Estimating Venezuela´s Latent Inflation

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ABSTRACT

Percent variation of the consumer price index (CPI) is the inflation indicator most widely used. This indicator, however, has some drawbacks. In addition to measurement errors of the CPI, there is a problem of incongruence between the definition of inflation as a sustained and generalized increase of prices and the traditional measure associated with the CPI. We use data from 1991 to 2005 to estimate a complementary indicator for Venezuela, the highest inflation country in Latin America. Latent inflation is defined as that component of measured inflation that has no impact on real output in the long-run. This notion, consequently, is consistent with a vertical long-run Phillips curve and therefore it is grounded on economic theory. Latent inflation is constructed placing dynamic restrictions on a structural vector auto regression system. We find that latent inflation reflects more closely the generalized and sustained price increases most likely to be impacted by monetary policy. Our results are consistent with the identifying restrictions and with the theoretical definition of inflation.

Keywords: latent inflation, SVAR, monetary policy.

INTRODUCTION

*G*eneral Price index stability is one of the main objectives that every Central Bank wants to pursue, especially those whose main mandate is to safeguard the purchasing power of money. In actual practice, the percent variation of the consumer price index (CPI) is used as the most representative indicator of the inflationary phenomenon. However, it only accounts for the average variation in the prices of a basket of goods and services of the economy, while theoretically, inflation is a sustained and generalized increase of prices, Friedman (1968).

Moreover, the percent variation of the CPI can reflect certain kinds of distortions induced by spurious weightings and changes in relative prices caused by seasonal factors, changes in the terms of trade, alterations of indirect taxes, wage related governmental decrees and price rigidities due to menu costs that don't reflect the real inflationary process, Quah and Vahey (1995), Ball and Mankiw (1995) and Wynne (1999). In addition, regional or sectoral disturbances can change a component of the CPI which is barely related to the inflationary process. Therefore, if the monetary authorities react to these shocks, it could generate severe costs to the real sector of the economy.

In spite of its limitations, the percent variation of the CPI constitutes the most used measure of inflation in many countries. This has led central banks responsible for inflation control and its estimation, to search for alternative measures capable of providing useful complementary information about the inflationary process, in order to purge it from variations in prices which aren't within monetary policy control. Hence, an indicator closely related to the theoretical definition of inflation as a long term monetary phenomenon and therefore susceptible to be affected by monetary policy is desirable.

The goal of this research is to contribute to enhance the understanding of the Venezuelan inflationary phenomenon, the highest in Latin America in recent years, generating a complementary indicator to the consumer price index, named *latent inflation*. It is defined as the part of the traditional measure of inflation that has no impact

over long term real income, which is consistent with the notion of money neutrality. Therefore, *latent inflation* obeys to an economic theory concept that is compatible with a vertical Phillips curve. Estimating *latent inflation,* we are providing a new indicator in addition to the "*underlying inflation*" measure suggested by Blanco and Reyes (2002) and to the "*inflationary nucleus*" estimated by Cartaya and Fermín (2002), both for the Venezuelan case.

An estimate of *latent inflation* is obtained through a Structural Vector Auto Regression System (SVAR), which is identified when the long term restrictions suggested by Blanchard and Quah (1989) are applied. Specifically, we assume that the inflation that is measured by percent variations of the CPI is affected by two types of non-correlated disturbances: The first has unrestricted effects on real output. The second disturbance has no impact over production nor economic activity level on the long run. In accordance with Quah and Vahey (1995), *latent inflation* is the part of inflation that is built upon the second type of disturbances.

The latent indicator estimated, allowed us to validate the connection between the economic theory associated with its estimation, and its relationship to the traditional measure of inflation. Furthermore, the results associated with the impulse response function analysis and variance decomposition are consistent with both the theoretical approaches and the identifying restrictions. Thus, *latent inflation* has limited impact over output, explaining less than 8% of the total variation of the output's prediction error. In addition, certain discrepancies exist between *latent inflation* and the traditional measure, suggesting that during some periods, the CPI overestimates (underestimates in other periods) the real inflationary pressures to which the economy is subject to, creating the possibility of pitfalls in the conduct of monetary policy.

For example, between January 1993 and December 1996, traditional inflation, impacted by negative supply shocks, overestimated the latent indicator, while during other periods (for example, July 1998 – July 2002) positive supply shocks contributed to an underestimation of the traditional measure relative to the *latent inflation*.

This research is organized as follows. Section I presents various measures of inflation, pointing out its strengths and weaknesses. In section II we present the methodology used to estimate *latent inflation*. Results are shown in section III, which also compares and interprets the percent variation of the CPI's evolution with the *latent inflation* and shows the impulse response functions analysis and variance decomposition. Section IV concludes and suggests avenues for future research.

I.   THE ELUSIVE ESTIMATION OF THE OPTIMAL MEASURE OF INFLATION

It's important to point out that the term *core inflation*, which will be translated in this paper as *inflationary nucleus*, has been used to designate various measures of inflation, all of which intend to approximate themselves to the theoretical concept of inflation. In Eckstein's seminal work (1981), total inflation is broken down into inflation caused by demand, inflation caused by supply disturbances, and *inflationary nucleus*, defined as the variation in the price index along with a balanced growth path.

However, Torres (2003) and Clark (2001) use the term *inflationary nucleus* to a modified CPI that excludes some of its components based on several judgments. For example, a possible measure of *inflationary nucleus* is constructed without including the food and energy sectors due to their high volatility.

A variation of the prior case is generated excluding goods and services whose prices experience the highest and lowest percent changes each month. Another possibility simply considers the CPI´s median, yielding central tendency measures of inflation with truncated distributions, also known as limited influence estimators, see Bryan and Cechetti (1994) and (1996) and Bryan, Cechetti and Wiggins (1997).

These approaches present the inconvenience associated with some capriciousness in the process that is used to determine which sectors are to be excluded. According to Hernaiz and Jiménez (2005) both indicators result from mechanical assumptions that respond to statistical rather than theoretical criteria. Moreover, the process of eliminating sectors implies wasting potentially valuable information of the inflationary process. Nonetheless, the

inflationary nucleus has the benefit of being transparent, facilitating the central bank's communication with the public.

Another line of research employed is what Blanco and Reyes (2002) denominated the statistical approach, which consists in obtaining the series' tendency through moving averages, ARIMA models, transfer function models and statistical filters. The application of these techniques yields an inflationary trend which Álvarez and Matea (1997) and Mateos and Gaytán (1998) called *underlying inflation.* These procedures also present certain drawbacks, for example, the trend yielded by the ARIMA models and statistical filters is sensitive to the sample's size.

The line of research developed in this paper corresponds to the "economic approach" (Blanco and Reyes, 2002) or "conceptual approach" (Misas, López, Téllez and Escobar, 2005), which offers the advantage of explicitly including a hypothesis based on economic theory to estimate a measure of inflation, without ignoring any component of the CPI. Using a multivariate analysis, this paper incorporates the hypothesis that the medium and long run inflation shouldn't affect the level of economic activity because it is a purely monetary phenomenon. Hence, the measure of inflation obtained is compatible with a vertical Phillips curve and with the notion of long term neutrality of money. Quah and Vahey (1995), pioneers in this kind of estimation, named the obtained indicator, *Core Inflation*. Melo and Hamman (1999) refer to it as *Basic Inflation*. Following Álvarez and Matea (1997) and Mateos and Gaytán (1998), we'll refer to it as **Latent Inflation**.

Quah and Vahey´s (1995) analysis assumes that the variations observed in the CPI are affected by two types of uncorrelated disturbances, which can be distinguished through their impact on output:

1.   The first type can have a strong effect over the level of economic activity on the long and medium term.
2.   The second type has no impact over long term output, although it could have some effect over shorter time frames.

Consequently, they define *latent inflation* as the component of traditional inflation that is associated only with the second type of disturbances, that is, with those that are output neutral.

According to Quah and Vahey (1995) and Mateos and Gaytán (1998), *latent inflation* and its comparison to the CPI's variation, yield relevant information about the type of inflationary pressures that affect the economy. If the traditional measure of inflation is similar to the *latent inflation*, it clearly suggests an absence of long term shocks on output; therefore, these variations obey to forces over which monetary policy can have some influence.

On the other hand, it can be expected that when there are negative (or positive) disturbances that affect the long term level of production, inflation will be higher (or lower) than *latent inflation*. As the effect of theses disturbances on measured inflation dissipates, it will tend to converge to the *latent inflation*. Such comparisons allow for a better interpretation of the business cycle.

A proper interpretation of the inflationary process is of prime importance in Venezuela, considering that it has experienced the highest levels of inflation in Latin America over the past few years, as can be observed in Graph 1.

Graph 1: Annual Inflation 1996-2004 for some Latin American countries.

ANNUAL INFLATION 1996 - 2004
FOR SOME LATIN AMERICAN COUNTRIES
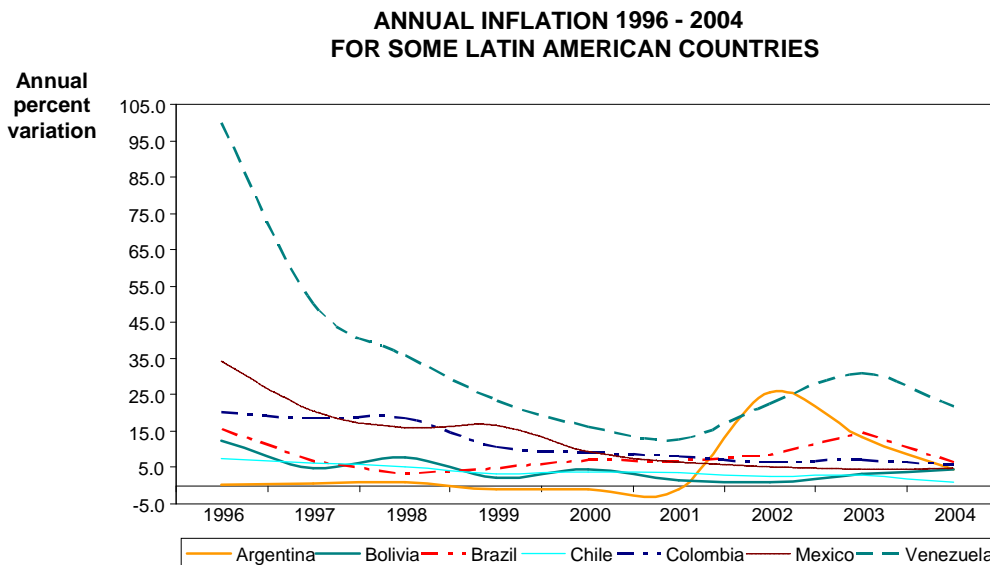
Source: International Monetary Fund (International Financial Statistics)

In this respect, the measure of *latent inflation* has the benefit of not responding to transitory fluctuations in the supply of goods in the economy and reflects sustained movements in prices. Creating an indicator with these characteristics enables monetary policy authorities to determine inflationary pressures susceptible of being affected by monetary policy. However, *latent inflation* presents the inconvenience of being sensitive to the sample's size and of not facilitating the central bank's communication with the public.

II.   DATA, DESCRIPTIVE STATISTICS AND METHODOLOGY [1]

1.   Data And Software

The data comes from Venezuela's Central Bank (www.bcv.gov.ve). The variables "price" and "product" are represented with the Consumer Price Index logarithm (LNCPI) and the Industrial Production Volume Index (LNVOL), respectively. The data is presented on a monthly basis, for the period starting on January 1991 and ending on February 2005. The analyses were made using Eviews and MATLAB software.

2.   Descriptive Statistics

Graph 2 and Table 1 present the evolution of LNVOL and LNCPI variables and a summary chart with descriptive statistics.

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[1] The data, as well as the analysis's specific results in this paper, are available upon request of the authors at (hugomoises@gmail.com)

Graph 2 and Table 1: Evolution of Price and Production variables and the Series´ Summary Statistics table

Basic Descriptive Statistics		
	LNVOL	LNCPI
Mean	4.558685	4.325987
Median	4.580625	4.788431
Maximum	4.825456	6.151242
Minimum	3.317149	1.843124
Std. Dev.	0.181385	1.364695
Observations	170	170
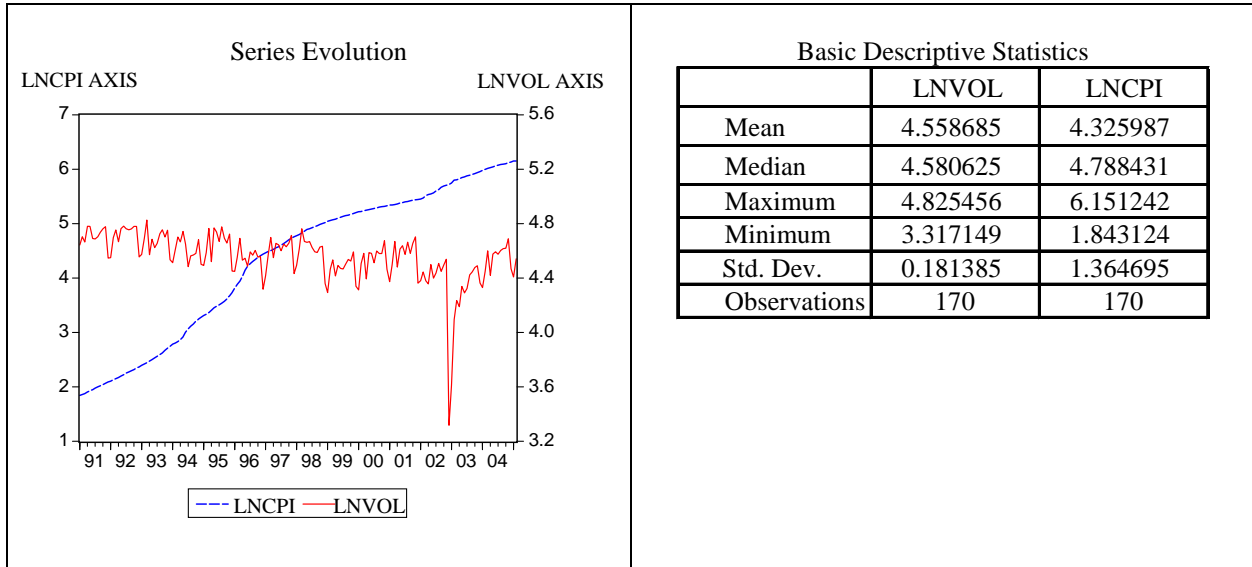
Source: BCV and own calculations

In order to obtain the output's series (LNVOL), it was necessary to employ chain procedures because during the study's time frame there were several base years for this indicator. As seen on Graph 2, the industrial production volume index has a strong seasonal behavior with significant reductions in December and January. For this reason, and by using formal seasonality tests, the index is the seasonally adjusted industrial production volume index (LNVOL_SA). The method used for determining seasonality, as well as for seasonally adjusting the series is the well known X-12 program, version 0.9.2 (provided by Eviews), developed by the *U.S. Department of Commerce, U. S. Census Bureau.*

Graph 3: Seasonally Adjusted and Non-Seasonally Adjusted Industrial Production Volume Index
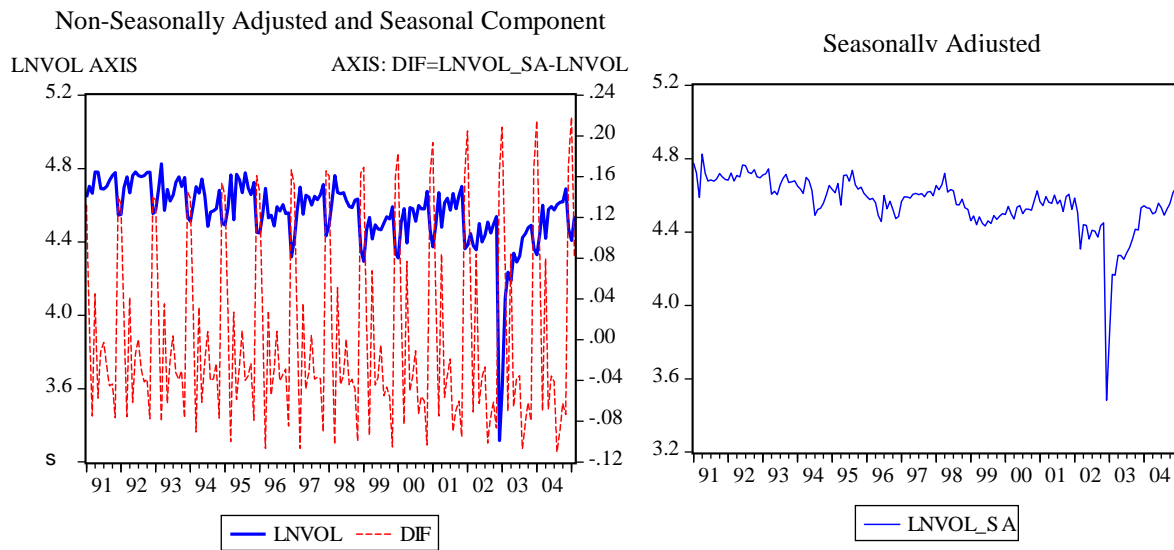
Graph 3 presents evidence of the output's series seasonality. On the left, the original series of the industrial production volume index is presented along with its seasonal component. On the right, the seasonally adjusted results are shown.

3. Overview

The two structural disturbances that affect inflation and output are not directly observable. Therefore, Quah and Vahey (1995) estimate a vector auto regressive model (VAR) under structural restrictions (SVAR), originally proposed by Blanchard and Quah (1989), with the purpose of identifying these elements and breaking down the series observed in the graph into its latent and non latent components.

Under this methodology's assumptions[2], the identification of the structural disturbances is carried out through the imposition of statistical restrictions that assume that both types of disturbances are independent. In addition, it is established that a distinction between both can be made due to its differing impact on real output: Disturbance number one (ε_{1t}) could present a permanent effect on output, while disturbance number two (ε_{2t}) presents no impact over output in the medium and long term, even though it could affect it on shorter time spans. In this context, *latent inflation* is defined as the one that can be derived only from the second type of disturbance[3].

Following Quah and Vahey (1995), we observe that the model does not impose any restrictions over the non neutral disturbance's adjustment. Nor does it present restrictions over the required period for the effect of the output's neutral disturbance to disappear. Finally, the identification restriction relative to the neutrality of the second disturbance over output should be reflected on the impulse response and variance decomposition functions.

4. Methodology

An estimate of *latent inflation* is obtained through a Structural Vector Auto Regression System (SVAR), which is identified when the long term restrictions suggested by Blanchard and Quah (1989) are applied. Specifically, we assume that the inflation that is measured by percent variations of the CPI is affected by two types of non-correlated disturbances: The first has unrestricted effects on real output. The second disturbance has no impact over production nor economic activity level on the long run. In accordance with Quah and Vahey (1995), *latent inflation* is the part of inflation that is built upon the second type of disturbances.[4]

5. Construction Of The Latent Inflation

In order to obtain the latent CPI relative to each period from series ε'_{2t}, the following procedure was followed:

1. In period *t*, the latent structural residue ε'_{2t} represents, by definition, the difference between the observed inflation and the *latent inflation* to be estimated:

$$\varepsilon'_{2t} \equiv \Delta \ln ipc_t - \Delta \ln \overline{ipclat}_t \tag{1}$$

Where: $\Delta \ln ipc_t$ = Observed inflation and $\Delta \ln ipclat_t$ = Estimated *latent inflation*.

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[2] When a two variable VAR model is defined, the e_t vector error term has two components. In SVAR models, certain structural restrictions define another e_t vector error consisting of two elements, defined in this paper as first (ε_{1t}) and second (ε_{2t}) type of disturbances.

[3] It should be noted that under the specification imposed on the SVAR, the definition of latent inflation itself constitutes one of the identification conditions.

[4] The mathematical analysis related to this section is available upon request of the authors at hugomoises@gmail.com

2. From the previous equation, *latent inflation* can be expressed in its recursive form:

$$\Delta \ln i\dot{p}clat_t \equiv \ln i\dot{p}clat_t - \ln i\dot{p}clat_{t-1} = \Delta \ln ipc_t - \varepsilon'_{2t} \tag{2}$$

$$\Rightarrow \begin{cases} \ln i\dot{p}clat_t = \ln i\dot{p}clat_{t-1} + \Delta \ln ipc_t - \varepsilon'_{2t} & \text{if } t > 0 \\ \ln i\dot{p}clat_0 = \ln ipc_0 & \text{if } t = 0 \quad \text{(initial condition)} \end{cases}$$

III. RESULTS

I. Determining The Integration Order

To use the Blanchard and Quah technique requires stationarity of the two time series. The Augmented Dickey-Fuller Test was used to determine the order of integration of the variables for the period starting on January 1991 and ending on February 2005. In such test, it wasn't possible to reject the hypothesis that series LNCPI and LNVOL_SA are not stationary, I (1), not even at a 10% significance level; see Table 2.

Table 2: Augmented Dickey-Fuller Test for the study's variables. Period: 1991:01 –2005:02

		t statistic	*p-value*
Levels	LNCPI	-2.33292	0.1629
	LNVOL_SA	-2.313772	0.1689
1st difference	LNDCPI	-4.316616	0.0006
	LNDVOL_SA	-13.82448	0.0000

Source: Own calculations

In the case of the logarithmical difference of the consumer price index (LNDCPI) and the logarithmical difference of the seasonally adjusted industrial production volume index (LNDVOL_SA), the null hypothesis of the existence of a unit root is rejected at a 1% significance level for both cases, these results suggest that first differences of these variables are stationary.

2. Cointegration Analysis

Application of Quah and Vahey´s (1995) methodology requires both series not to be cointegrated. From Graph 2 it can be inferred that variables LNCPI and LNVOL don't exhibit a cointegration relationship. Johansen's formal cointegration tests (trace and maximum Eigenvalue tests) for the VAR model constructed from LNCPI and LNVOL_SA yield the same results: there is no evidence of any kind of cointegration at a 5% significance level.
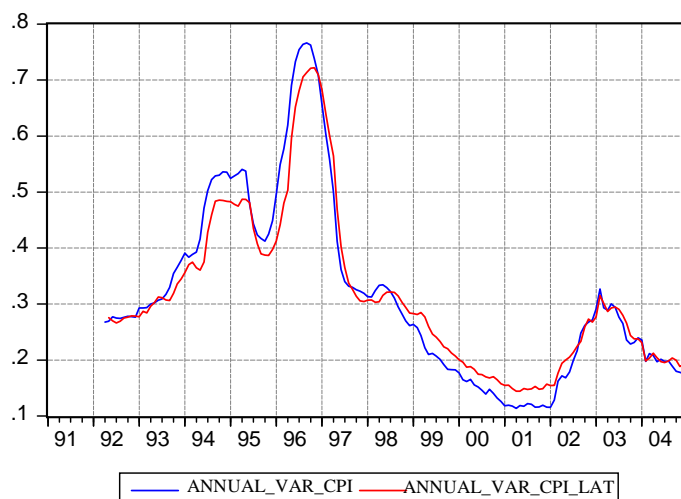
3. VAR Formulation

After establishing the integration order, a VAR model was constructed for the consumer price index's growth (LNDCPI) and the difference of the seasonally adjusted industrial production volume index (LNDVOL_SA), which included three lags, three dummy variables and a constant[5].

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[5] A dummy variable referred to the price variable was specifically incorporated in May 1996, in order to consider inflation's atypical growth during that month, as a consequence of price and currency exchange controls elimination in April 1996. Similarly, two dummy variables linked to the volume indicator were introduced for December 2002 and February 2003 in order to avoid distortions, resulting form the national general strike that took place during those months.

4.   Comparison Between The Observed Inflation And The Latent Indicator

Graph 4 presents the results of the *latent inflation*'s annualized calculations and its comparison with the CPI's evolution.

Graph 4: Latent Inflation and CPI

Source: BCV and own calculations

Table 2: Chronology of Events

PERIOD	EVENTS / IMPLICATIONS
JUNE 1994	Beginning of the banking crisis on January of the current year, resulting in considerable capital outflows which derived in a significant drop of international reserves and in the establishment of a price and foreign exchange control, fixing the bolívar / dollar parity in Bs. 170 for every US$ on sale.
DECEMBER 1995	Bolívar / dollar parity adjustment to Bs. 290 for every US$ on sale; a 70,5% devaluation.
APRIL 1996	Dismantling of the foreign exchange control and adoption of a free convertibility regime. Under this new regime, the exchange rate experienced approximately a 62% adjustment increase.
JULY 1996	Adoption of an exchange rate band regime, establishing an amplitude of +/- 7,5%, an initial central parity of Bs. 470 for US$ and a monthly sliding rate of 1,5%.
FEBRUARY 2003	Implementation of a unique and integral exchange control, with a rate of Bs. 1.600 per US$, a 38% adjustment relative to 2002´s average. Establishment of an administered price regime for various products that comprise the consumption basket.
FEBRUARY 2004	Official exchange rate adjustment to Bs. 1.920 per US$, a 20% adjustment.

After analyzing the evolution of the inflation measures shown in Graph 3, and considering Table 2 as a reference (which presents a chronology of events that had an impact in price changes), the following conclusions can be drawn for each period:

Cycle I (1993-1997)

In general terms, the rate of inflation measured by the CPI was higher than the latent indicator's growth, which could be associated with the presence of negative shocks on output. However, it's important to point out that during this period, two sub periods should be distinguished. The first one, from 1993 until the first quarter of 1996,

witnessed the re-emergence of fiscal imbalances, the banking crisis that started in 1994 and the establishment and gradual deterioration of the price and foreign exchange control. These factors, among others, determined increases of both measures of inflation, a scenario in which the CPI incorporates short term elements which generate additional inflationary pressures that aren't displayed by the latent indicator.

The second sub period, from July 1996 through June 1997, both indicators presented decreasing tendencies, revealing a relative control of inflation. The lower devaluation and inflationary expectations encouraged by the exchange rate band regime, in effect since July 1996, could represent a determinant factor.

On the other hand, the great similarity between the inflation series and the latent indicator during this sub period, suggests an absence of temporary inflationary pressures induced by supply shocks.

Cycle II (1998-2001)

Latent inflation is actually higher than the CPI inflation though both are decelerating. This reveals disinflation that could be the result of the exchange rate band mechanism that partially anchored the exchange rate. The strong decreasing tendency that both indicators displayed between July 1996 and June 1997 and in particular that the CPI inflation underestimated the latent indicator since mid 1998 until late 2001, suggests the occurrence of positive supply shocks. Nevertheless, between the fourth quarter of 2000 and the year 2001, both indicators appear to level off. Apparently, rigidities in the labor market and domestic outlay increases put an end to the disinflation process.

Cycle III (2002-2004)

In general terms, the evolution of both measures of inflation is relatively similar. However, from the second semester of 2004, there's evidence of a widening gap, with a relatively stable evolution for the latent indicator but higher than the CPI's. Thus, the theory posits that the reduction in the price's growth rate measured by the CPI is temporary; when the positive effects are dissipated it should converge to the latent level. In this case, the central bank would be missing an opportunity to reduce inflation with low costs in terms of output loss.
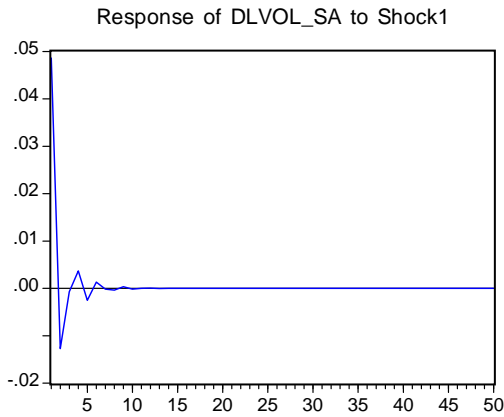
5.   Impulse Response Function

Graphs 5 to 8 present the impulse response functions induced by the non latent shock (shock 1) and the latent shock (shock 2) on output and inflation. There's evidence that the latent disturbance, Graph 6, presents a mild impact over the rapidly stabilizing output, which is consistent with the identifying restriction that establishes that latent disturbances have a neutral effect on the real product, as well as the existence of a vertical Phillips curve.
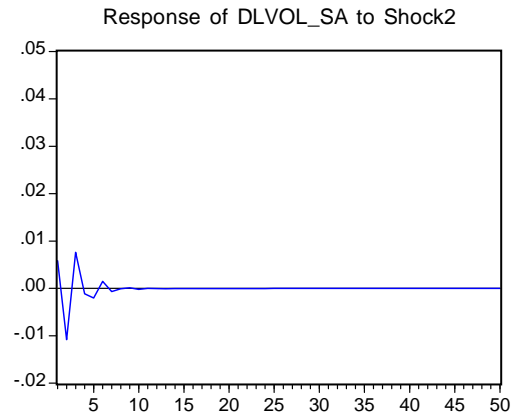
The non latent disturbance, Graph 5, has a substantially higher accumulated effect over the product, taking more time for its stabilization. This result is consistent with the notion that transitory supply shocks explain innovations in production and its behavior.

Both disturbances impact inflation in different ways. The impact of the latent disturbance, Graph 8, is much more accentuated, suggesting that an increase in the quantity of money has a short run incidence over the prices' evolution. The effect of the non latent shock, which could be interpreted as a transitory supply innovation, is mild and tends to stabilize relatively quickly, Graph 7, which is consistent with the hypothesis that non latent disturbances introduce noise over inflation and do not affect it on the long term.
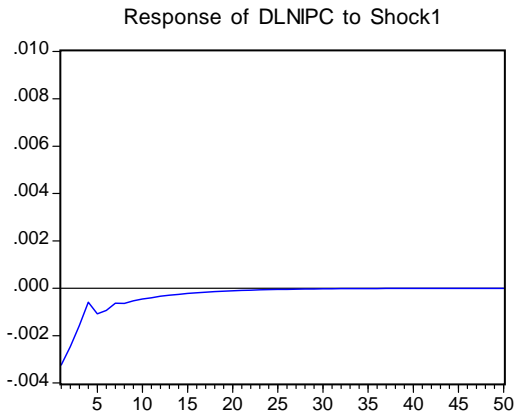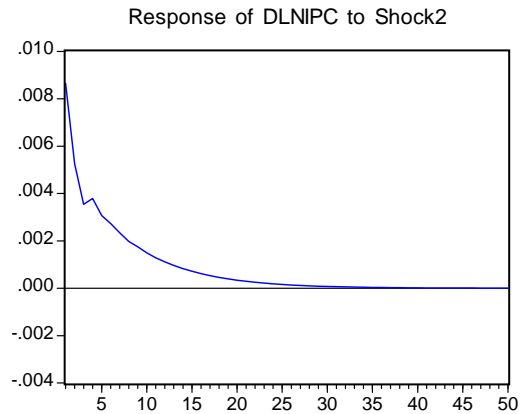
Response to Structural One S.D. Innovations

Response of DLVOL_SA to Shock1

Graph 5

Response of DLVOL_SA to Shock2

Graph 6

Response of DLNIPC to Shock1

Graph 7

Response of DLNIPC to Shock2

Graph 8

6.   Variance Decomposition Analysis

The error prediction of the variance decomposition indicates the proportion of the change in a sequence due to its own disturbances and those caused by another sequence's (variable) disturbances. Table 4 shows that the explanatory contribution of the latent disturbance of the output volume is systematically lower than that of the non latent shock, i.e., no greater than 8%. On the other hand, the latent shock accounts for a high proportion of the observed inflation's change, while the non latent disturbance never explains more than 15% of the observed inflation's change. These results are consistent with the previously mentioned hypothesis concerning the latent and non latent disturbances´ role in the evolution of output and inflation.

Table 4: Variance Decomposition

DLVOL_SA Variance Decomposition:				LNDCPI Variance Decomposition:		
Period	Error Est.	Shock_NLAT	Shock_LAT	Period	Error Est.	Shock_NLAT	Shock_LAT
1	0.048989	98.57924	1.42076	1	0.00923	12.26741	87.73259
2	0.051749	94.38062	5.619375	2	0.010908	13.88054	86.11946
3	0.052312	92.37913	7.62087	3	0.011579	14.17111	85.82889
4	0.052455	92.37411	7.625886	4	0.012197	13.00012	86.99988
5	0.052554	92.2573	7.742696	5	0.012623	12.87157	87.12843
10	0.0526	92.17175	7.828248	10	0.013554	12.34884	87.65116
20	0.0526	92.17154	7.828455	20	0.013803	12.21703	87.78297
30	0.0526	92.17153	7.828466	30	0.013816	12.21023	87.78977
40	0.0526	92.17153	7.828466	40	0.013817	12.20987	87.79013
50	0.0526	92.17153	7.828466	50	0.013817	12.20985	87.79015
100	0.0526	92.17153	7.828466	100	0.013817	12.20985	87.79015
200	0.0526	92.17153	7.828466	200	0.013817	12.20985	87.79015
300	0.0526	92.17153	7.828466	300	0.013817	12.20985	87.79015

V.   CONCLUSIONS AND RECOMMENDATIONS

The theoretical concept of inflation is the sustained increase of the price's general level. In practice, the CPI's percent growth is the most commonly used measure of inflation. However, this indicator only represents the average change in the cost of given basket of goods and services for a typical consumer. Moreover, this indicator is influenced by seasonal, irregular and cyclical factors and transitory changes in relative prices, among others, which can lead to erroneous measurements and interpretations of inflation's true behavior.

This research paper intends to define, estimate and analyze an alternative measure of inflation, complementary to the consumer price index called *latent inflation*. It can be defined as the growth in prices that would take place in the absence of long term shocks on real output. This notion is consistent with the existence of a vertical Phillips curve. In order to obtain this indicator, Quah and Vahey´s (1995) methodology is employed under the assumption that the changes in the CPI are affected by two types of disturbances. The first ones (non latent disturbances) affect the real output on a medium to a long term, while the second ones, latent disturbances, don't have an impact on the long run.

In this context, the latent component of inflation is associated with the price increase that would be obtained *in the absence* of the disturbances that affect output. For this reason, a detailed analysis of the latent component was performed, comparing it (for the 1991-2005 period) with the CPI indicator to obtain relevant information regarding the type of inflationary pressures to which the Venezuelan had to endure.

Both measures had similar behavior; however, there were sub periods in which one of the indicators reflected a higher or lower change than the other. Thus, evidence suggests that when negative supply shocks are present in the economy, such as financial crisis, abrupt changes in the exchange rate, fiscal unbalances, national strikes or any negative shock on output, the CPI registers a higher inflationary pressure than the latent indicator. Nevertheless, once these disturbances are dissipated, the CPI tends to converge towards the measure of *latent inflation*.

However, when the Government adopted measures aimed at lowering devaluationist and inflationary expectations, such as the implementation of an exchange rate band regime in 1996, the CPI reflected less growth in comparison with the *latent inflation* indicator. In these cases it can be inferred that the Central Bank most likely missed an opportunity to lower inflation with a low cost in terms of production loss.

Finally, the results presented in this research paper, besides being consistent with the model's identifying restrictions, show that the information originated from the *latent inflation* contributes to the understanding of the Venezuelan inflationary phenomenon, the highest in Latin America, highlighting the source of these pressures. As a complement to the CPI, the use of the *latent inflation* indicator is suggested in monetary policy decision making. In addition, it is advisable to estimate other complementary measures; such as the permanent or long term inflation suggested by Álvarez and Sebastián (1995), and the common stochastic tendency model applied by Bagliano and Morana (2003a and 2003b) and Misas, López, Téllez and Escobar (2005).

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