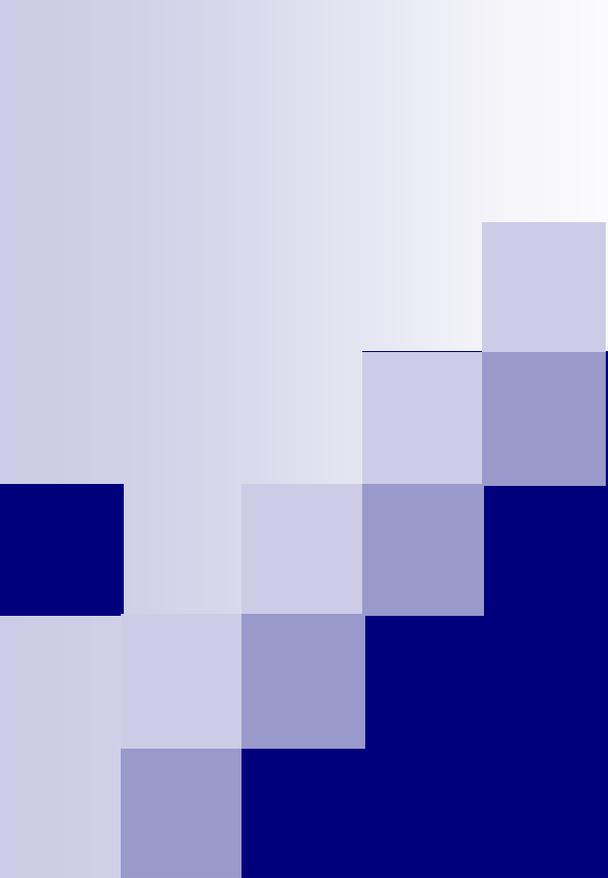


**“ LA POLÍTICA MACROECONÓMICA DEL  
PERU DURANTE LA CRISIS Y OTRAS  
SOLEDADES”**

**ENCUENTRO DE ECONOMISTAS DEL BCRP**

*Lima 17 de Noviembre , 2010*

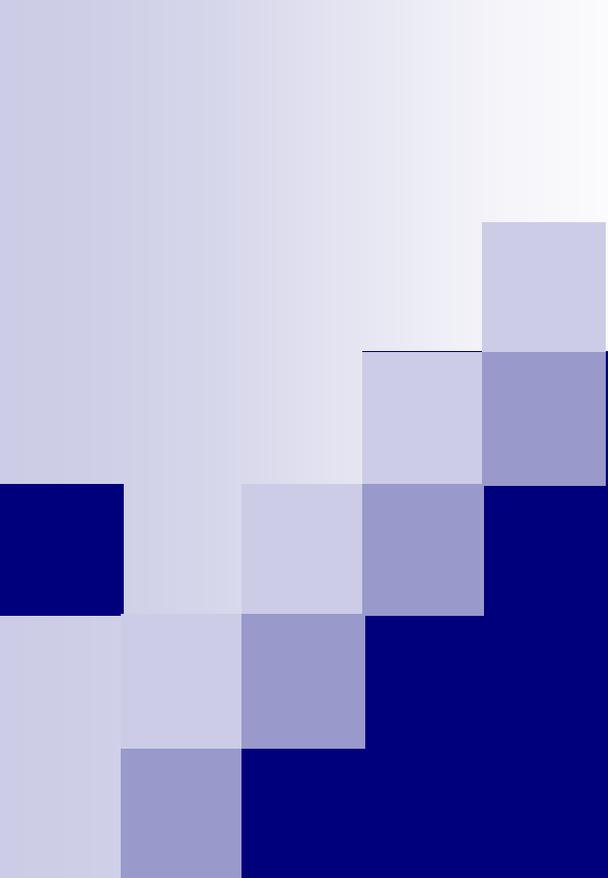
**Ricardo V. Lago**



**“PERU’S RESILIENCE DURING  
THE CRISIS 2008-10 : LESSONS  
FOR DEVELOPING COUNTRIES”**

*Dubrovnik 24 June , 2010*

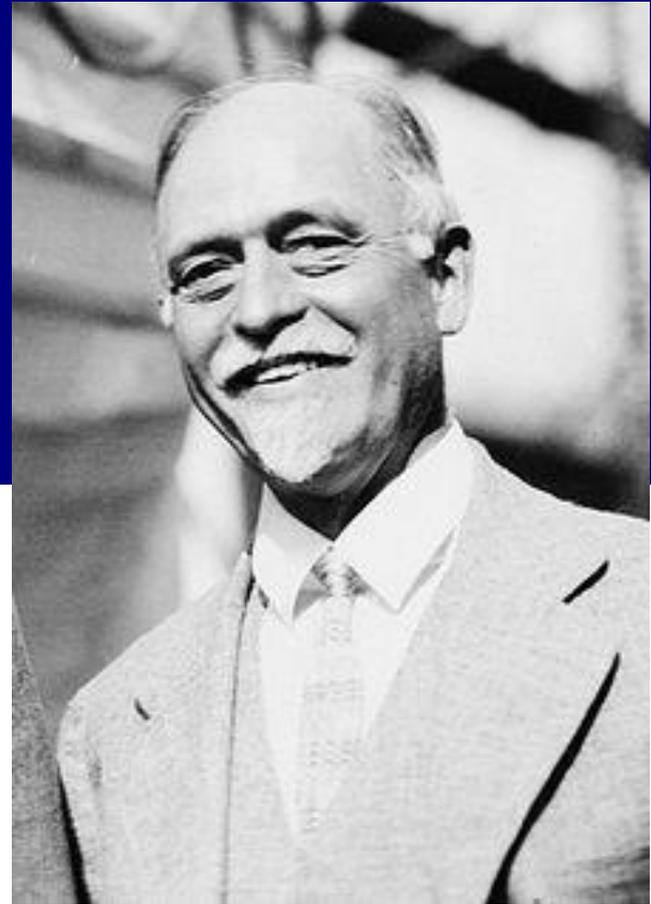
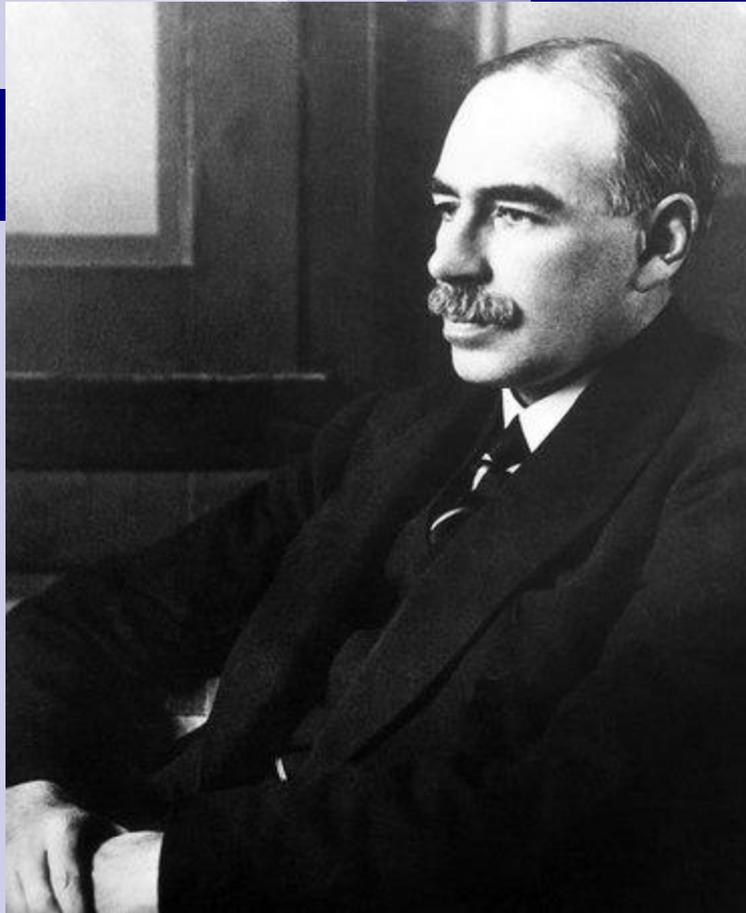
**Ricardo V. Lago**



# **I - LOS GURÚS TAMBIÉN SE EQUIVOCAN**

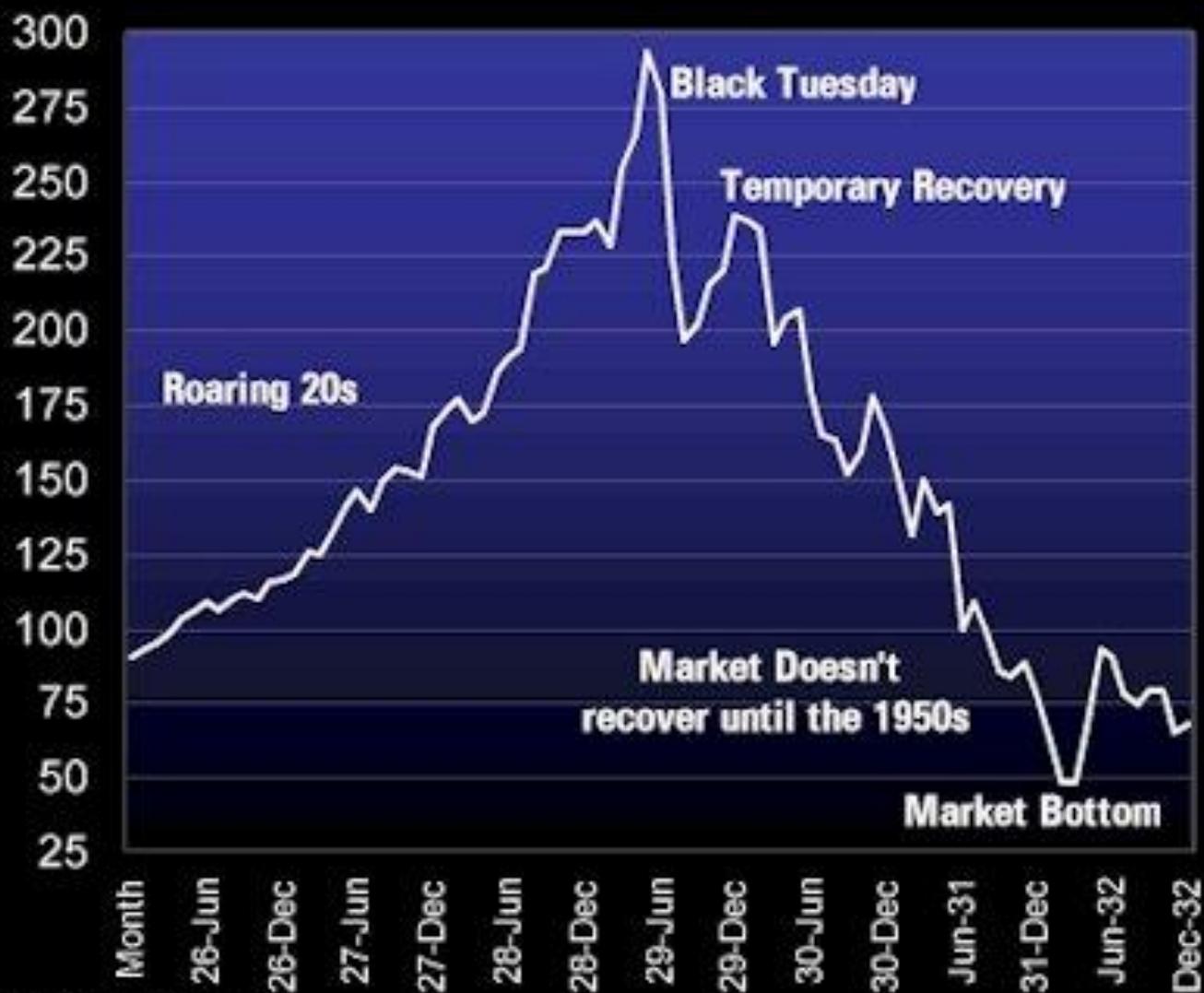






# 1929 Crash Using S&P 500 Data

## Growth of \$100



# La Bolsa : los pronósticos presuntuosos de los sabios

1

*"We will not have any more crashes in our time."  
John Maynard Keynes in 1927*

4

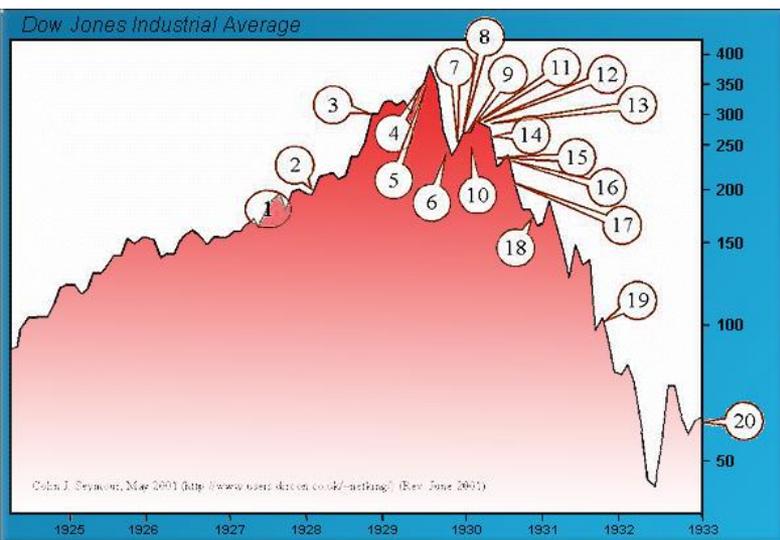
*"There may be a recession in stock prices, but not anything in the nature of a crash."*

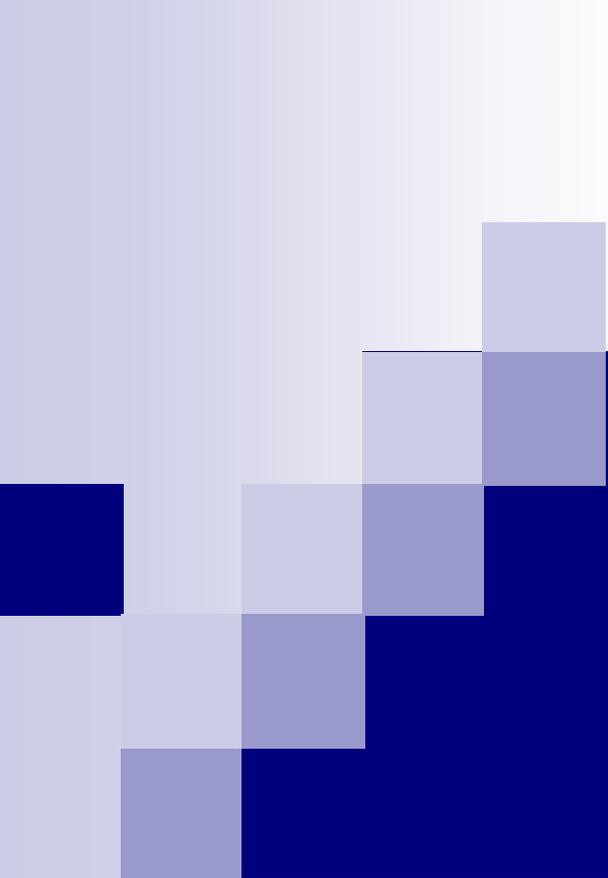
*Irving Fisher, Professor of Economics  
Yale , New York Times, Sept. 5, 1929*

8

*"... a serious depression seems improbable; [we expect] recovery of business next spring, with further improvement in the fall."*

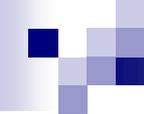
*Harvard Economic Society , November 10,  
1929*





# II - CADE 2010





# CADE : COMPETITIVIDAD

- CARRANZA
- PORTER
- CANDIDATOS

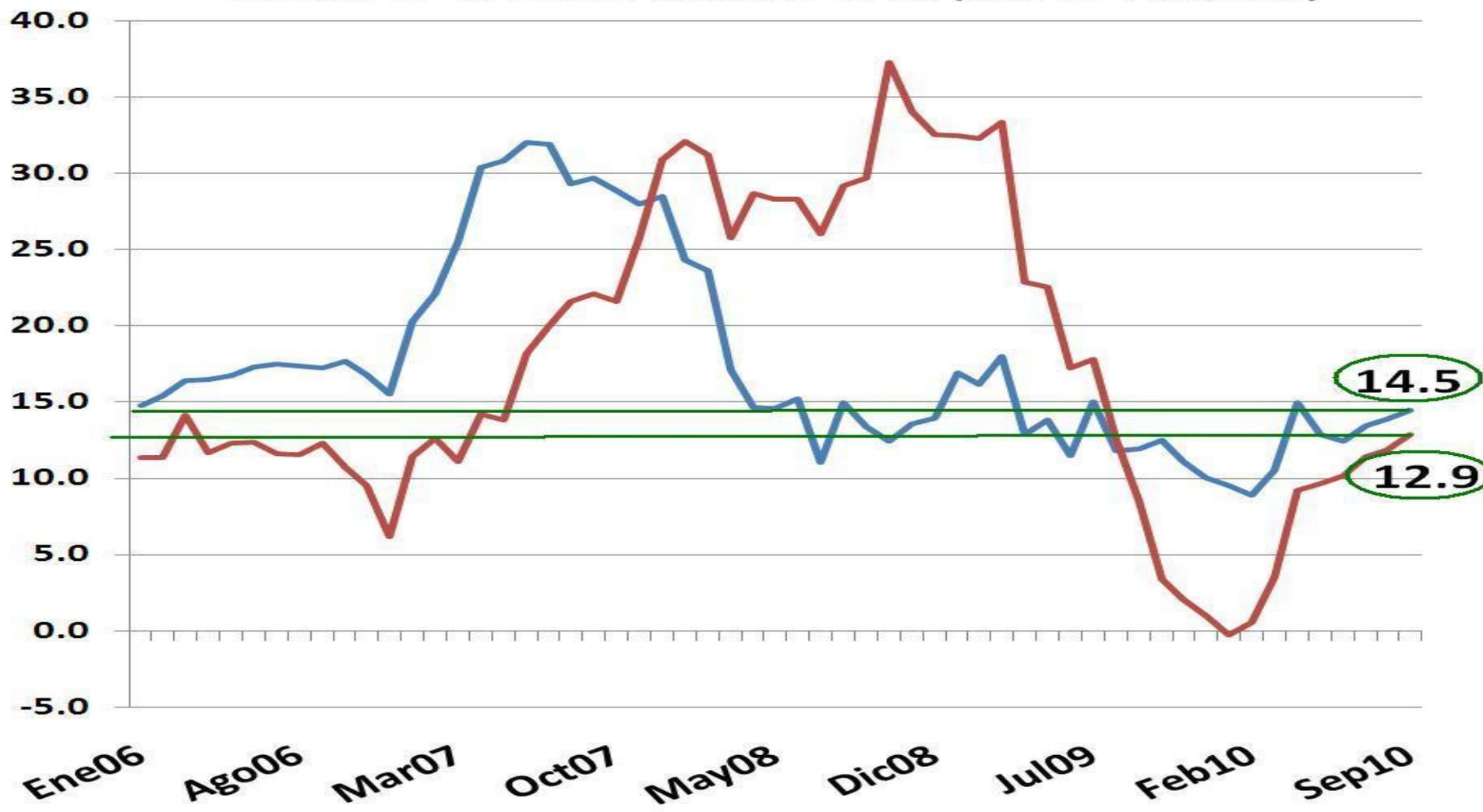


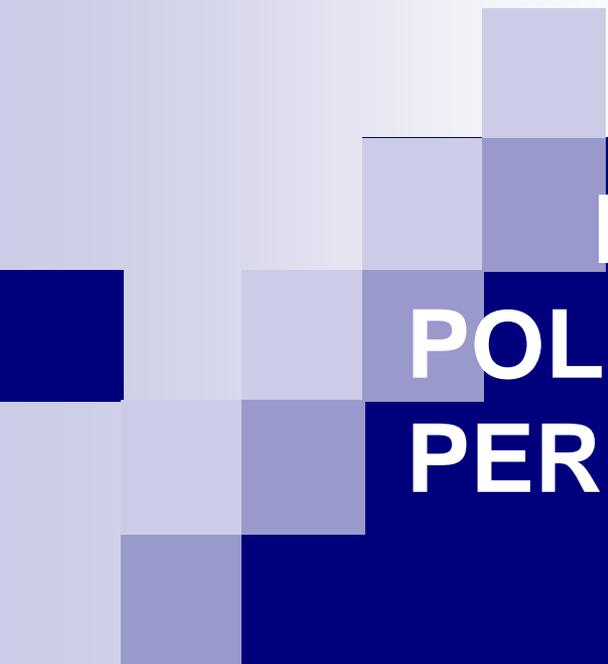
# **III -LA PELEA DE BOXEO ENTRE ROSSINI Y PORTER**



# Rossini contra Porter : Primer asalto

— Crédito SF al Sector Privado Total (var % 12 meses)  
— Crédito SB al Sector Privado total (var. % 12 meses)



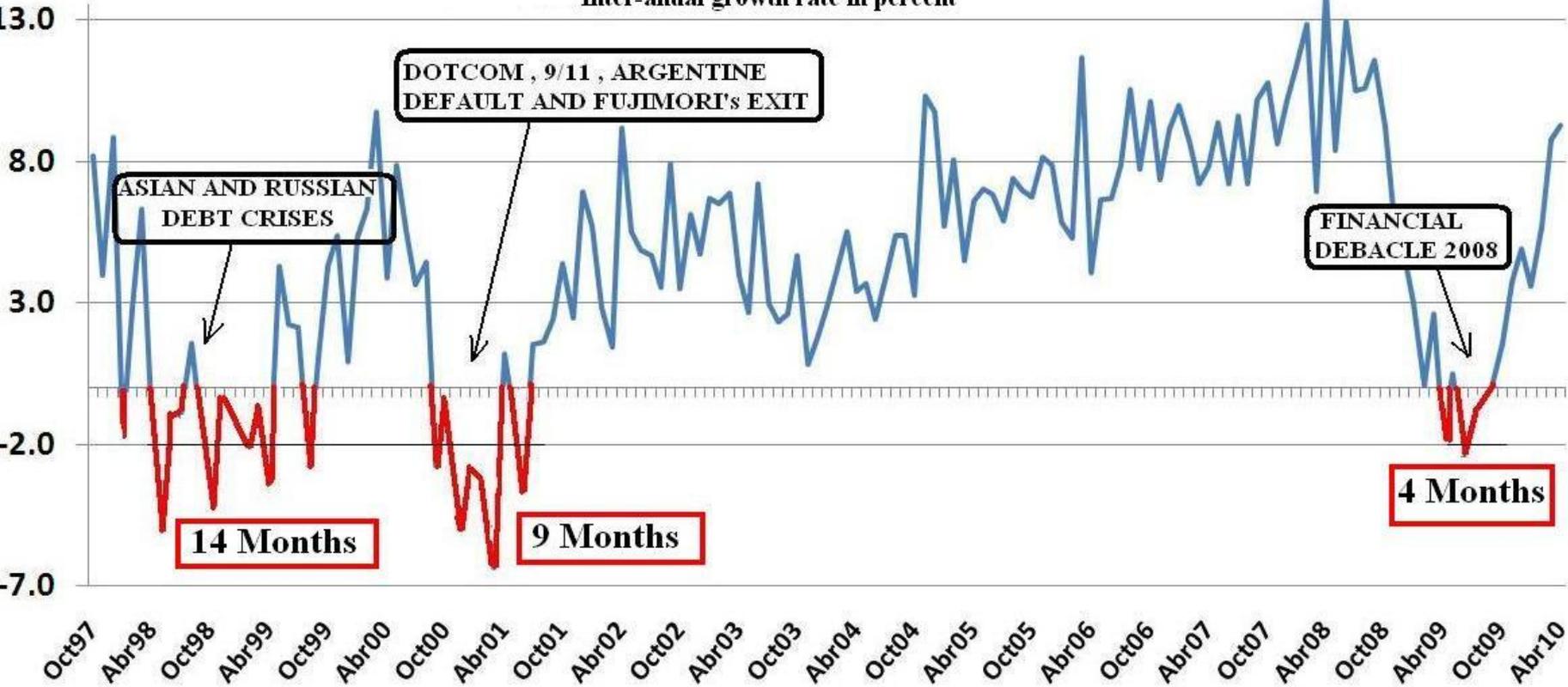


# **IV- EL DEBATE SOBRE LA POLÍTICA ECONÓMICA EN EL PERU 2008-09**

%

# PERU : MONTHLY GDP IN LAST THREE RECESSIONS

Inter-annual growth rate in percent



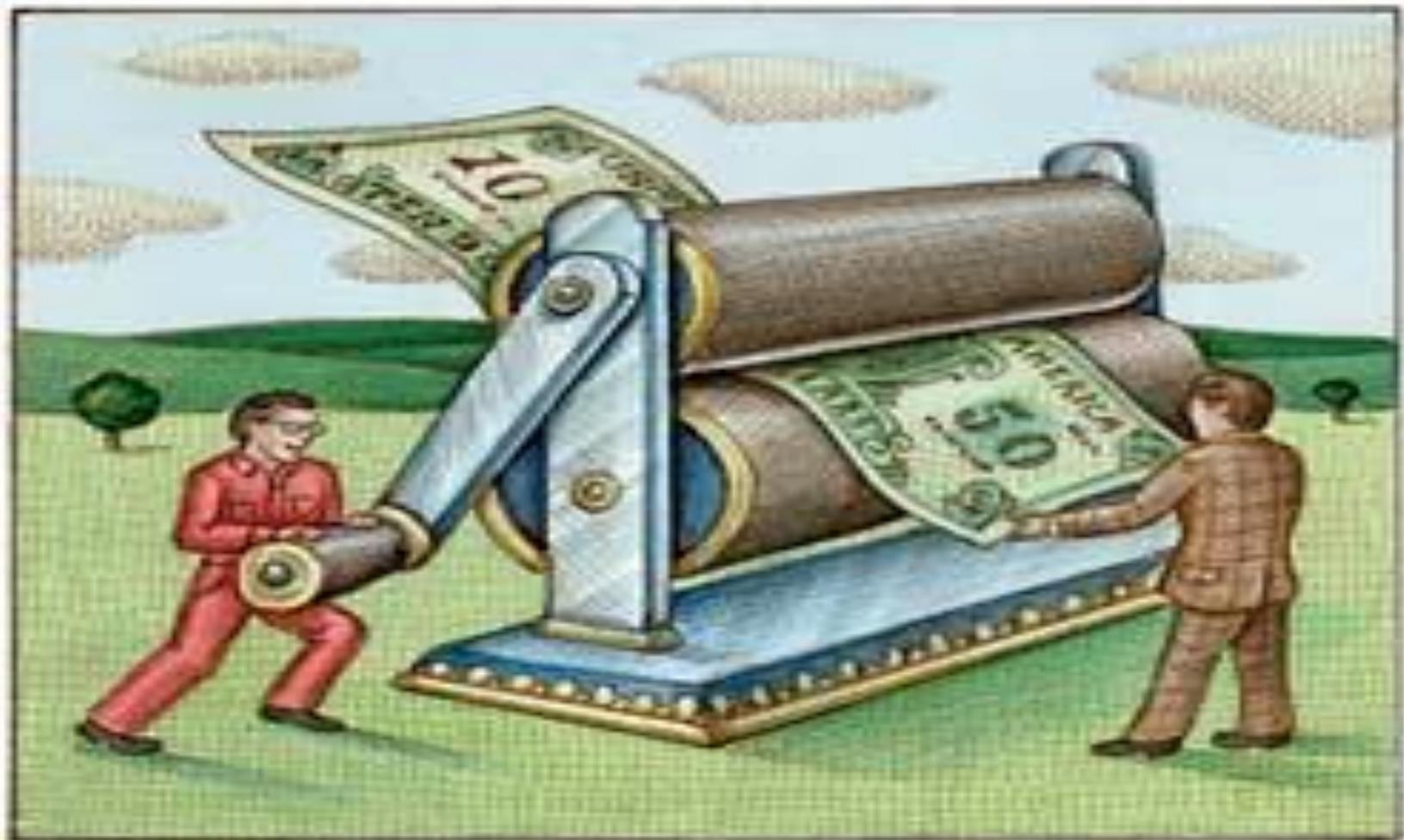
# **LAS CRITICAS A LA POLÍTICA ECONÓMICA EN 2008-2009**

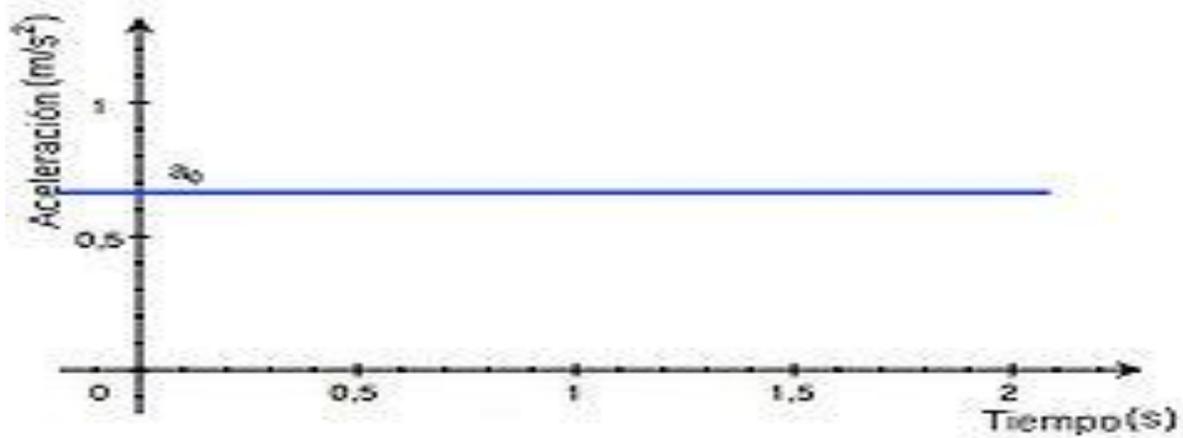
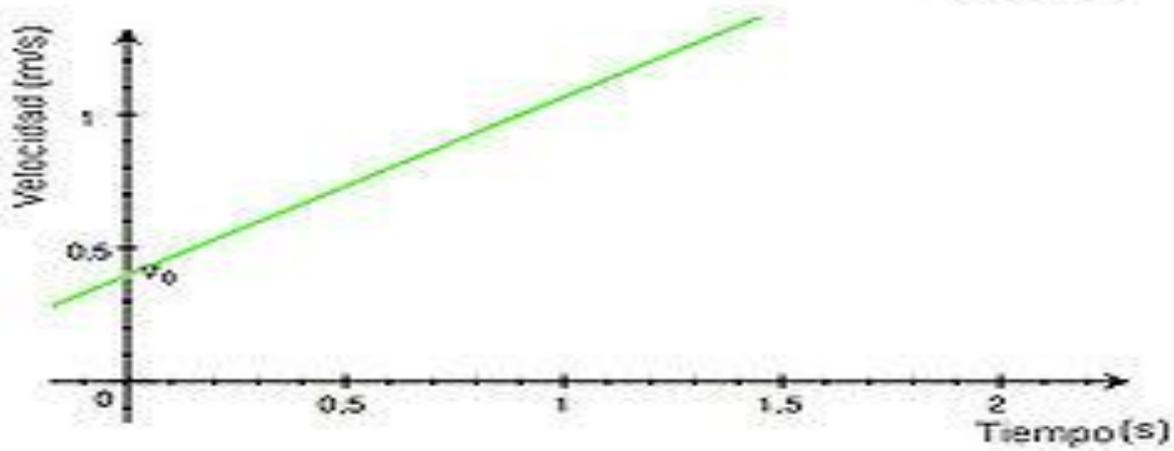
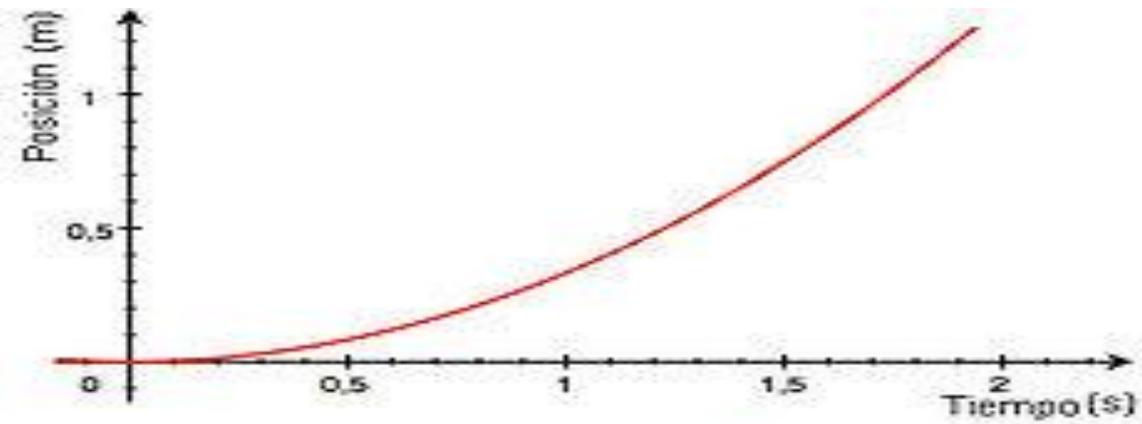
- **DEMORA E INSUFICIENCIA DEL ESTIMULO FISCAL**
- **DEMORA EN REDUCIR LAS TASAS DE INTERÉS**

# ESTIMULO FISCAL



# ESTIMULO MONETARIO





# DEBATE EN PERU : LOS CRÍTICOS

- **MARCO ANALÍTICO UTILIZADO : IS – LM**
- **MARCO RELEVANTE : MODELO MUNDELL –FLEMING , IS-LM-BP**
- **MÁS EN PARTICULAR : MODELO DE OVERSHOOTING DE DORNBUSCH ( 1976 )**
  - Es un modelo de dos velocidades
    - Mercado de cambios : ajuste instantaneo
    - Mercado de bienes : ajuste lento
  - Equilibrio de Corto plazo ; mercado de dinero
  - Equilibrio de Largo plazo : mercado de bienes

# MARCO ANALITICO

## ■ Rudi Dornbusch ( 1976 )

- Modelo de overshooting del Tipo de Cambio
- $t = 0$  : antes de la crisis
  - $M(0) = p \{ C - a r + b y \}$
  - $C =$  Componente de demanda muy especulativo
- $t = 1$  : llega la crisis de confianza
  - $C =$  Fuga hacia dólares
  - $M(1) = p \{ -a r + b y \}$
- $C =$  Exceso de oferta de soles = exceso de demanda de dólares

# **LAS OPCIONES DEL BANCO CENTRAL**

## **■ TRATAR DE DEFENDER LA ESTABILIDAD CAMBIARIA**

- C = Venta de Reservas Internacionales
- Prevenir oscilaciones bruscas del Tipo de Cambio

## **■ FLOTACION DEL TIPO DE CAMBIO**

- No perder Reservas
- Que sea el Tipo de Cambio el que equilibra el mercado
- Conduce al overshooting del Tipo de Cambio ( Modelo de Dornbusch)

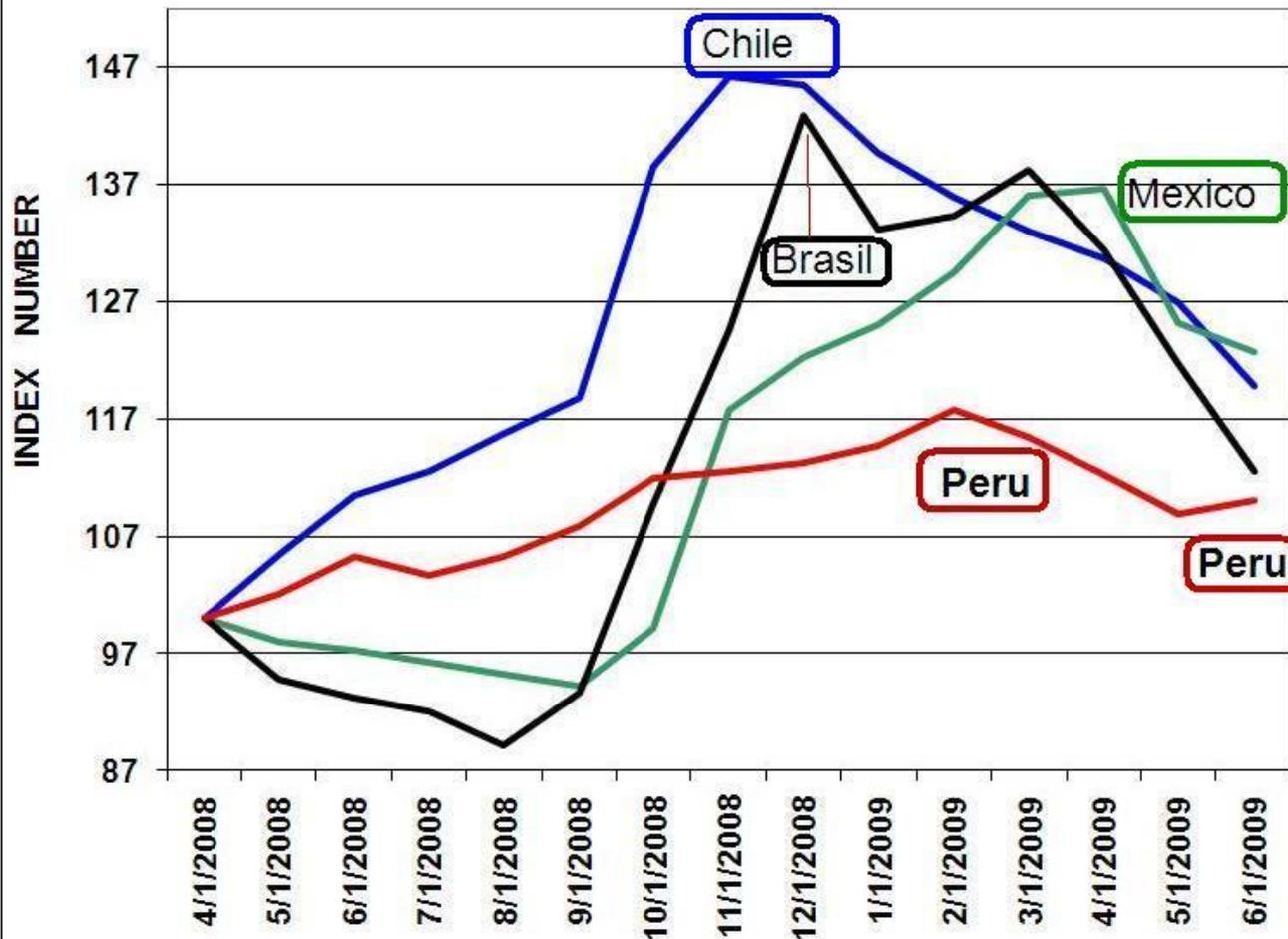
## **■ COMBINACION ENTRE AMBOS**

CANTINFLAS FRENTE A LA DEVALUACION DEL 500% DEL PESO MEXICANO EN 1982 , ULTIMO AÑO DE GOBIERNO DEL PRESIDENTE LOPEZ PORTILLO :

*“QUE LE PASA AL PESO QUE NO PESA ? ; NO CUATE QUE NO ES UNA DE TIPO DE CAMBIO , ES QUE NECESITAMOS UN CAMBIO DE TIPO”*



## EXCHANGE RATES ( Local currency Units per US\$ )



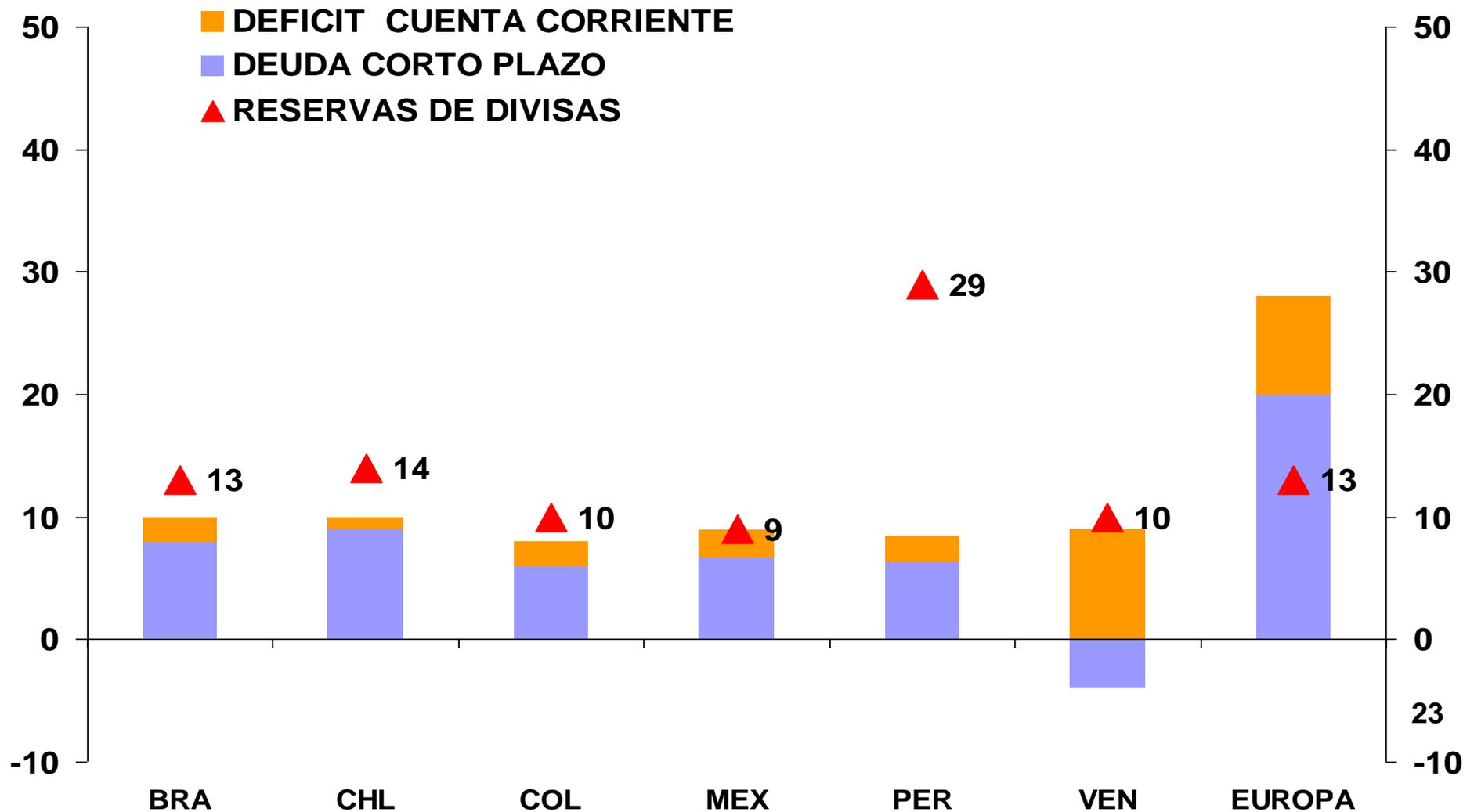
—Chile

—Mexico

—Brasil

—Peru

# COBERTURA DE LAS NECESIDADES DE FINANCIAMIENTO EXTERNO Y DEUDA CORTO PLAZO (Porcentaje del PBI )



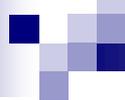
**CHINA : BALANCE SHEET OF THE BANKING SYSTEM ( May 2010 )**  
**( Billion of Yuan )**

66,000	ASSETS	BROAD MONEY	66,000
17,000	Net Int. Reserves Central Bank ( = US\$ 2.5 trillion )	M1	24,000
49,000	Domestic Credit and Net Unclassified Assets	Other: Near Monies	42,000
<div style="border: 2px solid black; padding: 5px; display: inline-block;">             Ratio of International Reserves / Broad Money = 26 %           </div>			

**PERU : BALANCE SHEET OF THE BANKING SYSTEM ( December 2008)**  
**( Billion of Sol )**

<b>113</b>	<b>ASSETS</b>		<b>BROAD MONEY</b>	<b>113</b>
<b>96</b>	<b>Net Int. Reserves Central Bank ( = US\$ 31 billion )</b>		Currency and Sol Deposits	<b>60</b>
<b>17</b>	<b>Domestic Credit and Net Unclassified Assets</b>		Dollar Deposits	<b>53</b>

Ratio of International Reserves / Broad Money = **85%**



# LAS RESERVAS DE DIVISAS ERAN ELEVADISIMAS PERO...

- PERO EN MOMENTOS DE PÁNICO.....
- NADIE CREE NADA
- NADIE CREE A NADIE
- MUCHO MENOS DESPUES DE MADOFF

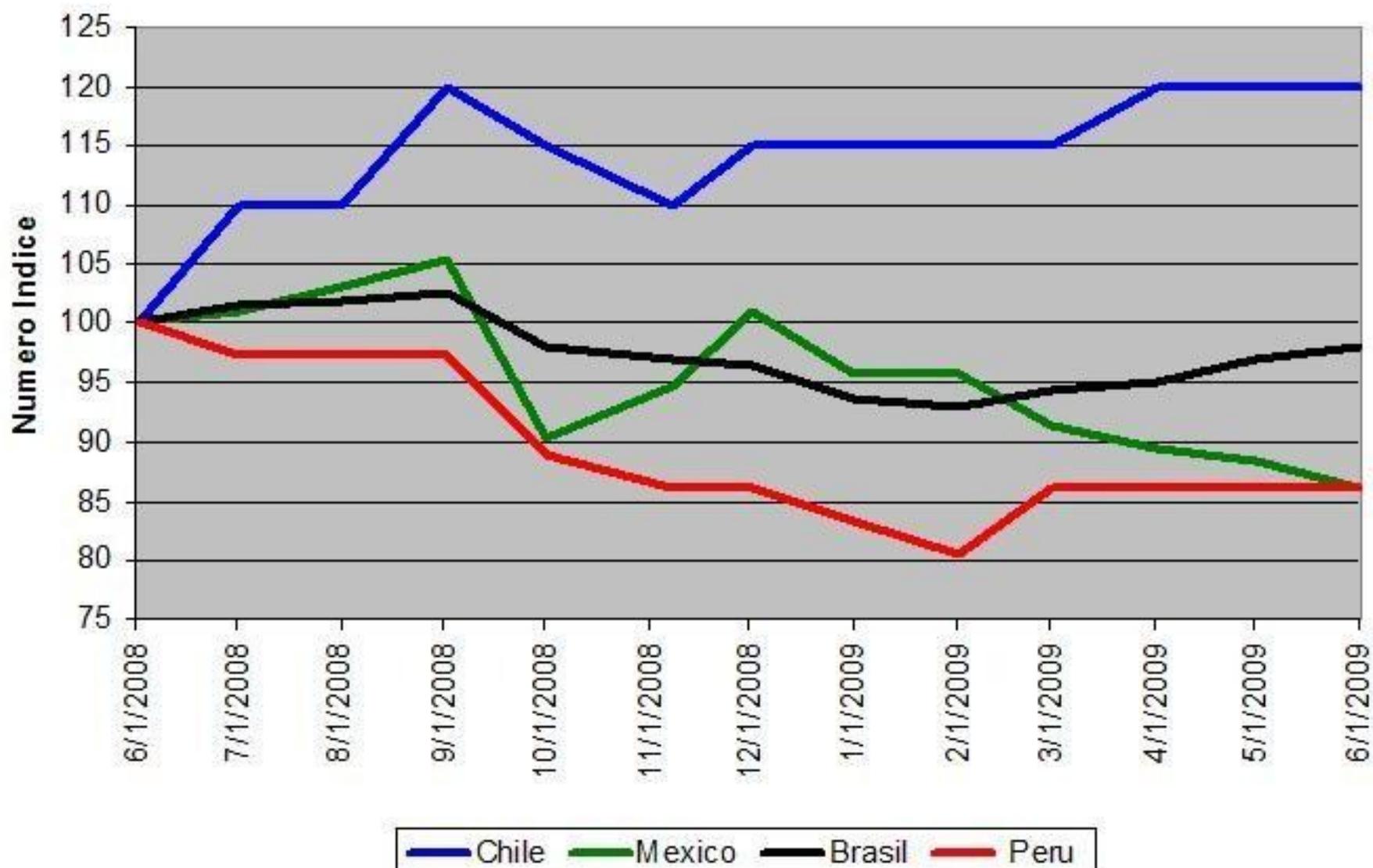
# BERNIE MADOFF



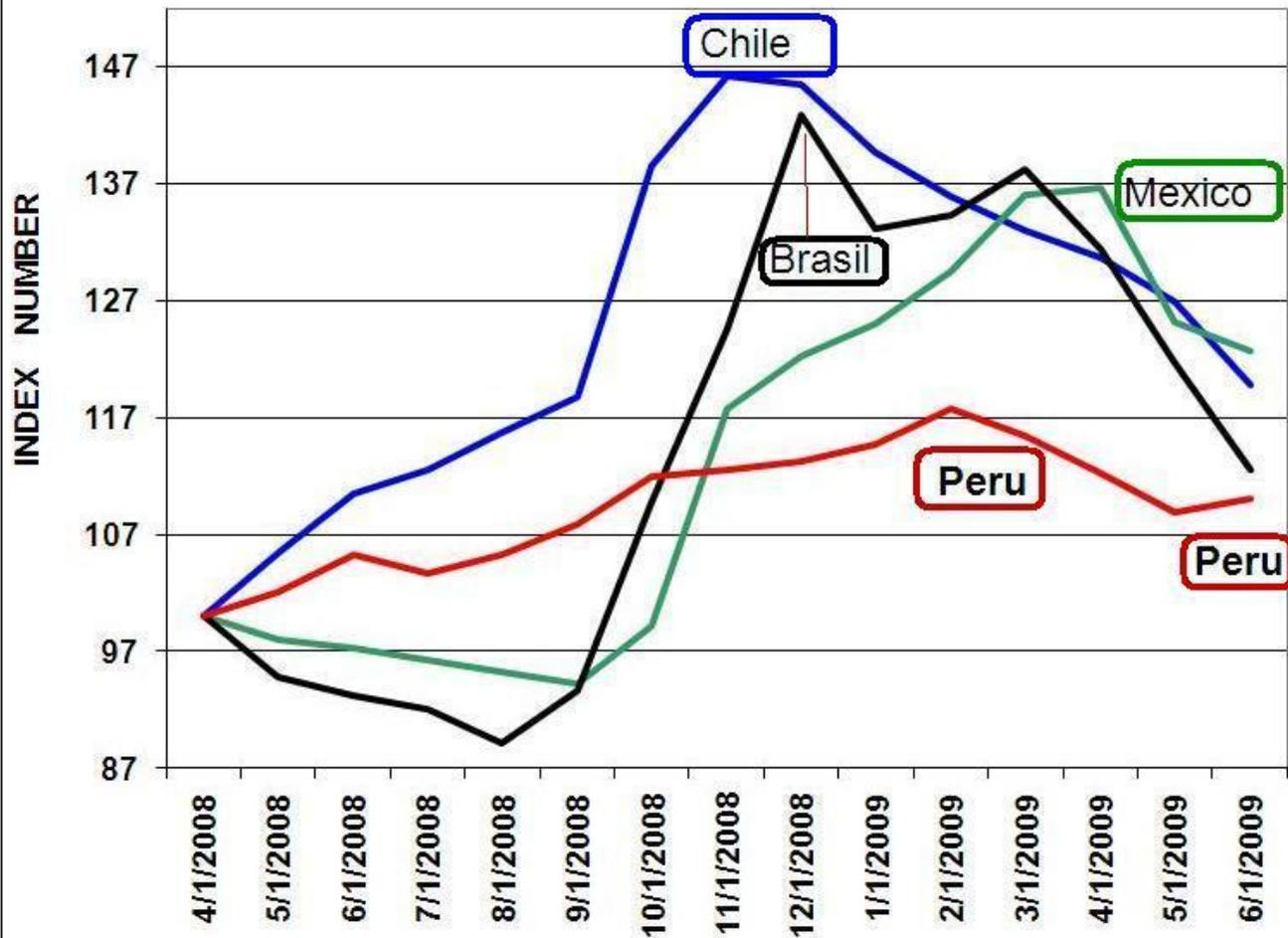
**PERU : INTERNATIONAL ASSET AND LIABILITY POSITION**  
 ( US\$ billions)

<b>ASSETS</b>		<b>LIABILITIES</b>	
<b>37</b>	<b>CENTRAL BANK RESERVES</b>	<b>TOTAL EXTERNAL DEBT</b>	<b>37</b>
<b>23</b>	<b>OTHER EXTERNAL ASSETS</b>	<b>PORFOLIO INVESTMENT</b>	<b>20</b>
		<b>FOREING DIRECT INVESTMENT</b>	<b>40</b>
<b>60</b>	<b>TOTAL ASSETS</b>	<b>TOTAL LIABILITIES</b>	<b>97</b>
	<b>BOTTON LINE : NET TOTAL LIABILITIES</b>		<b>37</b>

## RESERVAS INTERNACIONALES



## EXCHANGE RATES ( Local currency Units per US\$ )



—Chile

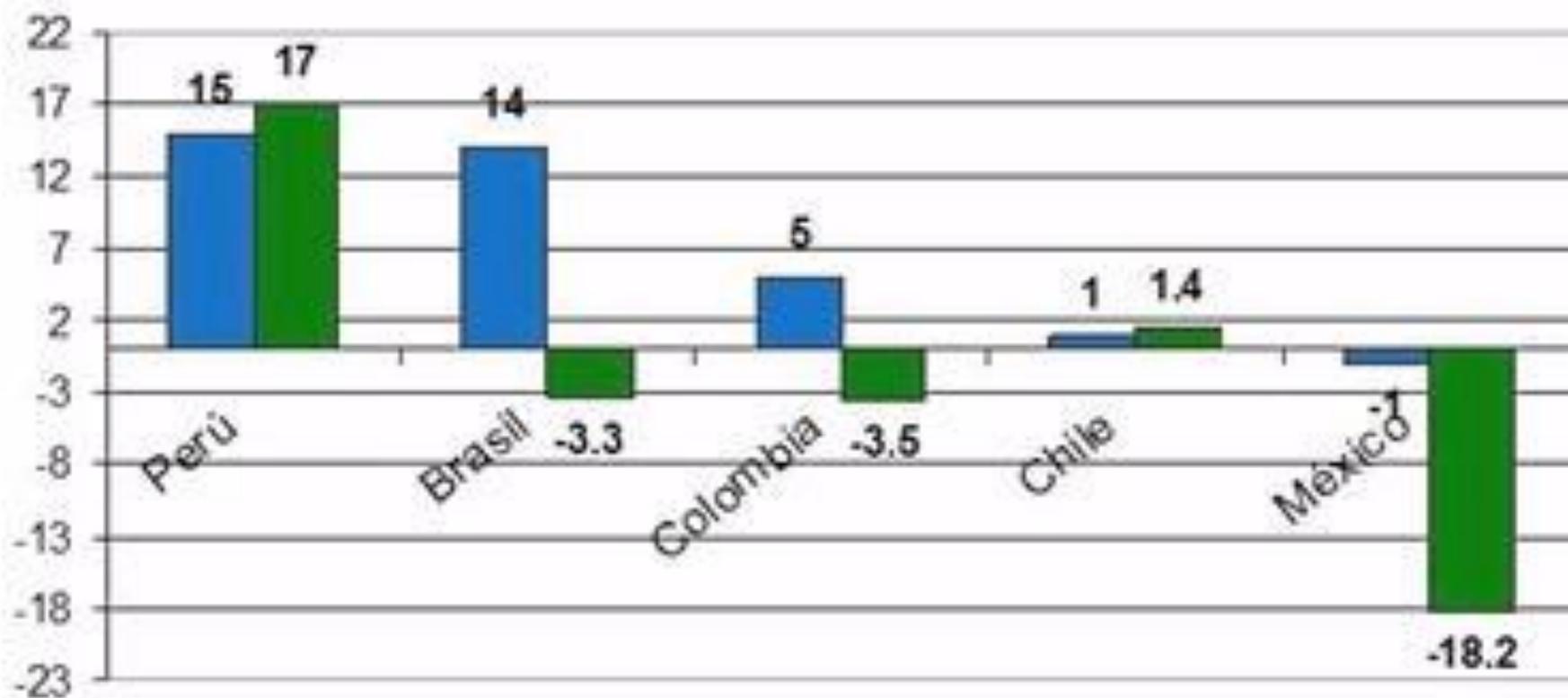
—Mexico

—Brasil

—Peru

**CRECIMIENTO DEL CREDITO AL SECTOR PRIVADO**  
(Tasas de crecimiento % Jun09 - Jun08)  
Grafica que incluyo despues de la entrevista a Willem Buiter

■ Credito Real al Sector Privado ■ Credito Sector Privado (Poder Adquisitivo en US\$)



# **DISTRIBUCION DE FRECUENCIAS DEL TIPO DE CAMBIO Y LA TASA DE INTERES**

## **PERIODO DE MAXIMA TURBULENCIA**

- **7 de Sept , 08 ( Fannie and Freddy ) al 6 de Marzo 06 , 2009 (Punto mas bajo de la bolsa USA )**
- **Tipos de cambio de los 4 paises normalizados a 100 al 7 de Sept 7 , 08**

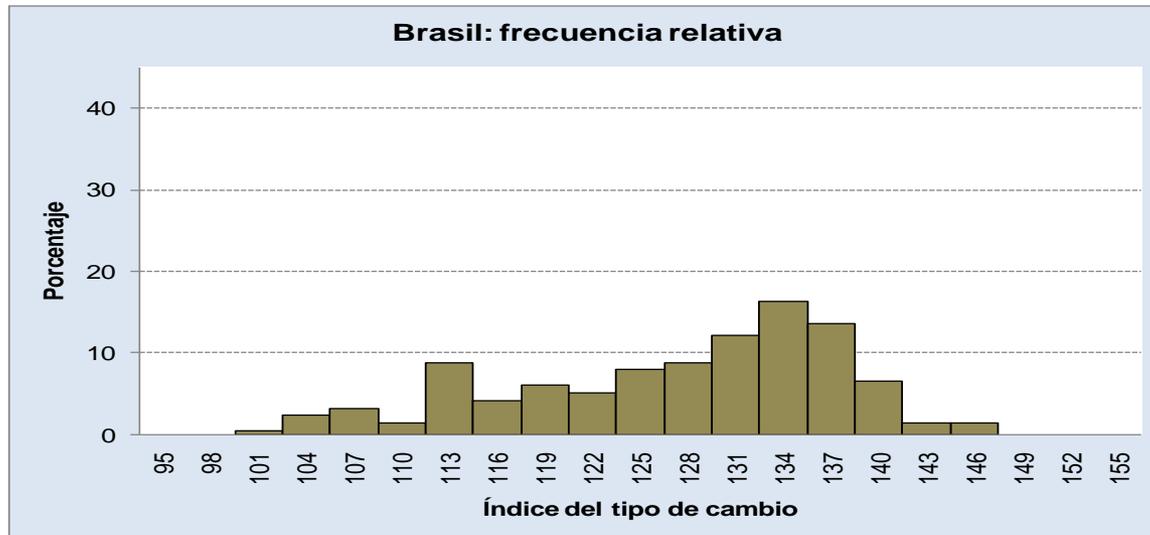
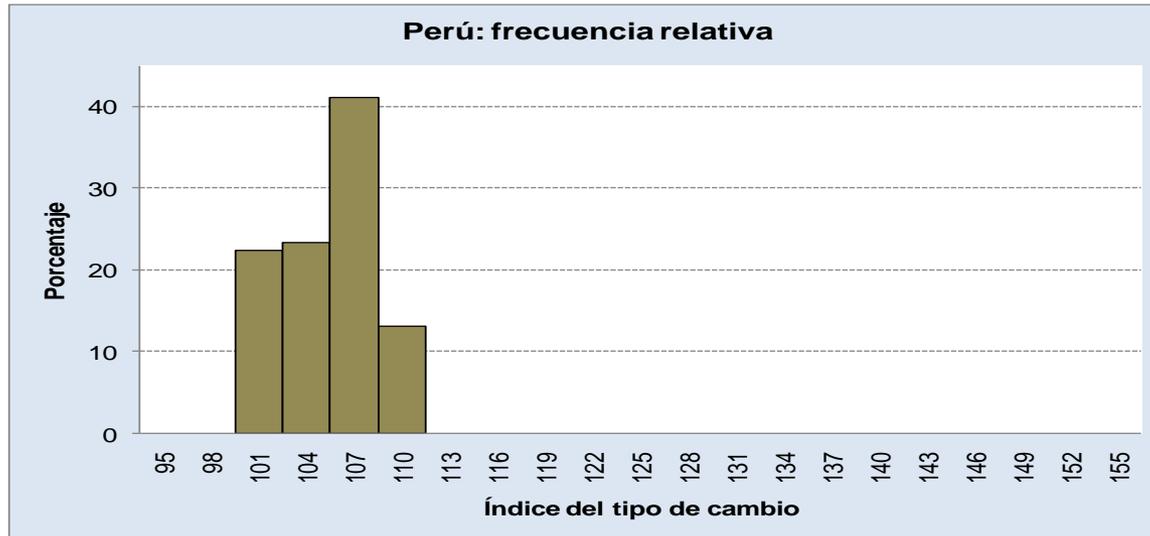
# NIVEL DEL TIPO DE CAMBIO

## Statistical Indicators - Daily Exchange Rates

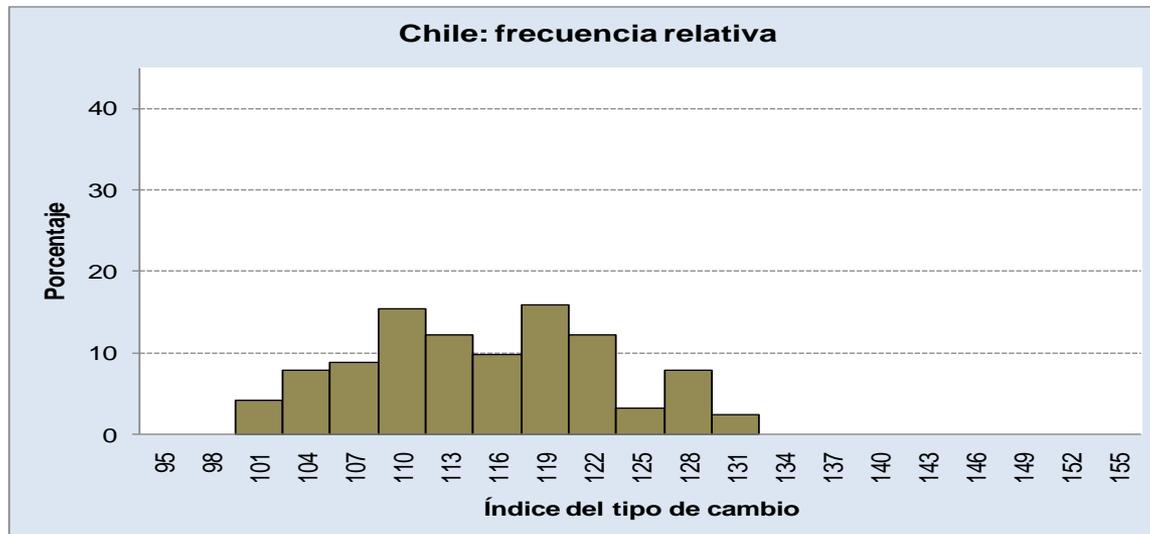
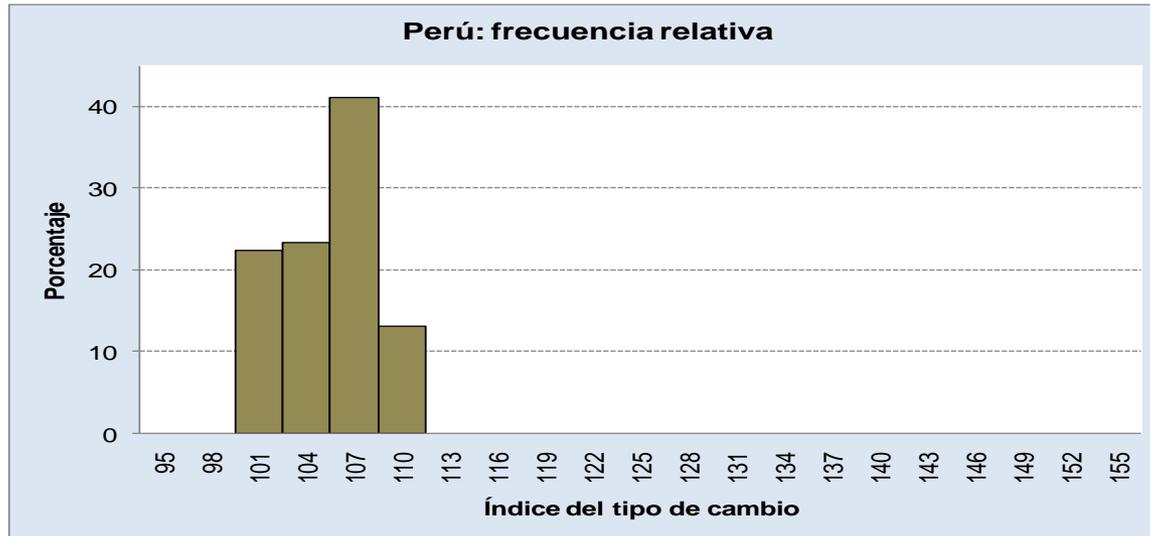
Sept. 7, 2008 - March 6, 2009 \*

	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

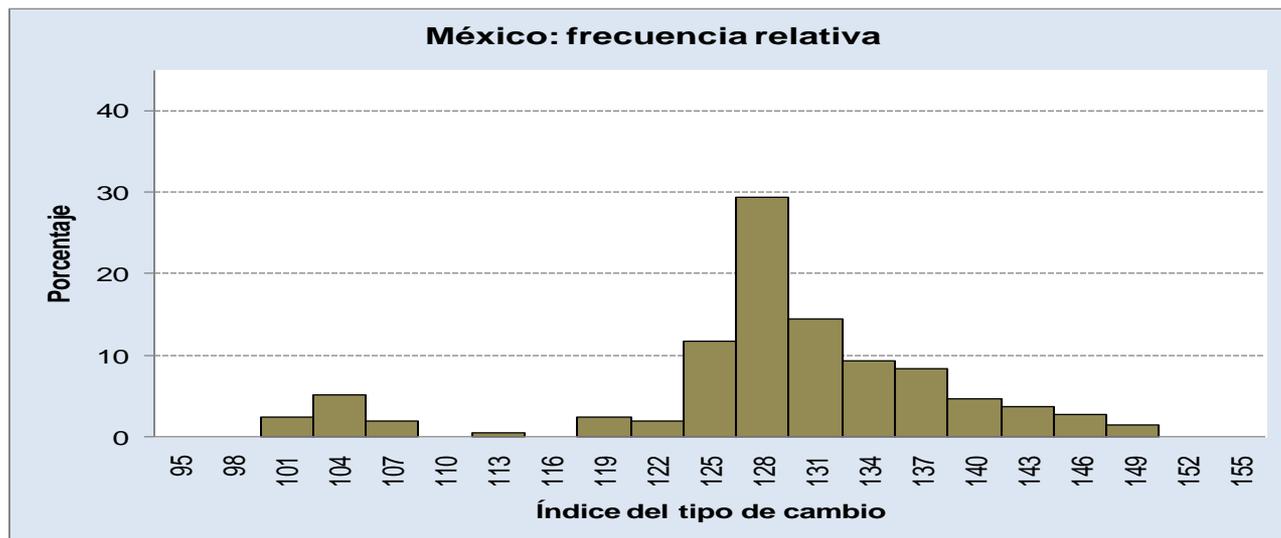
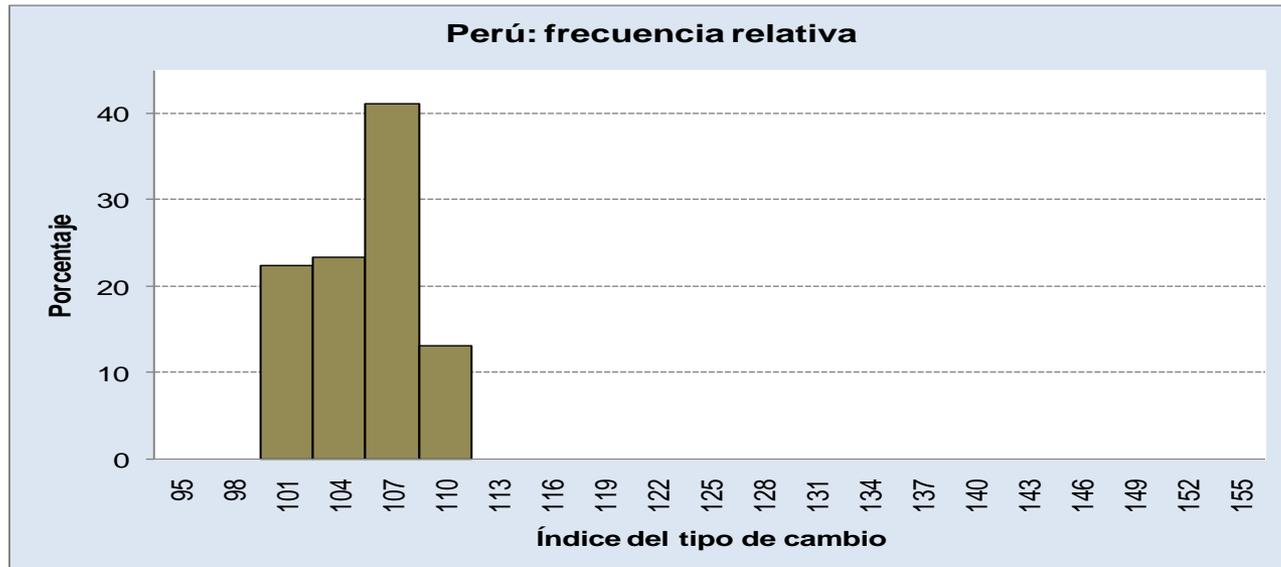
# Peru versus Brazil



# Peru versus Chile



# Peru versus Mexico



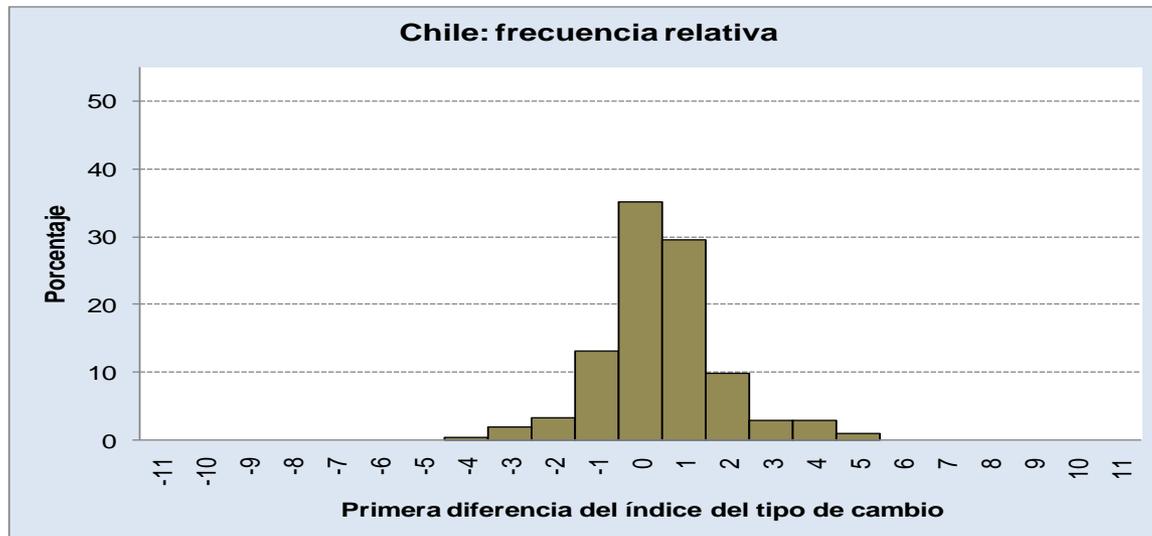
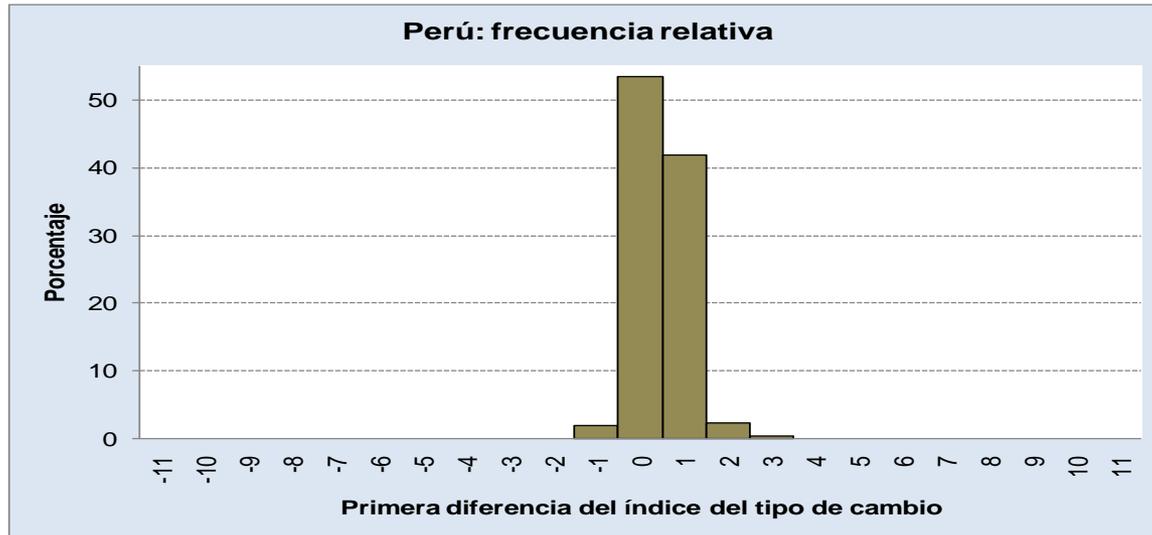
# CAMBIOS EN EL TIPO DE CAMBIO ( PRIMERAS DIFERENCIAS

Changes ( first differences ) of Daily Exchange Rates

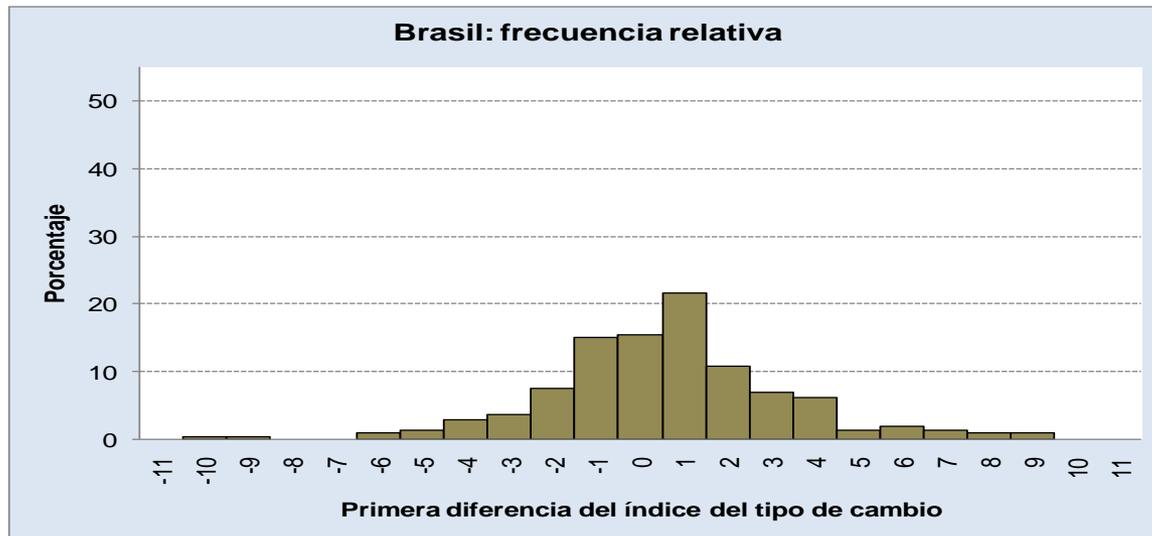
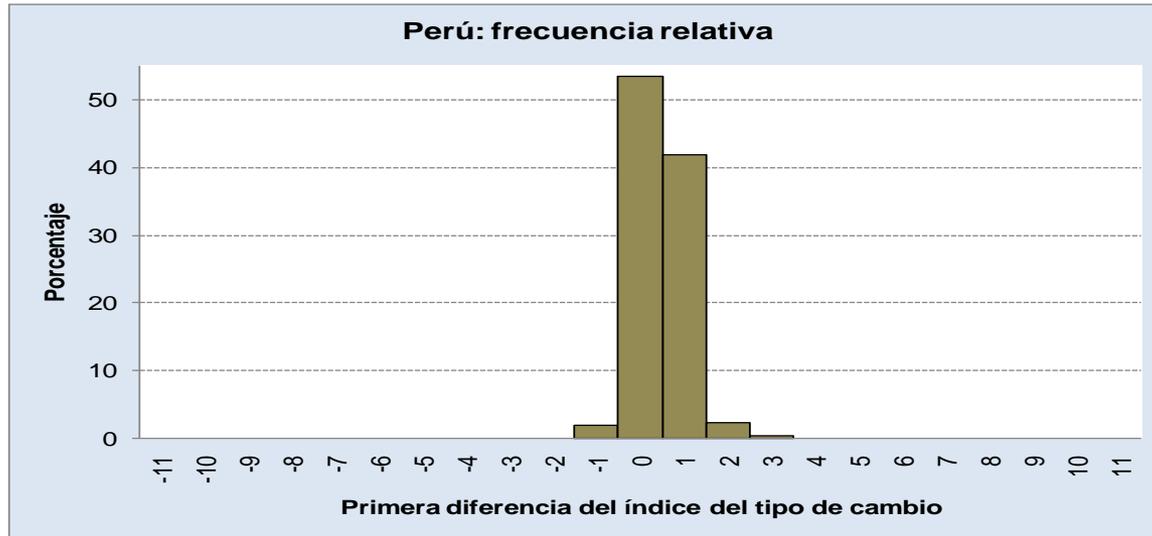
Sept. 7, 2008 - March 6, 2009

	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

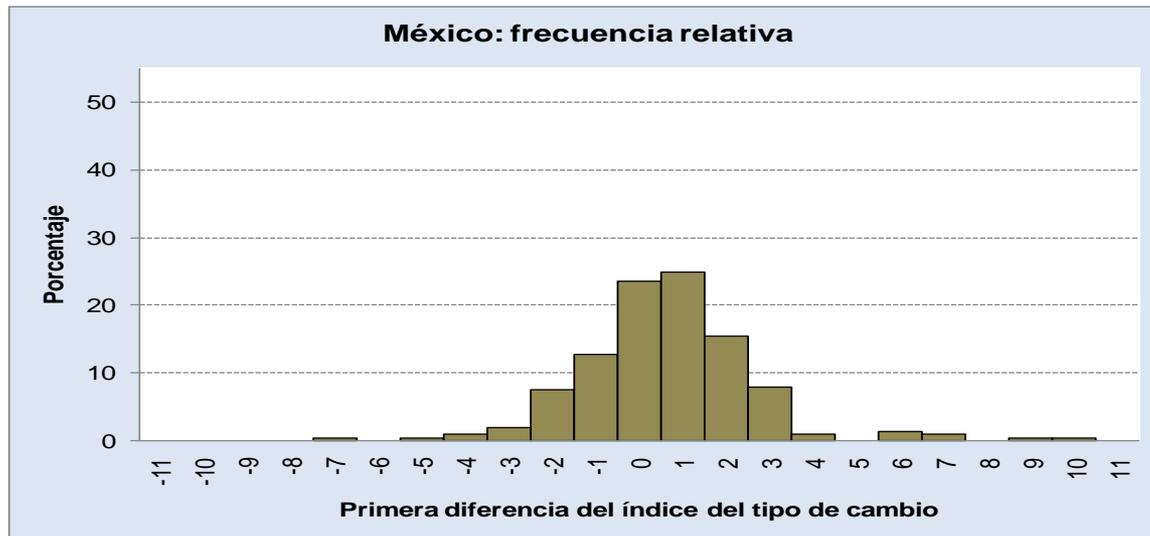
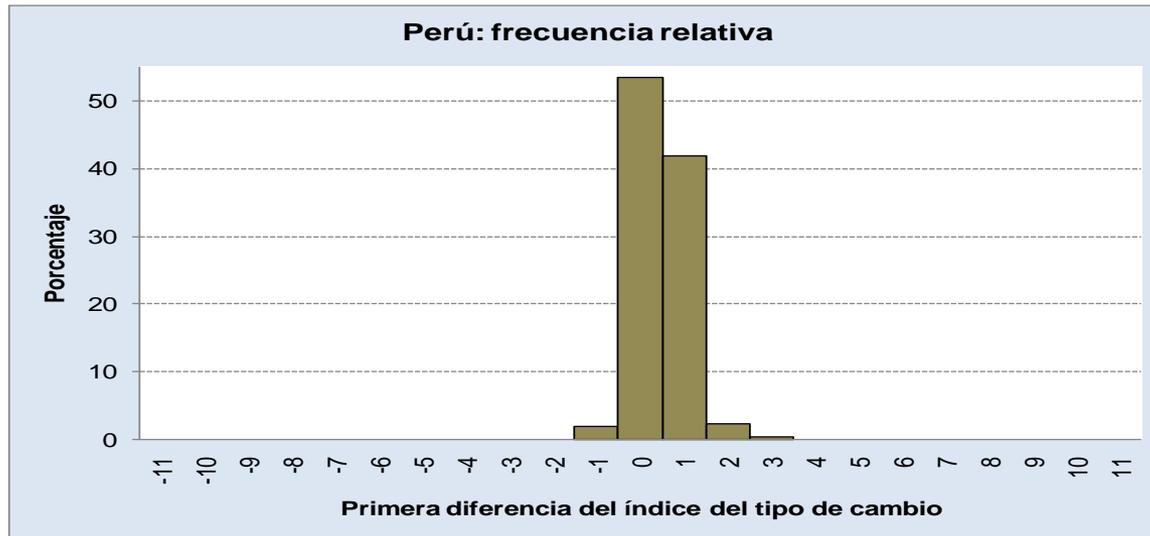
# Peru *versus* Chile



# Peru *versus* Brazil



# Peru versus Mexico



# **DISTRIBUCION DE FRECUENCIA DE LAS TASAS DE INTERES**

**Periodo 7 de Sept , 08 ( Fannie and Freddy)  
hata el mes de maxima devaluacion del tipo  
de cambio**

**Peru : hasta el 5 de Marzo, 09**

**❖ Brasil : hasta el 8 de Dic , 08**

**❖ Chile : hasta el 21 de Nov 08**

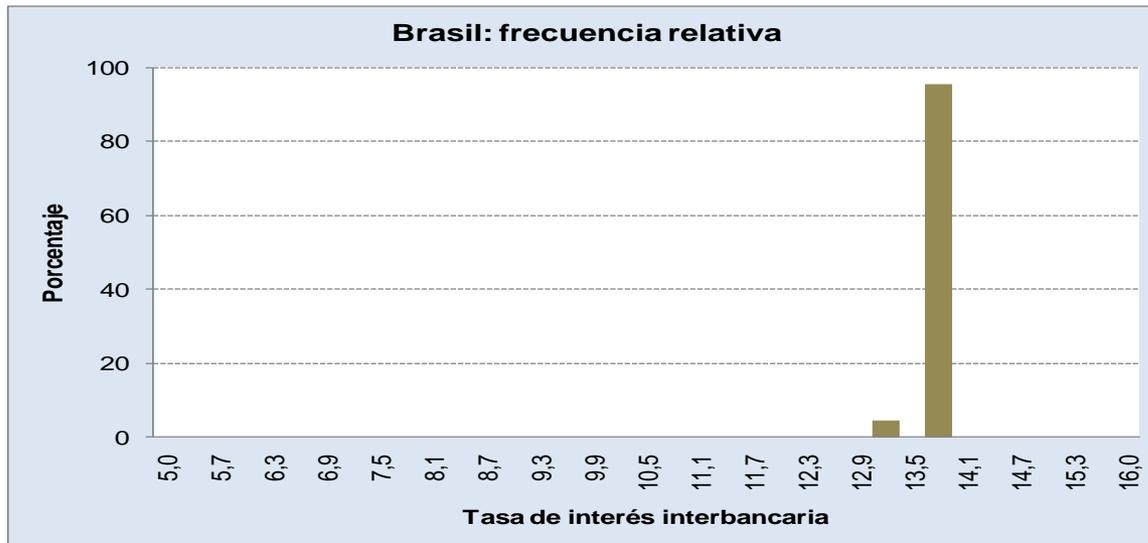
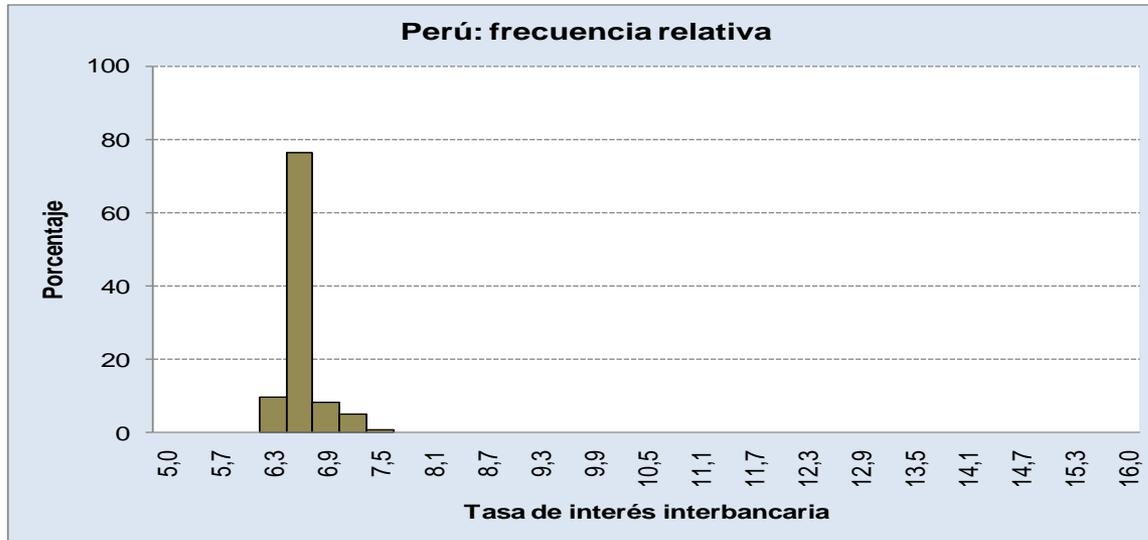
**❖ Mexico: hasta el 5 de Marzo ,09**

## Daily Interbank Interest Rate

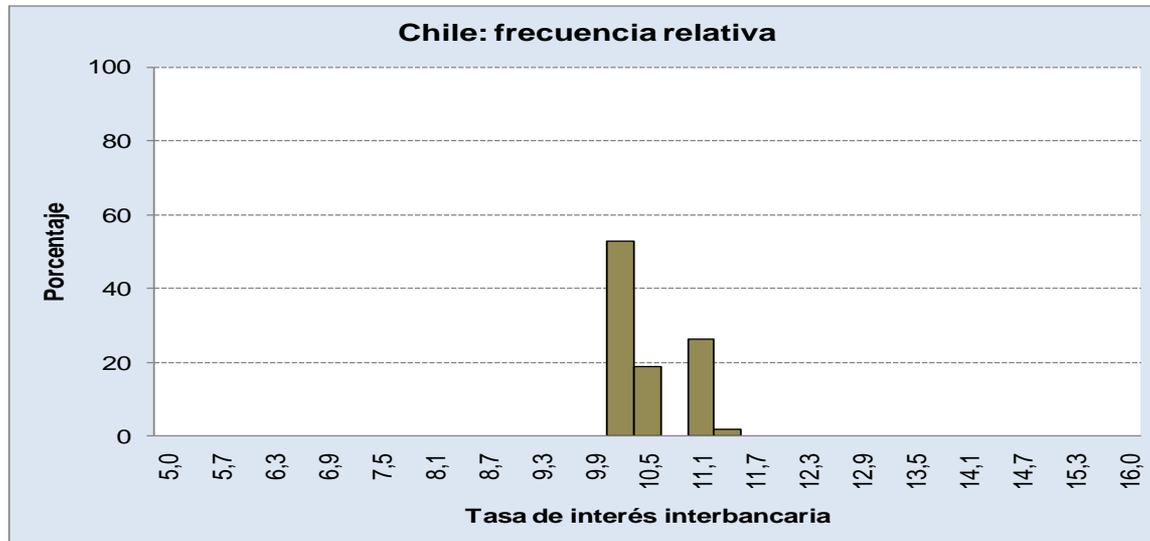
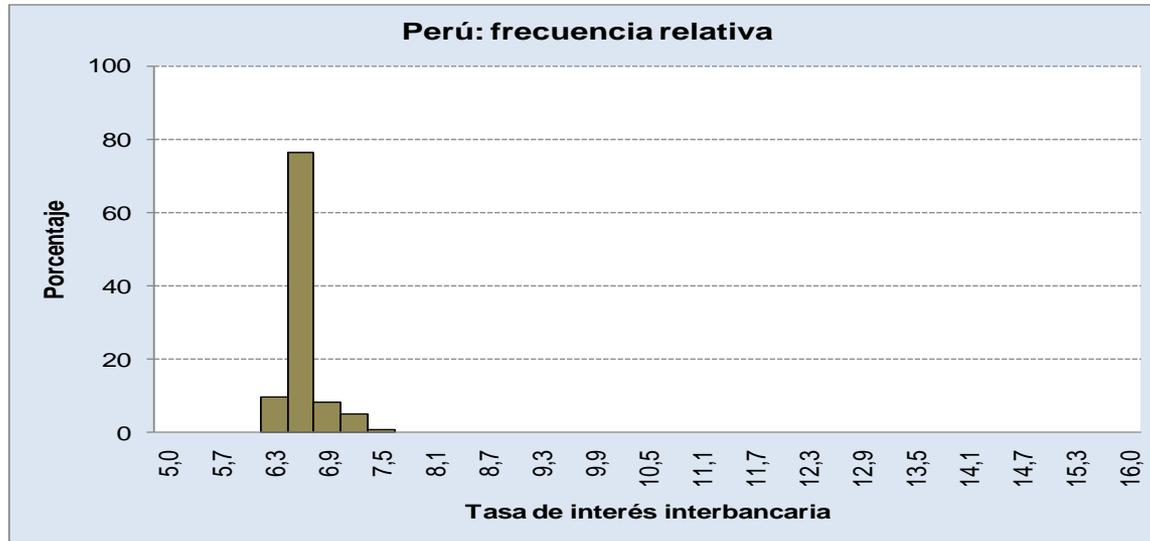
Sept.7, 2008 – Maximum devaluation level \*

	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

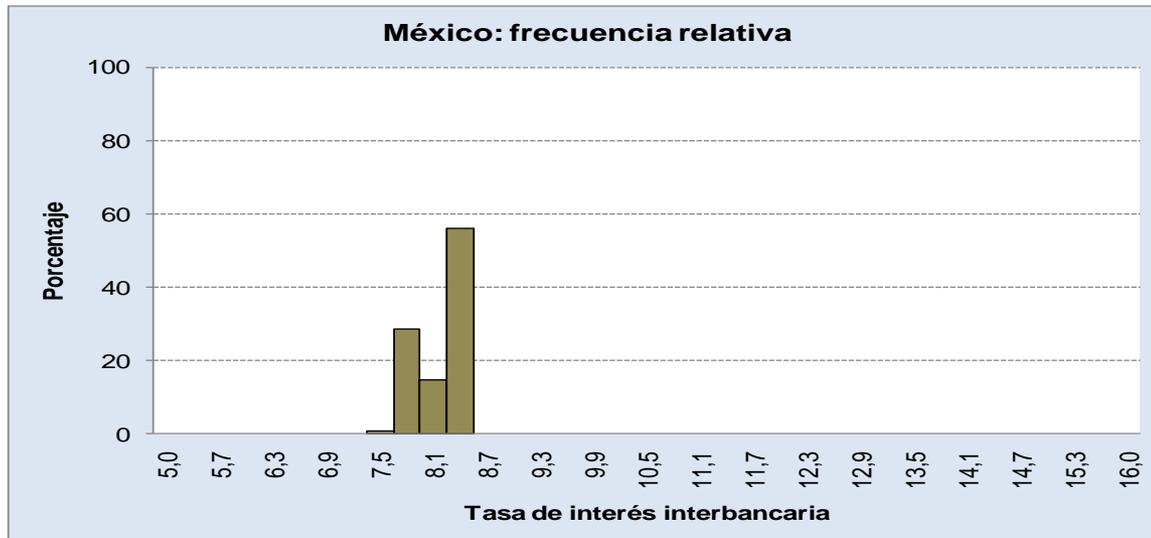
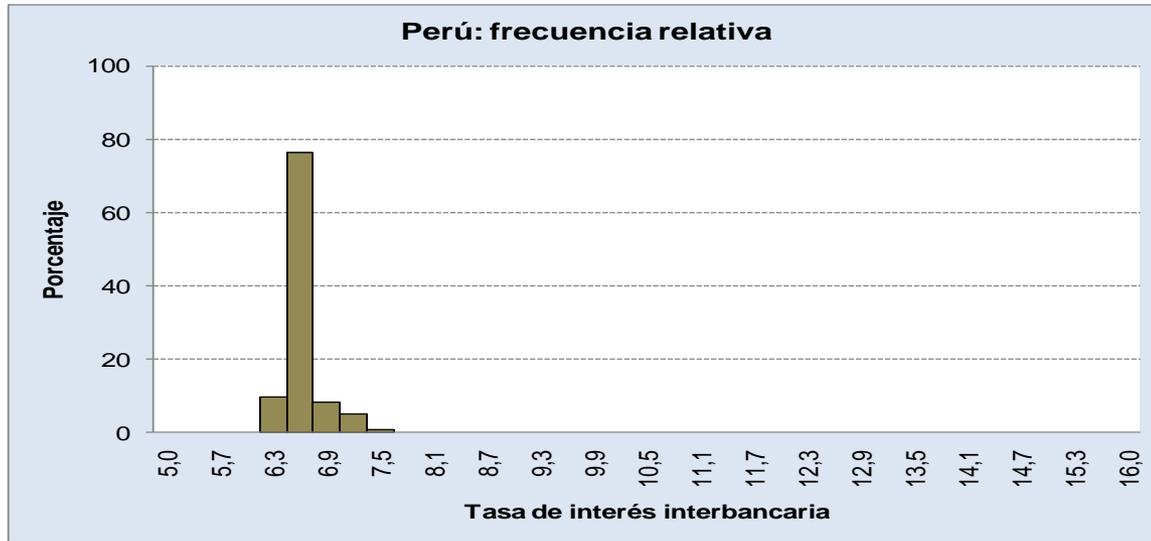
# Peru versus Brazil



# Peru versus Chile

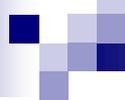


# Peru versus Mexico



# REGLA DEL SEMAFORO





# **NO ES ACONSEJABLE INICIAR LA REDUCCION DE TASAS DE INTERES**

- SI LA PRESION DEL MERCADO ES HACIA LA DEPRECIACION DEL SOL
- SI LA DOLARIZACION VA EN AUMENTO
- SI EL BCRP SIGUE PERDIENDO RESERVAS .  
PRECIO DE LOS METALES Y COMODITIES  
SIGUE BAJANDO
- SI LAS EXPORTACIONES SIGUEN CAYENDO

# **CUANDO SE PRENDE LA LUZ AMARILLA : EN ENERO 2008**



# EN ENERO 2009

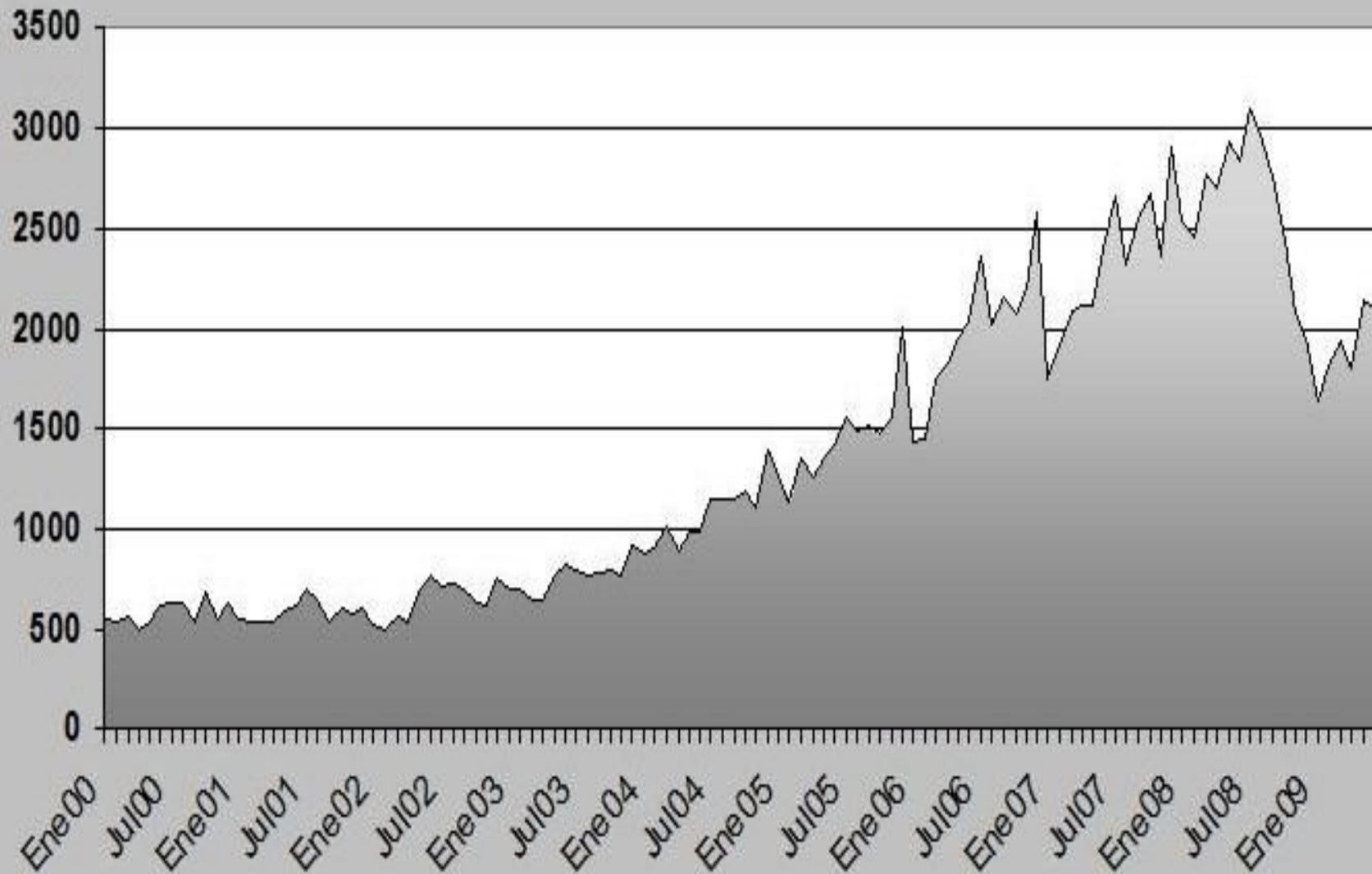
GRAFICA 3  
PRECIO INTERNACIONACIONAL DEL COBRE

Precio el 14-04-09



El precio mínimo se registro el 28-12-08

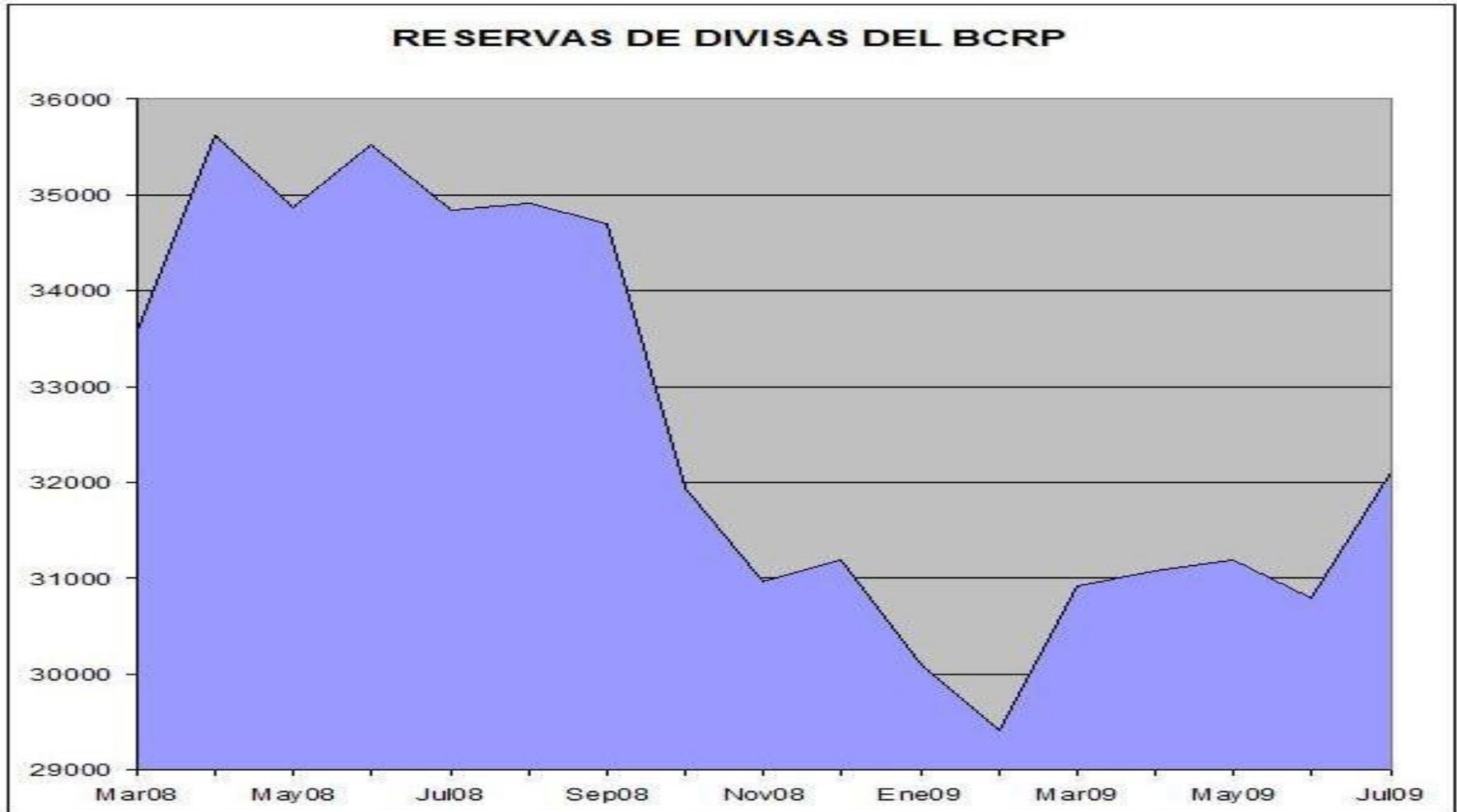
Export. totales (mill. US\$)



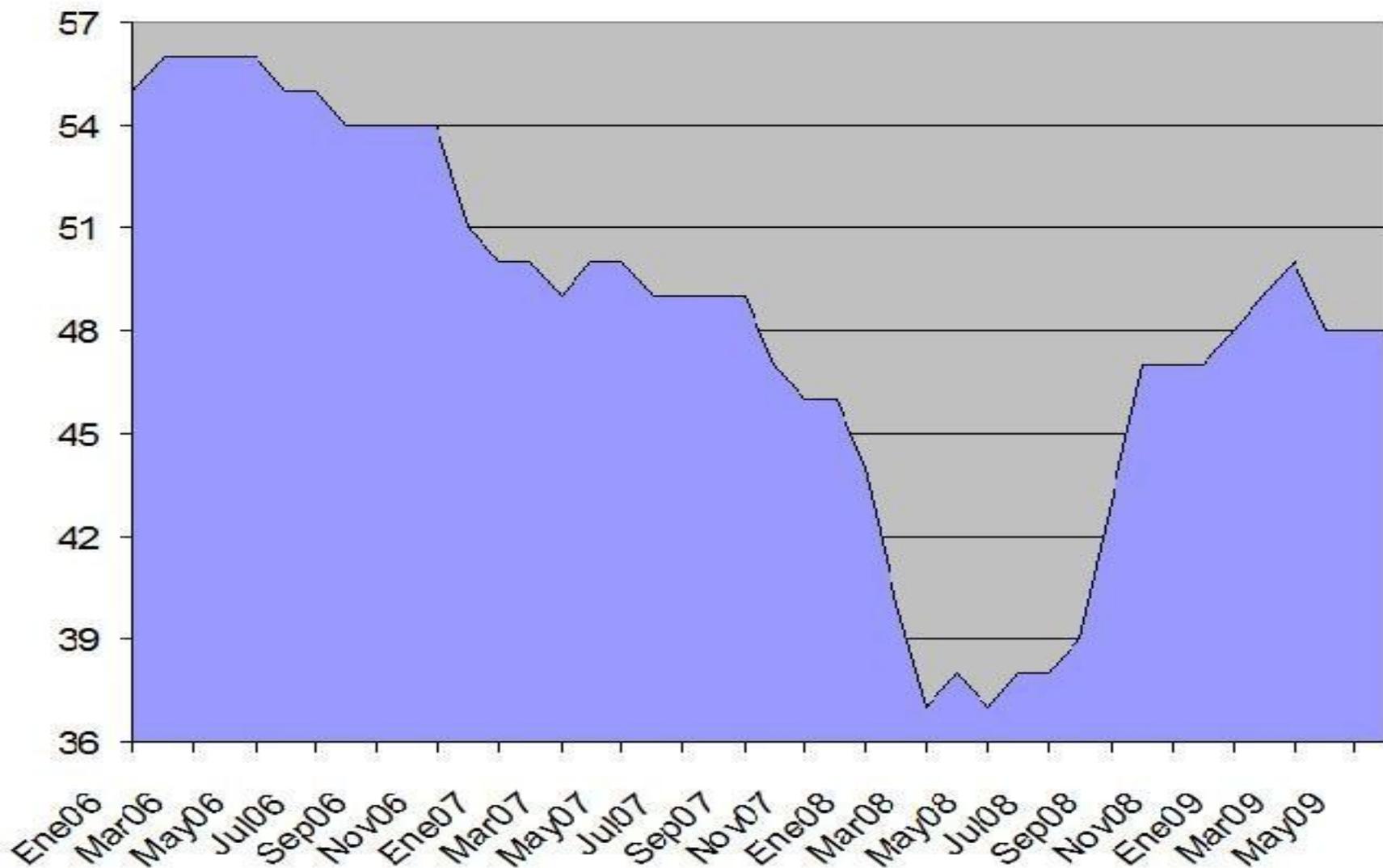
# CUANDO SE PRENDE LA LUZ VERDE

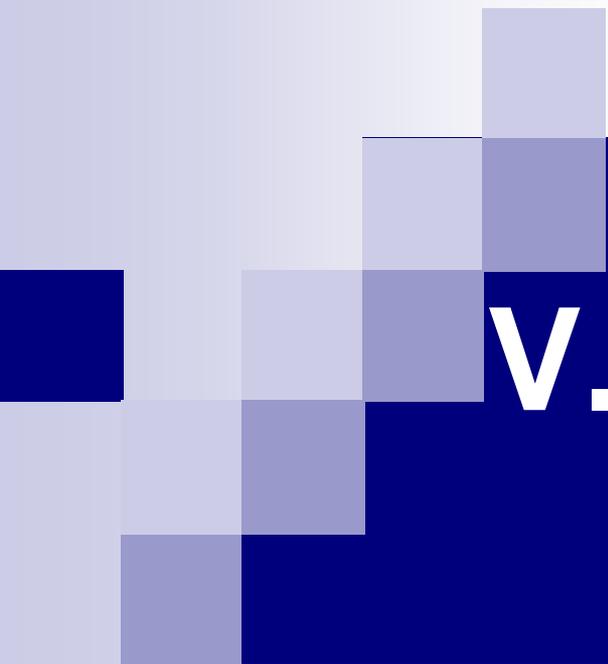


# EN FEBRERO- MARZO DEL 2009



# COEFICIENTE DE DOLARIZACION DE LA LIQUIDEZ (%)

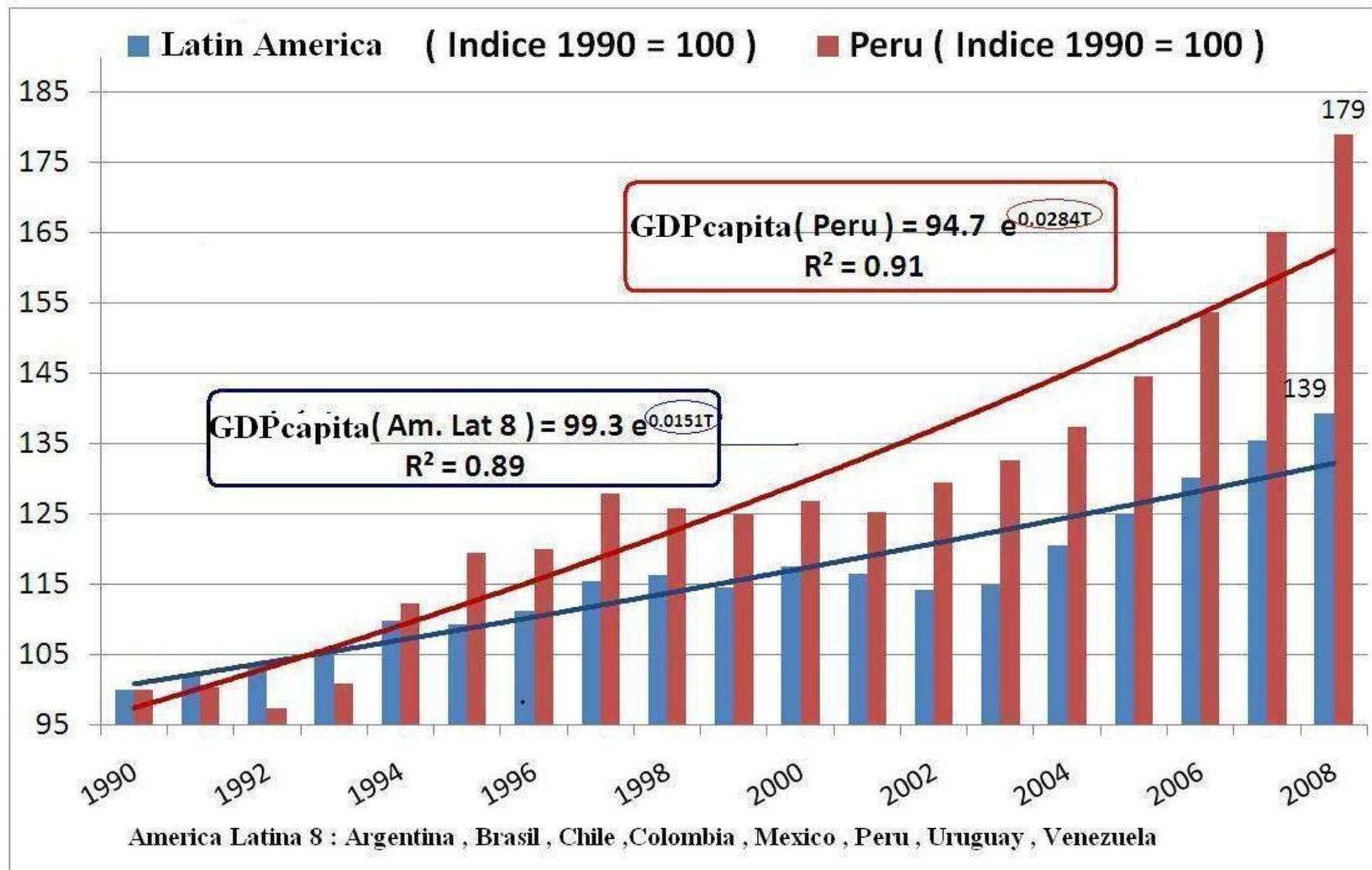




# V. PERU vs BRASIL



## GDP Per-capita : 1990 - 2008

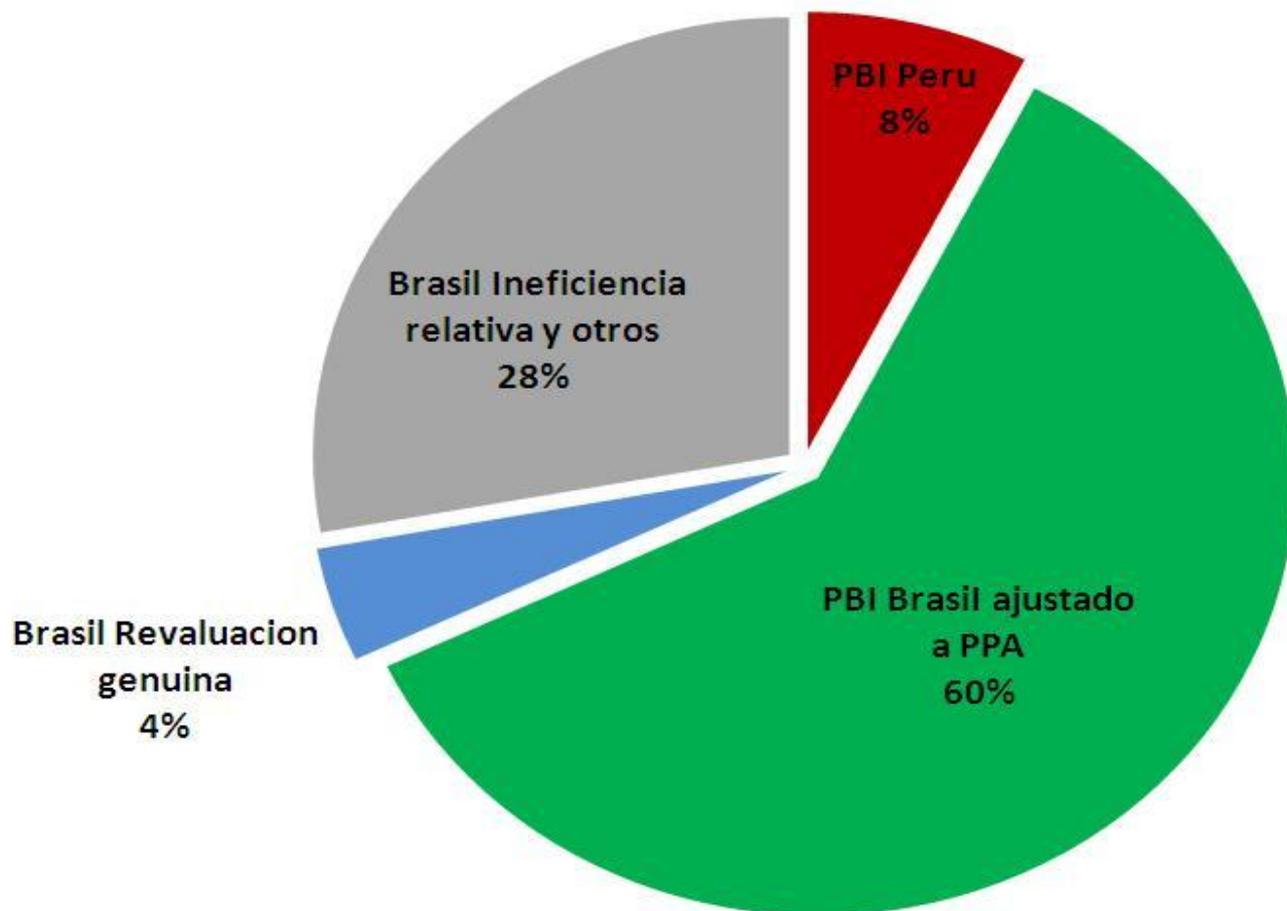


■ PBI Peru

■ PBI Brasil ajustado a PPA

■ Brasil Revaluacion genuina

■ Brasil Ineficiencia relativa y otros



(139 PAISES)

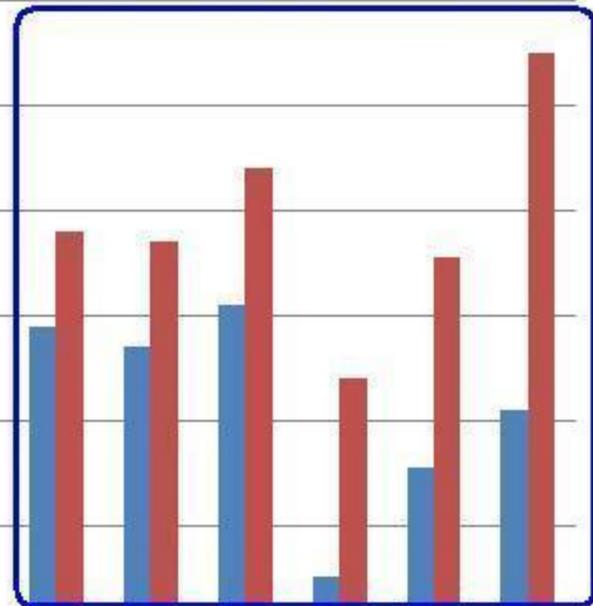
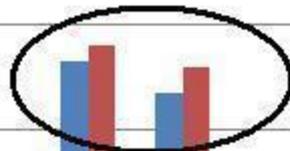
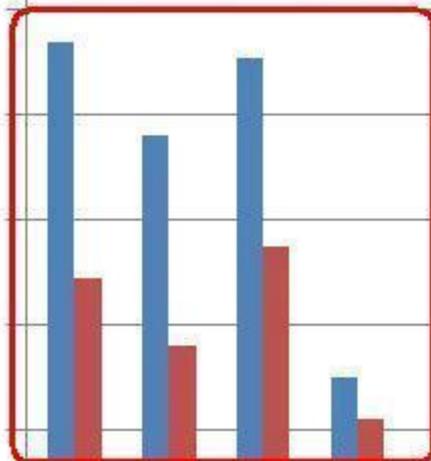
PERU

BRAZIL

140  
120  
100  
80  
60  
40  
20  
0

PERU DOMINA

BRASIL DOMINA

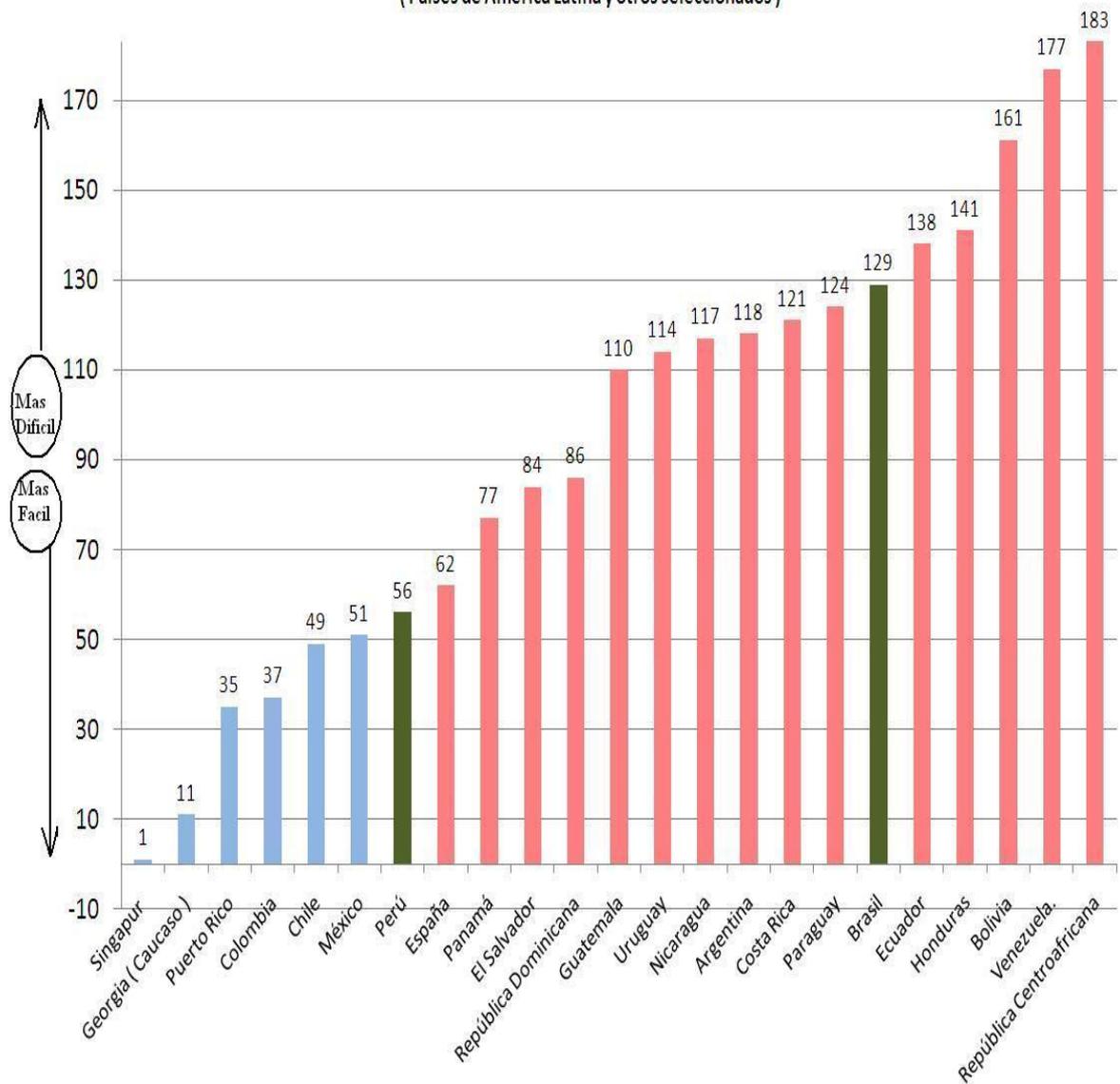


EFICIENCIA MERCADO DE BIENES  
EFICIENCIA MERCADO DE TRABAJO  
ENTORNO MACROECONOMICO  
DESARROLLO FINANCIERO

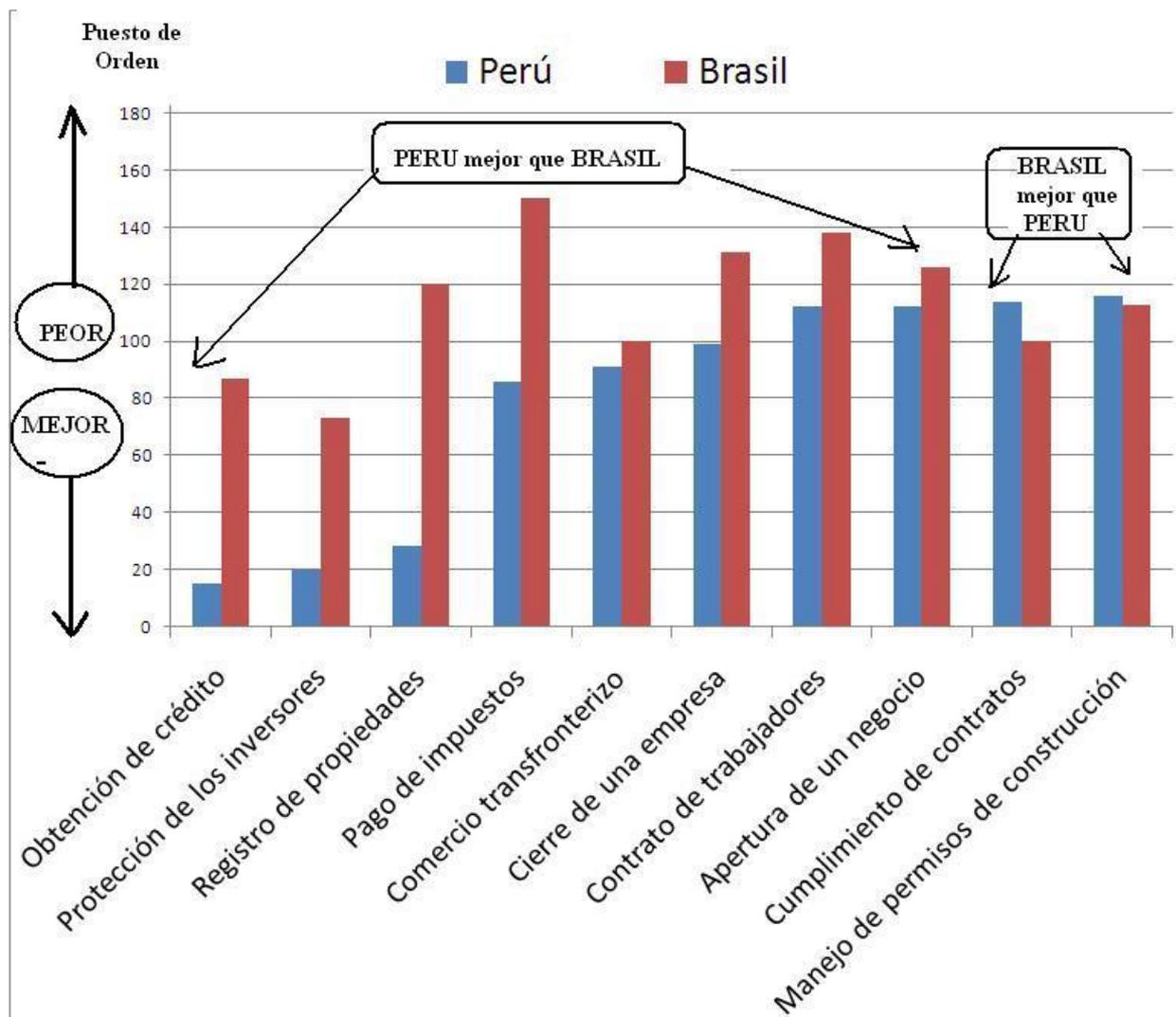
EDUCACION Y SALUD PRIMARIAS  
EDUCACION SUPERIOR Y CAPACITACION

TECNOLOGIA  
INFRAESTRUCTURA  
TAMANO DE MERCADO  
SOFISTICACION EMPRESARIAL  
INNOVACION

NUMERO DE ORDEN DE PAISES EN CUANTO A LA FACILIDAD DE HACER NEGOCIOS  
 ( Países de America Latina y otros seleccionados )



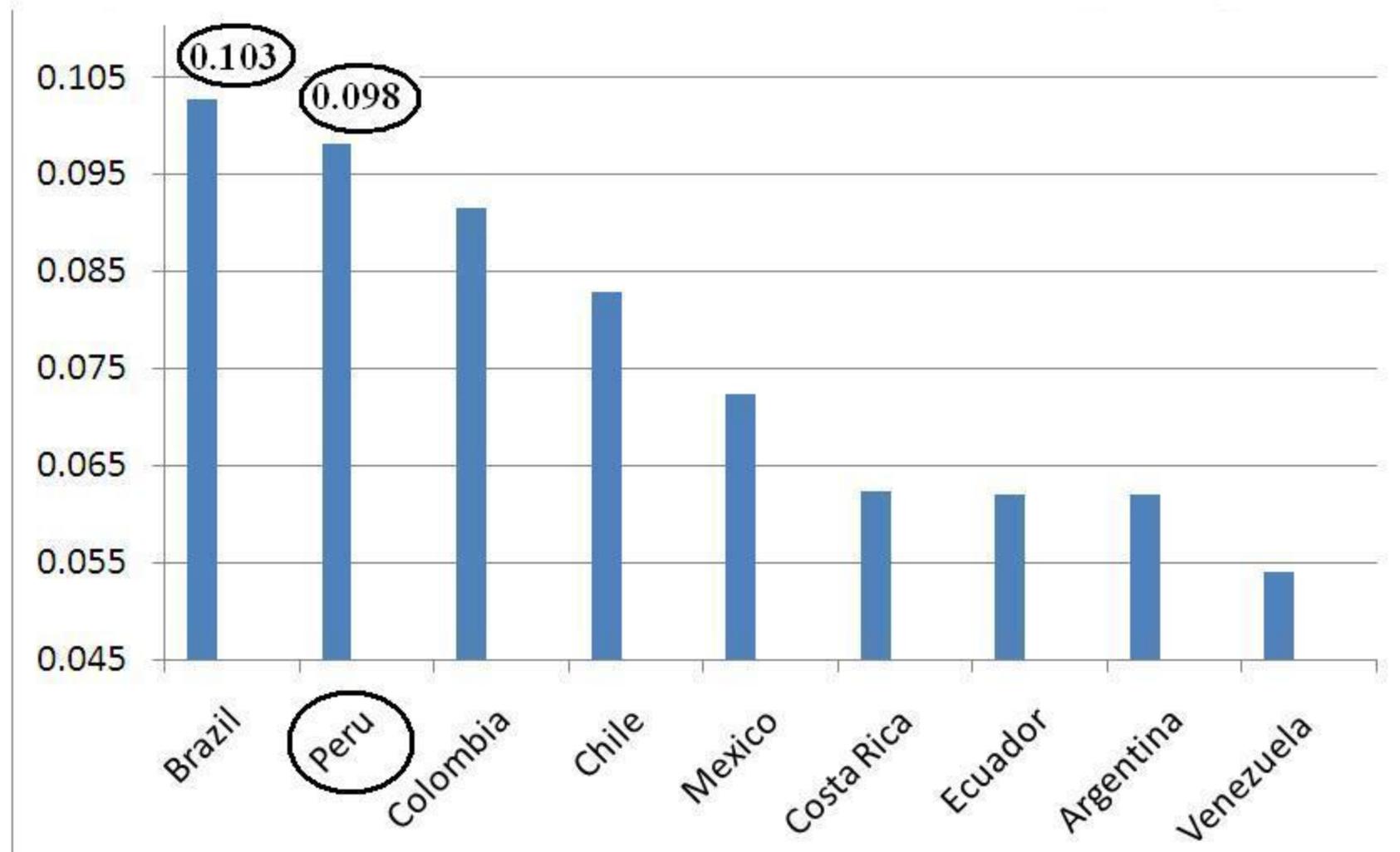
## PUESTO QUE OCUPAN PERU Y BRASIL EN CUANTO A FACILIDAD DE HACER NEGOCIOS EN CIERTOS ASPECTOS CLAVE



Elaborado por Ricardo V. Lago a partir de la base de datos del proyecto "Doing Business" del Banco Mundial - IFC ( <http://espanol.doingbusiness.org/economyrankings> ). Informe del 2010 , indicadores correspondientes al 2009

## IMPROVEMENT IN THE U.N. HUMAN DEVELOPMENT INDEX: 1990-2007

( Index ranges from 0.34 in Niger to 0.97 in Norway - Best improvement China =0.164 )





# **VI – FORTALEZAS DE LA ECONOMÍA PERUANA**



# LOS DOCE ANGULOS DEL “HATUNRUMIYOC”

## LAS CLAVES QUE EXPLICAN EL RESURGIR DE LA ECONOMIA PERUANA

### Claves Coyunturales

1. Reservas internacionales del BCR
2. Sistema financiero solido y solvente
3. Sector publico acreedor neto internacional
4. Sistema Bancario ( y País ) Sub-hipotecado
5. Credibilidad del equipo económico :Julio Velarde BCR ,Luis Carranza MEF
6. Margen para políticas anti cíclicas
7. Cartera de Inversión Extranjera
8. Diversificación de exportación de metales

### Claves Estructurales

1. Historial de Reformas : 1990-2009
2. Avances en la lucha contra la pobreza
3. Apoyo de la población al modelo económico
4. Bajo Riesgo de retorno al populismo

# LA PIEDRA DE LOS DOCE ANGULOS : HATUNRUMIYOC (Cuzco)



## Washington Consensus I'

“What Washington Means by Policy Reform” by John Williamson ( 1989)

Areas of reform	Progress made by Peru	
	<i>Ricardo V. Lago's Assessment</i>	<i>Degree of Consensus on my assessment by among economist ?</i>
1. Fiscal Discipline	High	High
2. Reorientation of public spending <i>Towards pro-growth and anti-poverty (primary education and health, and infrastructure Investment )</i>	High	High
3. Tax Reform <i>Braden the tax base and set moderate rates</i>	Medium ( Informality)	High
4. Interest rates <i>Market determined but (moderately) positive in real terms</i>	High	High

Areas of reform	Progress made by Perú	
	<i>Ricardo V. Lago 's Assessment</i>	<i>Degree of Consensus on my assessment by among economist ?</i>
5.Exchange Rate  <i>Market determined and /or in any case competitive</i>	High	High
6.Free trade  <i>Abolition of import licenses and quotas and low and uniform tariffs</i>	High	High
7.Openess to FDI	High	High
8.Privatization	High	High
9. Deregulation .  <i>Less red tape, free entry and strict exit, defense of competition . Also effective financial supervision, and protection of consumer rights, health and safety .</i>	High	High