

ECONOMICS AND FINANCE

BITCOIN AND PUBLIC FINANCE IN EL SALVADOR

Solution or deepening of a pre-existing crisis?

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Structural fiscal problems are one of the scenarios faced by the Bukele government since he became president; however, the adoption of Bitcoin as legal tender has brought about an adverse situation for the financing and stabilization of public finances.



There was no discussion or prior announcement on the part of the Salvadoran government to the population regarding the implementation of this measure.



The Bitcoin Law has not met the objective of being a catalyst for financial inclusion; on the contrary, it has weakened the state's ability to respond to the needs of the most vulnerable population.

1 STRUCTURAL PROBLEMS OF SALVADORAN PUBLIC FINANCES

For decades, the capacity of Salvadoran fiscal policy to be an instrument of equitable economic and social development faced great challenges related to insufficient income¹ and their retroactive nature², insufficient social spending and high indebtedness levels³.

The last 30 years reflect that annually, tax revenues have been insufficient to cover spending, systematically requiring both internal and external financing. Added to this financial behavior are critical nuances such as the growth of the proportion of expenditure destined to the payment of debt interest, which in 2021 came to represent 15.47%⁴.

El Salvador's financial profile also reflected the vision of risk rating agencies and international investors regarding the country's challenges in terms of public finances. For 2010⁵, El Salvador's sovereign debt instruments were already rated within the degree of underinvestment, making reference to the high risk of these instruments against the probability of default.

The degree of underinvestment determined by risk rating agencies also translates into high interest rates, compared to the region, when issuing public debt in stock markets. Eurobonds issued between 2002 and 2019, with a 30-year term, were issued with coupons⁶ between 7.1% and 8.2%; this fact being one of the strongest components of pressure on public finances in relation to debt interest payments.

Despite the fact that the greatest lack in this scenario was a comprehensive fiscal agreement with broad national consensus that would allow the obstacles raised above to be addressed in a categorical manner, a step on the road to the ordering and medium and long-term vision of public finances was the approval of the Fiscal Responsibility Law for the Sustainability of Public Finances and Social Development (LRF), approved in 2016 and which had as its object the issuance of standards that guaranteed fiscal sustainability⁷.

In 2018, the LRF was reformed in some parameters to make the targets proposed in 2016 more flexible, especially with regard to the debt/gross domestic product (GDP) parameter; however, the need to continue with the creation of the Medium and Long-Term Fiscal Framework (MFMLP) was reaffirmed, which would adopt the updated fiscal provisions, regulations, estimates and projections over a period of ten years. Besides counting on the definition and rules for periods of Fiscal Consolidation⁸ and Fiscal Sustainability⁹ which together formed fiscal adjustments for the next 10 years.

The combination of these challenges and regulatory frameworks in fiscal matters was the scenario under which the government of President Nayib Bukele became president. The government administration of Nayib Bukele lacks a Government Program that allows to give guidelines of its vision in fiscal matters, and the Government Plan 10 presented prior to his election lacked details regarding how to address these challenges and the new challenges in the face of the great promises that it contained.

¹ Between 2000 and 2018, the net tax burden in El Salvador went from 11.4% to 18.0%; for the 2022 budget, a gross tax burden of 21.9% was calculated; still below the average tax burden of countries of the Organization for Economic Cooperation and Development (OECD), which for 2020 was 33.5%.

² For 2022, it has been budgeted that 59.9% of the income would come from indirect taxes, "reaffirming the regressive tax structure" of the country (ICEFI, 2021).

³ To June 2019, public debt represented 68.5% of the GDP, and for 2020, 18.8% of the expenditures of the Central Government were destined to debt service.

⁴ 2021 Budget execution information from the Central Reserve Bank.

⁵ <https://www.secmca.org/wp-content/uploads/2019/02/RiesgoPaisDiciembre2010.pdf>

⁶ Information from the Ministry of Finance El Salvador.

⁷ <http://extwprlegs1.fao.org/docs/pdf/els195751.pdf>

⁸ 5-year period to achieve adjustments in income and expenses of at least 3% of GDP.

⁹ 5-year period after the consolidation period to reach a debt/GDP ratio not greater than 50%.

¹⁰ <https://plancusatlan.com/>

The COVID-19 pandemic came to El Salvador to alter any possible previously existing tax planning¹¹ and to exacerbate fiscal problems in debt issues. According to the Economic Commission for Latin America and the Caribbean (CEPAL), El Salvador was the country with the greatest fiscal effort to face the COVID-19 pandemic, with measures representing 11.1% of the GDP (the average in 16 Latin American countries was 3.2%)¹².

The fiscal effort to face the pandemic was fully financed by public debt, especially with short-term debt, which went from representing 3.4% of the GDP in January 2020 to 7.8% by December 2020. Total non-financial public sector (NFPS) debt rose from 68.2% of GDP to 85.8% in the same period.¹³

2 THE BEGINNING OF THE DISCUSSION ABOUT BITCOIN IN EL SALVADOR

On June 5, 2021, on the second day of the Miami Bitcoin 2021 conference, held in that city, Jack Mallers, founder of a Bitcoin payments app, showed in his presentation “A small step for Bitcoin, a big leap for humanity”¹⁴, a video of President Nayib Bukele announcing that he would send a bill to the Legislative Assembly in order to make Bitcoin legal tender.

Until that day, the public discussion on cryptocurrencies or bitcoin in El Salvador was almost non-existent, and there was no previous discussion or announcement by the government of El Salvador to the Salvadoran population regarding this measure. In the video of Nayib Bukele at the Miami Bitcoin 2021 conference, he explains that this measure “will help create jobs and financial inclusion in the short term”; this statement being the only framework for analyzing the public policy objectives pursued by the measure.

Cryptocurrencies are digital means of exchange that use cryptography¹⁵ to secure transactions, control the creation of additional units, and verify the transfer of assets using distributed ledger technologies. According to Statista, to July 2021, there were a total of 6,044 cryptocurrencies¹⁶, to February 2022, that number rises to 10,397 cryptocurrencies worldwide.

Bitcoin is one of these thousands of cryptocurrencies, the first to start operations in 2009 and one of the most popular; to August 2022, there are more than 19 million bitcoin in circulation, valued at more than USD 459,000.0 million¹⁷.

The reference price of each bitcoin unit has varied substantially over time, going from a reference price of less than \$1,000 in early 2017 to all-time highs of \$67,000 in mid-2021. In mid-2022, a sharp fall in prices has placed bitcoin units in the range of between USD 20,000 to USD 24,000¹⁸.

In addition to its worldwide popularity, no other parameter by which the government of El Salvador chose bitcoin as a cryptocurrency to be converted into legal tender is known or deduced; the beginning of talks related to bitcoin between the Salvadoran government and foreign entrepreneurs is also unknown. Journalistic investigations trace some conversations related to bitcoin between President Bukele’s brothers and businessmen held at the end of May 2021¹⁹, a few days before the president’s announcement in Miami, where not only the intention to convert bitcoin in legal tender but also certain plans to introduce a national cryptocurrency other than bitcoin and encourage its use with public funds were discussed.

Faced with great uncertainties, surprises and a lot of new terms, the Salvadoran population faces the decision to convert bitcoin into legal tender, without being consulted or having clarity of its objectives and effects. Three days after President Bukele’s announcement at the Miami 2021 Bitcoin conference, on June 8, 2021, the Minister of Economy presented the draft Bitcoin Law to the Legislative Assembly.²⁰

¹¹ The Fiscal Responsibility Law was immediately suspended at the beginning of the pandemic.

¹² https://repositorio.cepal.org/bitstream/handle/11362/45730/S2000154_es.pdf?sequence=5&isAllowed=y

¹³ This variation of the debt/GDP ratio is also altered by the sharp fall of the GDP of -9.2% according to data from the Ministry of Finance of El Salvador

¹⁴ <https://b.tc/conference/2021/agenda>

¹⁵ A field of cryptology that deals with encryption or decryption techniques intended to alter the linguistic representations of certain messages in order to make them unintelligible to unauthorized recipients.

¹⁶ <https://www.statista.com/statistics/863917/number-crypto-coins-tokens/>

¹⁷ At a price per bitcoin of USD 24,000; average price of the first week of August 2022.

¹⁸ Range determined between the period of June 15 and August 15, 2022

¹⁹ https://elfaro.net/es/202107/el_salvador/25609/Bukele-y-sus-hermanos-planear-emitir-colones-digitales.htm

²⁰ <https://www.asamblea.gob.sv/sites/default/files/documents/correspondencia/806B3BEE-02DF-4CAB-BE98-1D3F03E50627.pdf>

3

STRUCTURE AND APPROVAL OF THE BITCOIN LAW

The Bitcoin Law project was approved about 5 hours after being presented to the Legislative Assembly, after a discussion between legislators that did not exceed 2 hours²¹. The Bitcoin Law has a total of 16 articles, declaring as the main objective in its considerations, the promotion of the financial inclusion of the population.

In its first articles, the law establishes bitcoin as legal tender, determines that its exchange rate from bitcoin to dollars will be established “freely by the market” and that any price can be set in bitcoin. The structure of these articles is simple and makes fairly general statements in light of the economic significance of the financial instrument that it is legalizing.

Bitcoin, despite being one of the most popular cryptocurrencies in the world, is mostly used as a long-term investment asset²². Due to the growth of its price, the financial incentive of bitcoin holders is not to use it as a means of payment, but under its investment function. This financial fact directly conflicts with the content of the law, creating difficulties and spaces of confusion at the time of landing its payment function in the face of great volatilities in its price and figures that hinder the ability to set prices in bitcoin.

The tax treatment of transactions in bitcoin is regulated by articles 4 and 6, establishing that tax contributions can be paid in this cryptocurrency and that the profits that come from its exchange (whether private or public sector transactions), are not subject to taxes on capital gains. The legalization of the payment of tax contributions with bitcoin opens great risks for the public treasury, due again to the strong volatility of the cryptocurrency. The treatment of the great possibilities of loss or gains when accepting bitcoin as a

means of payment of tax contributions was not addressed by the law, nor by any other publicly known secondary regulation. How these risks are addressed in light of the liquidity pressures of the fiscal fund is not known either.

Article 7 of the law, one of the most controversial on it, establishes the obligation of “every economic agent” to receive payment in bitcoin, “when it is offered by the person acquiring a good and service.” The little legal refinement of this provision generated great fears regarding the payment of salaries in this cryptocurrency, among others. Between the period of approval of the law and entry into force (90 days later), this provision was continuously discussed, emerging from different spaces of civil society, including as a law reform, by excluding the payment of salaries and other compensation explicitly in the law. All these attempts to specify the obligatory nature were rejected by the government and the statements of various officials were also contradictory²³ or unclear in the clarification of this legal stipulation.

The following articles of the law raise general obligations on the part of the State in terms of providing alternatives to people for the use of bitcoin and enable the government to “create the necessary structure for law enforcement.” Again, the legal stipulation is quite brief, and, through the articles, it was not possible to know or conclude the type of institutionality that planned to be created, and much less, its financial cost. The only direct reference to cost and institutionality to be created is established in article 14, which establishes the creation of a trust administered by the Development Bank of El Salvador (BANDESAL).

21 https://elfaro.net/es/202106/el_salvador/25539/Asamblea-aprob%C3%B3-en-solo-cinco-horas-la-Ley-Bitcoin-que-Bukele-hab%C3%ADa-anunciado-tres-d%C3%ADas-antes.htm

22 Gajdek, Seweryn & Kozak, Sylwester. (2019). Bitcoin as an Electronic Payment Tool. *Zeszyty Naukowe Uniwersytetu Przyrodniczo-Humanistycznego w Siedlcach*. Seria: Administracja i Zarządzanie. 47. 33-39. 10.34739/zn.2019.47.04.

23 <https://www.elsalvador.com/noticias/negocios/uso-bitcoin-sera-opcional-dice-ministro-hacienda/869655/2021/>

Among the final provisions of the law, the mandate is established to the Central Reserve Bank (BCR) and to the Superintendence of the Financial System, to issue the regulations corresponding to the application of the law before 90 days of the end of the period for entry into force. To date, two regulations have been published on the BCR portal regarding the participation of financial institutions in the bitcoin ecosystem and the authorization formats for the operation of the service platforms of this cryptocurrency.

The regulations created in order to implement the Bitcoin Law in El Salvador focused mostly on financial regulations for banking (Table 1); however, none of the regulations clearly develops the application of the obligation to receive bitcoin in payment (Article 7 of the Bitcoin Law), nor the mechanisms of registration of purchase, holding, gains or losses of the handling or purchase of bitcoin by the Salvadoran State.

Table 1
Regulations on the implementation of bitcoin as legal tender in El Salvador

Name of the Law, Regulations or Instructions	Validity	Content
NRP-29 Technical Regulations to Facilitate the Participation of Financial Institutions in the Bitcoin Ecosystem ²⁴	07/09/2021	Regulation of the subjects that offer bitcoin-based services to their customers, whether natural or legal persons, and these services may be offered directly or through a Bitcoin Service Provider.
Guidelines for the Authorization of the Operation of the Technological Platform of Services with Bitcoin and Dollars ²⁵	07/09/2021	Establishment of applicable provisions for the authorization of the operation of the technological platforms of the services with Bitcoin and Dollars of the United States of America, wished to be provided by obligated subjects to their clients, whether natural or legal persons.
Decree No. 27 – Regulations of the Bitcoin Law ²⁶	26/08/2021	Develop, facilitate and secure the application of the Bitcoin Law. The content refers especially to the regulation of the banking system on the subject.
Bitcoin Trust Creation Law ²⁷	30/08/2022	Constitution and regulation of the operation of the Bitcoin Trust. The Trust, because it is constituted in favor of the State and Government of El Salvador, through the users of the state digital wallet, was constituted for an indeterminate period, from the validity of this law.

Source: own elaboration based on information from the BCR and Official Journal.

²⁴ <https://www.bcr.gob.sv/regulaciones/upload/NRP-29.pdf?v=1660577918>

²⁵ https://www.bcr.gob.sv/regulaciones/upload/Lineamientos_para_la_Autorizacion_del_Funcionamiento_de_la_Plataforma_Tecnologica_de_Servicios_con_Bitcoin_y_Dolares.pdf?v=1660577918

²⁶ <https://www.uif.gob.sv/wp-content/uploads/instructivos/Reglamento-de-la-Ley-Bitcoin.pdf>

²⁷ https://www.transparencia.gob.sv/system/documents/documents/000/450/425/original/Ley_de_Creaci%C3%B3n_del_Fideicomiso_Bitcoin.pdf?1631049624

4 BITCOIN LAW AS ECONOMIC POLICY

From the first moment of its announcement, the implementation of bitcoin in El Salvador was announced as a mechanism for financial inclusion; a way to bring the financial system closer to the population, especially to reduce the costs of remittance transfers to the country.

In El Salvador, international remittances are a transcendental component in the economic dynamism at the aggregate level, representing 28% of the GDP by 2021, and also a relevant socioeconomic element for Salvadoran households, being an important source of income for food and housing needs²⁸. Therefore, obtaining a remittance transfer tool in an agile, secure and cheap way would be of great benefit to the Salvadoran population and this was what the government pointed out as one of the benefits of the approval of bitcoin as legal tender: remittances with zero transaction cost.

The implementation of bitcoin in El Salvador occurred almost exclusively by government media and resources, so to consolidate the promise of greater financial inclusion the government created an electronic wallet called “Chivo Wallet”, which would be backed by the Bitcoin trust managed by BANDESAL. The Chivo wallet had as a benefit for users the non-collection of commission per transaction because its costs were assumed through public funds.

To promote the use of the government wallet, the government provided an incentive of USD 30 inside each wallet. According to the 2021 Evaluation Survey, prepared by the “José Simeón Cañas” Central American University (UCA), 56.6% of the Salvadoran population downloaded the virtual wallet. However, this same survey reveals that within that total of downloads, more than 55% of people used it only once, for the withdrawal or expense of the bonus provided. This is also shown in the information collected in the study “Are cryptocurrencies coins? Bitcoin as a legal trend in El Salvador”²⁹ here 60% of the people surveyed answer not having used the Chivo Wallet after using the incentive bonus.

Between January and May 2022, only 1.65%³⁰ of the total remittances received were made through cryptocurrency wallets; therefore, despite the higher transaction cost, people sending remittances continue to use traditional means. The reasons why the government of Nayib Bukele failed in its intention that the Chivo wallet replaced the traditional means of sending remittances are still unknown, as they deserve an in-depth study and a survey of the opinion of the people sending remittances to El Salvador. However, in financial terms, transferring remittances via the Chivo wallet had an implicit cost relative to the volatility of the price of bitcoin, which in some cases could be consolidated into a substantive loss of the money that is transferred, which exceeds any cost of sending by traditional means.

The government presented its vision of the benefits of bitcoin to the International Monetary Fund (IMF), as part of the information shared with the international institution within the framework of the Article IV Consultation with El Salvador corresponding to 2021. The IMF notes that “the authorities pointed out that the use of Bitcoin as legal tender is a strategy that seeks to promote financial inclusion, payment digitization and a rebranding of El Salvador to increase the profits of tourism and private investment”³¹. In this last point, there are still no statistics that show if the increase in tourism has been substantial, and that its profits have had the ability to offset the implementation costs of bitcoin in El Salvador.

To date, the cost of bitcoin implementation in El Salvador has been calculated in at least USD 205 million³², which include: USD 150 million to operationalize the operation of the Bitcoin Trust, USD 2 million for the acquisition of communications technology, USD 23.3 million for the “crypto-friendly project” and USD 30 million to finance the incentive bonus of the Chivo Electronic Wallet. These costs may not include the bitcoin purchases announced by President Nayib Bukele, which are recorded only through his Twitter staff account, so it has not been possible to know the source of public funds used for the announced purchases.

²⁸ According to the Multi-Purpose Household Survey of 2019, 82.5% of the Salvadoran population spends remittances on food and housing.

²⁹ https://www.nber.org/system/files/working_papers/w29968/w29968.pdf

³⁰ Data from the BCR. Economic and financial database.

³¹ <https://www.imf.org/en/Publications/CR/Issues/2022/01/26/El-Salvador-2021-Article-IV-Consultation-Press-Release-Staff-Report-and-Statement-by-the-512245?cid=em-COM-123-44218>

³² <https://www.asamblea.gob.sv/sites/default/files/documents/correspondencia/F5DFFB97-593A-42C6-8180-AD1848437CBD.pdf>

According to the tracking of the Twitter account of President Nayib Bukele, 11 announcements of bitcoin purchases have been made, which consolidate an approximate cost of USD 107.1 million³³. Despite constant requests for information made to the Ministry of Finance³⁴ and other institutions in charge, it has not been possible to obtain public information about the source of resources, price and valuation of these alleged announced purchases. To August 15, 2022, the market value of the purchasing portfolio amounts to a little more than USD 57.5 million³⁵, consolidating a loss of approximately USD 49.6 million, just over 46% of the investment³⁶. This also shows the contradictions in the government's use of bitcoin as currency or as a speculative investment asset;

various statements of the Minister of Finance assume bitcoin purchases that, despite their price falls, "do not generate losses"³⁷ because it is considered a long-term investment, without assessing the effects on the liquidity and financial profile of the government in the short term.

It is relevant to mention that both the objective of financial inclusion (creation of a government digital wallet), and that of attracting tourism through "rebranding", could be implemented without the need to legalize bitcoin as legal tender. In fact, a state e-wallet that does not contain the implicit risk of bitcoin price variation, using dollars, may have been a more attractive mechanism for making transfers and payment system.

5 PUBLIC PROJECTS TIED TO BITCOIN

The government's bet on bitcoin has not been limited to its legalization as legal tender, the electronic wallet and the alleged purchases of this cryptocurrency made by the government. In November 2021, at Bitcoin Week in El Salvador, the president of the republic announced another project related to this cryptocurrency: Bitcoin City. "It will have residential areas, shopping centers, restaurants, a port, everything around bitcoin," said the president. He also announced that in this city, there will not be income tax, ever. No income tax, no property tax, no tax on hiring, zero municipal taxes and zero CO2 emissions. The only tax that there will be in 'Bitcoin City' is VAT, half of which will be used to pay the municipal bonds and the rest for public infrastructure and city maintenance³⁸.

Such city mechanisms with preferential treatment in terms of taxes and other concessions of sovereignty in order to attract investment are part of projects usually referred to as "private cities"; investment attraction mechanisms very similar to the Zones of Employment and Economic Development (ZEDE) of Honduras, which to date have generated multiple social and environmental conflicts, due to the substantial concession of territory of power that the State gives to private companies.

According to the information provided at the event by the president, and the only one of official origin related to the project; Bitcoin City will be built in the department of La Unión, in the municipality of Conchagua; near the volcano

with the same name, which "will power the city and the bitcoin mining." This use of energy for mining can lead to "the deepening of territorial and national inequalities in access to energy"³⁹, according to certain analyses related to the project.

The announcement of Bitcoin City was accompanied by the issuance of debt for the financing of part of the infrastructure of that city. That same day, President Nayib Bukele announced the issuance of public debt for USD 1,000 million for a term of 10 years and with an interest of 6.5%; of which USD 500 million will be earmarked for the purchase of bitcoin and the remaining USD 500 million to build bitcoin mining and energy infrastructure. The interest rate offered by these bonds is substantially lower than what would be projected for a traditional bond; therefore, from a purely financial aspect, they would not be an attractive investment. To date the issuance of bonds has not been carried out and the only official information about the conditions of this issue was that provided by the president in Bitcoin Week.

The government of El Salvador announced March 20 as the date of issuance of these bonds. According to statements by the Minister of Finance of El Salvador, currently, conditions are not favorable for the placement, and they are waiting for the cryptocurrency to rise in price for issuance⁴⁰. Previously, the postponement of the issue was also justified by the conflict between Russia and Ukraine and its effect on the stock market.

33 An approximation based on the average price on the day of purchase.

34 <https://transparencia.mh.gob.sv/downloads/pdf/700-UAIP-IF-2021-13138.pdf>

35 Approximate bitcoin price on the day: USD 24,160

36 <https://nayibtracker.com/>

37 <https://www.dw.com/es/alejandra-zelaya-el-salvador-no-ha-tenido-p%C3%A9rdidas-por-ca%C3%ADda-del-bitcoin/a-62119892>

38 <https://www.presidencia.gob.sv/presidente-nayib-bukele-anuncia-construccion-de-bitcoin-city-en-el-cierre-de-bitcoin-week-feel-the-bit/>

39 <https://library.fes.de/pdf-files/bueros/fesamcentral/18742.pdf>

40 <https://www.criptonoticias.com/finanzas/el-salvador-espera-bitcoin-suba-precio-lanzar-ansiados-bonos/>

6 AGGRAVATION OF THE FISCAL CRISIS

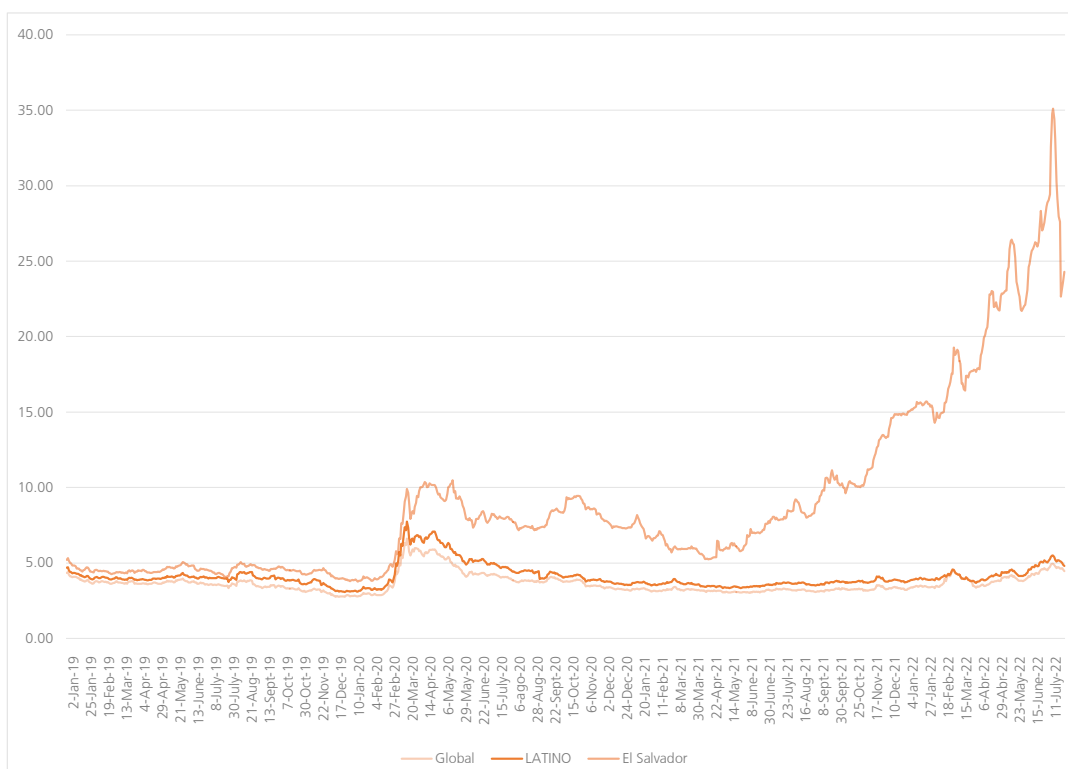
As previously developed, El Salvador’s fiscal problems are of structural origin and are the result of decades of absence of a comprehensive approach to fiscal policy; however, since the arrival of President Nayib Bukele to the government, public indebtedness has shown a large growth and El Salvador’s credit risk profile has in turn deteriorated greatly.

Between June 2019 and June 2022, public debt has grown by USD 5,099.5 million ⁴¹, which corresponds to a growth of 27.73% in 3 years. This includes the indebtedness due to the COVID-19 pandemic, in which new debt up to USD 3 billion was authorized.

Regarding the risk rating, in the second quarter of 2022 both the Standard & Poor’s and Moody’s agencies updated the rating and outlook of El Salvador’s long-term debt. Standard & Poor’s downgraded the risk rating from B- to CCC+ with a negative outlook and Moody’s downgraded it from B3 with a negative outlook to Caa3 with a negative outlook, between the second quarter of 2021 and the second quarter of 2022 ⁴².

Standard & Poor’s underpins El Salvador’s downgrade with the fiscal vulnerabilities and dependence on favorable conditions to meet its financial commitments, in addition to a very high debt burden and weak economic growth (the

Graph 1
EMBI Global, Latin American and of El Salvador
January 2019 - August 2022



Source: own elaboration with data from JPMorgan

41 Data from the Fiscal Transparency portal of the Ministry of Finance.

42 Country risk report of the Central American Monetary Council from June 2022

economy is expected to grow below 3% for 2022). Meanwhile, Moody's attributes the downgrade of its rating to the absence of a concrete financing plan, in addition to the uncertainties regarding the payment of the next two bond debt repayments of 2023 and 2025, which together add up to USD 1,600 million in payment of capital.

El Salvador's bonds have fallen substantially in price in recent months, with prices hovering around 80% or 40% of the initial value of these debt securities⁴³; that is, of every USD 100 of initial value of this debt, the price of the 2023 bonds fell around USD 80 and USD 40 for the 2025 bonds; this also as an indicator of the distrust of international markets in Salvadoran public finances. Based on this situation, the government of El Salvador recently announced the repurchase of 2023 and 2025 bonds at market prices, translating in financial terms into a discounted debt payment. After the first announced buyback, the government managed to buy 16% of the debt of 2023 and 54% of 2025; as a result, the payment of more than USD 1,000 million remains in uncertainty.

Despite this move to buy back discount bonds, international rating agencies continue to downgrade El Salvador (Fitch Ratings downgraded the country's rating to "CC"), as this debt buyback is seen by investors as the recognition that the government does not have enough money to pay its debts.

Another parameter that shows the deterioration of public finances is the Emerging Market Bond Index (EMBI)⁴⁴, which has undergone substantial increases in recent years. The differential (also called spread or swap) presented by the EMBI is expressed in basis points (bps). A measure of 100 bps means that the government in question would be paying one percentage point (1%) above the yield on risk-free bonds, the Treasury Bills.

The rise observed at the beginning of 2020 is an increase relative to the effect of the COVID-19 pandemic on the stock markets; however, after the pandemic the rest of the countries have returned to pre-2020 EMBI indicators; while, as of the end of 2021, El Salvador presents a constant growth to be ranked as one of the countries with the highest indicator in Latin America. This indicator foresees that, when issuing debt in stock markets, the Salvadoran state would face high interest rates.

7

THE GREAT ABSENCES AND FUTURE PERSPECTIVES

The implementation of bitcoin as legal tender in El Salvador is based on a great lack in the process of creating public policies and a correct diagnosis of the needs of the Salvadoran population, besides the political and technical knowledge of how to solve them. The transcendental factor of the lack of financial inclusion in El Salvador is not the lack of digital transfer mechanisms, private banking already offers a diversity of payment mechanisms and digital transfers. At the base of the marginalization of the majority of the population from the financial system are the deep economic deprivations of the population and the uncertainty of the income that comes from a mostly informal labor market. Neither of these two problems was directly addressed in the implementation of bitcoin in El Salvador.

Financial inclusion is a structural problem in El Salvador. According to the 2016 National Survey on Access to Financial Services in El Salvador⁴⁵, only 23% of the adult population in El Salvador has a savings account in a banking institution; this data is even more serious in terms of gender, where only 18% of adult women have a bank account (27% for men). According to that same report, 79% of adults own a cell phone, but only 35% used it for financial operations. This research concludes that access to financial services is limited by the lack of resources and problems to comply with the requirements to acquire financial products (evidence of income stability). In addition, within these obstacles, there are gender gaps in access to financial services, which must be considered for the purposes of creating public policies with a gender perspective, another major shortcoming of the implementation of bitcoin in El Salvador.

⁴³ Also called "face value", which refers to the value expressed in the debt security at the time of issuance.

⁴⁴ It is the difference in the interest rate paid by dollar-denominated bonds, issued by underdeveloped countries, and US Treasury Bonds, which are considered "risk-free".

⁴⁵ <https://cdn.inclusionfinanciera.gob.sv/wp-content/uploads/2021/06/ENCUES2.pdf>

This 2016 survey is the latest information from public sources available regarding access to financial services in El Salvador, reinforcing the need to create new evidence and statistics that allow the correct diagnosis and resolution of the problem. The form of implementation of bitcoin shows the shortcomings and setbacks in the processes of creating public policies in the country. In fact, the institution in charge of the technical process of diagnosis and execution of public interventions has been weakened, since the elimination of the Technical and Planning Secretariat of the Presidency 46, until the recent dissolution of the General Directorate of Statistics and Censuses (DIGESTYC), which when transferred to the Central Reserve Bank, carries the risk of twists in the generation of statistics and evidence at the census level.

In addition to the shortcomings in the diagnosis and execution of the policy, the implementation has been marked by great deficiencies related to transparency in the use of public money. More than a year after the approval of the law, there is no clarity or public information on the amount of bitcoin purchases, its sources of financing and the amount of possible losses or gains. There is no detailed information on the management of the bitcoin trust, or statistics of the money in the Chivo Electronic Wallet, which is privately owned and directly linked to people in the political circle of the government party 47.

The continuous evidence of the arbitrary, unreflective and non-transparent way in which public resources have been used in El Salvador for the implementation of bitcoin, generates unfavorable expectations for international investors, rating agencies and international organizations regarding the

Salvadoran State's ability to pay, but they also consolidate an adverse scenario for public finances and place us even further away from a reform that guarantees taxation for social and economic development with equity.

In 2022, the crisis of public finances in El Salvador has deepened further, also affecting the execution of public spending and financially weakening social programs that benefit the most vulnerable population. According to the execution of the 2022 budget of the Ministry of Finance 48, to June 2022, 44% of the budget has been accrued, but some ministries present a worrying underexecution, such as the Ministry of Local Development, with only 17% of its budget executed, or the Ministry of Agriculture and Livestock, with an execution of the 21%. The Ministry of Local Development is the executor of social programs such as the Universal Basic Pension, conditional transfers to people in a poverty situation, and the Women's City Project (Ciudad Mujer), the latter one of the most relevant programs to guarantee women's rights.

The adjustments that are being made to face the financial difficulties are affecting the execution of these social programs and showing that the fiscal crisis, which has worsened in recent years, has greater effects on the most vulnerable populations, showing how the implementation of bitcoin in El Salvador has not only failed to achieve its proposed goals, but has deepened the pre-existing fiscal crisis.

46 <https://historico.elsalvador.com/historico/609013/bukele-eliminara-cuatro-secretarias-de-la-presidencia-de-la-administracion-anterior-y-creara-dos-nuevas.html>

47 https://elfaro.net/es/202109/el_salvador/25707/Chivo-es-una-empresa-privada-financiada-con-fondos-públicos.htm

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ABOUT THIS PROJECT

The Friedrich-Ebert-Stiftung (FES, Friedrich Ebert Foundation) arrived in El Salvador in 1989, with the aim of supporting dialogue between the country's leftist forces, in the face of the negotiations of the peace agreement between the government and the Farabundo Martí National Liberation Front. It acquires its status as an "International Mission" in 1995 and, since then, has been able to support various processes of research, training, debate and political advice in collaboration with various social, political and governmental actors who identify with democratic values, feminism, hu-

man and environmental rights and good governance. In that manner, the FES bets on strengthening transformative leaderships -with emphasis on progressive youth- and the formation of progressive alliances to address the problems that most affect the country's population.

For more information, visit
<https://americacentral.fes.de/>

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BITCOIN AND PUBLIC FINANCE IN EL SALVADOR

Solution or deepening of a pre-existing crisis?



The capacity of Salvadoran fiscal policy to be an instrument of equitable economic and social development has, for decades, faced great challenges related to insufficient revenues and their retroactive nature, insufficient social spending and high indebtedness levels. El Salvador's financial profile also reflected the vision of risk rating agencies and international investors regarding the country's challenges in terms of public finances.

Fiscal problems, of a structural and historical nature, are one of the scenarios faced by the government of Nayib Bukele since he became president; however, together with the management of public funds in the pandemic, the implementation of bitcoin has caused an adverse situation for the search for financing and stabilization of public finances.



Until June 2021, the public discussion of cryptocurrencies or bitcoin in El Salvador was almost non-existent; there was no discussion or prior announcement by the Salvadoran government to the population regarding this measure, nor is it born of a concern of the majority of the population or of a demand to solve their most acute problems in economic terms.

The Bitcoin Law in El Salvador has not met the objective of being a catalyst for financial inclusion for the population; on the contrary, it has deepened structural fiscal problems by creating a further weakening of the State's financial capacity to respond to the needs of the most economically and socially vulnerable population.



The biggest incentives for the use of bitcoin in El Salvador have come from the Salvadoran government, which created an electronic wallet with public funds, granted bonds to encourage its use, created a trust and proposes to build a city and issue public debt.

To date, there are no known technical or economic policy documents that develop the objectives pursued by the implementation of bitcoin as legal tender. Therefore, the future of projects such as Bitcoin City and the issuance of volcano bonds poses great challenges in their execution and financing capabilities.

More information on the subject is available here:
<https://americacentral.fes.de/>