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Venezuela's Inflation as a macroeconomic imbalance. A second sight

La inflación de Venezuela como desequilibrio macroeconómico. Una segunda vista.

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Resumen

La inflación es un indicador importante que impacta en el desempeño económico y la riqueza de un país. Este trabajo se centra en el comportamiento de los indicadores de inflación de Venezuela a lo largo de la historia, especialmente en el año 2012 y posteriores. El documento muestra que las cifras de inflación de Venezuela no se pueden explicar solo por las teorías y modelos económicos habituales, sino a través de un análisis riguroso de las circunstancias intrínsecas de Venezuela. El trabajo propone algunas áreas de investigación como la relación entre inflación y descontento político.

Palabras clave: inflación; Venezuela; macroeconomía; desequilibrio.

Abstract

Inflation is an important indicator and one that impacts on the economic performance and wealth of a country. This paper focuses on the behavior of Venezuela's inflation indicators throughout the history specially in the year 2012 and after. The paper shows that Venezuela's inflation figures cannot be explain only by the regular economic theories and models but through a rigorous analysis of Venezuela's intrinsic circumstances. The paper proposes some areas of research such as the relationship between inflation and political discontent.

Keywords: inflation; Venezuela; macroeconomy; imbalance.

1. INTRODUCTION

Venezuela has had an increasing record of inflation since 1970's. However currently it has been more recurrent and exponential than ever before, it has come to show a hyperinflation that apparently cannot be stop. Prices changed repeatedly; the numbers are so outrageous that some analysts even say that the daily inflation rate in Venezuela is of 1,5%. Focus Economics Consensus Forecast "estimate that inflation jumped from 530.3% at the end of Q3 2016 to 632.7% at the end of the year inflation is seen ending 2017 at 724.5%. For 2018, the panel expects inflation of 625.3%."

There comes the question on how to understand that Venezuela went from a positive performance in 2012 to a complete failure in 2015 and subsequences years. The problem relays in many circumstances that need to be explain and that is the aim of the present paper.

2. OBJECTIVES

Analyze the process of Venezuelan inflation, and with the empirical evidence try to explain the inflation's exponential spiral. The study will be until 2015 because there are not official figures of Venezuelan economic behavior after 2015.

3. METHODOLOGY

To the method, the constructivism framework was chosen. The type of sources is a documentary research, based mainly on the selection and critical analysis of documents and investigations of different nature

3.1. International Oil Prices, the good, the bad, the evil.

The fall in the Venezuelan oil basket in the third quarter of 2015 was approximately 57.8%, compared to the same period in 2014.

Around the middle of 2014, we found a fall in world oil prices explained by the rising alarm of a deceleration of the Chinese economy and the flourishing shale oil production, which had made net imports of crude oil and oil products into the United States dropped from the highs of 13 million barrels per day in 2006 to less than five million barrels per day. Even with this dropped figures, OPEC members led by Saudi Arabia, for the first time since 2002, continued to produce at record levels, as a way to protect their market share, but specially as a way to defy the US shale oil industry, which had a much higher cost of production.

As a result, many of these drills in the USA clogged their production. Nevertheless, the technology remains its path of development, and the cost of shale oil production is declining, so the figures are increasing again. As can be seen, the price of oil at the global level depends on variables beyond supply and demand, including geo strategy and policy, both at a high level.

Figure 1
Venezuela Production Average Daily Oil Barrels 2014-January 2019.

Source: OPEC, PDVSA, Infografia Gina Domingos.

3.2. Venezuelan oil industry

The oil industry represents a strategic sector for public finances in Venezuela's economy. This is due to its importance as an input and its contribution as a generator of foreign exchange through the export of crude oil. In addition, it is an important source of public revenue.

Oil extraction and production in Venezuela shows a decreasing trend, as a result of the quota system from the OPEC.

In 2009 and 2011, oil exports went from US $ 37.937 billion to US $ 49.332 billion. Meanwhile, in the course of January - August 2012, the value of crude oil exports was $ 31.64 billion, 40 percent from the sale of heavy crude oil and the rest from the commercialization of light oil type Mesa and Guafita.

Despite the favorable behavior of the crude oil trade, the total value of exports in August was 5.1 percent below the level registered in the same period of 2011, due to the higher oil price reported in that year.

3.3. Inflation in Venezuela

By 2011 Venezuela was leaving behind the recessionary cycle of the end of 2008, and showed a general improvement in all economic activity, which opened up new and renewed hopes of well-being and development. The Economic Growth marked by GDP (annual variation in%) stepped from 4.2 to 5.6, which could only be recognized not only as an economic triumph but as miraculous growth. However, 2013 marks a reverse.

Table 1

Venezuela’s Economic Indicators

	2011	2012	2013	2014	2015
Population (million)	29.1	29.5	30.0	30.5	30.9
GDP per capita (USD)	10,859	12,885	12,401	18,601	-
GDP (USD bn)	316	380	372	567	-
Economic Growth (GDP, annual variation in %)	4.2	5.6	1.3	-3.9	-5.7
Unemployment Rate	8.2	7.8	7.5	7.0	6.8
Inflation Rate (CPI, annual variation in %, eop)	27.6	20.1	56.2	68.5	181
Inflation Rate (CPI, annual variation in %)	26.1	21.1	40.6	62.2	122
Inflation (PPI, annual variation in %)	20.8	16.6	52.4	-	-
Benchmark Interest Rate (%)	14.50	14.50	14.74	14.84	14.59
Stock Market (annual variation in %)	79.1	303	480	41.0	278
Exchange Rate (vs USD)	4.30	4.30	6.30	6.30	6.30
Exchange Rate (vs USD, aop)	4.30	4.30	6.09	6.30	6.30
Current Account (% of GDP)	5.2	0.7	1.2	0.6	-
Current Account Balance (USD bn)	16.3	2.6	4.6	3.6	-18.2
Trade Balance (USD billion)	41.2	31.9	31.6	27.2	-
Exports (USD billion)	93.7	88.8	88.8	74.7	-
Imports (USD billion)	52.6	57.2	57.2	47.5	-
Exports (annual variation in %)	40.2	-5.3	0.0	-15.8	-
Imports (annual variation in %)	26.0	8.8	0.0	-16.9	-
International Reserves (USD)	29.9	29.9	21.5	22.1	16.4

	2011	2012	2013	2014	2015
External Debt (% of GDP)	37.5	34.4	35.6	24.0	

Source: http://www.focus-economics.com/countries/venezuela

This downward trend continued in consecutive years. The National Consumer Price Index (NCPI), presented by the Central Bank of Venezuela (BCV) and the National Statistical Institute (INE), registered a cumulative variation of 108.7% in September 2015, Combined quarter-on-quarter changes of 19.1%, 26.1% and 38.9%, corresponding to the first, second and third quarter, respectively.

Inflation, as measured by the national consumer price index (NCPI), showed a year-on-year change in the NCPI that for September 2015, was 141.5%. Also, during the first half of 2015, a variation of 50.3%, so that quarter-on-quarter variation was 38.9% in the third quarter.

Among the factors determining the performance of economic activity in the third quarter is the lower availability of foreign exchange as a result of the adverse impact of the fall in oil prices of 57.8% compared to the same period of 2014, which affected the imports required by the national productive system.

When grouping the results for the third quarter of 2015, it can be seen that: As a result, 9 of the 13 categories of NCPI grew less than the global average (38.9%): housing services (2.5%); Rental of housing (9.0%); communications (15.0%); goods and services (22.3%); health (23.8%); transportation (27.0%); leisure and culture (30.0%); house appliances (33.3%) clothing and footwear (35.6%). In the remaining four groups, the following cumulative variations were reported: education services (43.3%); Alcoholic beverages and tabaco (50.9%); restaurants and hotels (52.0%), food and non-alcoholic beverages (55.7%).

According to Feng Lu (Feng2, 2017), “in a standard textbook, inflation is defined as persistent growth of consumer price driven by excessive growth of money supply and aggregate demand vs. aggregate supply….[but]..The traditional understanding is useful in identifying and dealing with conventional inflation reflected by CPI hike but with limitation in addressing the inflation through asset bubbles”.

The world did not end in 2012 as many thought according to Maya prophecy, but the disruption of the Venezuelan economy begun. In that year, without any of the variables that from the theory allows to understand not only inflation but a hyperinflation, Venezuela changed from an inflation of 20.1 in 2012 to a 56.2 in 2013 reaching 274% inflation in 2016, (El Mundo,2017), not explainable neither by increases in aggregate demand nor to decreases in aggregate supply (as established by economic theory), or by the increase in monetary

liquidity (as monetarists explained)

3.4. Gross domestic product

According to the Venezuelan National Bank, gross domestic product (GDP), at constant prices, declined by 7.1% during the third quarter of 2015, compared to the same period of the previous year.

This result was influenced by the fall in the value added of the main economic activities. The performance, as it was part of the previous two quarters (-1.4% and -4.7%), resulted in a contraction of 4.5% in the January-September period. Under the institutional perspective, in the third quarter, the public sector experienced an increase of 1.1%, while the private sector decreased by 10.5%.

4. RESULTS

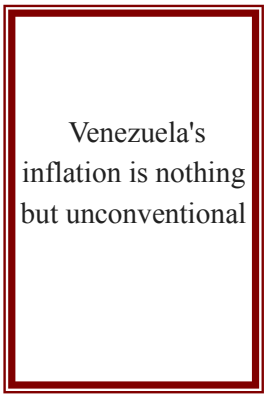
4. 1. Inflation Models

In need of more explanations and variables to understand Venezuela's inflation rate we can analyze it through a theory called the quantity theory of money which links the inflation rate to the growth of money supply, it uses the variable of velocity defined as the rate that money circulates;
The formula states:
$V=T/M$
V= Velocity
T= Value of all transactions
M=Money supply
After a few adjustments of the formula and relating it to the GDP the formula acquires this shape

$$\pi = \Delta M/M - \Delta Y/Y$$

According to (Feng,2017) "Normal economic growth requires a certain amount of money supply growth to facilitate the growth in transactions. Money growth in excess of this amount leads to inflation. $\Delta Y/Y$ depends on growth in the factors of production and technology; hence the quantity theory predicts a one-for -one relation between changes in the money growth rate and changes in the money growth rate and changes in the inflation." Confronting the theory with the inflation indicators and Venezuela's GDP, the theory states that higher money growth rate higher inflation, however in Venezuela we see in the charts an hyperinflation rising without a presence of higher money growth.

4.2. Inflation and political discontent



The results reported are produced in a general context characterized by a reduction in the supply of final consumer goods, due to the drop in imports and the decline in domestic production, which in turn were influenced by the fall in international prices of Petroleum. The shortage of some products is perceived by the population as one of the main problems that afflict the country, along with speculation and hoarding. This outcome of hyperinflation has an upsetting factor in the population towards those considered responsible for such a situation, and the hypothesis can be maintained that as inflation increases, the popularity of the leaders decreases, and therefore their chances of winning votes in the next election decreases.

Just as an exercise, I designed an econometric model that uses inflation as a parameter to show how strong is the relationship between inflation and the outcome of the elections.

Model

$\Delta Votes = -0.61 \Delta Inflation - 2.9$

$R2 = 0.75$

Figure 2

This model predicts that for each 10 percent of change in the increase of inflation it will be reflected in a 61 percent of decreases of votes in that party.

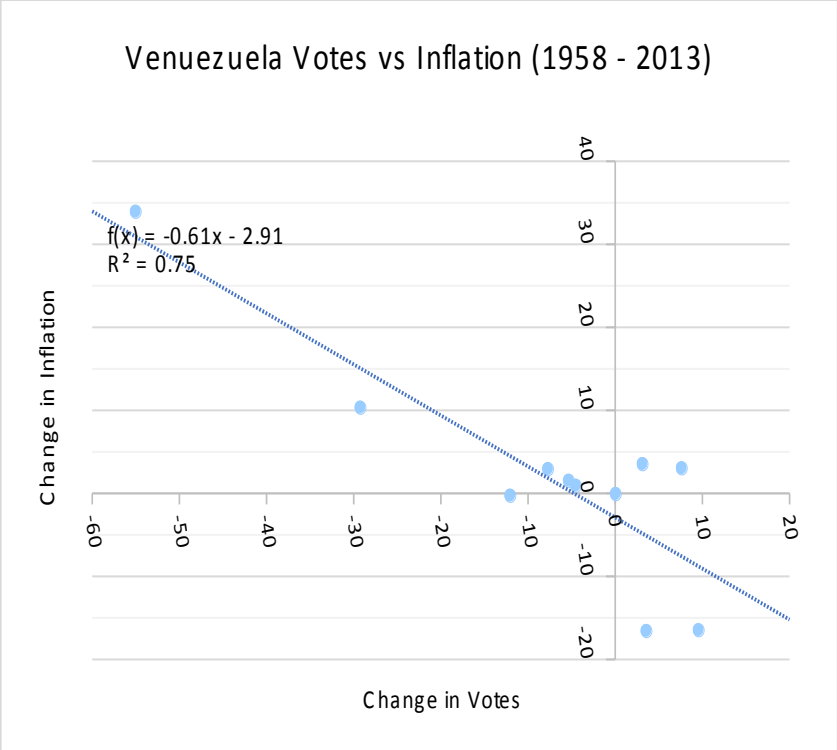


Figure 3

Summary

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.868608
R Square	0.754481
Adjusted R Square	0.727201
Standard Error	6.987744
Observations	11

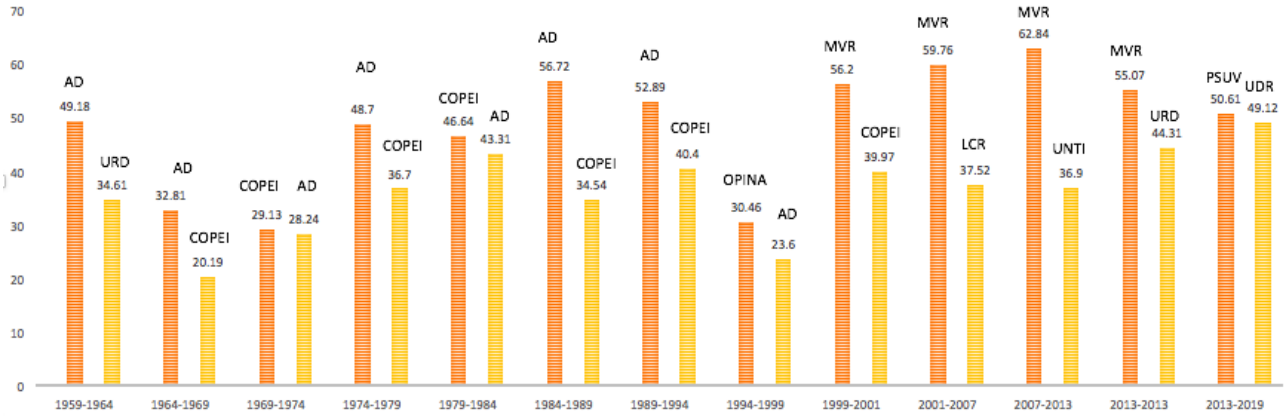
ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	1350.450147561	1350.45	27.65697	0.0005214333
Residual	9	439.4571251661	48.82857		
Total	10	1789.907272727			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95,0%*	*Upper 95,0%*
Intercept	-2.913656	2.3161155765	-1.257993	0.240052	-8.1530736024	2.325761	-8.1530736	2.32576128
X Variable 1	-0.614852	0.1169144054	-5.258989	0.000521	-0.8793303537	-0.350373	-0.87933035	-0.3503728

Figure 4

Venezuela's Parties 1958-2019



Source Ordonez (2019)

5. CONCLUSIONS

The general message of this paper is that Venezuela's inflation hasn't behave like any other country through history in time and in order to find answer it needs to be addressed in a specific context. Theory points to the fact that inflation is positively correlated with higher money growth rate, aggregate demand vs. aggregate supply, however it fails to explain the characteristics of the economic bubbles that Venezuela is experiencing that can lead to answers and explanations. Unfortunately, there is limited empirically research that has emphasizes at how to understand Venezuela's growing inflation.

REFERENCES

Feng Lou Economic Policy: Macroeconomic Analysis (2017). National School of Development at Peking University (NSD) Institute of South-South Cooperation and Development (ISSCAD)

Web references

Economics Consensus Forecast. February 10, 2017 Inflation in Venezuela. https://www.focus-economics.com/country-indicator/venezuela/inflation

El Mundo. April 20, 2017 http://www.elmundo.com.ve/noticias/economia/banca/fmi--banco-central-de-venezuela-dijo-que-la-inflac.aspx#ixzz4fOfKW7Dq

Feng Lou, Economic Policy: Macroeconomic Analysis (2017). National School of Development at Peking University (NSD) Institute of South-South Cooperation and Development (ISSCAD