



# The Chilean Experience with Inflation Targeting

Rodrigo Vergara M.  
Governor  
Central Bank of Chile

PANEL

Futuro de la Política Monetaria: Lecciones del Esquema de Metas de Inflación  
LACEA, November 1<sup>st</sup>, 2012



# Outline

---

- The two phases of IT in Chile
- Why these choices?
- Outcomes of IT in Chile
- Issues arising from the recent experience



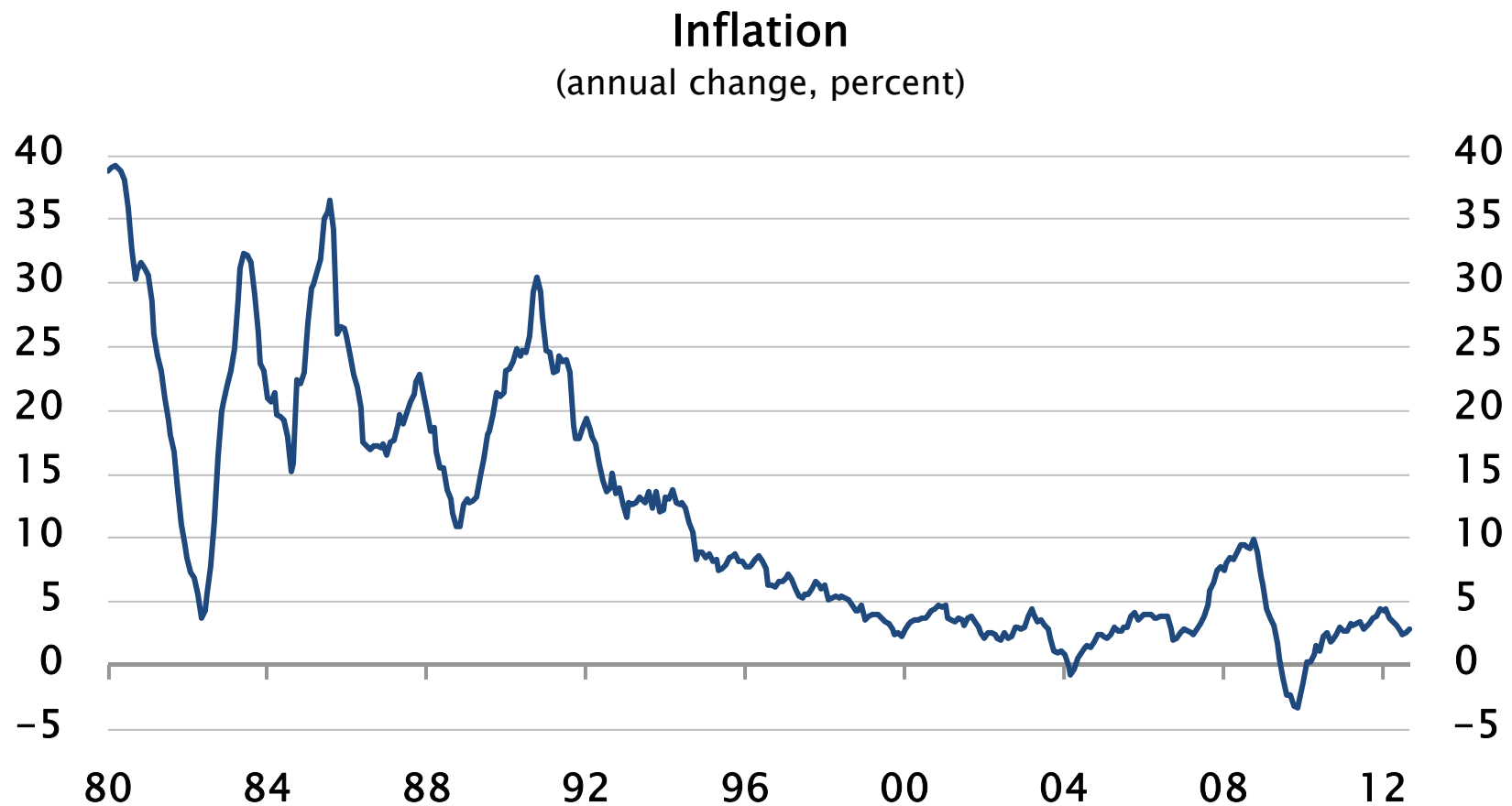
# Outline

---

- The two phases of IT in Chile
- Why these choices?
- Outcomes of IT in Chile
- Issues arising from the recent experience



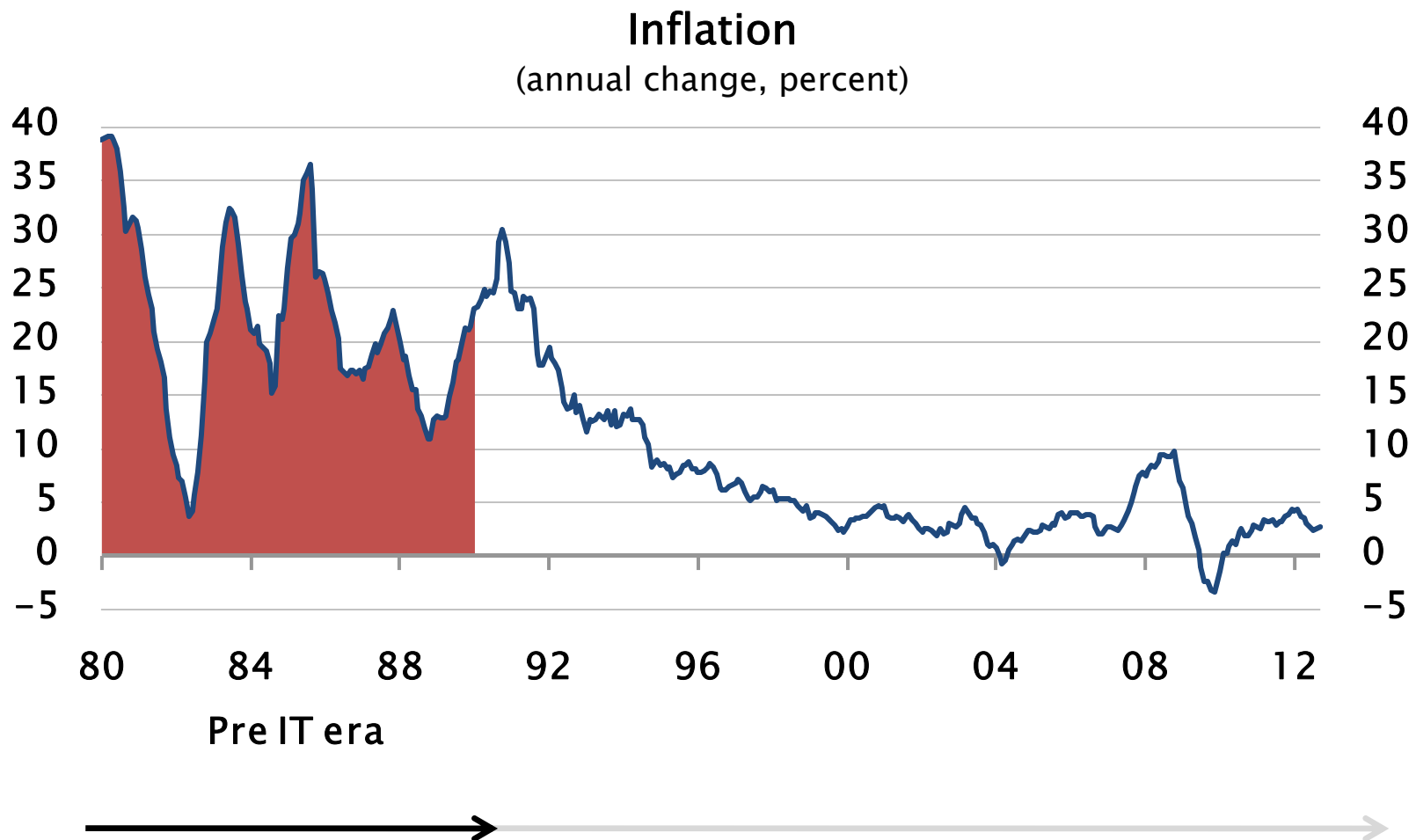
# The timeline of inflation in Chile



Source: National Bureau of Statistics.



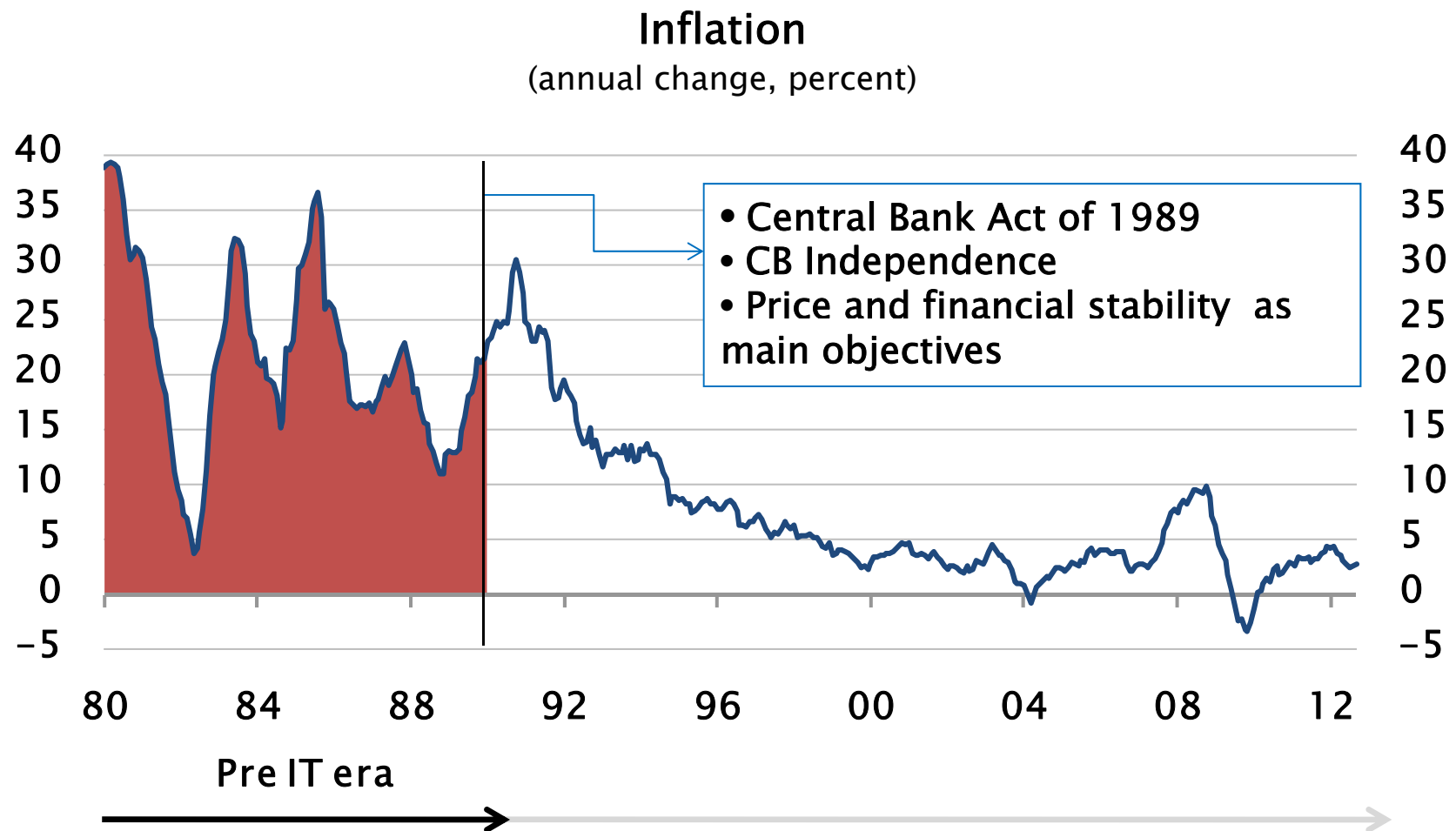
# The timeline of inflation in Chile



Source: National Bureau of Statistics.



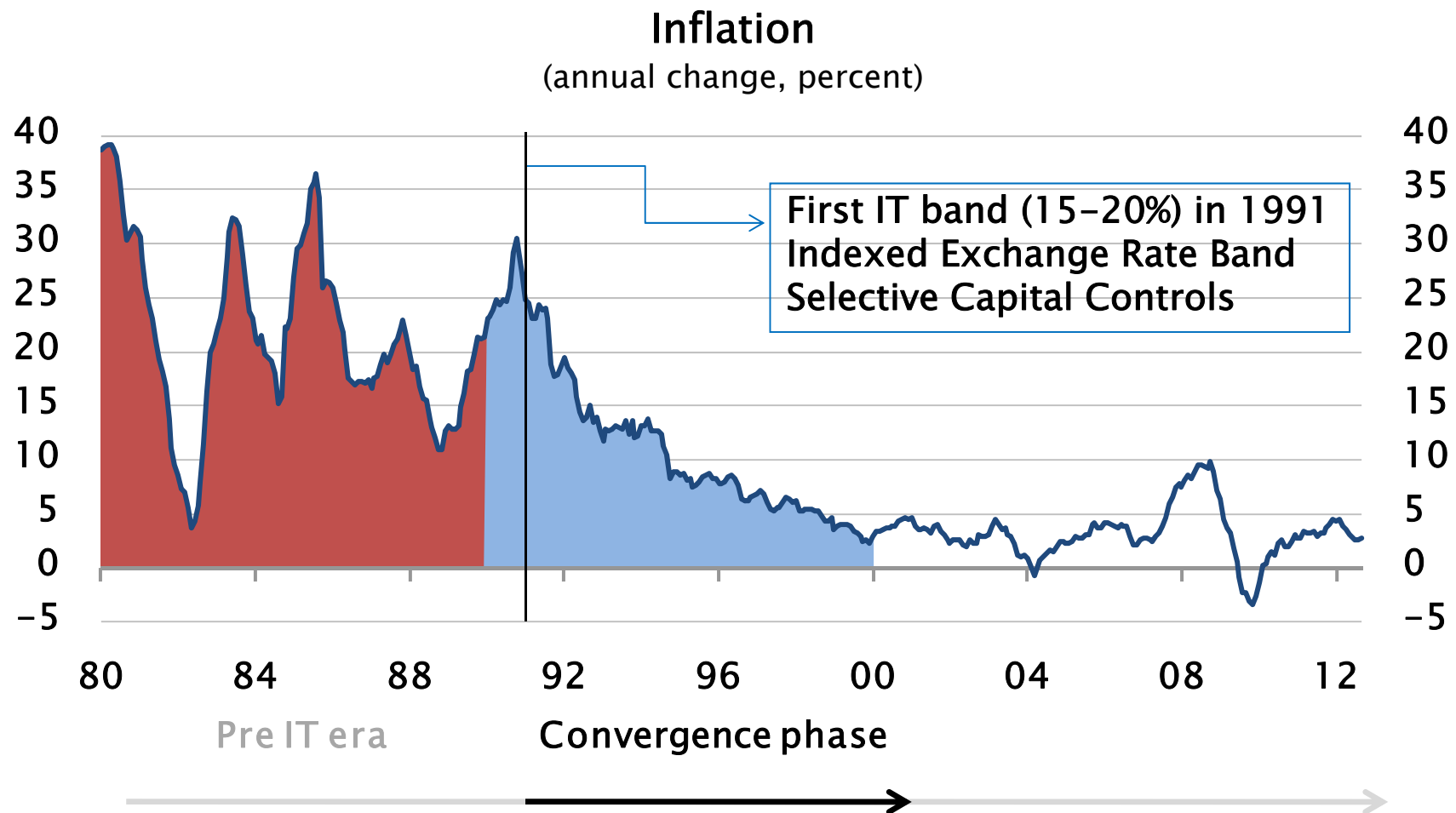
# The timeline of inflation in Chile



Source: National Bureau of Statistics.



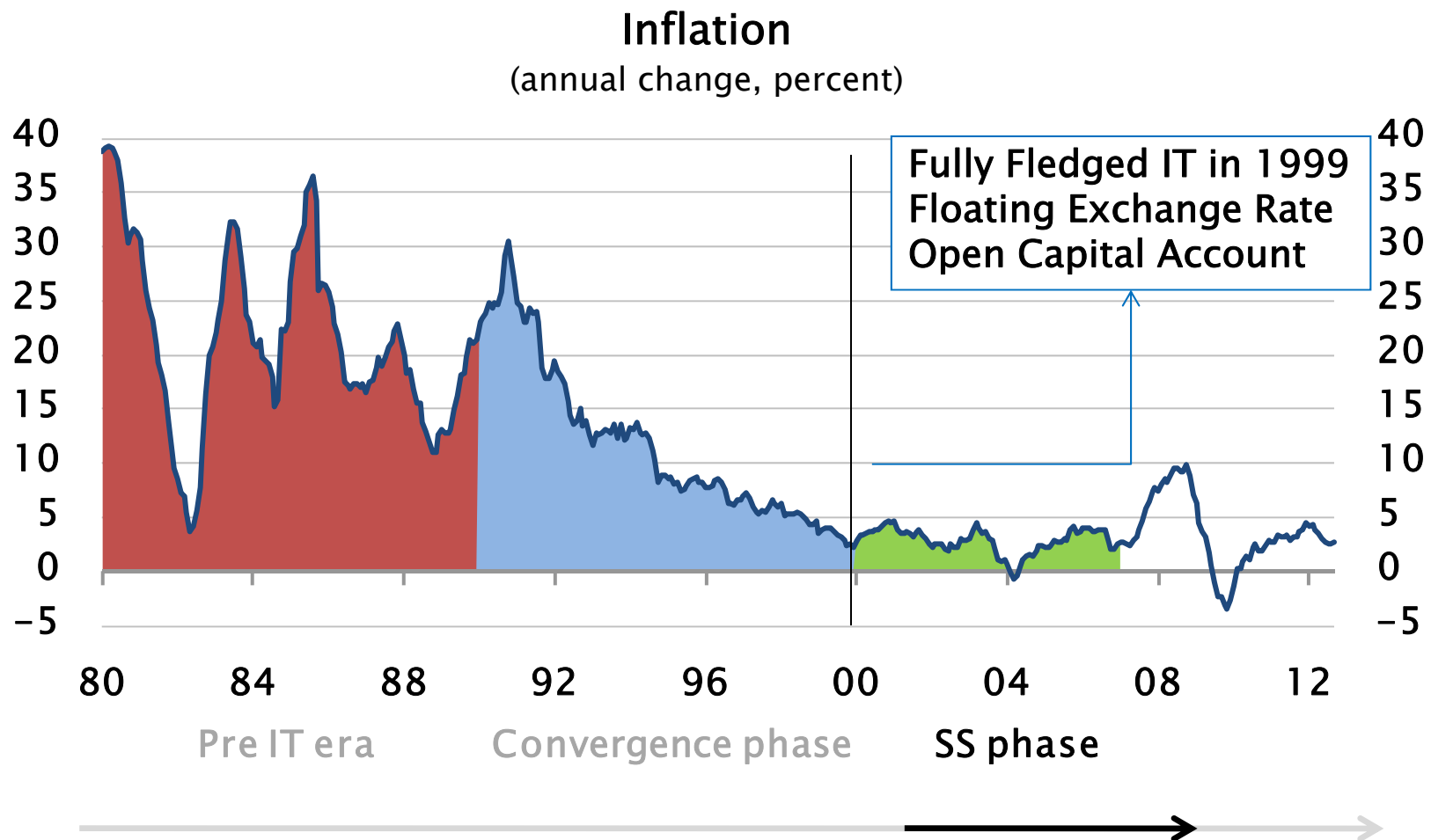
# The timeline of inflation in Chile



Source: National Bureau of Statistics.



# The timeline of inflation in Chile

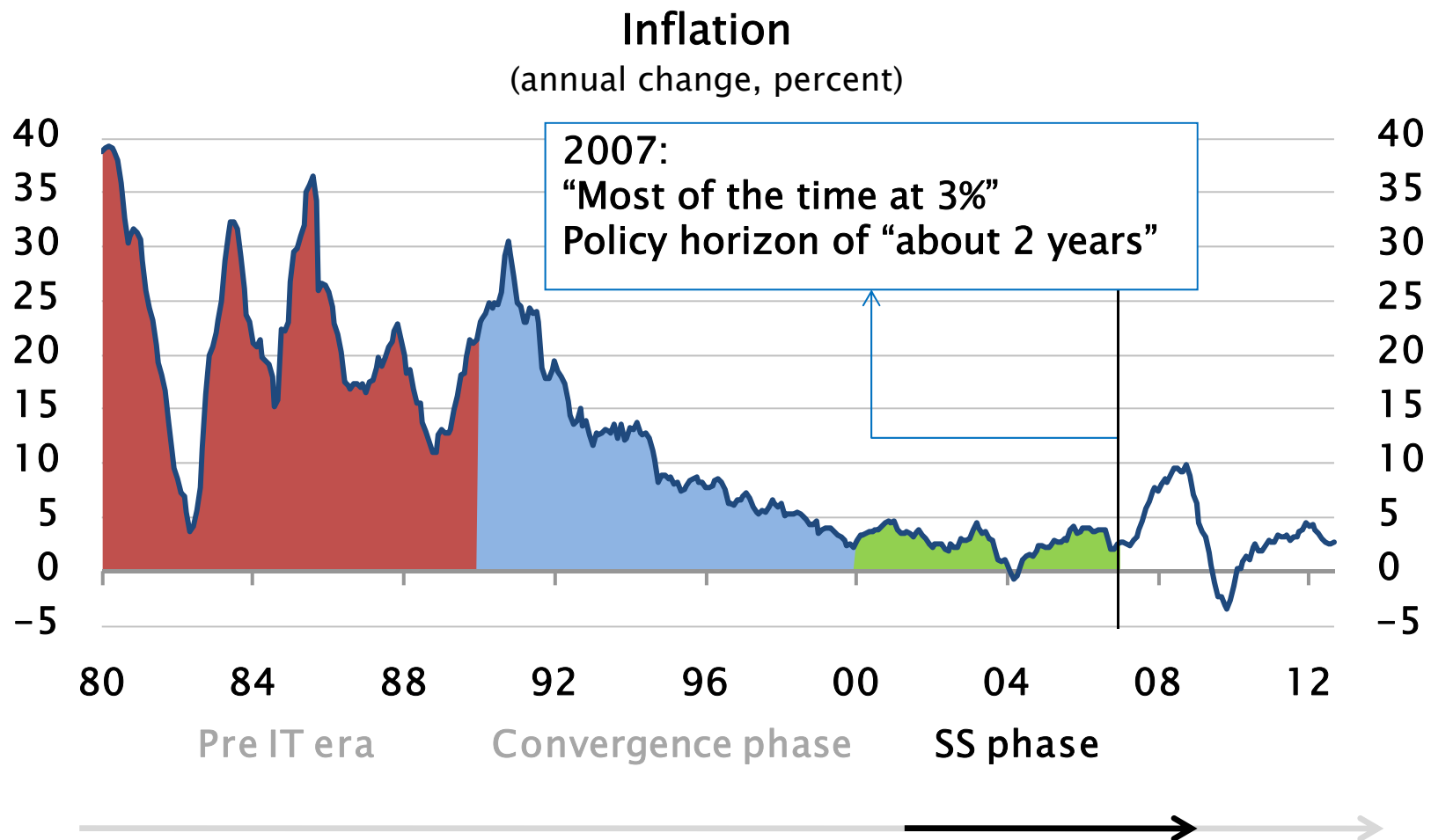


Source: National Bureau of Statistics.





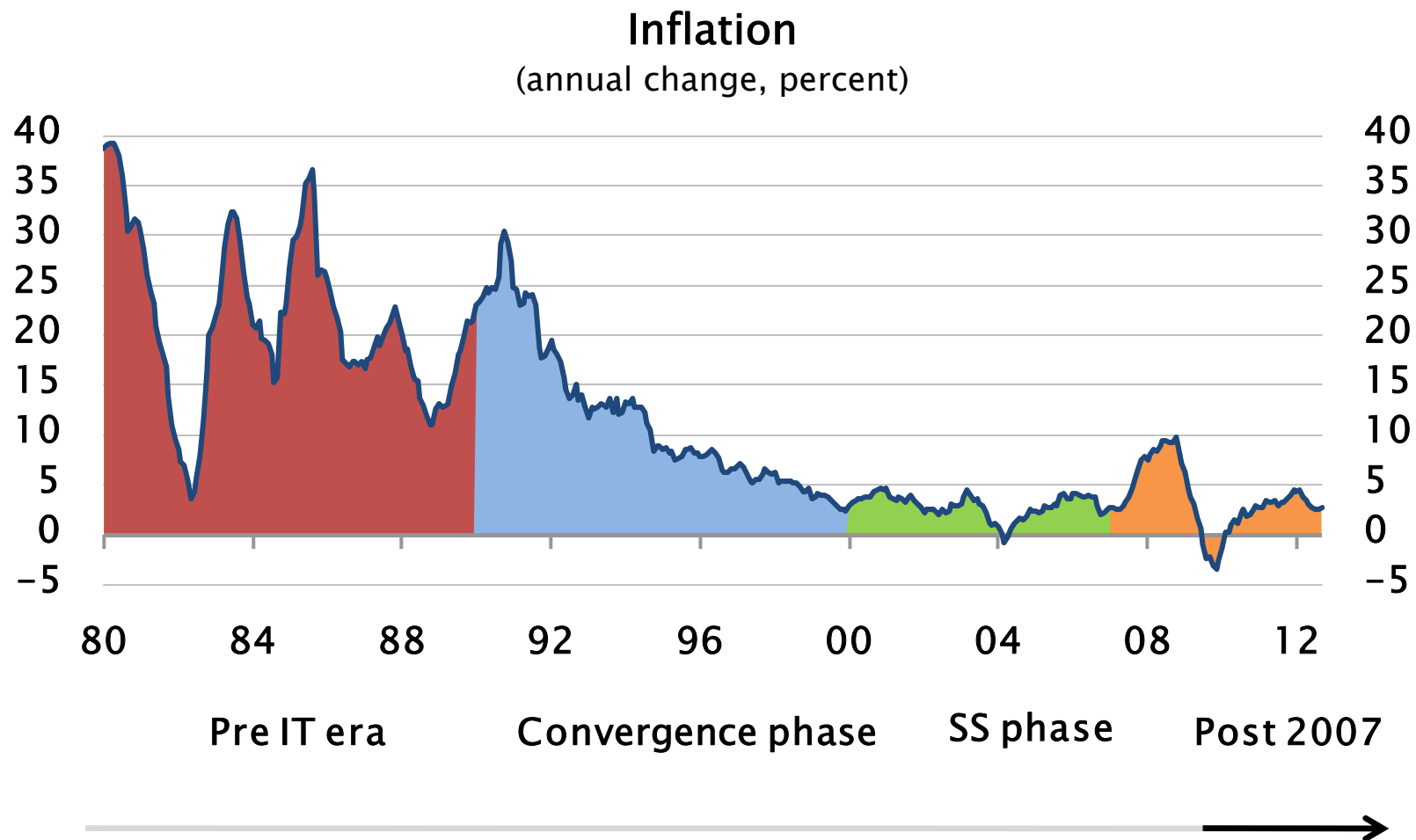
# The timeline of inflation in Chile



Source: National Bureau of Statistics.



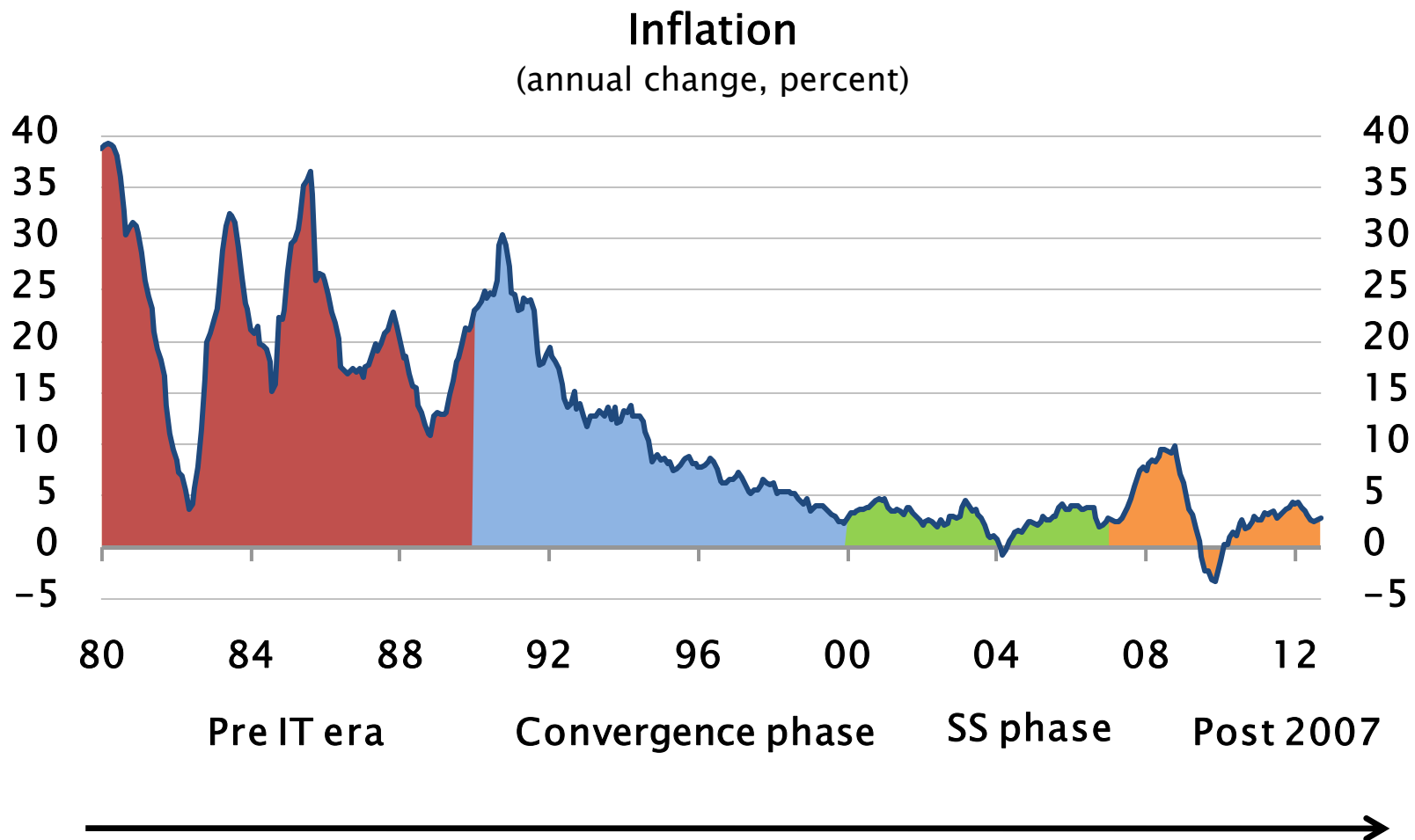
# The timeline of inflation in Chile



Source: National Bureau of Statistics.



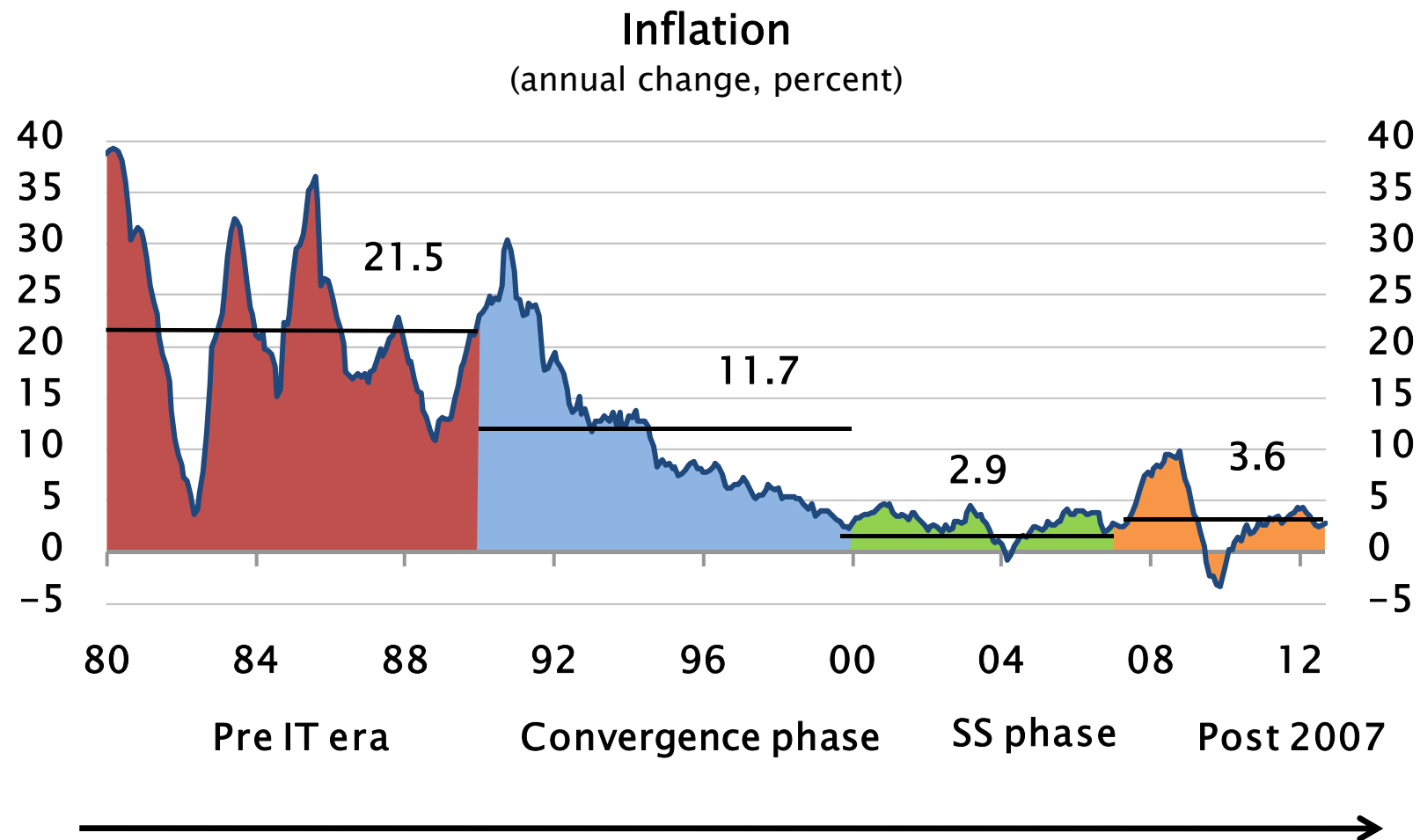
# The timeline of inflation in Chile



Source: National Bureau of Statistics.



# The timeline of inflation in Chile



Source: National Bureau of Statistics.



## IT in Chile since Sep. 99

---

- Floating exchange rate regime
- Removal of selective capital controls
- Permanent inflation target (instead of declining)
  - 2000–2006: 2–4% for CPI Headline Inflation
  - Since 2007 : Most of the time 3%, tolerance  $\pm 1\%$
- MP horizon over the medium term
  - 12–24 months during 2000–2006
  - Around 2 years since 2007
- Nominalization of the policy rate (2001)



## IT in Chile since Sep. 99

---

- Other standard characteristics
  - Pre-announced monthly MP meetings (6 months in advance)
  - Detailed minutes of MP meetings after 3 weeks
  - Inflation report every 3 (before 4) months



# Outline

---

- The two phases of IT in Chile
- **Why these choices?**
- Outcomes of IT in Chile
- Issues arising from the recent experience



# Why these choices?

---

- Floating exchange rate
  - Unique nominal anchor
  - Flexible monetary policy
  - Absorb external shocks to terms of trade and capital account
- Headline inflation (CPI)
  - Broadly used as a reference in Chile and easier to communicate
  - Obvious cost of including volatile components
- A 3% level target
  - High level is harder to consider as a signal of “price stability”, may entail risks
  - Low level:
    - Increases the probability of negative adjustment of nominally rigid variables (ie. wages)
    - CPI inflation usually overestimate actual household inflation because of quality and substitution
    - Reduces margin of action of MP because of the ZLB





## Why these choices?

---

- A  $\pm 1\%$  tolerance band
  - Inflation may deviate from target because of temporary shocks.
    - Smoothing them may be too costly in terms of output and interest rate volatility
  - Monetary policy operates with lags
  - Symmetry signals that the CBC cares equally about inflation and deflation.
  - In Chile there is no explicit list of situations where the band may be breached
- An horizon of about 2 years
  - Gives time for temporary deviations to resolve and for monetary policy to operate
  - Defines the operational goal of CBC:
    - Targeting of inflation projections at that horizon



## Why these choices?

---

- Inflation reports, etc.
  - Power of MP lies in its impact on expected paths of certain variables
    - Clear communication with markets helps to set these expectations
    - Also help explain the rationale for deviations of previous paths
  - Careful to avoid forecasts to be considered as commitments!



## Some key companions

---

- Fiscal responsibility
  - Initially declining levels of debt and converging in first phase
  - Fiscal responsibility since mid 70's and fiscal rule since 2000
  - Cyclical adjustment for tax and copper revenues, etc.
  - Avoids sudden changes in fiscal expenditures and procyclicality
- Healthy financial system supported by strong institutions
  - Prudential supervision and effective regulation



# Outline

---

- The two phases of IT in Chile
- Why these choices?
- **Outcomes of IT in Chile**
- Issues arising from the recent experience



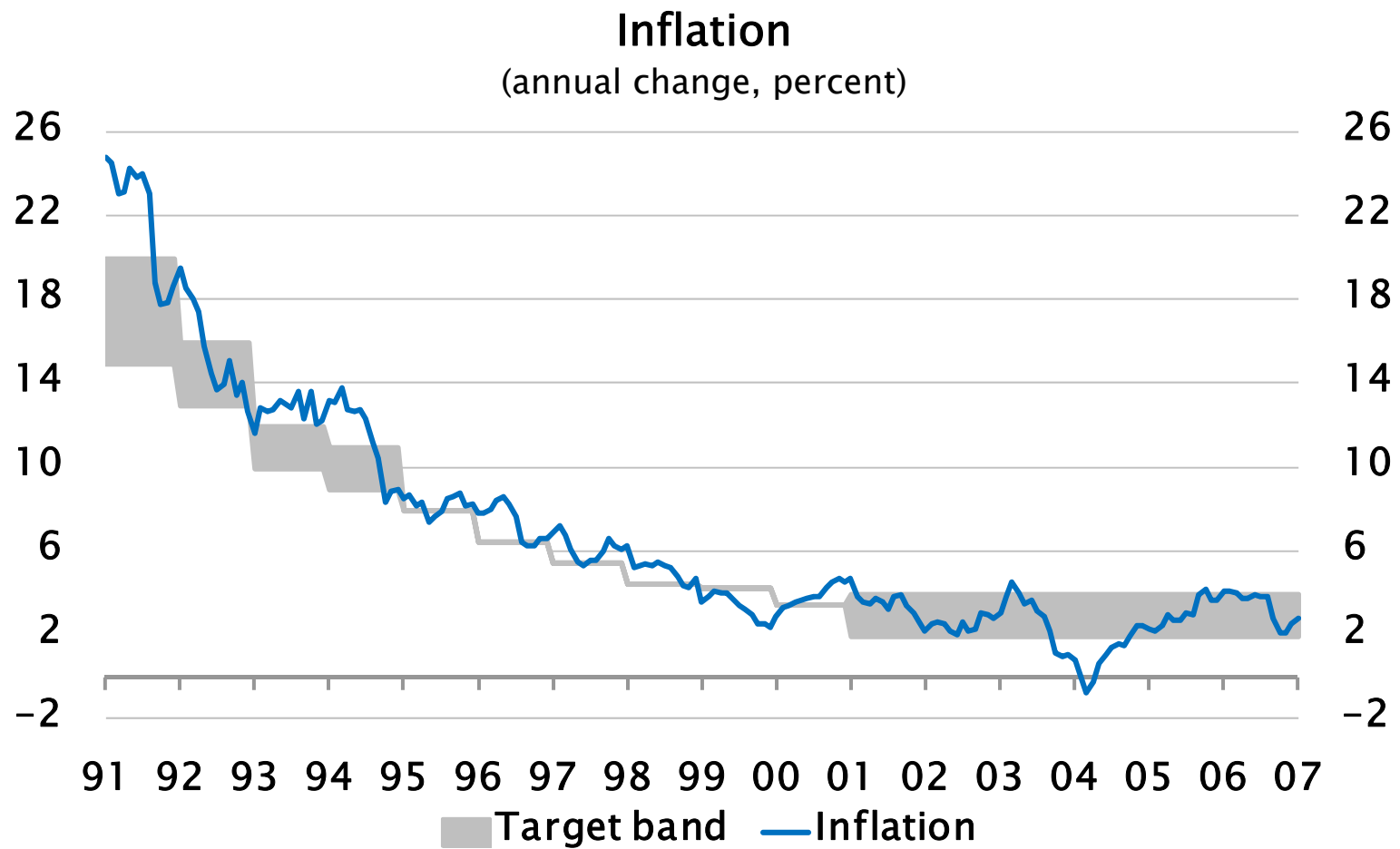
## Observed outcomes during the Great Moderation: 2001–2007

---

- Convergence of inflation and expectations
- Declining inflation and output volatility
- Less inflationary inertia in prices and wages and smaller exchange rate pass-through



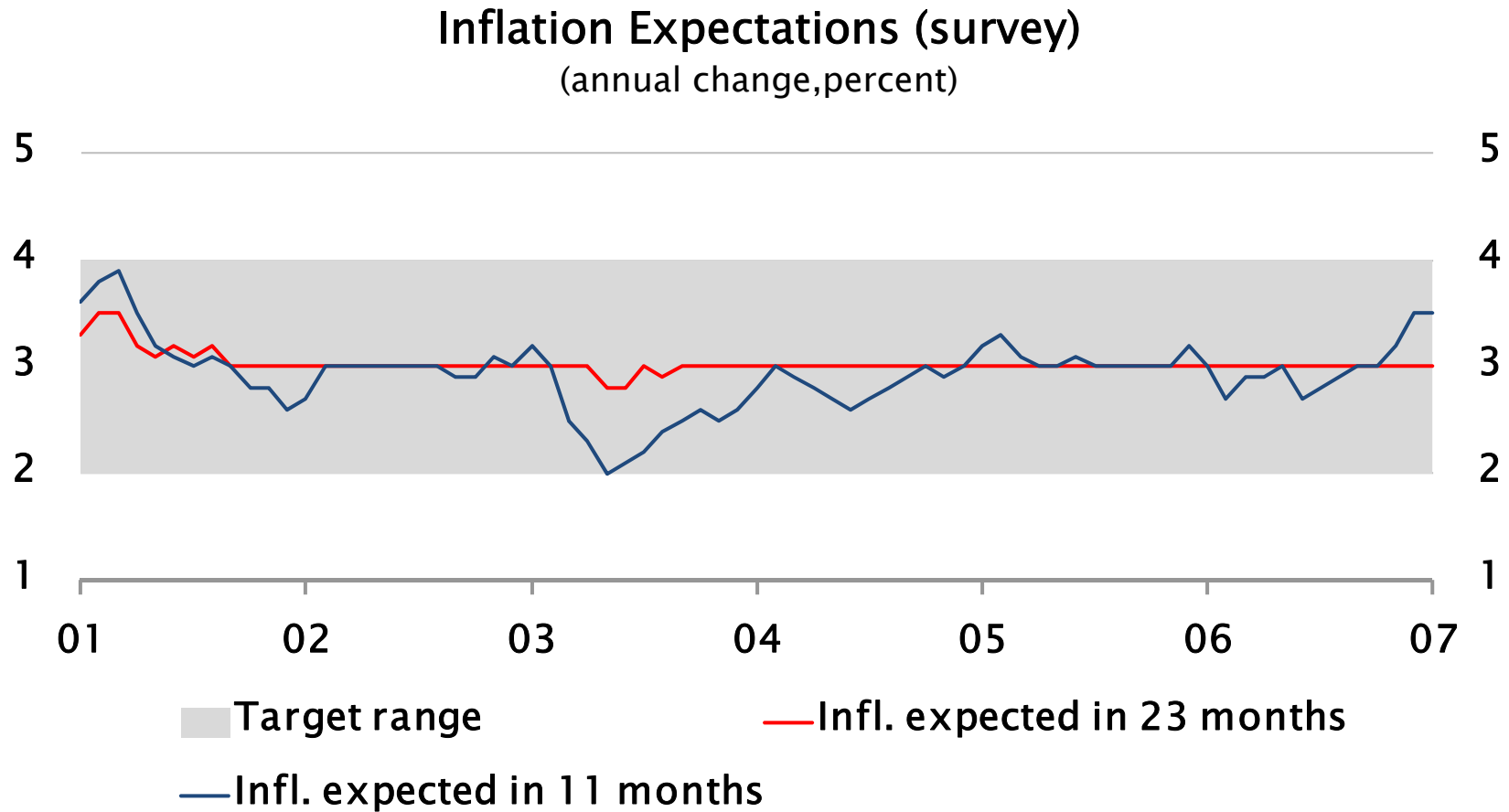
# Convergence of Inflation



Source: National Bureau of Statistics.



# Expected Inflation and target range



Source: Central Bank of Chile.



## Inflation since 2007

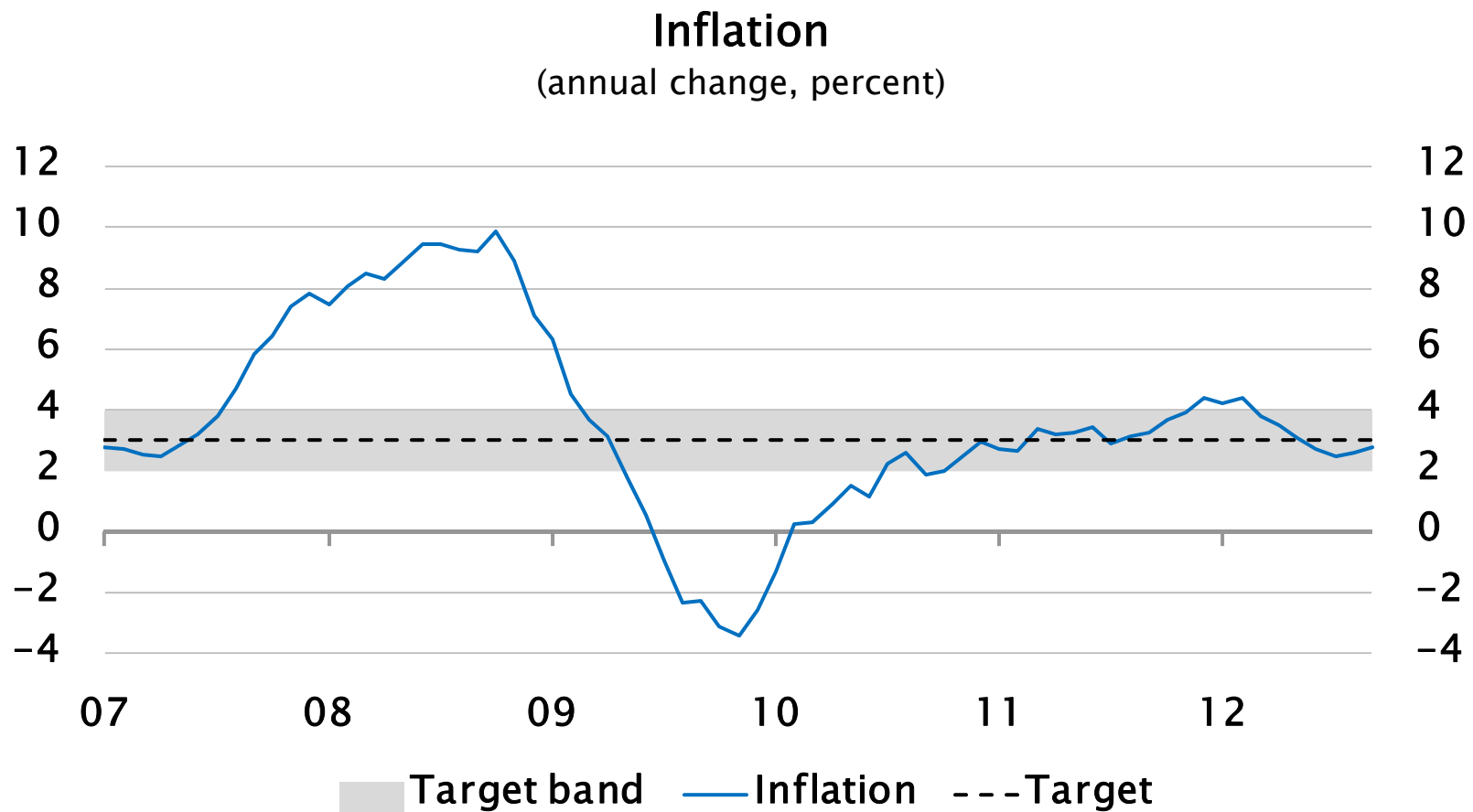
---

- Food and energy price shocks
- Financial crisis and its aftermath
  - More volatility of headline inflation
  - Some frictions in the monetary transmission mechanism





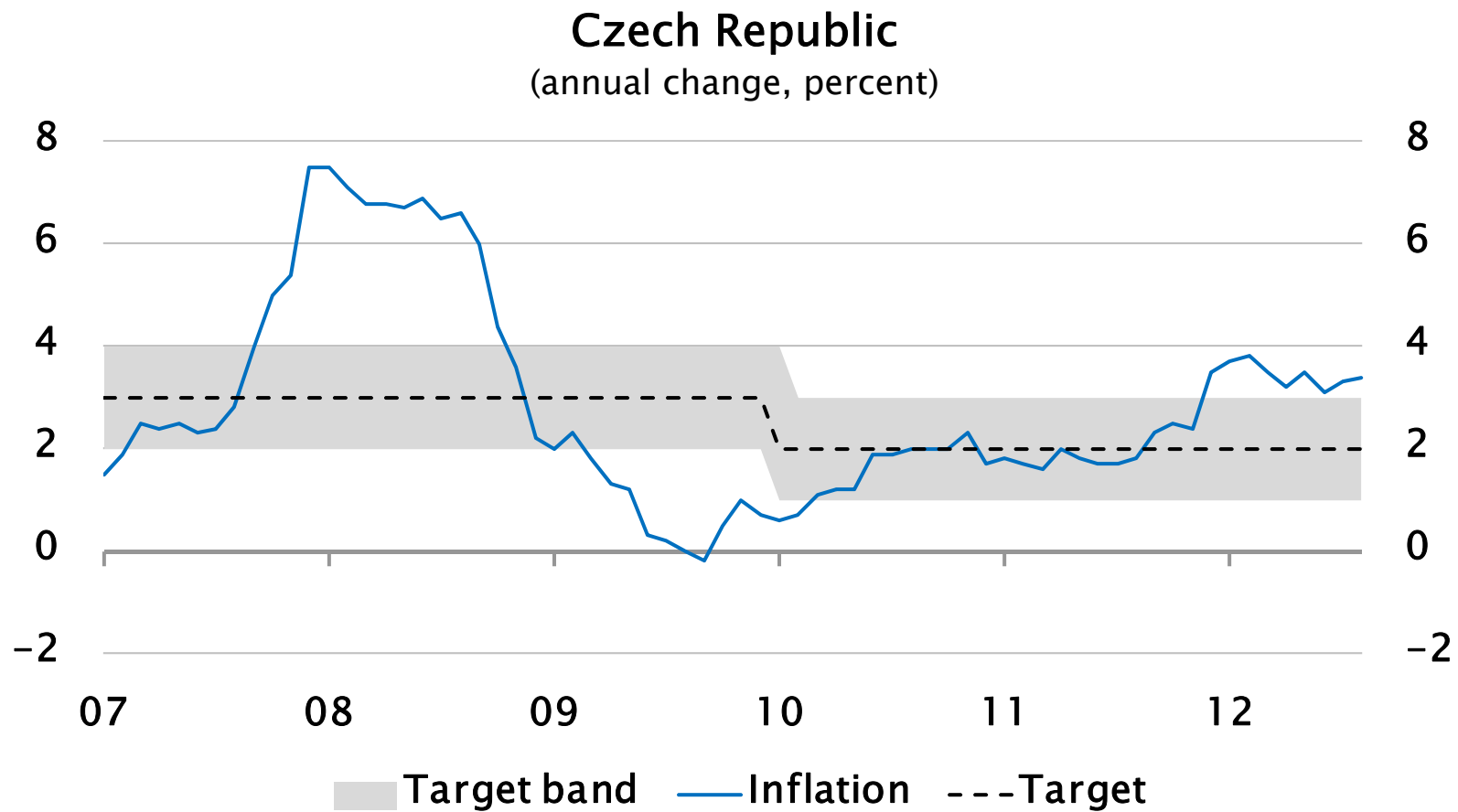
# Inflation in Chile since 2007



Source: National Bureau of Statistics.



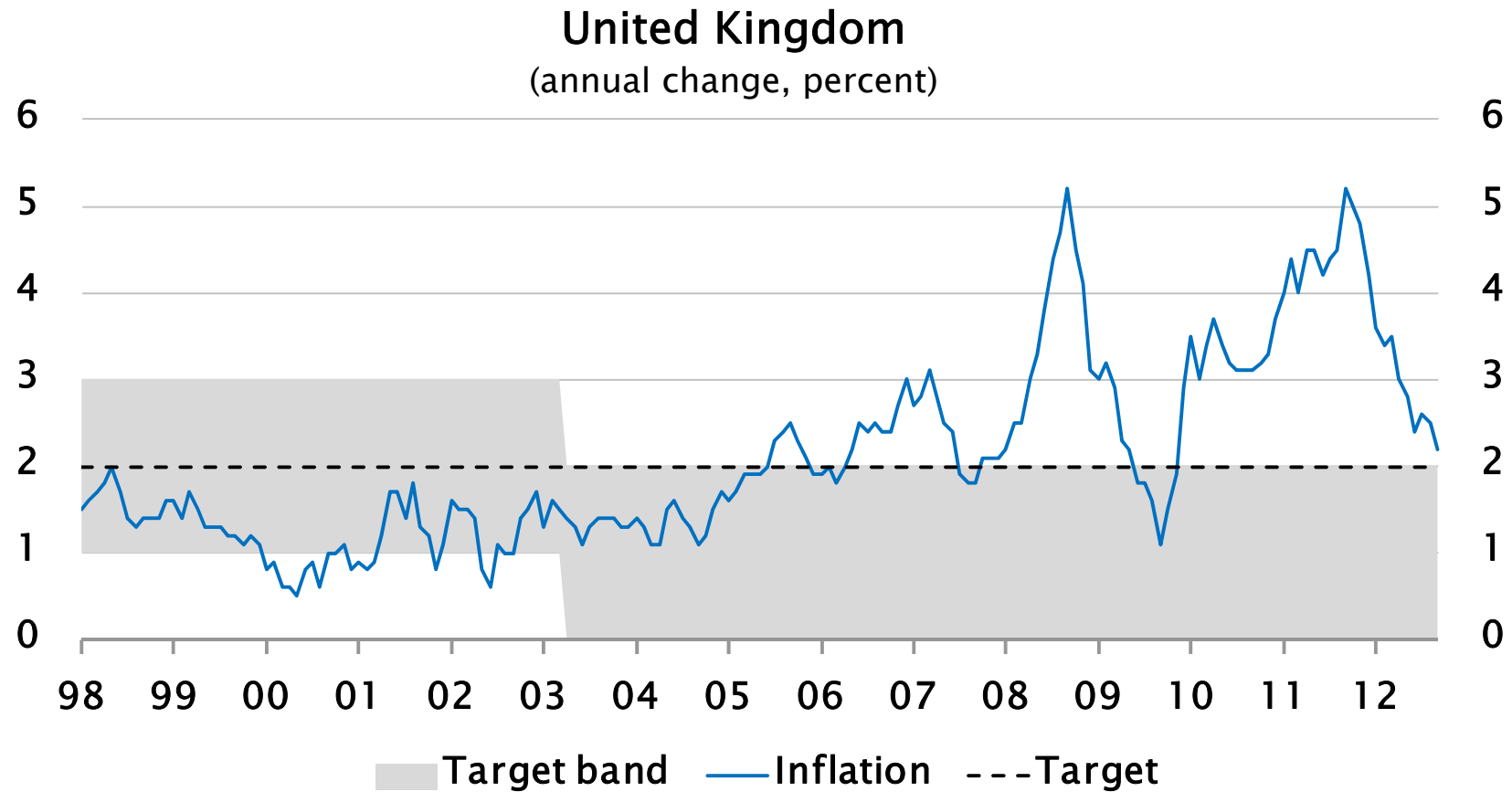
# Inflation and target range



Source: Czech National Bank.



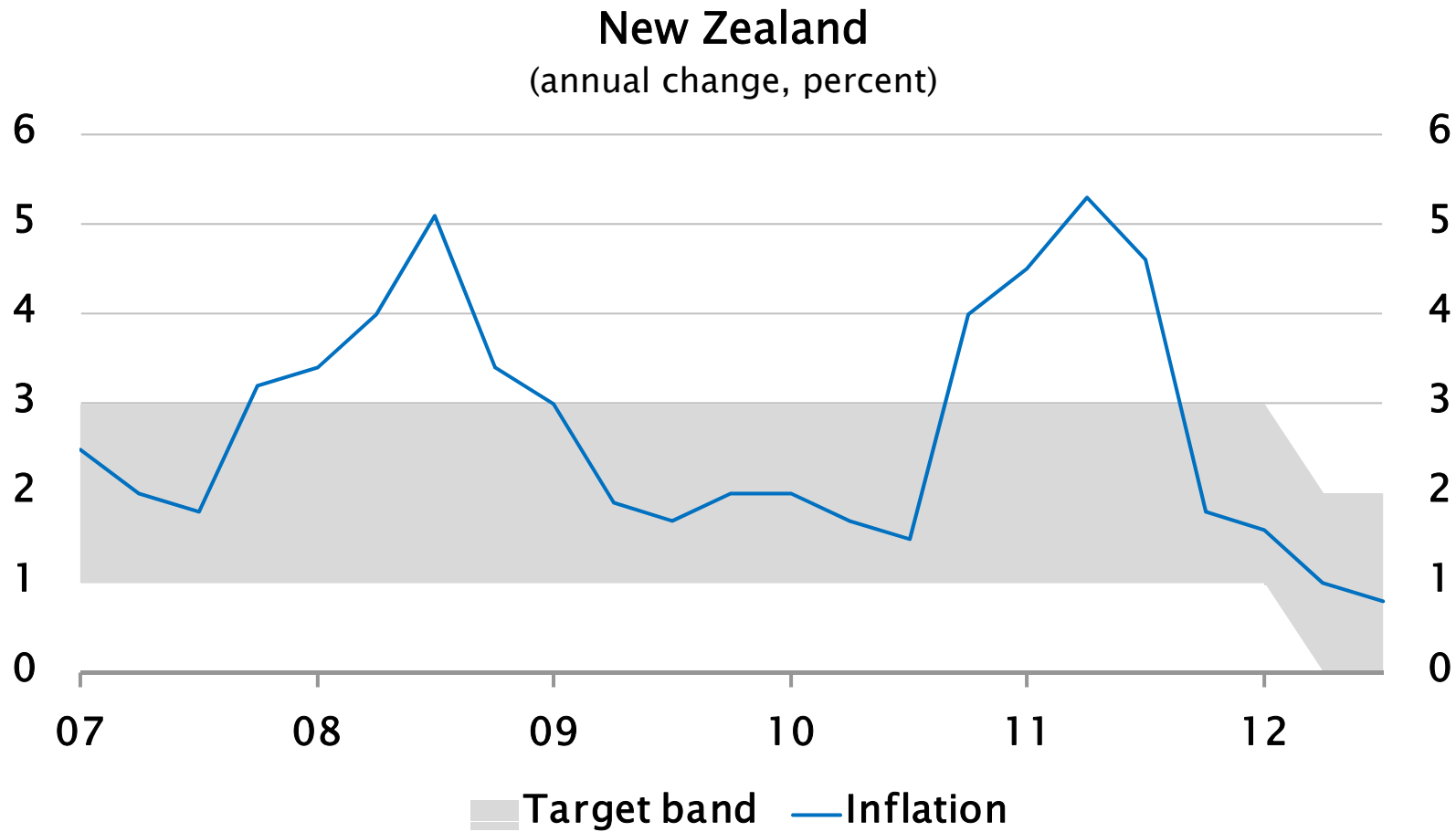
# Inflation and target range



Source: Bank of England.



# Inflation and target range



Source: Reserve Bank of New Zealand.



# Outline

---

- The two phases of IT in Chile
- Why these choices?
- Outcomes of IT in Chile
- **Issues arising from the recent experience**



# Supply shocks and Flexible IT

---

- Changes in relative prices are hard to deal with
  - Flexibility in the scheme should allow accommodation and reallocation.
- Several research related questions
  - Is headline inflation the right target? Core inflation? Domestic inflation?
  - How much flexibility should be introduced?
    - Tolerance, horizon, explicit escape clauses.
- BCCh focuses on headline for target and communication but actively follows various core measures of inflation and domestic inflation to assess inflationary pressures and even refers to them in communications



# The level of the target

---

- Countries that found the ZLB binding after the crisis started seriously considering the cost–benefit of higher target levels of inflation
  - A higher target would give more room for maneuvering
  - The proposals to raise these levels from 2% to 3 or 4% have found weak support among academics and policymakers
    - It has costs and there are better tools to deal with the possibility of a ZLB
- Chile already has a target above those of most EME ITers.
  - ZLB was not a big issue during the recent crisis
- More extreme proposals highlight the advantage of a price level target (or even a nominal income target)
  - Good to deal with ZLB
  - Time consistent?



# New monetary policy tools to deal with financial turmoil and the ZLB

---

- The implementation of monetary policy may become severely impaired in a scenario of significant stress in financial and credit markets:
  - Frictions in credit markets impair the transmission of monetary policy and reduce its effectiveness
  - ZLB may become an active restriction to implement a more expansionary monetary policy
- Central Banks need to use other instruments beyond a target for the overnight interest rate to implement their desired monetary stance:
  - Communications policy on interest rates and explicit forward guidance (ie. FED)
  - Medium and long term financing facilities for banks. (ie. Chile in 2009, ECB)
  - Quantitative easing targeted to certain financial markets (ie. FED, BoE)
  - FX intervention and FX targets (ie. SNB)





# Asset prices / Financial Stability

---

- The crisis reignited the debate on whether central banks should take financial stability issues into consideration
- For instance, react to asset price inflation or to strong credit growth
  - Especially if they are “misaligned” (bubble) or growing “too fast”
  - Standard framework responds to these to the extent they affect inflation
  - But if the Phillips curve is very flat due to external competition or credible expectations, then the response of monetary policy may be too little or too late.
- Main issue is the misallocation that can result and the resulting troubles when there are corrections
  - Especially in the crucial financial sector
- Wait and clean or lean against the wind?



# Asset prices / Financial Stability

---

- Debate is open:
  - CB should incorporate measures of froth/stress in financial markets and the risk of financial crises into their policy function. Consistent with flexible IT (Woodford (2012))
  - Monetary policy and financial stability policy are different goals that require different instruments. May or may not be conducted by the same entity.
  - Macroprudential tools are the best instruments to deal with financial stability issues, while monetary policy is a second best tool (Svensson (2011) , Walsh (2009))
- BCCh
  - Monetary policy is too blunt to deal with financial stability issues. We need other tools to address additional goals
  - Using MPR for other targets beyond inflation may confuse its goals and put at risk its credibility
  - In practice, we actively monitor financial conditions, assess likely impact on output and prices, and coordinate with other regulatory agencies to avoid reaching critical conditions (prudential policy).
  - But we remain open to academic and policy developments in the area (macroprudential policies)



# Asset prices / Financial Stability

---

- A related issue for the BCCh and other CBs is whether MP should react to exchange rate fluctuations
  - In Chile there is a flexible regime.
  - But significant deviations of RER from fundamentals may lead to misallocation in the real sector and financial vulnerabilities
  - The CBC can, and has, intervened when it assesses there is the possibility of a costly misalignment
  - Crucial to do it in a way such that it does not affect monetary policy credibility
  - For this, the form of intervention matters a lot
    - Through sterilized reserve accumulation (de-accumulation). Consider quasi-fiscal cost. Small if intervention is “correct”
    - Transparency and focused in quantities (not prices)
    - Only in extraordinary situations



# High public debt and fiscal dominance

---

- Public debt in advanced economies has reached unprecedented peace-time levels.
- Under current conditions, uncertainty about future fiscal sustainability may create at some point uncertainty about monetary policy.
  - High public debt makes the public budget dependent on the monetary stance and the level of interest rates.
  - Pressure on Central Banks to implement quasi-fiscal policies (asset purchases) through their balance sheets.



## Concluding remarks

---

- Chile has a long history with IT
- IT has served Chile well
  - Macroeconomic pillars plus IT have allowed the Chilean economy to have sustainable low inflation
  - Today 3% acts as a true inflation anchor, which has survived strong tests in recent years
- Flexible IT raises the possibility of improvement and learning, it is far from a rigid system
  - Chilean system has evolved over time in broad aspects and in details to follow best practice
  - We will continue to do so in the future