

Emerging Market Countries in the Global Financial Crisis



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'Insights in Development Thinking -- Executive Seminar'

with COMFAMA.

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at Harvard University

Outline

- The crisis of 2008-09
& the 2010 outlook



- The 3rd capital inflow boom 2003-2008:
Was it different?



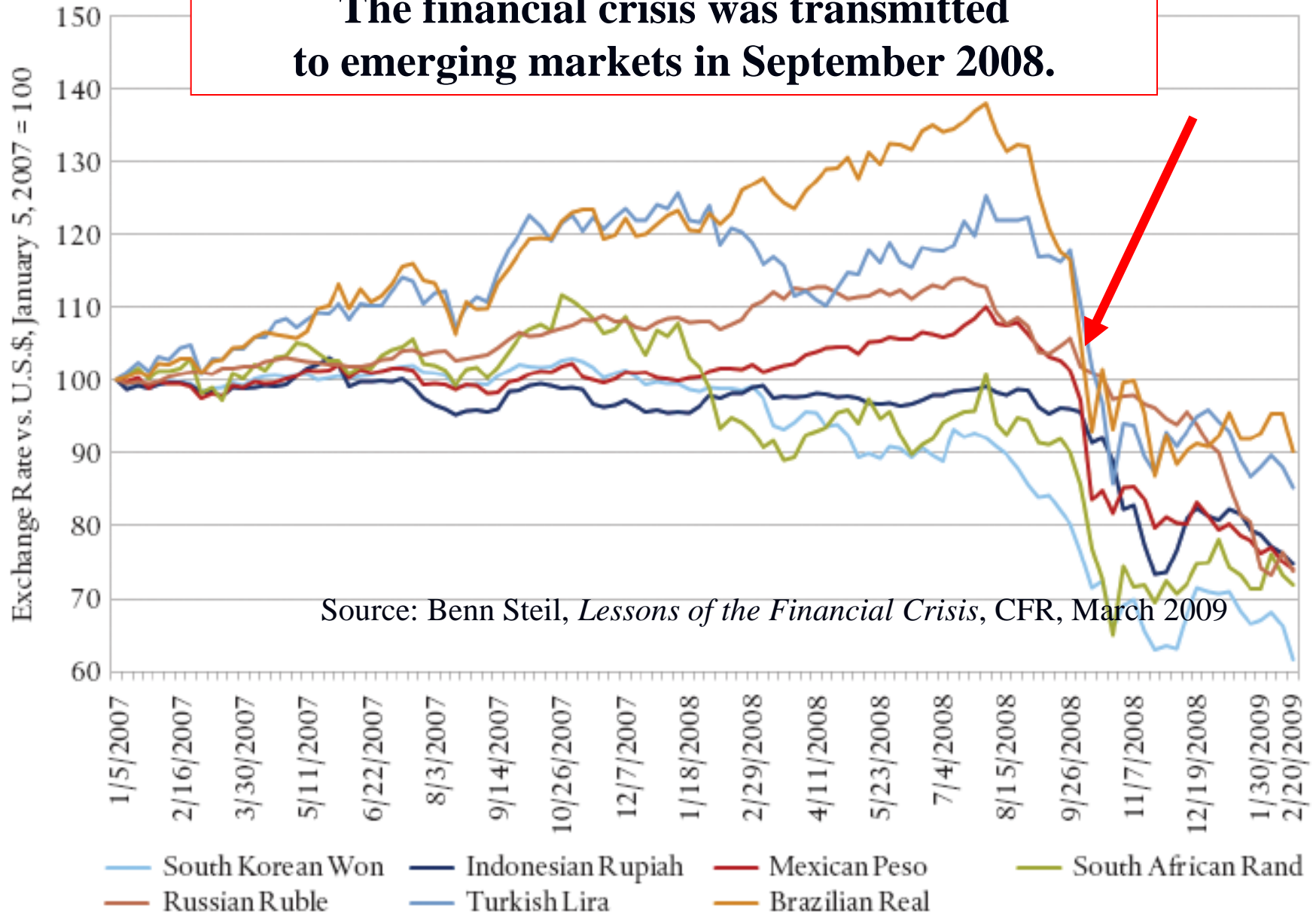
- Lessons of 1994-2002 on avoiding crises:
Did they hold up in 2008?



- Emerging markets come of age
 - Decoupling
 - The new countercyclical fiscal policy

THE COLLAPSE OF EMERGING-MARKET CURRENCIES

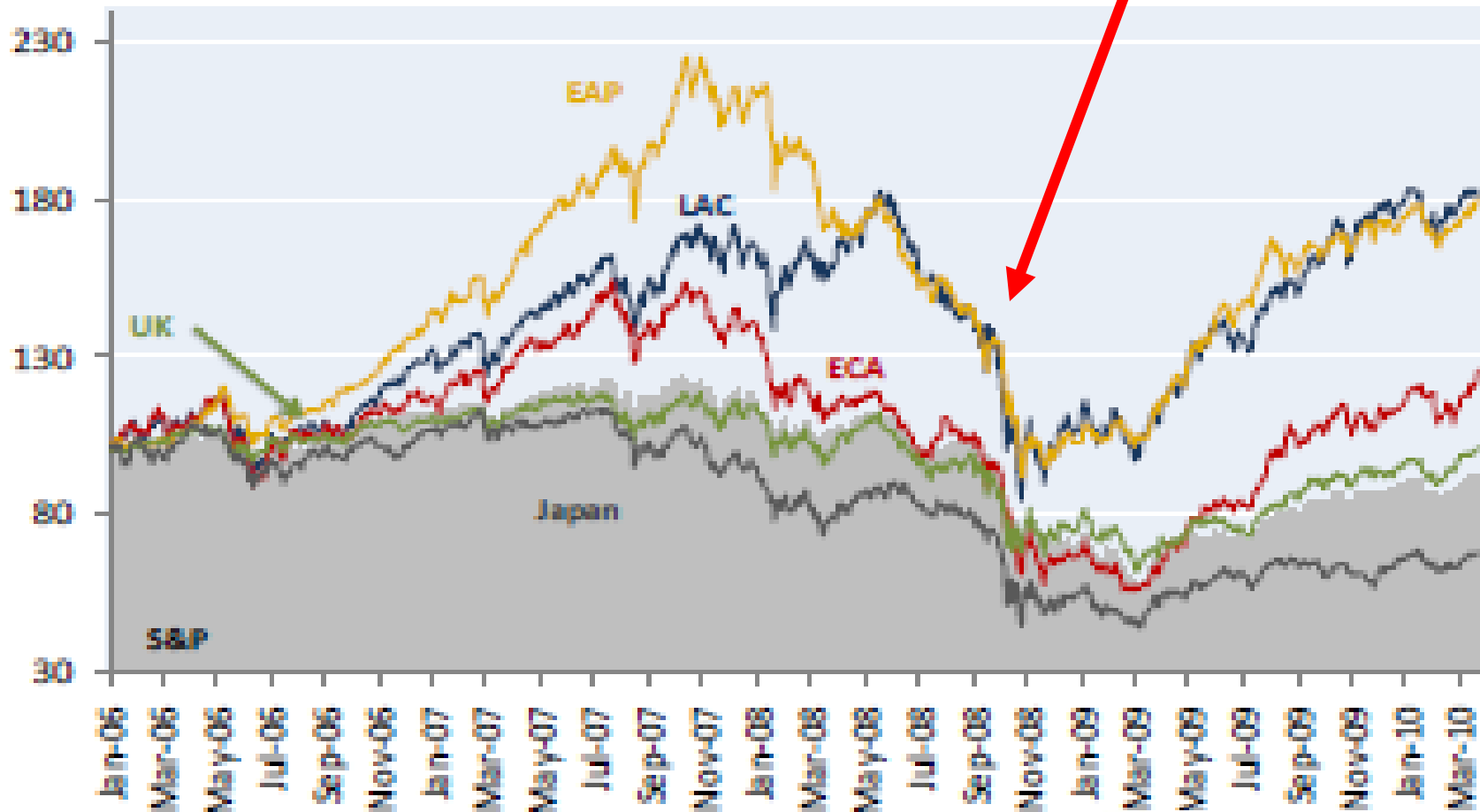
The financial crisis was transmitted to emerging markets in September 2008.



Source: Benn Steil, *Lessons of the Financial Crisis*, CFR, March 2009

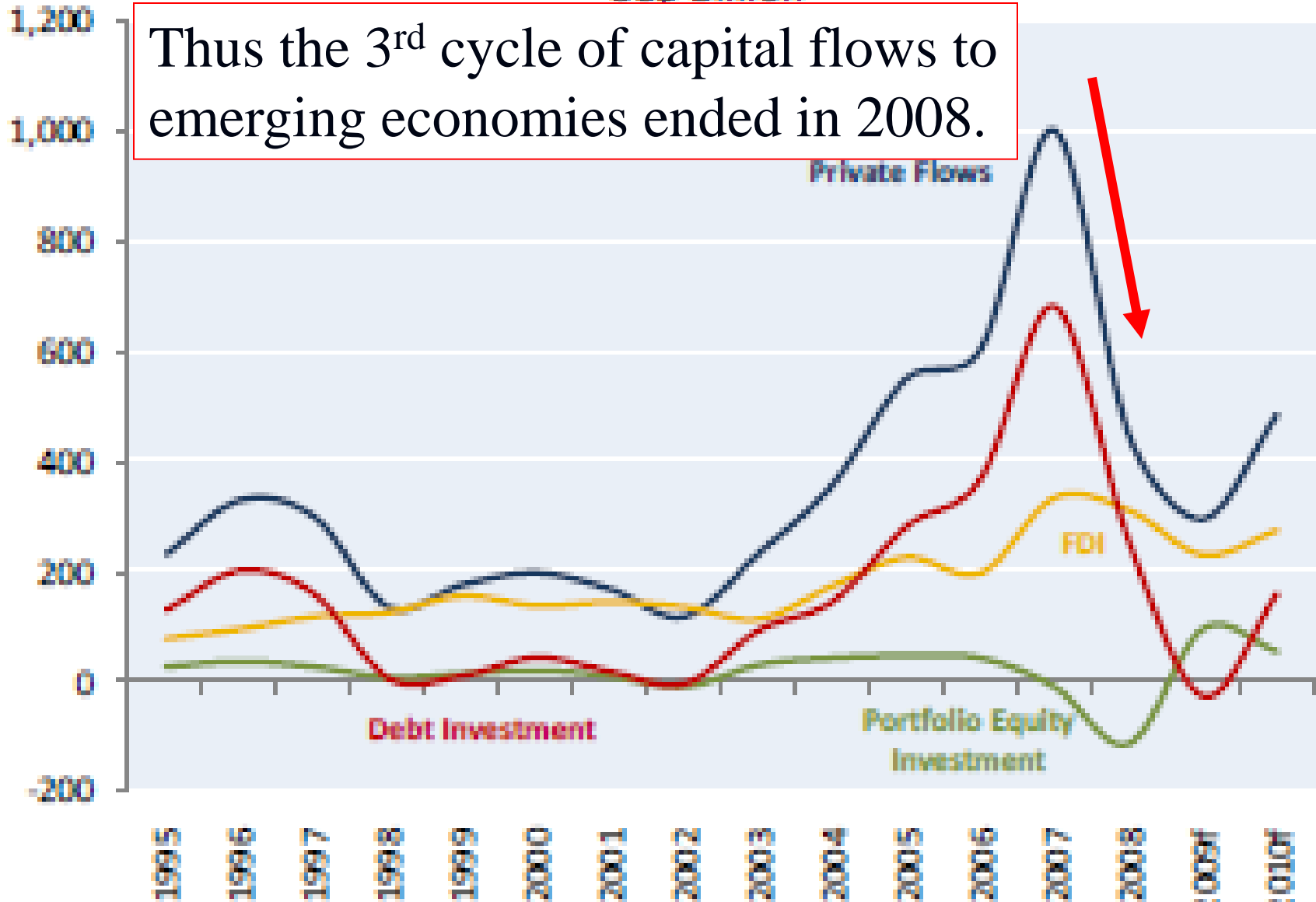
The global financial crisis of September 2008 was transmitted to emerging markets.

Stock Prices Around the World
Indexes: Jan-06=100



Net Private Capital Flows to Emerging Economies

US\$ Billion

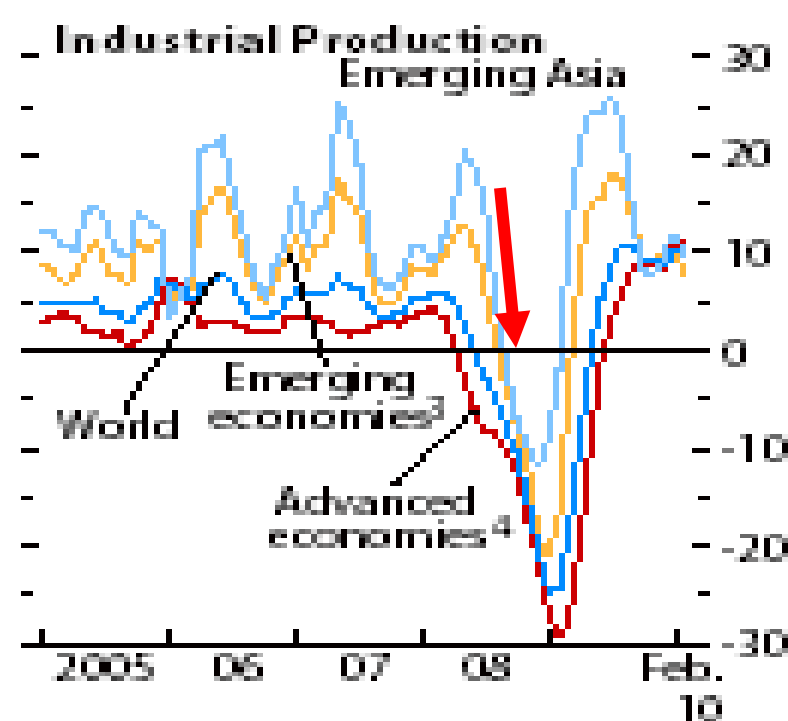
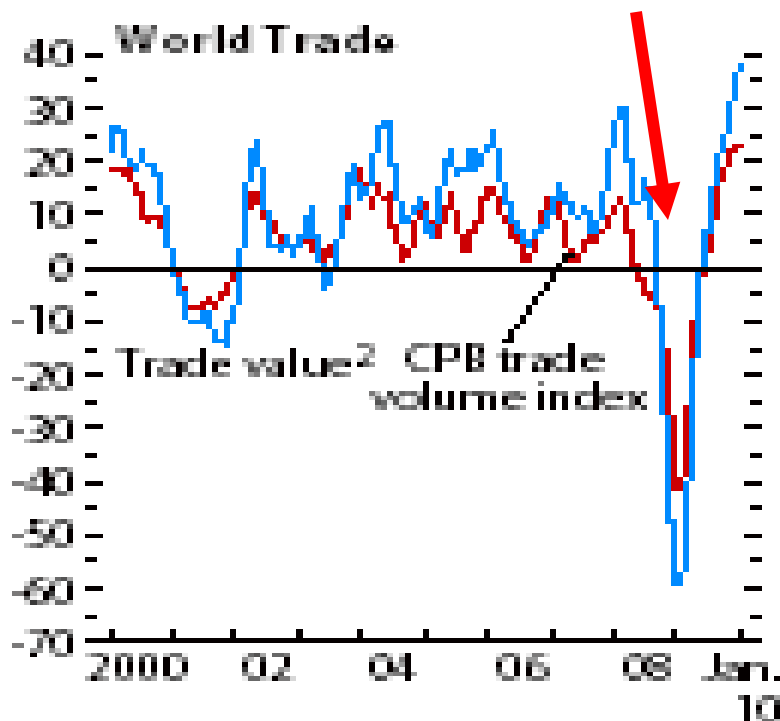


Transmitted also by a collapse of world trade,
the global recession soon showed up in emerging economies.

Financial Crisis

(Annualized percent change of three-month moving average over previous three-month moving average unless noted otherwise)

Global activity has rebounded, as evidenced by accelerating world trade, industrial production, and retail sales. Employment continues to contract in advanced economies but is expanding again in emerging economies, helped by strong potential growth. Industrial confidence has returned to precrisis levels, but household confidence in advanced economies continues to lag, reflecting subdued employment.



World Trade Volumes

Seasonally Adjusted, Index 2000=100

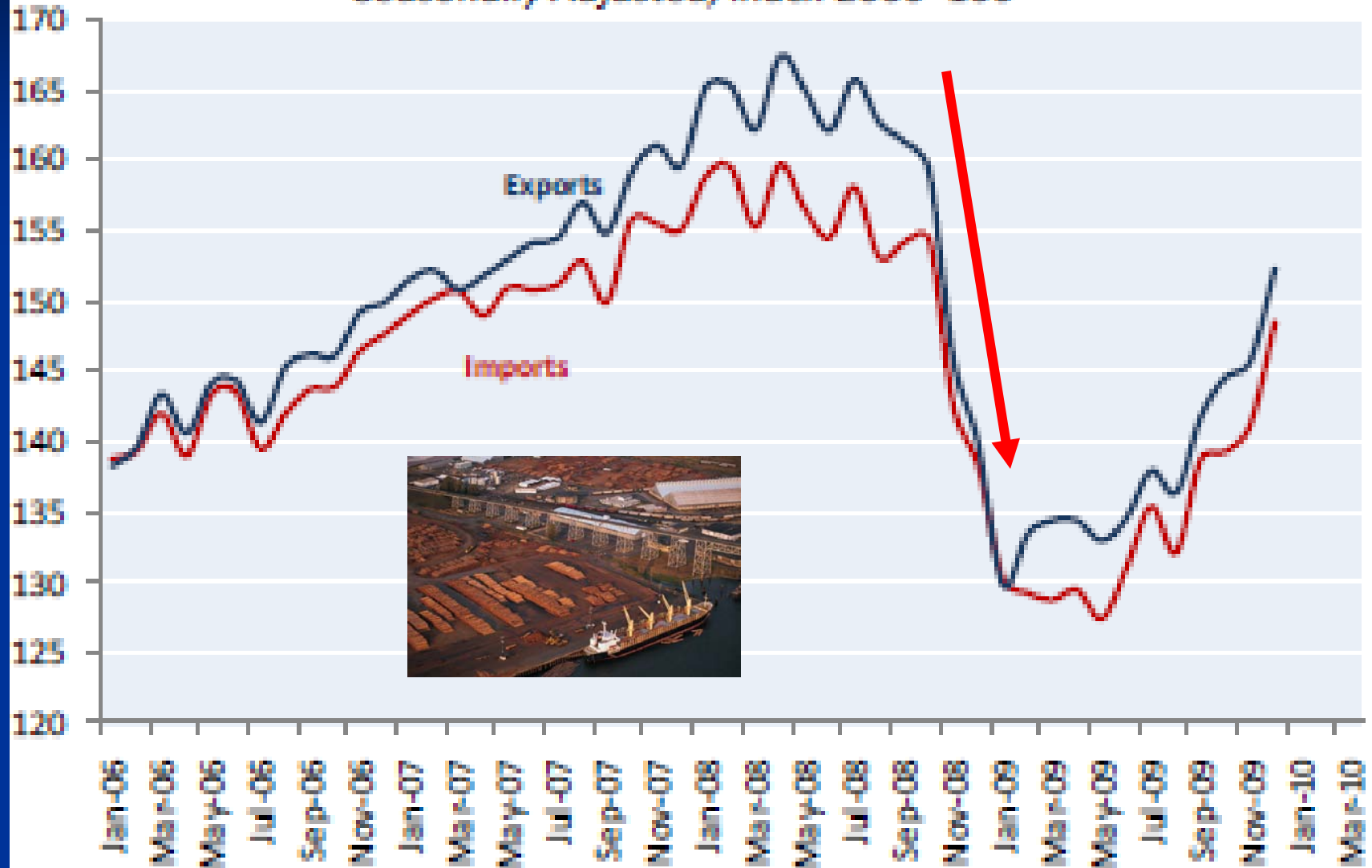


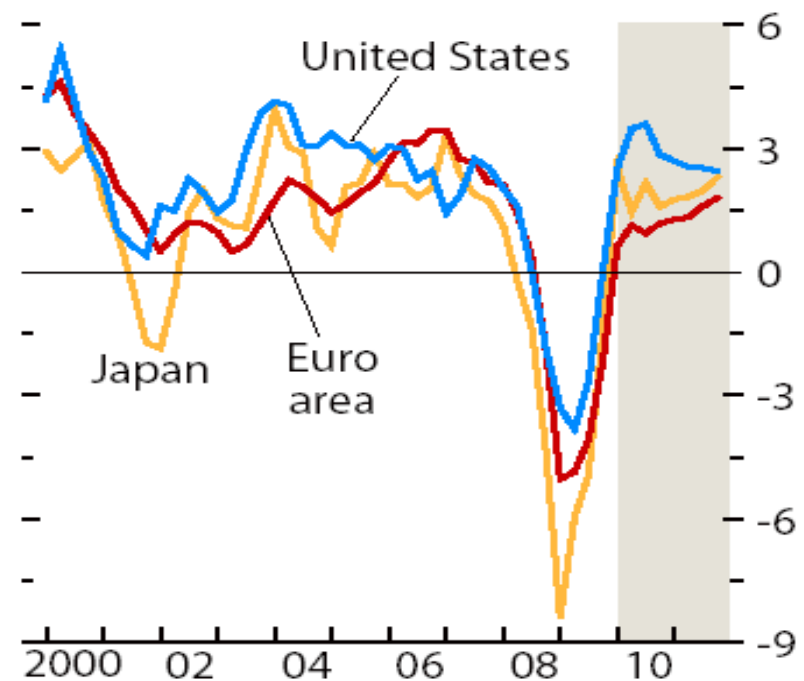
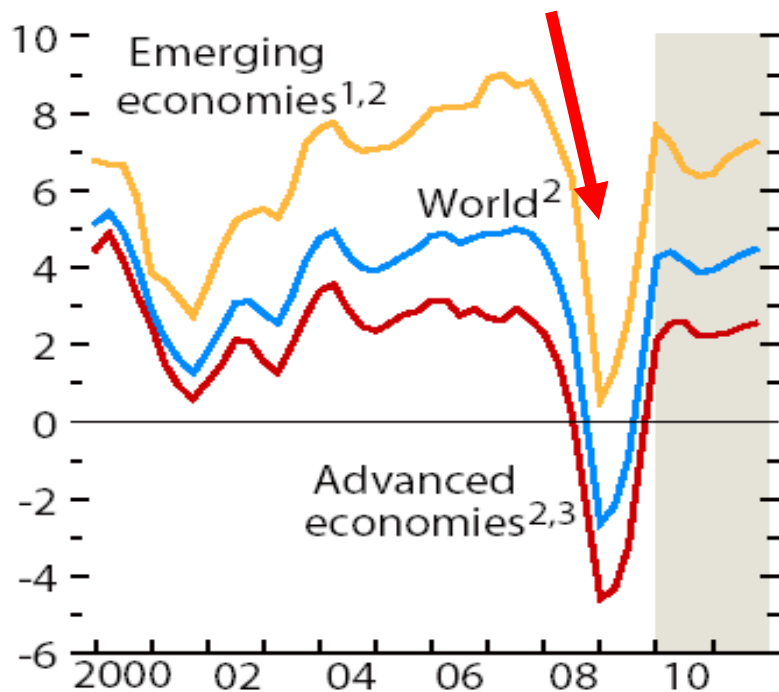
Figure 1.11. Global Outlook

Real GDP; quarterly percent change from one year earlier,

The slowdown in %-points of growth was similar in emerging countries as in advanced, but did not put them literally into negative territory. (Their base was a much higher growth rate.)

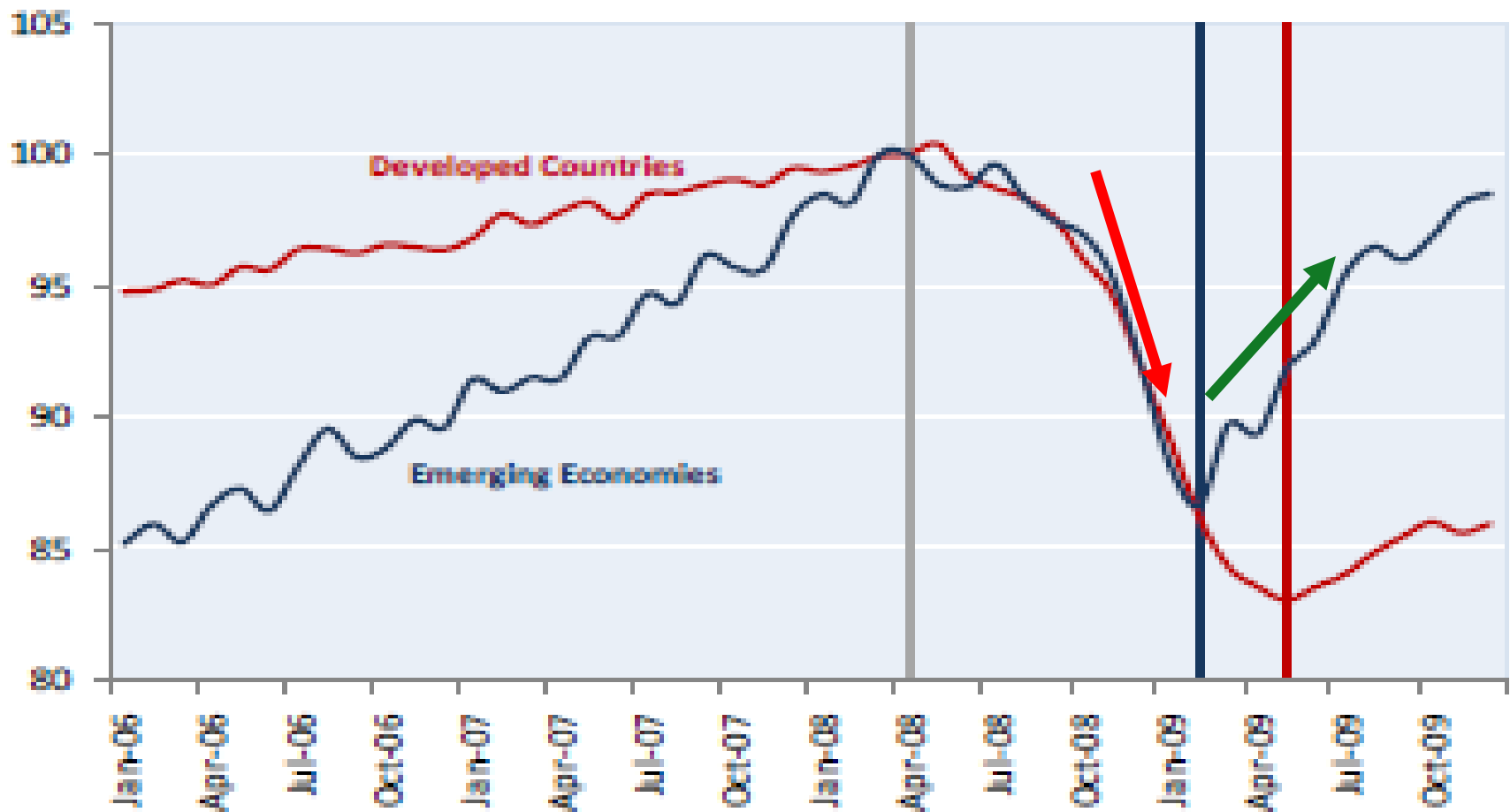
Source WEO, IMF, April 2010

³Australia, Canada, Czech Republic, Denmark, euro area, Hong Kong SAR, Israel, Japan, Korea, New Zealand, Norway, Singapore, Sweden, Switzerland, Taiwan Province of China, United Kingdom, and United States.



Emerging economies have recovered far more quickly than developed countries

World Industrial Production
Index Apr-08 = 100

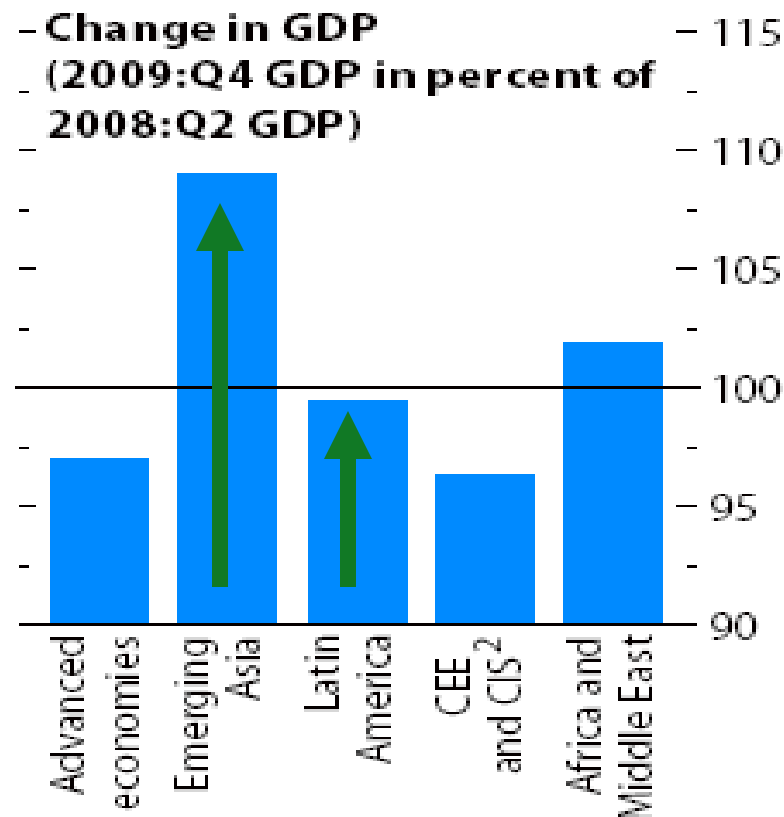
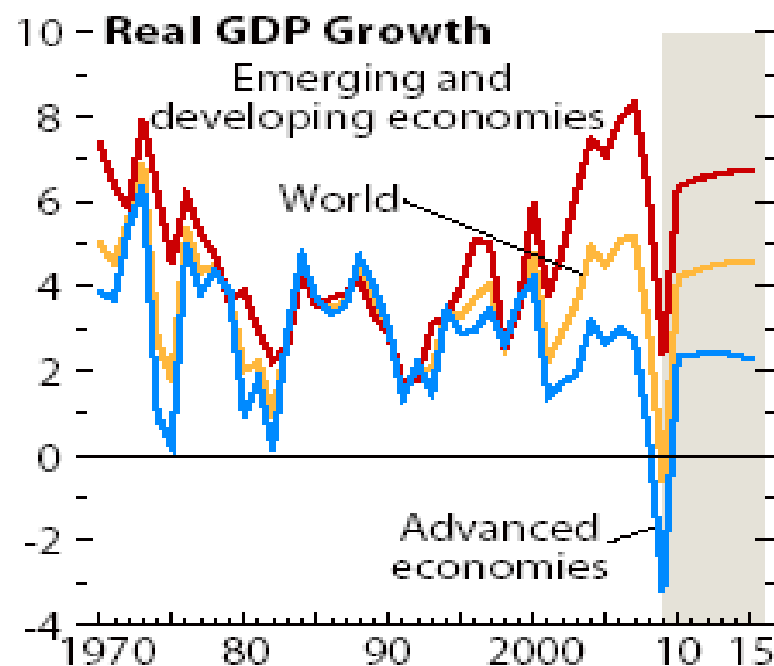


Note: The group of developed countries refers to OECD countries excluding Turkey, Mexico, Republic of Korea, and Central European countries. Source: CPB (Netherlands Bureau for Economic Policy Analysis).

Figure 1.2. Global Indicators¹

(Annual percent change unless noted otherwise)

The bounce-back has been especially strong in Emerging Asia



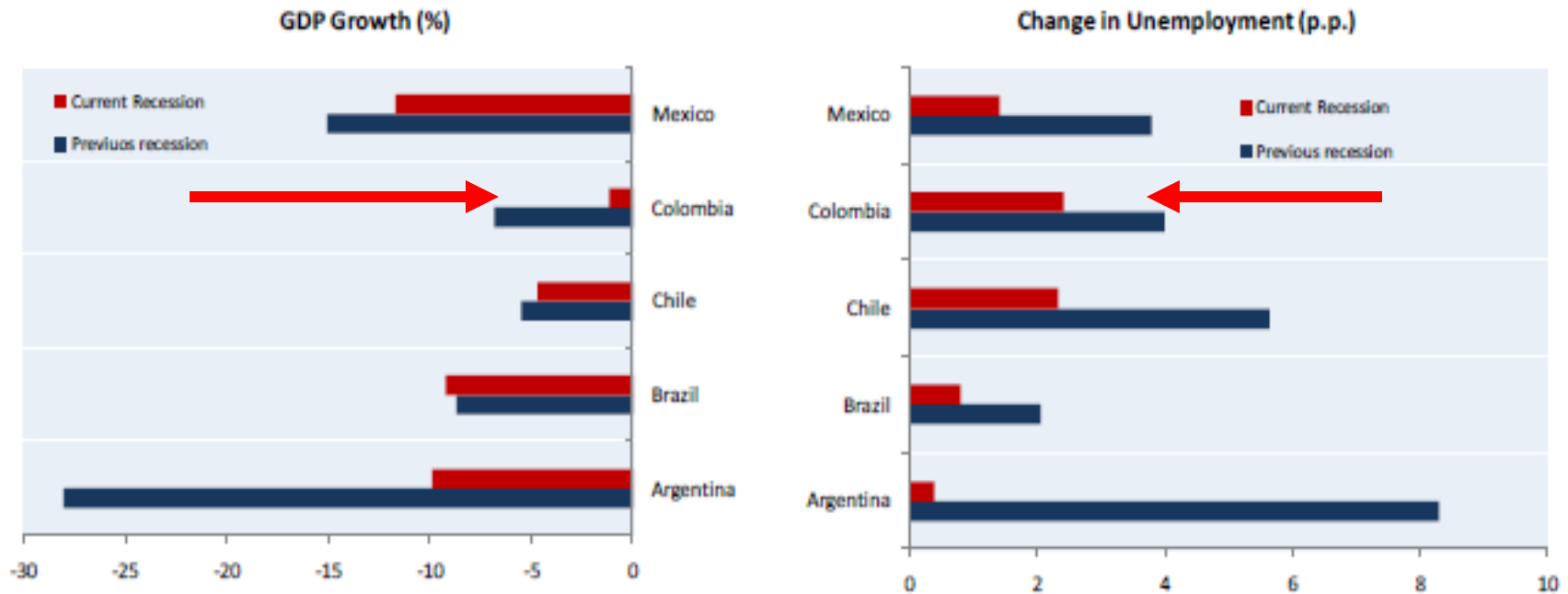
Source WEO, IMF, April 2010

The recession in Latin America was much milder than in past episodes.

Figure 21. GDP Growth and Change in the Unemployment Rate During Recessions

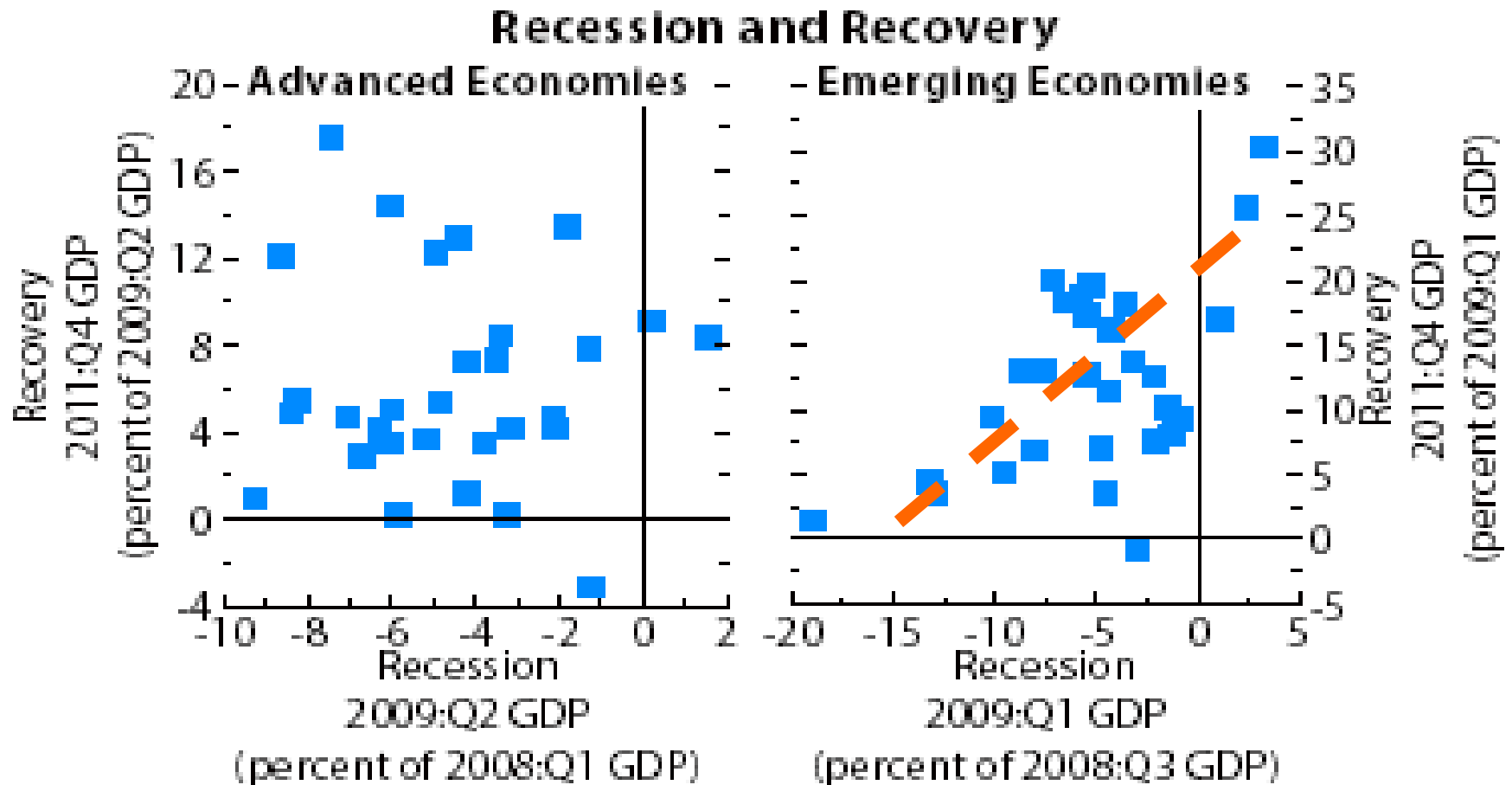
A. GDP Growth

B. Change in Unemployment



Note: Previous recession periods are: Argentina (1998.Q4 – 2002.Q2); Brazil (1997.Q4 – 1998.Q2); Chile (1998.Q3 – 1999.Q4); Colombia (1998.Q3 – 1999.Q4); and Mexico (1995.Q1 – 1996.Q1). Current recession periods are: Argentina (2008.Q3 – 2009.Q2); Brazil (2008.Q4 – 2009.Q2); Chile (2008.Q3 – 2009.Q3); Colombia (2008.Q3 – 2009.Q2); and Mexico (2008.Q2 – 2009.Q2). Source: LCRCE Staff calculations based on National Statistical Institutes data.

The pattern “the farther they fall the stronger they bounce back” has *not* held in this cycle.

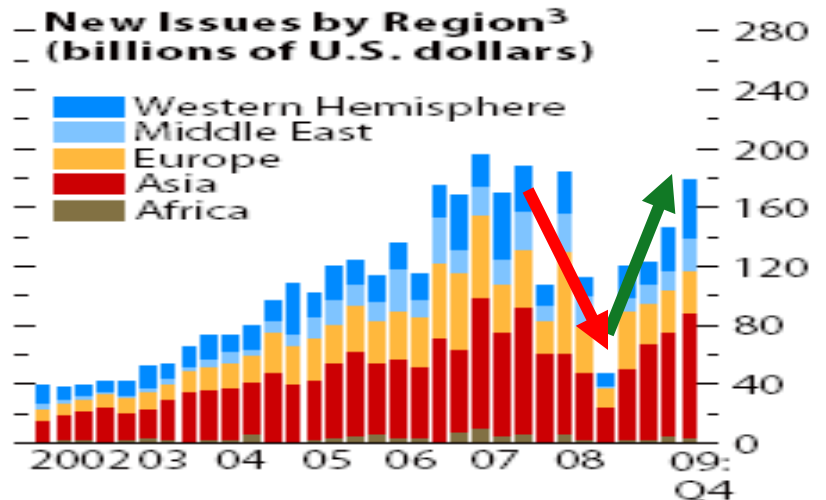
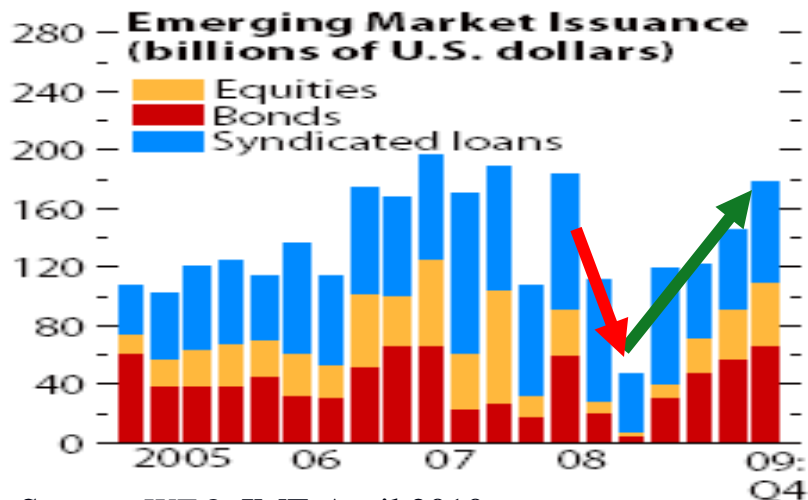
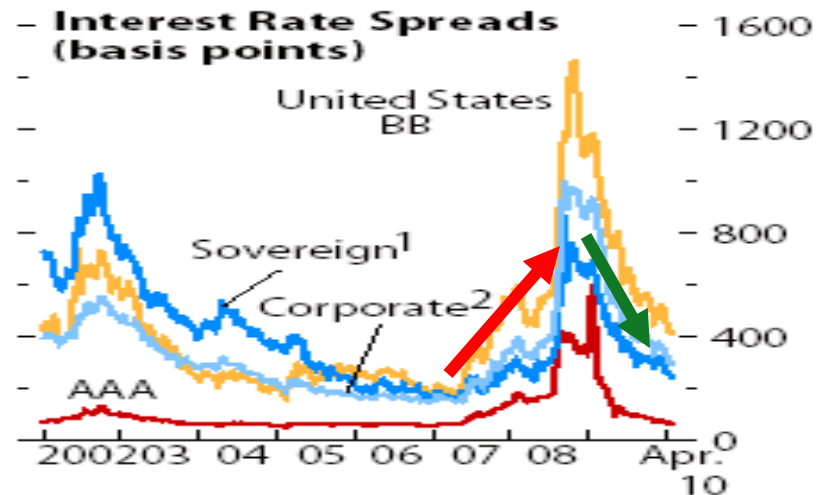


Source: IMF staff calculations.

¹Based on deviations from an estimated (cointegration) relationship between global industrial production and retail sales.

Figure 1.4. Emerging Market Conditions

Global financial market conditions returned to normal by late 2009
(at least until the Greek crisis).



Source WEO, IMF, April 2010

WEO
forecasts,
April 2010



Year over Year

(2010-2011 are projections)

Q4 over Q4

Emerging & Developing Economies

Central & E. Europe

Russia



Developing Asia

China



India

ASEAN-5

Middle East & N. Africa

Sub-Saharan Africa

Western Hemisphere

Brazil



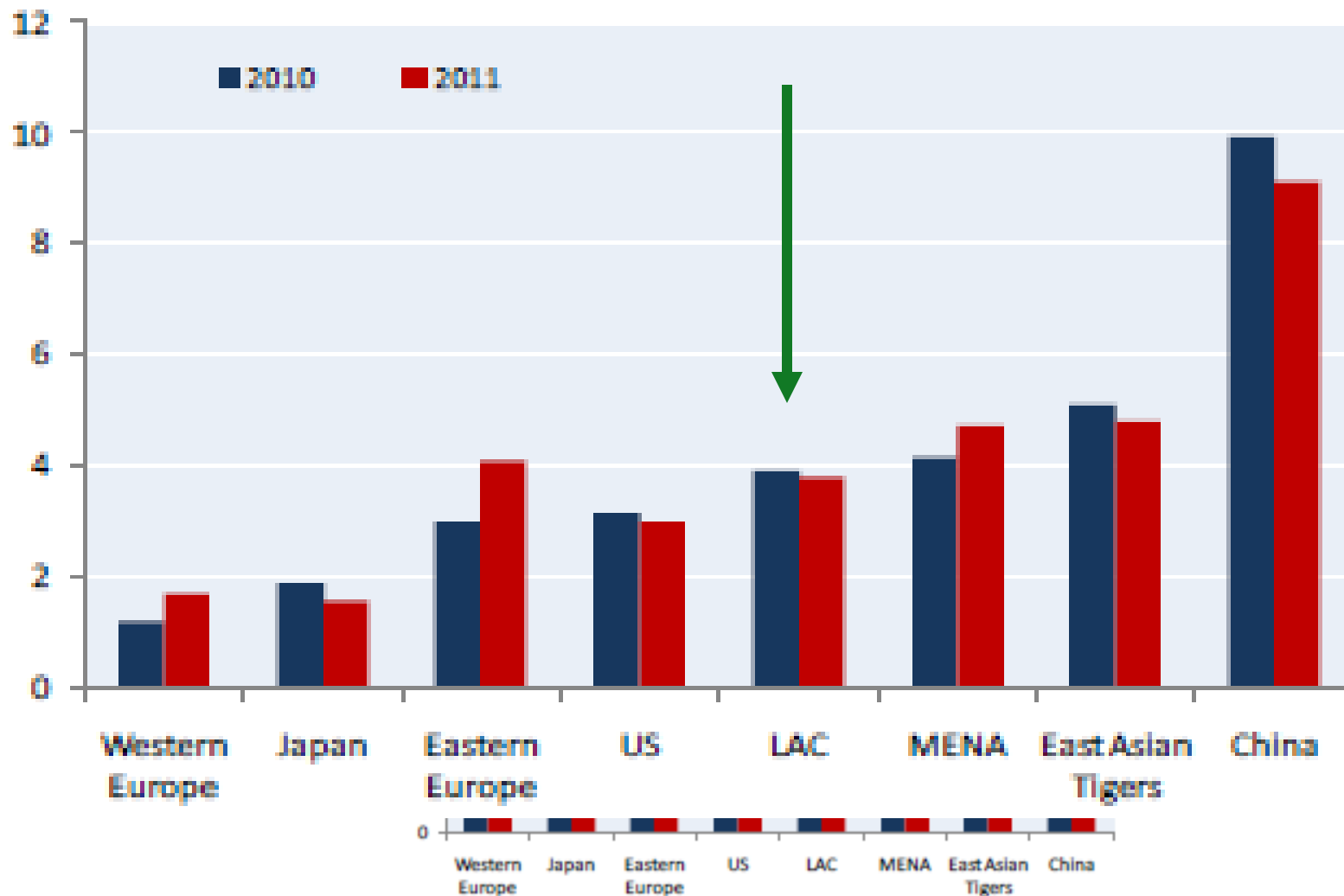
Mexico

	2008	2009	2010	2011	2009	2010	2011
Emerging & Developing Economies	6.1	2.4	6.3	6.5	5.2	6.3	7.3
Central & E. Europe	3.0	-3.7	2.8	3.4	1.9	1.3	4.1
Russia	5.6	-7.9	4.0	3.3	-3.8	1.7	4.2
Developing Asia	7.9	6.6	8.7	8.7	8.6	8.9	9.1
China	9.6	8.7	10.0	9.9	10.7	9.4	10.1
India	7.3	5.7	8.8	8.4	6.0	10.9	8.2
ASEAN-5	4.7	1.7	5.4	5.6	5.0	4.2	6.2
Middle East & N. Africa	5.1	2.4	4.5	4.8
Sub-Saharan Africa	5.5	2.1	4.7	5.9
Western Hemisphere	4.3	-1.8	4.0	4.0
Brazil	5.1	-0.2	5.5	4.1	4.3	4.2	4.2
Mexico	1.5	-6.5	4.2	4.5	-2.4	2.3	5.5

The outlook is positive for Latin America, as for other developing countries.

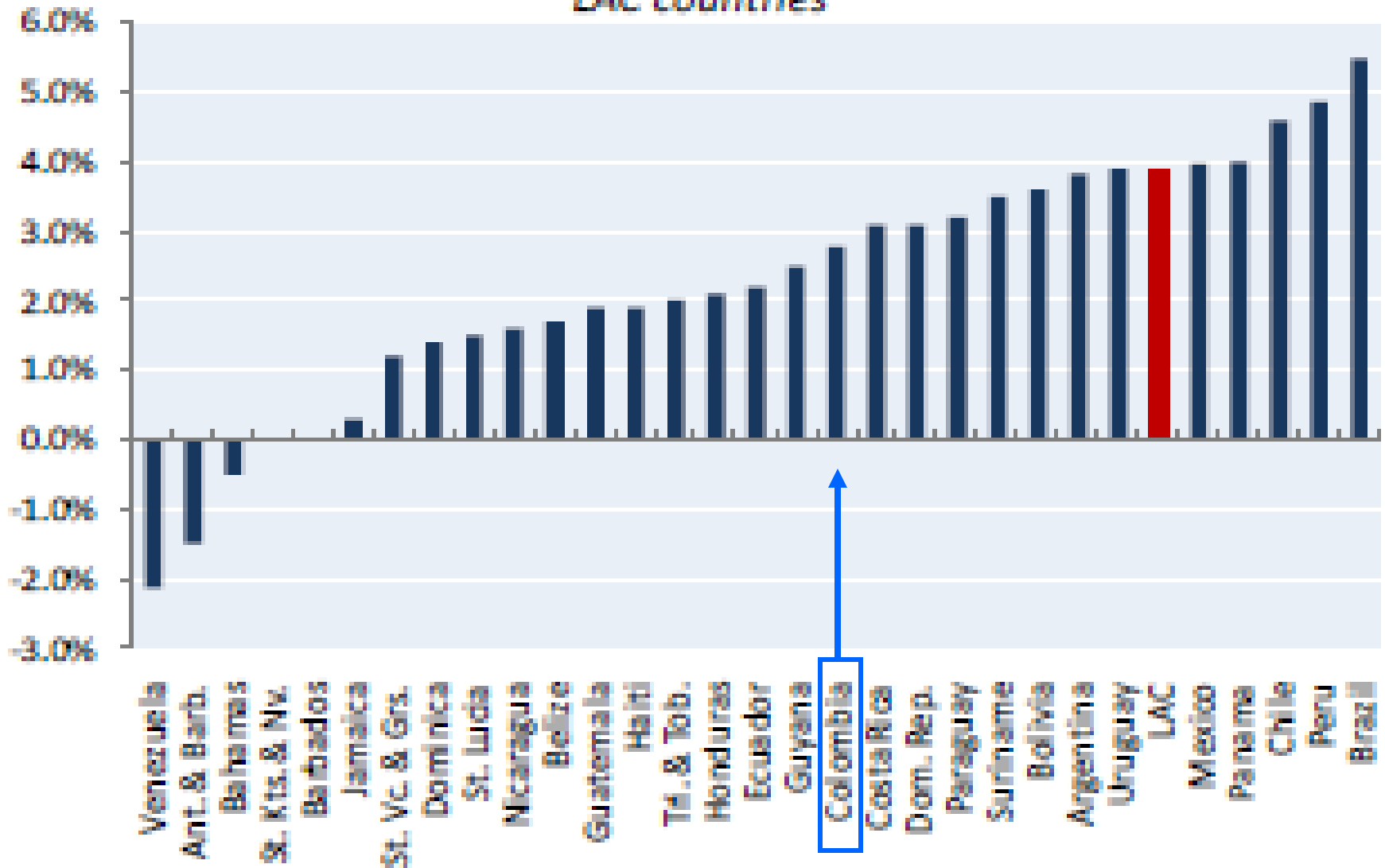
Real GDP Growth Forecasts for 2010-2011

Annual Real GDP Growth Rate



Note: Western Europe comprises Euro Zone countries, Denmark, Sweden, UK, Norway, and Switzerland. Source: Consensus Forecasts (December 2009 and March 2010), and Bloomberg.

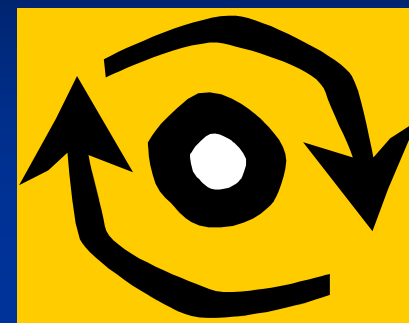
Real GDP Growth Forecasts for 2010 LAC countries



Source: Latin American Consensus Forecasts as of March 2010, IMF's World Economic Outlook, IMF's Regional Economic Outlook.

Cycles in capital flows to emerging markets

- **1st developing country lending boom (“recycling petro dollars”): 1975-1981**
 - Ended in international debt crisis 1982
 - 7 Lean years (“Lost Decade”): 1982-1989
- **2nd lending boom (“emerging markets”): 1990-96**
 - Ended in East Asia crisis 1997
 - 7 Lean years: 1997-2003
- **3rd boom (incl. China & India this time): 2003-2008**



What characteristics have helped emerging markets resist financial contagion in the past?

- High FX reserves and/or floating currency
- Low foreign-denominated debt (currency mismatch)
- Low short-term debt (maturity mis-match)
- High Foreign Direct Investment
- Strong initial budget, allowing room to ease.
- High export/GDP ratio,
 - Sachs (1985); Eaton & Gersovitz (1981), Rose (2002); Calvo, Izquierdo & Talvi (2003); Edwards (2004); Cavallo & Frankel (2008).

Are big current account deficits *per se* dangerous?

Neoclassical theory – If a country has a low capital/labor ratio (or transitory negative shock), a large CAD can be optimal.

“*Lawson Fallacy*” (1989) – CAD not dangerous *if* government budget is balanced, so borrowing goes to finance private sector, rather than *BD*.

Amendment after 1994 Mexico crisis – CAD not dangerous if $BD=0$ *and* *S* is high, so the borrowing goes to finance private *I*, rather than *BD* or *C*.

Amendment after 1997 East Asia crisis – CAD not dangerous if $BD=0$, *S* is high, *and* *I* is well-allocated, so the borrowing goes to finance high-return *I*, rather than *BD* or *C* or empty beach-front condos (Thailand) & unneeded steel companies (Korea).

Amendment after 2008 financial crisis – yes, CADs are dangerous.

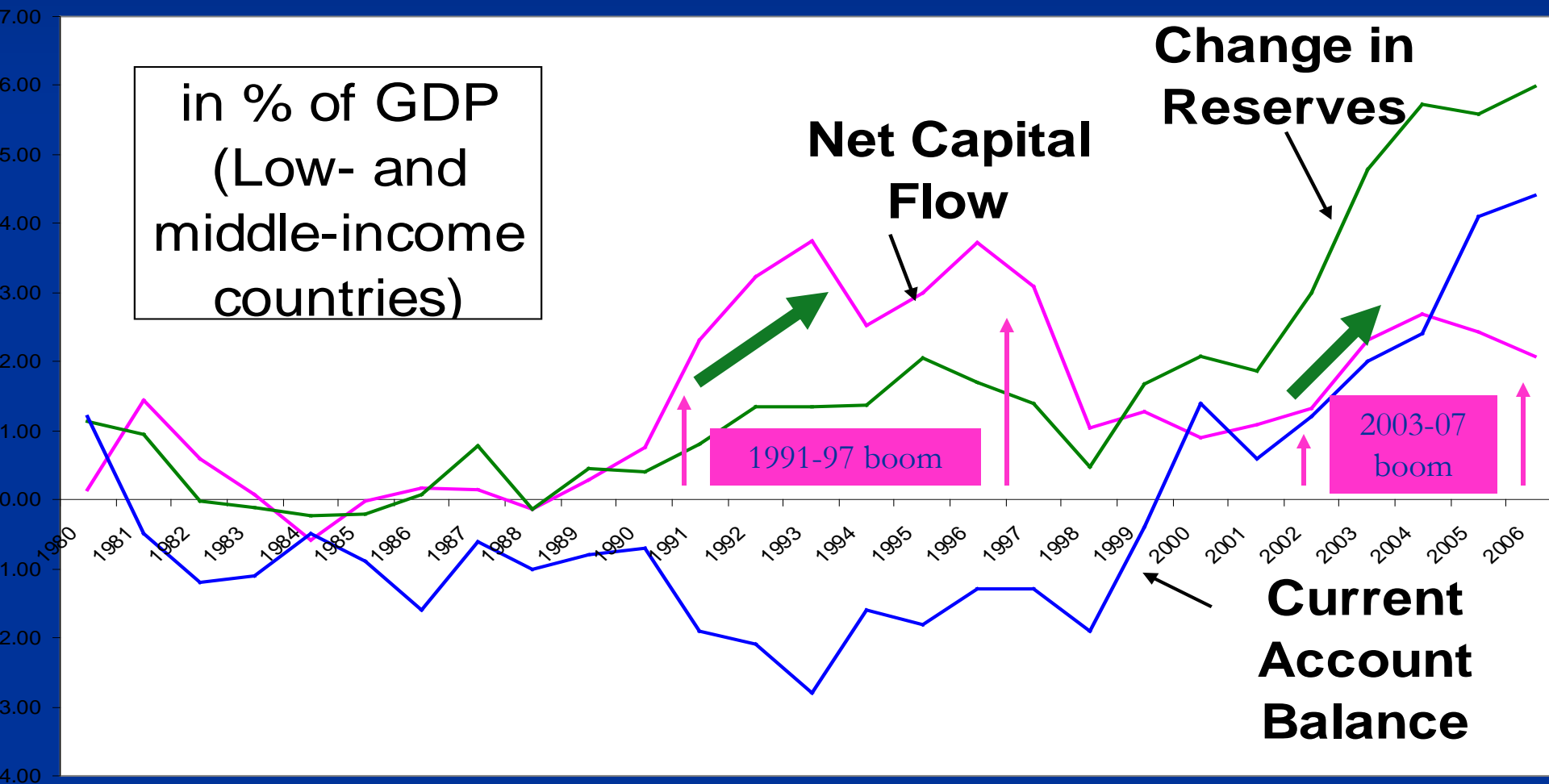
Some references on statistical predictors of crises among developing countries

- Jeffrey Sachs, Aaron Tornell & Andres Velasco, "Financial Crises in Emerging Markets: The Lessons from 1995" (1996):
Combination of weak fundamentals (changes RER or credit/GDP) and low reserves (relative to M2) made countries vulnerable to tequila contagion.
- J. Frankel & Andrew Rose, "Currency Crashes in Emerging Markets" (1996):
Composition of capital inflow matters (more than the total): short-term bank debt raises the probability of crash; FDI & reserves lower the probability.
- Graciela Kaminsky, Saul Lizondo & Carmen Reinhart, "Leading Indicators of Currency Crises" (1998).
Best predictors: Real ex. rate, M2/Res, GDP, equity prices.
- A. Berg, E. Borensztein, G.M. Milesi-Ferretti, & C. Pattillo, "Anticipating Balance of Payments Crises: The Role of Early Warning Systems," IMF (1999).
The early warning indicators don't hold up as well out-of-sample.

Lessons of the 1994-2002 crises

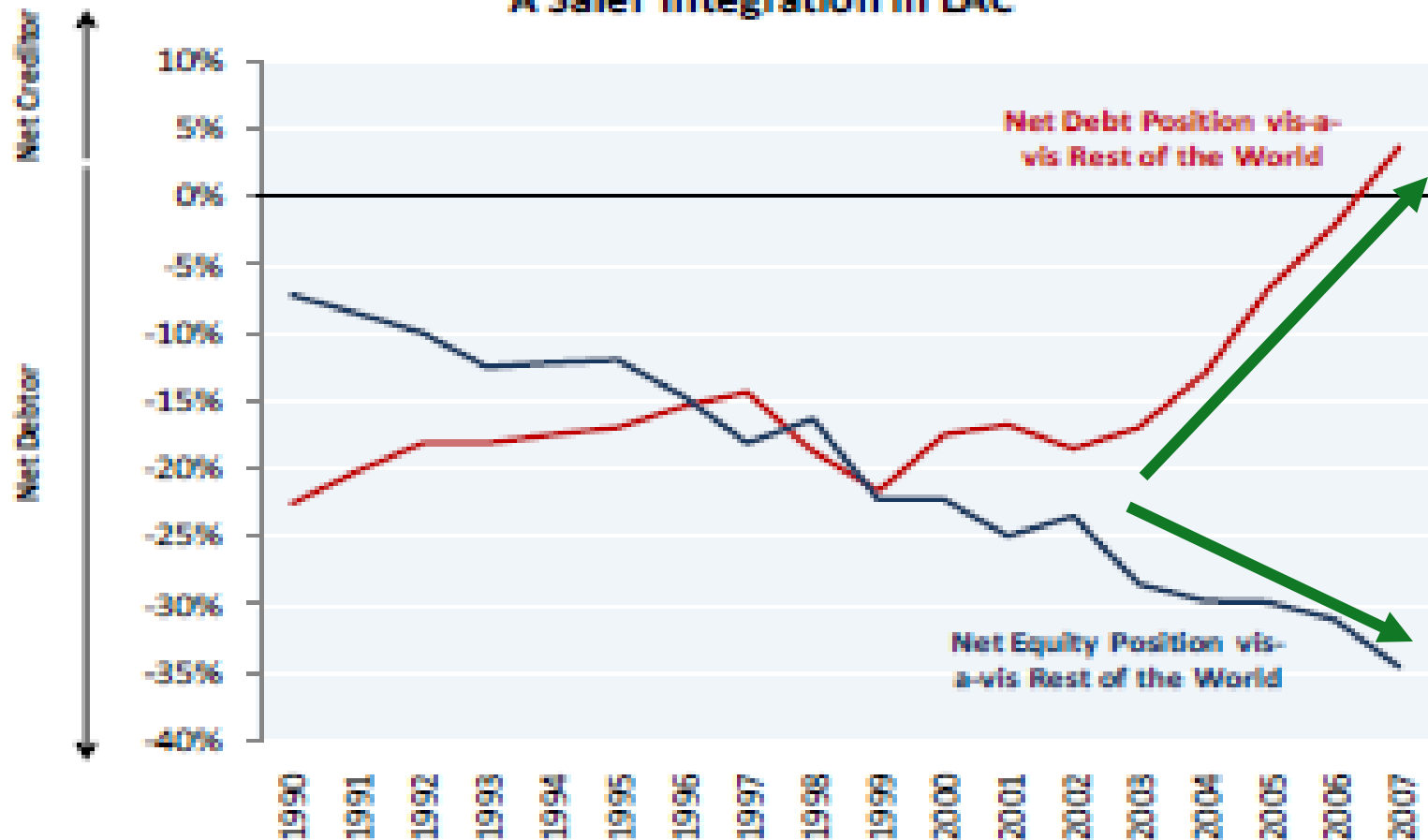
- Many emerging markets after the 1990s learned to
 - (1) float or hold large reserves *or both*
 - (2) use capital inflows to finance reserve accumulation (“self-insurance”), rather than current account deficits
 - (3) take capital inflows more in the form of FDI or local-currency-denominated debt flows;
 - avoiding the currency mismatch of \$ liabilities
 - and avoiding bank loans.
- The ratio of reserves to short-term debt is the most robust predictor of crisis likelihood & severity.
 - e.g. the Guidotti Rule: Keep ratio >1

This time, many countries used the **inflows** to build up **forex reserves**, rather than to finance **Current Account** deficits



A change in the composition of capital inflows: Latin America replaced debt with FDI & equity

A Safer Integration in LAC



Source: The net debt position (vis-à-vis ROW) is the sum of debt assets and reserves minus debt liabilities. In turn, the net equity position (vis-à-vis ROW) is the sum of net FDI assets and net portfolio equity assets. The sample ranges from 1990 to 2007. Source: Lane and Milesi-Ferretti (2007).

Did those who obeyed the lessons of 1994-2002
done better in response to the 2008-09 shock?

- Some who had large current account deficits & foreign-currency debts did have the most trouble,
 - particularly in Central & E.Europe: Hungary, Ukraine, Latvia... Reserves have turned out the ultimate insurance.
 - Aizenman (2009): “The deleveraging triggered by the crisis implies that countries that hoarded reserves have been reaping the benefits.”



Systematic studies are only starting.

- Obstfeld, Shambaugh & Taylor (2009a, b):
 - Finding: A particular measure of countries' reserve holdings just before the current crisis, relative to requirements (M2), predict 2008 depreciation.
 - Current account balances & short-term debt levels are *not* statistically significant predictors, once reserve levels are taken into account.
- Rose & Spiegel (2009a, b) and Blanchard (2009) found no role for reserves in predicting who got into trouble.
- Frankel & Saravelos (May 2010):

We get stronger results, because we consider crisis period to have gone thru March 2009.

Top 8 categories of Leading Indicators in pre-2008-crisis literature

Table 1

Frankel & Saravelos (2010)

Leading Indicator ¹	KLR (1998) ²	Hawkins & Klau (2001) ³	Abiad (2003) ^{4,6}	Others ^{5,} 6	Total
Reserves ^a	14	18	13	5	50
Real Exch.Rate ^b	12	22	11	3	48
GDP ^c	6	15	1	3	25
Credit ^d	5	8	6	3	22
Current Acct. ^e	4	10	6	2	22
Money Supply ^f	2	16	1	0	19
Exports or Imports ^{1a, g}	2	9	4	2	17
Inflation	5	7	1	2	15

Next 9 categories of Leading Indicators in pre-2008-crisis literature

Table 1, Leading Indicator¹	continued		Frankel & Saravelos (2010)		
	KLR (1998) ²	Hawkins & Klau (2001) ³	Abiad (2003) ^{4,6}	Others ^{5,6}	Total
Equity Returns	1	8	3	1	13
Real Interest Rate ^h	2	8	2	1	13
Debt Compositn ^{1b, i}	4	4	2	0	10
Budget Balance	3	5	1	0	9
Terms of Trade	2	6	1	0	9
Contagion ^j	1	5	0	0	6
Political/Legal	3	2	1	0	6
Capital Flows ^{1c, k}	3	0	0	0	3
External Debt ^l	0	1	1	1	3
Number of Studies	28	28	20	7	83

¹, ^{1a}, ^{1b}, ^{1c} Leading indicator categories as in Hawkins & Klau (2000), with exception of ^{1a}includes imports,

^{1b}debt composition rather than debt to international banks, ^{1c}capital flows rather than capital account.

²As reported in Hawkins & Klau (2000), but M2/reserves added to reserves, interest differential added to real interest rate.

³S&P, JP Morgan, IMF Indices, IMF Weo, IMF ICM, IMF EWS studies have been excluded due to lack of verifiability of results. The following adjustments have been made to the authors' checklist: significant credit variables reduced from 10 to 8 as Kaminsky (1999) considers level rather than growth rate of credit; significant capital account variables reduced from 1 to 0 as Honohan (1997) variable not in line with definition used here; Kaminsky (1999) significant variables for external debt reclassified to debt composition as these variables relate to short-term debt.

⁴10 out of 30 studies excluded from analysis. 7 included in Hawkins & Klau (2000) and 3 due to absence of formal testing of variables.

⁵Includes Berg, Borenstein and Pattillo (2004), Manasse and Roubini (2005), Shimpalee and Breuer (2006), Davis and Karim (2008), Bergmen et.al. (2009), Obstfeld, Shambaugh and Taylor (2009), Rose and Spiegel (2009a).

⁶See App. 1 for criteria defining statistical significance in Abiad (2003) and Others studies. For rest see KLR (1998), Hawkins & Klau (2001)

Variables included in the leading indicator categories:

^aReserves: relative to GDP, M2, short-term debt, 12m change

^bReal Interest Rate: domestic or differential

^bReal Exchange Rate: change, over/under valuation

ⁱDebt Composition: commercial/concess./variable-rate/debt to internat. banks/short-term/multilat./official relative to total external debt. Short-term debt relative to reserves (rather than relative to total external debt) is in the reserves category

^cGDP: growth, level, output gap

^dCredit: nominal or real growth

^eCurrent Account: CA/GDP, Trade Balance/GDP

^jContagion: dummies for crisis elsewhere

^fMoney Supply: growth rate, excess M1 balances

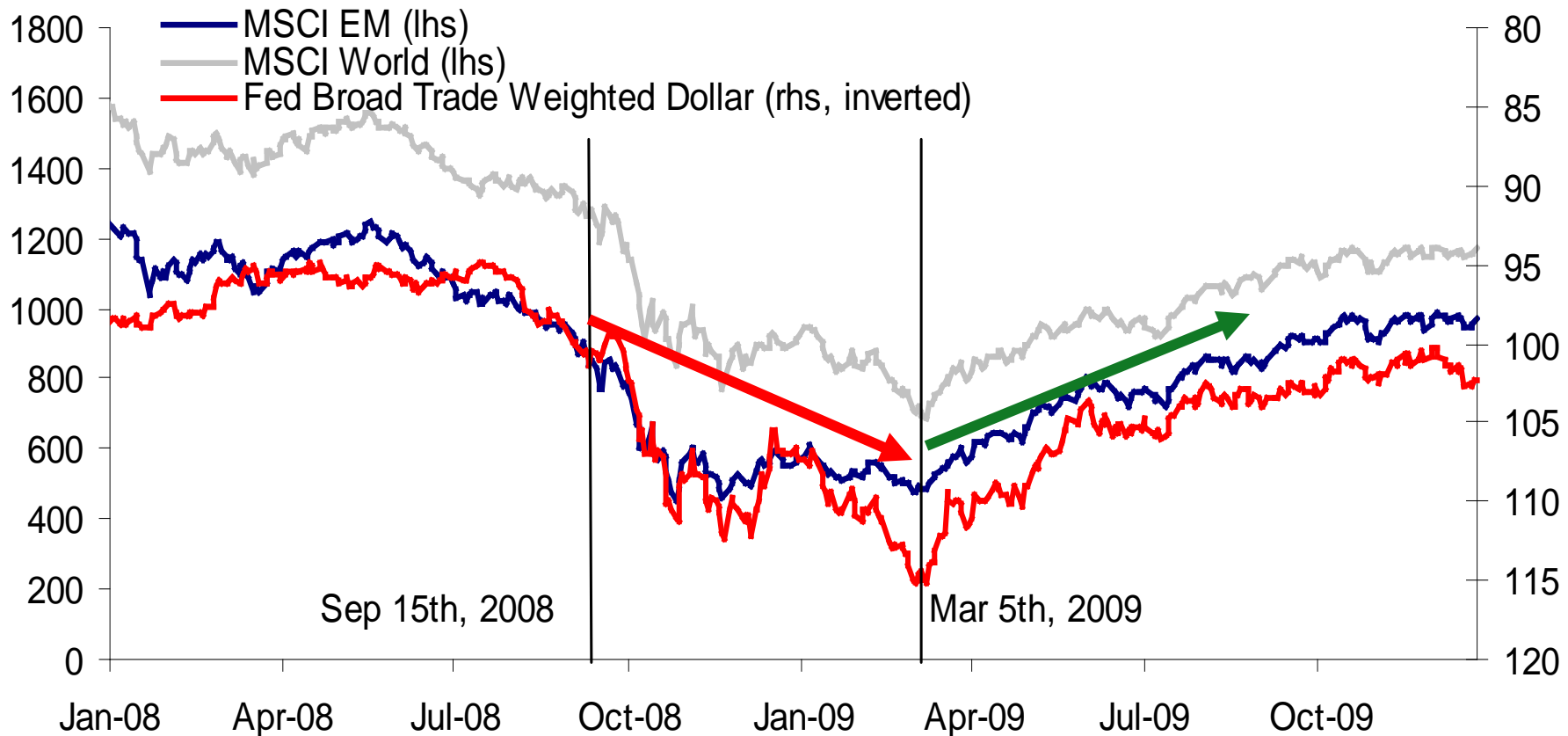
^kCapital Flows: FDI, short-term capital flows

^gExports or Imports: relative to GDP, growth

^lExternal Debt: relative to GDP

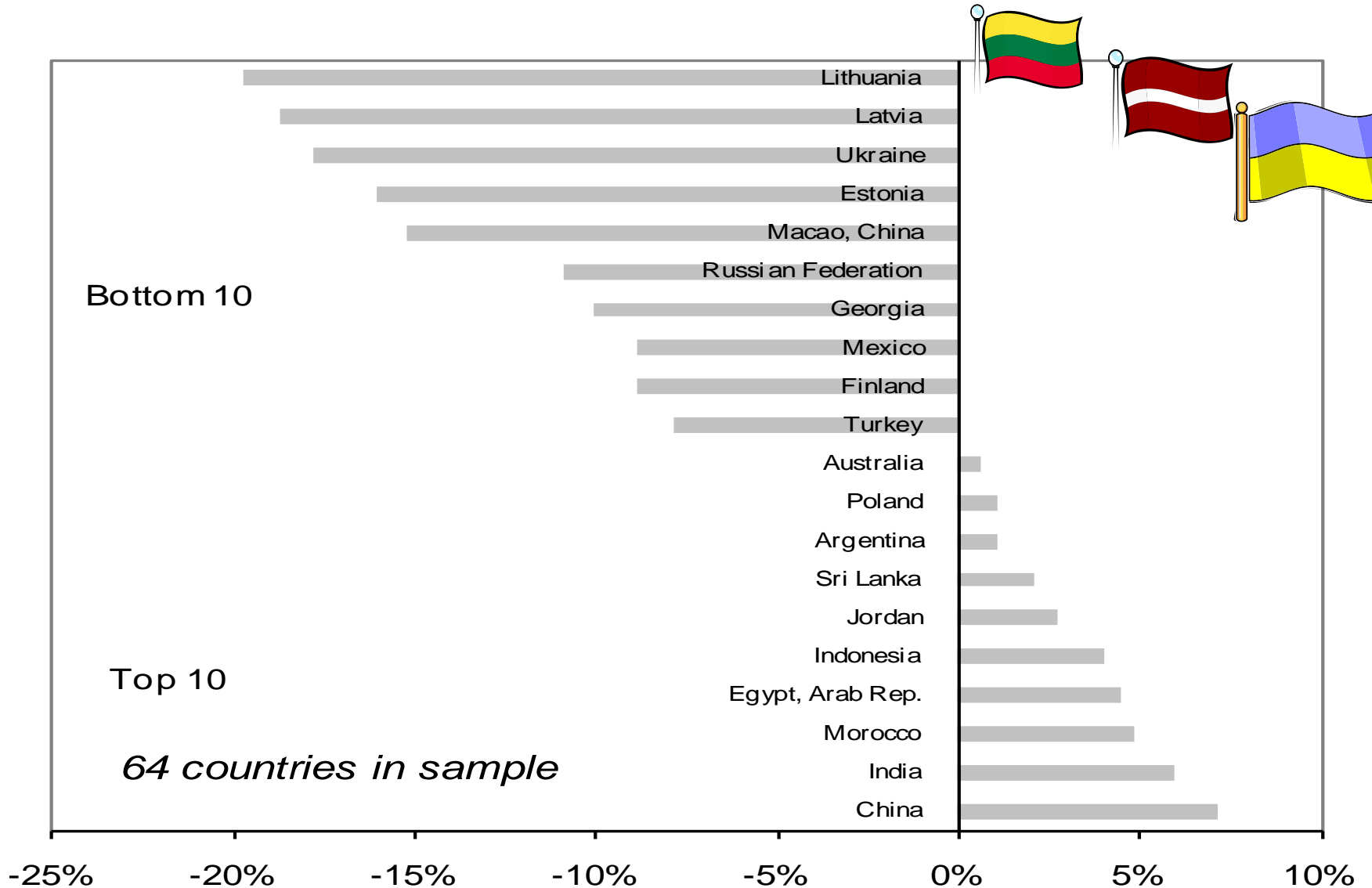
Equity prices suggest that the global financial crisis did not begin in earnest until Sept. 2008, nor end until March 2009

whereas Rose & Spiegel, Obstfeld et al, look simply at 2008



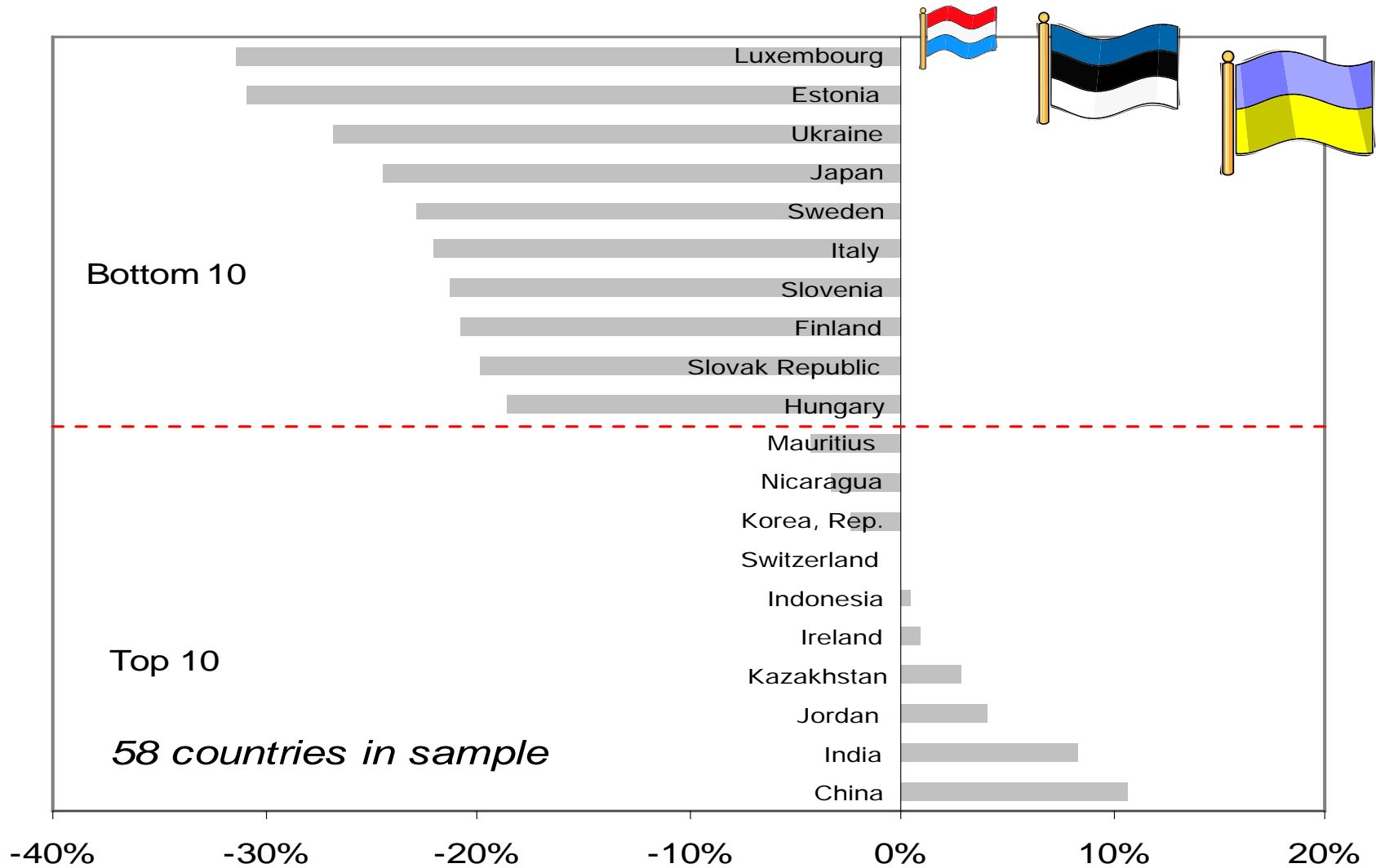
Best and Worst Performing Countries -- F&S (2010), Appendix 4

GDP Change, Q2 2008 to Q2 2009



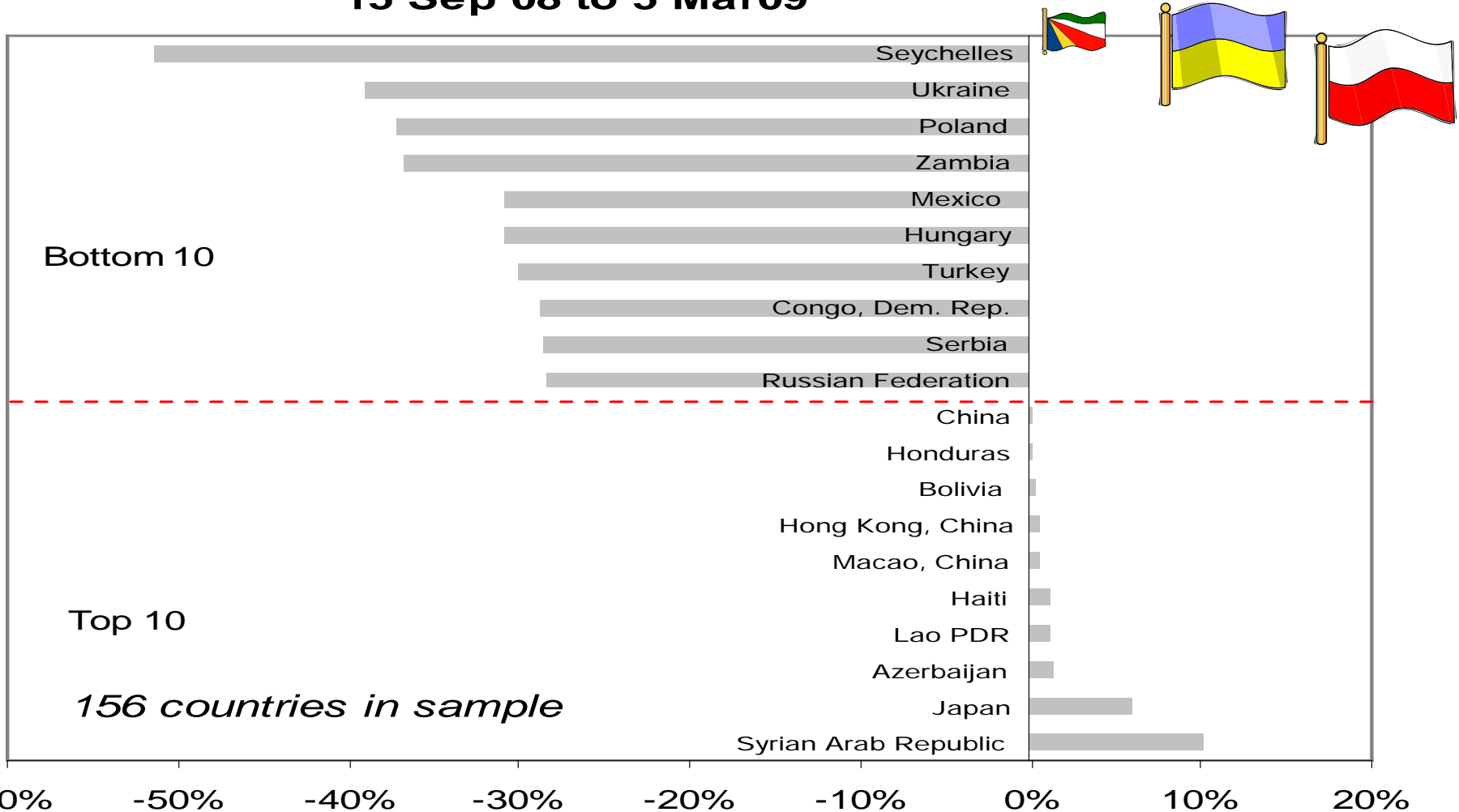
Best and Worst Performing Countries -- F&S (2010), Appendix 4

Industrial Production Change, Q2 2008 to Q2 2009



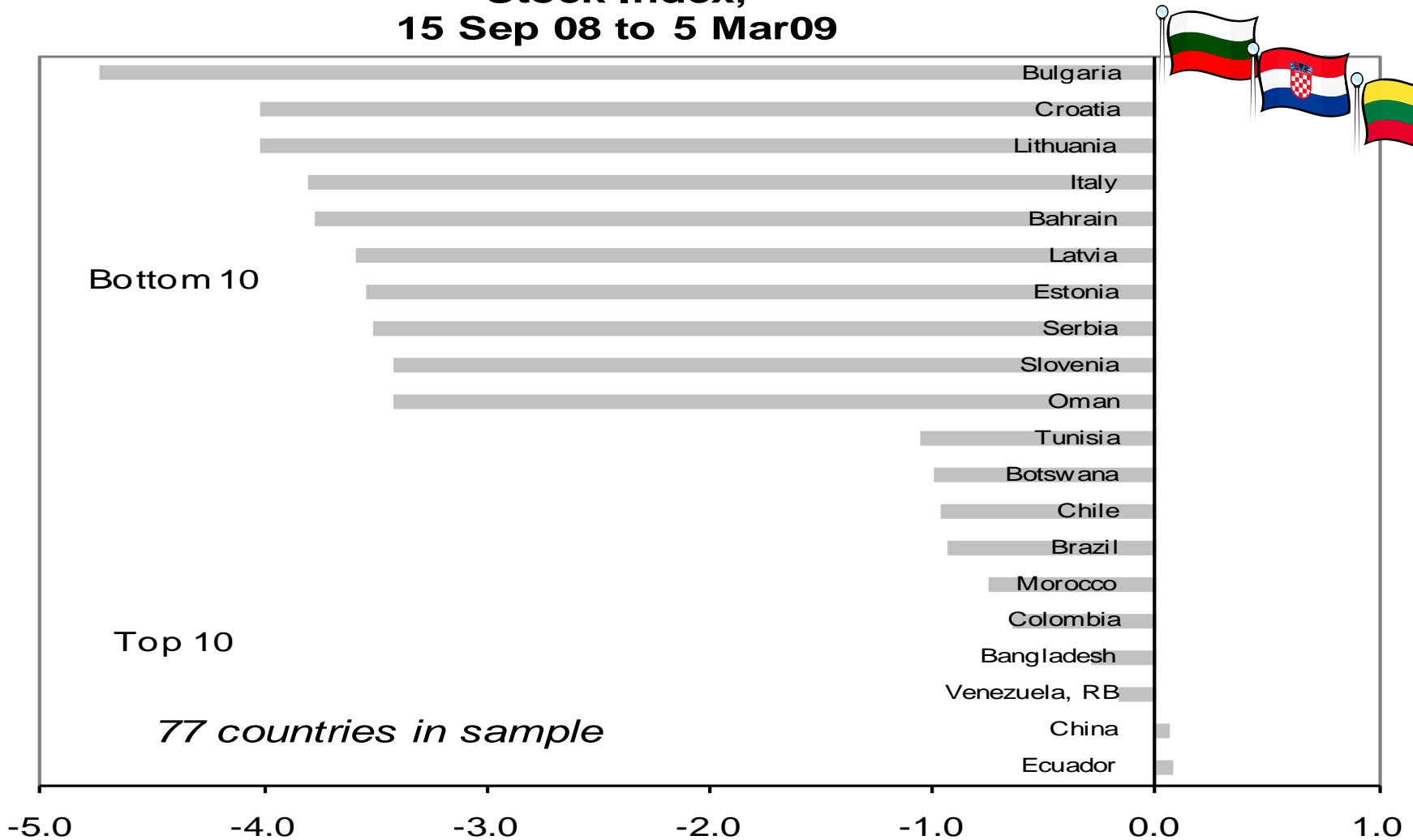
Best and Worst Performing Countries -- F&S (2010), Appendix 4

**Change in Local Currency vs USD,
15 Sep 08 to 5 Mar09**



Best and Worst Performing Countries -- F&S (2010), Appendix 4

Annualized Returns/Standard Deviation of Benchmark Stock Index, 15 Sep 08 to 5 Mar09



Coefficients of Bivariate Regressions of Crisis Indicators on Each Independent Variable* (t-stat in parentheses)

bolded number indicates statistical significance at 10% level or lower, darker color shading equivalent to higher statistical significance

F & Saravelos (2010): Bivariate		Currency Market	Equity Market	Recourse to IMF	Industrial Production	GDP	Significant and Consistent Sign?^
RESERVES	Reserves (% GDP)	0.082 (2.52)	0.850 (1.6)	-1.020 (-1.92)	0.155 (2.22)	0.008 (0.27)	Yes
	Reserves (% external debt)	-0.000 (-1.42)	0.000 (2.11)	-0.010 (-3.42)	0.000 (3.62)	0.000 (3.07)	Yes
	Reserves (in months of imports)	0.002 (1.58)	0.103 (4.71)	-0.089 (-3.31)	0.006 (1.48)	0.001 (0.75)	Yes
	M2 to Reserves	0.000 (0.14)	-0.026 (-3.81)	-0.067 (-1)	-0.001 (-2.46)	0.000 (1.44)	Yes
	Short-term Debt (% of reserves)	-0.000 (-2.6)	-0.007 (-4.45)	0.000 (1.18)	-0.000 (-1.7)	-0.000 (-2.93)	Yes
REER	REER (5-yr % rise)	-0.293 (-5.4)	-0.303 (-0.32)	0.889 (0.99)	-0.000 (-0.01)	-0.029 (-0.85)	
	REER (Dev. from 10-yr av)	-0.292 (-2.93)	-0.920 (-0.81)	0.671 (0.58)	-0.000 (-0.01)	-0.041 (-0.91)	
GDP	GDP growth (2007, %)	0.003 (1.7)	0.078 (1.58)	0.039 (1.63)	0.010 (2.59)	-0.002 (-1.21)	Yes
	GDP Growth (last 5 yrs)	0.002 (1.08)	0.118 (2.14)	0.052 (1.68)	0.009 (2.14)	-0.003 (-1.21)	
	GDP Growth (last 10 yrs)	0.005 (1.59)	0.087 (1.06)	0.042 (1.2)	0.016 (2.63)	-0.004 (-0.76)	
	GDP per capita (2007, constant 2000\$)	-0.003 (-0.7)	-0.296 (-4.69)	-0.221 (-3.23)	-0.027 (-2.48)	-0.010 (-1.74)	
CREDIT	Change in Credit (5-yr rise, % GDP)	-0.029 (-0.83)	-1.979 (-5.42)	0.139 (0.37)	-0.092 (-1.67)	-0.065 (-2.34)	Yes
	Change in Credit (10-yr rise, % GDP)	-0.024 (-2.84)	-0.904 (-3.9)	-0.011 (-0.08)	-0.046 (-1.58)	-0.019 (-1.13)	Yes
	Credit Depth of Information Index (higher=more)	-0.005 (-1.34)	-0.115 (-1.72)	0.009 (0.19)	0.006 (0.57)	-0.003 (-0.47)	
	Bank liquid reserves to bank assets ratio (%)	0.000 (1.52)	0.022 (1.51)	-0.000 (-13.97)	0.002 (2.34)	0.001 (2.58)	Yes
CURRENT	Current Account (% GDP)	0.001 (1.57)	0.032 (2.18)	-0.032 (-3.46)	0.000 (0.42)	0.000 (0.78)	Yes
	Current Account, 5-yr Average (% GDP)	0.001 (1.31)	0.030 (1.66)	-0.032 (-2.76)	0.000 (0.53)	0.000 (0.42)	
	Current Account, 10-yr Average (% GDP)	0.000 (0.72)	0.034 (1.46)	-0.038 (-2.63)	0.000 (0.15)	0.001 (1.59)	
	Net National Savings (% GNI)	0.000 (0.9)	0.048 (4.5)	-0.020 (-1.88)	0.003 (2.42)	0.002 (2.92)	Yes
	Gross National Savings (% GDP)	0.000 (0.76)	0.047 (3.9)	-0.028 (-2.51)	0.003 (1.99)	0.002 (2.52)	Yes

Table Appendix 7

Coefficients of Regressions of Crisis Indicators on Each Independent Variable and GDP per Capita* (t-stat in parentheses)

*bolded number indicates statistical significance at 10% level or lower***F & Saravelos (2010): Multivariate**

Independent Variable		Exchange Market Pressure	Currency % Changes (H208-H109)	Recourse to IMF (SBA only)	Equity %Chng (Sep08-Mar09)	Equity % Chng (H208-H109)	Significant and Consistent Sign?^
RESERVES	Reserves (% GDP)	0.164 (3.63)	0.087 (2.98)	-1.069 (-1.66)	0.011 (0.12)	0.010 (0.14)	Yes
	Reserves (% external debt)	0.000 (1.06)	0.000 (1.1)	-0.006 (-2.29)	0.000 (1.81)	0.000 (2.65)	Yes
	Reserves (in months of imports)	0.004 (2.25)	0.003 (1.95)	-0.119 (-3.01)	0.006 (1.32)	0.009 (2.32)	Yes
	M2 to Reserves	0.000 (0.27)	0.000 (0.76)	-0.044 (-0.91)	0.000 (0.02)	-0.000 (-0.09)	
	Short-term Debt (% of reserves)	-0.000 (-1.97)	-0.000 (-4.22)	0.000 (2.13)	-0.001 (-2.89)	-0.001 (-3.11)	Yes
REER	REER (5-yr % rise)	-0.440 (-5.55)	-0.210 (-3.19)	1.728 (2.15)	-0.182 (-1.24)	-0.185 (-1.61)	Yes
	REER (Dev. from 10-yr av)	-0.475 (-3.96)	-0.230 (-2.47)	2.654 (2.56)	-0.316 (-1.71)	-0.316 (-2.1)	Yes
GDP	GDP growth (2007, %)	-0.000 (-0.2)	0.001 (0.94)	0.070 (2.58)	-0.001 (-0.1)	-0.007 (-0.71)	
	GDP Growth (last 5 yrs)	-0.003 (-0.81)	0.000 (0.26)	0.084 (2.4)	-0.003 (-0.26)	-0.014 (-1.15)	
	GDP Growth (last 10 yrs)	0.000 (0.14)	0.001 (0.43)	0.064 (1.66)	-0.012 (-0.67)	-0.020 (-1.12)	
CREDIT	Change in Credit (5-yr rise, % GDP)	-0.021 (-0.36)	-0.035 (-0.98)	0.552 (1.02)	-0.274 (-2.97)	-0.248 (-4.13)	Yes
	Change in Credit (10-yr rise, % GDP)	-0.017 (-0.93)	-0.011 (-1.05)	0.210 (1.03)	-0.089 (-1.65)	-0.089 (-2.35)	
	Credit Depth of Information Index (higher=more)	-0.008 (-1.06)	0.000 (0.05)	0.224 (2.4)	-0.006 (-0.37)	-0.018 (-1.33)	
	Bank liquid reserves to bank assets ratio (%)	0.000 (3.84)	0.000 (0.5)	-0.000 (-11.44)	-0.002 (-0.54)	-0.002 (-0.79)	Yes
CURRENT	Current Account (% GDP)	0.001 (1.48)	0.002 (2.7)	-0.023 (-2.09)	0.009 (3.84)	0.007 (3.95)	Yes
	Current Account, 5-yr Average (% GDP)	0.000 (0.48)	0.001 (1.82)	-0.025 (-1.72)	0.007 (2.4)	0.006 (2.74)	Yes
	Current Account, 10-yr Average (% GDP)	0.000 (0.14)	0.002 (1.39)	-0.035 (-2.11)	0.008 (2.21)	0.007 (2.44)	Yes
	Net National Savings (% GNI)	0.002 (1.6)	0.001 (2.33)	-0.013 (-1.22)	0.006 (2.92)	0.004 (2.28)	Yes
	Gross National Savings (% GDP)	0.003 (2.01)	0.001 (2.53)	-0.015 (-1.36)	0.008 (3.42)	0.006 (3.03)	Yes

Conclusions from Frankel & Saravelos (May 2010)

- Early Warning Indicators *were* useful in predicting which countries were hit by the 2008-09 global financial shock,
- especially the most tried-and-true EWIs:
 - Reserves
(e.g., as a ratio to short-term debt),
 - Preceding real exchange rate appreciation
(relative to a long-run average RER).
- Among others that do the best: CA & Natl. Saving

Emerging markets came of age in 2009:

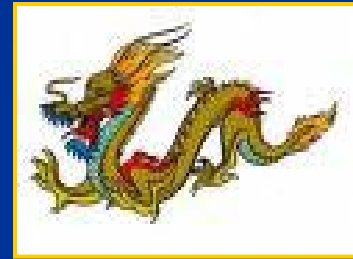
- Decoupling

and

- the new countercyclical fiscal policy

De-coupling turned out to be real after all

- at least with respect to East Asia, which has rebounded very strongly over the last year,
 - after a sharp loss of exports over the preceding year,
 - from 2008 Q1 to 2009 Q1.



■ China's growth

- has not only returned to its blistering pace of 10%
- but by now is a source of *global* growth
 - because China is now a much larger share of the world economy than in the 1980s or 90s.



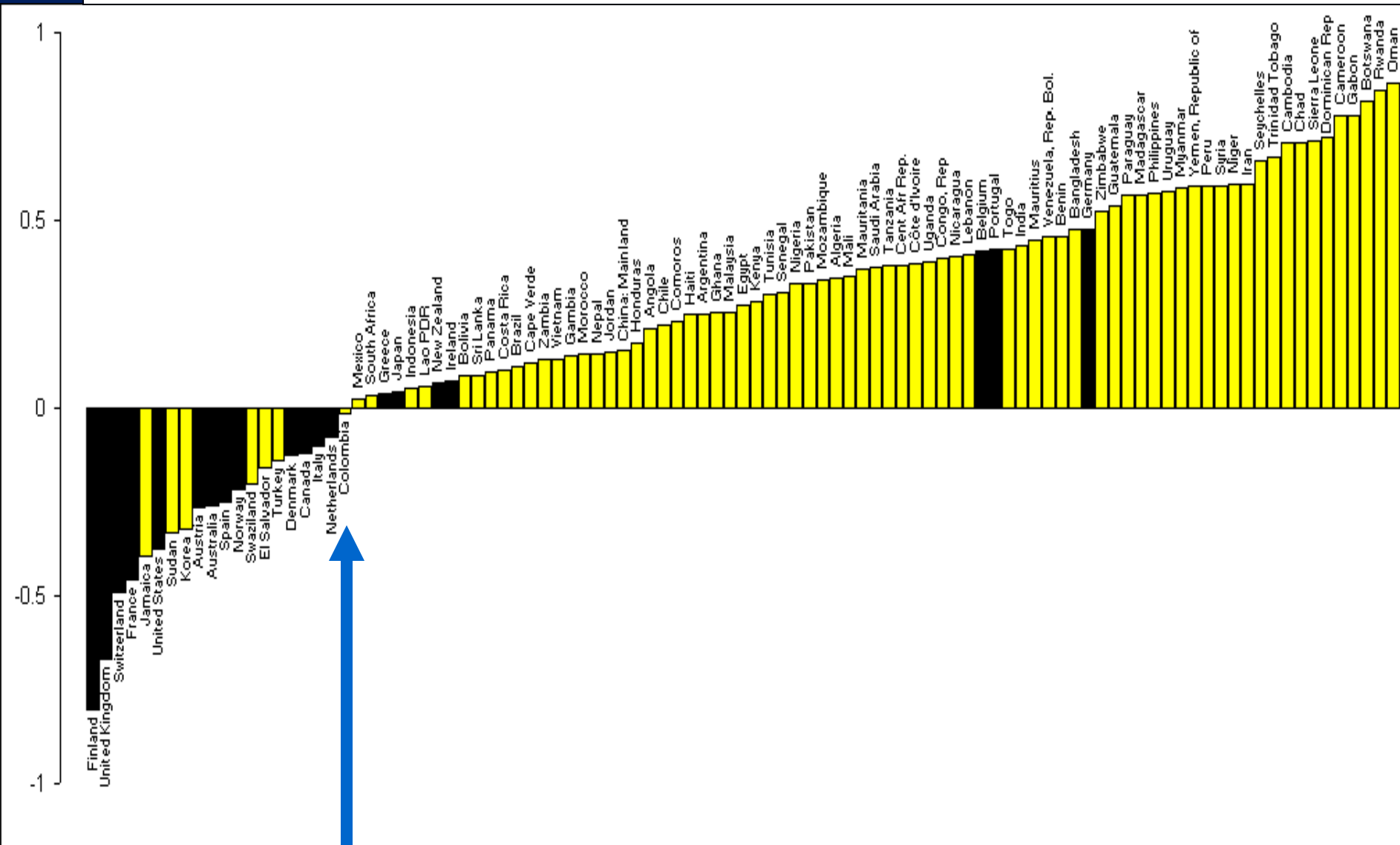
- India, Indonesia, & other Asian countries also weathered the global recession well, and are growing strongly.

The new countercyclical fiscal policy

- Fiscal policy used well would be countercyclical -- moderating fluctuations.
- In developing countries, unfortunately, fiscal policy has in the past tended to be *procyclical* -- expanding in booms, contracting in recessions.
 - It has been worse in Latin America,
 - and among commodity producers.
 - The US made the same mistake during 2003-2007: failed to take advantage of the expansion to reduce the structural budget deficit.
- References for procyclical fiscal policy:
 - E.Mendoza & P.M. Oviedo, NBER SI, 2006
 - E.Talvi & C.Vegh, *JDE*, 2005
 - M.Gavin & R.Perotti, *NBER Macro Annual*, 1997
 - Kaminsky, Reinhart & Vegh, "When it Rains, it Pours," *NBER Macro Annual* 2004
 - A.Alesina & G.Tabellini, 2005

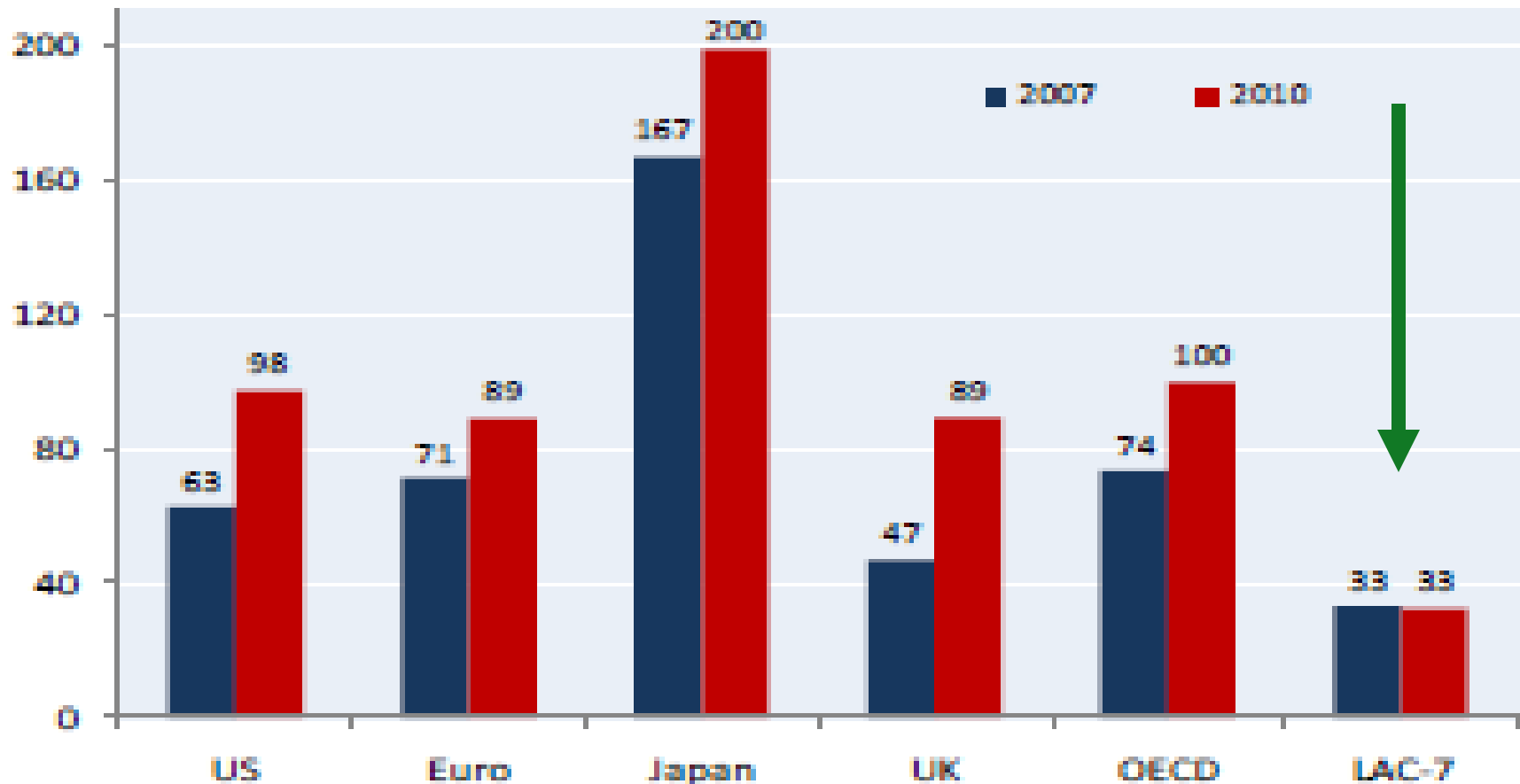
In the past, correlations between government spending & GDP > 0 for most developing countries.

Source: Reinhart, et al (2004)



But by 2007, Latin America had reduced its debts below levels of the advanced countries

Gross Nominal Liabilities**
% of GDP

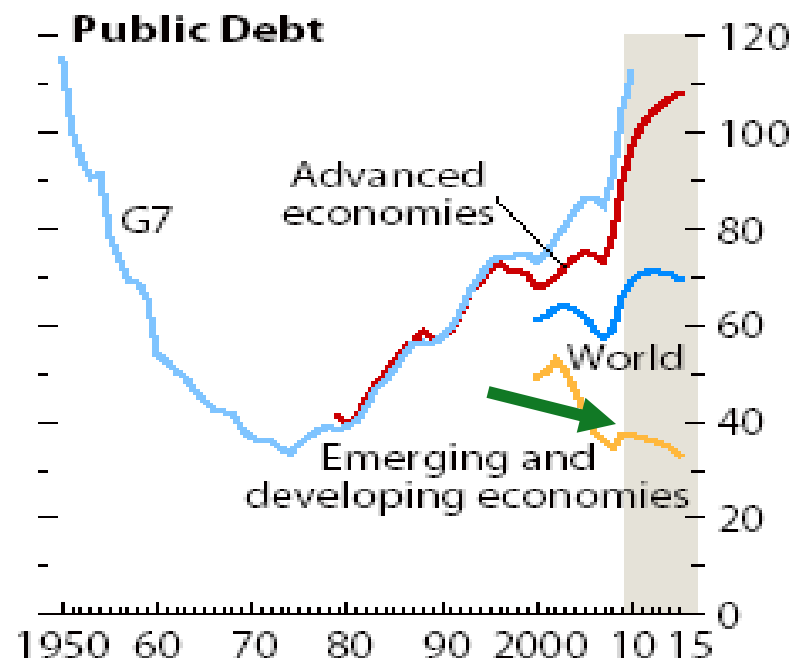
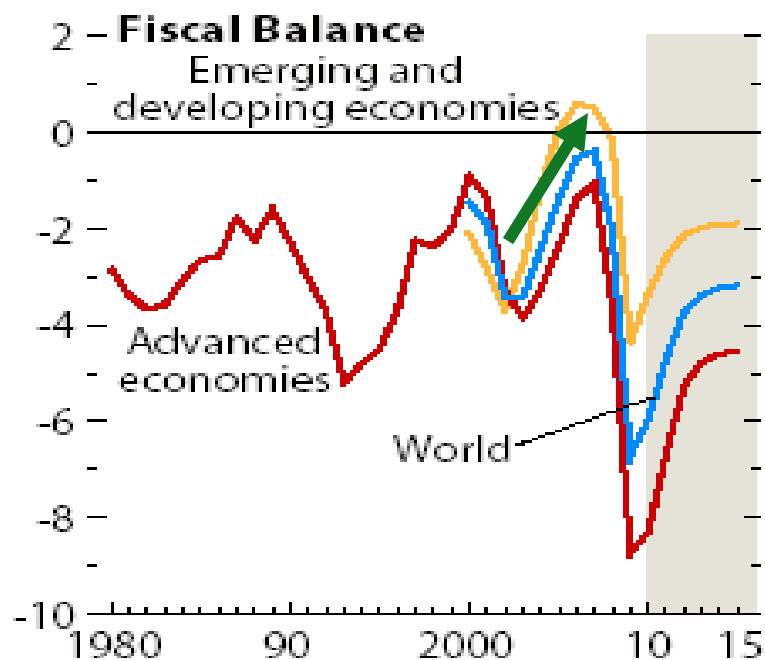


Source: EIU and Consensus Forecasts (various issues).

Figure 1.7. General Government Fiscal Balances and Public Debt

(Percent of GDP unless noted otherwise)

By 2007, emerging & developing economies had achieved fiscal balance and debt/GDP ratios well below those of advanced economies

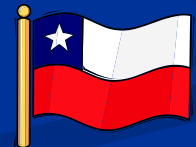


The fruits of fiscal discipline:

- For the first time, Korea has a higher credit rating than Iceland or Greece
- Developing countries were able to respond to the 2008-09 recession with fiscal expansion to moderate the downturn.

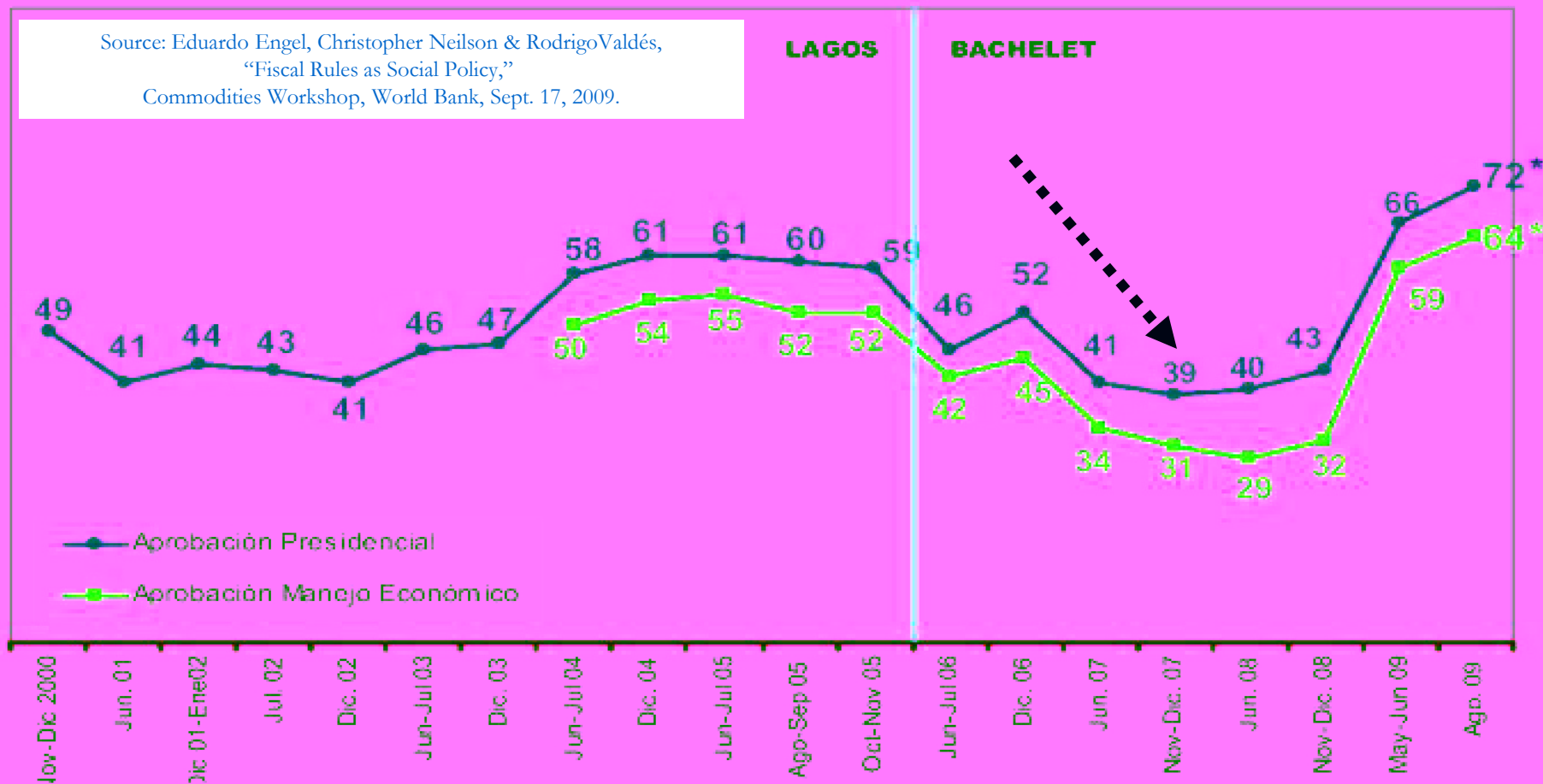
Developing countries in 2009, for the 1st time, were able to run countercyclical fiscal policies:

- those that had wisely saved during the boom,
 - often in the form of ForEx reserves or a SWF.
- On a global scale, China's fiscal expansion was the most important example.
- Chile's institutional reform could be a model for all:
 - Structural surplus of 1% of GDP (reduced to ½ %, then 0)
 - if economy is at full employment & price of copper at its long-run level.
 - Estimates of full employment & LR price of copper are made by commissions of experts, *not* politicians.



As late as June 2008, President Bachelet & Finance Minister Velasco had the lowest popularity ratings of any since the restoration of democracy in Chile.

Source: Eduardo Engel, Christopher Neilson & Rodrigo Valdés,
 "Fiscal Rules as Social Policy,"
 Commodities Workshop, World Bank, Sept. 17, 2009.

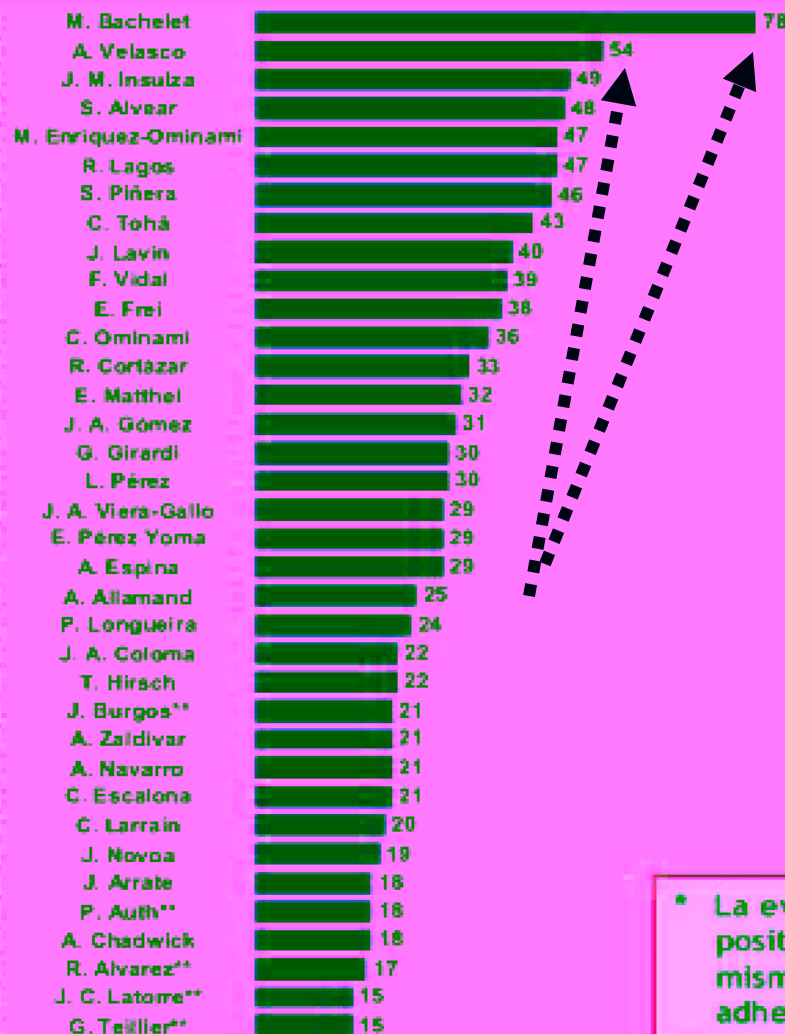
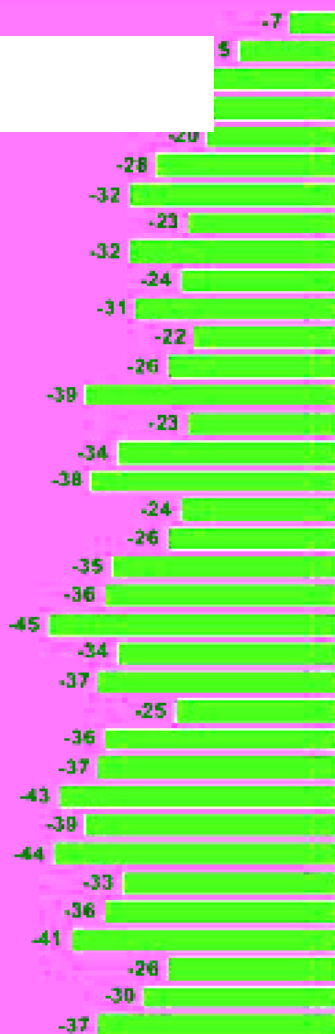


Why such a change in approval of economic performance?

A year later, the pair had the highest popularity rating of any since the restoration of democracy.

Source: Engel, Neilson & Valdés, 2009.

% NEGATIVA + MUY NEGATIVA



% POSITIVA + MUY POSITIVA

Nota 1: Al entrevistado se le lee una lista cerrada de personajes que debe evaluar.

Nota 2: La evaluación positiva y negativa está medida entre quienes tienen opinión (se elimina la categoría No sabe, No contesta y No conoce a la persona).

* La evaluación positiva no es lo mismo que la adhesión política.
 ** Con menos de 50% de conocimiento

Commodity Prices

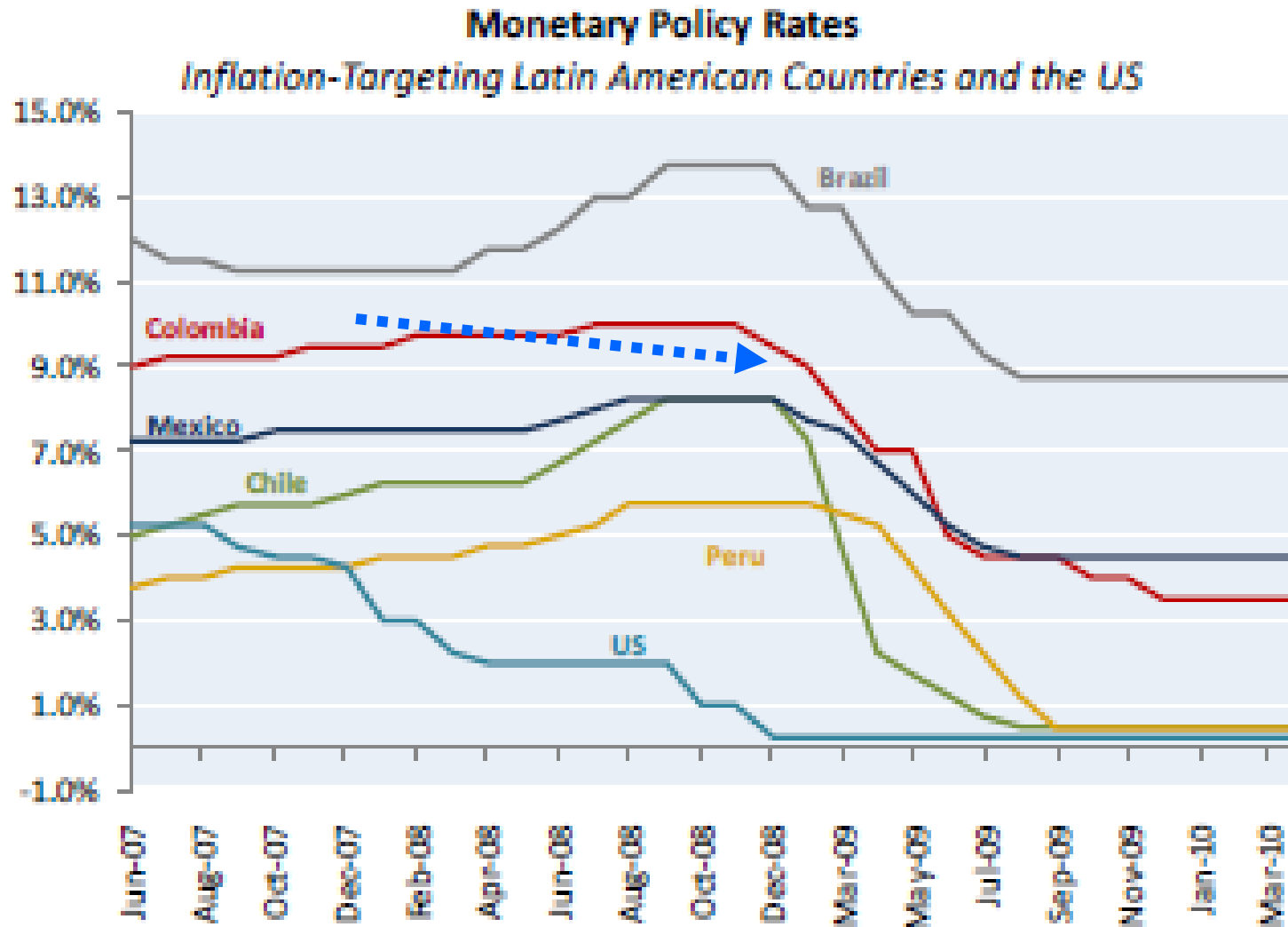
Wheat, Copper and Soybean: Index Jan-01-05=100

Oil WTI in Current US\$



Latin American countries were able to respond to the 2008-09 crisis with monetary ease, unlike in past crises

Figure 8. Monetary Policy Rates in LAC countries



Further thoughts on macro policy in commodity-exporting countries

- “The Natural Resource Curse: A Survey,” forthcoming in *Export Perils*, edited by B. Shaffer (U.Penn. Press). May 2010.
- A Comparison of Monetary Anchor Options for Commodity-Exporters in Latin America and the Caribbean,” *Myths and Realities of Commodity Dependence: Policy Challenges and Opportunities for Latin America and the Caribbean*, World Bank, Sept. 2009.
- “Peg the Export Price Index: A Proposed Monetary Regime for Small Countries,” *Journal of Policy Modeling*, June 2005 .

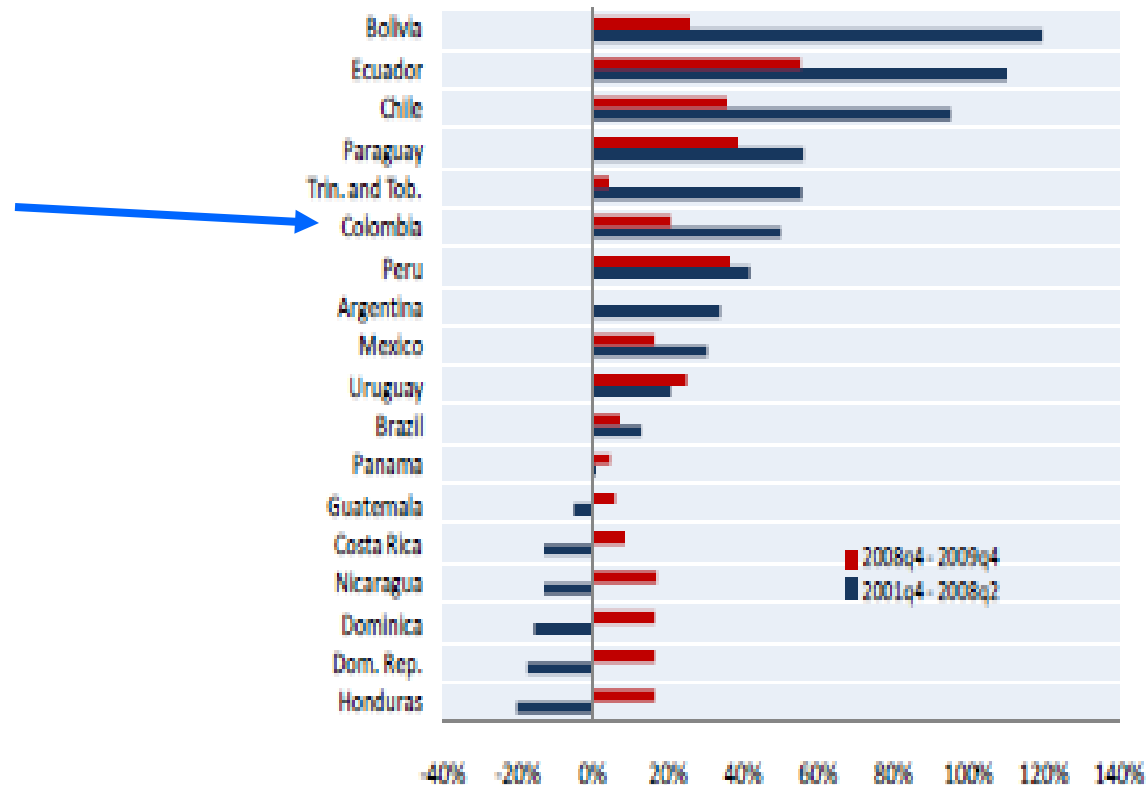
How does Colombia compare?

- Trade
- Impact on domestic macroeconomy



Figure 13. Terms of Trade

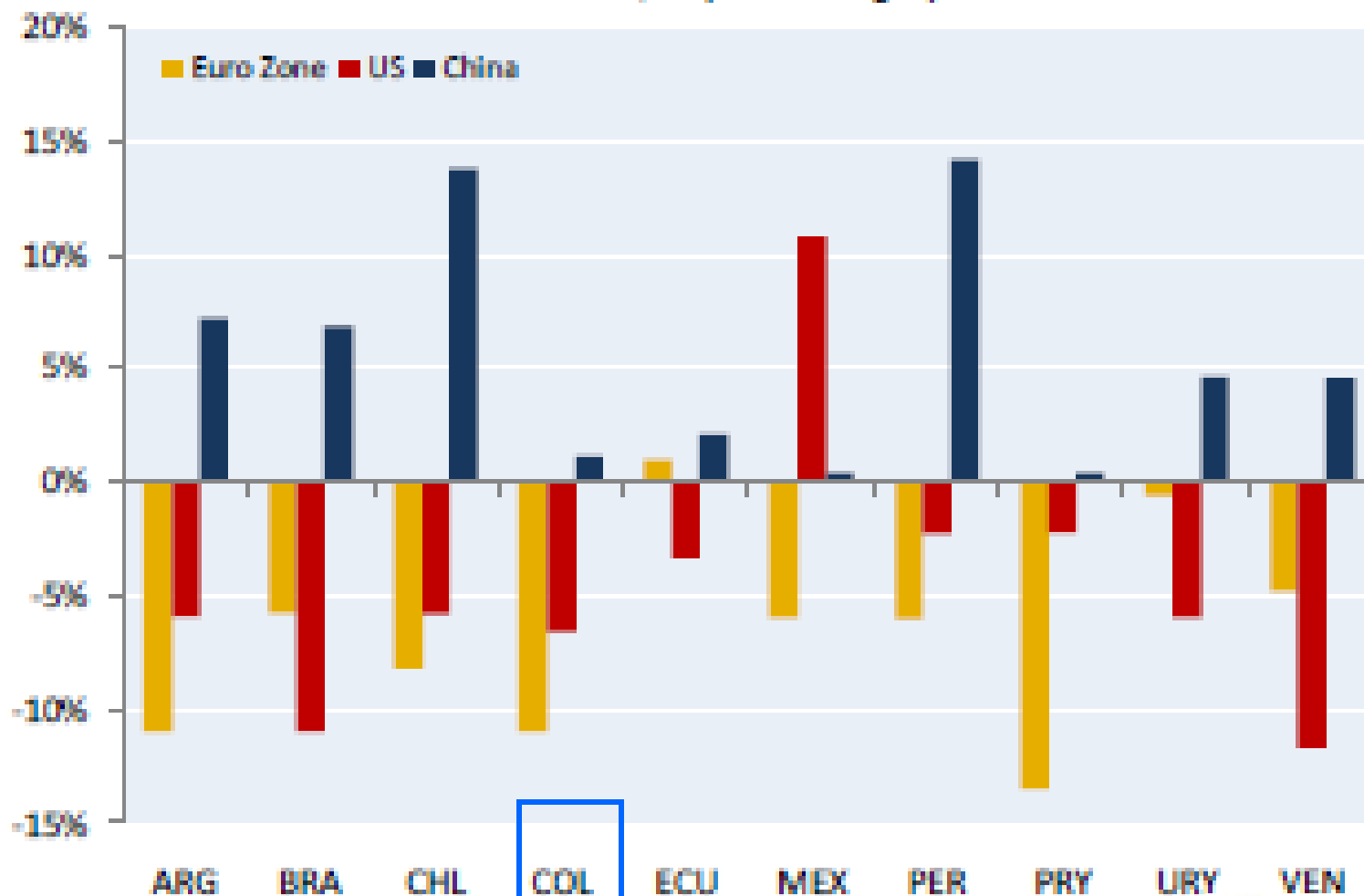
Cumulative Change in Terms of Trade



Note: The cumulative variation in the terms of trade index is calculated using quarterly data. The blue bars represent the cumulative percentage change during the recent commodity price boom up to the peak in 2008q2. The red bars capture the cumulative percentage change in terms of trade from its trough in 2008q4 to the most recently available quarter (2009q4). Source: WDI, DECPG, and Haver Analytics.

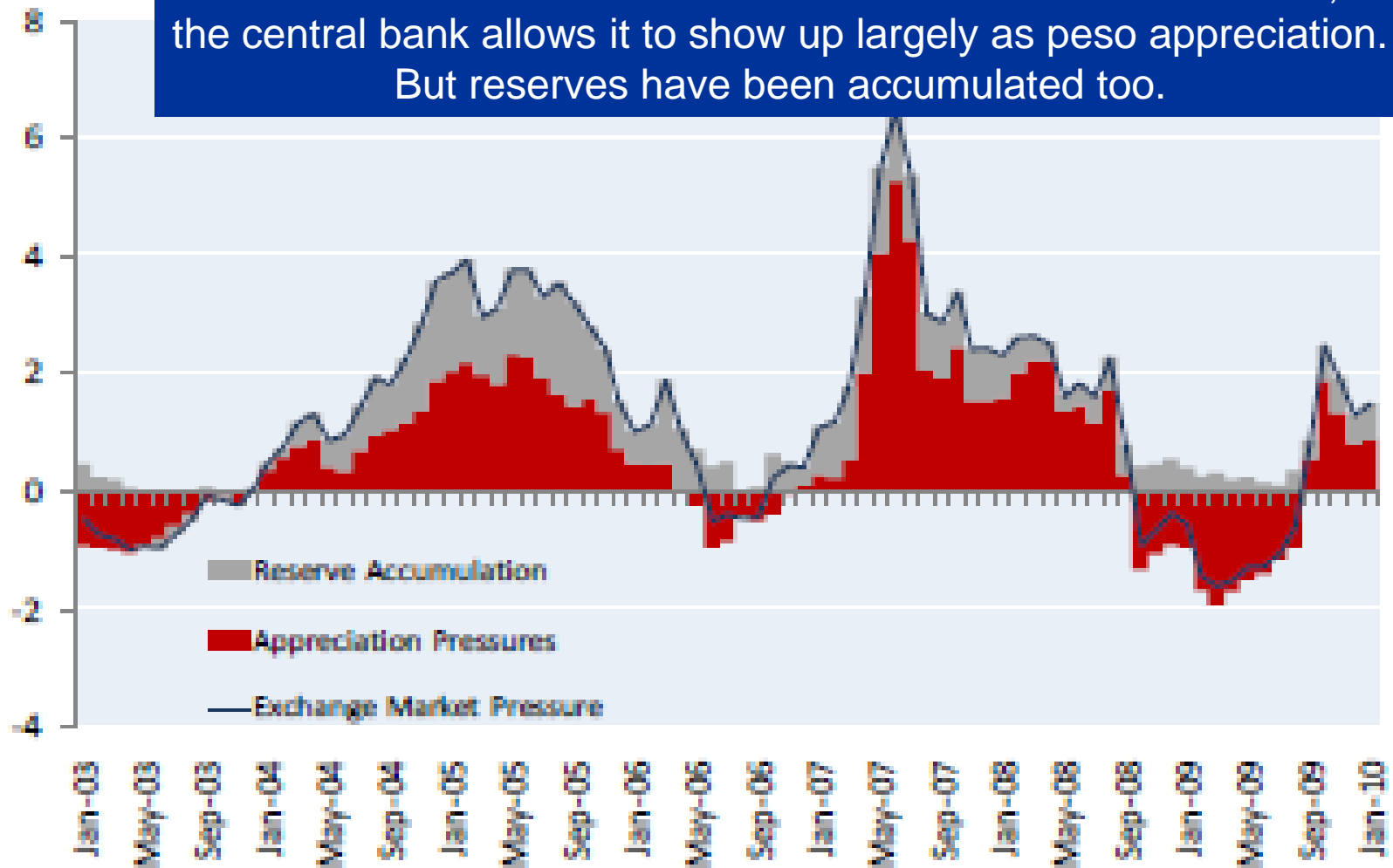
Figure 9. Variation in Export Market Shares in LAC

Variation in Export Market Shares for LAC Countries
2008 vs. 1990, in percentage points



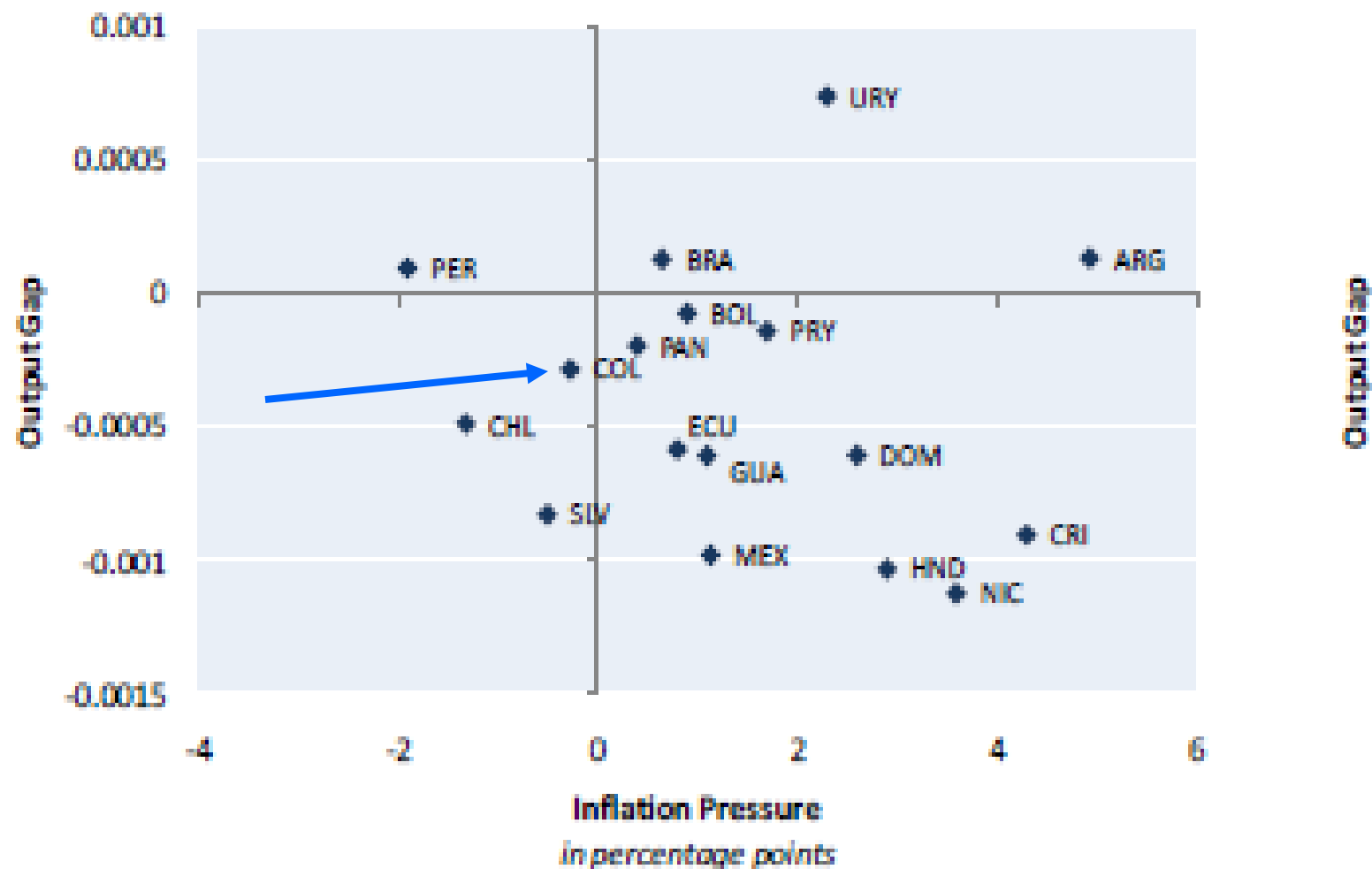
Exchange Market Pressure

When international demand for Colombian assets increases, the central bank allows it to show up largely as peso appreciation. But reserves have been accumulated too.



Note: The Exchange Market Pressure Index is the weighted average of year-on-year percentage changes in: (a) the nominal exchange rate of the local currency vis-à-vis the US dollar (such that an increase represents an appreciation of the LAC currency), and (b) the level of international reserves. The weights are given by the inverse of the annual standard deviation of the change in the standard deviation of the changes in reserves. An increase in the Exchange Market Pressure index indicates an accumulation of reserves. Source: LCRCE Staff calculations based on IMF's IFS.

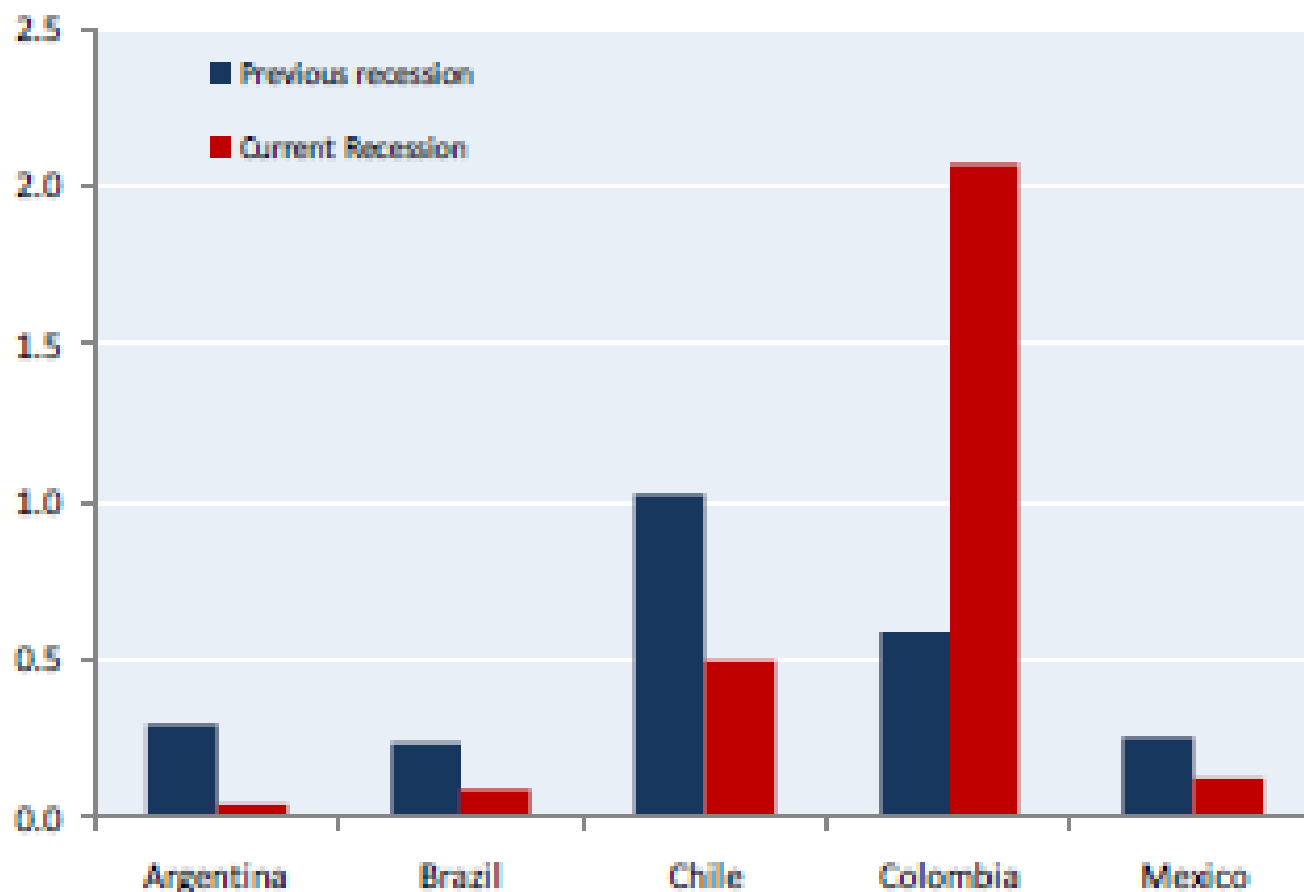
2010 Output and Inflation Gaps



Note: Inflation pressures are calculated as the difference between the 2010 inflation rate forecast and an estimated target of 4% (assumed to be the target for most countries in the region). The output gap calculated as the difference between the (log of) actual and potential GDP, with the latter being calculated using the Hodrick-Prescott filter. Source: LCRCE Staff calculations based on Consensus Forecasts as of March 2010.

Employment was unusually sensitive to economic activity in Colombia, as in the US, but not most other countries (neither Latin America nor Europe)

Elasticity of Unemployment With Respect to GDP Growth



Note: Previous recession periods are: Argentina (1998.Q4 – 2002.Q2); Brazil (1997.Q4 – 1998.Q2); Chile (1998.Q3 – 1999.Q4); Colombia (1998.Q3 – 1999.Q4); and Mexico (1995.Q1 – 1996.Q1). Current recession periods are: Argentina (2008.Q3 – 2009.Q2); Brazil (2008.Q4 – 2009.Q2); Chile (2008.Q3 – 2009.Q3); Colombia (2008.Q3 – 2009.Q2); and Mexico (2008.Q2 – 2009.Q2). Source: LCRCE Staff calculations based on National Statistical Institutes data.

Table II.A.1. Dating Recessions in Selected LAC Countries

Country	Sample	Recessions				Expansions		
		N° of Quarters	N° of Episodes	N° of Quarters	Avg. Duration	N° of Episodes	N° of Quarters	Avg. Duration
Argentina	1990q1 - 2009q3	79.00	5.00	37.00	7.40	4.00	42.00	10.50
Brazil	1991q1 - 2009q3	75.00	7.00	25.00	3.57	6.00	50.00	8.33
Chile	1980q1 - 2009q3	119.00	5.00	28.00	5.60	3.00	91.00	30.33
Colombia	1994q1 - 2009q2	62.00	3.00	11.00	3.67	2.00	51.00	25.50
Mexico	1980q1 - 2009q3	119.00	8.00	42.00	5.25	7.00	77.00	11.00

Source: LCRCE Staff Calculations

D. Colombia

Recessions in Colombia

Period	Duration	Amplitude	Quarter Amplitude
1998q2 - 1999q2	5	-6.8%	-1.4%
2002q2 - 2002q4	3	-0.7%	-0.2%
2008q2 - 2008q4	3	-1.2%	-0.4%

