

# Monetary Policy in Emerging Economies: The View from Chile

Vittorio Corbo Governor



- 1. Macroeconomic adjustment in emerging economies
- Chile's transition to its current monetary policy framework
- 3. Monetary policy results in emerging economies and in Chile
- 4. Conclusions



### Macroeconomic adjustment in emerging economies



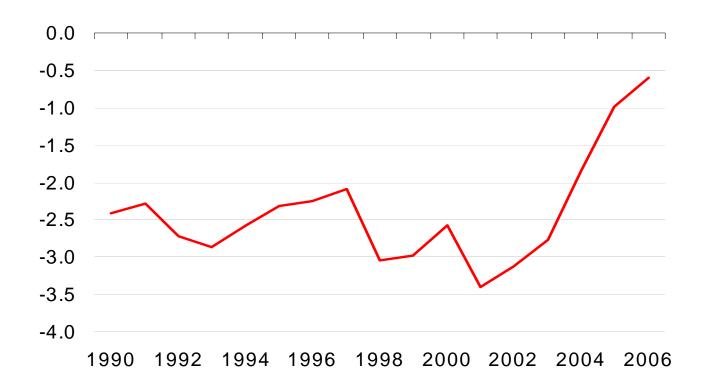
## Macroeconomic adjustment in emerging economies

- Since the 1990s, and more so during this decade, the macroeconomic policy framework in emerging economies has improved in four key areas:
  - 1. Fiscal responsibility.
  - 2. Exchange rate regime.
  - Monetary policy (MP) framework: anchors have shifted from exchange rate or monetary aggregates to inflation targeting (IT), particularly in Latin America.
  - 4. Financial system development.



### Declining fiscal deficits in emerging economies

#### Central government balance as percent of GDP



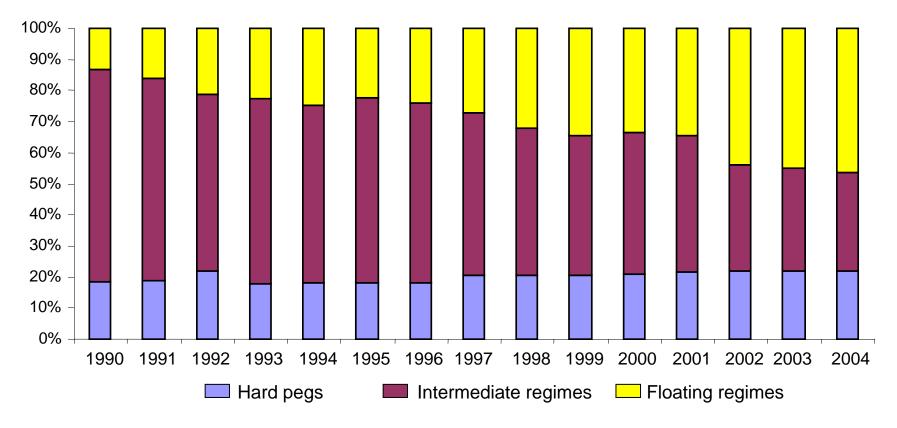
Note: sample average for 32 emerging economies.

Sources: Institute of International Finance (IIF), Deutsche Bank, and Central Bank of Chile.



## Toward more flexible exchange-rate regimes in developing countries

(de facto, 1990-2004)



Note: the sample comprises 32 emerging economies. By 1990, nearly 70% of countries had in place an intermediate regime (IR), whereas by the end of the 1990s nearly 41% had an IR and, as of 2004, only 30% had an IR in place.

Source: IMF.



# Chile's transition to its current monetary policy framework



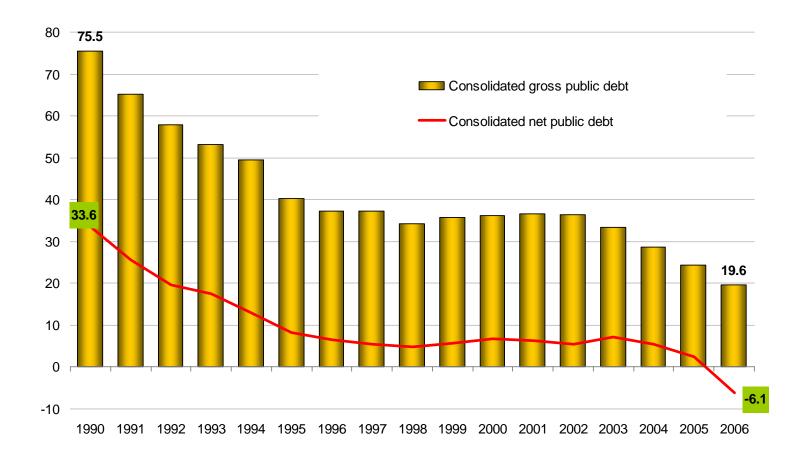
#### Macroeconomic policy framework

- Monetary policy is part of Chile's overall macroeconomic framework, which rests on four pillars:
  - An autonomous Central Bank with the explicit mandate of safeguarding stability of prices and payments.
  - A low public-debt to GDP ratio and a fiscal policy rule anchored to a structural fiscal surplus.
  - A robust financial system, with competitive and wellcapitalized banks, appropriately regulated and supervised.
  - A full-fledged inflation-targeting framework, complemented by a floating exchange rate regime.



#### Government debt in Chile

(percent of GDP, 1990-2006)

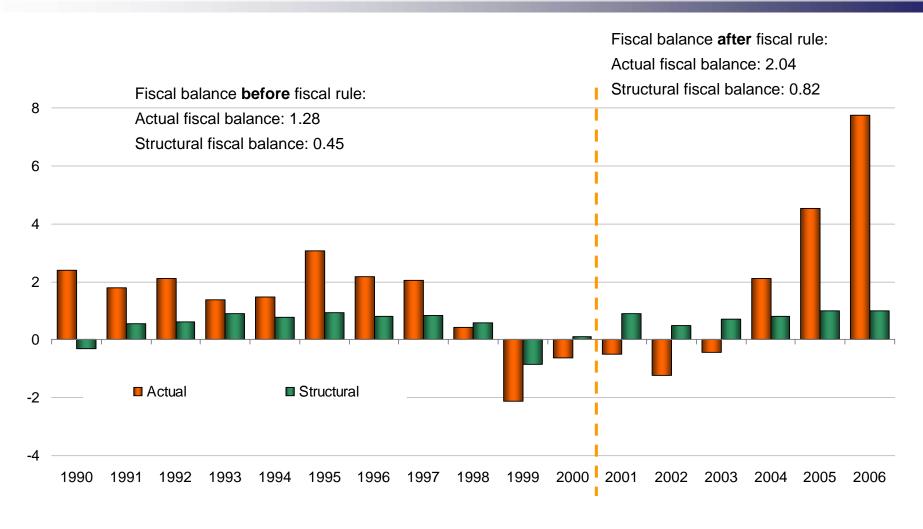


Sources: Ministry of Finance and Central Bank of Chile.



### Central government balance in Chile

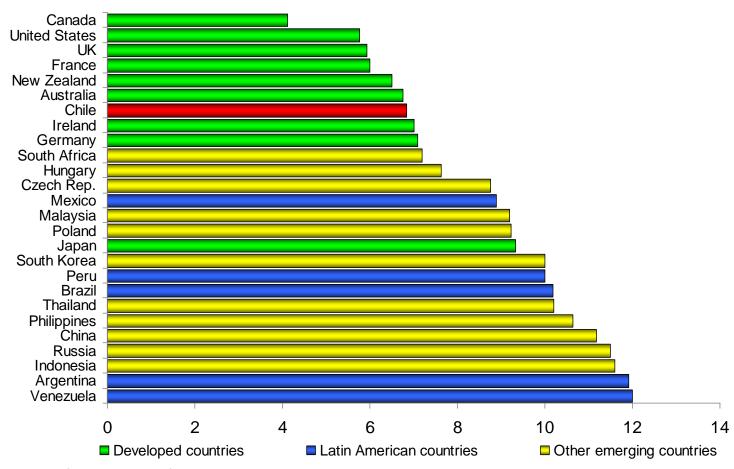
(percent of GDP, 1990-2006)



Sources: Ministry of Finance and Central Bank of Chile.



#### Strength of financial systems (2006)



Note: It is quantified in a scale from 1 to 13.

Source: Central Bank of Chile, based on Moody's Financial Strength Ranking (December 2006).



#### Central Bank charter and its objectives

- Since 1989, the CBC is an autonomous, technical institution, governed by a constitutional law, with full legal capacity, control of its equity, and of indefinite duration.
- The constitutional law establishes two objectives for the CBC:
  - 1. Stability of the purchasing power of Chile's currency:
    - Low and stable inflation through time;
  - 2. Normal functioning of domestic and external payments:
    - Safeguarding the financial sector's primary functions of credit and savings intermediation, provision of payment services, and proper risk allocation by financial markets.



#### Inflation-targeting regime

- Gradual implementation of the IT regime:
  - 1991-1999: Adoption of firm inflation targets but without full framework (first phase);
  - 2000 to the present: Full-fledged IT regime (second phase).
- First phase falls short of a full-fledged inflation targeting regime. MP was focused on two targets (inflation and the exchange rate).
- The second phase features a single inflation target and an active communication strategy for MP.



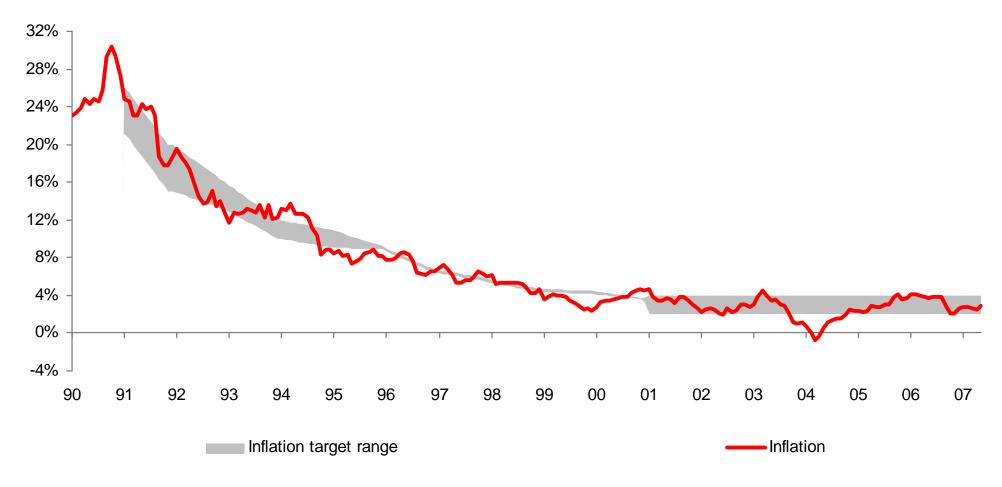
#### Features of IT, 1991-1999

- Partial IT was introduced in 1991:
  - Annual announcements of CPI inflation targets: in September of each year for next year's Dec-to-Dec inflation.
    - Announcement of annual target ranges during 1990-1996 and annual point targets during 1997-1999.
  - Annual targets were lowered by 1.5 percentage points per year on average.
- Inflation performance improved strongly during this period: annual inflation fell from 20%-30% to low single-digit levels.
- However, independence and effectiveness of MP were hindered by conflicts between exchange-rate-band commitment, annual inflation targets, and capital controls.



### Inflation and inflation target in Chile

(1990-2007, annual percent change)



Sources: National Statistics Bureau and Central Bank of Chile.



### Transition to full-fledged IT scheme

- Transition to full-fledged IT was carried out in 2000 with:
  - Inflation rate converging near 3%;
  - MP credibility strengthened by attainment of inflation targets;
  - Adoption of a floating-exchange-rate regime;
  - Abolition of capital controls.



#### Full-fledged IT scheme

- Between 2000 and 2006, the inflation target was defined to keep annual inflation most of the time within a range of 2% to 4%, with MP horizon at 12 to 24 months.
- Since 2007, the main MP objective is to keep annual CPI inflation rate most of the time at around 3%, within a symmetric tolerance range of one percentage point, and a policy horizon of around two years.
  - This target strengthens the 3% mid-point as the nominal anchor of the economy, while acknowledging that inflation can temporarily deviate from the 3+/-1% range to accommodate transitory shocks.



#### Communication and transparency

- The CBC underwent a major effort to provide more and better information to the markets and to explain how its IT scheme operates:
  - Disclosure of relevant data with small time lags and making information available on the CBC website;
  - Large number of technical publications, including the *Monetary Policy Report* (with a four-monthly frequency since May 2000), the *Financial Stability Report* (semi-annual, since 2004), the *Monetary Policy Framework* document (updated January 2007, previous May 2000) and the Projection Models book (2003);
  - Publication of monthly MP meeting dates (six months in advance since 2000), summary of MP minutes with the Board members' voting decisions (since 2000), and background information on MP minutes (since July 2005).



#### Communication and transparency

- Transparency efforts:
  - Provide institutional legitimacy and substantive accountability;
  - Promote monetary policy effectiveness, guiding market expectations:
    - MP affects expenditure decisions, output, and prices more through its effects on market expectations on the future course of monetary policy, than through the direct effects of a change in the short-term MPR.



# Monetary policy results in emerging economies and Chile



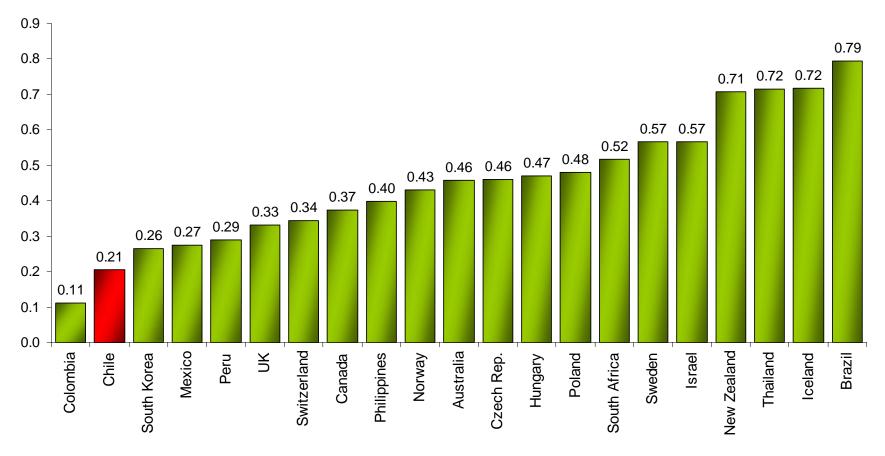
#### Inflation convergence

- Emerging economies have experienced a significant decline in inflation since the 1990s, approaching developed-country levels.
- However, convergence has been more successful in emerging IT economies than in non-targeting countries.
  - Schmidt-Hebbel and Werner (2002) and Mishkin and Schmidt-Hebbel (2007) find that inflation targets Grangercause inflation during most of the 1990s.
- Among all IT countries, Chile is the second most accurate in hitting its inflation target.



### Relative deviations of inflation rates from targets in 21 targeting countries

(since start of inflation targeting and through 2006)



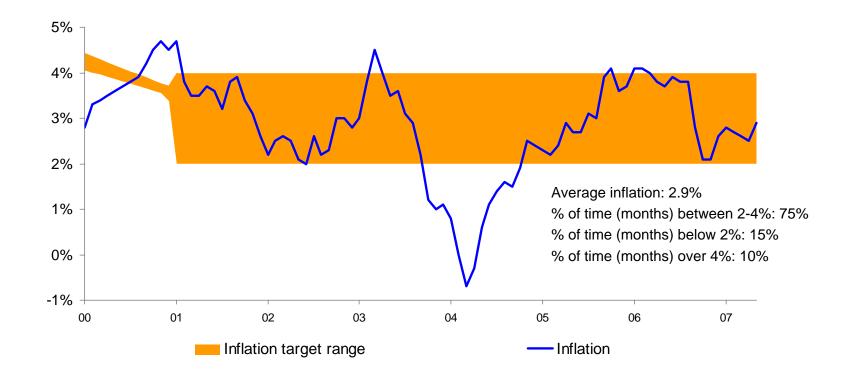
Note: The initial period of an inflation-targeting scheme varies across countries.

Source: Based on Albagli and Schmidt-Hebbel (2004).



#### Inflation target and rate in Chile

(January 2000 - May 2007, annual percent change)



Sources: National Statistics Bureau and Central Bank of Chile.



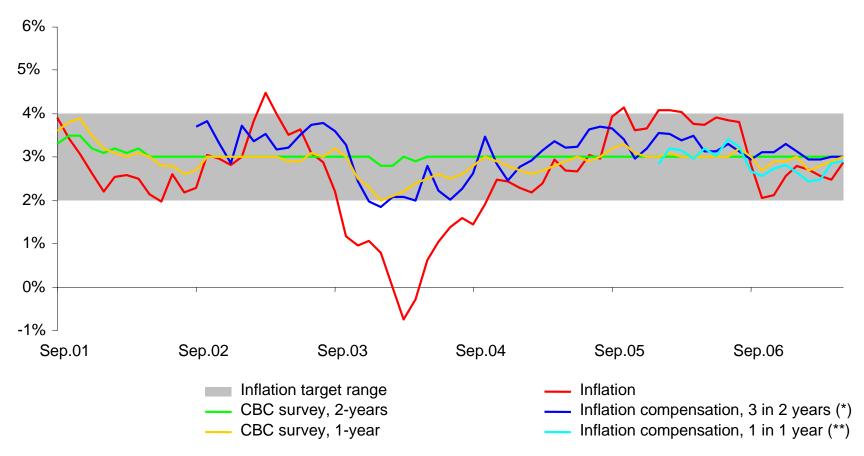
#### IT and credibility

- Adoption of IT has also contributed to building up credibility of central banks:
  - IT has helped in anchoring inflation expectations at levels close to targets and inflation expectations are more stable than in the U.S. (Ramos et al., 2007; Gürkaynak et al., 2007);
  - In Chile, the distance of inflation expectations from inflation targets was closed as targets converged toward the stationary 3% level and the CBC showed strong commitment to attaining the targets (Céspedes and Soto, 2005);
  - During the past five years, inflation expectations have remained close to the mid-point of the inflation target range, reflecting high credibility of the IT regime.



### Inflation and inflation expectations in Chile

(Sept. 2001 – May 2007, annual percent change)



- (\*) Average forward rate of inflation compensation from 2 to 5 years ahead.
- (\*\*) Average forward rate of inflation compensation from 1 to 2 years ahead. Source: Central Bank of Chile.

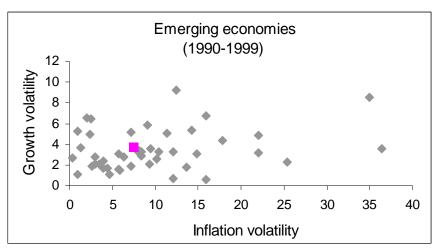


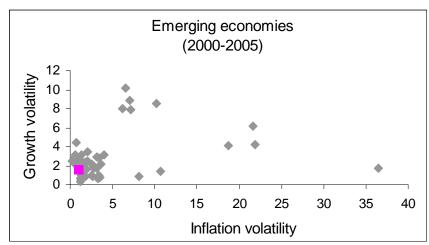
#### IT and macroeconomic stability

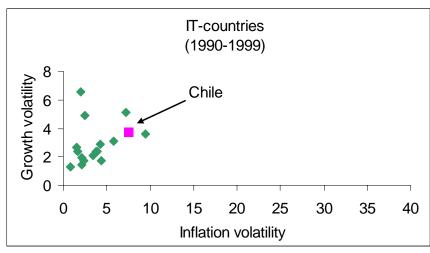
- Emerging economies have experienced reductions in the volatility of both inflation and output. However, volatility reductions have been more pronounced in IT countries than in non-IT countries.
- Volatilities of growth and inflation have fallen significantly in Chile, even in comparison to other inflation targeters.
- Two factors explain most of volatility reduction in IT countries: smaller shocks hitting the economy and improvements in monetary policy efficiency (Mishkin and Schmidt-Hebbel, 2007).

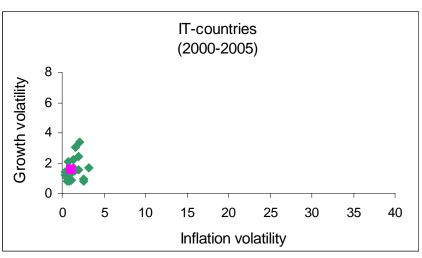


#### World volatility of growth and inflation





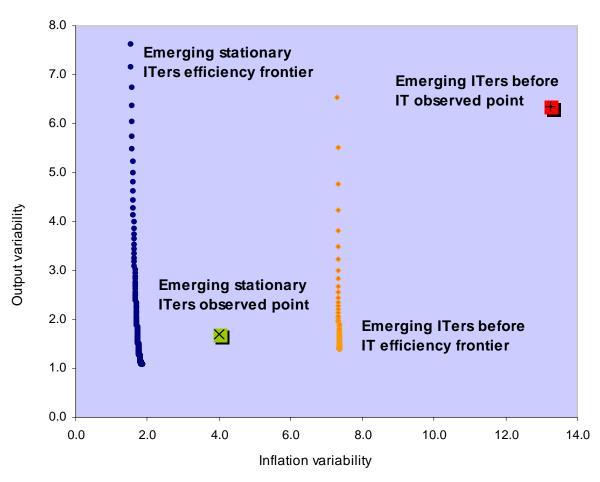




Note: Measured as the standard deviation on indicated period. Source: World Development Indicators 2007, World Bank.



## Inflation and output volatility and MP efficiency in emerging IT economies

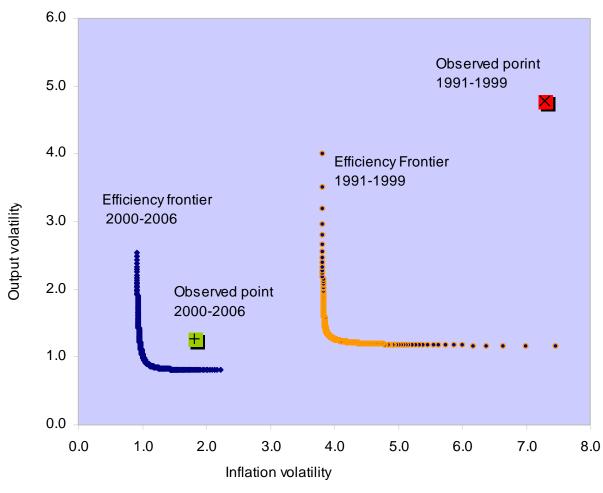


- 58% of the current performance is explained by smaller shocks.
- 42% of the decline in volatilities is explained by monetary policy improvements.

Source: Mishkin and Schmidt-Hebbel (2007).



## Inflation and output volatility and MP efficiency in Chile



Source: Based on Mishkin and Schmidt-Hebbel (2007).



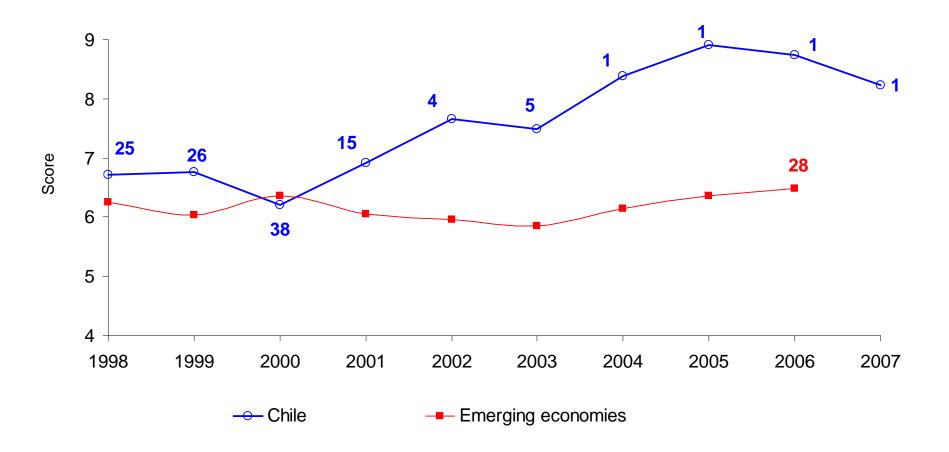
### Contribution of MP to macroeconomic performance

- Emerging economies have improved MP practice.
   However, the contribution of monetary policy to macroeconomic performance is still low.
- The annual report on competitiveness prepared by the Institute for Management Development (IMD) shows that the positions of emerging economies in the country ranking of the contribution of central bank policy to economic development has not changed significantly since 1998.
- Yet Chile has made significant improvements during the last decade: CBC policies are ranked first since 2004.



### Contribution of central bank policy to economic development

(Chile's ranking, 1998-2007)

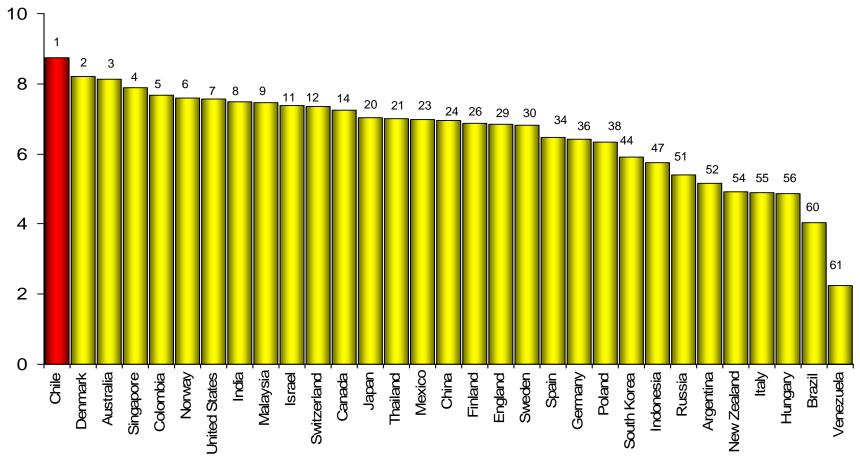


Note: The number over each circle denotes the place in the ranking. Source: Institute for Management Development.



## Contribution of central bank policy to economic development

(Cross-country ranking, 2006)



Note: It is quantified in a scale from 1 to 9. The number over each bar denotes the place in the ranking. Source: Institute for Management Development (2006).





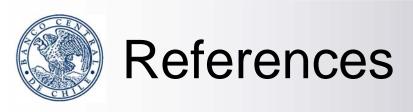
- Macroeconomic conditions have improved significantly in emerging economies since the early 1990s.
- Emerging economies show major progress in:
  - Fiscal responsibility;
  - Coherent adoption of central bank autonomy, monetary regimes based on IT, and larger exchange-rate flexibility;
  - Financial system strength.
- Adoption of more flexible exchange rates and an IT regime has contributed to lower output and inflation volatility, and stronger credibility of central bank policies.



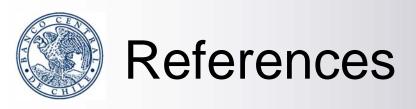
- Macroeconomic stability is often accomplished gradually. Chile adopted the IT regime in two distinct phases and implemented a solid macroeconomic framework based on central bank autonomy with a clear focus on price stability. This was supported by a solvent, responsible, and predictable fiscal policy and a solid and well-regulated financial system.
- Chile's good record of attaining inflation levels close to the target has strengthened private sector confidence in the CBC and raised MP effectiveness and credibility.



- Low inflation and a credible monetary policy represent an essential macroeconomic achievement.
- By improving its policy framework, supported by strong transparency, accountability, and communication, the CBC has laid a major foundation to Chile's macroeconomic stability.
- Yet the conquest and predictability of inflation are not guaranteed. The CBC will remain vigilant, improving its policy framework as needed to continue delivering high levels of macroeconomic stability.



- Albagli, E. and K. Schmidt-Hebbel (2004), "By How Much and Why do Inflation Targeters Miss Their Targets?", *Mimeo*, Central Bank of Chile.
- Céspedes, L. and C. Soto (2005), "Credibility and Inflation Targeting in an Emerging Market: Lessons from the Chilean Experience", *International Finance* 8 (3): 545-75.
- Gürkaynak R., A. Levin, A. Marder and E. Swanson (2007), "Inflation Targeting and the Anchoring of Inflation Expectations in the Western Hemisphere," in *Monetary Policy Under Inflation Targeting*, Series on Central Banking, Analysis, and Economic Policies Vol. XI, edited by K. Schmidt-Hebbel and F. Mishkin, Central Bank of Chile.
- Institute for Management Development (2006), World Competitiveness Yearbook, several years.
- International Monetary Fund (2007), *International Financial Statistics*. Data on CD-ROM, April.



- Mishkin, Frederic S. and K. Schmidt-Hebbel (2007), "Does Inflation Targeting Make a Difference?" in *Monetary Policy Under Inflation Targeting*, Series on Central Banking, Analysis, and Economic Policies Vol. XI, K. Schmidt-Hebbel and F. Mishkin, Central Bank of Chile.
- Moody's Investors Service (2006), "Monthly Ratings List. Bank Credit Research".
- Ramos-Francia, M., D. Chiquiar, and A. Noriega (2007), "A Time Series Approach to Test a Change in Inflation Persistence: The Mexican Experience", *Working Paper* N° 2007-01, Banco de México.
- Schmidt-Hebbel, K. and A. Werner (2002), "Inflation Targeting in Brazil, Chile, and Mexico: Performance, Credibility, and the Exchange Rate", *Economia*, 2 (2): 30-89.
- World Bank (2007), World Development Indicators 2007. April.



# Monetary Policy in Emerging Economies: The View from Chile

Vittorio Corbo Governor