Challenges for Central Banking in the Global Economy: Inflation Targets and Financial Stability

José De Gregorio
Banco Central de Chile

LACEA Annual Meeting, Bogotá, October 2007

Contents

I. Monetary policy under inflation targeting

Inflation targets

- The monetary policy objective consists of maintaining inflation most of the time around a specific target with some tolerance range.
- The operational objective is based on an inflation forecast. If inflation deviates from the target it is expected that it should return to the target within a policy horizon (usually about one to two years).
- The tolerance range, as well as the policy horizon take into account not only the lags with which monetary policy affects output, but also implies a gradual adjustment in order to take into account the output losses from maintaining inflation stable.

Inflation target regimes do care about the output gap

- The evidence shows that low and stable inflation fosters long-run economic growth. Inflation targets also achieve greater output stability which is also conductive to economic growth.
- The definition of the target range as well as the policy horizon implicitly take into account an appropriate balance between output and inflation stability. If central banks do not care about inflation the target would be attempted to be met all the time with no policy horizon.
- Organizing monetary policy around an inflation target provides an anchor for inflation. This anchors inflationary expectations, reducing the output costs of achieving price stability.
- In addition the inflation target avoids the problem of having one instrument for two objectives.

Additional considerations

- On the risks of conducting monetary policy through an output objective:
  - Lack of nominal anchor.
  - Uncertainty about full employment can lead to periods of high inflation with large costs of reducing it. This also happens in the operation of inflation targets, but monitoring inflation and its perspectives facilitates corrections.
- Other ingredients
  - Transparency plays a key role in the monitoring of the achievement of the inflation target. It is less necessary in schemes of monetary or exchange rate targets.
  - Fiscal support to avoid subordination of monetary policy to fiscal imbalances.
  - Appropriate financial regulation and supervision

II. Exchange rates, asset prices, inflation targets and financial stability

Preliminaries

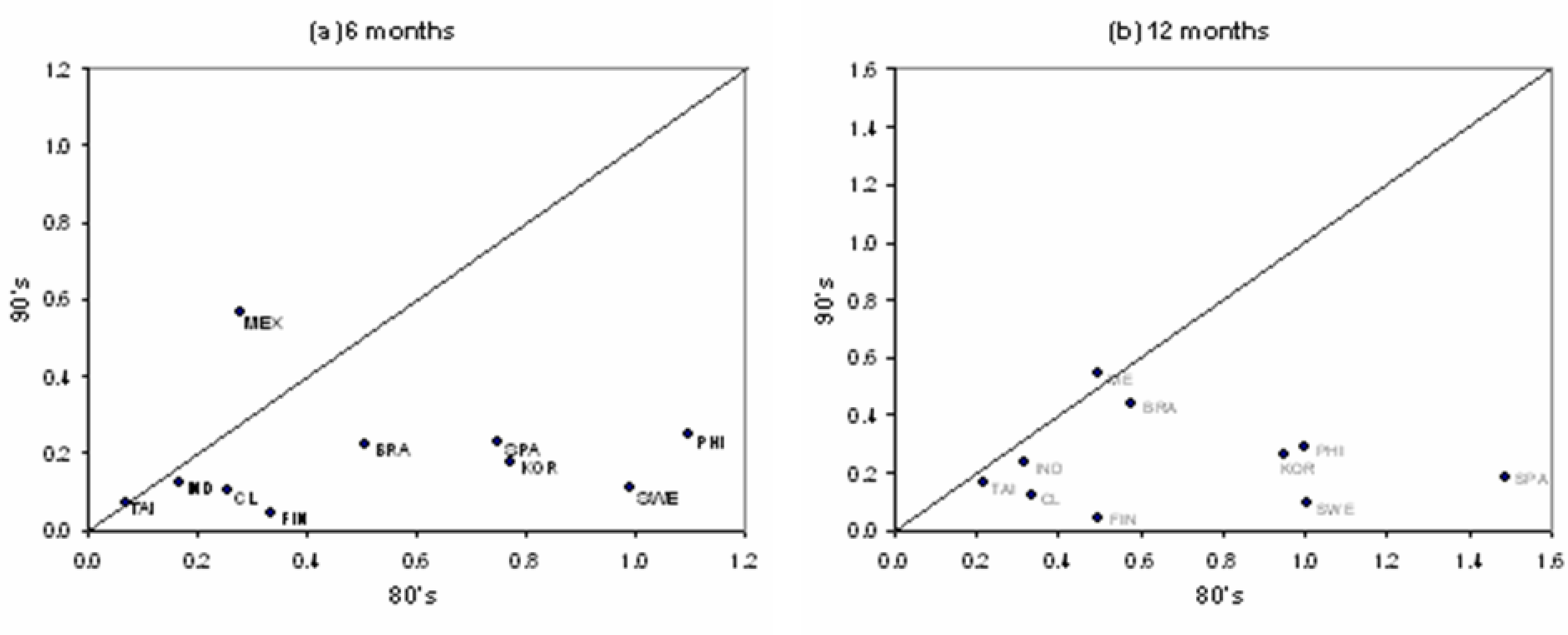
- The “impossible trinity”: it is not possible to have free capital mobility, monetary independence and to control the exchange rate.
- Capital controls have become increasingly ineffective.
- A flexible exchange rate is the one consistent with an IT regime.
- The exchange rate helps adjustment as a shock absorber (recent experience).
- A flexible exchange rate regime reduces the possibility of misalignments and currency crisis (recent experience).

Fear of floating

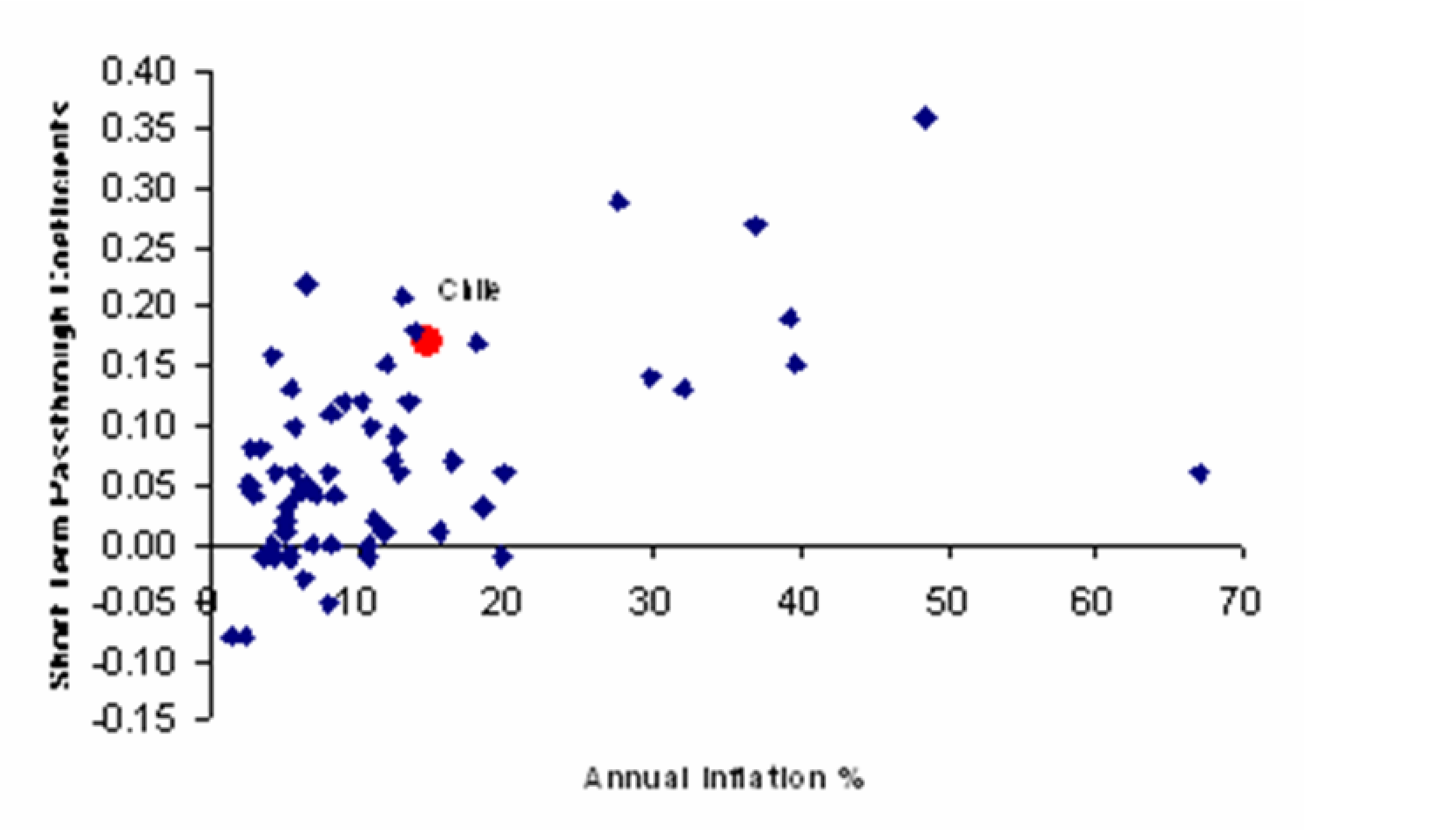
It has been the main reason for the resistance of countries to adopt flexible exchange rates. Reasons for fear of floating:

- Inflationary effects. Although passthrough from depreciation to inflation is small in countries with anti-inflationary commitment and flexible exchange rates.
- Financial stability. Balance sheet effects due to mismatches (currencies and maturities). But, floating incentives adequate matching.

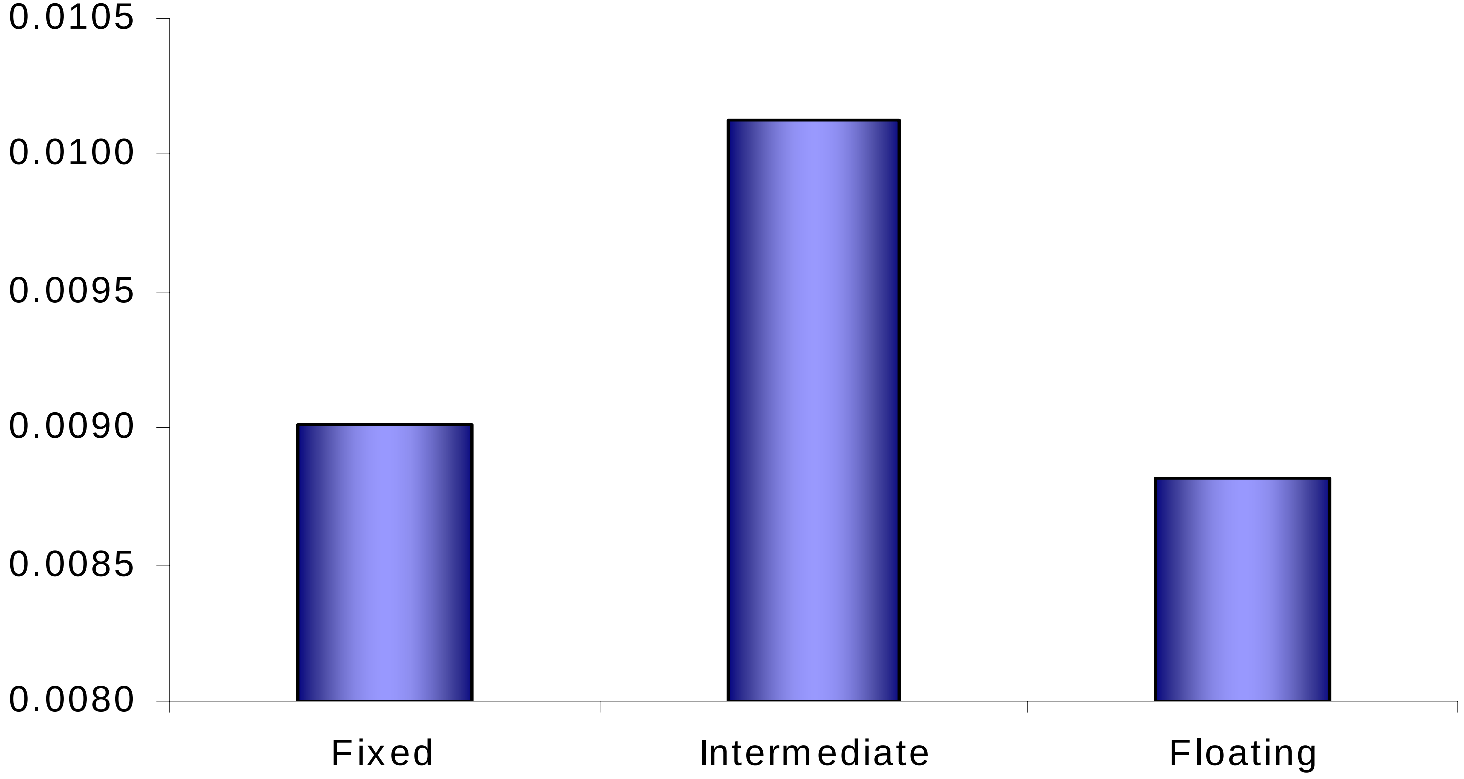
Passthrough coefficients across decades



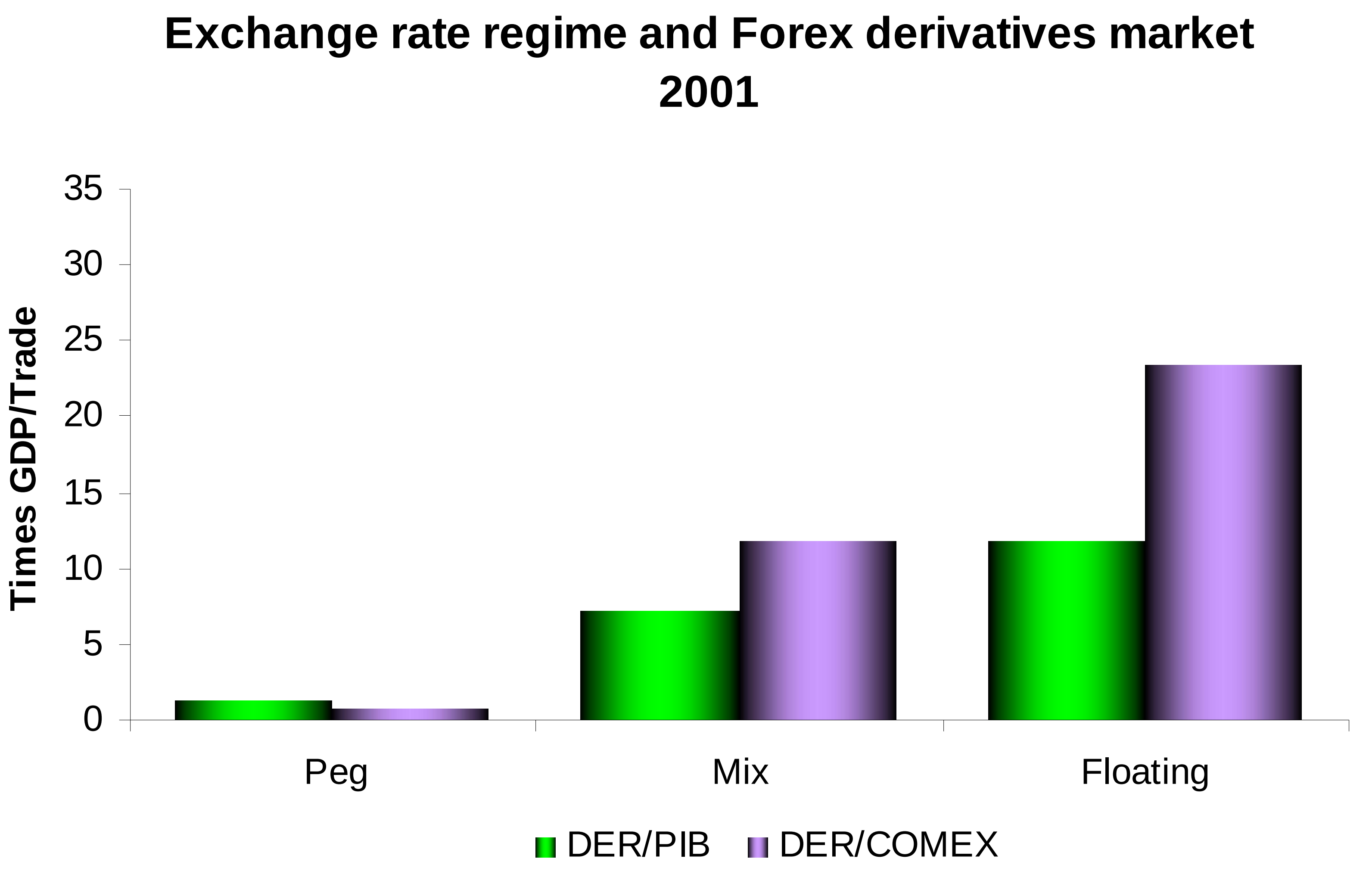
Passthrough coefficients and inflation 1979-2000



Squared Misalignment 1979-2004



Forex markets deepness



Exchange rate, asset prices and inflation targets

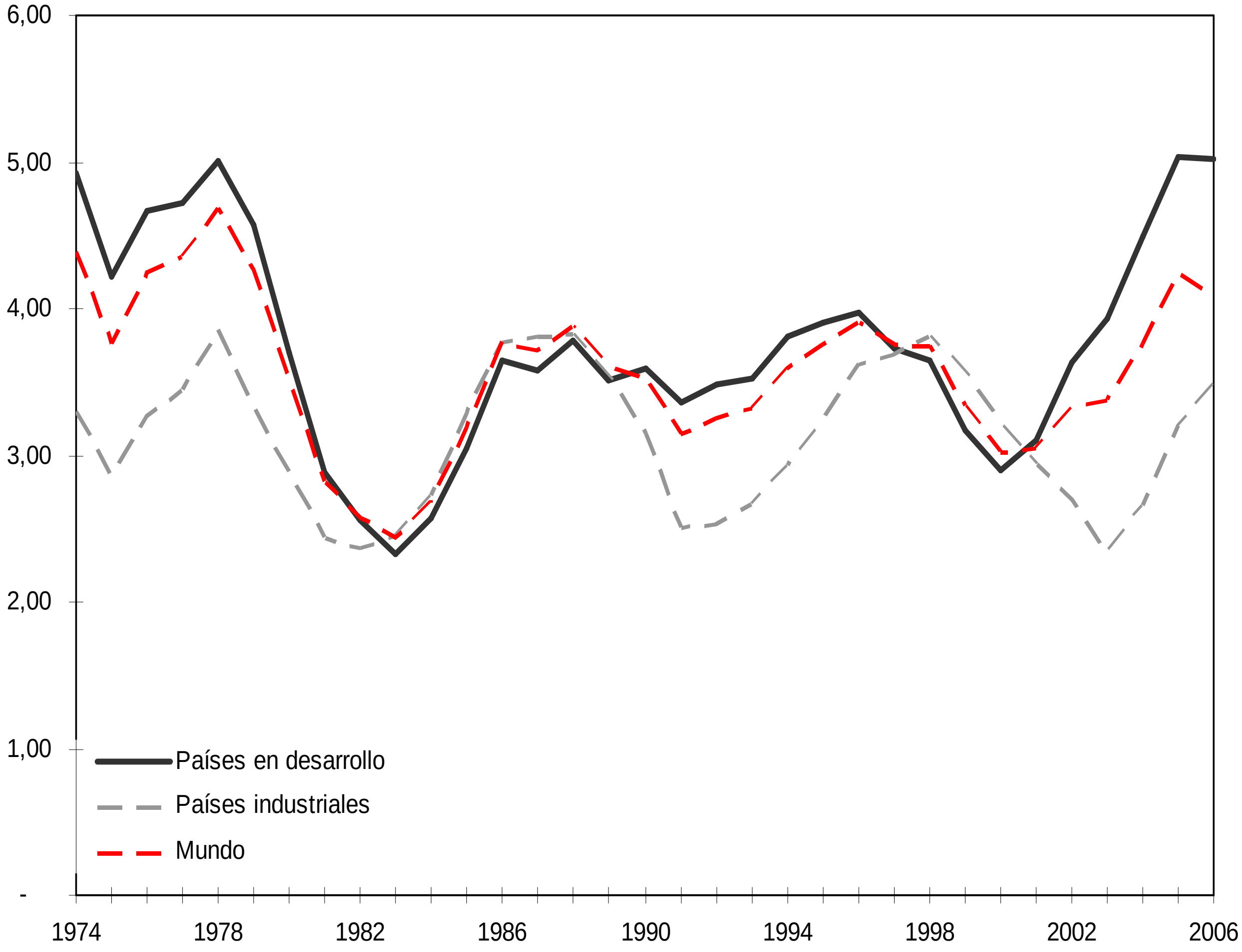
- In an inflation target regime the exchange rate as well as other asset prices (such as housing, stock market, etc.) affect monetary policy decisions as long as they affect inflation forecast.
- But, central banks always keep the option of intervening in the foreign exchange market in exceptional circumstances.
- Rationale: financial stability.

Exchange rate, asset prices and financial stability

- Most central banks have as an objective, in addition to price stability, stability of the financial system.
- Inflation targets do not consider explicitly the occurrence of financial crisis, and hence it is key to monitor carefully the stability of the financial system.
- Malfunctioning of the foreign exchange market or other asset markets (bubbles) can affect financial stability, which may require additional tools, such as exchange rate intervention and the provision of liquidity. More recently we have seen how central banks inject liquidity to avoid financial distress.
- But exceptional intervention must be done on the basis of preserving stability.

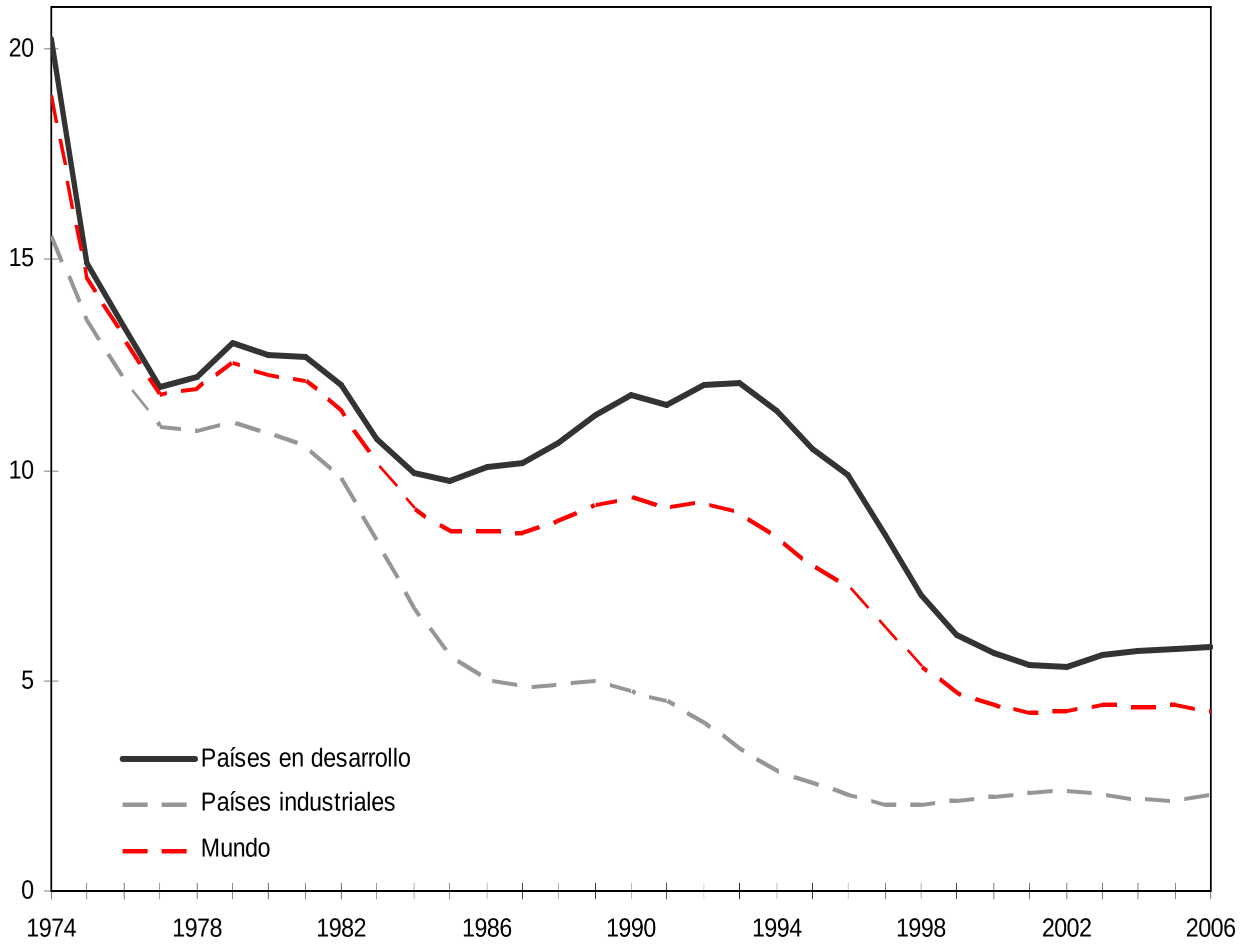
III. Results of macroeconomic policies

Growth



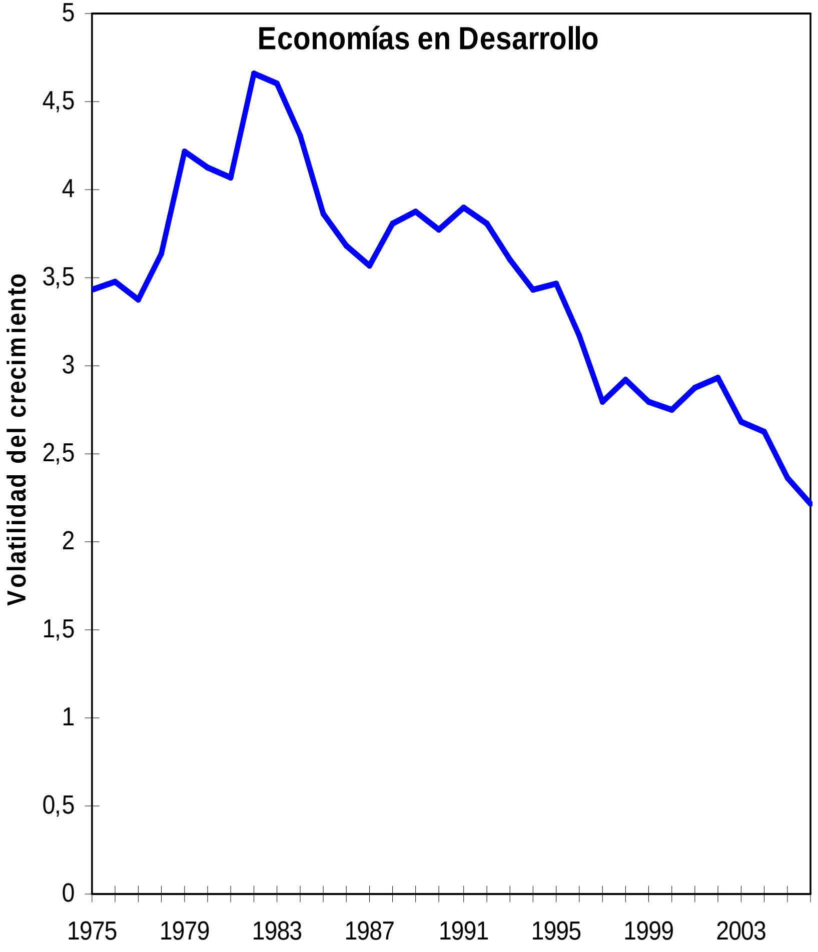
6,00
5,00
4,00
3,00
2,00
1,00
-
1974
1978
1982
1986
1990
1994
1998
2002
2006
Países en desarrollo
Países industriales
Mundo

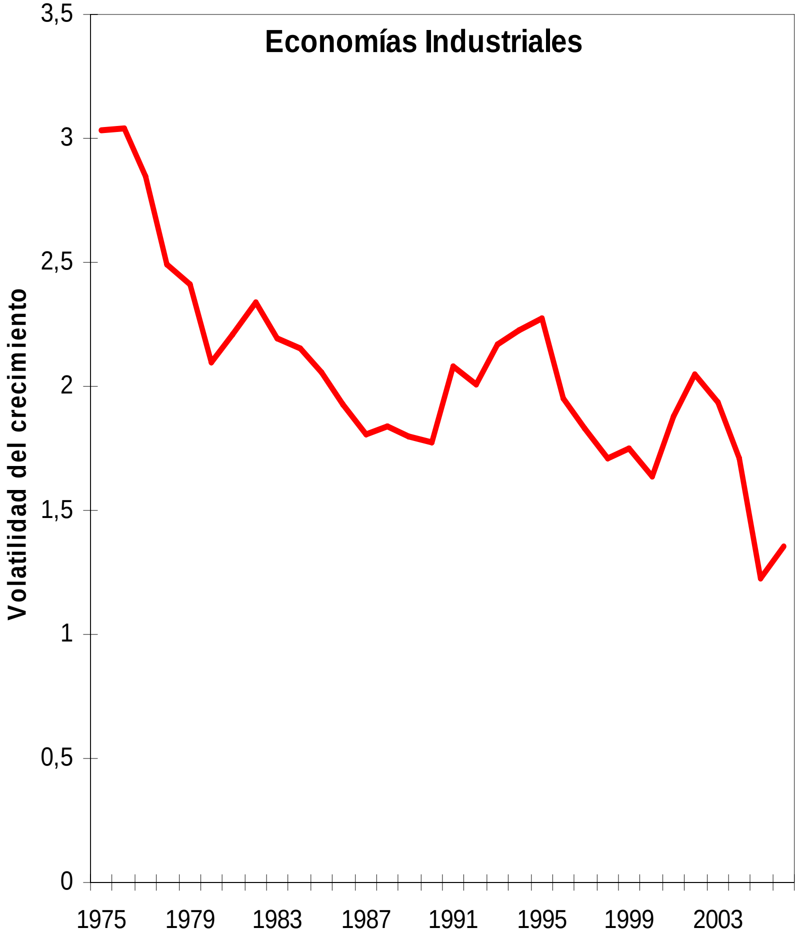
Inflation



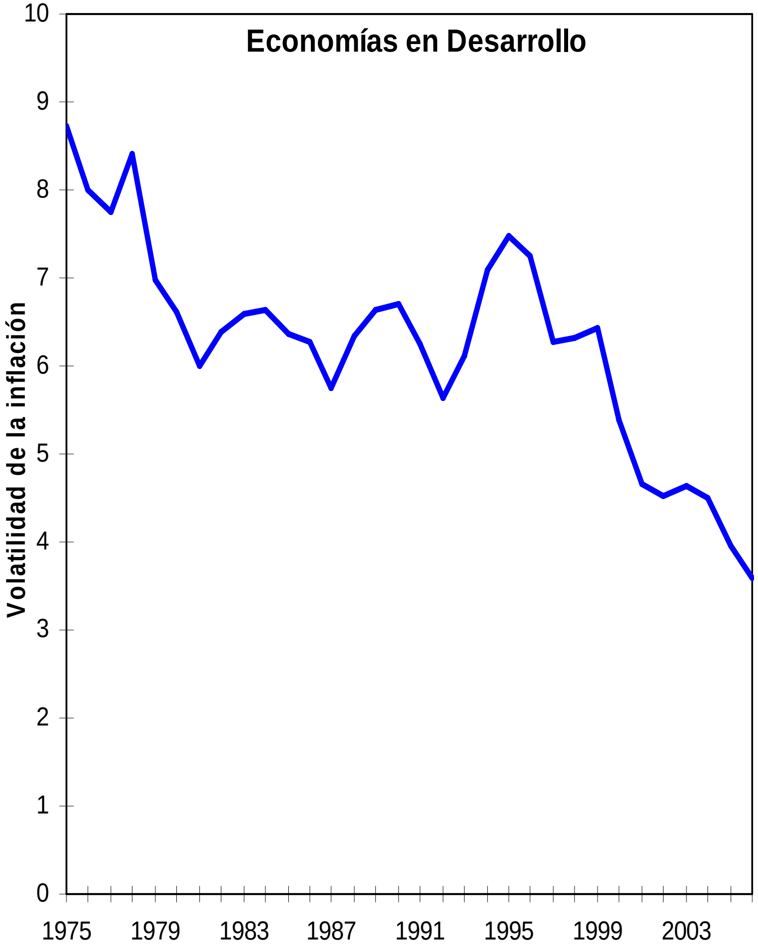
20
15
10
5
0
1974
1978
1982
1986
1990
1994
1998
2002
2006
Países en desarrollo
Países industriales
Mundo

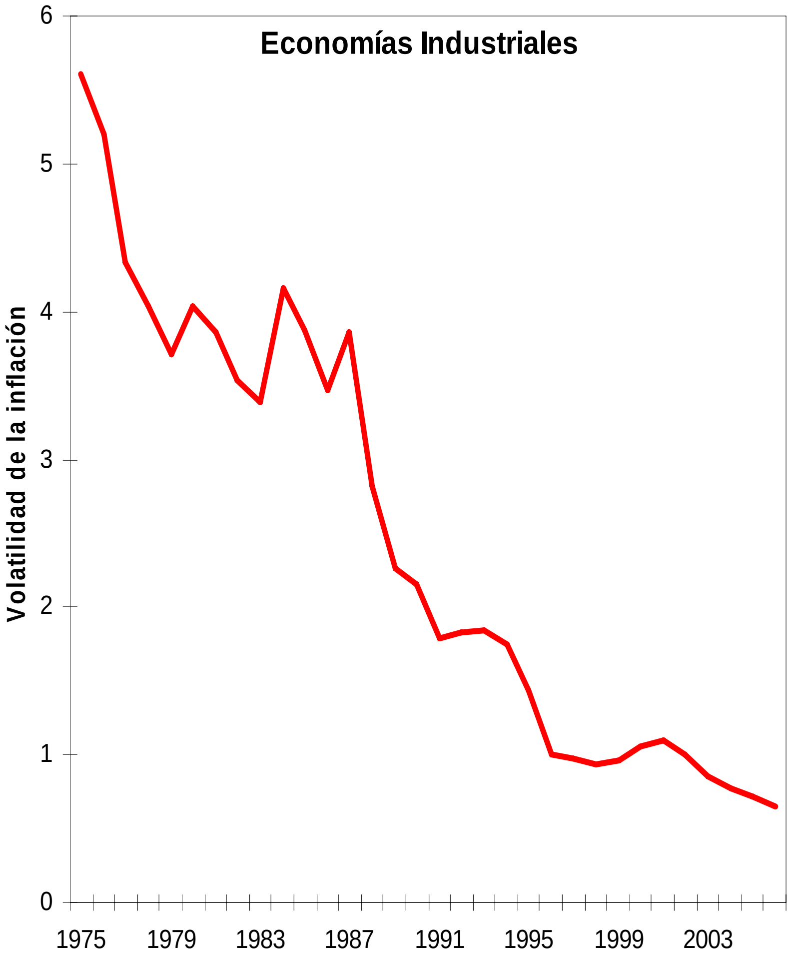
Output volatility





Inflation volatility





Results

- The “great moderation” has reached emerging markets.
- The moderation took place in the mid 80s in industrial countries and in the second half of the 90s in developing economies, for growth as well as inflation. If there were global factors the reduction of volatility should occur at the same time in most countries. In contrast, the great moderation coincides with the decline in inflation, which suggests a key role for monetary policy.

IV. Recent progress in Latin America

Recent developments

	GDP Growth (%)				Inflation (%)				Current Account			
	1993-2002	2002-2006(p)	2006(p)	2007(f)	1993-2002	2002-2006(p)	2006(p)	2007(f)	1993-2002	2002-2006(p)	2006(p)	2007(f)
World	**3.5**	**4.5**	**5.4**	**4.9**	**11.3**	**3.6**	**3.8**	**3.5**				
Argentina	0.7	4.9	8.5	7.5	5.0	12.8	10.9	10.3	-2.1	4.3	2.4	1.2
Brazil	2.9	3.2	3.7	4.4	412.3	8.2	4.2	3.5	-2.7	0.8	1.3	0.8
Chile	5.0	4.4	4.0	5.2	6.4	2.6	3.4	2.5	-2.7	0.8	3.8	2.7
Colombia	2.4	4.6	6.8	5.5	15.9	5.7	4.3	4.2	-2.9	-1.5	-2.2	-2.3
Costa Rica	4.5	5.5	7.9	6.0	13.0	11.2	11.5	8.1	-4.3	-5.0	-4.9	-4.8
Ecuador	2.3	4.9	4.2	2.7	38.5	5.7	3.3	2.8	-2.4	0.0	4.5	0.4
Guatemala	3.7	3.0	4.6	4.5	8.8	7.4	6.6	6.2	-5.0	-4.5	-4.4	-4.5
Mexico	2.8	2.8	4.8	3.4	16.0	4.4	3.6	3.9	-3.1	-1.1	-0.2	-1.0
Peru	4.4	5.7	8.0	6.0	12.0	2.0	2.0	1.0	-4.8	0.1	2.6	0.7
Uruguay	0.5	3.3	7.0	5.0	22.9	10.7	6.4	6.0	-1.5	0.1	-2.4	-3.3
Venezuela	0.1	4.4	10.3	6.2	41.9	20.9	13.6	21.6	3.8	13.8	15.0	7.0
Average (11)	**2.7**	**4.2**	**6.3**	**5.1**	**53.9**	**8.3**	**6.3**	**6.4**	**-2.5**	**0.7**	**1.4**	**-0.3**
LA Average	**2.9**	**4.1**	**5.9**	**5.0**	**37.8**	**7.3**	**6.2**	**6.2**	**-4.1**	**-0.8**	**0.0**	**-1.3**

(p) Preliminary; (f) Forecast

Source: World Economic Outlook, April 2007

- Latin America has had very good performance in terms of growth and inflation. The demand for foreign financing has declined.

Recent developments

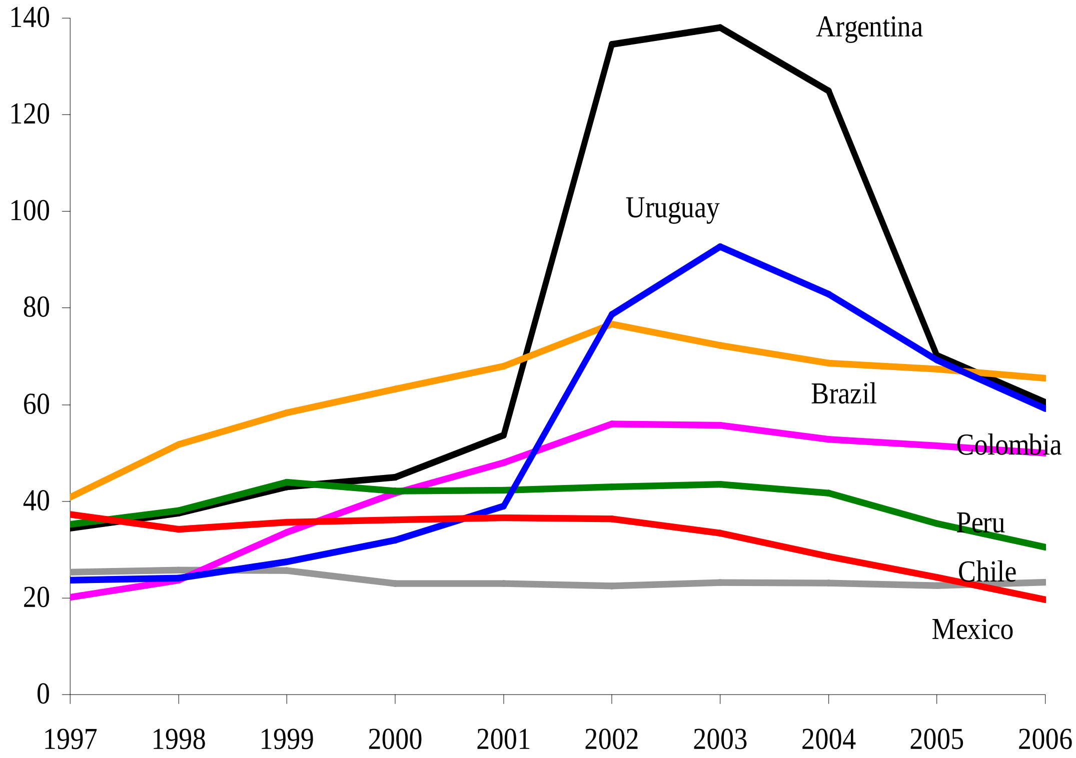
	General Government: Overall Balance				
	1987-1996	1997-2002	2002-2006	2006	2007(f)
Argentina	-0.7	-2.0	1.0	1.8	0.9
Brazil	-8.6	-4.7	-4.7	-4.3	-4.2
Chile	1.8	-0.3	2.7	8.1	6.0
Colombia	-1.7	-4.7	-3.1	-2.5	-1.6
Costa Rica	n.a.	-3.0	-2.6	-1.1	-2.3
Ecuador (*)	0.6	-1.6	-0.7	-0.4	-0.8
Guatemala (*)	n.a.	-1.8	-1.5	-1.7	-1.6
Mexico (*)	-2.3	-1.3	-1.2	-1.6	-1.3
Peru	-3.2	-2.0	-0.7	1.8	-0.3
Uruguay	-0.9	-4.2	-3.7	-1.4	-1.0
Venezuela	-2.1	-2.3	-1.6	0.6	-2.5
Average	-1.9	-2.5	-1.5	-0.1	-0.8

(f) Forecast
(*) Central government
Source: World Bank for data 1987-96; Moody's for data 1997-2007

- Also progress in public finance

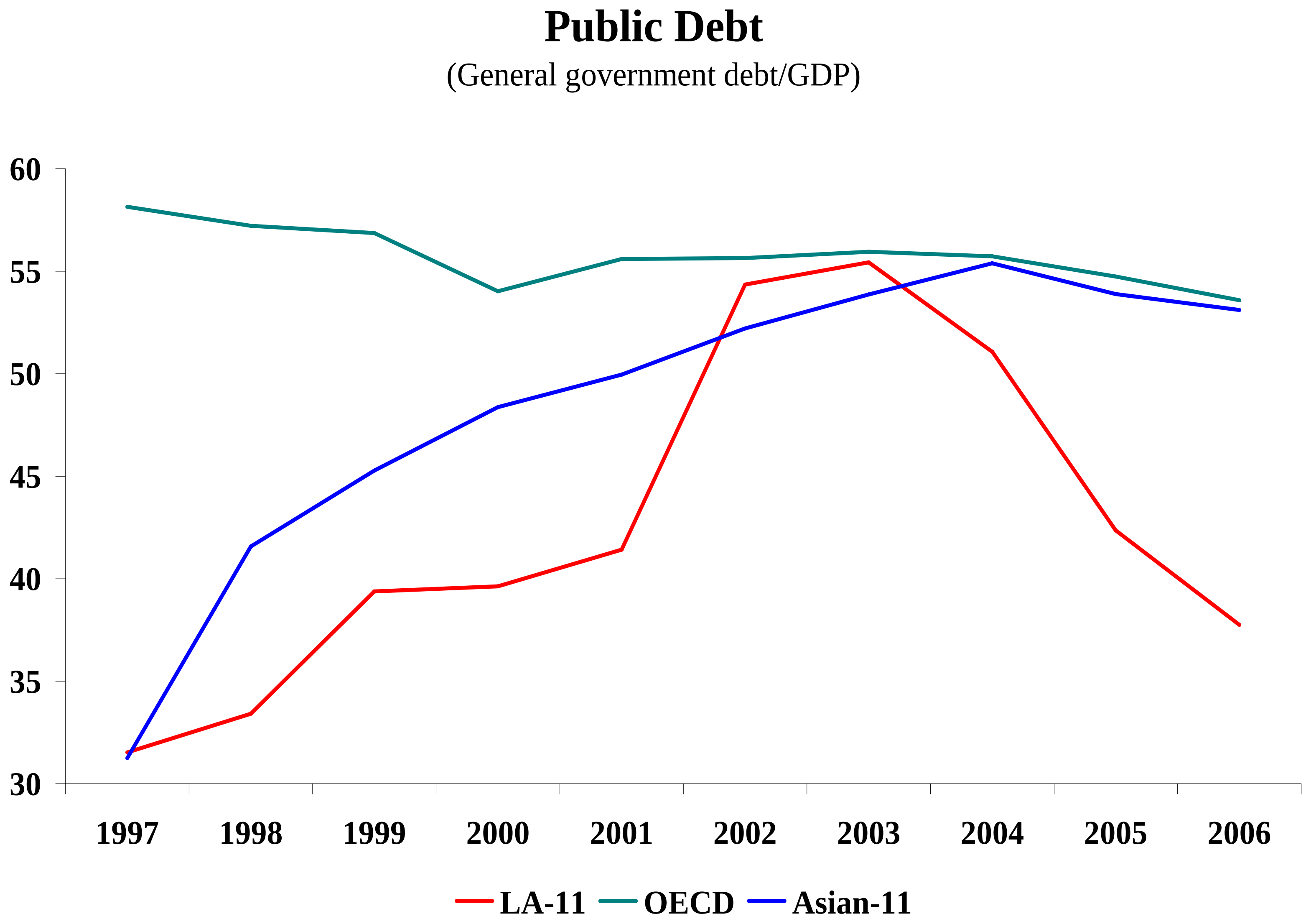
Recent Developments

PUBLIC DEBT IN LATIN AMERICA
(General government's debt, % GDP)

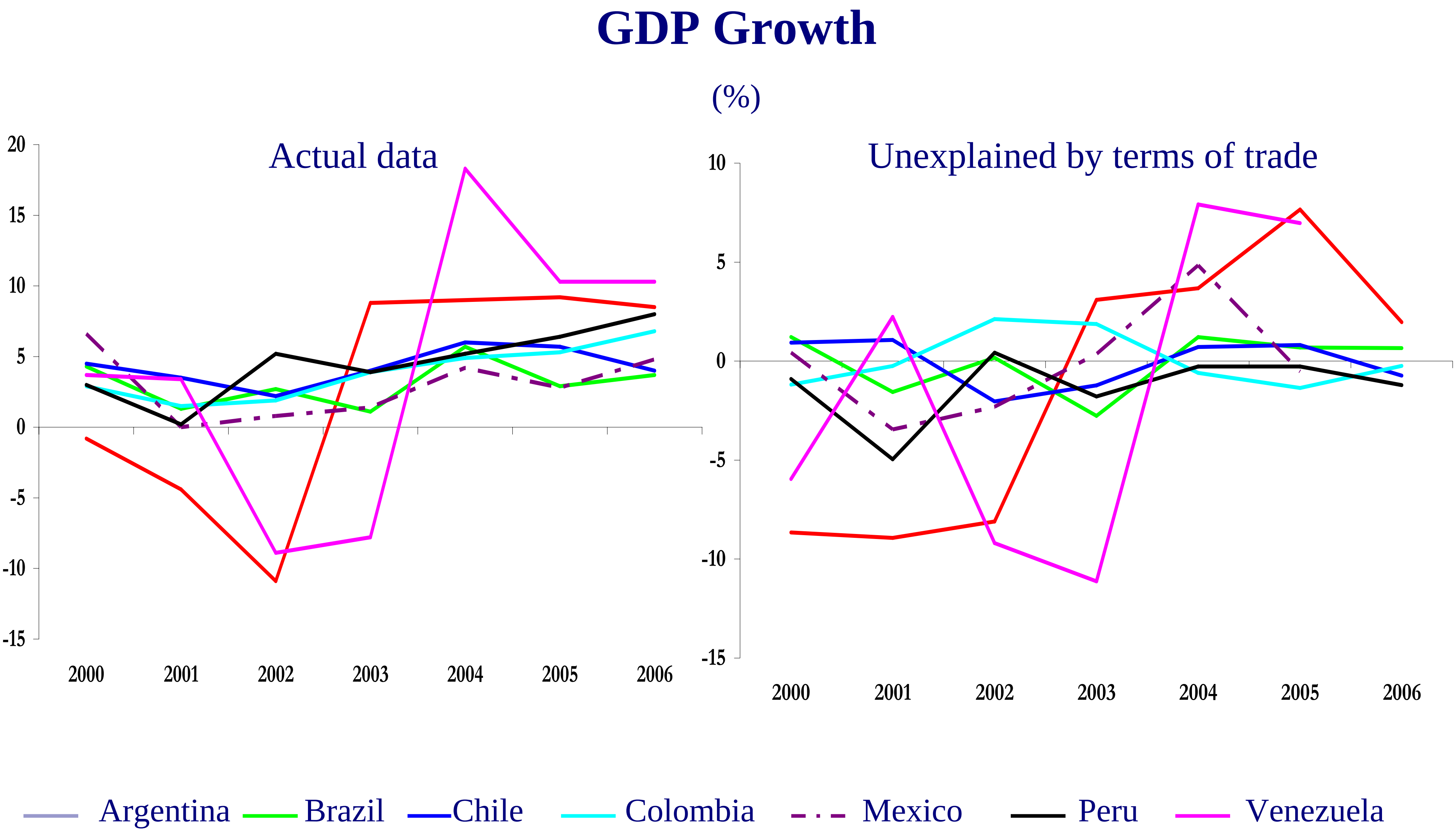


Source: Moody's Country Credit Statistical Handbook (2006); Chile's Ministry of Finance (2006).

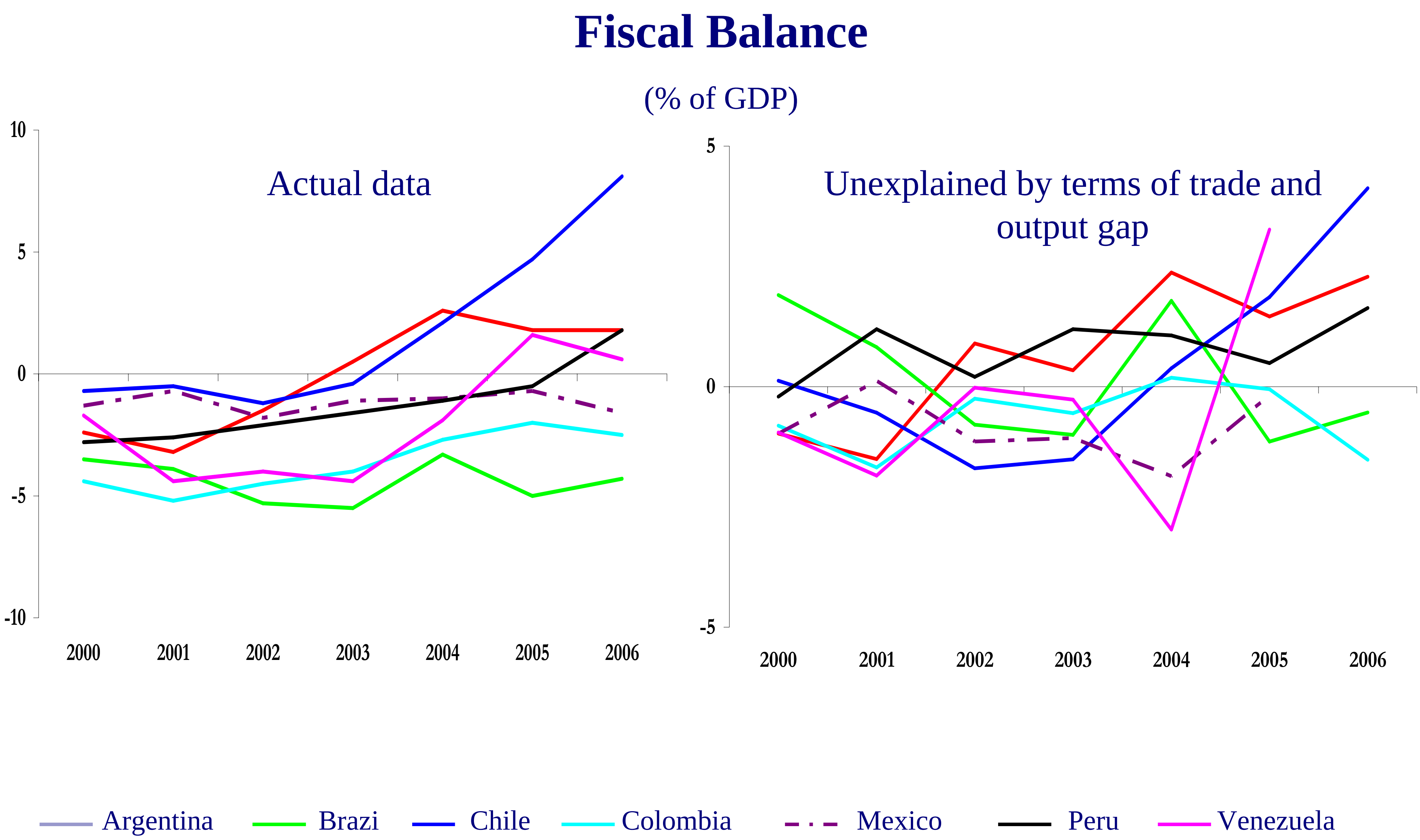
Recent Developments



Is it only terms of trade?



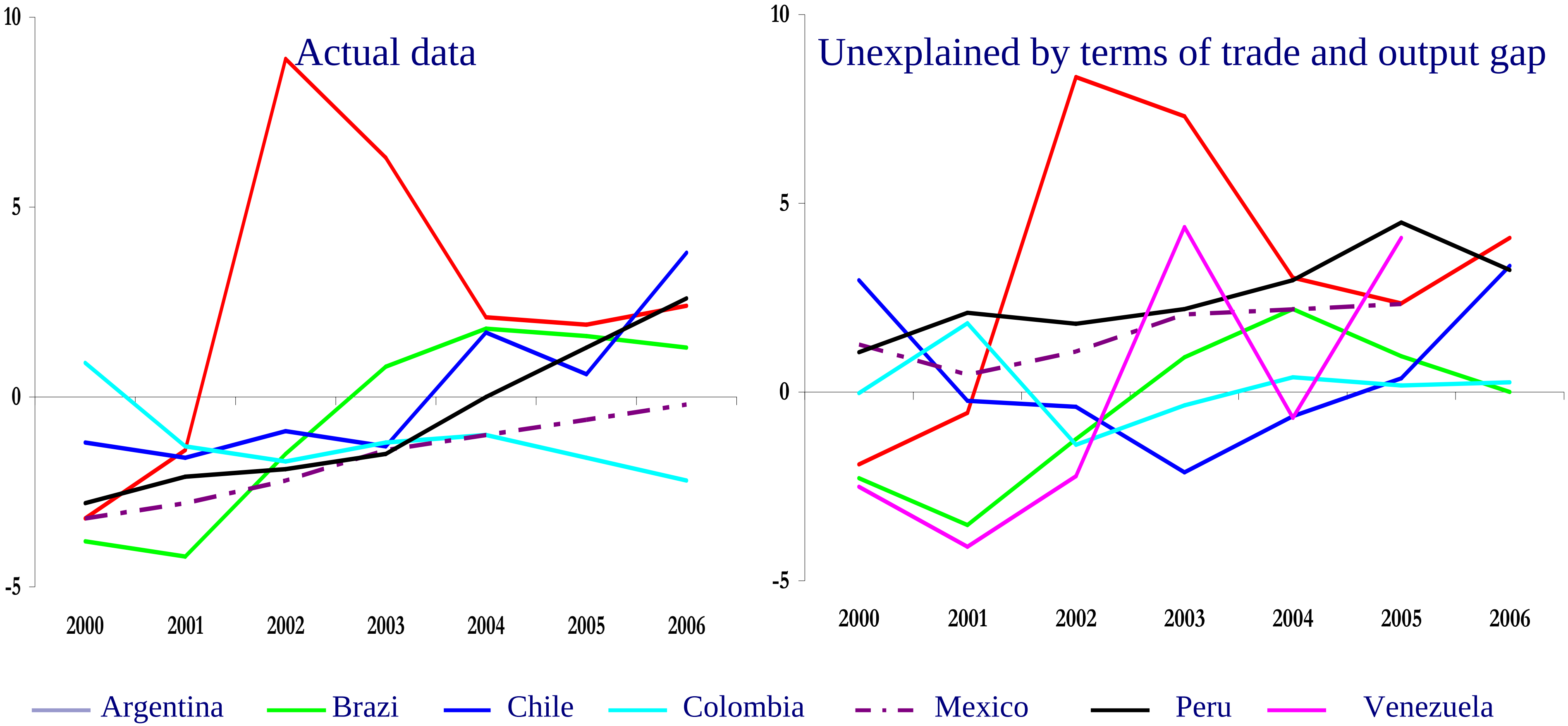
Is it only terms of trade?



Is it only terms of trade?

Current Account

(% of GDP)



Note: for scale reasons Venezuela has been excluded from actual data sample

Latin America: Diferences with the Mean 1990-2006

	Growth			Overall Fiscal Balance			Current Account Deficit		
	Actual	ToT Effect	Residual	Actual	Tot and Output Gap Effect	Residual	Actual	Tot and Output Gap Effect	Residual
1990-99	-0.1	-0.5	0.4	0.0	0.0	0.0	-1.5	-0.8	-0.7
2000-04	-1.0	0.3	-1.3	-0.7	-0.5	-0.3	1.4	0.7	0.7
2005-06	2.6	1.1	1.5	1.9	0.9	1.1	4.0	1.7	2.3

Source: Author's calculations. The sample consits of the following countries: Argentina, Brasil, Chile, Colombia, Mexico, Peru and Venezuela.

- Simple exercise: Period 1990-2006, estimations of annual growth on level and growth of terms of trade (current and lagged), and estimations of current account and fiscal balance on the level of terms of trade and output gap (current and lagged). Reported: differences with respect to mean, the estimated effect of explanatory variables, and residual. The following figures show: country by country results for this decade.
- **The evidence shows that not all is terms of trade**. Although growth, fiscal balance and current account have improved in part due to terms of trade and cyclical adjustment, there is still an important unexplained component, which suggests that there has been progress beyond the rise in terms of trade.

V. Concluding remarks

Concluding remarks

- Defining the monetary authorities' objective in terms of an inflation target does not mean that the business cycle, particularly unemployment, becomes irrelevant in monetary policy decisions.
- Emerging markets economies, and Latin America in particular, have made significant progress in macroeconomic policies. This has contributed to greater stability of output and prices, creating an environment, which ultimately fosters growth and increases welfare.
- The recent experience in the resilience of Latin America to the financial turmoil reveals the importance of macroeconomic stability, commitment to low inflation, sound public finance and floating exchange rates.
- Risks of deterioration of external environment,—financial turmoil ad decline in terms of trade—requires commitment to maintain macroeconomic and financial stability.

References

De Gregorio, J. (2007a), “Defining inflation targets, the policy horizon, and the output-inflation tradeoff,” Documento de Trabajo No. 415, Banco Central de Chile, marzo.

______________ (2007b), “Esquemas de metas de inflación en Economías Emergentes,” en Banco Central de la República Argentina, *Política Monetaria y Estabilidad Financiera*, Jornadas Monetarias y Bancarias, BCRA.

______________ (2007c), “Algunas reflexiones sobre el crecimiento de la economía chilena,” Documento de Política Económica No. 20, Banco Central de Chile, agosto.

De Gregorio, J. y A. Tokman (2007), “Overcoming fear of floating: Exchange rate policies in Chile,” in N. Batini (ed.), *Monetary Policy in Emerging Markets and Other Developing Countries, New York: Nova Science Publishers Inc.*