

What is inflation targeting, and how can it be further improved?

Lars E.O. Svensson
Princeton University

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1. History
2. Principles for flexible inflation targeting
3. Possible improvements

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History

- Inflation targeting (IT) started in NZ 1990, only 14 yrs of experience
- Rapid spread: Canada, UK, Sweden, Finland, Australia, Czech Republic, Brazil, Chile, ..., Israel, South Korea, Thailand,..., Switzerland, Norway, Iceland, ECB?, ... (now 20+ countries)
- Simple definition of IT
 - Numerical inflation target
 - Decision-making process: “Forecast targeting”
 - Transparency and accountability
- Central-bank reform: Institutional commitment to low inflation
 - Mandate
 - Independence
 - Accountability

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Principles for flexible inflation targeting

- Principles simple; practice complicated
- Principles of Good Monetary Policy
- Tolstoy: “Every good monetary policy is (approximately) the same, but bad monetary policies are all different.”
- Objective:
 - Explicit symmetric inflation target, inflation stability
 - Stability of the real economy: Output-gap stability (*flexible* IT, *not* strict)

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- Transmission mechanism links CB instrument (short interest rate) and target variables (inflation, output gap)
 - Conventional wisdom
 - Short nominal interest rate, sticky inflation/inflation expectations
 - short real rates → long real rates via expectations hypothesis/risk premia → exchange rate and other asset prices
 - Long real rates and exchange rate affect aggregate demand, output gap
 - Parallel credit channel: Commercial bank lending to firms
 - Inflation expectations, output gap and exchange rate affects inflation
 - Lags, variable, uncertain responses, intervening shocks, imperfect control of output gap (3-5 qtrs) and inflation (5-9 qtrs)

- Lags and imperfect control: Forecast targeting
 - Find instrument-rate path/plan such that projections of inflation and output gap “look good”
 - Current state of the economy
 - View of transmission mechanism
 - Projections of inflation and output gap conditional on alternative instrument-rate plans
 - Find optimal instrument-rate plan: Instrument-rate path that results in optimal inflation and output-gap projections

- Announce projections and implement instrument path
- Transparency (press releases, minutes, inflation reports, strategy notes)
 - Accountability (democracy)
 - Incentives for CB
 - Efficient implementation: Management of expectations

- Management of expectations
 - Expectations of future interest rates
 - Inflation expectations
 - Output expectations
 - Effective implementation of monetary policy
 - Better private-sector decisions

- Forecast targeting implies appropriate response to shocks
 - Signal extraction
 - Filter through forecast
 - Respond accordingly

Possible improvements

- International best practice
 - Reserve Bank of New Zealand, Bank of England, Sveriges Riksbank
 - Norges Bank?

- Norges Bank Watch 2002
 - Institutional framework: Weak
 - Conduct of monetary policy: Comparable to best practice
 - Recommendations
 - * Institutional reform (legislation)
 - Mandate
 - Independence
 - Accountability
 - * Within existing legislative framework (several implemented)
 - * Conduct of monetary policy (many implemented)
 - * Debate about the exchange rate (implemented)
 - * Research, model development (implemented)

- Several substantial improvements implemented. What remains?

- Several substantial improvements implemented. What remains?
- Explicit intertemporal loss function

$$L_t = E_t \sum_{\tau=0}^{\infty} (1 - \delta)\delta^{\tau} l_{t+\tau}$$

Period loss function

$$l_t = (\pi_t - \pi^*)^2 + \lambda(y_t - \bar{y}_t)^2$$

For $\delta \approx 1$

$$L_t \approx (E[\pi_t] - \pi^*)^2 + \text{Var}[\pi_t] + \lambda \text{Var}[y_t - \bar{y}_t]$$

Parameters?

- π^*
- $\delta \approx 1$
- λ

Decide/interpret and go public

Interpretation clear and understandable

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- Abandon assumption of constant interest rate
Implemented: RBNZ and Norges Bank ahead of Bank of England and Riksbank
- Reference interest-rate path, reference projection: guide policy decision
 - Market expectations (now)
 - Not necessarily best forecast

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- Optimal interest-rate path, optimal projection and best forecast
 - Best forecast of future interest rate
 - Best forecasts of future inflation and output gap
 - RBNZ ahead of Norges Bank

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- Reduce emphasis on 2-year horizon
 - Too rigid, not optimal; horizon depends
 - Look at whole projection of inflation and output gap, should “look good”

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Conclusions

- Flexible inflation targeting best monetary-policy regime so far
- Norges Bank in the top league: Considerable progress
- Still room for some improvements