Considering unemployment in Ecuador during the Great Depression, 1928-1935

Reflexiones sobre el desempleo en Ecuador durante La Gran Depresión, 1928-1935

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Abstract: The Great Depression struck Latin America through the commerce: the reduction in revenues from the external commerce spread to the rest of the economy, resulting in the continue decreasing of the monetary supply. The Ecuadorian monetary policy until 1932, based on the gold standard, faced the phenomenon of deflation, which caused real salaries to grow. Since 1932, the monetary supply increased due to the abandonment of the gold standard, which caused real wages to decreased. In the same period, from 1928 to 1935, the primary data of the central offices of eight institutions shows that public employment decreased abruptly from 1928 to 1930, from 109.4 to 83.1 points (1927=100). After 1930, there was a quick recovery until 1932, and, from this point in time, it remained relatively stable until 1935. This article constructs, for the first time in the Ecuadorian historiography, an employment index which serves to see employment as the adjustment variable of the Great Depression.

Keywords: employment, salaries, Ecuador, Great Depression, monetary policy.

Resumen: La Gran Depresión golpeó a América Latina a través del comercio, la reducción de los ingresos del comercio exterior se extendió al resto de la economía, lo que provocó una continua reducción de la circulación monetaria. La política monetaria ecuatoriana hasta 1932, basado en el patrón oro, enfrentó el fenómeno de la deflación, lo que causó el crecimiento de los salarios reales. A partir de 1932, la oferta monetaria se incrementó a causa del abandono del patrón oro, lo que causó la reducción de los salarios reales. En el mismo período, de 1928 a 1935, los datos primarios de las oficinas centrales de ocho instituciones muestran que el empleo público decreció abruptamente de 1928 a 1930, de 109.4 a 83.1 puntos. Después de 1930, hubo una recuperación breve hasta 1932, de ahí en adelante permaneció estable hasta 1935. Este artículo construye, por primera vez en la historiografía de Ecuador, un índice de empleo que sirve para visualizar el empleo como la variable de ajuste de la Gran Depresión.

Palabras clave: empleo, salarios, Ecuador, Gran Depresión, política monetaria.

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Introduction

In mid-1929, the US economy began to show signs of weakening until it reached the point known as "Black Tuesday": on 29th October 1929, when economic indices began to plummet sharply, giving way to one of the greatest economic crises of the twentieth century, the Great Depression. This crisis affected the Latin American region through foreign trade, especially, with the United States, its main trading partner. The Great Depression in Latin America has been studied profoundly, particularly in the evolution of the macroeconomic variables, given the fact that this crisis occurred after the first globalization wave.

After First World War, the increment in trade links between the United States and the European powers with Latin America remained during the second decade of the twentieth century. The influence of the United States in the region came along with the growth of the foreign investment[1], which financed the generation and advance of industries such as coffee, cocoa, tobacco, banana, etc.[2] But also, it financed the initiation of some communication systems such as the rail system[3].

The impact of the Great Depression in Latin America has been studied extensively, however, in the case of Ecuador, there are few important studies of economic history during this period. In a previous study[4], the evolution of real wages was presented as a specific element that served to comprehend the impact of the international crisis. This study presented that real wages did not decrease, they just incremented, given the fact that most Latin American countries were facing deflationary indexes.

In this context, this research presents the first unemployment index, based on the primary data of eight institutions, in order to have a glimpse of the social impact of the Great Depression in Ecuador. The conclusions cannot be extrapolated to the country as a whole unit. Nonetheless, it provides of conclusions that can be tested in future papers. The main finding of this article is that the reduction of monetary supply, until 1932, brought two consequences: the first one was the increment of real wages and the second one was the increment of unemployment. The article is divided in three sections: first of all, the construction of a context of the impact of the international crisis around the evolution of some economic series; in a second part, the relation between the Ecuadorian economic policies and its monetary consequences, with an emphasis in the development of wages; and the third section is about the impact of the international crisis

[1] Taylor, Alan, "Foreign Capital in Latin America in the Nineteenth and Twentieth Centuries". *National Bureau of Economic Research*, working paper 9580 (2003). https://doi.org/10.3386/w9580

[2] Hofman, André, *The economic development of Latin America in the twentieth century*, Santiago de Chile, CEPAL, 2000.

[3] Herranz-Loncán, Alfonso, *The Contribution of Railways to Economic Growth in Latin America before 1914: A Growth Accounting Approach*, Barcelona, Universidad de Barcelona, 2011.

[4] Naranjo, Christian, "Evolución de los salarios reales en Ecuador durante la Gran Depresión, 1927-1937", *Revista de Historia Economica - Journal of Iberian and Latin American Economic History*, 36, 2 (2018), pp. 299-335.

in unemployment by the construction of an employment index. This research concludes that employment was one of the adjustment variable, this is visible through the governmental budget of eight dependencies, which showed a reduction of the number of workers in 26.3 % from 1928 to 1930. In this sense, the main finding of this article is that the impact of the economic crisis was not found in the evolution of real wages, but in the evolution of employment.

1. The Great Depression

The studies on the Great Depression in Latin America are focused on a large variety of fields with multiple economic edges. In mid-1929, the US economy began to show signs of weakening until it reached the point known as the “black Tuesday”, on 29th October 1929, when economic indexes began to collapse, especially, the stock index known as the Dow Jones. It expressed the behavior of the stock prices of the thirty most important industrial companies in the United States. During the “black Tuesday”, the Dow Jones index fell from 261 to 230 points. This crash continued vertiginously until reaching 50 points in the second quarter of 1933, date from which the different indices, including the Dow Jones, began to recover.

Although for the majority of scholars the Great Depression lasted four years, from 1929 to 1933, for other scholars it lasted ten[5]. Most of the Latin American region began to recover in 1932 and 1933, years considered the lowest peaks of the crisis. The United States of America (USA) and Great Britain were the main trading partners of the Latin American countries, trade with the US represented about 40% of the total foreign trade of Latin America, and 50 % of Ecuador’s foreign trade[6]. It was clear that the crisis was going to be felt mainly in the export and import sectors of the region. The global crisis created commercial, financial, monetary and exchange shocks in Ecuador, forcing the government to make controversial decisions. Those decisions at that time were considered as possible solutions to the attacks of the Great Depression. These anti-crisis policies were implemented in a decade of strong political instability, as reflected by the fact that, in the nine years, from 1929 to 1938, twelve governments succeeded

The international crisis opened the door to reconsider the growth path the region has walked through, criticizing the dependence on the international market and proposing an inward approach of growth. In the five-year period 1925-29, the terms of trade worsened significantly during the crisis; later, they recover a good part of the lost, but in a very fleeting way, as they

[5] Friedman, Milton & Ana, Ana, *A Monetary History of the United States, 1867-1960*, National Bureau of Economic Research, Princeton University Press, 2009, p. 455.
[6] Naranjo, Christian, “Síntomas de la Gran Depresión en Ecuador, 1927-1934”, *Revista Historia Autónoma*, 11 (2017), pp. 133-160. https://doi.org/10.15366/rha2017.11.007

fall again. Singer[7] argued that the tendency for the terms of trade to deteriorate was inevitable. It was an expansive increase in foreign trade followed, naturally, by a declining, contractive or collapse phase. Prebisch[8] thought that this new approach will allow the active population of Latin America, as part of the periphery of the system, to gradually move from agriculture to industry and seek other urban occupations, as technical progress advances.

1.1. Latin America

The first studies on the evolution of macroeconomic variables were related to the evolution of the region's GDP. Twomey[9] analyzed the evolution of the national production of six countries in the region: Argentina, Brazil, Chile, Colombia, Honduras and Mexico, concluding that, after 1929, "the decline in production was larger in Chile, less in Colombia, while Honduras did not experience a typical cycle during the first part of the decade"[10]. In Honduras, the Gross Domestic Product increased from 1929 to 1931 by around 4 %, while Colombia registered a stagnation in 1929 and 1930, and from 1931 its GDP grew steadily. The evolution of Ecuadorian GDP is also an atypical case because it does not register decreasing percentages during the thirties, but also, it shows minimal growth on average.

With regard to the historical evolution of the GDP, since the publication of Twomey, our knowledge has been considerably improved because the new databases have expanded the range of countries. Three groups of countries are identified due to the new information: the impact of the international crisis was greater in Chile, Venezuela and Peru, with an average decrease in GDP of -29 %; Argentina, Brazil and Uruguay are located in a second group, with an average decrease of -11 %; and, in a third group, Colombia and Ecuador with an average increase of 4 %.

The Great Depression has also been studied by Pinilla & Aparicio[11] who analyzed the evolution of exports of agricultural and food products from South America between 1900 and 1938. They built a series of terms of exchange for agricultural exports of the region, giving relative weight to exports of different agricultural products. The Great Depression "affected world trade, volume and prices fell. In addition, the terms of trade, for exporters of primary products, suffered a huge deterioration"[12]. Latin American countries specialized in the export of primary products, such as agricultural and minerals: cocoa (Ecuador), coffee (Brazil), sugar

[7] Singer, Hans "U.S. foreign investment in underdeveloped areas, the distribution of gains between investing and borrowing countries", *American Economic Review*, 40, 2 (1950), pp. 473-485.
[8] Prebisch, Raúl, *Crecimiento, desequilibrio y disparidades: interpretación del proceso de desarrollo, Estudio económico de América Latina*, Nueva York, 1950, p. 5.
[9] Twomey, Michael, "The 1930s Depression in Latin America: A Macro Analysis", *Explorations in Economic History*, 20 (1983), pp. 221-247. https://doi.org/10.1016/0014-4983(83)90031-1
[10] *Ibidem*, p. 221.
[11] Pinilla, Vicente & Gema Aparicio, *Navigating in Troubled Waters: South American Exports of Food and Agridultural Products in the World Market. 1900-1938*, Madrid, Asociación Española de Historia Económica, 2014.
[12] *Ibidem*, p. 15.

(Cuba), minerals (Chile), gold, coffee, bananas (Colombia), wheat (Argentina). However, Pinilla & Aparicio also stated that the main source of recovery, as of 1931, was the promotion of exports, accompanied by devaluations, the creation of new financial institutions, moratorium on external debt and the creation of multiple Exchange rates.

The crisis affected the Latin American region through foreign trade, and, in particular, through trade with the United States, which is its main trading partner. As see in table 1, the United States of America and Great Britain were the main trading partners of Latin American countries. Trade with the US represented about 40 % of the foreign trade of the Latin American countries. Thus, it was clear that the crisis was going to be felt mainly in the export and import sectors of the region. In the Ecuadorian case, as it will be seen later, foreign trade with the US represented about 50 %.

Table 1. Foreign trade with the U.S, Great Britain and Germany, millions of current local currencies, 1927.

	United States		Great Britain		Germany	
	Imports	Exports	Imports	Exports	Imports	Exports
Brazil	1,063	1,630	678	678	448	338
Chile	174	194	95	95	83	66
Colombia	58	95	18	18	18	2.7
Ecuador	35	39	16	16	11	5.1
Bolivia	24	19	12	12	9.7	1.9

Source: Naranjo, Christian, “Síntomas… *op. cit.*, p. 135.

1.2. Ecuador

In this context, the global crisis mostly affected the Latin American countries given the close commercial relationship it had with the United States of America. In the case of Ecuador, the economic crisis involved mainly the external trade sector because the United States supplied 45 % of total imports and 47 % of total exports[13]. The global crisis created commercial, financial, monetary and currency shocks in Ecuador, which forced the government to make controversial decisions, decisions that at the time were considered as possible solutions to the attacks of the Great Depression. These anti-crisis policies were implemented in a decade of strong political instability, as reflected by the fact that, from 1929 to 1938, twelve different governments followed. This instability impacted government decisions, as there was no way to establish long-term public policies. The decade of the thirties was a turbulent time which was reflected in the extraordinary number of presidents, civil and military dictators, “as the economy worsened,

[13] Fieker, F., *Economic and Financial Condition in Ecuador. Washington: U.S. Deparment of Commerce*, Bureau of Foreing and Domestic Commerce, 1931, p. 1.

more and more Ecuadorians turned to the government in search of immediate solutions to economic problems and social of the nation"[14].

2. Economic policies in Ecuador

The anti-crisis policies had a time of slow decision making because, just a few months before the world crisis began, the American economist Edwin Kemmerer, along with most of his collaborators, had left the country after advising the government of Ecuador with one specific purpose: the creation of the Central Bank. It was the only legal institute that had the power to issue currency and with the purpose of the establishment of the gold standard as a monetary system. On 11th February 1927, apart from other economic norms, the Kemmerer Mission presented to the Government of Ecuador the Organic Law Project of the Central Bank of Ecuador; the 4th March, President Isidro Ayora signed the law; and the 10th August, the Central Bank began its operations.

Edwin Kemmerer was considered an international authority on economic issues. From 1919 to 1930, the Kemmerer Mission advised the governments of Guatemala (1919), Colombia (1923), Chile (1925), Ecuador (1926), Bolivia (1928), and Peru (1930). The relationship between the government of Ecuador was strongly strengthened, so "the absolute dependence that has been created since then with the expert for the application of measures"[15] was maintained until 1932.

The consequences of the influence of the Kemmerer Mission were established around the purpose of maintaining fiscal stability that exceeds the instabilities of the international market. From the visit of the Kemmerer mission during October 1926, the gold standard remained an immovable conversion system. The gold standard was designed to maintain the stability of the money supply and also maintain the value of the Ecuadorian currency, that is, sucre's value.

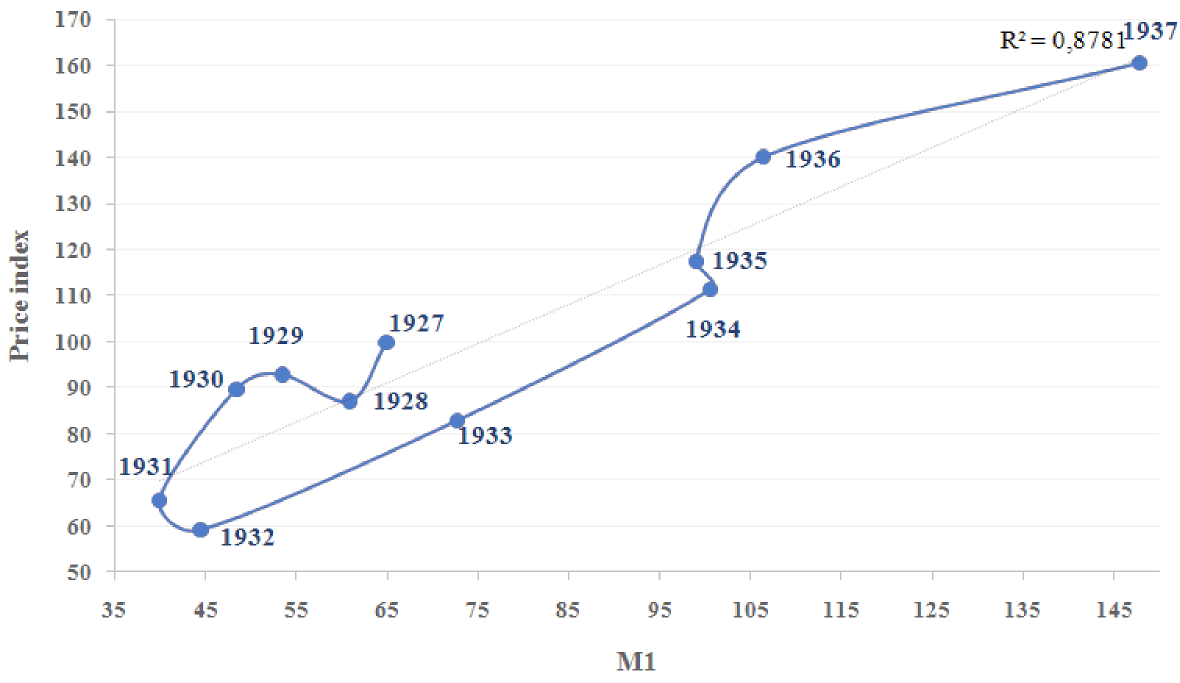
The circulating currency, during the influence stage of the Kemmerer Mission, decreased since 1927. In 1929, the year in which the international crisis began, the circulating currency was 67 million sucres. These data clearly show that the money supply was constantly reducing before the international crisis and it was the immediate cause of the foundation of the Central Bank and its monetary policy; printing of new currency; regulation of the type of discount and interest, raising it when there was excess of money; exchange rate; and purchase and sale of money orders abroad.

[14] Rodríguez, Linda, *Las Finanzas Públicas en Ecuador (1830-1940)*, Quito, Ediciones Banco Central del Ecuador, 1992, p. 198.
[15] Almeida, Rebeca, *Kemmerer en el Ecuador*, Quito, Facultad Latinoamericana de Ciencias Sociales Sede Ecuador, 1994, p. 54.

Meanwhile, from 1927 to 1929, the reduction of the circulating currency occurred at a rate of -8.2 % on an annual average; and, from 1929 to 1931, the reduction was at a rate of -17.9 % per year. In 1932, the circulating currency increased by 15 million sucres, registering 58 million sucres. The financial rigidity policies resulted in the circulating currency going down rapidly. In two years, from 1929 to 1931, the circulating currency was reduced by a third, which, in turn, produced a strong devaluation.

In September 1931, Great Britain decided to set aside the gold standard, which caused serious repercussions in Ecuador as an accelerated gold outflow began. The Central Bank lost about one million sucres during the same year. After Britain’s decision to abandon the gold standard and after seeing an accelerated fall in the reserves of the Central Bank of Ecuador, “most of the Banks in Guayaquil had chosen to make their dollar-based loans”[16]. The result of these policies was obvious: the money supply decreased from 65 million sucres in 1927 to 40 million in 1931, which produced an intense deflationary phenomenon until 1932 (figure 1).

Figure 1. Prices index and Monetary supply, 1927-1937.



Source: Naranjo, Christian, “Evolución… *op. cit*, p. 311.

After those years in which Kemmerer offered counseling to the Ecuadorian government, it began to make relatively independent decisions. The Ecuadorian government set aside the “Kemmerian” policies and began making decisions based on its own expertise, including the abolition of the gold standard, the increase of money supply, seizure of money orders, etc. The

[16] Morillo Battle, Jaime, *Economía monetaria del Ecuador*, Quito, Imprenta Mariscal, 1996, p. 74.

policies during the Great Depression were given in part by the expertise of national politicians, partly by public pressure that was tired of the government prostrating itself before the "monetary doctor"[17] and, in part, it came from the political instability that led the country to have twelve people in charge of the executive branch in less than a decade. Thus, Ecuadorian anti-crisis policies went through two very clear stages: the first one that has been named as the "influence of the Kemmerer Mission, 1927-1932", and the second stage that is known as the stage of "inconvertibility and instability, 1932-1938".

Anti-crisis policies focused on government intervention in the resources of the Central Bank. There are eight loans from the Central Bank to the Ecuadorian government from 1932 to 1937, with a total of 44.8 million sucres. These loans were made according to the following timeline: on 8th February 1932, 12 million sucres were lent; on 29th December 1932, through an Emergency Law, 13 million was lent to the Banco Hipotecario del Ecuador, a bank in charge of the Ecuadorian government; on 30th December 1933, 6.4 million sucres were lent to the government at two percent interest; in February 1934, 2.5 million sucres were lent for the payment of fiscal maturities; on 13th May 1937, 1.7 million sucres; on 24th June 1937, 3 million sucres; and on 21st August 1937, 6.2 million sucres. The 19th August 1937, the government debt is consolidated with a balance of 268,000,000 sucres, at 3 percent annual interest, with a fixed fee from 1938 of 750,000. In five years, from 1932 to 1937, the total government's debts have amounted to 47.041 million sucres[18], where 44.8 million came from the Central Bank of Ecuador.

The abandonment of the gold standard, plus the recurring debts with the Central Bank of Ecuador, made it possible to have a greater money supply, which produced high inflation rates. From 1932 to 1937, the M1 increased from 44.55 million to 147.9 million sucres, producing a strong inflationary phenomenon. Until February 1932, the "Kemmerian policies" caused a deep deflation that led to an upward trend in the evolution of real wages in Ecuador. As of 1932, monetary policies caused a considerable increase in the money supply and, therefore, inflationary indices produced downward trends in real wages.

3. Evolution of Wages

In a previous research[19], it was concluded that the evolution of real wages in Ecuador was related to the monetary supply. It means that when the monetary supply reduced, the evolution

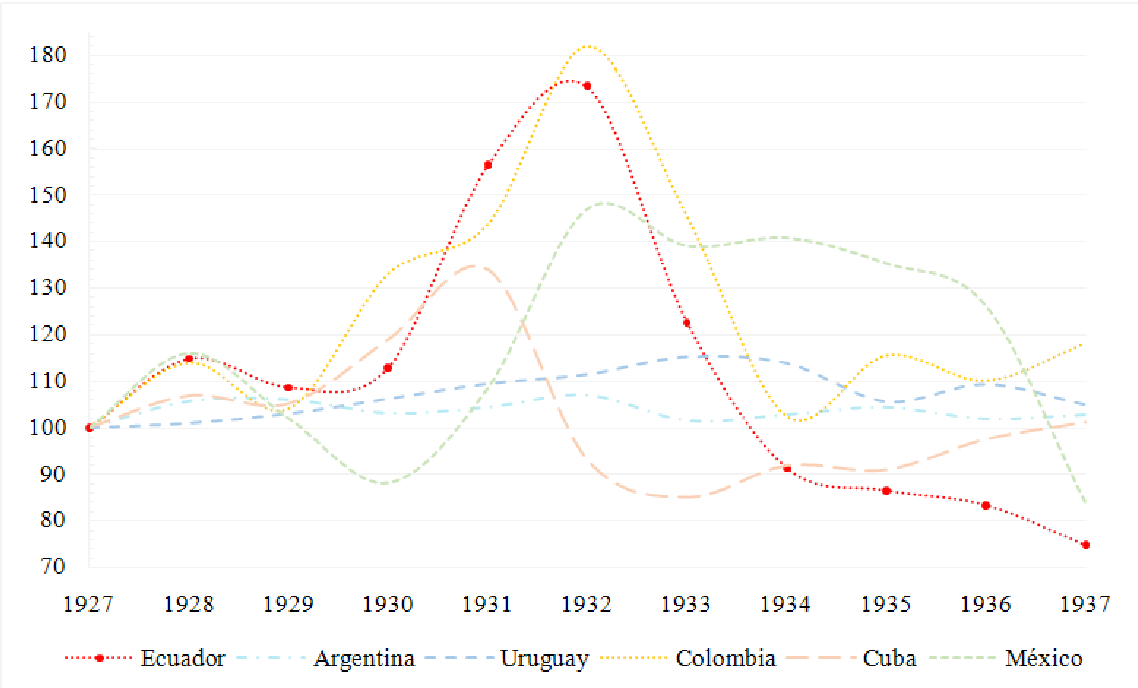
[17] Drake, Paul, *Kemmerer en los Andes: la misión Kemmerer, 1923.1933*, Quito, Banco Central del Ecuador, 1995.
[18] Larrea Stancey, Eduardo, *Evolución de la Política del Banco Central del Ecuador 1927-1987*, Quito, Ediciones del Banco Central del Ecuador, 1990, p. 62. https://doi.org/10.1017/S0212610917000131
[19] Naranjo, Christian, "Evolución… *op. cit.*

of real wages showed an upwards tendency, while when the monetary supply increased, the evolution of real wages showed a downward tendency. These two trends can be seen in figure 2, which shows that the purchasing power of real wages in the countries of Latin America evolved with a considerable increase until 1930-1934, and subsequently experienced a significant decline until the period 1935-1939. Despite these fluctuations, the salaries recorded during 1935-1939, with respect to 1925-1929, increased by 8.34 %, which shows that in a decade real wages did not register a significant increase.

The evolution of real wages in Ecuador was similar to the evolution registered in Latin America in two important aspects. First, in both cases an upward trend in the evolution of real wages can be observed once the international crisis began. When the Great Depression spread throughout the region, the purchasing power of real wages in Ecuador and Latin America increased significantly. In the Ecuadorian case, from 1929 to 1932, in 64.9 points and, in the case of Latin America, in 30.87 points.

Second, immediately after the increase in the purchasing power of wages, in the case of Ecuador and Latin America, there is a decrease in purchasing power. In Ecuador, the index falls from 173.51 to 74.76 points, while in Latin America, from 135.7 to 97.6 points. With these trends, it can be established that, in general terms, the pattern of evolution of real wages in the region and in Ecuador was similar.

Figure 2. Real wages in Latin America, 1927-1937.



Source: Naranjo, Christian, “Evolución… *op. cit.,* p. 317.

4. Unemployment during the Great Depression

Margo[20] mentions that the Great Depression impacted the U.S. with high rates of unemployment from 1929 to 1933: unemployment grew 17- 20 percentage points. For the rest of the decade, the unemployment rate stayed the same. The variations of percentages reflect that some research, such as Lebergott[21] (1964), presented aggregate unemployment data considering "work-relief" as unemployed workers, or, on the other hand, considering it as employed people[22]. Margo[23] also states that the decade of the thirties observed a persistent long-term unemployment as a severe political problem, at least 63 percent had been unemployed for more than one year.

There is an interesting positive correlation between real wages and unemployment during the Great depression: in the case of the U.S. data, between 1929 and 1932, wages and unemployment show a positive correlation: while real wages increased by 16 percent, unemployment rose from 3 to 23 percent[24]. As seen in table 2, the impact of the crisis was not presented in real wages, but in the increment of unemployment. Furthermore, over 310 thousand Mexican workers in the United Stated were deported between 1929 and 1936, six percent of those laboring in 1930[25].

[20] Margo, Robert, "Employment and Unemployment", *Journal of Economic Perspectives*, 7, 2 (1993), p. 42. https://doi.org/10.1257/jep.7.2.41
[21] Lebergott, Stanley, *Manpower in Economic Growth*, New York, McGraw Hill, 1964.
[22] Darby, Michael, "Three and a Half Million U.S. Employees Have Been Mislaid: Or, and Explanation of Unemployment, 1934-1941", *Journal of Political Economy*, 84 (1976), pp. 1- 16. https://doi.org/10.1086/260407
[23] Margo, Robert, "Employment… *op. cit.*
[24] *Ibidem*, p. 43.
[25] Cárdenas, Enrique, *The Great Depression and Industrialization: The Case of Mexico*, Centro de Estudios Económicos, 1982, p. 13.

Table 2. unemployment and real wages in the U.S.

Year	Unemployment rate		Real Wage index
	Lebergott (1964)	Darby (1976)	(1940= 100)
1929	3.2%	3.2%	69.4
1930	8,7	8.7	75.7
1931	15.9	15.3	83.2
1932	23.6	22.9	80.9
1933	24.9	20.6	79.5
1934	21.7	16.0	84.3
1935	20.1	14.2	80.4
1936	16.9	9.9	81.1
1937	14.3	9.1	85.5
1938	19.0	12.5	93.9
1939	17.2	11.3	97.3
1940	14.6	9.5	100.0

Source: Margo, Robert, "Employment… *op. cit.,* p. 43.

In the case of Canada, it also experienced something similar to the United States. Unemployment was the variable of economic adjustment. This problem affected up to 50 % of the adult population and it obliged the government to adopt reforms similar to the New Deal[26]. Moreover, the data collected by Temin[27], cited by González[28], show the increment of unemployment if four of the main global economies during the twenties and thirties. As presented in table 3, the growth of unemployment was significant in the United States and in Germany, but less dramatic in Great Britain and France.

Table 3. Unemployment in the main economies.

Country	1921-1929	1930-1938	Difference
France	3,8	10,2	6,4
Germany	9,2	21,8	12,6
Great Britain	12,0	15,4	3,4
United States	7,9	26,1	18,2

Source: González, José Manuel, "La Crisis … *op. cit.*, p. 189.

In relation to real wages for Latin America, we proposed an explanation of the relation between deflation and real wages: while deflation is provoked by the reduction of the monetary supply, given the fact that the gold standard restrained the creation of new currency, nominal wages remained stagnated mainly because of legal restrictions, causing the increment of real

[26] Drinot, Paul & Alan Knight, *La Gran Depresión en América Latina*, México D.F., El Colegio de México, 2016.
[27] Temin, Peter, *Lesson from the Great Depression,* Cambridge, Massachusetts, MIT Press, 1989.
[28] Gonzáles, José Manuel, "La Crisis Financiera Mundial: Lecciones y Retos", En Martín-Aceña, *Pasado y Presente de la Gran Depresión del siglo XX a la Gran Recesión del siglo XXI*, Bilbao, Fundación BBVA, 2011.

wages until the abandonment of the gold standard. In this sense, the main finding of this article is that the impact of the economic crisis is not going to be found in real wages, but in employment.

Even though the information for unemployment for Latin America is scarce, we have some data for Chile. The impact of the Great Depression was devastating especially in the industrial export sectors, given the fact that at least 40 % of exports went to the United States. In the case of Chile, it has been well studied the situation of the nitrate workers. As shown in table 4, the depression had a great impact on Chilean workers in different parts of the country and, mostly, in the northern saltpeter, where mass unemployment (the number of unemployed saltpeter workers amounted to 50 thousand in 1932) was a direct consequence of the collapse of the export economy[29]. For Bohoslavsky[30], in 1931, the situation was aggravated in the copper, saltpeter and coal industries. The increase in unemployment was noticeable in the northern mining. Between 1929 and 1931, salt production fell by almost half and the number of copper and salt workers fell from 104,000 to 42,000 over the course of the same period.

Table 4. Unemployment in Chilean workers.

Month and year	Number of people looking for job	Number of people working	Difference
December, 1929	5734	1679	4055
January, 1930	1414	1051	363
February, 1930	1507	852	655
March, 1930	1666	1147	519
April, 1930	1332	830	502
May, 1930	927	280	647
June, 1930	885	321	564
September, 1930	1730	180	1550
October, 1930	4300	2749	1551
November, 1930	4339	1375	2964

Source: Vergara, Ángela, "Los Trabajadores… *op. cit*., p. 86.

The Great Depression had its strongest social impact in unemployment, this is visible in the information presented. Something similar was expected to be found in the case of the employment data of the eight institutions researched in Ecuador. The following data will show that the impact in unemployment was similar compared to the information shown in this epigraph.

[29] Vergara, Ángela, "Los Trabajadores chilenos y la Gran Depresión, 1930-1938", en Knight, Alan & Paul Drinot, *La Gran Depresión en América Latina*, Mexico D.F., El Coelgio de México, 2016, p. 86.

[30] Bohoslavsky, Erenesto, "Desempleo, organización y política. Los trabajadores rurales del sur chileno frente a la Gran Depresión", *Anuario de Estudios Americanos*, 59, 2 (2002), pp. 541-563. https://doi.org/10.3989/aeamer.2002.v59.i2.185

5. Ecuador

Most of the Ecuadorian population lived in rural areas and less than a quarter part was living in cities. The most populous city was Guayaquil, with around 96,000 inhabitants; and Quito with an approximate population of 50,000 inhabitants[31]. In addition, approximately one third of the population in Ecuador were indigenous; a quarter of the population had a certain European ancestry; slightly less than half of the population were mestizos, with predominantly indigenous ties; and the rest of the population were blacks, of which the majority lived in the coastal cities. These factors are important to be considered in order to propose that the data presented only represents the part of population who had a formal job, with all the legal boundaries and benefits, and represents only the employment data of the eight governmental institutions researched. Nonetheless, the findings propose a hypothesis that can be tested for the rest of the country.

There is not any previous research on unemployment in Ecuador during the Great Depression. This lack of academic exploration is understandable due to two factors: first of all, the availability of a comprehensible dataset. There is not one macroeconomic dataset that could help to visualize the evolution of unemployment. The second one, there is not an approximation to unemployment because of the main historiography focus, which has been unfolded around the political and social evolution of history. Given this context, the data and conclusions presented in this article represent the first approximation to unemployment, which will help to understand more profoundly the impact of the Great Depression in Ecuador.

6. Methodology

The article explores the evolution of hired job positions of eight institutions, namely: Tobacconist, Supreme Court, Ministry of Foreign Affairs, National Conservatory, Ministry of Social Security, Treasury, Treasury Department, and Attorney General’s Office (appendix A). These intuitions represent a total number of 1990 workers (considering hired job positions in 1927). This research has considered the number of employed people in the central offices of each institution because there is a complete set of data. The main offices of these institutions were located in Quito; therefore, the information is directly related to the economic situation in the capital.

[31] Rodríguez, Linda, *Las Finanzas… op. cit.*, p. 200.

Every employed position has been counted in the central office of each organization for each year, from 1927 to 1935. After that, an index has been created for each institution as follows: the number of people employed has been counted per year, and, then, an index for each institution has been created, considering 1927 as the base year.

$$f(Em) = \mathrm{Em}\frac{100}{J1}$$

$$f(Em) = Employment\ index\ by\ industry$$

$$\mathrm{Em} = Number\ of\ people\ employed$$

$$J1 = Number\ of\ people\ employed\ in\ year\ 1\ (1927)$$

After the construction of an index by organization, a general index has been generated for each year. As the study considers eight institutions, table 5 shows a weighted index has been assigned based on the number of employees each institution had in 1927.

Table 5. Weighted porcentage[32].

Name	%
Tobacconist	7.38
Supreme Court	18.09
Ministry of Foreign Affairs	4.97
National Conservatory	1.55
Ministry of Social Security	29.64
Treasury[1]	32.11
Attorney General's Office	6.23
Total	100

$$f(Eix) = \sum_{n=1}^{n=9}\left(f(Em)\frac{Ins}{100}\right)$$

$$f(Eix) = Employment\ index$$

$$\frac{Ins}{100} = Ratio\ of\ representation\ for\ industry$$

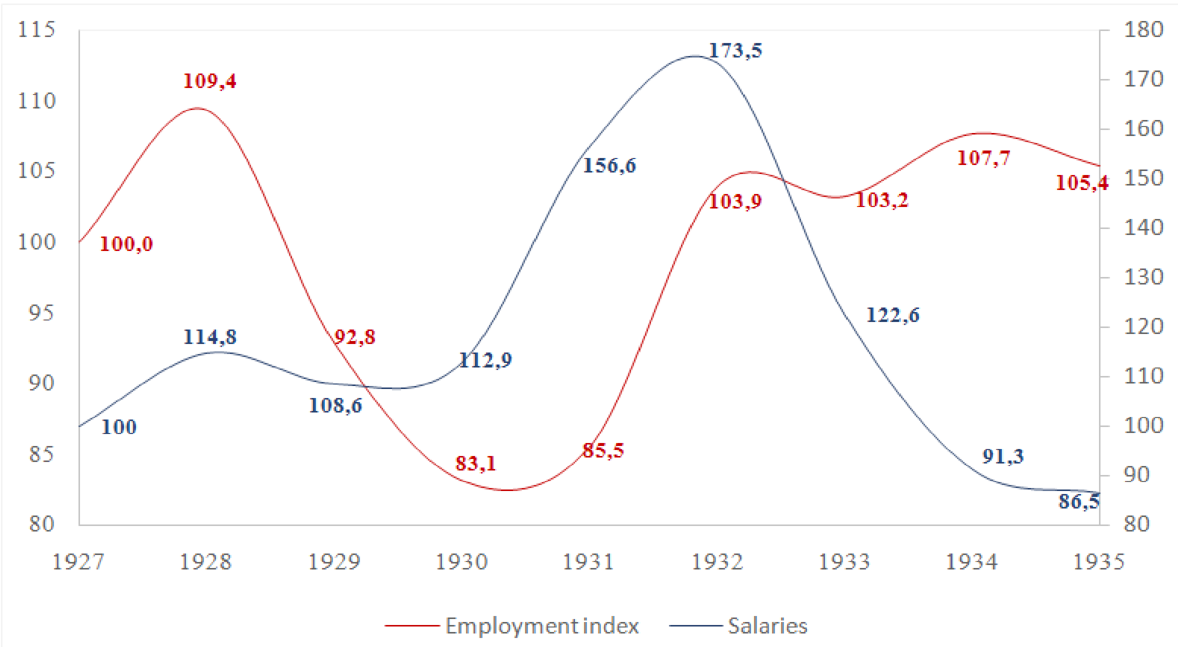
[32] Appendix A.

7. Results and Discussion

The employment index shows that it grew until 1928. From 1928 to 1930, it decreased 26,3 %. This result is comprehensible due to the abrupt reduction of the monetary supply, which decreased from 65 million sucres in 1927 to 48,5 million in 1930, and 40 million in 1931. The reduction of the money supply produced an intense deflationary phenomenon until 1932, but also, it could have encountered at least two outlets, namely: salaries and employment. In order for the economy to adapt, as it managed less currency, salaries could have been reduced as well as employment.

Nonetheless, as it was discussed previously, the real wages in Ecuador, as in the rest of Latin America, grew considerably during the Great Depression (figure 3). This phenomenon is understandable due to legal restrictions that prohibited the reduction of wages. In the case of Ecuador, the Penal Code of 1906, which was in force during the decade of the twenties and thirties, instituted a system of labor protection for workers, punishing with prison or fines the reduction of wages (Art. 298). Also, the 11th September 1916, some work rules were decreed, "by which the hours and days of work are set, in eight the former, and six the later, per week"[33]. In this sense, due to deflation, the purchasing power grew until 1932. In this year, the gold standard was abolished by the government, resulting in an increment of the money supply and, therefore, high inflationary digits emerged for a couple of years.

Figure 3. Employment and real wages index in Ecuador, 1927-1935[34].



[33] Albornoz, Miguel, *Informe del Ministro de Gobierno y Previsión Social*, Quito, Ecuador, Ministerio de Gobierno y Previsión Social, 1931, p. 52.
[34] Appendix D

From the presented data, three main remarks could be made:

First, the data from Ecuador shows that the social impact of the Great Depression was seen in unemployment and not in wages. Employment decreased abruptly from 1928 to 1930 from 109.4 to 83.1 points (1927=100). After 1930, there was a quick recovery until 1932, and, from this point in time, it remained relatively stable until 1935. These figures open the door to consider that the variable of adjustment was unemployment and not real wages.

Second, the recovery of employment stopped in 1932, while, in the same year, real wages started to decreased until 1935. This shows that the economic policies adopted by the government, within which the main one was abandonment of the gold standard and the increment of money supply, produced more jobs while the purchasing power declined continuously.

Third, the Ecuadorian population composition prevented the rural areas of the country from spreading the economic crisis, given the fact that "most Ecuadorians lived in rural areas, had access to food, housing, and were able to avoid the full impact of the economic decline"[35]. This part of the population was left out of the domestic trade and it minimized the impact of Great Depression in Ecuador.

8. Conclusions

The consequences of the international crisis can be understood through the glasses of the Ecuadorian economic policies. In this way, the influence of the Kemmerer Mission provoked the establishment of the gold standard, and, as a result, the decrease of the circulating currency. The data presented in this article clearly shows that the money supply was constantly reducing between 1929 and 1931, the reduction was at an average rate of -17.9% per year. The result of a decreasing money offering caused high levels of deflation which, in return, caused the increment of real wages. From 1932, when the government decided to abandon the gold standard, the economic policies focused on the expansion of money supply, which produced high inflation rates, affecting real wages, which decreased abruptly until 1935.

In the case of employment, it became the variable of adjustment: while real wages increased from 1928 to 1932, unemployment in the central offices of the eight institutions studied also increased in the same period. This decrement in public employment represents a loss of around one quarter of the total job positions. After 1930, employment presented a quick recovery. Then, it remained stable until 1935. In 1932, the recovery of employment stopped

[35] Rodríguez, Linda, *Las Finanzas Públicas… op. cit.,* p. 200.

while real wages started to decrease: while the increment of money supply produced more jobs, the purchasing power declined constantly.

This research concludes that employment was one of the adjustment variable, this is visible through the governmental budget of eight dependencies, which cannot be extrapolated to the whole country; nonetheless, it serves as a glimpse of the impact of the crisis in public employment. Even though the impact of the crisis could be seen in unemployment and in the decreasing of real wages, there is an important element to be emphasized: the Ecuadorian population composition. The majority of the population lived in rural areas with access to food and housing, so they lived in a barter-like context. This characteristic prevented the country from a bigger economic impact.

9. Appendix

Appendix A, number of workers by Institution, 1927.

Name	Number of people employed
Tobacconist	147
Judiciary system[2]	360
Ministry of Foreign Affairs	99
National Conservatory	31
Ministry of Social Security	590
Treasury[3]	639
Attorney General’s Office	124
Total	1990

Source: Registro Oficial N. 522; Registro Oficial N. 528; Registro Oficial N. 569; Registro Oficial N. 535; Registro Oficial N. 654; Registro Oficial N. 762; Regostro Oficial N. 77; Registro Oficial N. 97; Registro Oficial N. 140; Registro Oficial N. 7; Registro Oficial N. 22; Registro Oficial N. 24; Registro Oficial N. 239; Registro Oficial N. 363; Registro Oficial N. 500; Registro Oficial N. 60; Registro Oficial N. 32; Registro Oficial N. 54; Registro Oficial N. 109; Registro Oficial N. 22.

Appendix B, number of employed workers by office[36].

	Tobacconist	Supreme Court	Ministry of Foreign Affairs	National Conservatory	Ministry of Social Security	Treasury	Treasury Department	Attorney General`s Office
1927	9	15	38	28	30	19	20	8
1928	16	18	38	28	30	19	20	8
1929	14	24	17	28	12	19	18	8
1930	9	23	13	30	12	18	16	6
1931	10	23	25	30	12	18	16	6
1932	11	24	27	31	30	16	16	6
1933	11	22	34	31	30	16	17	6
1934	10	27	34	31	30	17	15	6
1935	10	25	35	31	30	17	15	6

Source: Registro Oficial N. 522; Registro Oficial N. 528; Registro Oficial N. 569; Registro Oficial N. 535; Registro Oficial N. 654; Registro Oficial N. 762; Regostro Oficial N. 77; Registro Oficial N. 97; Registro Oficial N. 140; Registro Oficial N. 7; Registro Oficial N. 22; Registro Oficial N. 24; Registro Oficial N. 239; Registro Oficial N. 363; Registro Oficial N. 500; Registro Oficial N. 60; Registro Oficial N. 32; Registro Oficial N. 54; Registro Oficial N. 109; Registro Oficial N. 22.

Appendix C, General Employment index.

	Tobacconist	Supreme Court	Ministry of Foreign Affairs	National Conservatory	Ministry of Social Security	Treasury	Treasury Department	Attorney General`s Office	Index
1927	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0	100,0
1928	177.8	120.0	100.0	100.0	100.0	100.0	100.0	100.0	109.4
1929	155.6	160.0	44.7	100.0	40.0	100.0	90.0	100.0	92.8
1930	100.0	153.3	34.2	107.1	40.0	94.7	80.0	75.0	83.1
1931	111.1	153.3	65.8	107.1	40.0	94.7	80.0	75.0	85.5
1932	122.2	160.0	71.1	110.7	100.0	84.2	80.0	75.0	103.9
1933	122.2	146.7	89.5	110.7	100.0	84.2	85.0	75.0	103.2
1934	111.1	180.0	89.5	110.7	100.0	89.5	75.0	75.0	107.7
1935	111.1	166.7	92.1	110.7	100.0	89.5	75.0	75.0	105.4

[36] With the exception of the National Conservatory, and because of the lack of a yearly information of employment in each institution, the index shows the evolution of the number of workers in the central offices.

Appendix D, Employment and real wages index in Ecuador, 1927=100.

Year	Employment	Real Wages
1927	100.0	100.00
1928	109.4	114.81
1929	92.8	109.49
1930	83.1	108.33
1931	85.5	144.91
1932	103.9	154.19
1933	103.2	108.30
1934	107.7	80.67
1935	105.4	76.65

Source: appendix C for unemployment, and Naranjo (2018) for real wages.