NÚMERO 551

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The Real Exchange Rate, Regime Changes and Volatility Shifts

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Abstract

We make use of a data set that is both long span and high frequency to test for purchasing power parity while allowing for a structural shift in the volatility of the Mexico-US bilateral real exchange rate. The Kim, Leybourne and Newbold (2002) unit root test, robust to changes in the innovation variance, indicates mean stationarity of the monthly real exchange rate, hence evidence of PPP, for the full sample, 1930-2012 and various subsamples. The persistence of deviations of the real rate from its PPP level as measured by half-lives ranges from 1.37 to 2.41 years.

Keywords: *PPP; Structural breaks; Mexico*
JEL Classification: *F31; C22*

Resumen

Empleamos una base de datos con periodicidad mensual y que abarca un periodo muy extenso para probar la hipótesis de paridad poder de compra, permitiendo un cambio estructural en la volatilidad del Tipo de Cambio Real entre para el caso México y Estados Unidos. Lo anterior se realiza mediante una prueba de raíz unitaria propuesta por Kim, Lee y Newbold en 2002. Los resultados de ésta indican que el tiempo de cambio real es estacionario, lo que abona a la hipótesis de PPP, para el periodo de estudio, (1930-2012), así como para diversas submuestras. Adicionalmente, se estudia la persistencia de las desviaciones de PPP, cifrándolas en un rago que oscila entre 1.37 y 2.41 años.

Introduction

If the cost of a market basket of traded goods is the same, in terms of a common currency, in different countries then absolute purchasing power parity (PPP) holds. There is an enormous literature of papers that test PPP empirically with mixed results [see Sarno and Taylor (2002)]. Taylor (2001) has shown that the application of unit root tests to the real exchange rate are likely to be biased towards finding a unit root, hence rejecting PPP, due to aggregation issues in calculating the nominal exchange rate and price indices. A solution to this problem is to employ real exchange rate (RER) series for long time spans. However, long time spans for most countries will include different nominal exchange rate regimes. Baxter and Stockman (1989) have documented differences in real rate volatility between fixed and floating nominal rate regimes. Changes in volatility can affect the performance unit root tests. Hamori and Tokihisa (1997), using the simplest Dickey-Fuller specification, found that a variance-augmenting break leads to spurious over-rejection of the unit root null hypothesis. Kim, Leybourne and Newbold (2002) extend these results by using more complex DF auxiliary regressions and find that there are "*severe spurious rejections of the unit root null when there is relatively early decrease in the innovation variance*".[1] Cavaliere (2004) shows that the size of the KPSS test may be substantially increased with a permanent increase in the innovation variance, leading to an incorrect rejection of the stationarity null. Thus, when using data spanning long time periods it is important to consider the volatility of the real rate series.

We investigate the validity of PPP hypothesis between Mexico and the US using the unit root test developed by Kim, Leybourne and Newbold (henceforth KLN) which controls for changes in volatility. There are a number of studies of Power Purchasing Parity (PPP) focused on Mexico. Ávalos-Huerta and Hernández-Trillo (1995) fail to find evidence of PPP. Wallace, Shelley, and Cabrera-Castellanos (2011) find some support for PPP during the 1930-1951 period but none for 1952-1960. Studies using a methodology that allows for structural breaks do find evidence of reversion of the real exchange rate to a shifting mean, see Noriega and Medina (2003) and Gómez-Zaldívar, Ventosa-Santaulària and Wallace (2013). However, reversion to a shifting mean cannot be regarded as evidence favorable to strict PPP.[2]

Although the PPP literature is very extensive, two factors distinguish this study from other empirical work on purchasing power parity. First, we employ a unique data set that is both long span and high frequency, more than 80

[1] Kim, Leybourne, and Newbold (2002), page 366.

[2] Papell and Prodan (2005) have assigned different terms to these situations in order to distinguish such shifts from PPP: Qualified PPP (stationary around a changing mean); Trend PPP (trend stationary); Trend Qualified PPP (trend stationary with changes in the intercept).

years of monthly data, to study purchasing power parity in Mexico. The complete data set employed in this work has not been used elsewhere. Indeed most PPP studies have been restricted to industrialized countries because long span, typically annual, data are more readily available. Second, we utilize a unit root test developed by Kim, Leybourne, and Newbold that controls for changes in the volatility of the monthly series and is robust to level changes. As discussed below, changes in volatility characterize the Mexican real exchange rate. We are unaware of any other PPP study employing either a similar long-span data set at the monthly frequency or the KLN unit root test.

The rest of this paper is organized as follows: in Section 2, we present the data and show that an empirical regularity identified in the literature, higher volatility associated with floating nominal exchange rates, is also present in our series. Section 3 describes the methodology. Section 4 presents results and conclusions are set forth in Section 5.

Data

The empirical analysis makes use of monthly observations on the Mexican peso/US dollar nominal exchange rate (NER) and the wholesale price index (WPI) of Mexico City and the US.[3] These monthly data span the period January 1930–December 2000. The US price index is from the database of the Federal Reserve Bank of St. Louis. The NER and the WPI series from Mexico City are obtained by piecing together data reported in Cárdenas (1994) for the 1930-1960 period; and data from the annual reports of Bank de Mexico (the central bank) for 1961-2000.[4,5] Since the Bank of Mexico (Banxico) stopped reporting the wholesale price index for Mexico City series in December 2000 the series is further extended to 2012 by appending the producer price index (PPI) for the entire country to the Mexico City series.[6] Although data limitations require cobbling together price index series for Mexico City with those of the country to obtain a complete series, our conjecture is that the different

3 The only available Mexican price index for the 1930-1960 period is the WPI for Mexico City. To maintain consistency in the series we used the Mexico City wholesale price index for 1961-2000 rather than a producer price index for the country available beginning 1969.

4 Cardenas identifies his source as the Bank of Mexico however these data are not reported on the Bank's website. The data in Cardenas are, however, very close to the values reported for the series in the Banxico annual reports for 1930-1960.

5 RER1 is the real exchange rate series constructed using the wholesale price index for Mexico City. The RER1 monthly series spans 1930-2000.

6 RER2 and RER3 are the series extended to 2012. RER2 is constructed using a PPI series excluding the price of petroleum while RER3 is the series using a PPI that includes the petroleum price. Given price volatility in international oil markets since 1973 we use RER2 as a robustness check on the results to determine whether oil price fluctuations affect the results.

geographic coverage makes very little difference. Mexico City has long been the commercial center of the country and location of a very large share of employment in most industries.

To assess the volatility of the series across time and identify periods of change, the conditional variance of the logarithms of the nominal exchange rate, relative prices index and the real exchange rate [given by equation (1)] are calculated.

$$q_t = logP_t^{US} + logS_t - logP_t^{M} \qquad (1)$$

P_t^M and P_t^{US} represent the period t price index in Mexico and the US respectively, and S_t is the nominal exchange rate, the Mexican peso price of a US dollar. The relative price index is the log difference of the Mexican and US price indexes $logP_t^{US} - logP_t^{M}$.

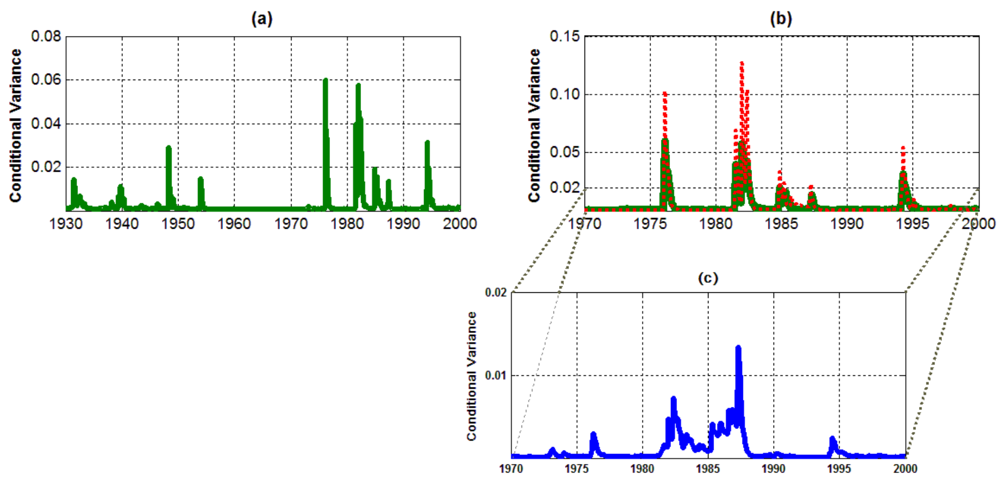
Changes in volatility of the monthly real exchange rate in Mexico are clearly evident in Figure 1a showing the conditional variance of the series over the full sample. Prior to 1976 when Mexico ceased to fix the nominal exchange rate, most spikes in the conditional variance of the real rate are associated with a switch from a fixed to flexible nominal rate regime a month or two earlier. These observations are consistent with evidence presented in Baxter and Stockman (1989) showing that real rate volatility is higher during flexible exchange rate regimes. Annual reports of the Bank of Mexico suggest that floating nominal rates were temporarily adopted during the 1933-1975 period to allow the real rate to return to its equilibrium level. An added advantage of our high frequency data set is that the timing of the volatility change can be precisely fixed in the particular month of a year often allowing us to identify the probable cause(s) from Banxico reports.

Figures 1b and 1c restrict attention to the 1970-2012 period of higher volatility in the real rate. Three additional facts about volatility and exchange rates in the Mexican economy are revealed by the graphs for the restricted sample. First, Figure 1b shows that the nominal exchange rate is more volatile than the real exchange rate. The maximum value for the conditional variance of the real exchange rate is about 0.06 in 1976 and 1981while the conditional variance of the nominal exchange rate exceeds 0.1 on three occasions from 1976-1983. Second, the conditional variance of relative prices is substantially less than the conditional variance of the nominal exchange rate. Even during the 1980s, a tumultuous period for the Mexican economy with high and variable inflation, the variance of relative prices is only about 10% of the variance of the nominal exchange rate. Third, the conditional variance of all three series has increased since 1976 when Mexico ceased to fix the nominal exchange rate and began to follow a flexible rate regime.[7] In summary, the graphs clearly show periods of varying volatility in all variables from 1930-

[7]The exact form of the flexible rate regime has varied since 1976. See Bank of Mexico (2009) for further discussion of these changes.

2012, therefore justify concern about the impact of varying volatility on unit root tests of purchasing power parity and use of a unit root test which controls for volatility changes.

FIGURE 1. CONDITIONAL VOLATILITY



Panel (a) conditional variance of RER, full sample 1930-2012; panel (b) Conditional variance of RER (green) and NER (dotted, red), subsample 1970-2000; (c)Conditional variance of relative price indexes, subsample 1970-2000.

Methodology

Kim, Leybourne and Newbold show that an abrupt change in the innovation variance of a nonstationary variable (integrated of order one) may bias Dickey-Fuller tests. They propose a solution in the same spirit as Perron (1990) by modifying the auxiliary regression. The resulting testing procedure not only controls for a break, but it endogenously identifies the breaking date while simultaneously remaining consistent under level shifts. The auxiliary regression is given by equation (2):

$$\tilde{y}_t(\tau^*) = \alpha_0 + \alpha_1 d_{1t}(\tau^*) + \alpha_2 d_c(\tau^*) + \sum_{j=1}^{p-1} \theta_j d_{2t-j}(\tau^*) + \rho \tilde{y}_{t-1}(\tau^*) + \sum_{j=1}^{p-1} \phi_j \Delta\tilde{y}_{t-j}(\tau^*) \quad + \eta_t \qquad (2)$$

where $d_{1t}(\tau^*) = 1[t > \tau^* T]$, $d_{2t}(\tau^*) = 1[t = \tau^* T + 1]$ and the break date, $0 < \tau^* < 1$, is replaced by its endogenously obtained counterpart, $\hat{\tau}$c

$$\hat{\tau} = \underset{\tau \in [\tau_1, \tau_2]}{\arg min} [\textstyle\sum_1^{\tau T} \{\varepsilon_t^2 - \sigma_1(\tau)^2\}^2 + \sum_{\tau T+1}^{T} \{\varepsilon_t^2 - \sigma_2(\tau)^2\}^2].$$

The ε_t are the residuals of a standard ADF test with constant term and $\tau_1 and \tau_2$ are the minimum and maximum break locations in the sample.[8] The variance terms, $\sigma_1(\tau)^2$ and $\sigma_2(\tau)^2$ correspond to the variance of the series from observation 1 to τT, and from observation τT+1 to T, respectively.

Results

Unit Root Tests

Standard unit root tests, DF-GLS (1996) and Ng & Perron (2001), fail to reject the null hypothesis of unit root when applied to the RER series for any specification of the auxiliary regression. Nevertheless it is well known that structural breaks distort the size and diminish the power of standard unit-root tests. Our concern is with the possibility of a substantial power decrease due to the presence of a break in the innovation variance. To avoid a loss of power, the KLN unit root test is also applied to the three series with results shown in the Table 1.

TABLE 1. RESULTS

Series	t-statistic	Break date	Conclusion
RER1 (1930-2000)	-3.8015**	July 1976	Stationary
RER2 (1930-2012, without petroleum)	-3.8881**	July 1976	Stationary
RER3 (1930-2012, with petroleum)	-3.8700**	July 1976	Stationary

The symbol ** denotes rejection of the null hypothesis of unit root at the 5% level.

The KLN test rejects the unit root null hypothesis in favor of a mean stationary process for the three series. Furthermore, the procedure identifies a change in the innovation variance occurring in July 1976 regardless of the real exchange measure used. According to the annual report of the Bank of Mexico for 1976, the fixed peso/dollar exchange rate was replaced by a managed floating exchange rate regime on September 1, 1976. The rate had been fixed at 12.5 pesos per US dollar since April 19, 1954. We interpret the July break date as reflecting macroeconomic difficulties in Mexico that ultimately led to a change in exchange rate regime shortly thereafter. The presence of the innovation variance break in July 1976 may explain the failure

[8] As usual, the testing procedure does not allow the break date to be “too” close to the extremes of the sample.

of the DF-GLS and Ng and Perron tests to reject the nonstationarity null. The results for RER2 and RER3 are almost identical suggesting that the real rate constructed with a price index including petroleum prices doesn't behave differently than real rate excluding oil prices.

Half lives

Since the KLN unit root tests results show that the RER series are mean stationary when allowing for a change in the innovation variance, the real exchange rate series may be modeled as AR(p) processes. Doing so allows computation of half-life values, a common measure of RER persistence. Half-lives are usually estimated according as $h_c = ln(1/2)/\ln(\rho_{DF})$, where ρ is the first-order autoregressive parameter of the simplest Dickey-Fuller test; but such an approach is adequate only if the RER is an *AR(1)*. Stock (1991) and Rossi (2005) propose two alternatives for calculating half-lives when the RER is a more complex *AR(p)* process. Stock (1991) suggests estimation of a standard augmented DF test with constant term and *k=p-1* lags with the half-life determined as $h_{stock} = ln(1/2)/\ln(\rho_{ADF})$. Rossi (2005) uses the same ADF auxiliary regression but modifies the half-life calculation so that $h_{rossi} = ln(1/2\widehat{b(1)})/\ln(\rho_{ADF})$, where $\widehat{b(1)} = 1 - \sum_{j=1}^{k} \widehat{\alpha_{j-1}^{*}}$, and the $\widehat{\alpha_i^*}$ are the estimates of the lagged differences in the ADF regression.

Table (2) shows estimates of the three half-lives measures for the various RER series over the complete period, and for the two sub-periods determined by the break date identified earlier. Note that the half-life measures in the table are in years. Also note that the three half-life measures are equivalent when the number of lags determined by the Bayesian Information Criterion (BIC) is equal to zero as occurs for the subsamples beginning in 1976.

TABLE 2. HALF-LIFE; SPEED OF MEAN REVERSION (YEARS)

Period	RER1	RER2	RER3
1930:01 – 2000:12	Lags=3 h_{stock}: 1.76 h_{rossi}: 1.91	--	--
1930:01 – 2012:12	--	Lags=3 h_{stock}: 2.15 h_{rossi}: 2.37	Lags=3 h_{stock}: 2.19 h_{rossi}: 2.41
Sub periods			
1930:01 – 1976:06	Lags=2 h_{stock}: 2.13 h_{rossi}: 1.8		
1976:07 – 2000:12	Lags=0 h_c =1.37	--	--
1976:07 – 2012:12	--	Lags=0 h_c =1.86	Lags=0 h_c =1.9

Rogoff (1996) cites as typical the finding of 3 to 5 year half-lives; and notes that these results represent a puzzle given the volatility of nominal exchange rates. Cheung and Lai (2000) study PPP in 94 countries, including Mexico. Although they do not report results for individual nations, their findings for industrialized countries indicate half-lives ranging from two to five years, consistent with the studies cited in Rogoff. Interestingly, Cheung and Lai find that most half-lives in less-developed countries are shorter than 3 years with an average half-life of 1.36 years for this group. Indeed, the low-income group of countries has the shortest half-life, slightly less than a year. Using quarterly and monthly data for 1980-2003 Mollick (2007) finds half-lives ranging from 1.4 to 2.5 years for Mexico.

Over the 1930-2000 period our half-life findings suggest that fifty percent of the deviation of the real exchange rate from its PPP level disappears in less than two years, results consistent with Cheung and Lai and Mollick. Extension of the sample to 2012 actually lengthens the half-life estimates; a surprising result since the Mexican peso floated freely with occasional central bank intervention from 2001-2012. A shorter half-life might be expected with inclusion of additional years under a floating nominal rate as market forces compel a return to the PPP level. However, the result may simply reflect macroeconomic difficulties of the country during this time period that included two recessions.

The estimated half-lives over the first subperiod, 1930:01-1976:06, range from 1.8 to 2.13 years. During most of this time Mexico followed a fixed exchange rate regime with brief periods of float. Various annual reports of the Bank of Mexico suggest that floating rates were adopted when the real exchange rate deviated substantially from its PPP level. After stabilization of the nominal exchange rate in the market, a fixed rate regime was readopted with the nominal rate fixed at its recently stabilized level. The estimated half-life is substantially shorter for the 1976:07-2000:12 period, 1.37 years, as might be expected with the shift to floating nominal rates. However extending the sample to 2012 again lengthens half-life estimates to nearly two years about the same as during the fixed nominal rate regimes. The half-life results are robust to the choice of price index as there is virtually no difference in results for the real exchange rate constructed with an index including petroleum (RER3) from the real rate without the petroleum price (RER2).

Conclusions

The Mexican nominal and real exchange rates display jumps in volatility, reflected in changes in their conditional variances, over the 1930-2012 period. Such breaks can lead to a loss of power in standard unit root tests. Two commonly used unit root tests applied to the real exchange rate fail to reject the nonstationarity null, evidence against purchasing power parity. However, the KLN unit root test is robust to changes in the innovation variance and indicates stationarity of the real exchange rate in Mexico, hence support for PPP, suggesting that the other tests may indeed suffer low power for a series subject to sudden volatility changes. Half-life estimates for Mexico are consistent with those from other studies.

Empirical studies of purchasing power parity have yielded mixed results. This failure to arrive at a consensus regarding the PPP hypothesis has led to alternative approaches such as panel unit root tests and nonlinear estimation methods. Our results for Mexico drawn from a unique, long span, high frequency data set suggest another reason for the mixed results; the data sets used in PPP tests typically span different nominal rate regimes and regime shifts can affect the conditional variance of the real exchange rate series. Failure to account for such changes in volatility may bias standard unit root tests against the PPP hypothesis.

References

Avalos Huerta, A., & Hernández Trillo, F. (1995). Comportamiento del tipo de cambio real y desempeño económico en México. Economía Mexicana, IV(2), 239–263.

Banco de México (2009). Exchange rateregimes in Mexico since 1954. http://www.banxico.org.mx/

Baxter, M. and Stockman, A.C. (1989). Business cycles and the exchange rate regime: Some international evidence, Journal of Monetary Economics 23, 377-400.

Cavaliere, G. (2004). Testing stationarity under a permanent variance shift, Economics Letters 82, 403-408.

Cárdenas, E. (1994).La hacienda pública y la política económica 1929-1958, El Colegio de México and Fondo de Cultura Económica, México, DF.

Cheung, Y. And Lai, K.S. (2000) On cross-country differences in the persistence of real exchange rates. Journal of International Economics 50, 375-397.

Gómez-Zaldívar, M.; Ventosa-Santaulària, D. and Wallace, F.H. (2013) The PPP hypothesis and structural breaks: The case of Mexico, Empirical Economics forthcoming.

Hamori, S. and Tokihisa, A. (1997) Testing for a unit root in the presence of a variance shift. Economics Letters 57, 245-253.

Kim, T.H., Leybourne, S. J., and Newbold, P. (2002). Unit root tests with a break in innovation variance. Journal of Econometrics 109(2), 365–387.

Lothian, J. R., and Taylor, M. P. (1996). Real Exchange Rate Behavior: The Recent Float from the Perspective of the Past Two Centuries. Journal of Political Economy, 104(3), 488-509.

Mollick, A.V. (2007). Random walks and half lives in Chilean and Mexican peso real exchange rates: 1980-2003. Journal of Applied Economics 10, 185-211.

Noriega, A.E. and Medina, L. (2003) Quasi purchasing power parity: Structural change in the Mexican peso/US dollar real exchange rate. Estudios Económicos 18, 227–236.

Papell and Prodan (2006) Additional evidence of long-run purchasing power parity with restricted structural change. Journal of Money, Credit, and Banking 38, 1329–1349.

Perron, P. (1990). Testing for a unit root in a time series with a changing mean. Journal of Business & Economic Statistics, 8(2), 153–162.

Rogoff, K. (1996). The purchasing power parity puzzle. Journal of Economic Literature 34, 647-668.

Rossi, B. (2005). Confidence Intervals for Half-Life Deviations from Purchasing Power Parity. Journal of Business & Economic Statistics, 23, (4), pp. 432-442.

Sarno, L. and Taylor, M.P. (2002). Purchasing power parity and the real exchange rate, IMF Staff Papers 49.

Stock, J.H. (1991) (1991) Confidence Intervals for the largest autoregressive root in the U.S. macroeconomics time series," Journal of Monetary Economics, 28, 435-459.

Taylor, A. (2001). Potential pitfalls for the purchasing-power-parity puzzle? Sampling and specification biases in the mean-reversion tests of the law of one price, Econometrica 69, 473-498.

_________ (2002). A Century of Purchasing Power Parity, Review of Economics and Statistics 84, 139-150.

Wallace, F.H. (2011). Purchasing power parity in Mexico: a historical note, Applied Economics Letters, 18, 349-352.

Wallace, F.H. and Shelley, G.L. (2006). An alternative test of purchasing power parity, Economics Letters, 92, 177-183.

Wallace, F.H., Shelley, G.L., and Cabrera-Castellanos, L.F. (2011). La paridad de poder de compra en México (1930-1960), El Trimestre Económico, 78, 675-693.

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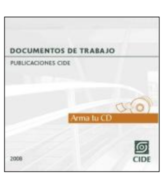

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