



Chile: Managing Monetary Policy during a Copper Price Bonanza

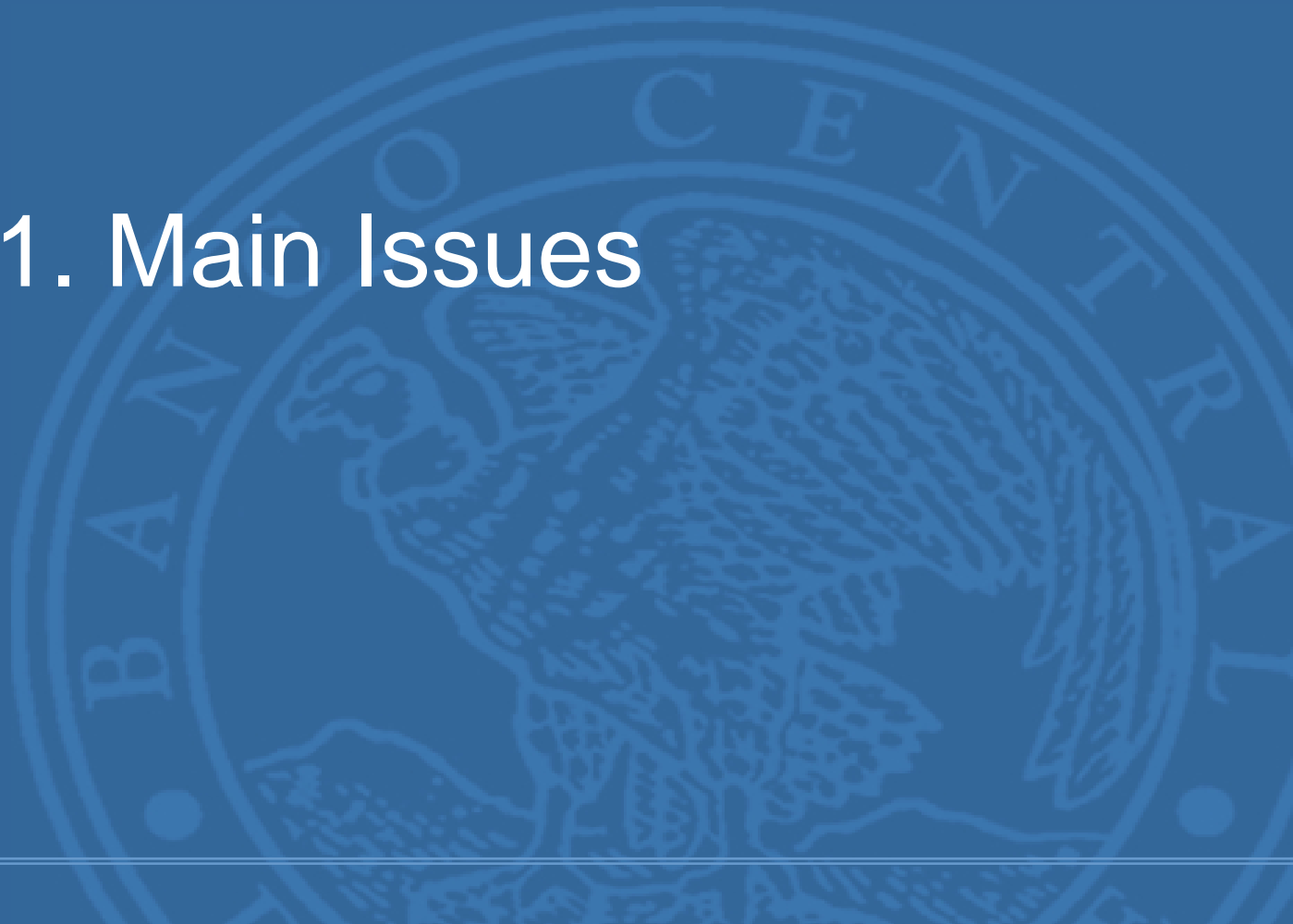
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Vittorio Corbo
Governor

Outline

1. Main Issues
2. Structural Features of the Economy
3. Copper Bonanza
4. Macroeconomic Policy Framework
5. Exchange-rate Behavior and Overall Competitiveness
6. Conclusions

1. Main Issues



Context

- In the past, world copper prices (and terms of trade) were highly correlated with Chile's government expenditure and with economic growth.
- Chile's terms of trade, current account balance, and copper prices are still highly correlated, but government expenditure and economic growth have been insensitive to the current copper price bonanza.
- What has been the role of policies in this improved performance?
- What about the exchange rate and competitiveness?

Context

- Copper mining accounted for 13% of Chile's nominal GDP (2005).
- More than 50% of copper exports accrue to non-residents.
- The economy is highly integrated into world financial markets.
- Chile has a sound and well-regulated financial system.
- Today's macroeconomic policy framework is better suited to face the copper bonanza.

2. Structural Features of the Economy

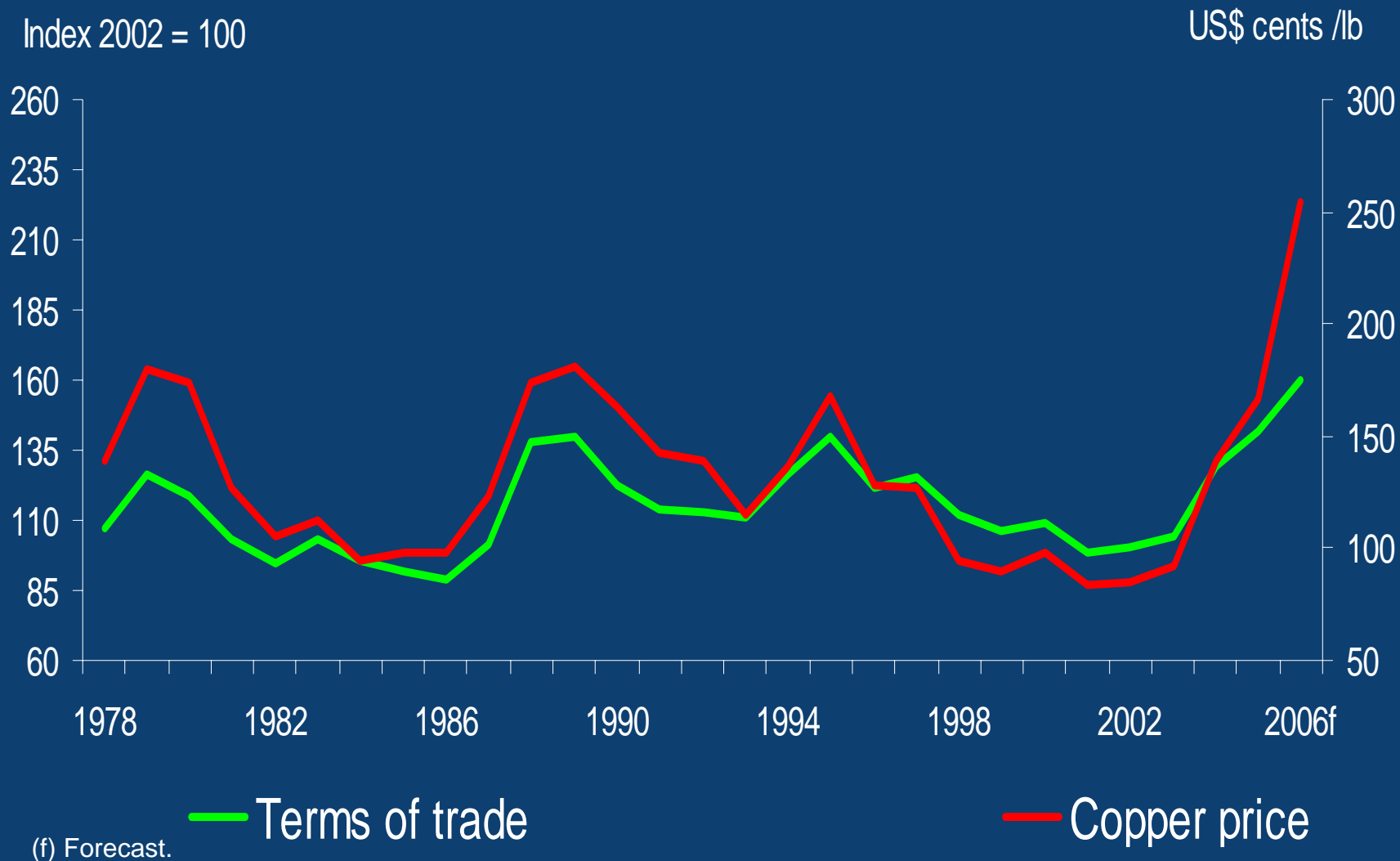


Structural Features

- Terms of trade move closely with copper prices. That tight relationship has not changed, but the economy is now in a better stance to absorb terms-of-trade shocks.
- Copper prices and the current account balance are positively correlated.
- Growth has been close to trend during the recent and ongoing copper price bonanza and much of the resource boom has been saved.

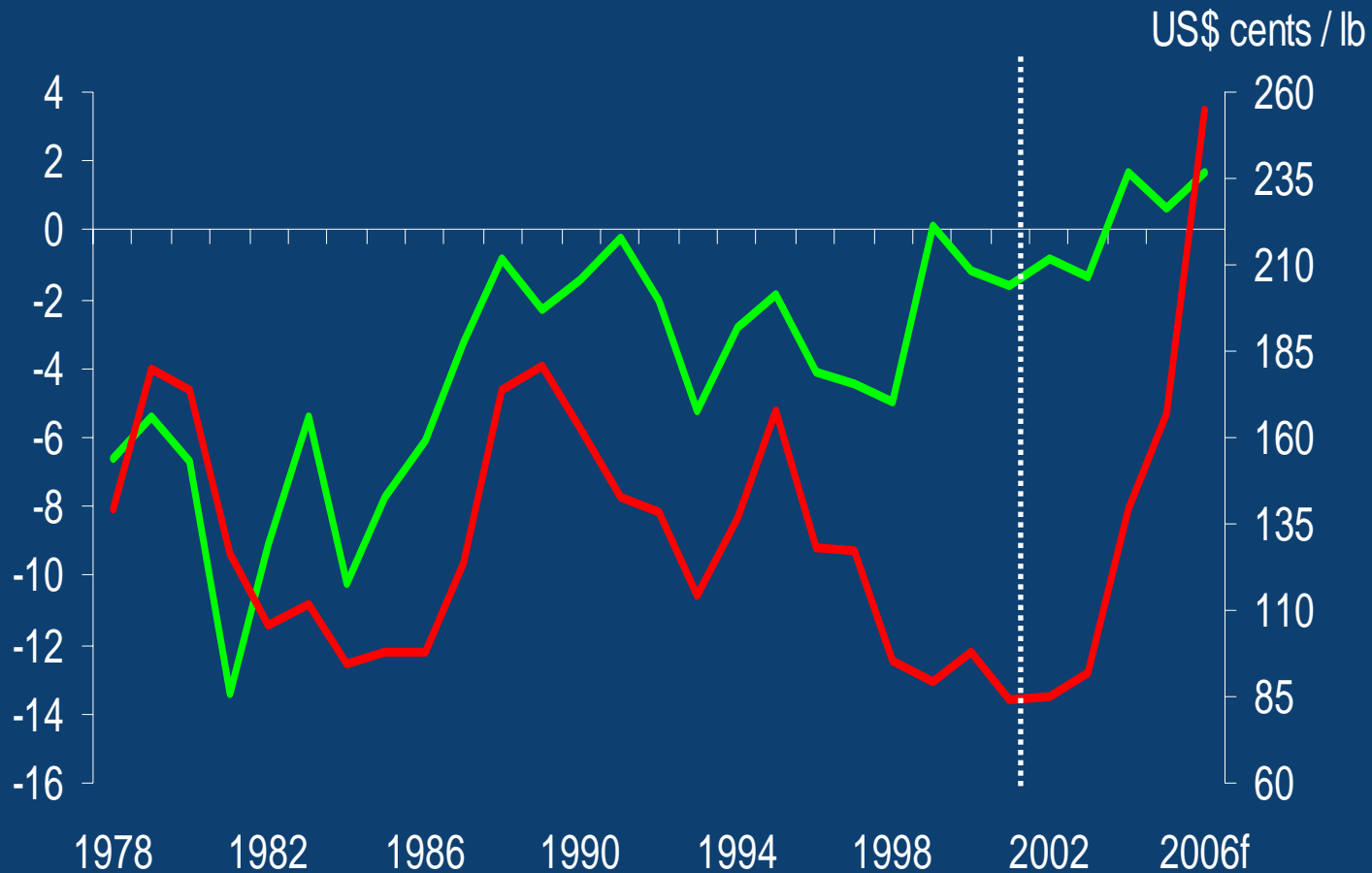
Copper Price and Terms of Trade

(Index 2002 = 100, US\$ cents / lb)



Copper Price and CA Balance

US\$ cents / lb, %GDP



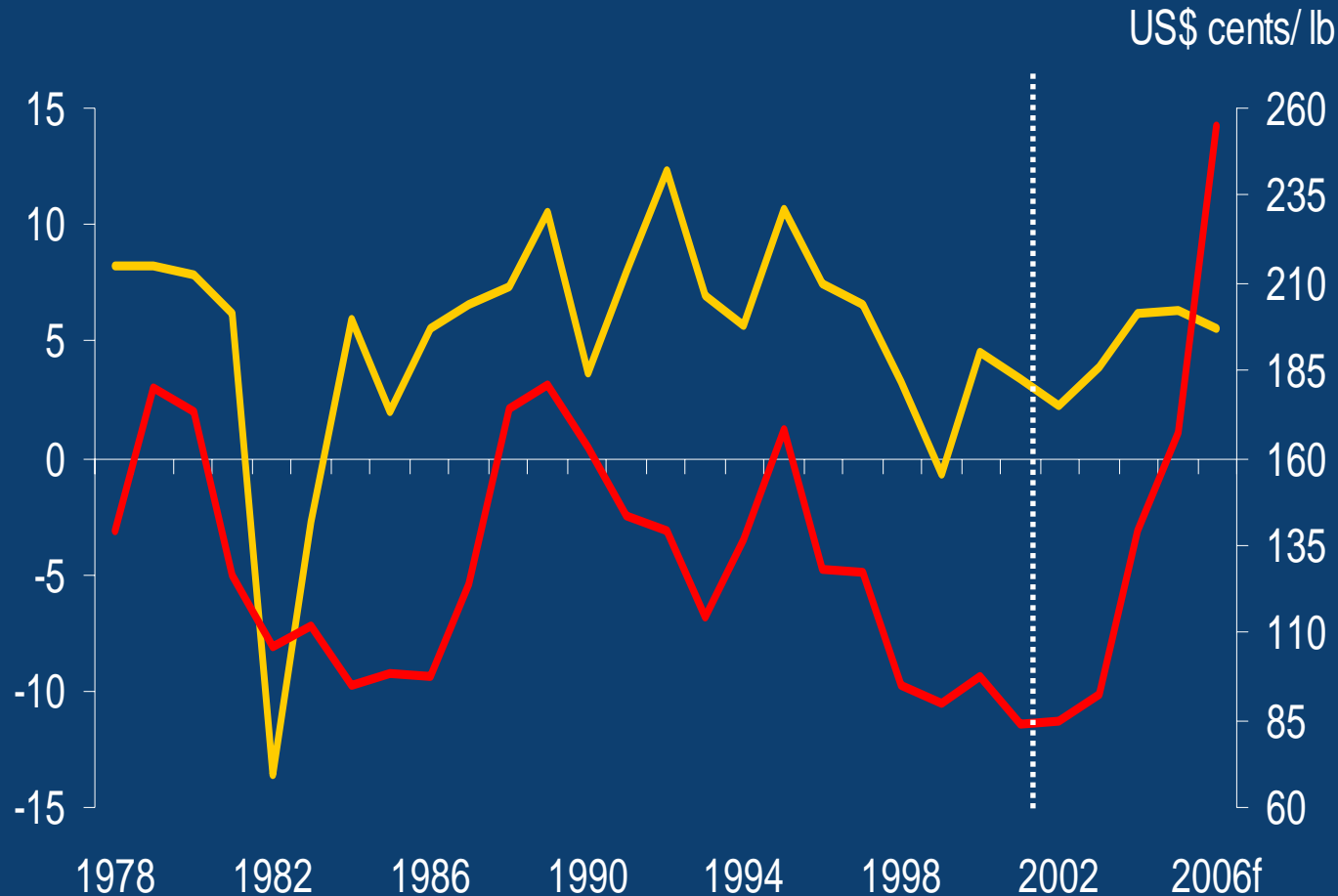
(f) Forecast.

— CA balance (%GDP)

— Copper price

Copper Price and GDP Growth

(US\$ cents / lb, % yoy)



(f) Forecast.

— GDP growth (% yoy)

— Copper price

3. Copper Bonanza

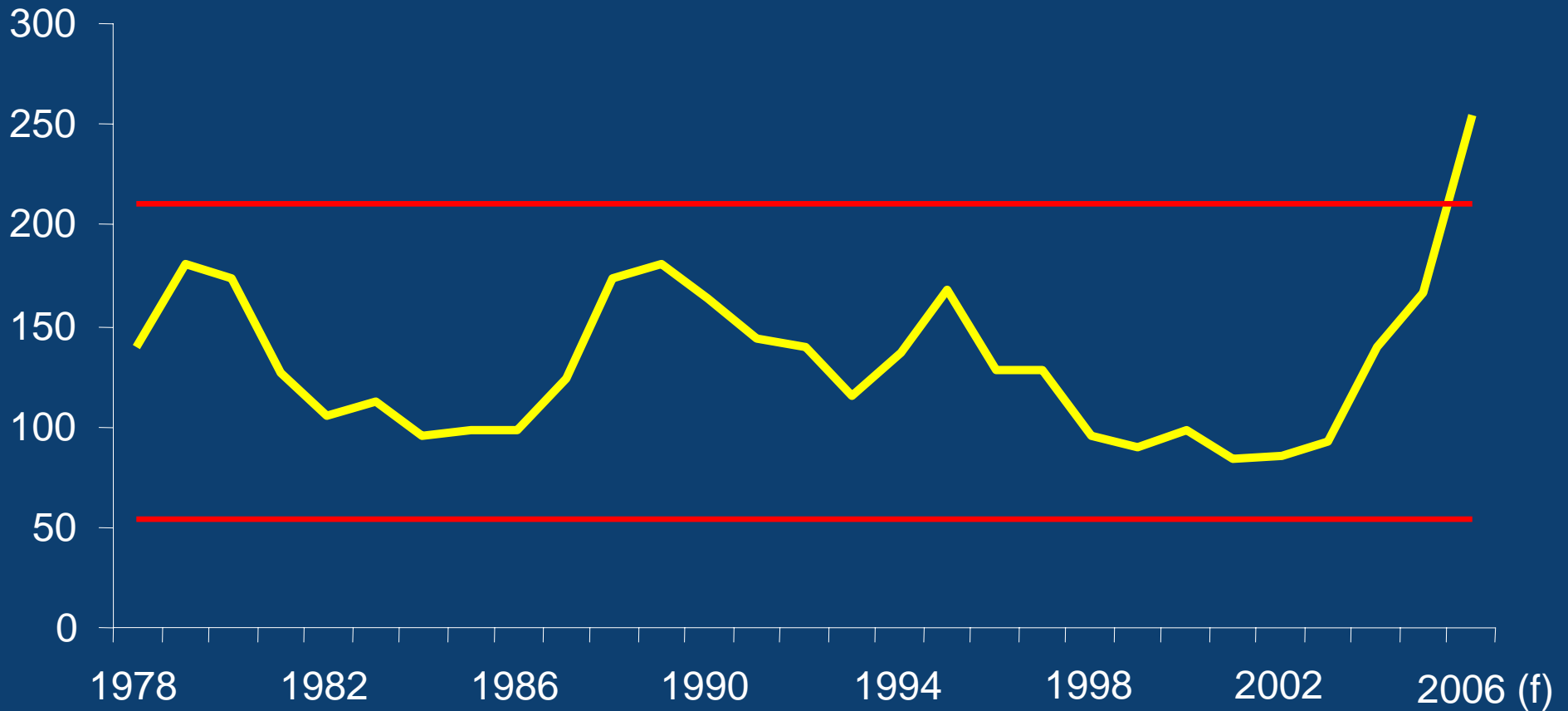


An Exceptional Bonanza

- The Chilean economy is facing a huge copper price boom - one of the largest bonanzas in the history of the world market of copper.
- Recent copper prices have repeatedly exceeded market projections and futures.
- Copper price booms tend to revert quickly when prices reach record highs.

High and Persistent Copper Prices

US\$ cents / lb



— Bands ± 2 standard deviations from the average 1978-2006(f)

(f) Forecast.

Copper Market Futures

US\$ cents/ lb



An Exceptional Bonanza

- The government introduced a counter-cyclical fiscal policy rule in 2001.
- The rule provides for a target surplus for central government's spending of 1% of GDP based on a long-run copper price and with output equal to its potential.
- The government's independent panel of experts projects an average copper price of 1.21 US\$/lb for the next 10 years while current (2006) average copper prices are projected close to 3 US\$/lb.

What is the Policy Challenge?

- Economies that face a boom in their terms of trade may confront an excessive appreciation of their currency (“Dutch disease”).
- Commodity booms are accompanied by favorable external conditions that may exacerbate the effects on the economy.
- As the price reversal often comes with a deterioration of external conditions, the domestic downturn becomes more pronounced.
- Successful international experiences suggest prudent management of temporary extra revenues from terms-of-trade booms.

4. Macroeconomic Policy Framework

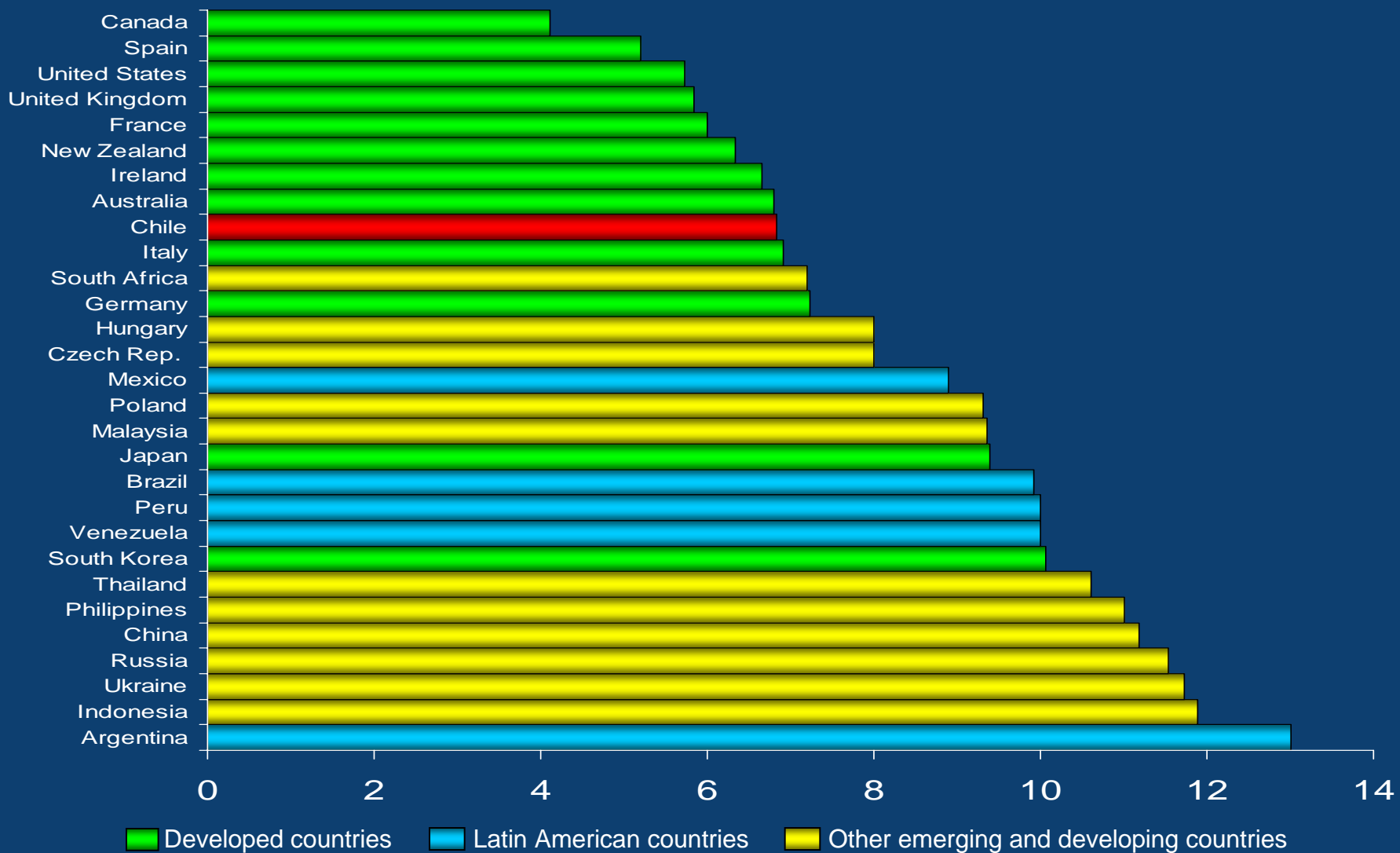


Chile's Overall Macroeconomic Framework

- Our macroeconomic framework is based on a “stool of three strong legs”:
 - ▲ An independent and credible Central Bank with explicit mandate of achieving price and payments stability;
 - ▲ Strong fiscal policy;
 - ▲ Strong financial regulation and supervision.
- Suited to face terms-of-trade shocks also thanks to:
 - ▲ Financially integrated to the world;
 - ▲ Favorable external financial conditions (investment grade since 1992).

Banking System Strength

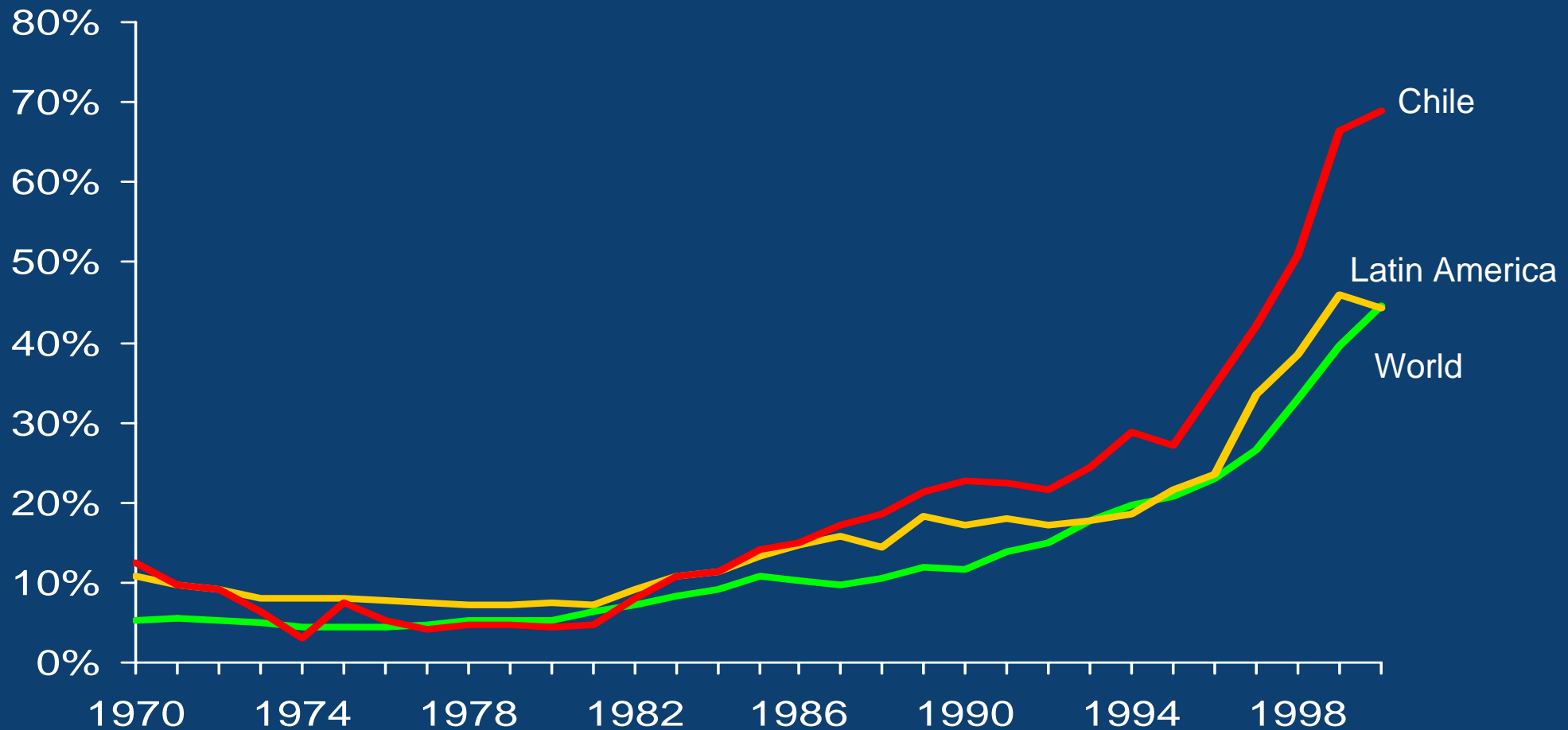
(Index, June 2006)



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

Financial Integration

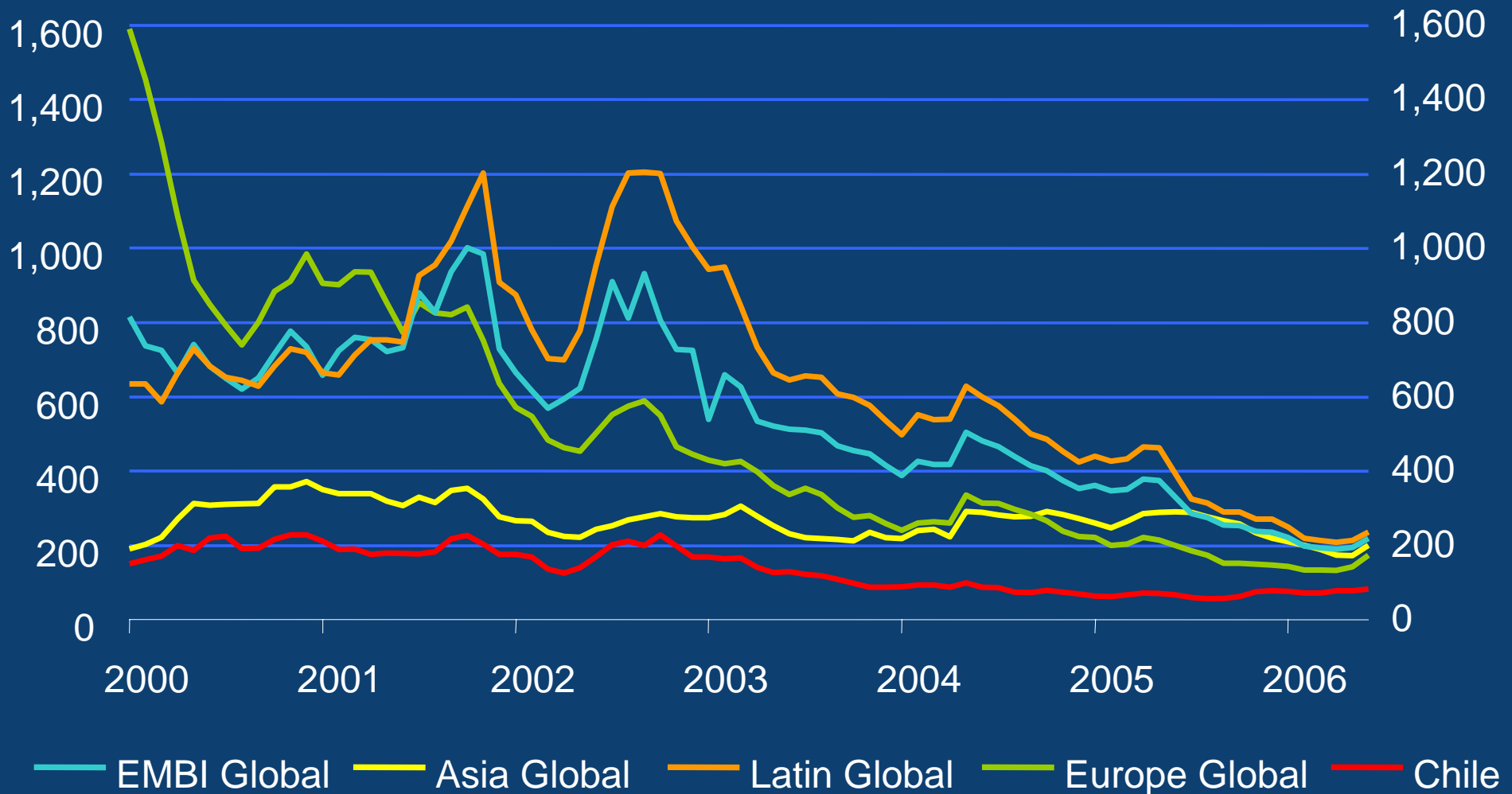
(1970-2000, Stock of foreign liabilities over GDP)



Source: Calderón, Loayza and Schmidt-Hebbel (2005).

Sovereign Spreads

(basis points)



Source: JP Morgan Chase.

Monetary Policy

1. Full-fledged inflation targeting.

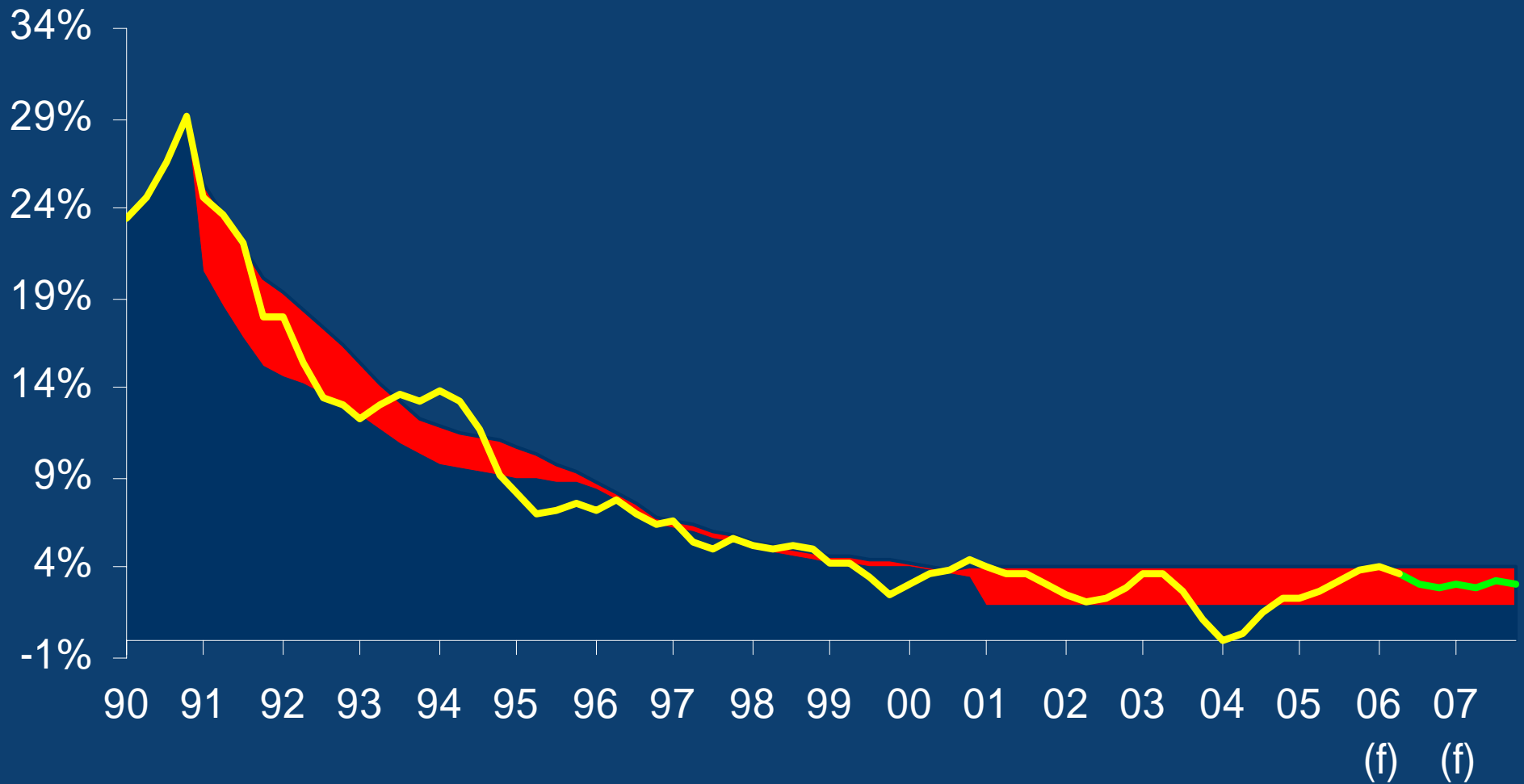
- ▲ Monetary policy is aimed at achieving CBC's main policy objective: inflation at 3% in a horizon of 12-24 months;
- ▲ Stable and anchored inflation expectations.

2. Consolidated floating exchange rate regime.

- ▲ Floating allows the nominal ER to absorb shocks;
- ▲ It has fostered the development of a large private market of hedging.

Inflation Targets and Inflation Rates

(%, yoy)



(f): Forecast.

Monetary Policy

- A main determinant of the cyclicality of monetary policy is credibility.
- Monetary policy has been increasingly counter-cyclical as policy credibility has been strengthened.
- At the same time, a substantial decline in output and inflation volatility has been observed in Chile.
- Monetary policy independence and effectiveness have been strengthened by ER flexibility.

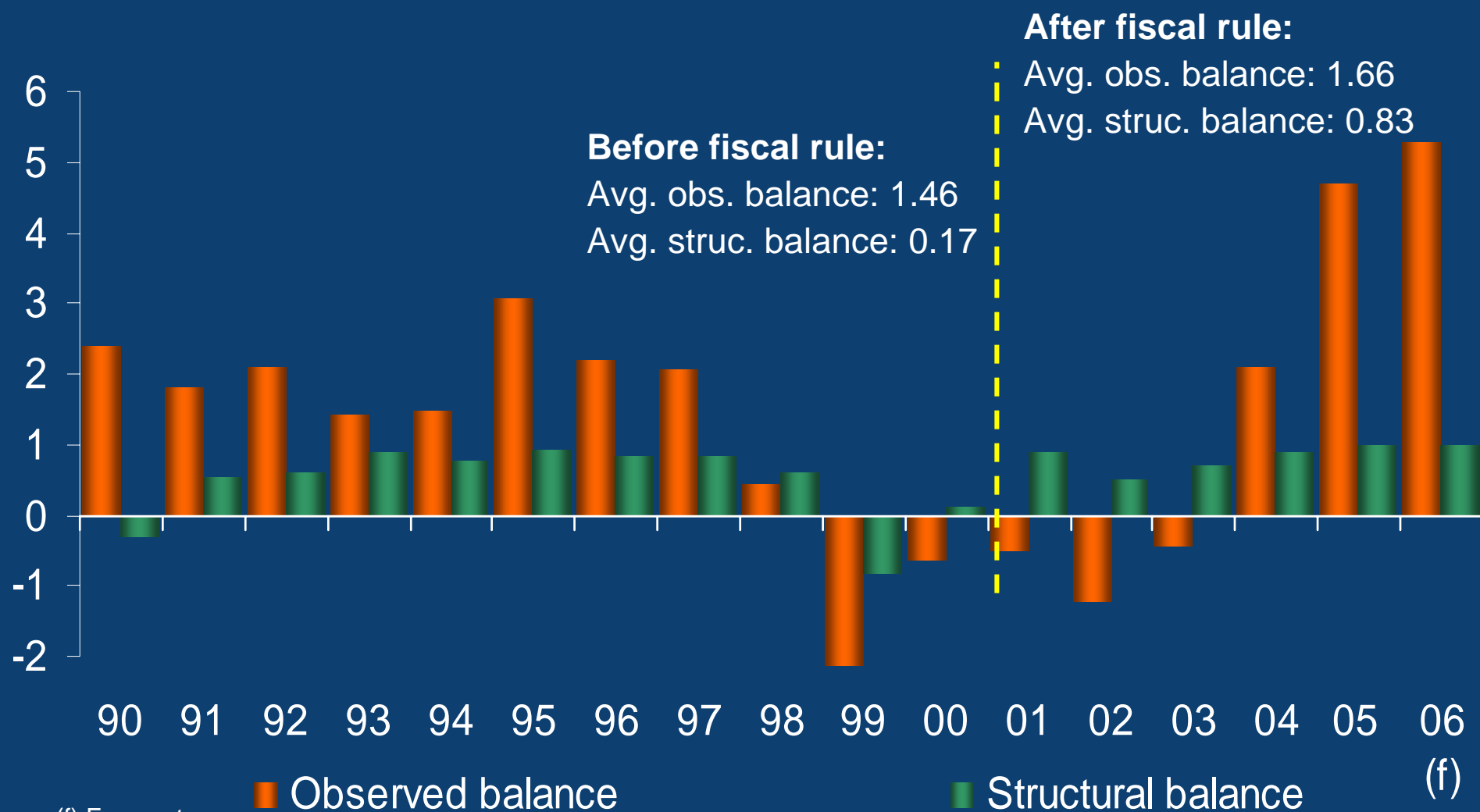
Fiscal Policy

- Counter-cyclical fiscal policy rule that targets government expenditure to permanent government revenue.
- Independent panels of experts provide estimates for the long-run copper price and trend GDP.
- Structural revenue is defined with a copper price at its “long-term level” and GDP at its trend level.
- Structural fiscal surplus (1% of GDP) is saved into “Reserve Pension Fund and Central Bank Capitalization.”
- Cyclical fiscal surplus is saved into “Economic and Social Stabilization Fund.”

Fiscal Policy

- The preceding Administration implemented the structural fiscal policy rule.
- The current Administration is anchoring the latter rule as part of the Fiscal Responsibility Law (already approved by Congress).
- Yet since the late 1980s, Chile has run actual fiscal surpluses, except during 1999-2003.
- An average structural balance of 0.83% of GDP has been attained during 2001-2006.

Central Government Balance (% GDP)



(f) Forecast.

Source: Chile's Ministry of Finance.

5. Competitiveness

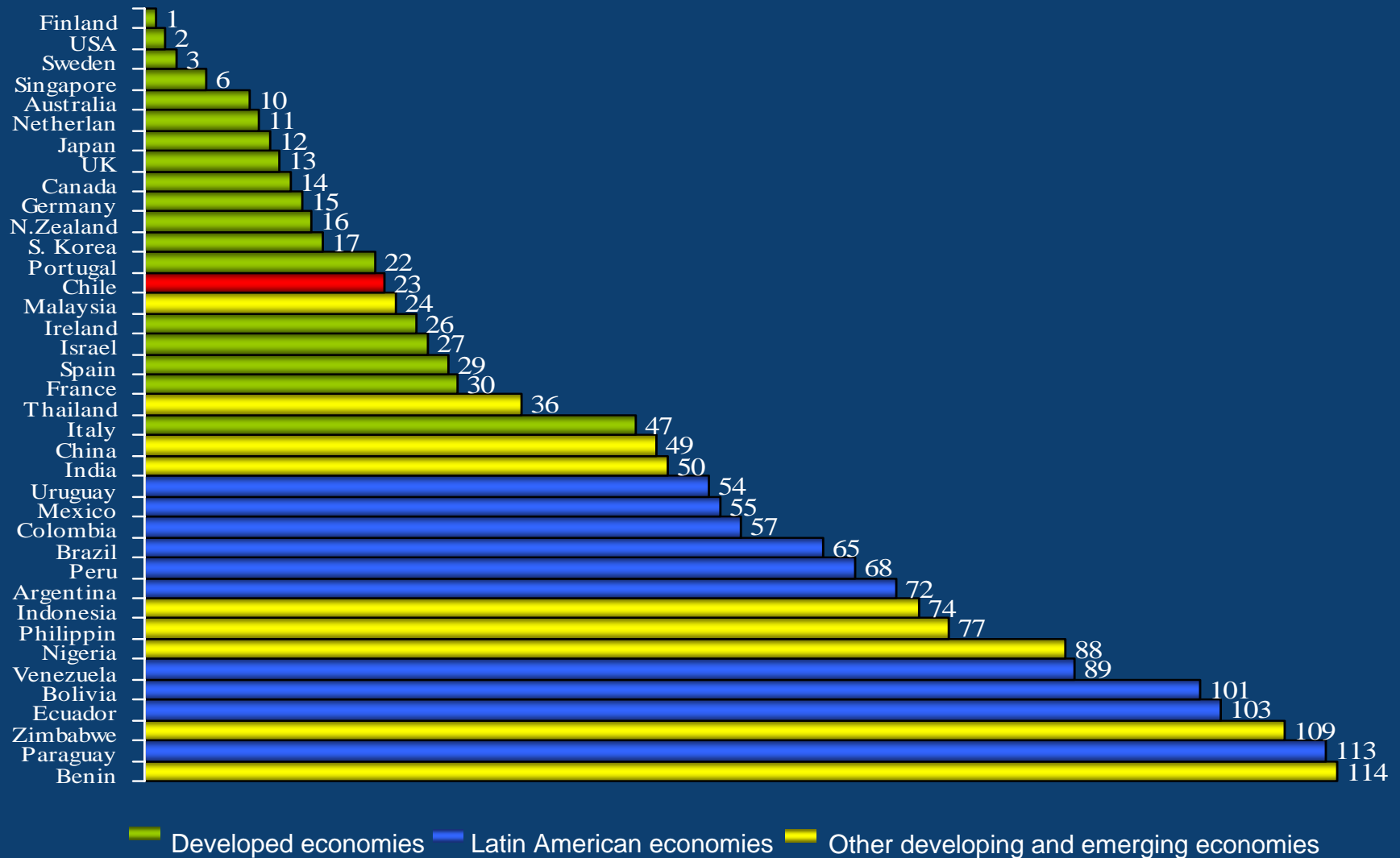


The copper boom has not harmed Chile's competitiveness

- The current macro-financial policy framework and ongoing reforms have allowed the economy to be as competitive as many industrial economies.
- Counter-cyclical fiscal and monetary policies together with solid structural features have broken down the link between the exchange rate and copper prices.
- With the price at historically high levels, the RER is at its 15-year average while the economy's overall competitiveness has been maintained.

Compared Competitiveness

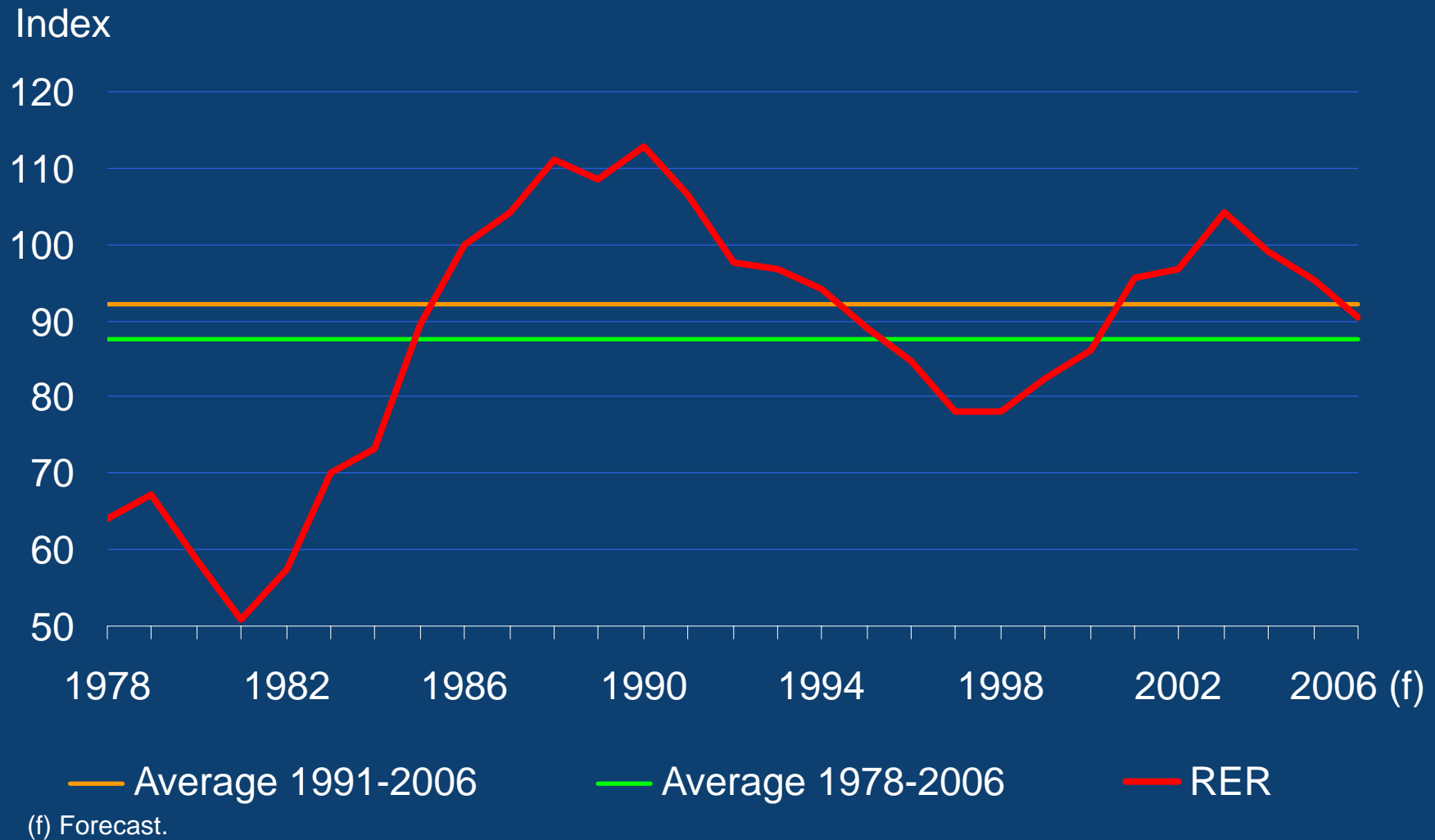
(Index, 2005)



Note: The competitiveness index measures country's ability to achieve high and sustainable per capita GDP growth.
 Source: World Economic Forum (2005).

Real Exchange Rate

(Index 1986=100, 1978-2006)



6. Conclusions



Conclusions

- The Chilean economy is facing a huge copper price boom - one of the largest bonanzas in the history of the world market of copper.
- Like in many emerging market economies today, Chile's terms of trade were highly correlated with government spending and with economic growth in Chile's past.
- However, growth has been close to trend during the recent and ongoing copper price bonanza and much of the resource boom has been saved.
- The prudent response reflects better policies and improved structural conditions of the Chilean economy.

Conclusions

- Better macro policies are reflected in a counter-cyclical fiscal policy rule that targets government spending to permanent government revenue, and a counter-cyclical monetary policy anchored in full-fledged inflation targeting and a floating exchange-rate regime.
- Structural features including a sound financial system, solid financial regulation, and strong integration into world financial markets are also helping to better manage the boom.
- The latter policy improvements have broken down the link between the exchange rate and the copper price. With the price at historically high levels, the RER is at its 15-year average while the economy's overall competitiveness has been maintained.
- In a nutshell, Chile's economy is today much more resilient in facing terms-of-trade bonanzas than it was in the past.

Conclusions

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- In a nutshell, Chile's economy is today much more resilient in facing terms-of-trade bonanzas than it was in the past.



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