Ecuador’s dollarization will have negative effects on its development prospects

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Dedication

To my Parents Luis and Sonia for their love, encouragement, and tireless support. My wife Ana Cristina for her love, motivation, and constant support on this academic journey. My siblings Lila and Pedro for always being there for me.

Brief Author Biography: Luis Verduga was a Finance and Economics major at Saint Peter's University who graduated in 2021. He is graduating from the Master's of Science in Finance from Saint Peter's University in May of 2022 with a concentration in Global Finance

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Introduction

Ecuador is a Latin American country that has been affected by an assortment of different economic crises. Many of the factors leading to these crises are often created by various causes. In fact, this is a leading reason why Ecuador has had very different political-economic views in the last thirty years, bringing different public administrations managed by different types of politicians that are always implementing different policies to satisfy the population of the whole country. In the last twenty years, Ecuador implemented one of the most significant changes, which was dollarization within the real economy and the financial system.

Ecuador has now become a laboratory for many economists around the world since dollarization has affected positively and/or negatively different strategic economic sectors. The main idea of this thesis will be focused on the positive and negative effects due of a dollarized economy on development and the lack of independence in the whole monetary system.

The main purpose of examining this topic is to understand how dollarization will mostly have negative effects on its development prospects, and it will be guided by how a country can be affected by the lack of independence once there is no sovereign power over its currency. Further, some subtopics of importance will be how the dollarization is connected and correlated to negative effects that will be gathered through a study that will focus on trade, exchange rates, inflation, and prices of oil.

The dollarization started on January 9, 2000, which was a monetary measure implemented by the Former President Jamil Mahuad, who decided that it was time to dollarize the whole economy and give up the sucre as the national currency. However, the author's timeline will first start from 1990 to 2020 for better context on how Ecuador has been affected by the dollarization in different areas, following a study on how the economy was before implementing the dollarization in the Ecuadorian economy. This will be done through descriptive and quantitative data that will focus on empirical results to show how dollarization has also had negative impacts on the good development of the Ecuadorian economy.

Chapter 1

Ecuador, a Dollarized Economy

"In the last few years, the idea of dollarization has surged to the forefront of monetary policy alternatives for Latin American countries. Several countries have already officially adopted the US dollar as legal tender". (Quispe, 2002). One of these examples is Ecuador which adopted the dollarization in January of 2000 under the administration of Jamil Mahuad. "In official or full dollarization, monetary authorities adopt the US dollar as legal tender for all transactions. The US dollar takes over all functions of domestic money: unit of account, medium of exchange, and store of value." (Quispe, 2002). What Quispe means here is that to define the whole theory of dollarization, a country tries to substitute the domestic currency for the dollar in all their monetary functions, as a medium of exchange, unit of account, and store of value. In a few words, official dollarization means that the country adopts the dollar currency as legal tender.

Going back to the time to 1990s, before the adoption of dollarization, there were different economic issues that led to the decision of adopting a foreign currency as the legal tender. "Large fiscal deficits and increasing external debt led to imbalances that became unsustainable with the decline of world oil prices and the devastating impact of El Niño in 1998" (Quispe, 2002). Indeed, El Nino affected different areas such as national output, especially the agricultural activity that destroyed a big portion of the productive infrastructure. Therefore, these had a great effect on the economic cycle by bringing negative economic impacts, such as recession, inflation, and insolvency within the national financial system.

In the macroeconomic overview, we can state that Ecuador entered a status of economic instability caused by El Nino. In addition to this, there were other different causes that brought these solvency and economic issues into the Ecuadorian economy, which were described as internal economic problems driven by bad political management of the prior administrations.

"In Ecuador in particular, the banking sector had been deteriorating for the past twenty years" (Perez, 2003). The contagion effect pushed the banking sector into a full-fledged crisis. Before the year 2000, banks were overexposed and undercapitalized and could not meet their commitments. Inflation ran rampant and the government tried to alleviate the problem by printing even more money causing the sucre to depreciate"

Due to the lack of political pragmatism in 1998, there were various indexes that indicated an economic collapse in the Ecuadorian financial system. The main indexes that functioned as main indexes were a deficit in the trade and balance of payments. "e.g., the same fiscal stance, external current account, and degree of financial fragility—as existed then. Alas, several shocks visited upon Ecuador virulently, confidence collapsed, and twin (banking and exchange rate) crises erupted". (Torre, 1990). These external shocks resulted in low growth, inflation, and liquidity problems in an already fragile banking sector. The country's dependence on oil and agricultural products to generate export revenues limited its ability to service foreign debt, due to declining prices for these commodities. Ecuador was known as a country that was very dependent on oil and agricultural products, yet it is commonly accepted within real-world economics that no country has ever become developed only using agricultural policies.

In the 1990s, Ecuador had a huge economic deterioration as the increase in real interest rate, restrictions on productive and commercial credits, foreign exchange control, and capital outflow, were all caused by different external and internal factors. To be sure, as the Asian and Brazilian crises spilled over as exogenous shocks into Ecuador an environment was created that witnessed a reduced amount of investment, creating a recession. In addition, other "developments contributed to Ecuador's economic collapse in 1999: the devaluation of the sucre in February, a freeze on bank deposits in March, a default on external debt payments in September, and the country's overall political uncertainty and lack of policy direction". (King, 2008). Hence, there was a perceived need to counteract the devaluation of the sucre and default on debt payments in a big way from the Ecuadorian administration because the devaluation of the sucre and economic weakness were directly connected to times of uncertainty. Hence, it was thought that the solution should come from abrupt changes to monetary policy; specifically, the adoption of dollarization.

"Freezing deposits temporarily halted the fall of the sucre and stabilized inflation, but at the expense of impairing the functioning of the payments system, which was then instrumental for the more than 7 percent of GDP drop in 1999". (Jacome, 2004) Fiscal issues and the international financial crisis brought as consequences a decrease in the international financial support, which drove the balance of payment deficit, weakening the domestic financial system aiming to times of insolvency. This not only affected the political view, but the banking system, bringing as result the 98-99 Ecuadorian Economic crisis better known as "EL FERIADO BANCARIO" which was a crisis period marked by economic instability caused by different reasons such as inflationary currency crisis, fiscal crisis, and sovereign debt crisis. Former President Jamil Mahuad enacted the freeze of deposits, these economic measures affected hundreds of thousands of Ecuadorians, which meant the closing of financial institutions which would eliminate the control for citizens to make withdrawals from their banking accounts. Such was it that the combination of the initial shock and the policy response only reinforced the negative consequences of devaluation, inflation, business bankruptcy, increased poverty, misery, and unemployment rate.

"Ecuador's decision to dollarize was taken in January 2000 by then-President Jamil Mahuad, who only a few days before had described the idea as "a jump into the abyss." (Fischer, 2006). In January 2000, in an environment of social unrest and lacking congressional support for the implementation of structural reforms, then-President Jamil Mahuad called for full dollarization to avoid the collapse of the banking system. The deterioration created on the economic and political side was the main cause to think about new economic actions, these economic actions were taken and directed by the former President Jamil Mahuad who called for the adoption of a full dollarization economy to avoid any disruption in the financial and economic system of Ecuador.

"In the year 2000, Mahuad was deposed as president and Congress approved the start of Gustavo Noboa as the new president of Ecuador for that time". (Fischer, 2006). Noboa knew that were going to be economic challenges once he took the presidency; however, a country with full dollarization would bring times of economic stability. Even in uncertain times, Noboa was willing to promote a new economic era due to the adoption of dollarization.

With the idea of implementing a positive environment and eliminating any kind of uncertainty in the Ecuadorian Population, Gustavo Noboa signed a standby agreement with the International Monetary Fund (IMF) in which it would support the economic growth and recovery of the country through multilateral agreements to acquire financial funds for the benefit of the whole economy. To avoid any disruption in the beginning and process of a dollarized economy, increasing the credibility of dollarization was the main goal of Gustavo Noboa's administration.

Fortunately, this started to happen thanks to the benefits caused by this new monetary policy adoption, these benefits were positive economic changes such as low inflation and economic recovery in the first quarter of 2000, which were the main reason to support the stabilization effect of a dollarized economy.

“In Latin America, since 2000, all countries (except Mexico, Nicaragua, and Paraguay) have reduced the share of external public debt or public debt in foreign currency (FC) in their total public debt, measured in relation to the size of the economy, external public debt or public debt in FC also fell in most countries since 2000, with Ecuador (-44 p.p.)”. (Levy, 2021). The whole dollarization started to have a contrary effect on people's doubt about not having their currency, which created a positive environment for the administration of Gustavo Noboa and the whole economic scenario.

In fact, “in Ecuador, full dollarization eliminated devaluation risk, although country risk did not decline immediately.” (Quispe, 2002). Dollarization started to have certain favorable positive effects on the Ecuadorian economy, one of these was the elimination of the devaluation risk and country risk, which are two ways to measure the possibility of a large decrease in the value of a country’s currency relative to other currencies and the uncertainty associated with investing in a particular country and how those investments can lead to losses for those investors. The dollarization had a good beginning in Gustavo Noboa's Administration leading to increasing people’s confidence in the financial and economic system of the country. Noboa deepened the dollarization of Ecuador with the main goal to exit the financial crisis created by the negative economic policies imposed by his predecessors, which was known as an economic threat about to lead hyperinflation and times of stagnation.

Despite this, if we go back to the times before the dollarization, we can state that Ecuador was already in the process of an informal dollarization process, which meant that people were using more dollars than sucre due to the uncertainty and low credibility of the domestic currency. The economic and governmental instability were the main reasons that ended creating informal dollarization that was threatening Ecuador into a status of hyperinflation, which was the main reason to adopt the dollarization, with the main goal of avoiding it.

“Vice President Gustavo Noboa assumed the Presidency. He honored Mahuad’s dollarization pledge” (Hanke, 2003). Back in Gustavo Noboa's Administration, another of his economic measures was the complete elimination of issuing sucre which was the domestic currency of Ecuador. In these economic and monetary changes, he also implemented the decree that each dollar was worth 25,000 sucres, which had many different effects, with one obvious one being to directly affect savings accounts.

After the Noboa Administration came that of Former President Lucio Gutierrez Borbua from 2003-to 2005. At this time there was a big economic improvement due to the dollarization imposed by Jamil Mahuad and Gustavo Noboa; however, there were also still persistent external factors that attributed to the economic enhancement as the prices of oil and the remittances increased. “The oil sector contracted in most years and only had positive average real growth due to the large jump in 2003–04 when private firms constructed a new pipeline for heavy oil”. (Gonzales, 2010). Indeed, the price of oil had a great increase, increasing oil rents up to 18.5% of GDP, besides this, the remittances sent by migrants that left the country at the start of dollarization showed a positive economic environment, which helped to decrease the inflation established in 2000 due to the dollarization. However, following the monetary policies and adjustments created by the IMF, there was a big decrease in the economic development of Ecuador in such areas as health care and education. The external debt or international bonds with the IMF were extended to a period of 11-30 years of maturity. However, after some cases of corruption, nepotism, and a big dissatisfaction with the current political-economic system from this administration, former President Lucio Gutierrez was disposed of his position as president of Ecuador on April 20, 2005.

In the government of Alfredo Palacio Gonzales ensued next from 2005 to 2007, there were many issues in the social sector that brought a big lack of support from a significant portion of the population, yet he achieved a big economic impact in the oil sector. “The free-trade deal is in the middle of negotiations and the Ecuadorean government cannot assume any compromise to sign it or not while there are still issues to be resolved” (Weitzman, 2006). In addition, Alfredo Palacio Gonzales tried to negotiate a free trade agreement with the US, which was a continuation of something that the administration of Lucio Gutierrez had started. However, the political left and indigenous groups were opponents of these economic negotiations, rejecting and making sure this would not be fulfilled by any administration since this could affect very hardly the whole Ecuadorian economy, especially the national productive sector.

“When Correa took office in 2007, his government adopted some ideas of the so-called “21st Century Socialism,” (Arevalo, 2014). The next President was Rafael Correa Delgado, which marked a change in policy and came with the initiative to eliminate every type of neoliberal policy. With the idea of creating a strong social economy where education and health care would be the biggest priority, and with the approach to not be connected in any type of negotiation with the IMF, World Bank, or any multilateral institution, he sought to change the political powers of the country. The main goal was to create a different type of political department that give all the powers to combat any social-economic issue caused by the old administrations.

“The project of the Citizen’s Revolution pursues, through different routes, to generate a profound and transcendental change in the political basis of the Ecuadorian state and a change in the Constitution, so it invokes principles of social equality, sovereignty, and self-determination" (Arevalo, 2014). With the creation of different political departments such as the social development department, strategic sectors, autonomous governments, decentralized, production department, political economy, and department of heritage assets, there was a lot of positive economic and social change stopping the economic deterioration promulgated by the old administrations and the economic change caused by the dollarization.

What is very important though is that Correa understood that any nation that does not control its sovereign currency will always face different types of challenges in different sectors, especially in the domestic sector due to the big competition created by the dollarization of goods and services. Thus, his main goal was to look for other alternatives to compensate for this by seeking to push the economic growth of strategic sectors and insulate it from external and internal shocks.

Chapter 2

Effects and consequences

In Chapter 2, I gathered different types of data that will help me analyze my hypothesis that dollarization negatively affects Ecuador's economy in a more profound form. Nevertheless, the data I gathered let me create an argument of mixed theories, which means I will also bring the dollarization's positive effects, making sure there is a combination of explanations for both scenarios.

GDP Growth (Annual %) Ecuador

Measuring the GDP growth rate, we can see a decrease in GDP growth % and Annual Change from 1999 to 2000. The decrease in 1999 was -4.74% in GDP growth and -8.01% in Annual change, which showed us how the economy was affected from 1999 to 2000 due to inflation and bad economic management. Once the dollarization started in Ecuador in the year 2000, we can see positive economic growth in GDP and Annual Change – in 2000, there was an increase of 1.09% GDP growth and 5.83% in Annual change – 20001 GDP growth of 4.02% and 2.92% Annual Change – 2002 increase of 4.10% GDP growth - 0.08% annual change. 2003 increase of 2.72% GDP growth, -1.37% Annual change. 2004 8.21% GDP growth and 5.49% annual change, 2005 5.29% GDP growth and -2.92% annual change, 2006 4.40% GDP growth and -0.89% annual change, 2007 2.19% GDP growth and -2.21% annual change, 2008 6.36% GDP growth and 4.17% annual change. As we can see, there was a very positive change since 2000, which means that at the start of the dollarization, everything started to change positively in the GDP growth, which means there was an economic expansion.

However, to understand what the real factors of this economic expansion were, we also need to understand different variables; we can see that the economic expansion started since the dollarization started in Ecuador, but we also need to go into a deep analysis to understand whether was only the dollarization that affected the GDP growth in Ecuador positively. Suppose we follow the stream in the GDP graph. In that case, we can see that there were times of increase and decrease in the Ecuador economy, so we cannot state that the dollarization was the main reason to have a positive economic change since there were moments of positive and negative fluctuation; we need also to understand the factors that made this happen and the factors that were used to fix it. First, we will talk about the main reasons that made the economy go up after the dollarization was established in 2000.

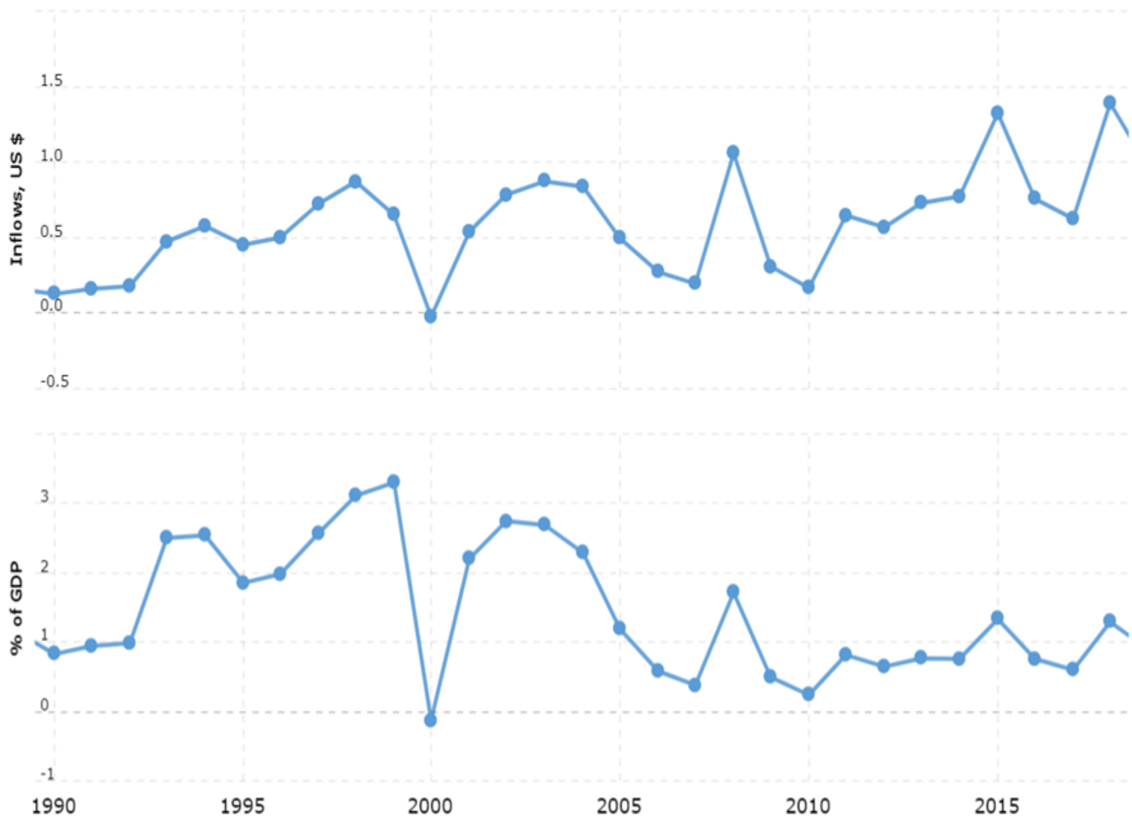
Ecuador Inflation Rate

As we can see, one of the positive things caused by dollarization was the decrease in inflationary rates. The most considerable increase in inflation rates started in 1999 with an Inflation rate % of 52.24% and an annual change of 16.14%, 2000, with 96.09% annual change of 43.85%, after this we can see the most significant decrease from 2001 to 37.68% inflation rate and annual change of -58.42%, 2002 decrease of 12.48% and annual change of -25.19%. After 2022 the inflation rate kept flat and constant, which means that inflation stopped being an economic issue in the Ecuador Economy.

Foreign Direct Investment

As we know, FDI is when businesses from one country invest in firms in another one. Hence, as the dollarization started in Ecuador in 2000, there was a positive increase in Ecuador, bringing a positive inflow of U.S. and an increase in % in GDP in 2000. We can say that the rise in FDI strongly correlates in 2000 with the rise in GDP in that same year. We can see that from 1998 there was an inflow, U.S. % of 0.87B, and 3.11% of GDP, after this we can see that in 1999 there was a decrease in inflows, U.S. $ of $0.65B and an increase in %GDP of 3.30%, however, we can see a significant decline in 2000 in inflows U.S. dollar of $-0.02B and a considerable decrease in % of GDP of -0.13%. Though, since the dollarization started, there was a positive change in FDI with an increase in Inflow, US$ in 2001 of $0.54B, and an increase % of GDP by 2.20%, and in 2002 an increase of $0.78B in Inflows, U.S. $ and an increase of 2.74% in % of GDP. Foreign investment kept flat and positive until 2004 and started to decrease in 2005 and 2006 because of the polls that Rafael Correa, a left wings candidate, was the favorite to become president; the hostile environment created by the media and some conservative economists made the FDI goes down, however, Rafael Correa created a program of government that could counteract all these future economic issues that he had to face.

Foreign Direct Investment



Net Trade in Goods and Services (BOP current US$)

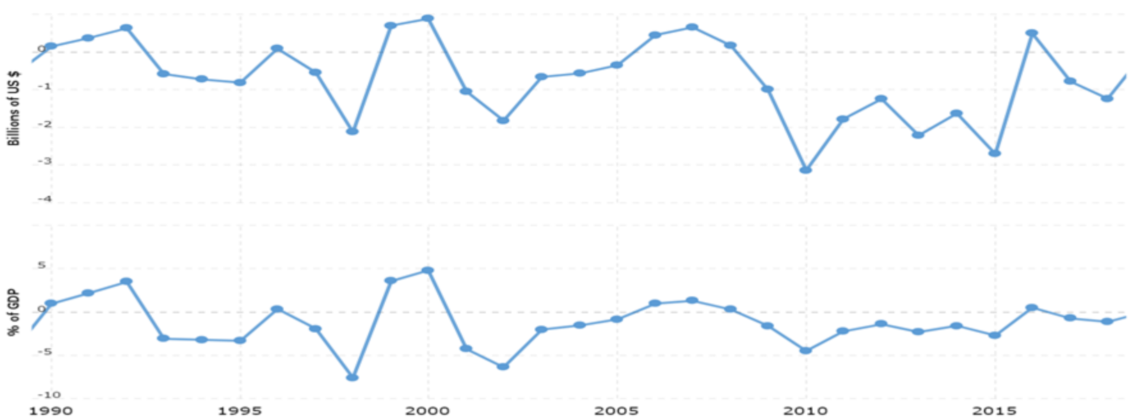
One of the biggest challenges in any economy is to keep a trade surplus and try to avoid trade deficits. There are many ways to keep a trade surplus, and one of these is having an independent monetary policy; this means having access to be independent and having the power of printing money to depreciate the domestic currency, which will help to increase the trade surplus since exports will be cheaper and be able to avoid any trade deficits. Therefore, countries that do not have their domestic currency will always face challenges in the net trade rates; in this case, Ecuador found a lot of challenges after this. I gathered some data that explain what I refer to as a trade disadvantage.

As we can see in our graph, there have been many times of volatility when referring to trade deficits and trade surplus. If we start to gather data from 1999, we can see that in 1999 there was a trade surplus of $0.70B with a % of GDP of 3.55%. In 2000 there was an increase in the trade balance, keeping a good trade surplus of $.088B and an increase in % of GDP of 4.79%. In 1999-2000 these were the times when the currency was very depreciated which created an environment of inflation but at the same time helped the economic trade due to the cheap exports creating a trade surplus in those times. However, if we observe what was the situation once the dollarization was established in 2000 we can see that there was a negative fluctuation in the trade balance taking Ecuador into a trade deficit of $-1.05B with a decrease in GDP of -4.30%, this negative environment of trade deficit was caused due to the dollarization, because this made goods and services being more expensive to export creating an environment of negative trade balance due to the big competition that existed in the trade market, competing with other countries that had the choice of depreciating their own currency was one of the biggest challenges that Ecuador had to face since dollarization started.

This trade deficit started from the start of the dollarization showing a negative impact in 2001 through 2005, with the following historical data – the year 2002 $-1.82B, -6.39% of GDP, the year 2003 $-0.66B, -2.04% of GDP, the year 2004 $-0.57B, -1.56% of GDP, the year 2005 $-0.36B -0.86% of GDP. There was a little improvement from 2006 to 2008 as; in the year 2006 $0.45B, 0.96% of GDP, the year 2007 $0.65B, 1.28% of GDP, and in 2008 0.17B 0.27% of GDP which starts to show a declining trend, this declining trend took Ecuador again to a trade deficit from 2009 to 20015, in the year 2009, the trade balance shows $-1.00B, -1.61% of GDP, in the year 2010 $-3.14B, -4.51% of GDP, in the year 2011 $-1.78B, -2.25% of GDP, in the year 2012

$-1.25B, -1.42% of GDP, in the year 2013 $-2.22B, 1.42%, 2014 $-1.63B, -1.60%, in the year 2015 $-2.71B, -2.73% of GDP. Nevertheless, keeping this perspective and the historic track with an average constant trend of trade deficit, this gave us; as a result, the main theory that after the dollarization, Ecuador has had to face challenging economic times due to the lack of independence in their monetary system due to the use of the dollar as a currency of legal tender. Hence, we can state that dollarization has many economic effects; as the data stated, dollarization directly affects the trade balance and, at the same time, a portion or percentage of GDP.

Net Trade-in goods and services (BOP current US$)



Personal Remittances received – (Current US$) and % of GDP.

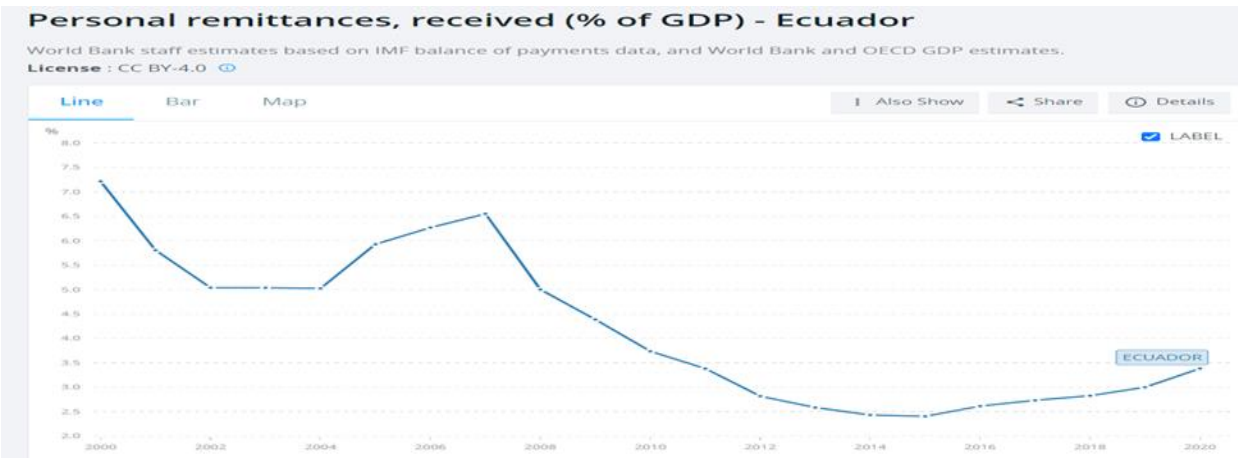
Personal remittances consist of those received by resident households or from nonresident households. "Remittances in Ecuador averaged 626.84 USD million from 1999 until 2021, reaching an all-time high of 1209.50 USD Million in the fourth quarter of 2021 and a record low of 238.55 USD Million in the second quarter of 1999". (Data Bank- World Bank). We need to understand that even since the dollarization had some positive effects, such as lowering the inflation rates, in development Relevance**,** the Movement of people, most often through migration, is a significant part of global integration. Migrants contribute to the economies of their host country and their country of origin; this means there were also negative effects as massive migration rates increased the personal remittances from 2000 to 2007. This means that migrants outside of the country used to send their money to Ecuador, which created a lot of personal remittances and helped the economy and GDP.

"Personal remittances comprise personal transfers and compensation of employees. Personal transfers consist of all current transfers in cash or in-kind made or received by resident households to or from nonresident households. Personal transfers thus include all current transfers between resident and nonresident individuals. Compensation of employees refers to the income of border, seasonal, and other short-term workers employed in an economy where they are not residents and of residents employed by nonresident entities. Data are the sum of two items defined in the sixth edition of the IMF's Balance of Payments Manual: personal transfers and compensation of employees. Data are in current U.S. dollars." (Data Bank- World Bank) As the data gathered from the world bank, the total personal remittances received (Current US $) were the followings, in the year 2000 1.32 billion, in the year 2001 1.42 Billion, in the year 2002 1.44 Billion, the year 2003 1.63 Billion, the year 2004 1.84 Billion, the year 2005 2.46 Billion, the year 2006 2.93 Billion, and the year 2007, as we can see from 2000 to 2007 there was a positive trend in the personal remittances, this was due to the massive of migrants that had to leave Ecuador due to the change of currency from sucre to dollarization.

Next, I will add the data from the personal remittances (% of GDP). In 2000 7.2% of GDP, in the year 2001 5.8%, in 2002 5%, 2003 5%, 2004 5%, 2005 5.9%, 2006 6.3%, and 2007 6.6%. As we can see here, even if their remittances were going up from 2000 to 2007, we saw that they became critical and showed a big correlation from 2004 to 2007 in the GDP growth. With this example, we can keep the theory that it was not only the dollarization that positively affected the Ecuador Economy. We can see that personal remittances were an important factor in the variability of GDP growth. Showing that it was not the dollarization that helped this happen to but the migrants that left Ecuador, how did migrants help Ecuador with their remittances? We can see a big effect in the increase of personal remittances received in the current US$, and this began to happen in 2000, which was the time that the massive migration in Ecuador started.

Therefore, since more migrants left Ecuador, the personal remittances increased because of the cash transfers they made to their family households that still resided in Ecuador. How the migrants became very important for the GDP growth in Ecuador, we can find a big correlation even after 2007 showing the following data: Personal Remittances, Received (Current US$) in 2008, 3.09 billion, 2009 2.74 billion, 2010 2.6 billion, 2011 2.68 billion, 2012 2.48 billion, 2013, 2.46 billion, 2014 2.47 billion and 2015 2.39 billion. The following data is gathered from Personal remittances, received % of GDP – 2008 there was a decrease of 5% of GDP, in 2009 4.4% of GDP, in 2010 3.7%, 2011 3.4%, 2021 2.8%, 2013 2.6%. 2014 2.4% and 2015 2.4%.

After observing and going into a deep analysis of this historical data since the dollarization started in Ecuador, we could see that it was not only the dollarization that helped the economy to improve, but the migrants transferring their money from their residing country into Ecuador helped to cool down the effects that the economy could have due to a new currency as the dollarization. The same migrants who were required to leave Ecuador due to the hard economic situation caused by the dollar were the same people who helped keep Ecuador's economic history stable from the beginning of the dollarization.



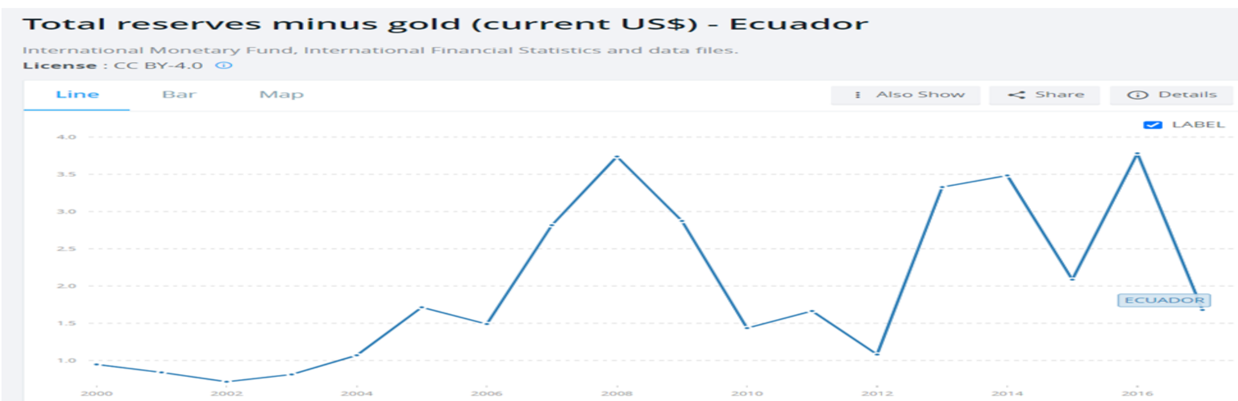
Total reserves minus gold (current US$) Ecuador

"Total reserves minus gold comprise special drawing rights, reserves of IMF members held by the IMF, and holdings of foreign exchange under the control of monetary authorities. Gold holdings are excluded. Data are in current U.S. dollars". (Data Bank – World Bank). Total reserves refer to the sum of deposits that depository institutions may count toward their legal reserve requirement. As is the case in Ecuador, a country that does not have a last lender of the resort will have to face different challenges where most of which would be connected to various economic scenarios. The central bank holds international reserves; these are used to back liabilities and influence monetary policy. In the case of Ecuador, they are needed to keep solvency and increase their U.S. dollar reserves since they cannot print them; because of this, Ecuador is a country that needs to be very competitive in trade since it is significant for its economic stability.

The more reserves the government has, the better for the country since these total reserves can be used as funds to help banks increase their loan power to boost the economy for most of Ecuador's population. Some countries are monetary independent and have the choice or facility to print their money and use their central bank as the lender of last resort, one of these examples is the U.S., countries that count on these features have the advantage of influence in their monetary policy from another point of view, like printing money and depreciating the domestic currency, which would help them to increase their exports and at the same time improve their resources for the banking system or support the economy. In Ecuador's case, there is no way to use independent monetary policies such as printing money or using these to keep the economy; instead, they need to increase their reserves through trade or economic strategies.

These strategies have the primary goal of being more competitive since other countries can acquire more exports due to the depreciation of their currency. Ecuador has to use different strategic ways such as; investing more in the domestic products, giving them a status of better quality, and making them competitive enough to increase exports. Total reserves must do a lot with the trade balance. Since dollarization started in 2000, there was a negative trend in the total reserves minus gold (current U.S. $, the following data are the year 2000 949,926,262, the year 2001 839,767,943, the year 2002 714,767,943, we can see that in those years there was a declining trend, this is due to the lack of competitiveness created by the dollar.

Nevertheless, we can see a positive trend from the year 2003 of 812,578,786, 2004 1.07 billion, 2005 1.71 Billion, 2006 1.49 Billion, 2007 2.82 billion and 2008 3.74 billion. However, we need to understand that the positive trend due to increased oil rents in those years positively affected the total reserves. After this, we can see a declining trend from 2008 that ends in 2010; data are the following: 2008 3.74 billion, 2009 2.87 billion, 2010 1.43 billion. After these declining total reserves, a positive trend from 2012 to 2013 was caused directly because of an increase in oil rents. If it was not because of oil, total reserves could have been affected drastically, directly affecting the economy since Ecuador is very dependent on total reserves through trade.

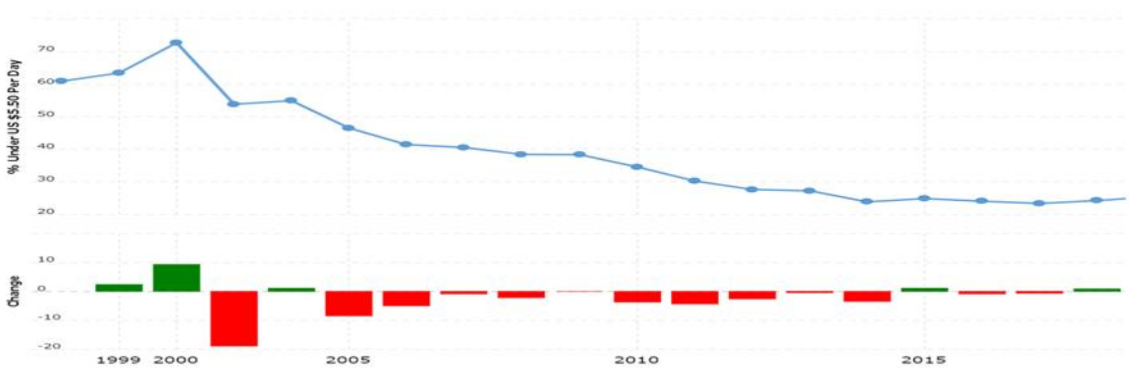


Ecuador Poverty rate

"Poverty rate is the ratio of the number of people (in a given age group) whose income falls below the poverty line; taken as half the median household income of the total population." (OECD DATA).

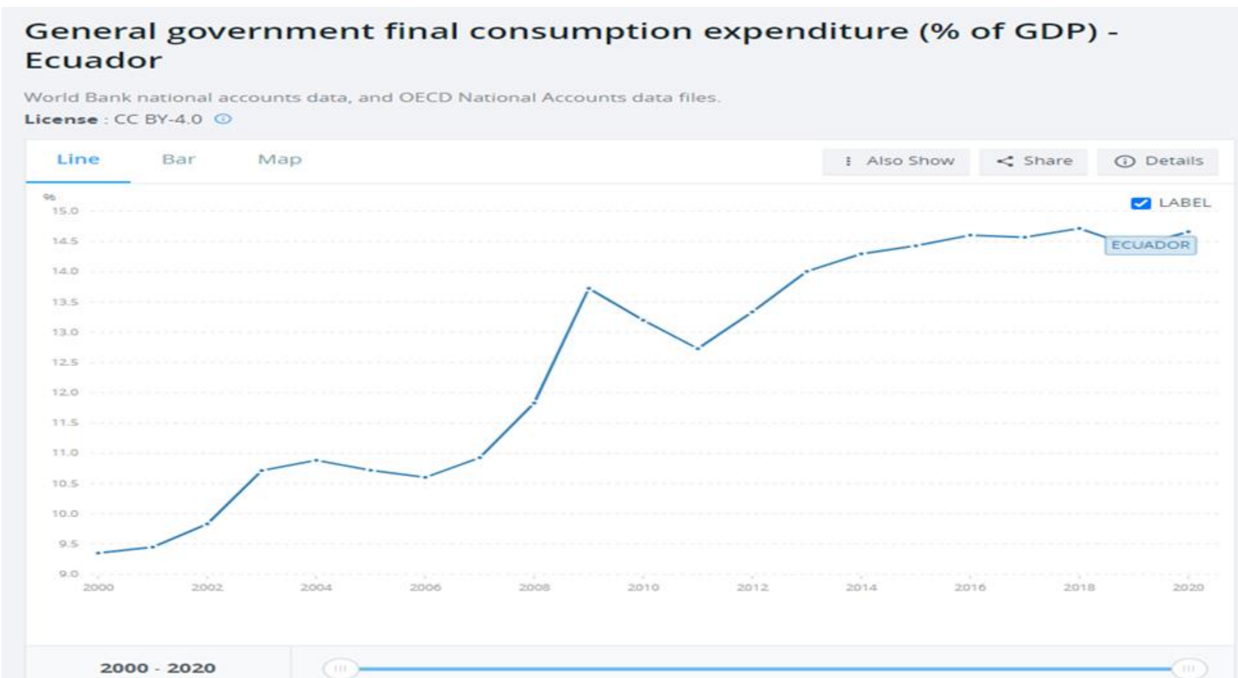
Besides all the challenges caused by the dollarization, the poverty rate was one of the main economic issues that needed to be considered. Even after the dollarization in 2000, the poverty rate had a slow decline; but after 2006, the rate declined constantly causing an optimistic economic scenario for the country. However, this was favorable because of many different variables and strategies, such as government final consumption expenditure, including education, technology, infrastructure, and innovation. Besides this, other factors i1mplied a decrease in hunger statistics, an increase in electricity access, clean water access, and an increase in the literacy rate.

Ecuador Poverty rate



The following data will indicate the trend of the Poverty rate before and after the dollarization. The poverty rate for 1999 was 63.40%, a 2.50% increase from 1994. For 2000 it was 72.70%, a 9.30 increase from 1999. For 2003 it was 53.80%, and 18.90% decline from 2000. For 2004 it was 54.90%, a 1.10% increase from 2003. For 2005 it was 46.50%, and 8.40% decline from 2004. For 2006 it was 41.40%, a 5.10% decline from 2005. For 2007 was 40.50%, a -0.90%

decline from 2006. For 2008 it was 38.40%, with a 2.10% decline from 2007. For 2009 was 38.30%, a 0.10% decline from 2008. For 2010 was 34.50%, a 3.80% decline from 2009. For 2011 was 30.20%, a 4.30% decline from 2010. For 2012 was 27.60%, a 02.60% decline from 2011. For 2013 was 27.20%, a 0.40% decline from 2012. For 2014 was 23.80%, a 3.40% decline from 2013. For 2015 was 24.80%, a 1.00% increase from 2014. For 2016 was 24.00%, a 0.80% decline from 2015. Thanks to all the economic strategies taken by the government, we can see that the poverty rate declined by 22.9% from 2006 to 20016. This happened in 10 years, which showed how all these economic strategies were reasonably applied, working positively even with all the obstacles caused by the dollarization.



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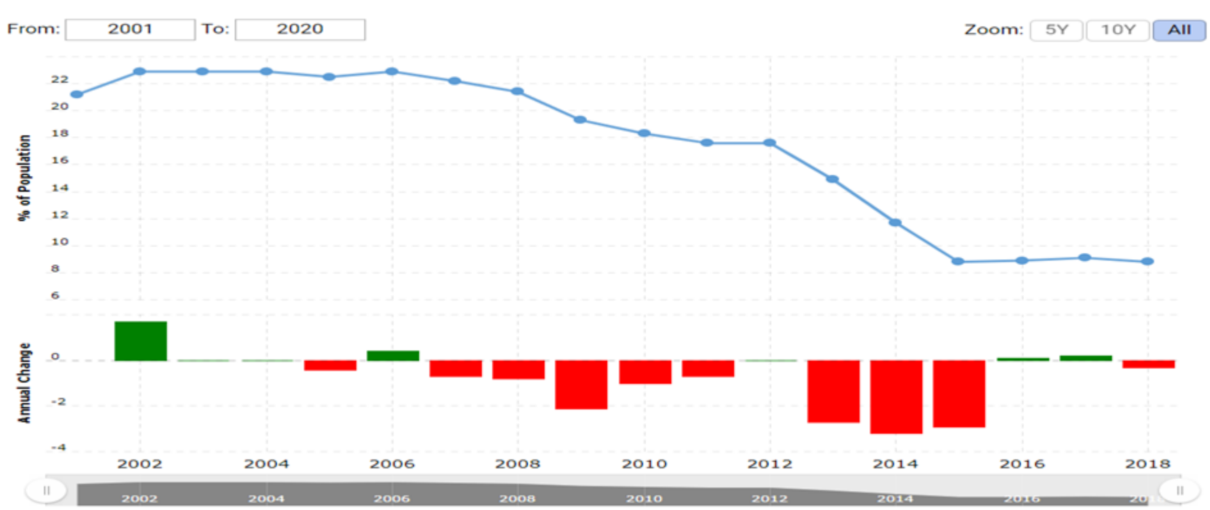
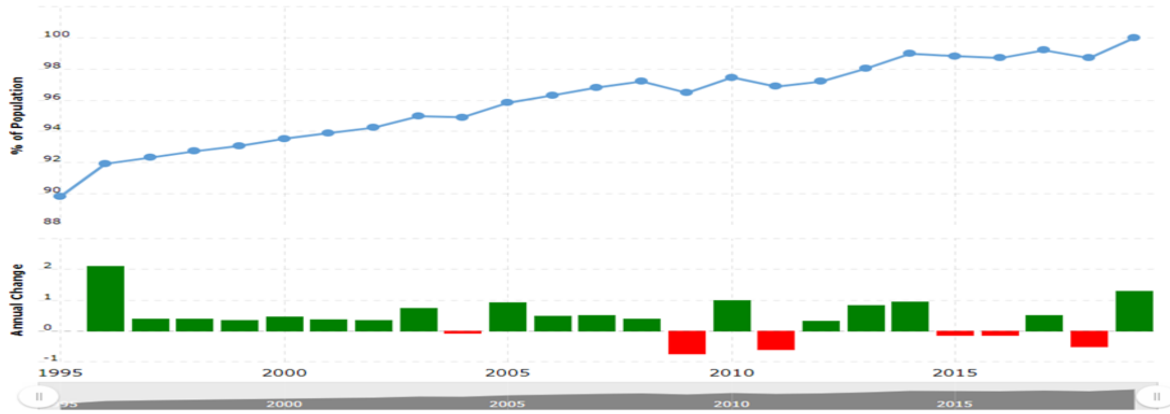
The positive decline in the poverty rate had to do with expansionary fiscal policies directly boosted by increased government consumption and expenditure. "General government final consumption expenditure (formerly general government consumption) includes all current government expenditures for purchases of goods and services (including compensation of employees). It also includes most national defense and security expenditures but excludes government military expenditures that are part of government capital formation" (Data Bank, World Bank). The following data will show the general government's final consumption expenditure (% of GDP) – in Ecuador – from 2000 to 2016. The year 2000 was 9.4 % of GDP. For 2001 it was 9.4%. For 2002 it was 9.8%. For 2003 it was 10.7%. For 2004 it was 10.9%. For 2005 it was 10.7%, and for 2006 it was 10.6% with a decline from 2005. Nonetheless, from 2006 the increase went higher. Data: 2006 was 10.6%, 2007 was 10.9%, 2008 was 11.8, and 2009 was 13.7, in 2010 there was a decline to 13.2% with another decrease in 2011 to 2.7%, in 2012 there was an increase of 13.3%, 2013 an increase of 14% for 2014 was 14.3%, for 2015 14.4% and 2016 14.6% of GDP. As we can see, the consumption expenditure was higher than at other times, which helped to decline the poverty rate despite all the challenges created by the dollarization. These economic measures helped improve the quality of life in Ecuador, which affected positively different areas such as access to electricity, access to clean water, literacy rate, and hunger statistics.

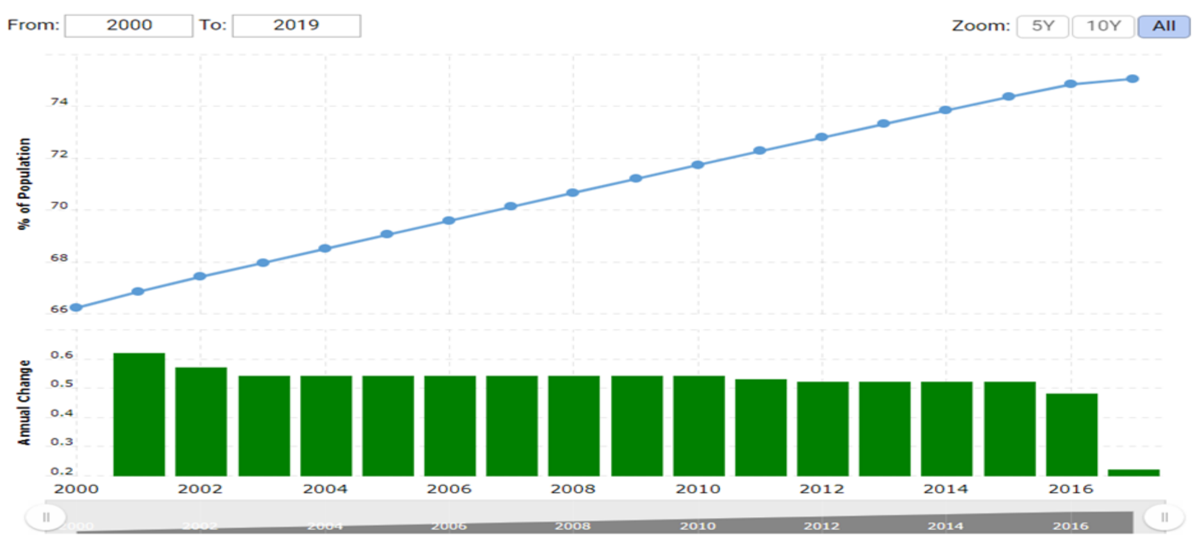
Ecuador Hunger Statistics 2001-2022



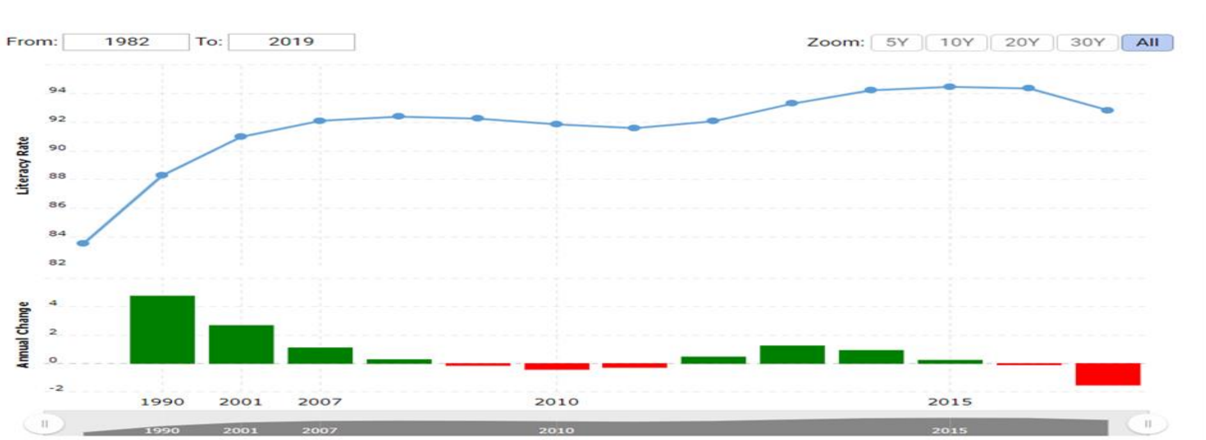
Electricity Access



Ecuador Clean water access 2000-2022



Ecuador Literacy Rate



Ecuador Tariff Rates

"Weighted mean applied tariff is the average of effectively applied rates weighted by the product import shares corresponding to each partner country. Data are classified using the Harmonized Trade System at the six- or eight-digit level. Tariff line data were matched to Standard International Trade Classification (SITC) revision three codes to define commodity groups and import weights. To the extent possible, specific rates have been converted to their ad valorem equivalent rates and included in calculating weighted mean tariffs. Import weights were calculated using the United Nations Statistics Division's Commodity Trade (Comtrade) database. Effectively applied tariff rates at the six- and eight-digit product levels are averaged for products in each commodity group. When the effectively applied rate is unavailable, the most favored nation rate is used instead" (Data Bank World Bank).

Tariffs are taxes imposed on imports. They can be used as tax revenues, but lately, they have been used to protect the national economy, making sure people buy more domestic products than goods and services that come from outside. This also reduces trade deficits because they slow down imports' growth, keeping exports higher and protecting countries from trade deficits. In an economy like Ecuador, where the dollar is the currency of legal tender, tariff rates are one of the best strategies to protect the national product and ensure that the dollar keeps in circulation in the country, avoiding capital outflow. As we can see, there was a significant decrease in the tariff rates from 2000, which could be described as a wrong decision. Still, we can see that in the government of Rafael Correa, there was an increase in the tariff rates, with the primary goal of protecting the national product, avoiding dollars outflow, and reducing trade deficits. In a few words, we can call tariff rates a positive measure to counter the adverse effects of dollarization in Ecuador. “The following data indicate the Ecuador Tariff rates, year and applied, weighted mean, all products (%), and annual change” (Data, macro trends). From 1999 to 2016.

2016	6.81%	0.43%
2015	6.38%	1.29%
2014	5.09%	0.75%
2012	4.34%	0.14%
2011	4.20%	-1.91%
2010	6.11%	1.61%

2009	4.50%	-0.64%
2008	5.14%	-0.76%
2007	5.90%	-0.26%
2006	6.16%	-2.53%
2005	8.69%	-0.26%
2004	8.95%	-0.95%
2003	9.90%	-0.77%
2002	10.67%	-0.49%
2001	11.16%	1.58%
2000	9.58%	-1.53%

1999	11.11%	0.41%

After analyzing the effects of the tariff rate in Ecuador, we can see that from 2011 there was a positive trend that kept increasing through 2016. Making a positive correlation with the trade balance, we can see that because of this positive trend, there was a time of trade surplus in 2016. “The absence of monetary policy, besides making it harder for the government to intervene during times of recession, has an adverse effect on exports. A weak domestic currency stimulates exports, and a strong domestic currency makes the country’s exports less competitive in the international market compared to goods from other countries”. (Alvarez, 2018). However, tariff rates are not the only alternative to increase trade; because of the dollarization, there are a lot of challenges that Ecuador's economy will have to face to keep a trade surplus most of the time. Becoming more competitive in the economic trade; applying good financial strategies and policies are one of the main challenges that Ecuador must combat the adverse effects caused by the dollarization.

Chapter 3

Effects and Consequences

After understanding how dollarization may negatively impact Ecuador's economy, I have done a deep analysis based on solutions that need to be integrated to protect Ecuador's economy from these negative issues caused by dollarization. These solutions must be assigned and incorporated by the government, creating an economic program that focuses on apportioning economic strategies to attract stable investors that promote economic growth—increasing productivity, competitiveness, and innovation and finding new ways to generate economic resources.

The reasons that make Ecuador unable to adapt to an improvement in their dollarized economy and need to be studied and integrated with effective financial and economic strategies are; to stop being very dependent on oil exports. “Ecuador remains a small, fairly open, economy, very much dependent on oil, though diversification efforts are ongoing” (Ecuador - Central Bank, 2009). This main effect makes Ecuador's economy swing into different economic scenarios based on the oil prices, pushing back the process of deindustrialization which means that Ecuador finds it more profitable to import than to produce. One example is the farmer sector; the government needs to implement correct economic policies that focus on helping the farmer Ecuador industry; farmers prefer to import agricultural products rather than produce them. In a few words, one of the most challenging scenarios in Ecuador's dollarized economy is to create strategies to increase the positive inflow in the balance of payment which means increasing the exports and controlling the level of imports. This is caused because an increase in the tariff rates, which have the primary approach to detain the level of imports and help the domestic economy, making the dollar circulation abide on the country.

Since the dollarization creates an economic view of uncertainty which makes the imports cheaper than the exports, this, as a result, causes an increase in the trade deficit. Thus, the assignation of tariffs is not the main issue. The government's lack of strategies and support to help predominant domestic sectors are the main consequence of a negative balance of payment.

Disadvantages are that dollarization created a significant distortion in the internal prices. “Dollarization suffers from a number of deep-seated problems, the most serious of which is structural with long-run effects on the country’s economy: productivity.” (Paredes, 2014). This means that countries are more expensive for their citizens and promotes the status of inequality. Another negative economic impact on the domestic industry also affects the employment sector, which means that a dollarized economy often becomes importing economy. For a country like Ecuador, this is a significant economic blow since its economy is very dependent on exports, mainly from raw materials and oil.

Another known consequence of a dollarized economy is the impossibility of enacting monetary policies. “After 15 years of dollarization, Ecuador’s monetary system has become untouchable. The financial and economic establishment insists that the economic stability experienced by Ecuadorian society has been due to the dollar being kept as the country’s currency” (Pares, 2004). In a few words, Ecuador cannot make decisions about increasing or decreasing the money supply, which in many instances is the principal monetary expansionary policy used to improve the circulation of money in any economy to contribute to economic growth in times of recession. This means that Ecuador lost independence in its monetary system when the government decided to opt for the dollar as course currency, leaving the sucre behind. Making Ecuador very susceptible front of any economic negative event-related to the United States.

The dollarization also caused the central bank cannot function as a lender of last resort to solve any liquidity issue that the economy might face in the future due to the withdrawals of the massive amounts of money from the deposits in the banking institutions. Another big problem would be the higher costs of international lenders; since the Ecuadorian central bank cannot be the lender of last resort, Ecuador would have to opt-out out and find international lenders, increasing the external debt or using the international reserves, which means that could cause a banking crisis which would affect the confidence in the Ecuadorian economy for foreign investors. This means that dollarization was not the primary tool to solve Ecuador's economic issues. There were still many challenges that needed to be considered, such as

- External Debt.
- Fiscal deficit.
- The correct distribution of income in a sustainable way.
- The enhancement of the education and health care system.
- The political-economic environment in the country.

How to stop Ecuador from being very dependent on oil; as we know, oil prices constantly fluctuate, which can affect any economy that is directly dependent on this; in the case of Venezuela, for example, 90% of their economy depends on oil exports. What I mean about stopping being dependent on oil is creating more resources in the whole economy that help increase and promote GDP and economic growth. This can be done with positive support from the government by implementing policies that create an economic diversification program that supports other areas such as; tourism, infrastructure, such as public transportation and telecommunications systems, and multipurpose projects that work with different goals such as an electrical distribution system and more with the primary purpose of creating resources that will foster the inflow of money having positive effects in the balance of payments. Of course, Ecuador is not dependent on oil to this high degree as Venezuela but still needs to focus on economic strategies to make sure this is not the only resource used to keep a favorable economic environment and economic growth of GDP.

Multipurpose projects or infrastructure investments such as; electrical distribution systems, public transportation, and telecommunication systems would foster any economy's economic growth. However, for this, the solid support of a government is needed with the primary approach to increase and direct their government spending to achieve this. As a result, all these projects would change the economic view of any economy, such as Ecuador's economy, which is very dependent on oil, making the percentage of GDP increase in all these areas, creating a more equitable diversified system. This might affect the balance of payment and convert the country into an exporting rather than importing economy, which was caused by the dollarization. Thanks to creating all the new options, Ecuador could have a great magnitude of choices that could be exported, influencing Ecuador positively in the economic trade environment, making it an exporting country with various options rather than only oil.

"The government's lack of strategies and support to help predominant domestic sectors are the main consequence of a negative balance of payment." In the case of the farmer sector, we can see a lot of negative impacts because of the tariff rates that are used to decrease imports and protect the domestic economy, increasing the money circulation and avoiding outflows. With this, the government makes sure their citizens opt-out of buying domestic products rather than importing goods and services. But even if it is a form to protect the domestic economy and keep dollars in circulation, it has also negatively impacted predominant sectors such as the farmer sector. The main reason for this negative impact is that since imports are more expensive due to the tariff rates, some resources such as tools or machinery are needed for the development of this area. This has pushed farmers to buy agricultural products rather than produce them internally.

To solve all these problems, the government should contemplate creating a more strategic and protected economy for this sector which is very important for the domestic economy, exports, and economic growth. Government should create protective policies that do not affect specific predominant industries, such as the farmers, which would give them the facility to import machinery or required tools to produce raw materials. However, this is not the only reason why farmers are affected by policies imposed due to dollarization. The dollarization also directly affects this sector due to the international market's big competitiveness due to a highly appreciated currency with the incapacity of being depreciated. One example of this can be Banana; Colombia, unlike Ecuador, has an independent monetary system that allows them to devalue their currency if they want to increase their export rates. Let's say that Ecuador and Colombia export the same number of bananas, but Colombia then decides to increase their exports by depreciating their actual currency; if they depreciated by ½, that means other countries will be able to import the double number of Bananas from Colombia paying the same amount they pay to import half of it in Ecuador. In a few words, if the US wants to import 50 bananas from Ecuador and Colombia at the cost of 1 dollar per Banana, which would be 50 dollars, and Colombia depreciates its currency by 1/2, the US will be able to buy 100 Bananas with 50 dollars putting Ecuador into a significant trade disadvantage.

The economy of scale potentiation. A country like Ecuador will always have a trade disadvantage due to its lack of independence in the monetary system. However, in my opinion, to fix this problem, the government should focus on promoting an economy of scale in specific sectors, such as the farmer sector. "The results indicate that elasticity of production with respect to cost is one, where increases in production lead to increases in the same proportion in costs" (Rodriguez, 2018). As we know, an economy of scale is a proportionate saving in costs gained by increased production, which means that production becomes more efficient. For example, in a manufacturing model, manufacturing costs can fall 70% to 90% every time the business doubles its output. In this case, if the government helps to increase the productivity of agricultural sectors by investment and advanced heavy machinery programs that will double its output, this will decrease costs and will allow farmers to export their raw material at more competitive prices, making them able to compete with low prices in the trade market. Of course, these policies must be studied and applied carefully, ensuring that the government guarantees farmers a sustainable transition into this new system and protecting them from being replaced by an automation economy.

"It is also important to notice that since the adoption of the US dollar as local currency, the Central Bank of Ecuador (CBE) left aside any attempt to implement monetary policy as it lost its capability for monetary emission." (Torre, 2013). Ecuador cannot make decisions about increasing or decreasing the money supply, which in many instances is the principal monetary expansionary policy used to increase the circulation of money in any economy to contribute to economic growth in times of recession. This disadvantage causes trade deficits, increasing imports due to their highly appreciated currency and decreasing exports because Ecuador products become more expensive. To find a solution for this, there will be many different factors that government must focus on with an economic, strategic approach. To promote the increase of international reserves and a decline in trade deficits, the main procedures must be centralized in economic strategies such as implementing economic policies of import substitution industrialization, investment in technology, innovation, and education with the primary goal of increasing the reserves and promoting the dollar circulation into the economy.

Since the dollarization created a disruption economic environment in the trade rates, increasing trade deficits, the government should attempt to focus on an economic policy of import substitution industrialization. This trade-economic policy should be implemented in a country like Ecuador. “Import substitution industrialization (ISI) is a theory of economics typically adhered to by developing countries or emerging-market nations that seek to decrease their dependence on developed countries” (Emerson, 2020). Import substitution industrialization is a trade and economic policy that focuses on replacing imports with domestic production, with the premise of decreasing their dependence on developed countries, making growth in the domestic goods produced to be competitive with imported goods.

“There is a need to promote Research and Development (R&D) to address capacity that will ensure continued self-sufficiency in basic commodity production, while at the same time building the necessary engine for transformative technologies geared towards meeting demands for hi-tech industrialized production in the postmodern era” (Emerson, 2020). Increasing government spending to invest in sectors such as technology, research, education, and innovation will help Ecuador create a path for creating good quality products that can be exported and, at the same time, fostered by their use citizens, making Ecuador quit the dependence on imports goods and services. This will not make Ecuador less dependent on imports but, consequently, will allow them to manage the competitive problems in the trade market. For example, suppose Ecuador focuses on promoting education, technology, and education. In that case, there will be an increase in investment for human capital, which will create new professionals with the capacity to invent new products with a technological approach that will be more competitive than others making imported countries buy them regardless of the prices.

In addition, Ecuadorian citizens will become less dependent on imported goods. They will start acquiring these good quality goods, which will keep the money in circulation, creating a trade surplus and increasing the country's international reserves, helping to defeat the main issues and negative consequences promoted by the dollarization. As we know, Ecuador, like any dollarized economy, has an agreement that needs to be fulfilled. For this to be possible, Ecuador needs to promote economic policies and strategies that positively impact dollarization. With this said, these positive impacts can be fostered by avoiding; capital outflow, trade deficits, decrease in money circulation, and the international reserves. Thus, the Ecuadorian government should follow and promote all these economic policies to keep a strong economy.

Conclusion

As we know, the Dollarization affected Ecuador in both positive and negative ways. The Dollarization started in the year 2000, creating a significant change in the economic view of Ecuador. To understand it, there was deep research based on different years, starting from 1990 to 2020. This helped me understand how the economy changed after the transition from sucre to the dollar. To understand the economic changes from different timeframes, I had to investigate various economic policies and political administrations based on other transitional governments.

In Chapter 1, I focused on These transitional governments headed by different former presidents, including Jamil Mahuad, who called for full Dollarization to avoid the collapse of the banking system. Gustavo Noboa signed a standby agreement with the IMF to support the economic growth and recovery of the country through multilateral agreements. Lucio Gutierrez Borbua, from 2003-to 2005, was involved in corruption cases and lived an era of economic growth thanks to the oil price increase. Alfredo Palacio 2005 wanted to keep Gutierrez's idea of negotiating a free trade agreement with the US and Rafael Correa from 2006, which marked a change in policy and came with the initiative to eliminate every type of neoliberal policy changing the current institutional political structure.

In chapter 2, I gathered different types of data, which helped me analyze and support my hypothesis that Dollarization had adverse effects rather than only having positive effects on the Ecuadorian economy. With this, I used different types of data chosen by various sectors that helped me understand and explain all the possible scenarios of how the Dollarization affected positively and negatively to the country. These data were gathered through different economic measures such as GDP Growth Annual % Ecuador from 1990 to 2015 and Ecuador's Inflation Rate from 1990 to

2015. Foreign Direct Investment measures the inflows in US $ and % of GDP from 1990 to 2015. Net Trade in Goods and Services Billions of US $ and % of GDP from 1990 to 2015. Personal remittance and total reserve minus gold from 2000 to 2020. Ecuador's poverty rate and the inverse relation between the General government's final consumption expenditure from 2000 to 2020 were directly connected to Ecuador's Hunger Statistics, Electricity Access, Ecuador's Clean Water Access, and Ecuador Literacy Rate from 1990 to 2015. Finishing with Tariff rates from 1995 to 2015 is the average of effectively applied rates weighted by the product import shares corresponding to each partner country.

In chapter 3, I focused on economic implications and how the issues and challenges caused by Dollarization could be solved. Taking different economic approaches, I focused on the solutions to avoid any topic that could cause the fall of Ecuador's monetary system, such as a negative balance of payment, trade deficit, decrease in the international reserves, capital outflows, and a weak economic-political system. Hence, Ecuador and any dollarized economy must understand that specific requirements need to be met under the agreement with the US federal reserve to keep the dollarized economy active. Governments must focus on implementing appropriate economic policies with a comparative approach to creating a solid and stable dollarized economy.

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