A FLEXIBLE INFLATION TARGETING REGIME
GOVERNOR ØYSTEIN OLSEN, CME, 11 OCTOBER 2016
Performance

Inflation. Percent

Unemployment. Percent

Sources: Norwegian Labour and Welfare Administration (NAV), Statistics Norway and Norges Bank
International interest rates

Long-term interest rates. 14 OECD countries\(^1\). Percent

1) US, Germany, France, Italy, UK, Japan, Netherlands, Austria, Belgium, Sweden, Denmark, Canada, Switzerland and Norway. Unweighted average.

Source: OECD
Forces driving the fall in the global real interest rate

- Increased savings in emerging economies and oil-producing countries
- Demographic trends
- Greater income inequality
- Deleveraging

Lower growth prospects
- Relative price of capital
- Public investment
- Persistent uncertainty

Diagram:
- Global real interest rate
  - Global investment
  - Global savings
- $r^*$
**Uncertain effect of policy rate**

**Target:**
Minimise $L_t = E_t (y_t - y^*)^2 = (E_t(y_t) - y^*)^2 + \text{var}(y_t)$

**Effect of policy rate on economy:**

\[ y_t = y^* - \alpha_t r_t + x_t \]
\[ \alpha_t = \alpha_0 + \varepsilon_t, \varepsilon_t \sim N(0, \sigma^2) \]

**Monetary policy response when $x_t$ changes:**

a) Uncertainty about effect of policy rate

\[ \sigma^2 > 0, \quad r_t = \frac{1}{\alpha_0 + \sigma^2/\alpha_0} x_t \]

b) No uncertainty about effect of policy rate

\[ \sigma^2 = 0, \quad r_t = \frac{1}{\alpha_0} x_t \]
Monetary policy and uncertainty

Active monetary policy to counteract shocks

Policy rate

Inflation

Output gap
Monetary policy and uncertainty
A more cautious policy response reduces uncertainty

Policy rate

Inflation

Output gap
1) Strong growth is defined as a rise of more than one standard deviation above the average. The rise is the average rise in the five years preceding the start of the recession.
Sources: BIS, Federal Reserve Bank of Dallas, OECD, Statistics Norway and Norges Bank
Monetary policy and financial stability

Financial imbalances give rise to tail risk

Policy rate

Inflation

Output gap
Monetary policy and financial stability

Consideration of financial imbalances reduces tail risk

Policy rate

Inflation

Output gap
A FLEXIBLE INFLATION TARGETING REGIME
GOVERNOR Øystein Olsen, CME, 11 October 2016