

Latin America: Macroeconomic Stability and Challenges

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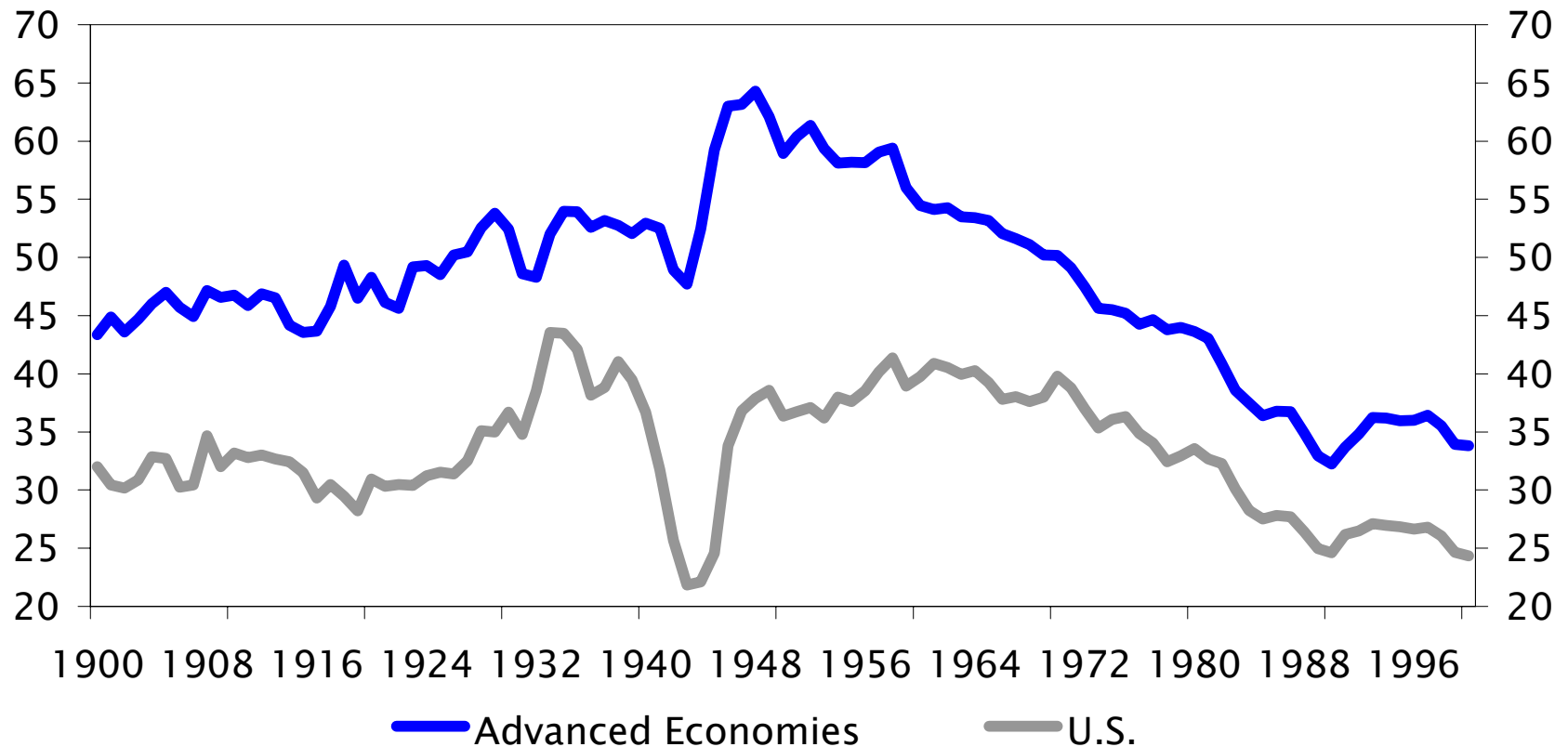
Presented at the Conference on "Latin America Growth and Stability", Graduate School of Business University of Chicago (June 1st, 2006) and the Chicago Council of Foreign Relations (June 2nd, 2006)

Outline

- Long term view
 - Growth performance
 - Openness, regional trade and institutions
 - Inequality and distortions
- Recent developments
- Strengths and vulnerabilities
 - Progress
 - Commodity cycle
 - Fiscal sustainability
 - Global Imbalances
- Concluding remarks

Long Term View: Growth Performance

Figure 1 (a): Latin America Relative Per Capita GDP (%)
Simple Average



Long Term View: Growth Performance

Table 2: GDP Per Capita as % of the USA

	1900	1913	1950	1960	1970	1980	1990	2000
Argentina	0.67	0.72	0.52	0.49	0.49	0.44	0.28	0.30
Bolivia	n.a.	n.a.	0.20	0.14	0.14	0.14	0.09	0.09
Brazil	0.17	0.15	0.17	0.21	0.20	0.28	0.21	0.20
Colombia	0.24	0.23	0.23	0.22	0.21	0.23	0.21	0.18
Chile	0.48	0.50	0.40	0.38	0.35	0.31	0.28	0.35
Ecuador	n.a.	n.a.	0.19	0.20	0.19	0.22	0.17	0.11
Mexico	0.33	0.33	0.25	0.28	0.29	0.34	0.26	0.26
Paraguay	n.a.	n.a.	0.17	0.14	0.12	0.18	0.14	0.11
Peru	0.20	0.20	0.24	0.27	0.25	0.23	0.13	0.13
Uruguay	0.54	0.62	0.49	0.44	0.34	0.35	0.28	0.28
Venezuela	0.20	0.21	0.78	0.85	0.71	0.55	0.36	0.30
<i>Latin America</i>	<i>0.32</i>	<i>0.29</i>	<i>0.31</i>	<i>0.35</i>	<i>0.33</i>	<i>0.32</i>	<i>0.22</i>	<i>0.22</i>
<i>East Asia (9)</i>	<i>0.16</i>	<i>0.18</i>	<i>0.13</i>	<i>0.14</i>	<i>0.17</i>	<i>0.24</i>	<i>0.29</i>	<i>0.33</i>
<i>Asian-4</i>	<i>n.a.</i>	<i>0.19</i>	<i>0.16</i>	<i>0.18</i>	<i>0.25</i>	<i>0.40</i>	<i>0.54</i>	<i>0.66</i>

Source: Maddison (2001)

Long Term View: Growth Performance

$$Y_{jt} = A_{jt} K_{jt}^{\alpha} H_{jt}^{1-\alpha} \quad (1)$$

$$\frac{y_j}{y_i} = \left(\frac{A_j}{A_i} \right)^{1/(1-\alpha)} \left(\frac{k_j / y_j}{k_i / y_i} \right)^{\alpha/(1-\alpha)} \frac{h_j}{h_i}. \quad (5)$$

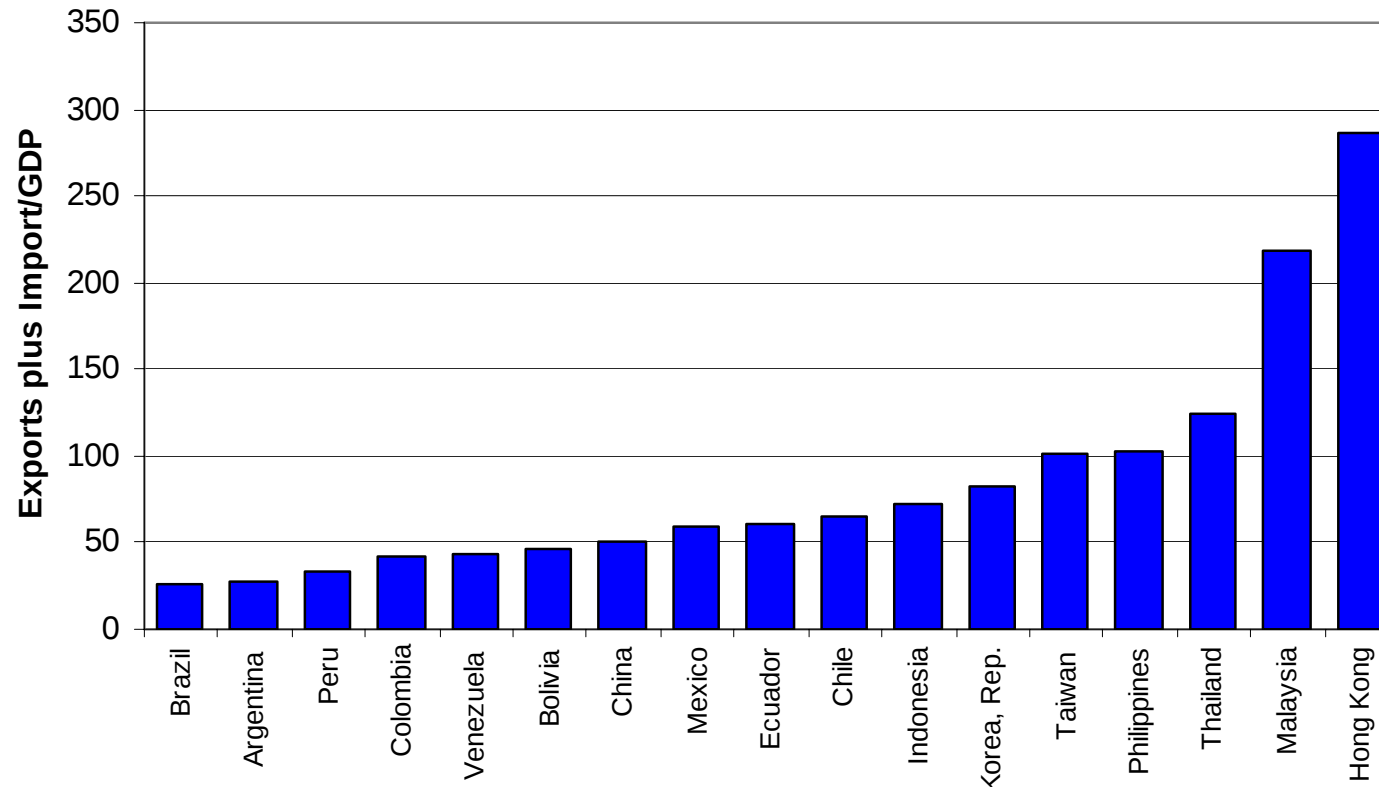
$$h = e^{\phi E}, \quad (6)$$

Long Term View: Growth Performance

	Per capita GDP	Capital-Output	Human Capital	Productivity
		Ratio		
Argentina	0.398	0.921	0.943	0.458
		[0.432]	[0.422]	[0.868]
Chile	0.389	0.863	0.694	0.649
		[0.450]	[0.560]	[0.599]
Colombia	0.178	0.701	0.629	0.403
		[0.254]	[0.283]	[0.441]
Mexico	0.381	0.922	0.684	0.604
		[0.413]	[0.557]	[0.631]
Peru	0.156	1.006	0.695	0.224
		[0.155]	[0.225]	[0.699]
Venezuela	0.275	0.936	0.666	0.441
		[0.294]	[0.413]	[0.624]
Corea	0.571	1.185	0.977	0.493
		[0.482]	[0.584]	[1.158]
Greece	0.546	1.127	0.940	0.515
		[0.485]	[0.581]	[1.060]
Israel	0.675	1.114	0.955	0.634
		[0.605]	[0.706]	[1.065]
Asia-4	0.670	1.089	0.885	0.724
		[0.640]	[0.788]	[0.963]
Latin America	0.225	0.816	0.648	0.464
		[0.301]	[0.379]	[0.529]

Long Term View: Openness, Regional Trade and Institutions

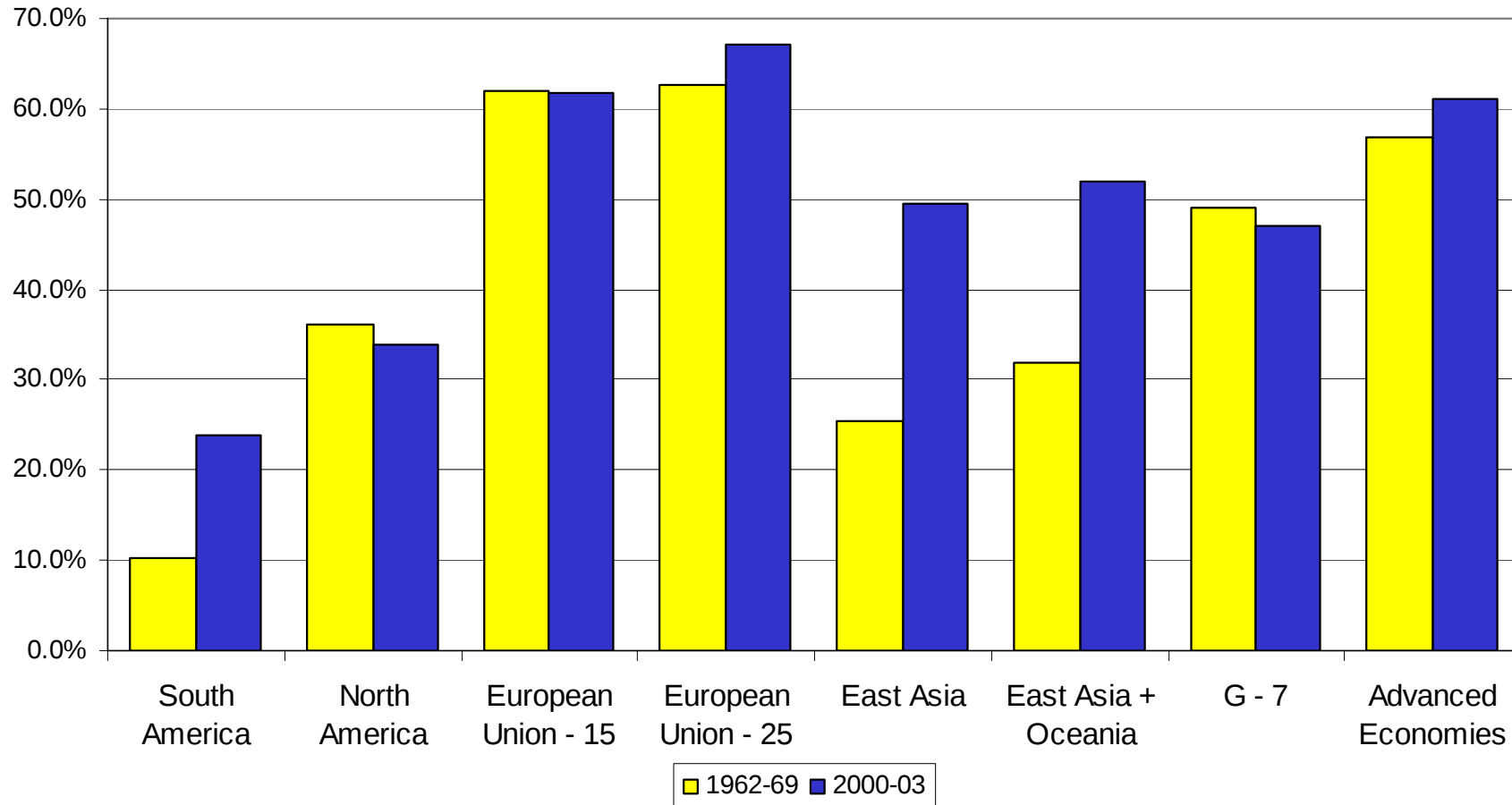
Figure 2: Trade as % of GDP (2000-2002)



Source: World development indicators, Department of Statistics of Taiwan, Singapore Statistics. All figures are expressed in dollars of each year.

Long Term View: Openness, Regional Trade and Institutions

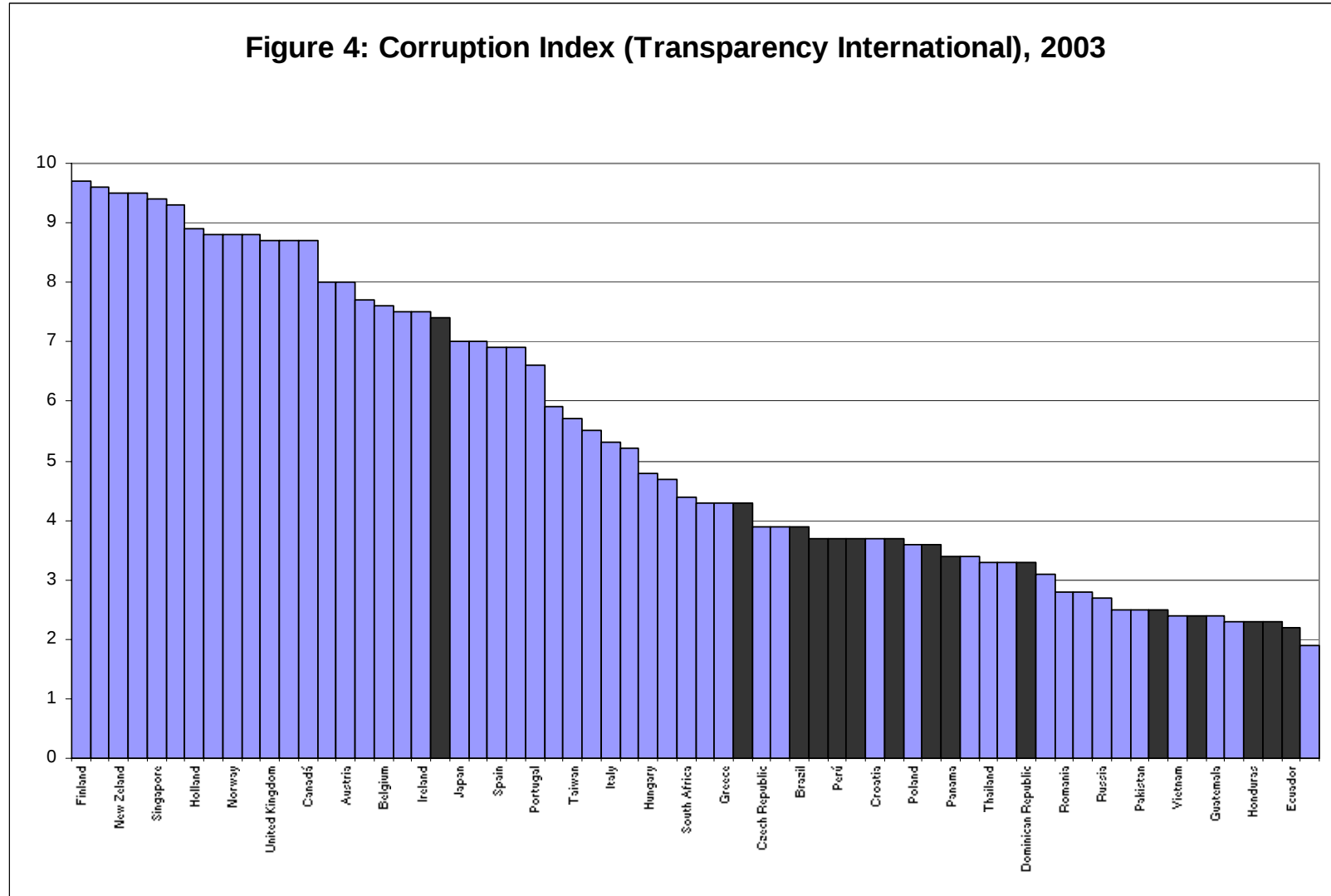
Figure 3: Intraregional Trade



Source: Comtrade Database, United Nations.

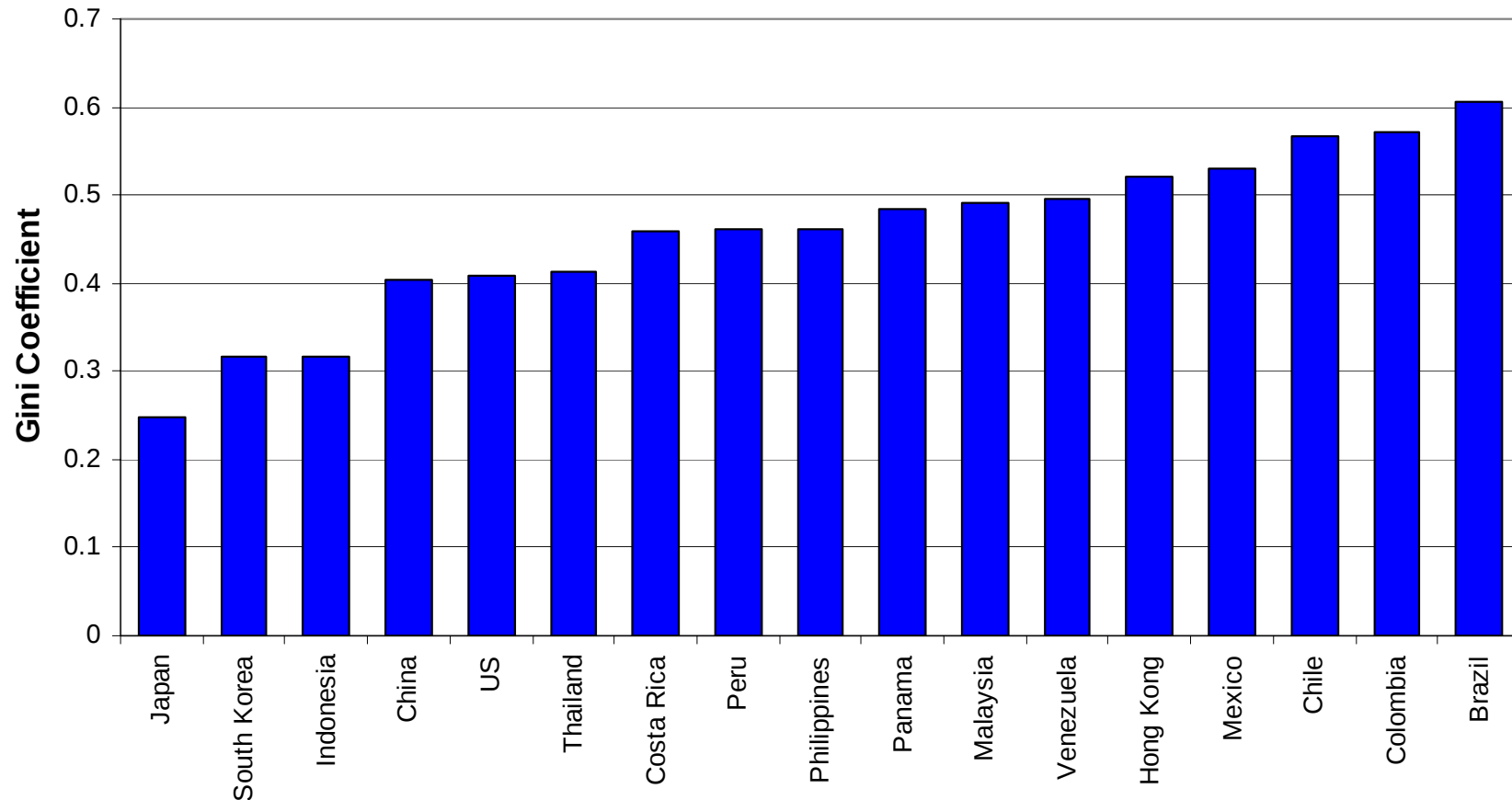
Long Term View: Openness, Regional Trade and Institutions

Figure 4: Corruption Index (Transparency International), 2003



Long Term View: Inequality and distortions

Figure 5: Income Distribution in the 1990s



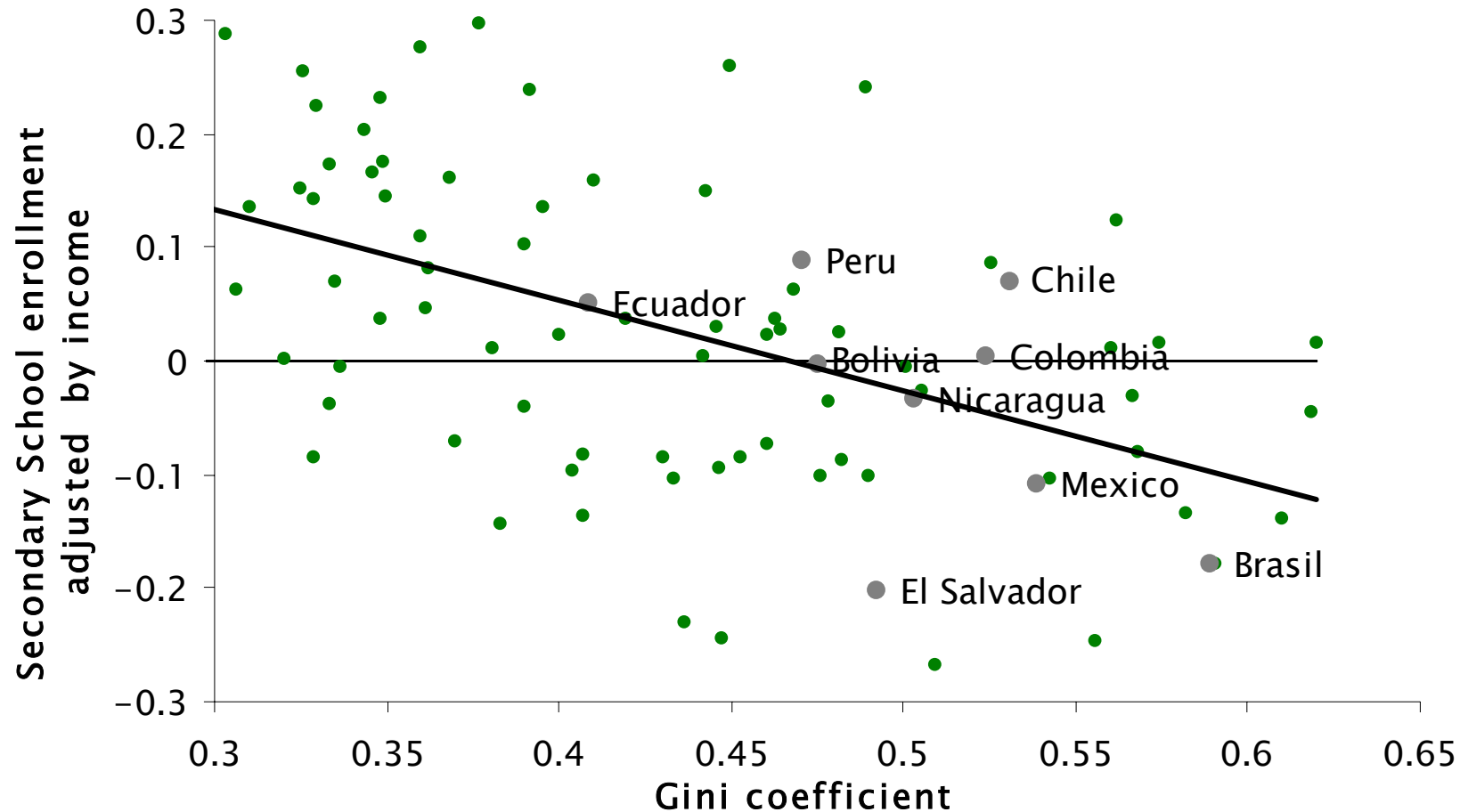
Source: World Bank

Long Term View: Inequality and distortions

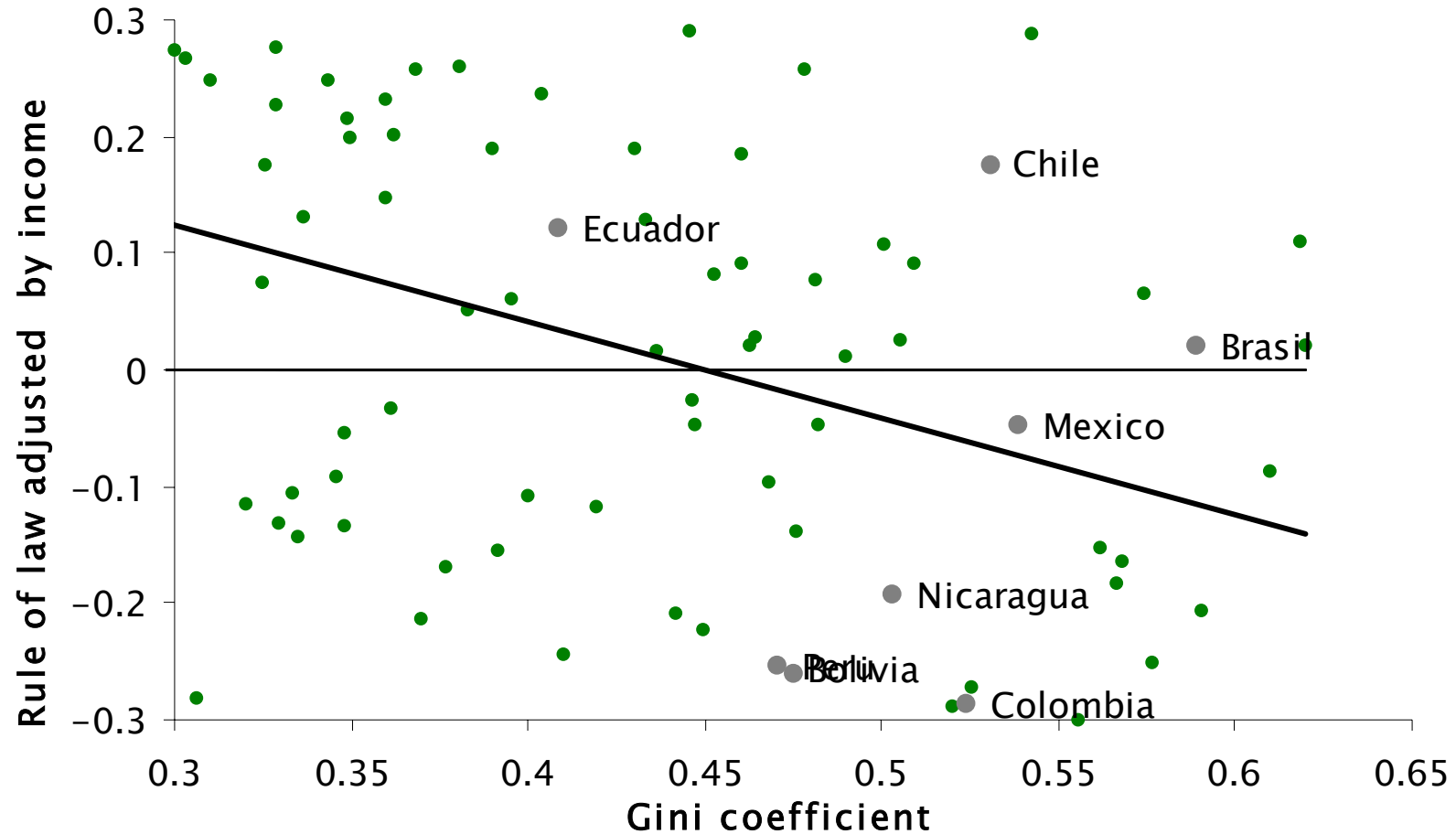
- Effects of inequality on growth are mostly negative but with some caveats
- But, inequality has negative effects on economic growth by introducing distortions and bad policies:

	Dependent variable	Gini index
(1)	Growth rate regression	-0.001 (0.018)
(2)	Fertility (log)	1.335 (0.146)
(3)	Government consumption/GDP	0.143 (0.036)
(4)	Secondary school enrollment	-0.800 (0.098)
(5)	Rule-of-law index	-0.869 (0.126)

Long Term View: Inequality and distortions



Long Term View: Inequality and distortions



Recent Developments

GDP Growth (%)

	1993-2002	2002-2006(f)	2005	2006(f)	2007(f)
World	3.5	4.4	4.8	4.9	4.7
Argentina	0.7	4.7	9.2	7.3	4.0
Bolivia	3.5	3.4	3.9	4.1	3.9
Brazil	3.0	2.6	2.3	3.5	3.5
Chile	5.0	4.8	6.3	5.5	5.2
Colombia	2.4	4.0	5.1	4.5	4.0
Ecuador	2.2	3.8	3.3	3.0	2.2
El Salvador	3.9	2.4	2.8	3.5	3.5
Guatemala	3.7	2.9	3.2	4.1	4.0
Mexico	2.8	2.6	3.0	3.5	3.1
Peru	4.4	5.1	6.7	5.0	4.5
Uruguay	0.5	2.7	6.0	4.0	3.5
Venezuela	0.1	3.3	9.3	6.0	3.0
LA Average	2.7	3.6	4.8	4.3	3.8

(f) Forecast

Source: World Economic Outlook, April 2006

Recent Developments

Inflation Rates (%)

	1980s	1990-94	1995-99	2000-04	2005	2006(f)	2007(f)
Argentina	565.7	505.1	0.8	8.3	9.6	12.9	15.0
Bolivia	1383.2	13.4	7.4	3.0	5.4	3.4	3.1
Brazil	354.5	1667.2	19.4	8.7	6.9	4.9	4.4
Chile	21.4	17.5	6.0	2.8	3.1	3.8	3.0
Colombia	23.5	26.6	17.8	7.3	5.0	4.7	4.2
Ecuador	34.0	44.8	33.2	31.4	2.4	3.4	3.0
Mexico	69.0	16.3	24.5	6.0	4.0	3.5	3.0
Paraguay	20.2	23.1	9.7	9.1	6.8	7.4	4.4
Peru	481.3	1607.4	8.4	2.4	1.6	2.7	2.2
Uruguay	57.6	76.4	21.4	10.6	5.9	5.5	4.9
Venezuela	23.0	41.0	53.8	20.8	15.9	11.7	17.3
LA Average	150.6	236.5	17.0	8.7	7.2	6.6	5.9

(f) Forecast

Source: IMF, World Economic Outlook, April 2006

Recent Developments

Current Account (% of the GDP)

	1993-2002	2002-2006(f)	2005	2006(f)	2007(f)
Argentina	-2.2	4.1	1.8	1.2	0.5
Bolivia	-5.4	0.8	2.6	1.7	1.0
Brazil	-2.9	0.8	1.8	1.0	0.2
Chile	-2.7	-0.2	-0.4	0.5	-1.2
Colombia	-2.9	-1.4	-1.7	-1.6	-2.7
Ecuador	-2.4	-1.7	-0.9	0.2	0.4
El Salvador	-1.6	-3.8	-4.0	-4.0	-4.0
Guatemala	-5.0	-4.5	-4.5	-4.2	-4.3
Mexico	-3.1	-1.2	-0.7	-0.6	-0.8
Peru	-5.0	-0.2	1.3	1.4	0.3
Uruguay	-1.5	-1.2	-2.4	-5.8	-2.5
Venezuela	-3.8	13.5	19.1	14.1	13.4
LA Average	-2.6	-1.5	-1.1	-1.6	-1.7

(f) Forecast

Source: World Economic Outlook, April 2006

Strengths and Vulnerabilities: Progress

Significant advances in economic policy have been made in LA:

- Prudential fiscal policies
- Improvement of MP frameworks
- Structural reforms

Strengths and Vulnerabilities: Progress

Inflation Targeting Regimes in Latin America

	Adoption Date ^{1/}	Current Inflation target (%)	Current Inflation ^{2/}
<i>Brazil</i>	1999:Q2	4.5 (+/-2.5)	4.6
<i>Chile</i>	1999:Q3	2 - 4	3.8
<i>Colombia</i>	1999:Q3	5 (+/-0.5)	3.7
<i>Mexico</i>	2001:Q1	3 (+/-1)	3.2
<i>Peru</i>	2001:Q1	1.5 - 3.5	2.9

Sources: IMF, National authorities.

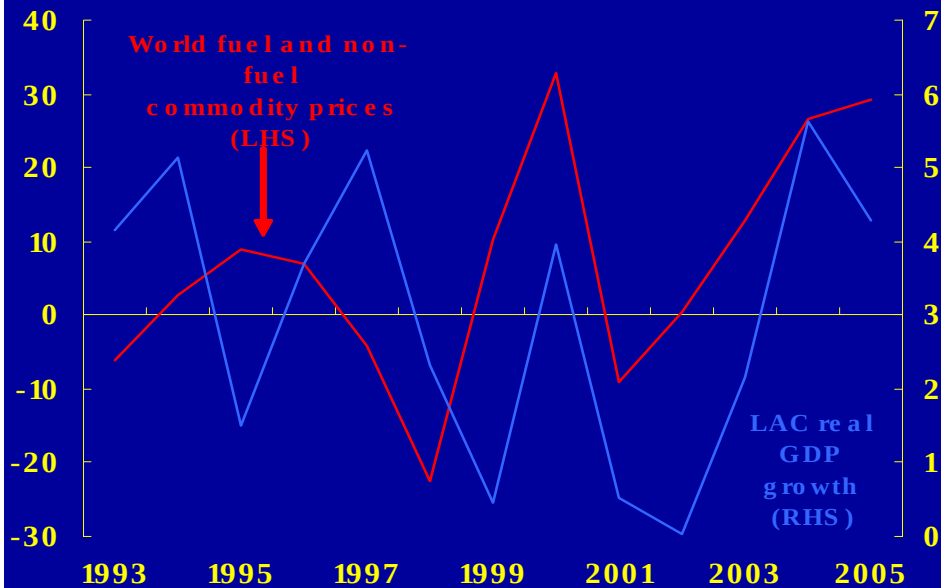
1/ Indicates when countries de facto adopted inflation targeting. Official adoption dates may vary.

2/ Twelve month percent change as of April.

Strengths and Vulnerabilities: Commodity Cycle

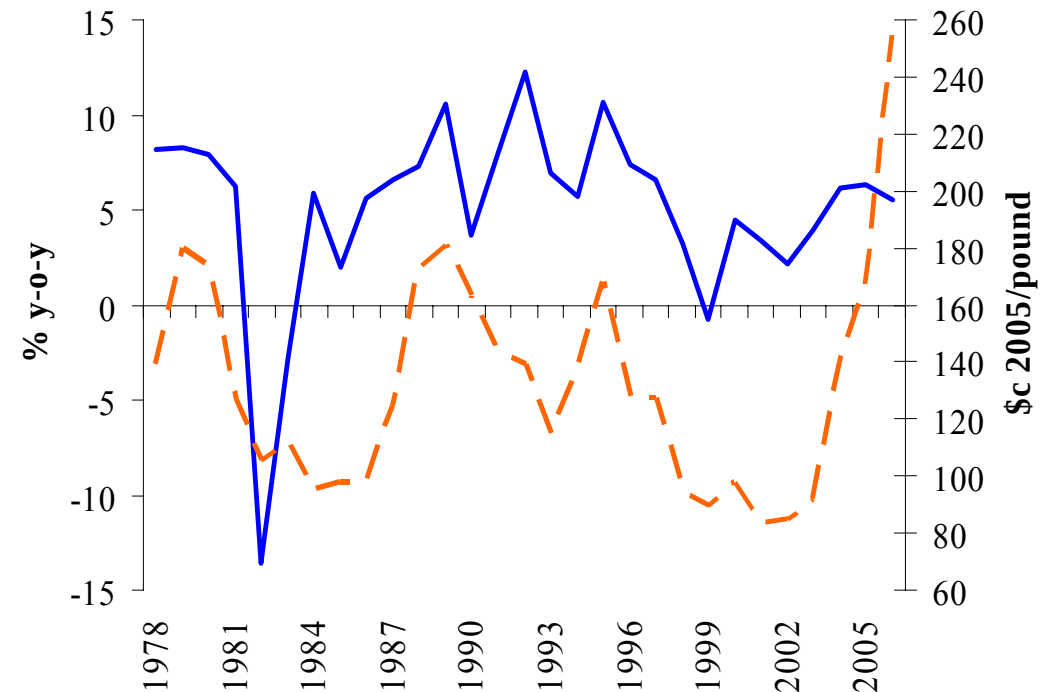
Growth and Commodity Prices

(Annual % change)



Source: IMF Staff estimates.

Chile: Copper Price and GDP



Source: Central Bank of Chile

— GDP — Copper Price

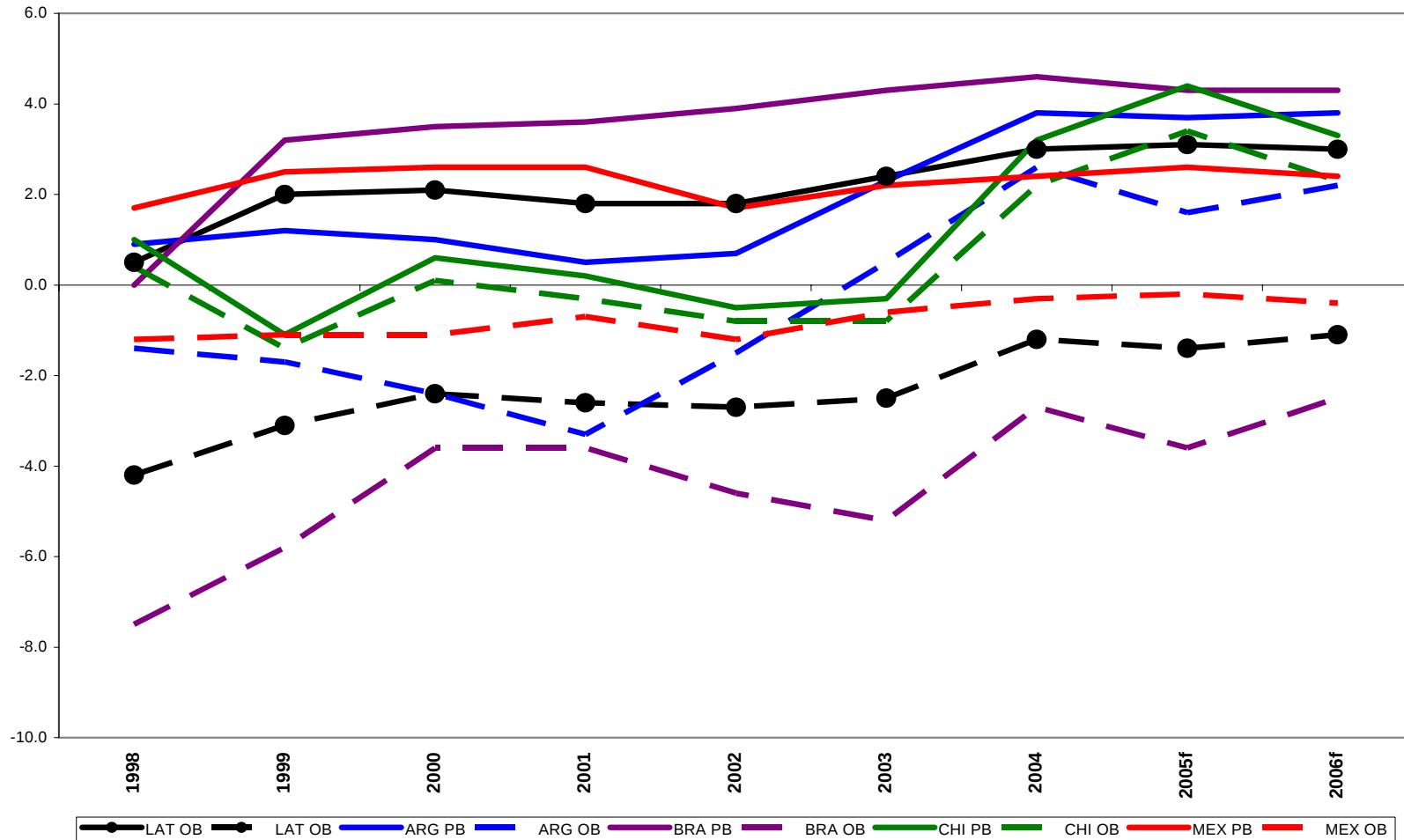
Strengths and Vulnerabilities: Fiscal

	1998	1999	2000	2001	2002	2003	2004	2005f	2006f
Latin America									
Primary Balance	0.5	2.0	2.1	1.8	1.8	2.4	3.0	3.1	3.0
Overall Balance	-4.2	-3.1	-2.4	-2.6	-2.7	-2.5	-1.2	-1.4	-1.1
Argentina									
Primary Balance	0.9	1.2	1.0	0.5	0.7	2.3	3.8	3.7	3.8
Overall Balance	-1.4	-1.7	-2.4	-3.3	-1.5	0.5	2.6	1.6	2.2
Brazil									
Primary Balance	0.0	3.2	3.5	3.6	3.9	4.3	4.6	4.3	4.3
Overall Balance	-7.5	-5.8	-3.6	-3.6	-4.6	-5.2	-2.7	-3.6	-2.5
Chile									
Primary Balance	1.0	-1.1	0.6	0.2	-0.5	-0.3	3.2	4.4	3.3
Overall Balance	0.4	-1.4	0.1	-0.3	-0.8	-0.8	2.2	3.4	2.3
Colombia									
Primary Balance	-1.9	-1.8	-1.9	-1.7	-2.5	-0.6	-1.2	-1.2	-1.2
Overall Balance	-4.7	-5.2	-5.8	-5.7	-6.4	-5.0	-5.5	-5.6	-5.7
Ecuador									
Primary Balance	-0.7	3.9	8.1	4.8	4.3	4.2	4.9	4.0	3.6
Overall Balance	-5.7	-4.7	1.5	0.0	0.8	1.2	2.3	1.5	1.0
Mexico									
Primary Balance	1.7	2.5	2.6	2.6	1.7	2.2	2.4	2.6	2.4
Overall Balance	-1.2	-1.1	-1.1	-0.7	-1.2	-0.6	-0.3	-0.2	-0.4
Peru									
Primary Balance	1.0	-0.9	-0.8	-0.2	-0.2	0.4	1.1	0.9	0.9
Overall Balance	-1.2	-3.3	-3.2	-2.5	-2.3	-1.8	-1.2	-1.4	-1.3
Venezuela									
Primary Balance	-0.7	1.5	-0.1	-3.4	-0.5	-1.3	0.2	2.0	1.6
Overall Balance	-3.9	-1.6	-2.6	-6.2	-4.8	-5.9	-3.9	-1.1	-1.2

Source: UBS, November 2005.

Strengths and Vulnerabilities: Fiscal

Fiscal Accounts: Primary and Overall Balance



Strengths and Vulnerabilities: Fiscal

Brazil's future fiscal sustainability

- Entrenching fiscal adjustment through sound institutions
- Restoring the government's creditworthiness
- Increasing public saving
- Deepening the social security reforms
- Reducing tax burden

Source: Giambiagi and Ronci (2006, OECD)

Strengths and Vulnerabilities: Fiscal

Fundamentals of Argentina's 2001 crisis

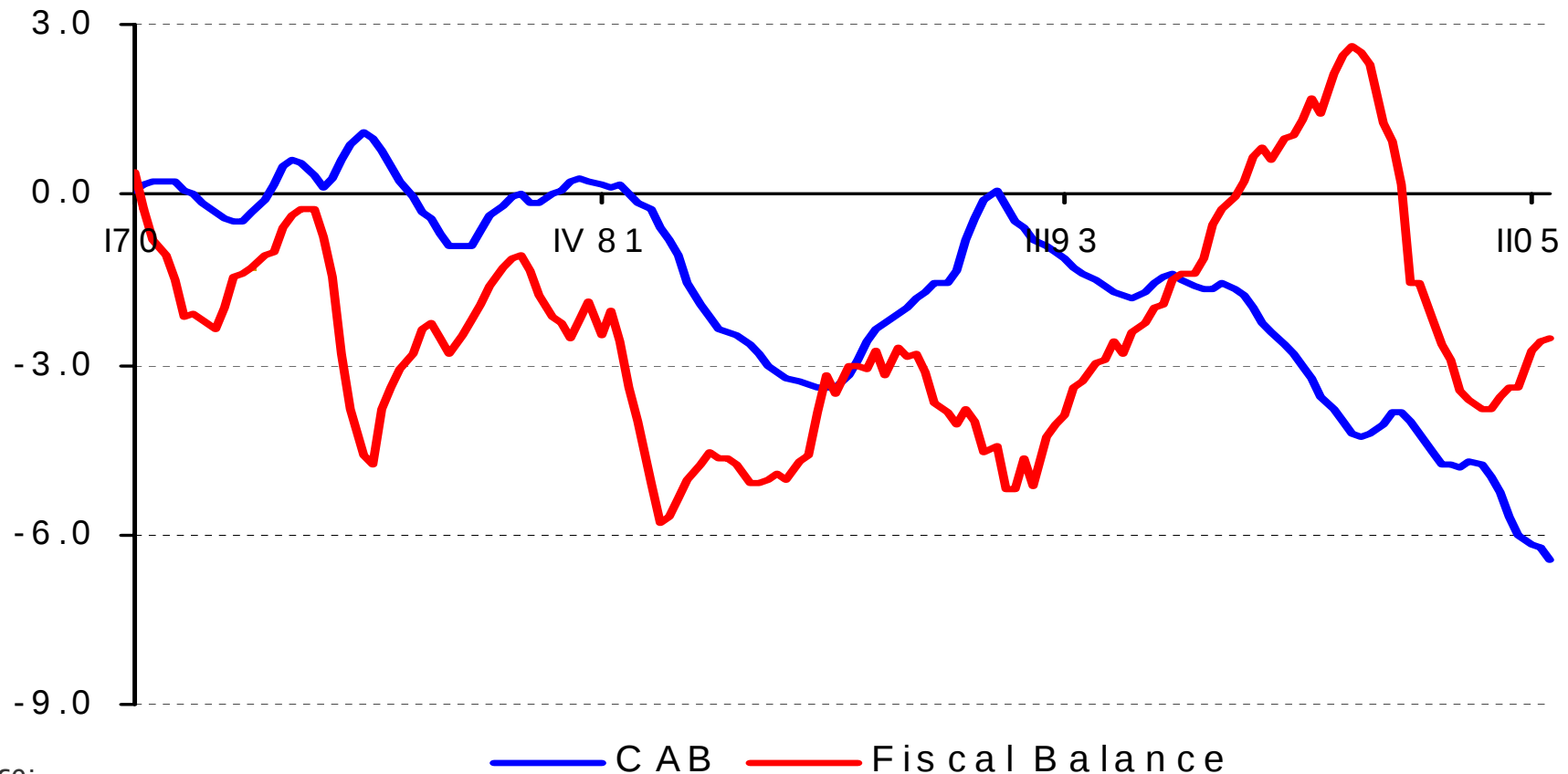
- Pension reform
- Unrecorded liabilities (fiscal “skeletons”)
- Refinancing at market rates

Source: Guidotti (2006, OECD)

Strengths and Vulnerabilities: Global Imbalances

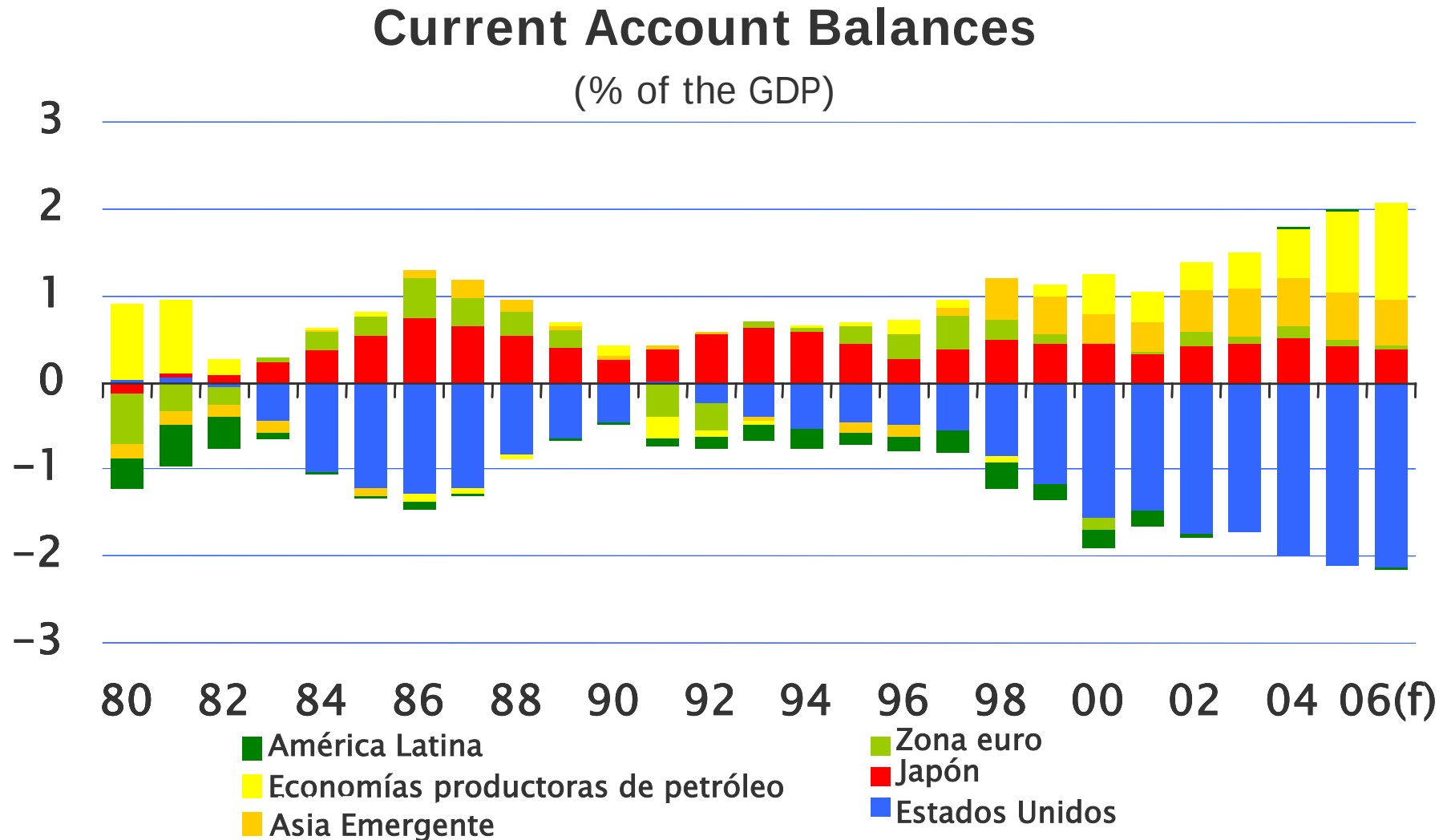
US Current Account and Fiscal Balances

(1973.I - 2006.I, Jan.1973 = 100))



Source:
Bloomberg

Strengths and Vulnerabilities: Global Imbalances



Source: IMF

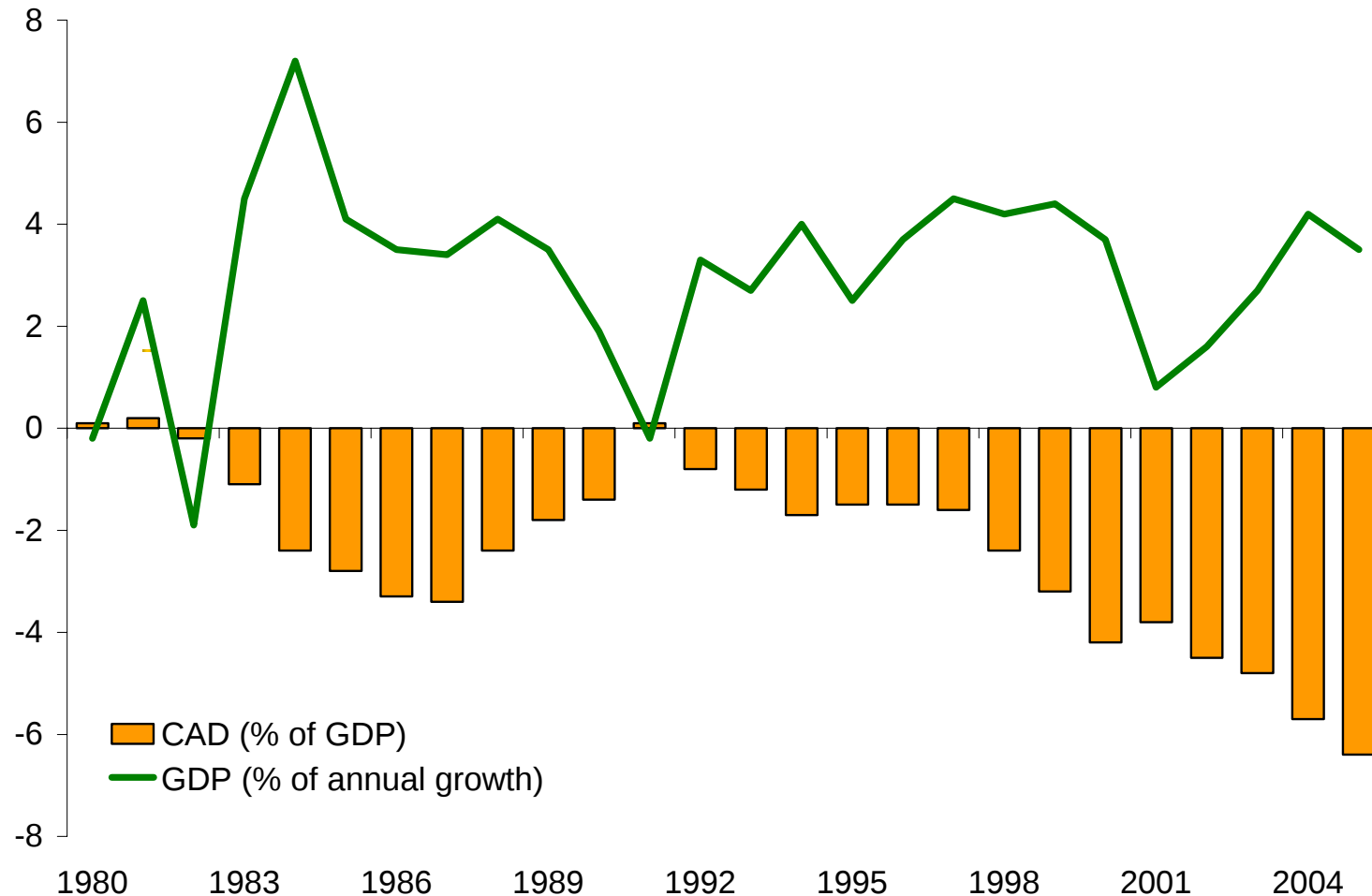
Strengths and Vulnerabilities: Global Imbalances

Possible reversion of imbalances: two views

- *Optimistic*: gradual adjustment of the imbalances.
- *Pessimistic*: disruptive adjustment in the short run, before factors behind a smooth adjustment take place.

Strengths and Vulnerabilities: Global Imbalances

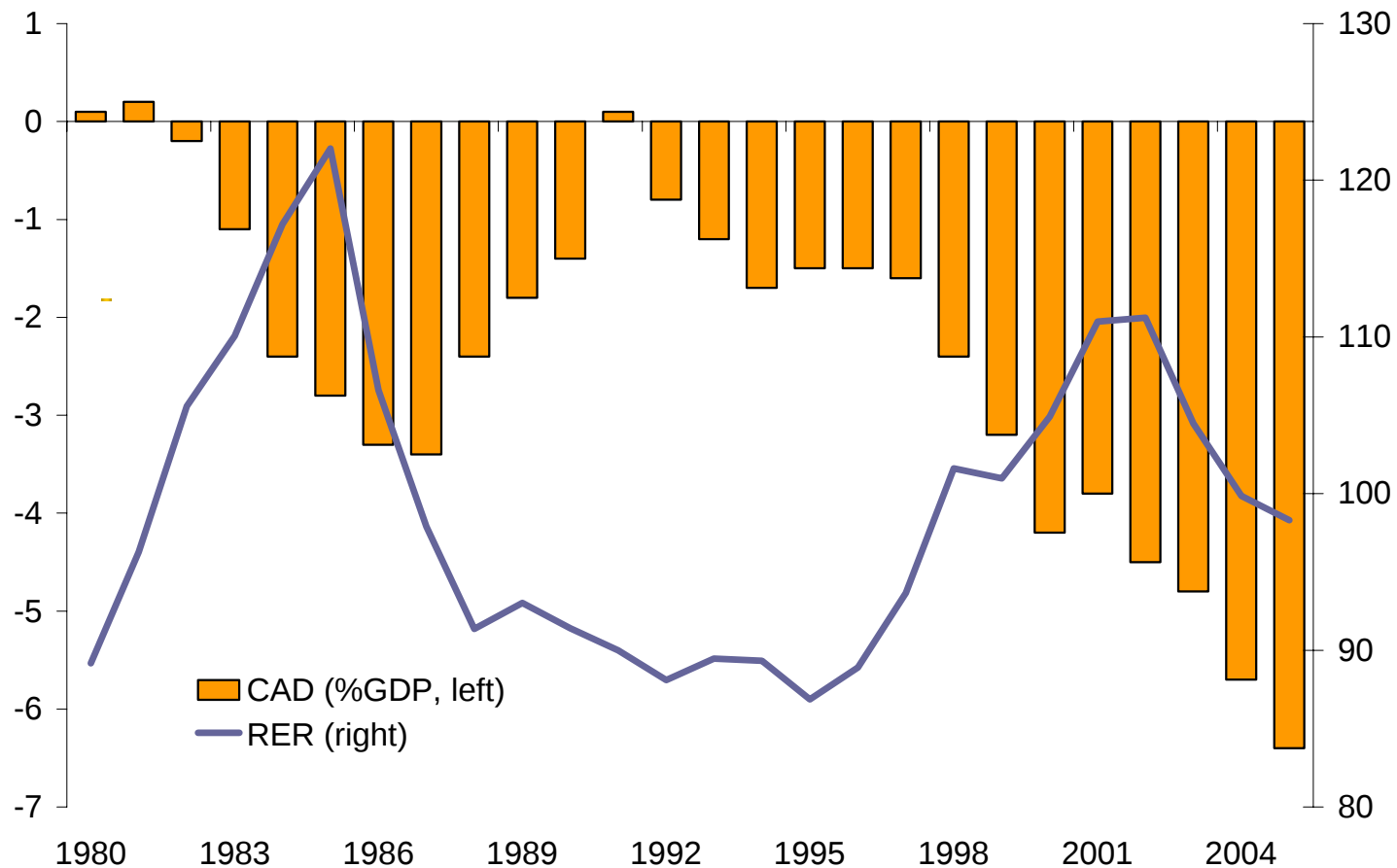
United States: Current Account Deficit and GDP Growth



Source: WEO.

Strengths and Vulnerabilities: Global Imbalances

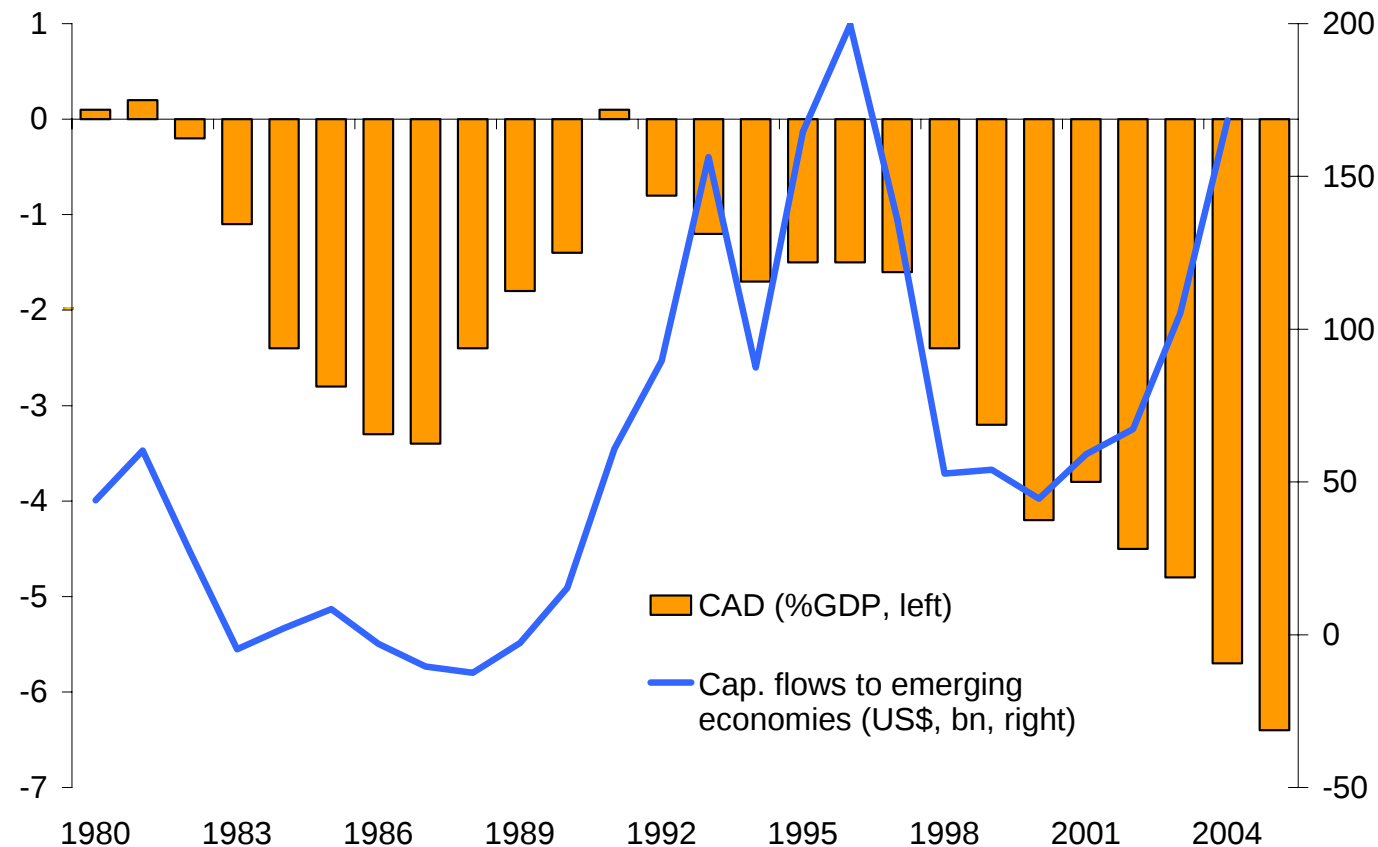
United States: Current Account Deficit and the Real Exchange Rate



Sources: WEO and Federal Reserve.

Strengths and Vulnerabilities: Global Imbalances

US Current Account Deficit and Capital Flows to Emerging Economies

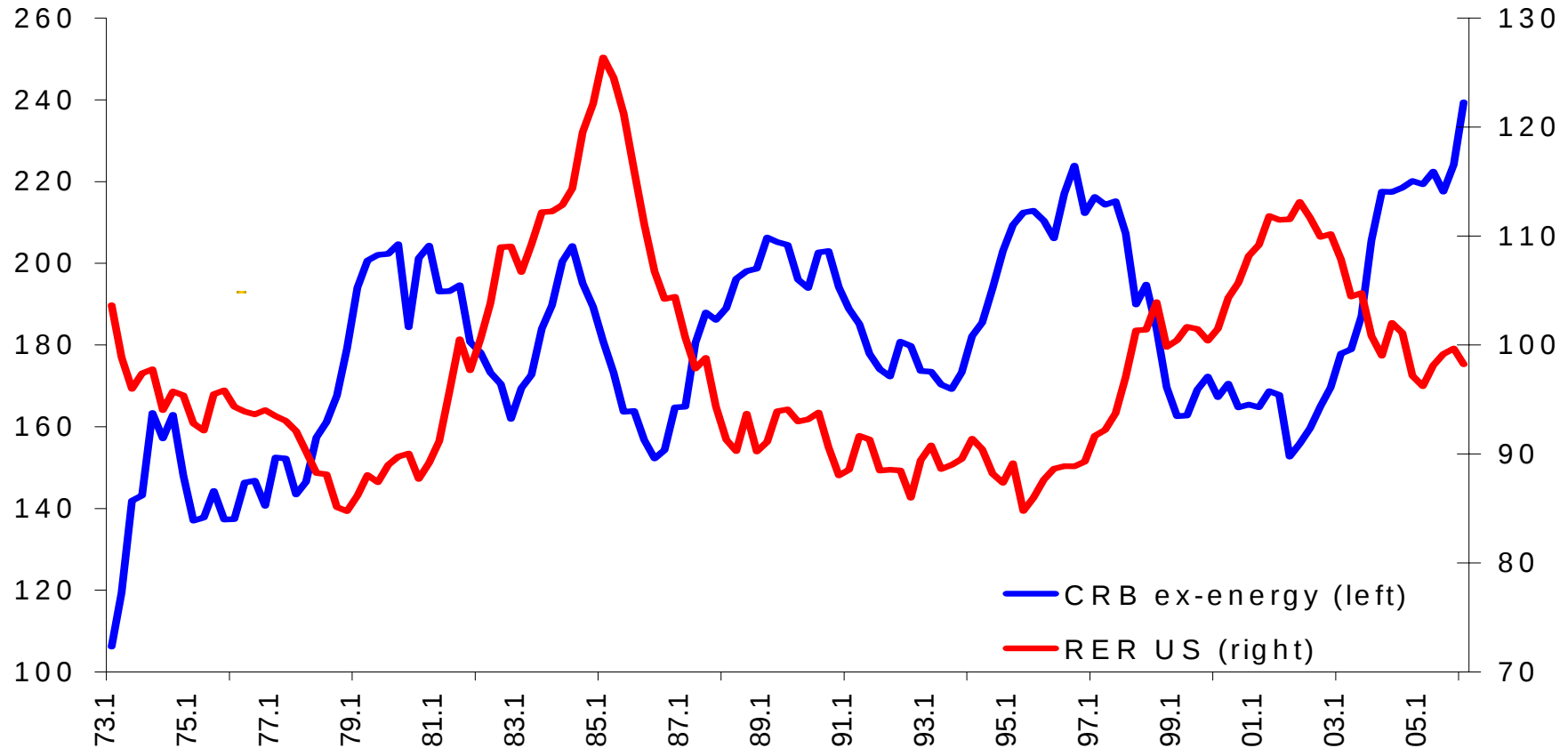


Sources: IFS and WEO.

Strengths and Vulnerabilities: Global Imbalances

Real Exchange Rate and Commodity Prices

(1973.1 - 2006.1, Jan.1973 = 100)



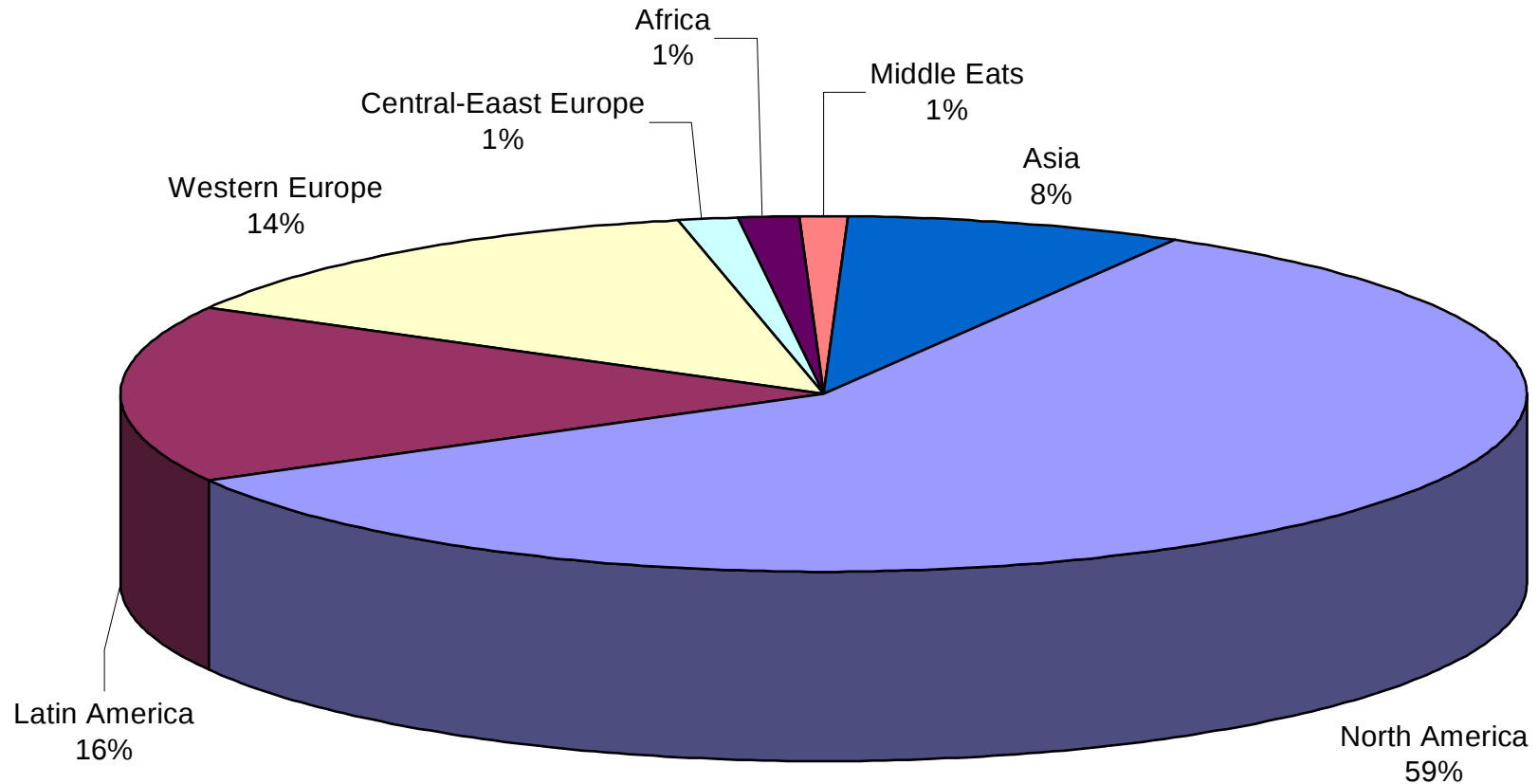
Sources: Commodity Research Bureau and US Federal Reserve.

Strengths and Vulnerabilities: Global Imbalances

- LA is sensitive to external demand for region's exports and changes in prices of commodities.
- The impact would depend on:
 - Share of non-commodity exports to the US
 - Share of commodity exports

Strengths and Vulnerabilities: Global Imbalances

Latin American Exports Destination
(2003)



Concluding Remarks: Macroeconomic Stability and Crisis Prevention

- Cost of crisis.
- Need for macroeconomic stability.
- Fiscal.
- Strong financial and monetary policy.
- Capital controls.
- Crisis prevention, all of the above but the last (?)

Concluding Remarks

- Efforts have been made to improve macroeconomic performance through structural reforms
- Final results are not good enough, considering the efforts
- Maintaining stability is still a challenge for the region

Latin America: Macroeconomic Stability and Challenges

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Central Bank of Chile
June 1st, 2006