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Ricardo V. Lago

Peru's Resilience Through the 2008-09 Crisis: Lessons for Developing Countries

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CROATIAN NATIONAL BANK

THE 16th DUBROVNIK ECONOMICS CONFERENCE

PERU'S RESILIENCE THROUGH THE 2008-09 CRISIS: LESSONS FOR DEVELOPING COUNTRIES

Ricardo V. Lago [1][2]

Paper presented to the 16th Dubrovnik Economic Conference June 23 - June 26, 201organized by the National Bank of Croatia

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[1] Economist and Independent Analyst. From 1980 and 2003, in inverse chronology, senior official of the EBRD, IADB, World Bank and the Ministry of Finance and the Office of Advisers to the President of the Republic of Mexico. Also, occasional Professor of Economics at several universities.

[2] I acknowledge the efficient help of Paul Castillo with the statistical analysis of exchange rates, interest rates and international reserves for Brazil, Chile, Mexico and Peru . I received helpful comments from Joshua Aizenman , Mario Blejer, Felipe Larraín, Martha Rodriguez, Renzo Rossini, Nouriel Roubini, Julio Velarde and other participants in the Cusco International Economics Conference of July, 2009 organized by Central Bank of Peru – Roubini Economic Global Monitor - Reinventing Bretton Woods. Mistakes are my own

"There is no question that the Washington Consensus is dead" one senior World Bank official said …. "The push toward deregulation and unfettered free markets died at the time of the US$700 million bailout"

"A Bit of 'I Told You So' Outside World Bank Talks" by H. Cooper and C. Savage

The New York Times, October 10, 2008

1. INTRODUCTION

I had an extraordinary professor at the University of California, Harold Demsetz, whose first words at the beginning of the course were: *"Adam Smith wrote The Wealth of Nations two centuries ago, the first and last was strictly economics."*

Well, in his book published in 1776, Adam Smith referred to Peru in 25 paragraphs, Boston, New York, Philadelphia (altogether) in just 12 t and Mexico in 11. It is clear that sixteenth to the eighteenth century; Lima was the power center in the Western Hemisphere and one of the most important cities in the world [3]

I leave it to historians the task of identifying the causes of the secular decline that begins at the end of the eighteenth century when Spain divided the Peruvian domains , and Lima's trade monopoly , by establishing the Viceroyalties of Nueva Granada (in Bogota) and Rio de la Plata (in Buenos Aires). But the fact is that in the nineteen eighties there were days when Lima looked more like Phnom Penh on the eve of the arrival of the Khmer Rouge than the hemispheric center of gravity it once was two centuries earlier. The economic chaos was complete with rampant inflation (up to 8000 % in 1990), a deep depression, and massive debt arrears (including with the IFIs) .The odds of the Shining Path taking over and establishing a Maoist state were in the uptrend.[4]

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[3] Adam Smith. "An Inquiry into the Nature and Causes of the Wealth of Nations." London. Printed by W. Strahan and T. Cadell, 1776. The reader can verify the data using the search option on the website http://www.econlib.org/library/Smith/smWN.html

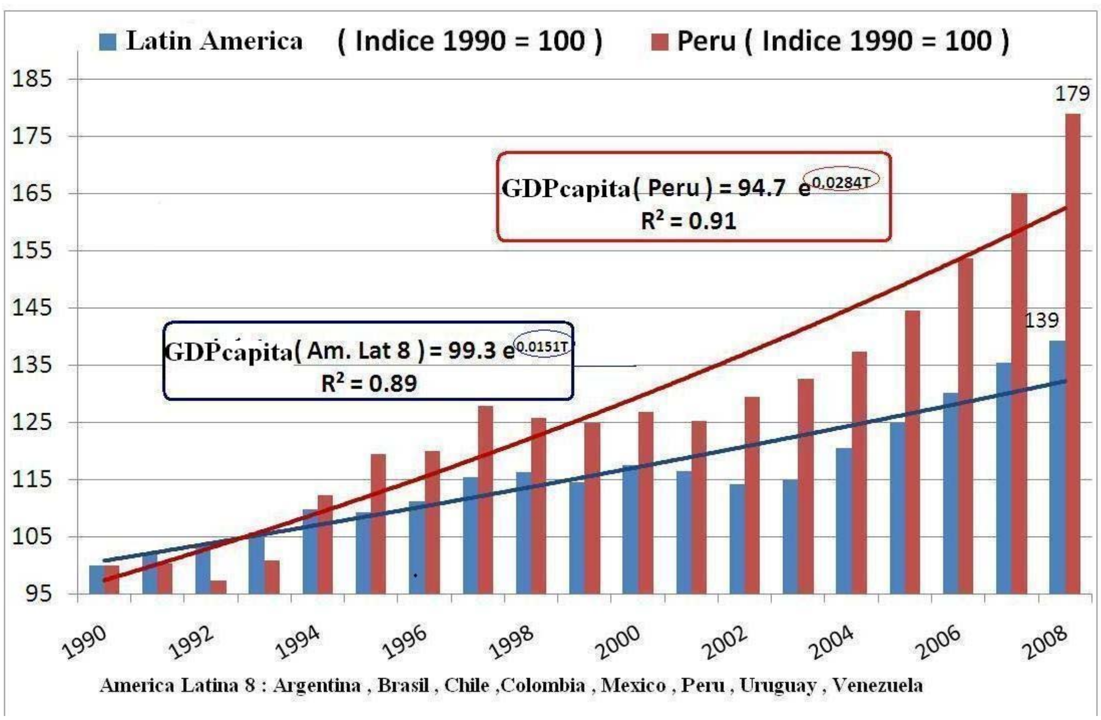
[4] Ricardo V. Lago. "The Illusion of Pursuing Redistribution Through Macropolicy: Peru's Heterodox Experience, 1985-1919 in The Macroeconomics of Populism in Latin America, edited by Dornbusch, R and Edwards, S. NBER and Chicago University Press (1991). Online http://www.nber.org/chapters/c8303.pdf?new_window=1

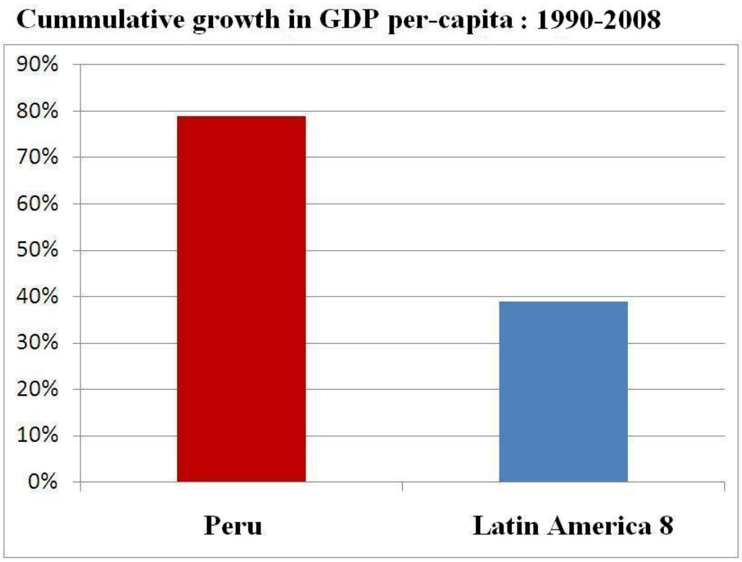
The downfall was nipped in the bud with the adoption of an unprecedented broadly based process of systematic economic and a fatal blow that eradicated the terrorist treat. For two decades, four successive governments of diverse political signs - which together represent the majority of the population - have turned around the economics and the organization of the country.

At the dawn of the millennium, right at the time of the worst of the international crisis since the thirties, the Peruvian economy endured without falling into recession, without financial or currency crises, nor business bankruptcies, bank bailouts, or any appreciable increase in unemployment. Further , in two of the most difficult years of our lives, 2008 and 2009 , over a million Peruvians (nearly 4% of the total population) graduated from the poverty line .

If politicians, lobbyists or ideologues: do not spoil it, Peru’s economic resurgence is unstoppable. The Peruvian economy is following on the footsteps of the Asian Tigers (and Chile) , economies with which every day becomes more intertwined commercially and financially , positioning itself as one of the most dynamic economies in the world.

GDP Per-capita : 1990 - 2008





Growth Accounting (in %)

	Capital	Labor	Productivity	GDP growth
1980-1989	1,4	1,6	-3,5	-0,5
1990-1999	1,2	1,5	1,5	4,1
2000-2005	1,0	1,5	1,5	4,0
2006-2011*	2,7	0,9	2,7	6,4

* Forecast

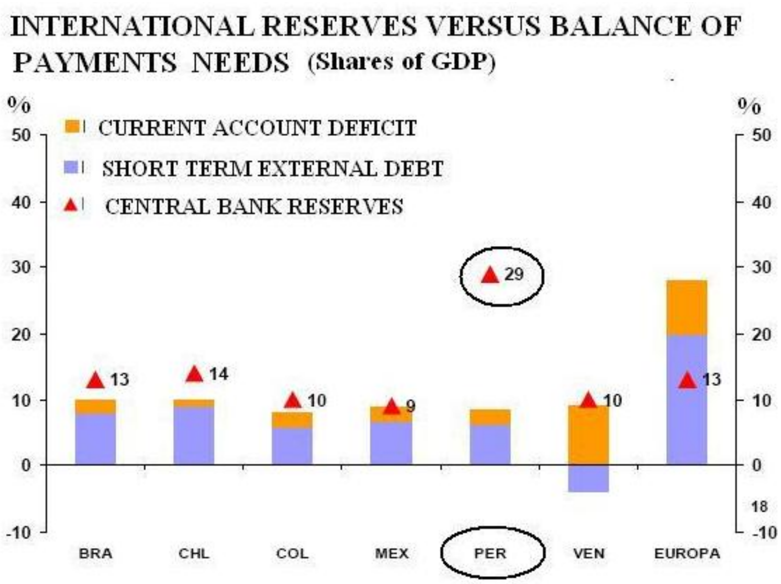
2. INITIAL CONDITIONS 2008: TWELVE FACTORS OF STRENGTH

In this section I explain the twelve factors that, in my opinion, explain the Peru's strength in times of global weakness (as in Garcia Marquez's novel Love *in Time of Cholera*). Some of them show that Peru kept virtue precisely where many other countries sinned leading the world economy to financial meltdown and the brink of global depression.

To explain the twelve factors I use a rhetorical imagine: the cornerstone of a wall of the Palace built by the sixth Sapa Inca of the Kingdom of Cusco, Inca Roca. The reason is that this wall was one of the few structures that withstood the earthquake of 1650, the worst ever in South America. That cornerstone is known by tourist as the "stone of the twelve angles" and its original name in Quechua is "Hatunrumiyoc" (whose literal meaning is "of the large stone")

A. Primary macroeconomic angles

I. International reserves of the Central Bank (CB). In September 2008 the net foreign exchange reserves totaled U.S. $ 36.000 billion, almost enough to cover total deposits in local currency (Sol)) and dollars of the banking system plus currency in circulation. It was as if the entire banking system was a major *currency board*, but without the constraint of being chained to a fixed exchange rate. About half of the international reserves had been accumulated from 2006 to 2008 by means of sterilization of the metal and commodity price boom .The Ministry of Finance ran sizeable fiscal surpluses and further to that the Central Bank bought reserves funded by floating bonds (sterilized intervention). The backing of broad money (M3) by international reserves - close to 100% - far exceeded that of Central Bank of China : reserves at U.S. $ 2.7 trillion represented 34% of M3 (at US$ 8 trillion M3). Another illustration of the strength is provided in the figure below, where reserves are shown as a multiple of the Balance of Payments financing requirements. It can be seen that Peru's position was better than those of any other Latin American country and six times stronger than that of the European Union.



II. Public sector was net international creditor. Its consolidated position (including reserve liabilities and currency in circulation by the Central Bank) was one of marginal debtor, at 10% of GDP, or one of the lowest ratios in the world. But the public sector was an international creditor in the sense that central bank reserves exceeded foreign currency denominated debt by US$13 billion or about 10% of GDP.

III. Financial system solvent and liquid. Modest in size (40% of GDP), but well-capitalized (leverage 10-1) ,with limited use of derivatives, and well supervised by a centralized and capable entity for banking , insurance and private pension administrators (Peru runs a pension system of individual accounts - akin to Chile's - along with a public pension system) . External funding of banks was limited (about 15% of total deposits) owing to a system of increasingly punitive reserve requirements imposed by the Central Bank during the commodity boom .Further , the second and third largest banks are offspring's of two strong international banks , BBVA and Scotia Bank , so refinancing of external funding was never a problem .In relative terms Peru's banking sector is 10 times lower than that of the United Kingdom and five times lower than the Spanish. In these days of banking over- sophistication and turmoil *"small is beautiful"* applies more than ever. Evidence of the strength is that two Peruvian banks (first Banco de Credito and a month late Banco Continental) were able to place US$ 400 million in bonds at reasonable spreads in December 2008 and without third parties guarantees .The funds raised amounted to 1% of the consolidated balance sheet of the Peruvian banking system . In those days, Goldman Sachs, JP Morgan, Merrill Lynch and the rest came to market with the backing of the FDIC, which is the US Treasury.

IV. Under-mortgaged banking system. All banks of Peru carried in their books just 110.000 mortgages (in a country with 28 million people) for a total of US $ 3.3 billion or 7% of the total portfolio. The typical exposure of any country in normal times is about three times that, from 19% to 22%. This atypically favorable under-exposure to mortgages contrasted with the excesses and housing bubble of the many countries that transformed the international financial system in a giant with feet of clay. It is true that rampant inflation of 1989 -90 "wrote off" mortgage liabilities and as a result the housing stock existing in 1990 was free of lien. That is, "virtue" was in part the result of a prior "vice" and the subsequent fear of falling into it.

I coin the four factors above "primary" angles because - barring incompetent macroeconomic management - on their own provided sufficient ground to forestall any foreign exchange and /or banking crisis.

B. Secondary macroeconomic angles

V. Credibility of the economic team. CB Governor, Julio Velarde had been in charge of monetary policy in August and September 1990 when the newly appointed Fujimori administration stopped the hyperinflationary bout of 1989-90. The Ministers of Economy and Finance Luis Carranza and Luis Valdivieso are orthodox, politically independent, and respected technicians with strong track records and solid academic training.

VI. Room for countercyclical policies. The strength of the balance sheets of the CB and the Treasury, and the favorable fiscal and balance of payments position afforded the government the opportunity to carry out supplementary public investment and / or social spending if and as the international scene worsened.

VII. Portfolio of foreign direct investment. Investment projects under execution totaled US $ 25 billion (equivalent to total investment in one year) and a similar amount was either under negotiation or at tender. The increasing security of tenure and stable rules afforded to investors and the relaxation of obstacles to investment (as shown by the *rankings* the World Bank, OECD and the World Economic Forum), as well as two decades of macroeconomic stability and free trade have been key factors to mobilize domestic and foreign investment. For instance, ten of the world's largest mining companies operate in Peru.

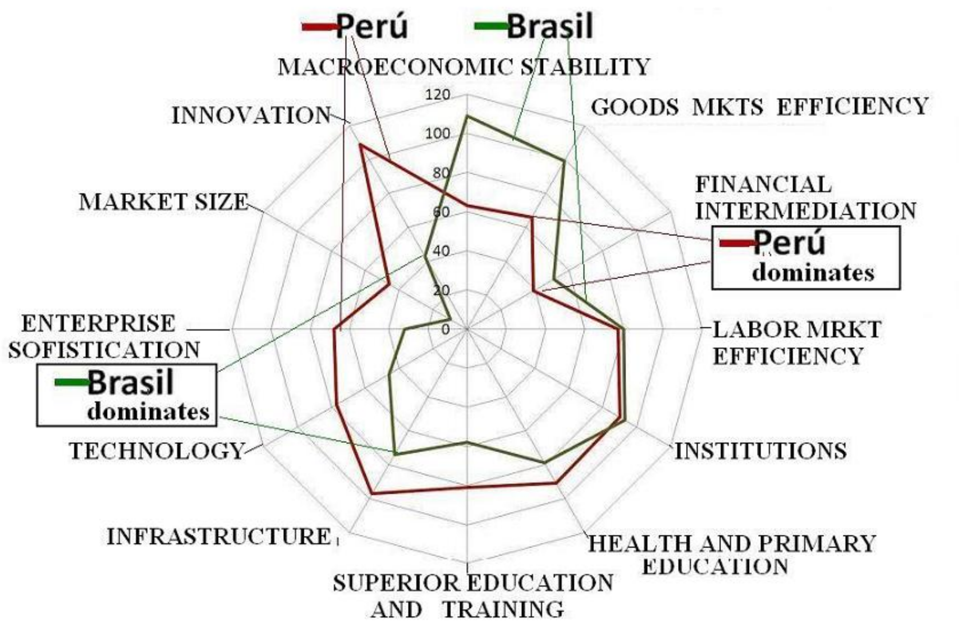
VIII. Portfolio diversification of metal exports . While two thirds of exports are metals or other *commodities* (e.g. fish meal), correlations between some of these prices have historically been near zero or even negative. For example, in the period 1970 - 2008, the correlation between the price of gold and copper - which together account for nearly half in 2008 total exports - was 17%, with spans of negative correlation like 2008.

C. Structural angles

IX. Reform track record: 1990-2009. For two decades , f our successive governments of diverse ideologies had undertaken one of the more ambitious, consistent and successful reform processes of history , including in the sample the transitions of Eastern Europe, India and even China. Above I present a comparison of the ranking of Peru and Brazil on the dimension of competitiveness calculated annually by the World Economic Forum of Davos. I also show the Peru's in the most recent survey of "doing business" of the World Bank. I use Brazil as a benchmark because it is often put forward as an example of success in economic transformation since 1994.

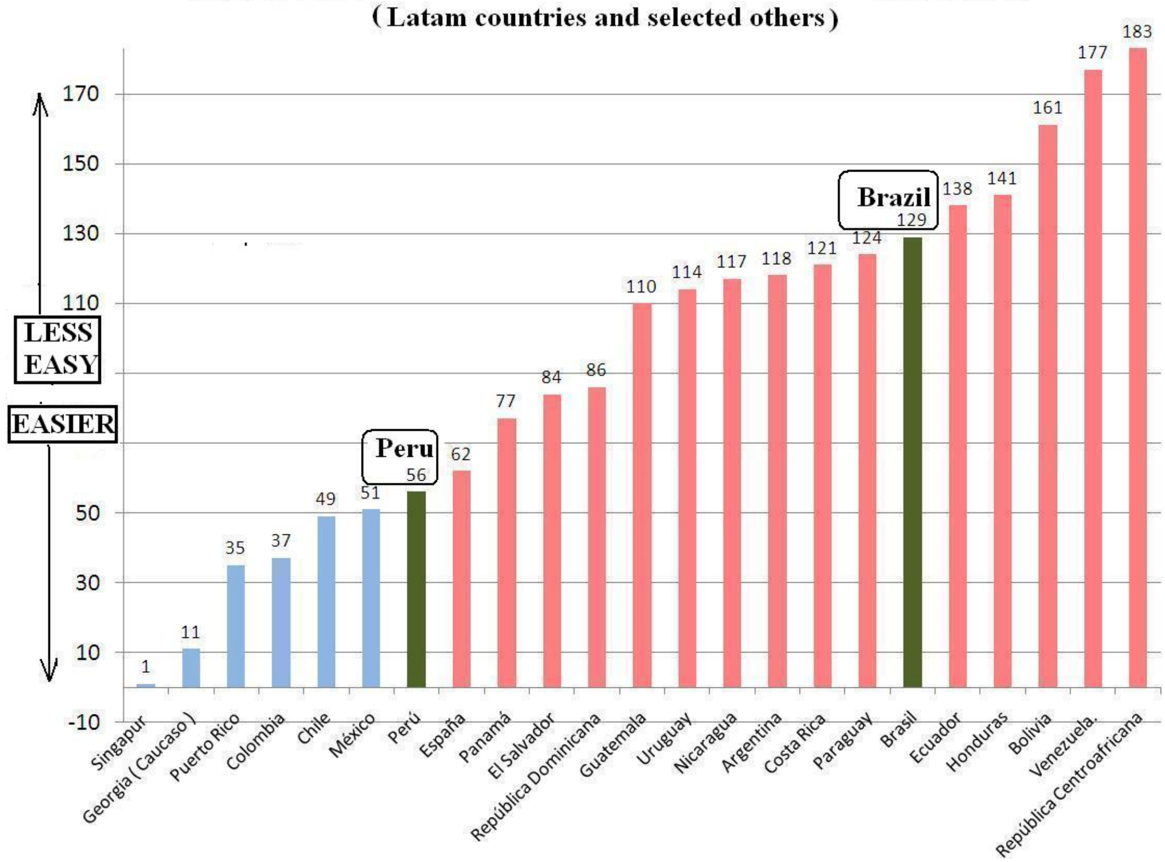
COMPETITIVENESS INDICATORS (Wold Economic Forum)

(The closer to the origin , the more competitive)

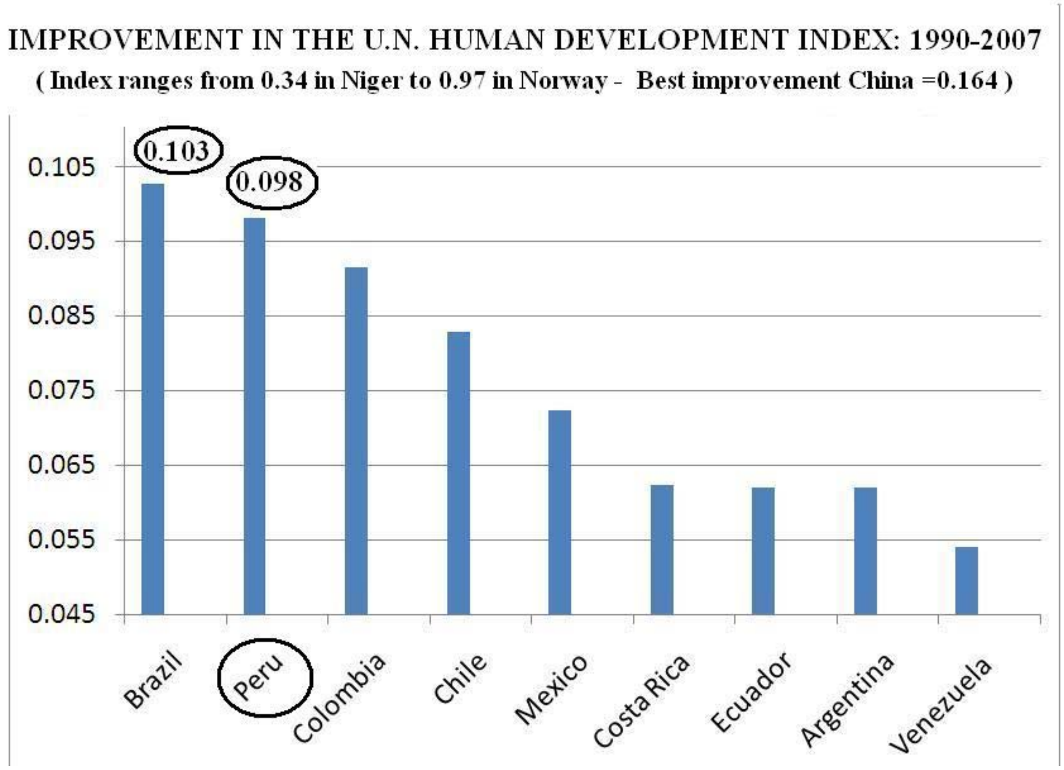


COUNTRY RANKINGS DOING BUSINESS SURVEY (The World Bank)

(Latam countries and selected others)



X. Progress on poverty. Over last five years, the population below the poverty line has fallen by about 3% of the total population per year. One of the highest rates of progress among developing countries. The same conclusion is obtained by analyzing Peru's advancement in the Human Development Index of the UN between 1990 and 2007 (latest available data.) This appears to be key reasons why people favor the markets and mistrust big government when consulted in polls.



XI. Support of the population for the economic model. As noted polls show that about two thirds of the population are suspicious of state activism and promises of politicians. This is rooted in the suffering resulting from the socialist policies of the seventies and populism in the eighties that ended in economic and social chaos .At the time of the negotiation of the Free Trade Agreement with the USA, polls showed that 70% of the population was in favor.

XII. Low political risk of a return to populism. There is consensus among four of the five main political forces on the central pillars of economic policy. Further, presidential elections comply with a two-round system. If no candidate obtains 50% of the vote in the first round, the front runner and the runner up have to contend in a *ballotage* . This system acts as a filter against radical anti-market candidates for if he/she passes to the second round - as it happen in the last presidential election - voters against that candidate may decide on the election.

3. MONETARY POLICY 2008-2010

A. Three questions confronting the central banker

Put bluntly these are:

First: How much foreign exchange to sacrifice?

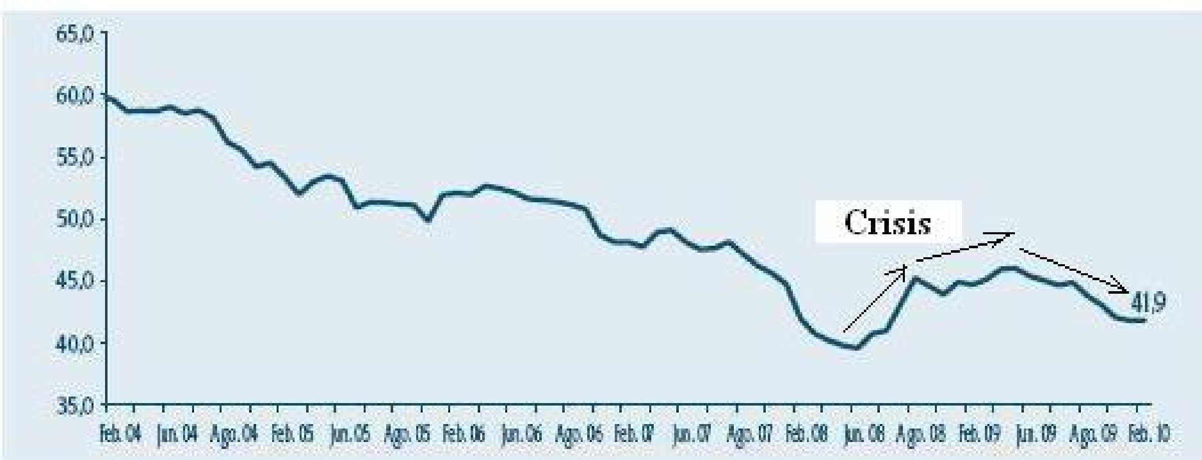
Second: How far to allow the currency to depreciate?

And third: What monetary policy to pursue?

Given the degree of dollarization in the economy, maintaining a reasonable degree of exchange rate stability was a key objective of the CB. Losing control of the exchange rate would have impacted inflation (as it did in Brazil and Mexico) and negatively affected firms and families carrying "short" positions in dollars , shaking the "house of cards" of their finances and credit risk .

Dollarization had been on a steady downswing - from 80% in the early nineties to 40% by mid 2008 - but it shoot up markedly when the crisis hit as did the preference for the security of US Treasuries (i.e. capital flight to quality).

Coeficient of dollarization of Broad Money

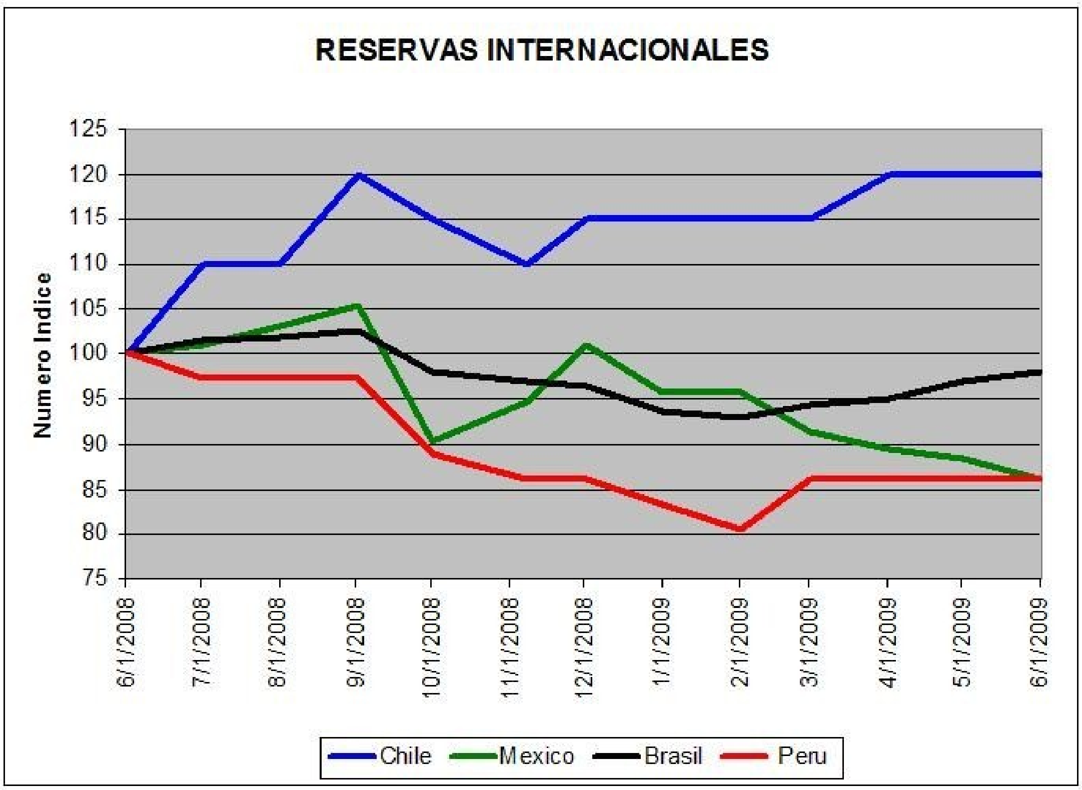


With US $ 36 billion in net reserves by mid-2008, the CB had the certainty that – barring major credibility and policy mistakes – it could stave off any incipient speculative attack on the Sol the reason being that he CB in fact had sufficient hard currency to buy back cash all bank deposits.

The problem, though, was one of credibility. In the wake of widespread panic, all of a sudden no one believes anything nor trusts anyone. The public wonders: what if the collapse of Lehman and others has undermined the reserve position of the CB? Even an IFI, the InterAmerican Development Bank, had lost US$ 3 billion on its mortgage securities treasury investments). Later, in December 2008, came the Madoff and several other scandals which did little to restore confidence in intermediaries.

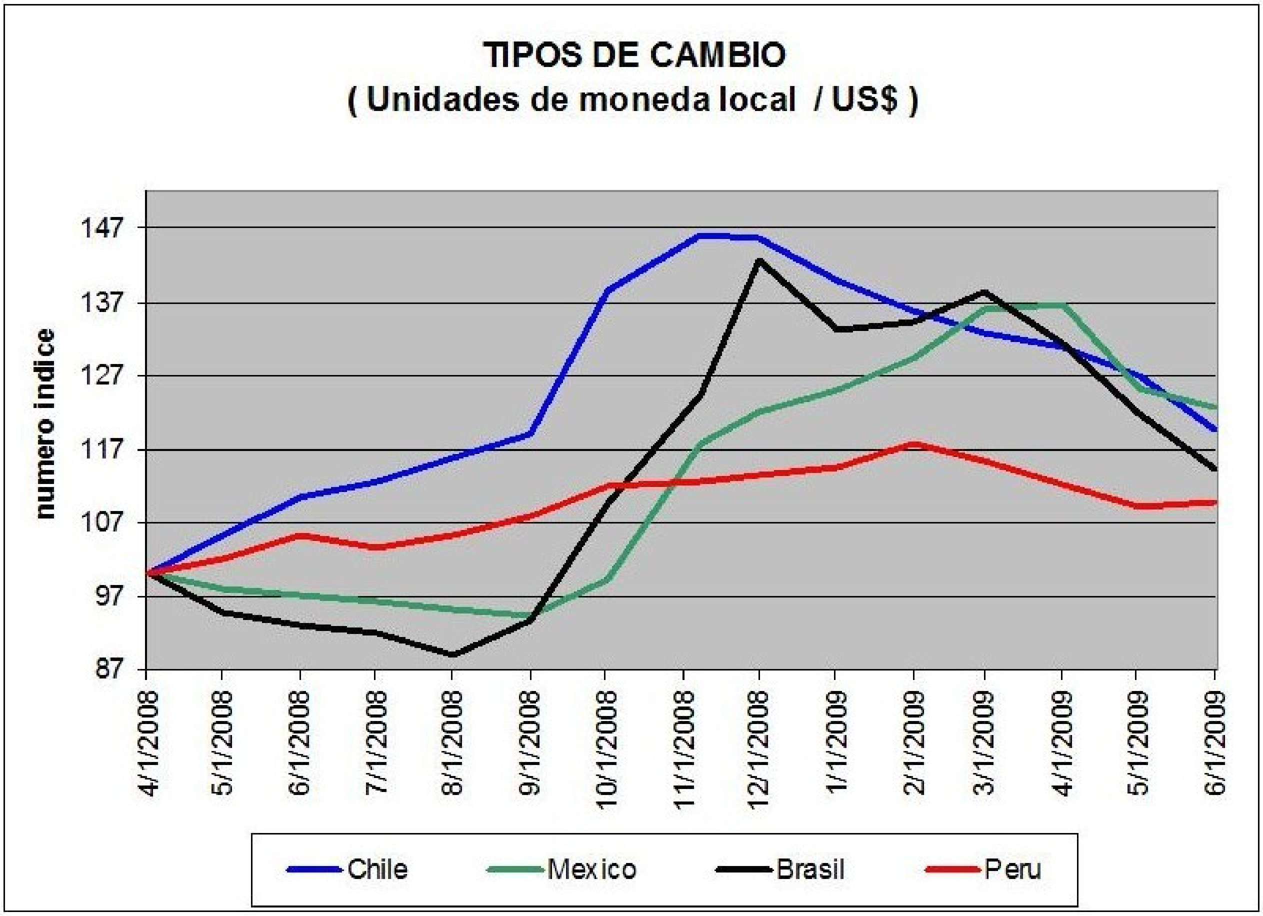
The standard framework to analyze fiscal and monetary policies in a small open economy is some variety of the Mundell-Fleming model. In the face of a shock as strong as the 2008 financial meltdown, however, the behavioral equations of the model - money demand, investment and net-exports - become very shaky. Of course, the accounting identities still hold, but the predictive power of the model is at best very limited. In the end there is no precise model that supplies ready to use prescriptions and as such the exercise is more of an art than a science

One of the tenets of the Mundell-Fleming model continues to hold. If the CB wants to maintain exchange rate stability, monetary policy has to be fully accommodating the public's demands and wishes. This does not mean, however, that the monetary policy has to be reactive; on the contrary CB decisions have to be anticipative and pre-emptive.



To limit capital outflows from the Peruvian financial system, the CB decided to pay a sufficient risk premium to fight a flight to US Treasuries. It kept its basic rate at 6.5% despite the reduction of rates in the US (the Federal Funds rate was at 1 % by late 2008). Further, as re-dollarization of deposits gained speed, the CB offered the banks forward cover so as they could hedge their incremental short dollar positions without the need to purchase dollars in the open market. At some point, forward dollar sales by the CB stood at U $ 6 billion.

Monetary injection of funds took the form of reductions in reserve requirements on deposits and open market operations. From September 2008 to March 2009, the CB injected funds for a total of twice the currency in circulation (or 100% of the M1). Commercial banks were thus able to keep credit growth at reasonable speed while at the same were able to face deposit withdrawals. [5]



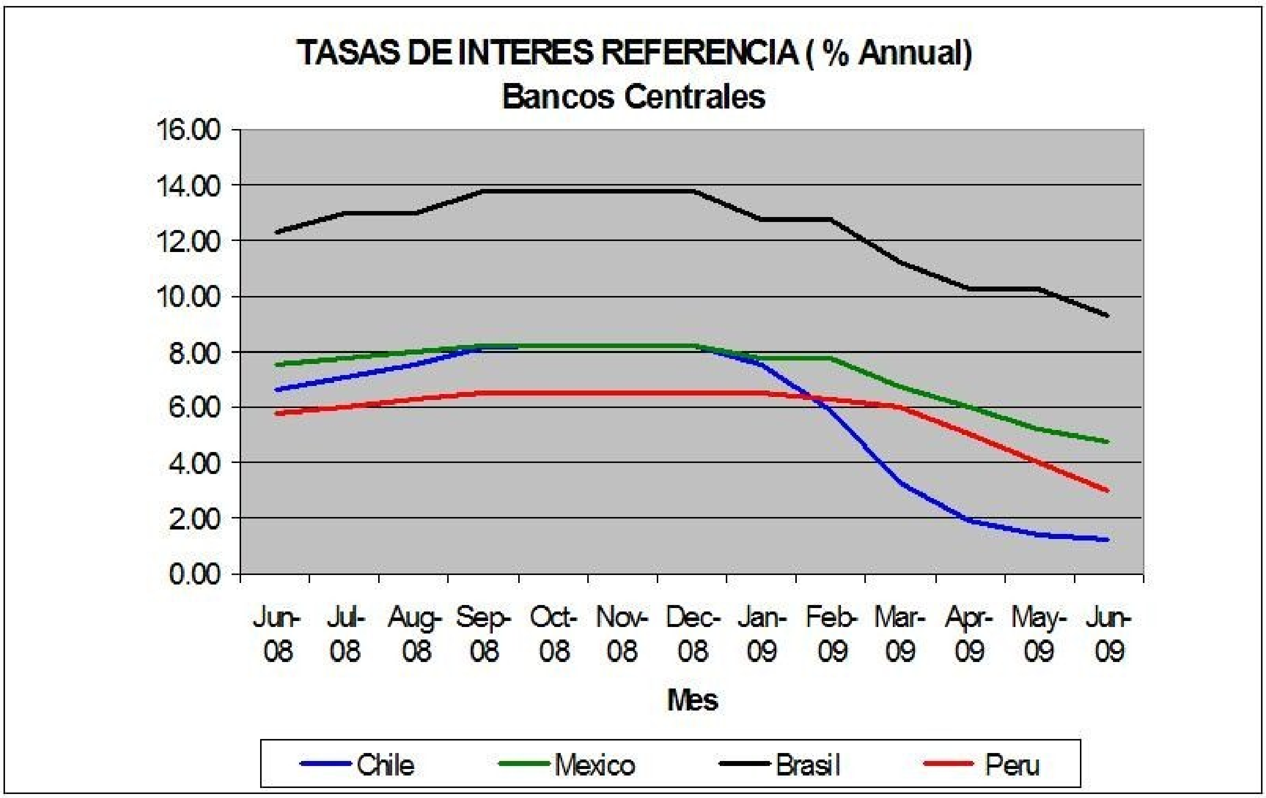
The monetary injection is never "free". The CB lost reserves which shrank from US$ 36 billion in June 2008 to US$ 29 billion in January 2009 .They have rebounded since then to the pre-crisis level. It was a good investment bet to be able to maintain exchange rate stability.[5]

The central banks of Mexico, Brazil and Chile, among others, were less fortunate. The Brazilians and particularly the Mexicans lost to the market pulse and eventually had to allow

[5] Paul Castillo presents a detailed analysis of each of the interventions of the Central Bank during the global financial crisis in his article "Monetary Policy in times of financial turbulence." Pages. 20 -24, Revista Moneda , BCRP, Lima (Peru). October, 2009.

their currencies to devalue by about 40% (at the peak) after paying the price of foreign exchange losses. The Chileans opted for allowing the peso to float so as to prevent reserves drain. The peso lost 31% against the dollar from September to December 2008 (adding to the 18% lost from April to September). In all, a devaluation of 50% at the peak. I am convinced that the judgment of the CB of Chile was flawed .The country had very strong fundamentals: no public debt, sufficient reserves, access to funds from the IFIs and an impeccable track record. It could have kept the exchange rate in a narrower range. After all, that is what reserves are for: a cheque for a rainy day!

The irony is that the currencies of these three countries are now appreciating towards pre-crisis levels. So in hindsight they paid a price in terms of nominal and real exchange rate volatility to no avail .Exchange rate volatility has negative effects on balance sheets and cash flow for businesses, consumers and banks. This is, in my opinion, one of the factors that pushed these three economies into recession.



Peru's monetary policy during the crisis was as cheered abroad as it was criticized at home .The hobby-horse of domestic critics was that the CB should have began reducing interest rates starting in late 2008 (as the CB of Chile did) in order to sustain growth . The analytical flaw in this criticism was the mechanical use of the IS-LM framework – a model applicable to a closed economy - for a small open economy trying to preserve some degree of exchange rate stability

.The Mundell-Fleming (IS-LM-BP) model tells us that, under fixed exchange rates, monetary policy is ineffective even in normal times.

Chile's central bank was able to start lowering interest rates aggressively from 8% in December 2008 to 0.5% in July 2009, because it had followed a policy of flexible exchange rates and the competitiveness of the peso was sheltered by a 50% cumulative devaluation. It had bought the right to reduce rates with a strong down-payment upfront.

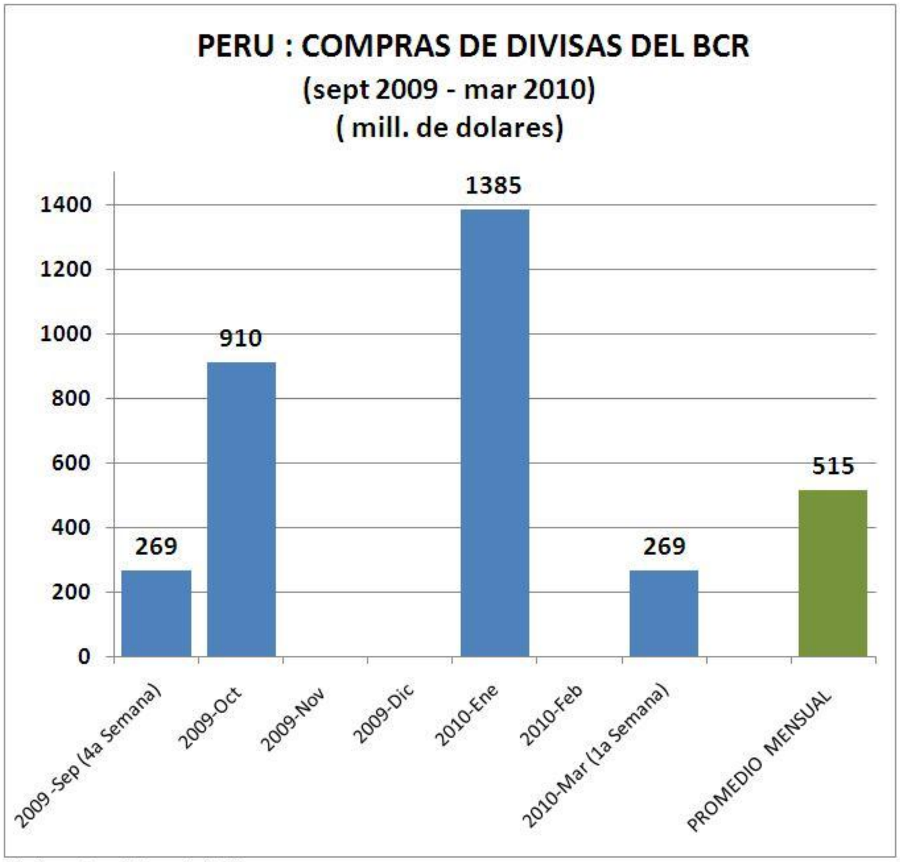
By contrast the CB of Peru lacked that latitude precisely because it had been able to preserve the value of the currency (the Sol had just devalued moderately : 12%) . From my discussions with CB staff I gathered that they set three tests to start reducing interest rates : (1) a recovery of the prices of copper and other commodities and thus exports (it occurred in January 2008) ; (2) a halt in reserve losses and appreciation pressure on the Sol (met in February 2009) ; and (3) a reversal of dollarization (which set stage in March 2009) . Consequently, it reduced rates from 6.5% in February 2009 to 1.25 in August 2009. (It has resumed rate hikes in May 2010, so far 50 basis points). Peru's rates were throughout much lower than those of Brazil and Mexico (see Chart). In June 2010 the rate in Peru was 1.75% when those of Brazil and Mexico were 10.25% and 4.5% respectively.

Some critics argued that *"since there was no currency crisis, the Central should have began lowering rates sooner"* but the question is : is it reasonable to assume that the CB would have avoided a currency crisis, hat it started reducing rates in late 2008 ? . This remains me of Frederic Bastiat's masterpiece *what is seen and what is not seen.* We saw that there was no currency crisis; we did not see what would have happened with a premature interest rate reduction. My assessment is that the policy course pursued was as in Jack Nicholson 1997 movie: *"As good as it get."*

Below , I assess the performance of monetary policies in Brazil , Chile, Mexico , and Peru against two criteria : firist , I look into the stability of exchange rates and interest ; and second , I use as the benchmark the flows of credit to the private sector (in real and foreign currency terms) in the four countries plus Colombia

B. First performance criteria: exchange and interest rate stability

Undoubtedly, supporters of fully flexible exchange rates can be found few and far between, but most of us seem to agree that excessive nominal and real exchange rate instability is bad for business and economic activity. Similarly , we also agree that it is not only desirable but imperative that currencies be allowed to appreciate or depreciate , in nominal and real terms, in the face of persistent changes in fundamentals (for instance , new terms of trade or a move towards a policy more attractive to FDI.) What is important in any case is that the CB be able to command (be in control of) the transition towards the new exchange rate in an orderly manner rather than be forced to do so by market pressure, and less so by a currency crisis. In this regard, CB reserves - as well as swap lines agreed with other CBs - are insurance policies aimed at avoiding frequent and unwanted currency volatility.



Elaboracion : Ricardo V. Lago
Fuente de datos : Banco Central de Reserva del Peru

I argued in the previous section, that Mexico and Brazil were forced into exchange rate overshooting during the period of turmoil that began in September 2008.In turn , Chile opted at departure for floating the exchange rate leading to a devaluation that in hindsight (and even *a priori*) seems excessive. Conversely, the Central Bank of Peru decided to maintain exchange rate stability and made it. Despite its intra-year loss of foreign exchange, the CB concluded 2008 with a greater level of reserves than at the start of the year 2007 and by March 2010 had almost regained the maximum level of reserves it ever had in mid-2008. The chart below shows that since late September 2009, the CB has bought on average about US$500 million per month

To measure the relative stability / instability of the four currencies I have - with the help of Paul Castillo - studied the daily behavior of exchange rates against the dollar for each of the four currencies during the period of **" maximum turmoil"**. I define that period as the six months spanning from the technical bankruptcy of Fannie and Freddie (September 7, 2008) to the day in which the S&P stock index reached the lowest point (6 March 2009). To compare the variability of exchange rates, I normalize the four exchange rates (in local currency units per US dollar at 100 on September 6, 2008.

I do three exercises. In the first one, shown below, I analyze the respective distribution of the daily levels of the normalize exchange rates. In the second one, provided in Annex 1, I look into the distributions of the daily changes (first differences) of the normalized exchange rates. And in the third one, in Annex 2, I study the distributions of CB interest rates.

First I report (the first to fourth statistical moments): ***mean standard deviation, symmetry and kurtosis***. Then, I present the frequency distributions of, for visual inspection as to whether there are cases of stochastic dominance.

The results are the following :

a. Daily exchange rates (Sept. 7, 2008 – March 6, 2009)

Statistical Indicators - Daily Exchange Rates Sept. 7, 2008 - March 6 , 2099 *				
	Brazil	Chile	Mexico	Peru
Mean	128.63	117.26	125.99	104.79
Standard Deviation	10.73	7.52	11.99	2.78
Symmetry	-1.24	-0.75	-0.75	-0.20
Kurtosis	3.60	3.00	2.94	2.62

* Exchange rates are normalized at 100 on Sept. 7, 2008

b. Changes (first differences) in daily exchange rates (Sept. 7, 2008 - March 6, 2009)

Statistical Indicators - Changes (first differences) of Daily Exchange Rates Sept. 7, 2008 - March 6 , 2099				
	Brazil	Chile	Mexico	Peru
Mean	0.28	0.12	0.35	0.07
Standard Deviation	3.35	1.57	2.26	0.45
Symmetry	-0.12	0.28	0.68	0.71
Kurtosis	3.83	3.70	6.78	10.81

c. Daily interest rates (Sept. 7 , 2008 to day of maximum devaluation level of each currency)

Statistical Indicators -Daily Interbank Interest Rate Sept.7, 2008 - Max devaluation level *				
	Brazil	Chile	Mexico	Peru
Mean	13.62	10.38	8.04	6.53
Standard Deviation	0.16	0.37	0.27	0.18
Symmetry	-4.32	-0.35	-0.69	1.80
Kurtosis	19.82	8.22	2.07	8.38

* Day in which maximum level of the exchange rate (maximum devaluation) was reached : Brazil on Dec. 8 , 2008 ; Chile on Nov. 21 , 2008 ; Mexico on March 5 , 2009 ; Peru on March 5, 2009.

The main conclusions that can be drawn from the tree tables are:

(1) **Means.** The mean exchange rate of Peru's Sol was much closer to 100 than the other three : 104 *versus* 117 for the Chilean Peso, which is the smallest of the other three).The same applies to the changes in the exchange rate :the mean for Peru's Sol (0.07) was close to ½ that of the Chilean Peso (0.12) ; ¼ of that of Brazil's Real (0,28) ;and 1/5 that the Mexican Peso (0.35). The mean interest rate of Peru (6.53) is also lower

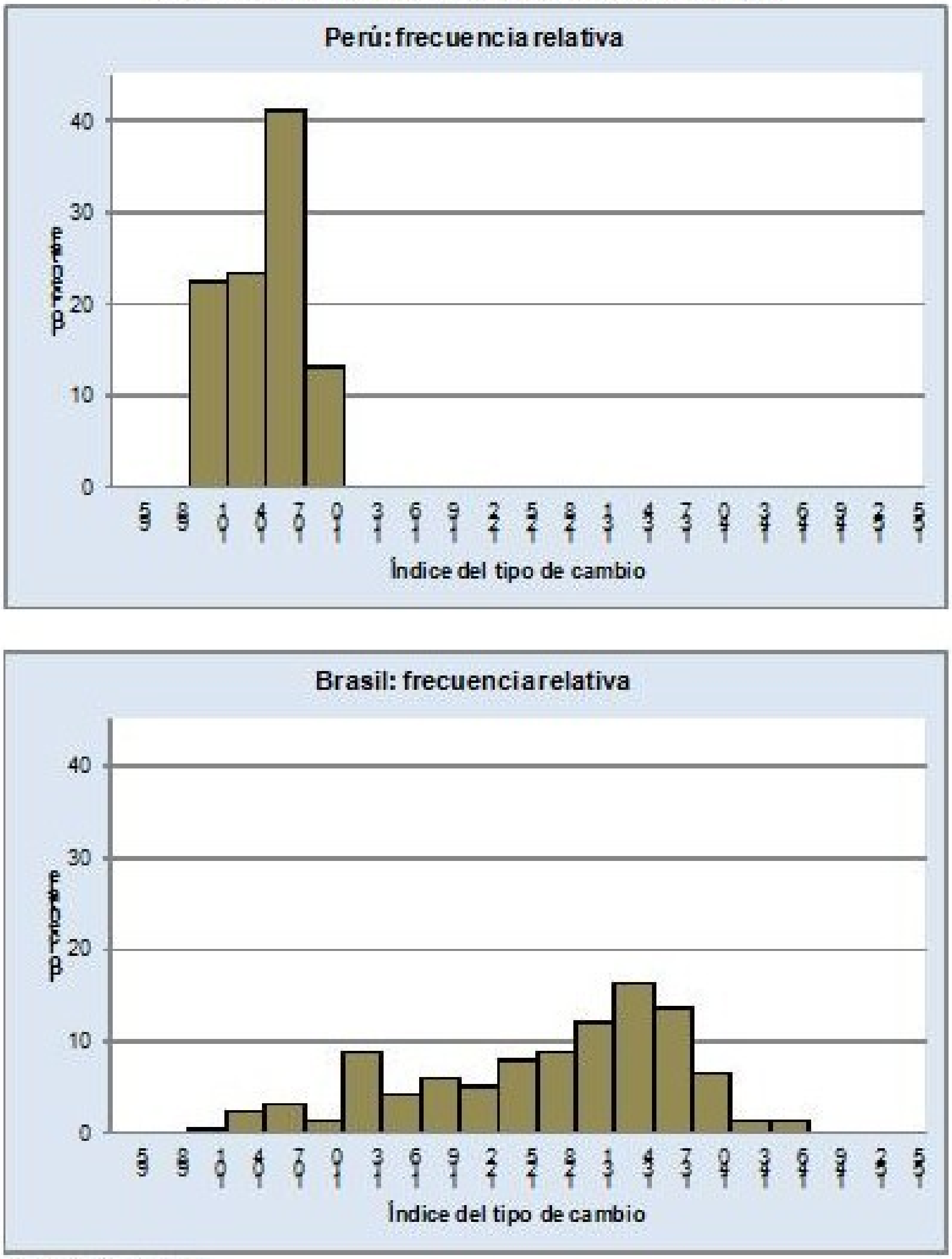
(2) **Standard Deviations.** That of the exchange rate of Peru's Sol (2.78) is almost 1/3 that of the Chilean Peso (7.52) and ¼ of that of the Mexican Peso. The same applies to the first differences of the exchange rate .Regarding , interest rates , the dispersion of the Brazilian Real (0.160 is slightly lower than that of the Peruvian Sol (0.18) , although the coefficient of variation (mean/ standard deviation) of the Sol is about half that of the Real /

(3) **Symmetry and Kurtosis** .It is unclear what meaning can be given to the Symmetry and Kurtosis of each of the three variables. Note though that the distribution of the exchange rate level of the Peruvian Sol is much more symmetrical (value is closer to zero) than those of the other three.

Below I provide the distributions of the daily exchange rates. In each page the distribution of the Peruvian Sol is compared with each of the other three currencies. Note that for ease of comparison, the range on the horizontal axis is the same: going from 95 to 155.

With the visual inspection of the Charts below one reaches the same conclusions. The distribution of the exchange rate of the Peruvian Sol is closer to 100, and has a much smaller range of variation ranges between 99 and 112. While the ranges changes in exchange rates of other currencies are as follows: Mexican peso (99-150) Brazilian real (99-147) and the Chilean peso (99 -132). It is clear that the distribution of Peru's currency dominatesthe other three.

INDICADORES ESTADÍSTICOS DEL ÍNDICE DEL TIPO DE CAMBIO*
(Del 7 de setiembre de 2008 al 6 de marzo de 2009)**



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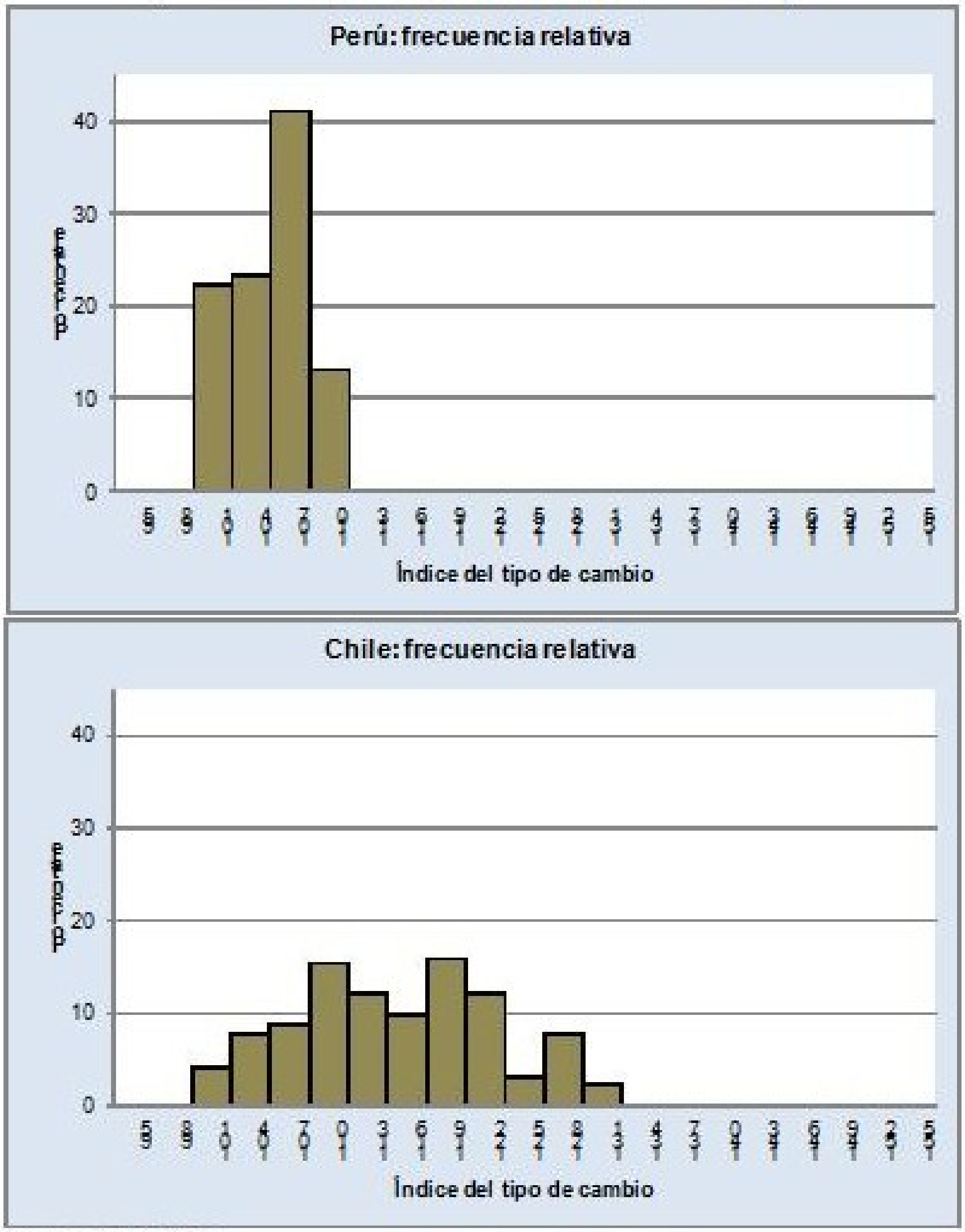
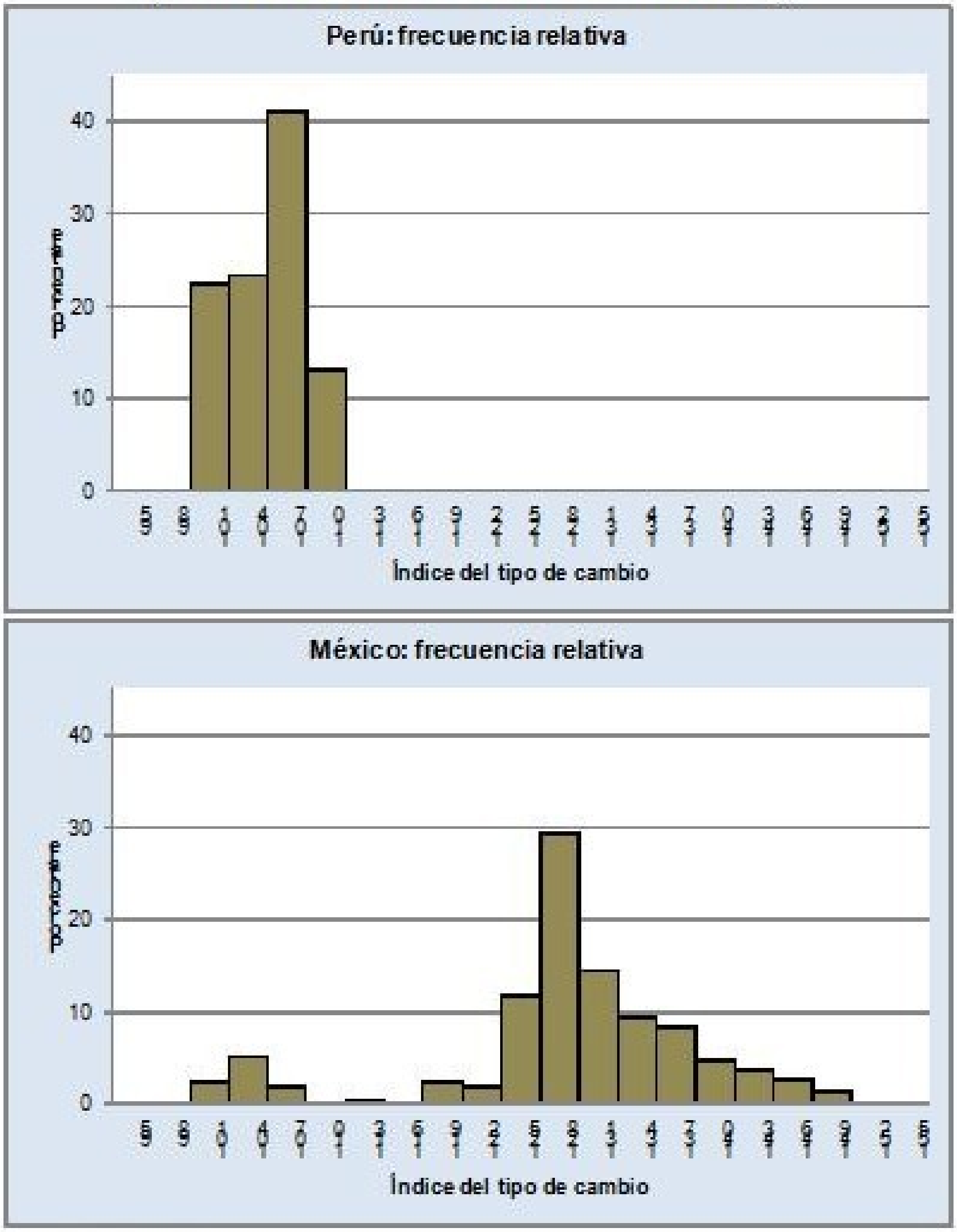
**Corresponde al periodo de la intervención de Freddie Mac y Fannie Mae y el mínimo del índice de la Bolsa de Valores Norteamericana.
Fuente: Reuters.
Monedas: Perú (Nuevo Sol por Dólar) y Brasil (Real por Dólar).

ÍNDICADORES ESTADÍSTICOS DEL ÍNDICE DEL TIPO DE CAMBIO*
(Del 7 de setiembre de 2008 al 6 de marzo de 2009)**



*Base del índice: 7 set. 08=100.
**Corresponde al periodo de la intervención de Freddie Mac y Fannie Mae y el mínimo del índice de la Bolsa de Valores Norteamericana.
Fuente: Reuters.
Monedas: Perú (Nuevo Sol por Dólar) y Chile (Peso por Dólar).

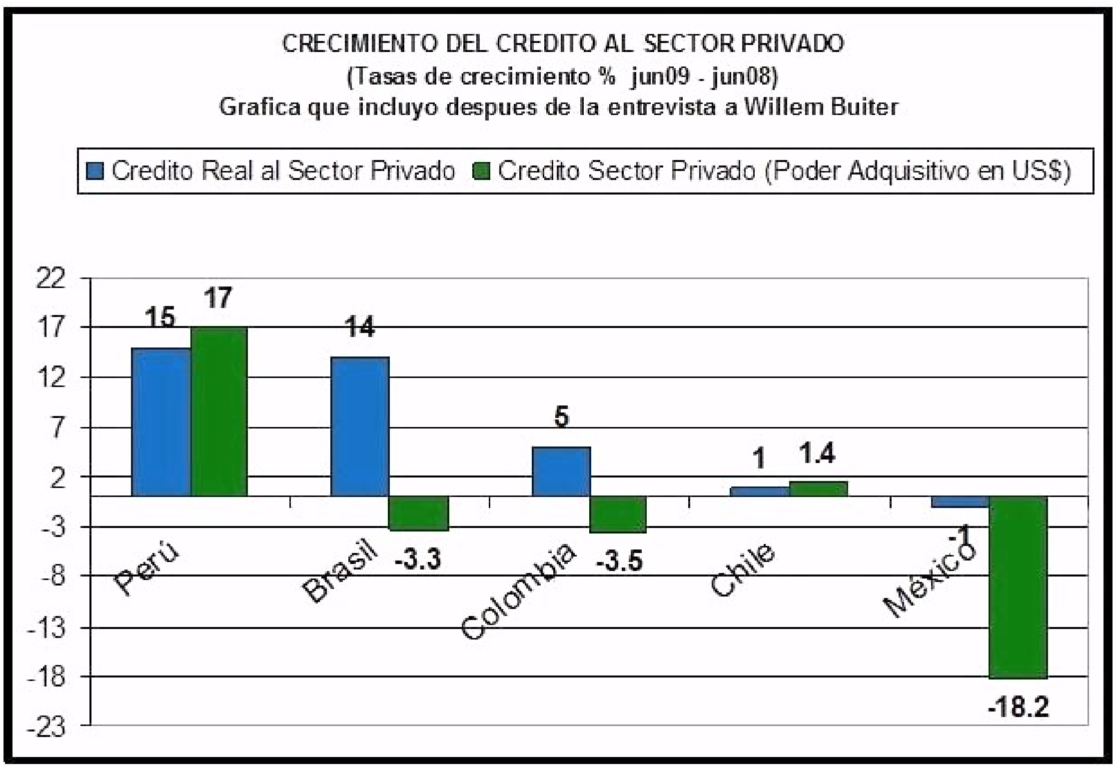
INDICADORES ESTADÍSTICOS DEL ÍNDICE DEL TIPO DE CAMBIO*
(Del 7 de setiembre de 2008 al 6 de marzo de 2009)**



*Base del índice: 7 set. 08=100.
**Corresponde al periodo de la intervención de Freddie Mac y Fannie Mae y el mínimo del índice de la Bolsa de Valores Norteamericana.
Fuente: Reuters.
Monedas: Perú (Nuevo Sol por Dólar) y México (Peso por Dólar).

C. Second performance criteria: credit to the private sector

As can be seen in the Chart below the relative stability of the exchange rate and the lower average interbank interest rate during the period of "maximum turmoil" were achieved while (o perhaps because of) maintaining a higher rate of credit growth to the private sector , measured as (i) the purchasing power of credit in terms of domestic goods (15% Peru versus 14% Brazil , the second best) ; and (ii) the purchasing power of credit in terms of dollars (17% Peru versus 1.4% Chile , the second best) Here , I use the period June 2008 to June 2009, i.e. three months before and after the period of "maximum turbulence." Peru was the only country that was able to maintain positive credit growth to the private sector measured in both real terms as purchasing power in dollars. Mexico was the only one who had negative records in both .[6]



[6] See Chart 3 in Paul Castillo (2009)

4. FISCAL STIMULUS

Peru delayed the implementation of a countercyclical fiscal policy. Several factors explained the delay. In July 2008, Finance Minister Luis Carranza resigned owing to tear and wear with his sectoral ministerial peers for his unwillingness to yield to more public spending. The economy's growth rate was approaching 10% and inflation was running at close to 7%. President Garcia was worried about inflation and wanted to cool down the economy, but Carranza had run out of political capital to negotiate budget cuts.

The new minister, Luis Valdivieso, took on the post with the request to negotiate the cuts. Between July and September 2008 he was able to define selective cuts and to enforce quality control processes for public investments : an strengthening of the National System of Public Investment (so called SNIP by his acronym in Spanish) ; and a reformulation of the regional allocation of public investment whereby regions would get central government funding for projects in proportion to the economic /social merits of each project , with fiscally poorer regions receiving higher funding on a scale .The regional equalization fund is known as FONIPREL .

Just as the task was completed, the international financial meltdown made appearance in September 2008. The solvency crisis spread swiftly across US and European financial institutions as did bank bailouts. It did not take long for a parallel with 1929 to be established. The specter of massive deleveraging of financial institutions had the potential to set in motion a deflation / depression spiral so brilliantly described by Irving Fisher (1933) [7]. Governments were quick to dust down off- the -shelve recipes of fiscal (Keynes) and monetary (Fisher and Friedman) and after a collapse of Lehman Brothers massive bail outs.

The Peruvian financial sector withstood the shock extremely well owing to the factors that I have explained in the first section. Also, Peru had a solid portfolio of foreign direct investment under execution .With the economy growing at 10 % , the illusion that the effect of the crisis could boil down to just a deceleration to 5% o 4% was widespread. Investment banks backed this framework with their projections .The weak fronts were the downfall in exports and the loss in tax revenues. Of the former, mining and commodity firms could muddle through well because of low debt and the cash accumulation during commodity boom. The real problem sectors were textiles and other manufacturing exports. Given the strong public finance and central bank balance sheets, the loss in tax revenue did not seem to be very problematic provided that the crisis did not last very long.

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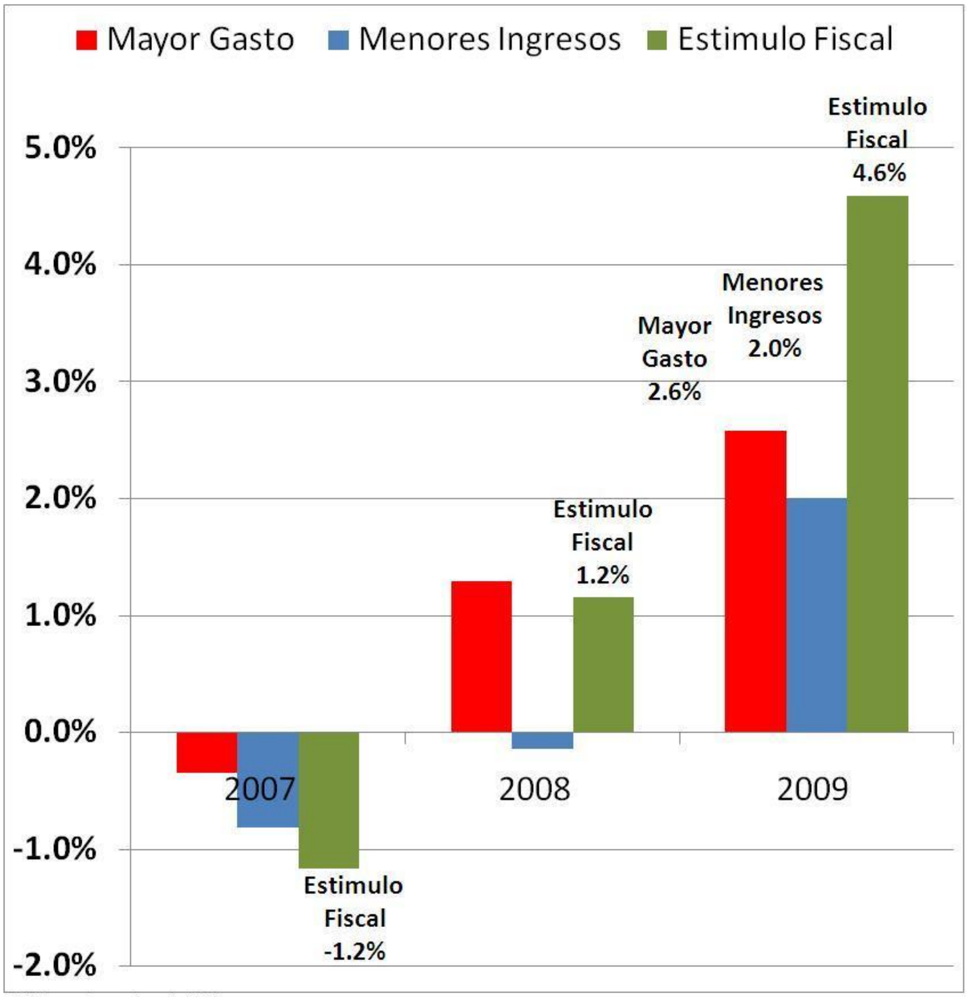
[7] Irving Fishe . "The Debt-Deflation Theory of the Great depressions," (Econometrica, 1933)

However, the clamor from media, business and some academics soared by the end of 2008 as the slowdown of economic activity became evident. Minister Valdivieso was in no rush to open the floodgates to public spending .Among his worries were (i) that the quality control of public expenditure be degrades ; (ii) that the stimulus be understood as a return to populism; and (iii) of the limited implementation capacity of the sectoral ministries .

Rather than yielding to “political expenditure”, he took his time in designing a countercyclical fiscal program. This came finally in early December 2008 in the form of a 2% of GDP supplemental budget consisting of three pillars: (I) 40% of the funds to accelerate implementation of the 45 "best" public investment projects ; (ii) 30% as additional resources for low income housing (the MiVivienda program); and (iii) 30% for social programs and training of displaced workers and lending to manufacturing firms .

In late January 2009, Valdivieso had to resign on the outcry to the effect that his slow response in boosting expending was to blame for the deterioration of economic activity. He was replaced by his predecessor, Luis Carranza who had greater command on the nuts- and- bolts of spending processes and appeared to have become less unwilling to compromise on some quality controls. Though public expenditure picked up markedly , some influential local academics continued their criticism of fiscal and interest rate policies , taking the increasing decoupling from the 2008 10% growth rate of as a reference and arguing on the of the basis of the IS-LM framework .This overlooked the facts : that in a small open economy the depressed external environment was the main driver of activity ; that public spending Keynesian multipliers are small (because of import leakages) ; that interest rates were compromised by the superior goal of maintaining exchange rate stability and that , in any event the monetary injection of the CB had been accommodating and overwhelming .

PERU : ESTIMULO FISCAL 2007 -2009



Elaboracion : Ricardo V. Lago
Fuente: BCRP y MEF

PROYECCIONES DEL FMI (para 2010)

	Deuda Publica Bruta % PBI	Deficit Primario % PBI
Peru *	**28.9**	**- 2.8**
Greece	129.5	-6.4
Portugal	83.3	-5.2
Spain	63.7	-8.5
Ireland	74.5	-10.5
Italy	117.6	-0.7
Belgium	100.9	-1.7
Austria	72.9	-3.1
France	84.9	-6.0
Germany	77.3	-3.4
UK	79.6	-9.6
Latvia*	33.2	-7.6
Hungary	80.2	0.7
Romania	33.3	-4.2
US	91.8	-8.0
Japan	228.6	-8.7
Canada	84.8	-4.0

*Proyeccion para el Peru de Ricardo V. Lago

By year end, monthly public spending was running at 30% nominal growth relative to 2008. Minister Carranza tendered his resignation in December in reaction to the Presidential signing into law of legislation that afforded tax exceptions to provinces in the Sierra -highlands (at over 2500 meters altitude) when in fact he had been fighting to abolish existing tax exceptions in the Selva -rain forest regions. He was replaced by Mercedes Araoz , the former Trade Minister who had conducted successfully the negotiations on Free Trade Agreements with the US , China , and the EU among others .Soon after taking office and with GDP already on recovery mode , she started to put checks on public spending .

As shown in the graph, the total fiscal stimulus in 2009 was 4.6% of GDP. Automatic stabilizers accounted for about 2.6%, consisting of a drop in tax revenues of 2% of GDP and probably around 0.6% of increased spending. Compared with other developing and developed countries the program was a modest 2 %. The international standard in terms of fiscal stimulus ranged from 2% to 5 % of GDP per year. Hence , the Peruvian public finances closed the year with a very acceptable primary deficit (excluding interest payments on the debt) of 0.9% of GDP and an overall deficit of 2.8% compared with levels of over 10% in the US, Japan , the United Kingdom and Spain among others.

4. STRENGTHENING EXTERNAL CONFIDENCE

Size matters .The Peruvian economy is not as "sexy" as a BRIC. Peru's GDP is 40 times lower than China and 12 times lower than those of Brazil, Russia and India. Hence, Peru has to display its charms to entice investors. That is precisely what it did when, in October 2008 - on the occasion of the Annual Meeting of the IMF in Washington D.C. Then Minister of Finance Valdivieso announced that Peru would issue a long term bond (of up to US$ 1 billion) in nearly defunct international capital markets. The Government of Peru did not need the money. The idea was to draw attention from international investors .The vehicle was a Bloomberg announced that Peru intended to be the first emerging economy to return to the market **.** Investors and bankers, stunned by the financial meltdown, would be caught by surprise and this, in turn, would place magnifying glasses on Peru's strong financial conditions and consolidate external and internal confidence

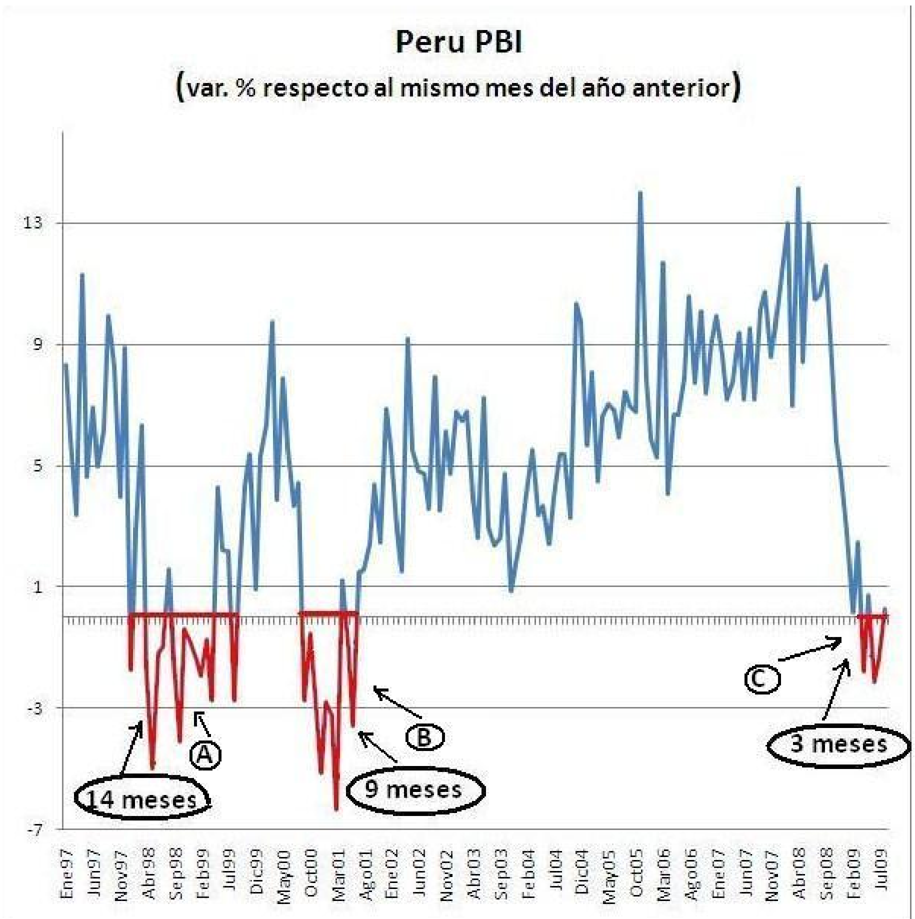
Following the announcement of the bond, the Minister of Finance and the Governor of the CB embarked on two roadshows in December 2008 and January 2009. South Africa was the only country that performed a similar exercise at the time. The effectiveness of the roadshows can be gauged by the evolution of premium on Peru's sovereign bonds from start to finish. It shrank 53 basis points (more than half a percentage point) while the respective declines of the premiums of Mexican and Brazilian bonds during period were only 10 and 16 points respectively .Colombia's premium was up 9 points. In fact, Peru's reduction of that country risk premium was the largest of any country.

Needless to say that, in those days, positive economic news was conspicuous by their absence. One of the few exceptions was page 28 of the Spanish business daily, Expansion, of December 22. Taking stock of the roadshow Madrid visit , and on two large photos of the Governor Velarde and the Minister Valdivieso Velarde, the headline read *"Fiscal and monetary rigor: the most dynamic economy of the region relies on its financial stability an investment grade status to be the first emerging country to place a global bond after the crisis."* Incidentally, the roadshows were as welcome in financial markets as criticized at home. With the change of ministers in January 2009, the bond agenda was pushed forward.

Eventually, Peru issued a US$ 1billion, ten-year bond in May 2009. It was placed at 7.2% with demand outstripping supply five to one. By then, however, the countries that had issued ten-year maturity bonds were a legion: Mexico, Brazil, Philippines, Indonesia, and Colombia. In July 2009, Peru reopened a global bond maturing in 2025 with an additional issue of US$ 1 billion at 6.95% and attracting demand 4.5 times larger than the placement This last bond was the first placed by a emerging economy at a length over 10 years.

5. TAKING STOCK OF ECONOMIC PERFORMANCE IN 2009

The Peruvian economy closed the year 2009 without falling into recession (0.9% growth in GDP) and with price stability (inflation rate of one-quarter of 1%). Growth of monthly GDP – relative to the same month of the previous year- was in the red for just 3 months while in the previous two international crises, East Asian –Russian and Dot-Com – Argentine; it had shown negative growth for 14 and 9 respectively.



Fuente :Ricardo V. Lago .Elaborado con cifras del BCRP y del INEI

A= Crisis asiatica y rusa ; B= Crisis del dot-com y de Argentina

C= Mayor crisis financiera y recesion global en siete decadas

The authorities managed to preserve exchange rate and monetary stability, employment levels stayed put and there were no major corporate bankruptcies nor was it necessary any bail out of banks. All this was achieved with a modest fiscal deficit (2.8% of GDP) and even a slight surplus in current account balance of payments (0.2% of GDP) when the previous year had registered a 4% of GDP deficit. Further, around 360,000 Peruvians (or 1.4 % of total population) graduated from the poverty line

6. LESSONS FOR OTHER DEVELOPING COUNTRIES

The Peruvian case shows that in two decades, an economy can transform from the black sheep of the international economy to stardom ; from hyperinflation to monetary and price stability ; from debtor in massive arrears to net creditor ; from a secular decline in living standards to becoming one of the most dynamic economies in the planet (in 2008 it grew faster than China :9.8%) ; from rampant poverty and social exclusion to being one among the top in progress in human development (as gauged by the UN Index).

The textbook tells us that in the face of severe shocks, a "large economy" has the advantage of a vast domestic market and a diversified production structure .This enables the country to cushion the effects of external shocks by switching from the external sector to the domestic market if needed. Fiscal multipliers can be sizeable (around 1). And if the economy at point has sound public finance and / or its legal tender is an international currency, it has plenty of scope for offsetting the effects of the shock by means of fiscal and monetary stimulus.

In contrast, a "small open" economy is at a stark disadvantage: limited diversification, high dependence on international trade, small multipliers, and non – reserve currency. The Peruvian economy - which produces only 2 dollars out of every 1000 produced by the world economy and whose average tariff on imports is 2.2% -one of the lowest in the planet - fits closely the term "small and open."

What is truly remarkable is that in the worst year of the international economy in seven decades, Peru was one of a handful of countries that did not fall into recession. Even without major fiscal stimulus. This shows that a "small and open" economy may be able to endure reasonably well a strong external shock. Several lessons can be drawn from the Peruvian experience:

First. Invest in "self-insurance"

i. Accumulating of savings in the good times (by fiscal austerity and monetary discipline)
ii. Maintaining plentiful foreign exchange reserves.
iii. Preserving of reasonable levels of public and private debt

(Note: The IMF is now arguing - so far with little success - against the large accumulation of reserves promoting instead the pooling of reserves in, inter alia, the IMF coffers so as it can act as a big lender of last resort. The countries, however, are suspicious because the use of their reserves is unrestricted whereas the use of IMF resources is conditional on economic and possibly political performance.

Second. Reduce financial vulnerability

i. Solid capitalization of financial intermediaries (low leverage)
ii. Limited dependence of banks on external short term funding
iii. Centralized ,competent financial supervision

Third .Avoid rapid credit growth , and debt build up as well as excessive credit concentration in specific sectors (for example, in Spain about two thirds of bank portfolios was directly or indirectly related to the real estate sector.

Forth. Maintain a strong portfolio of FDI by sound and reputable companies .Ideally, fund BoP Current Account deficits with FDI rather than external debt

Fifth. Move into a fully funded pension system.

Sixth. **Marketing.** Invest in promoting and divulging the country's strengths and investment opportunities.

All these factors reinforce sound fiscal, monetary and financial policies and constitute an insurance policy (a formidable shield) against international crises. It is obvious that to achieve those, a broad based process of structural reforms is required .In Peru the toughest part of it was carried out between 1990 and 1997)

Building strengths to ward off against the transmission of currency and financial crises should be the main priority to forestall recession. Little can be expected multipliers and fiscal stimulus in small economies. Moreover, it must not be overlooked that degrading quality controls on public spending for the sake of accelerating it, is counterproductive in the long term, for many of the controls are never restored after the crisis. Politicians like to spend.

Finally it is clear that some of the factors that helped Peru's performance in 2009 are atypical and may be difficult to extrapolate to other countries. In particular:

a) The small relative size of banking intermediation to GDP and therefore the low private sector indebtedness .For example, banking intermediation to GDP of Chile is more than twice the Peruvian level.

b) Low exposure to real estate sector. Clearly, this and the previous are in part the result of a financial system that had to be rebuilt from scratch in 1990 after a bout of hyperinflation.

c) The portfolio diversification resulting from the correlation between the prices of gold and copper, which is close to zero? Both products now account for about half of Peru's total exports.

7. CONCLUDING THOUGHTS

Can an economy on the brink of collapse, turn around into one of the strongest in two decades? The strength exhibited by the Peruvian economy during the worst crisis in seven decades seems to prove that indeed it is possible.

And what is the recipe to achieve this? Peru's record shows that it can be done with strict compliance with the principles of the so-called "Washington Consensus."

Consensus that, incidentally, has been reviled by many, with Nobel Laureates Paul Krugman and Joseph Stiglitz being the most vociferous. Further , as the quotation that heads this article tells even the very officials from the World Bank - one of the institutions that invented the benchmarks of the Consensus – pronounced its demise .However , as the man who coined the term ,John Williamson , has pointed out part of the problem is that is that everyone interprets the principles at her/his convenience. It appears that what we need is a "consensus" on the definition of the elements of the Consensus.

In the table below I present Williamson's enunciation of the principles of consensus and side by side my assessment on Peru's compliance with each of the principles and my judgment on to what degree other economists would agree with my assessment.

The problem is that Washington - and many other capitals of other developed world - have departed from some the policies of the Washington Consensus; namely on fiscal and monetary discipline and strong financial supervision. By contrast, Peru and other developing countries have followed the script, not only have they thrived, but have been able to limits the effects of the crisis.

Looking ahead, Peru (and other developing countries) need to advance reforms in the second and third generation (including the principles of the so called Litigation in Washington Contentious) with the same determination and consistency as they have implemented the Washington Consensus for twenty years, with four successive governments of different ideological signs, and with the support of the majority of the population.

Washington Consensus **"What Washington Means by Policy Reform" by John Willianson (1989)**		
Areas of reform	**Progress made by Perú**	
	Ricard. Lago's Assessment	*Degree of Consensus on my assessment among economists*
1.Fiscal Discipline	High	High
2.Reorientation of public spending *Towards pro-growth and anti-poverty (primary education and health ,and infrastructure Investment)*	High	High
3. Tax Reform *Braden the tax base and set moderate rates*	Medium (Informality)	High
4.Tasas de interés *Market determined but (moderately) positive in real terms*	High	High
5.Echange Rate *Market determined and /or in any case competitve*	High	High
6.Free trade *Abolition of import licenses and quotas and low and uniform tariffs*	High	High
7.Openess to FDI	High	High
8.Privatization	High	High
9. Deregulation . Less red tape *, free entry and strict exit , defense of competition .* *Also effective financial supervision and protection of consumer rights, health and safety.*	High	High

POSTSCRIPT

"In the economic sphere an act, a habit, an institution, a law produces not only one effect, but a series of effects. Of these effects, the first alone is immediate; it appears simultaneously with its cause; it is seen. The other effects emerge only subsequently; they are not seen; we are fortunate if we foresee them.

The key difference between a bad economist and a good one is that the bad economist confines himself to the visible effect; the good economist takes into account both the effect that can be seen and those effects that must be foreseen."

"That what is seen and that which is not seen"

Bastiat, Frédéric. (1863).

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ANNEXES (TO BE PROVIDED)

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