

The Monetary System and the Gold Standard in Venezuela

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Abstract

In this paper I explore how did the monetary system work in Venezuela from its foundation as a republic in 1830 to the creation of the Central Bank of Venezuela in 1941. Between 1830 and 1879 the monetary system was unstable, characterized by the adoption of different currency standards. With the creation of the Bolivar as a currency in 1879 and fixed to the gold, Venezuela gained stability in its monetary system. However, international markets did not work properly until 1918 when the country started to export oil and its trade level grew significantly. Accordingly, I find that between 1918 and 1941, when the Central Bank was established, domestic prices behave as expected by the monetary theory. I got similar results when I extend the test from 1913 to 1971, when the U.S. abandoned the gold standard.

1 Introduction

The period between the foundation of the Republic of Venezuela in 1830 and the arriving of the dictator Juan Vicente Gomez in 1908 can be described as chaotic, characterized by political instability and lack of institutions. The country was run by several *caudillos* who took turns in power depending on the size of their militias. During this period, the country remained fragmented and controlled by local and regional strongmen.

Gomez took power in 1908 and ruled Venezuela until 1936. During this period he had an important role in the creation of the state capacities, stabilization of the public finances, professionalization of the army and improvement of the physical infrastructure. Gomez invited foreign oil companies to operate in Venezuela under favorable conditions. 1918 was the starting point in two ways: the beginning of oil exports and the approve of the *Ley de Monedas* that created restored the Gold Standard.

According to the monetary theory, under a monetary system with fix exchange rate such as Gold Standard, it its expected that domestic prices behave like international prices. In this paper, I analyze the evolution of the behavior of the domestic prices respect to international prices.

1.1 The Monetary System 1830-1871

The Republic of Venezuela was founded in 1830, after its separation from the Gran Colombia. From 1834 to 1845, the Spanish peso fuerte, Spanish gold ounce, English shilling and other

gold coins from the new republics were allowed. In 1848 Venezuela adopted the French Franc as standard, but in 1854 the government authorized the coinage of *Venezolano de oro* (gold) and *Venezolano de plata* (silver). The bimetal system continued until 1879 when President Guzman Blanco decree the creation of the Bolivar and adopted the gold standard by fixing the Bolivar at a rate of 0.290323 grams of gold (equivalent to Bs. 3.06 US Dollars). This parity remained constant until 1959 (Peltzer, 1965).

1.2 The Monetary System and the Balance of Trade after 1918

In 1918 Venezuela started to produce and export oil. Until 1917 the main exports were coffee (25%) and cocoa (17 %) and total export value was around USD 23 million. In 1918, with the oil export, there was a jump up to USD 44 million. Figure 1 shows the breakpoint of international trade in 1918.

2 Model and Results

The research question of this paper is if the Venezuelan monetary system worked according to the gold standard system. To do that I will follow the same test conducted by McCloskey and Zecher (1997).

From the the one price law we have that:

$$P = P^*E \quad (1)$$

Where P is the domestic price index, P^* is the international pice index, and E is the nominal exchange rate.

Taking log and differences:

$$\Delta P = \Delta P^* + \Delta E \quad (2)$$

Since the exchange rate is fixed, it follows that:

$$\Delta P = \Delta P^* \quad (3)$$

To test this hypothesis I use a simple regression:

$$\Delta P = \beta_0 + \beta_1 \Delta P^* \quad (4)$$

In this sense, I expect that $\beta_0 = 0$ and $\beta_1 = 1$.

Table 1 shows the result for the regression between 1879 and 1938, which practically covers the whole period between the creation of the Bolivar in 1979 until the creation of the Central Bank of Venezuela in 1941. The data used for Venezuela was the General Index Price from Baptista (2006) and the Index of the General Price form the National Bureau of Economic Research in the case of the U.S. As expected, the intercept is not statistically different from zero while the slope is significant, but not close to 1 (as shown in Table 1, the coefficient is 0.444). It is possible that this result is a consequence of the very low level of trade between Venezuela and the U.S. before 1918.

In this sense, I tried to control for oil exports and trade with different variables including total trade (exports + imports) as a share of GDP from Maddison, as a share of the index of

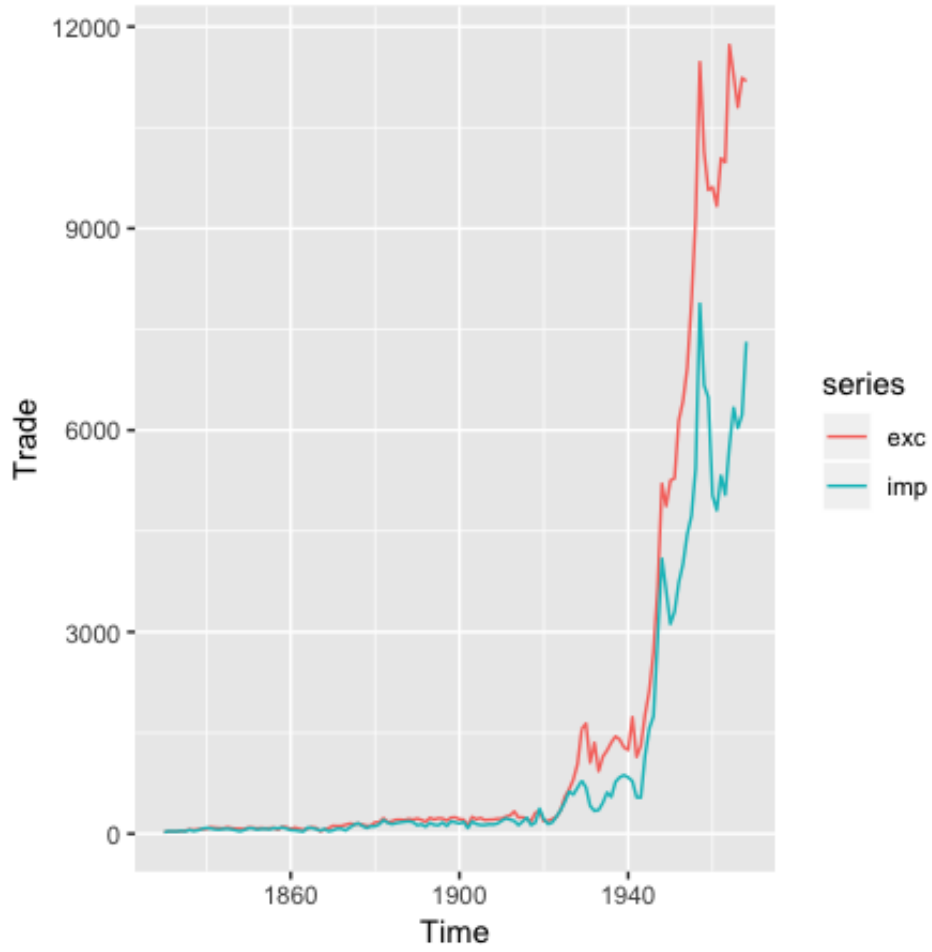


Figure 1: Venezuela: Exports and Imports (1830 - 1968) in Millions of Bolivars of 1968

general economic activity from Baptista (2006), and also a dummy that was equal zero before 1918 and equal to one after 1918. None of this control changed the value of the coefficient (0.44). However, this exercise could be explored in depth in further research.

Table 1: Venezuela 1879 - 1938

<i>Dependent variable:</i>	
ΔVEP	
ΔUSP	0.444*** (0.059)
Constant	-0.614 (0.475)
Observations	
	59
R ²	
	0.500
Adjusted R ²	
	0.492
Residual Std. Error	
	3.603 (df = 57)
F Statistic	
	57.068*** (df = 1; 57)
Note:	
	*p<0.1; **p<0.05; ***p<0.01

In Table 2, I conduct the test running the variation of prices of Venezuela against the U.S. and the U.K. from 1879 to 1918. In the case of the β_1 is statistically significant but around 0.27. In the case of the U.K. none of the coefficients are statistically significant. This confirms, that during this period international prices had little impact on domestic prices due to the very small trade.

In Table 3 we observe the results from the regression between consumer price index of Venezuela against the U.S. from 1918 - 1941. In this case, the intercept is not significant, but $\beta_1 = 1.131$ and statistically significant. This results suggests that domestic prices worked as expected by the monetary theory.

I extended the regression to the period 1913 (the year of the creation of the FED) - 1971 (the year that the U.S. abandoned the Gold Standard), obtaining that the slope is 0.804. This suggests that during this period, prices in Venezuela behaved as expected by the theory.

3 Conclusions

In this paper I explore the behavior of the prices in Venezuela respect to the U.S. prices between 1871 and 1941. The results suggests that, once Venezuela increased its level of international trade in 1918 by exporting oil, domestic prices behaved like international prices as expected under gold standard system. Despite Venezuela adopted the gold standard in 1871 with the creation of the Bolivar, before 1918, the level of trade were very low and the influence of international prices in the economy were around 44%.

Table 2: Venezuela 1879 - 1918

	<i>Dependent variable:</i>	
	ΔVEP	
	(1)	(2)
ΔUSP	0.277** (0.102)	
ΔUKP		0.472 (0.380)
Constant	-0.002 (0.547)	0.107 (0.561)
Observations	39	33
R ²	0.165	0.047
Adjusted R ²	0.142	0.017
Residual Std. Error	3.171 (df = 37)	3.221 (df = 31)
F Statistic	7.302** (df = 1; 37)	1.543 (df = 1; 31)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	

Table 3: Venezuela - US (1918-1941)

	<i>Dependent variable:</i>
	ΔVEP
ΔUSP	1.131*** (0.192)
Constant	-0.099 (0.202)
Observations	23
R ²	0.623
Adjusted R ²	0.605
Residual Std. Error	0.968 (df = 21)
F Statistic	34.754*** (df = 1; 21)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

Table 4: Venezuela: Gold Standard (1913-1971)

<i>Dependent variable:</i>	
ΔVEP	
ΔUSP	0.804*** (0.104)
Constant	-0.111 (0.117)
Observations	
	58
R ²	
	0.514
Adjusted R ²	
	0.506
Residual Std. Error	
	0.786 (df = 56)
F Statistic	
	59.284*** (df = 1; 56)
Note:	
	*p<0.1; **p<0.05; ***p<0.01

I suggest further research to explore more in depth how Venezuela kept such monetary stability during the interwar period.

References

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