

Inflation Targeting

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2025-02-28

Inflation Targeting Basics

- **Aim:** nominal anchor (manage inflation expectations)
 - Unlike exchange rate targeting (currency peg) one does not give up own monetary sovereignty.
- **Elements:**
 - **Announce** inflation target over the medium term
 - Communication and Transparency
 - **Implement** target by using policy instruments **policy interest rate**
 - Rules and Discretion: “constrained discretion”
 - Central Bank Independence (sufficient)
- **Flexible Inflation Targeting**
 - Inflation target & output gap
 - “divine coincidence” (of textbook model) policy interest rate is sufficient
 - Look through “transitory” supply shocks

Optimal Target

- **Level of Target**

- Baseline Textbook: inflation target = 0%
 - Reduces price adjustment cost (Rotemberg)
 - Reduces price dispersion (Calvo)
 - Divine coincidence (instantaneous vs. long-run output gap)
- Reasons for > 0% (depends on size of shocks)
 - ZLB
 - Downard (nominal) wage rigidity
 - Relative prices trends (new products are most expensive and become cheaper over time)
 - Quality bias

- **Type of Target**

- Point 2% (symmetric or asymmetric)
- Range 2%-4% “edge problem”
- Average Inflation Targeting

- **Moving Target & Credibility**

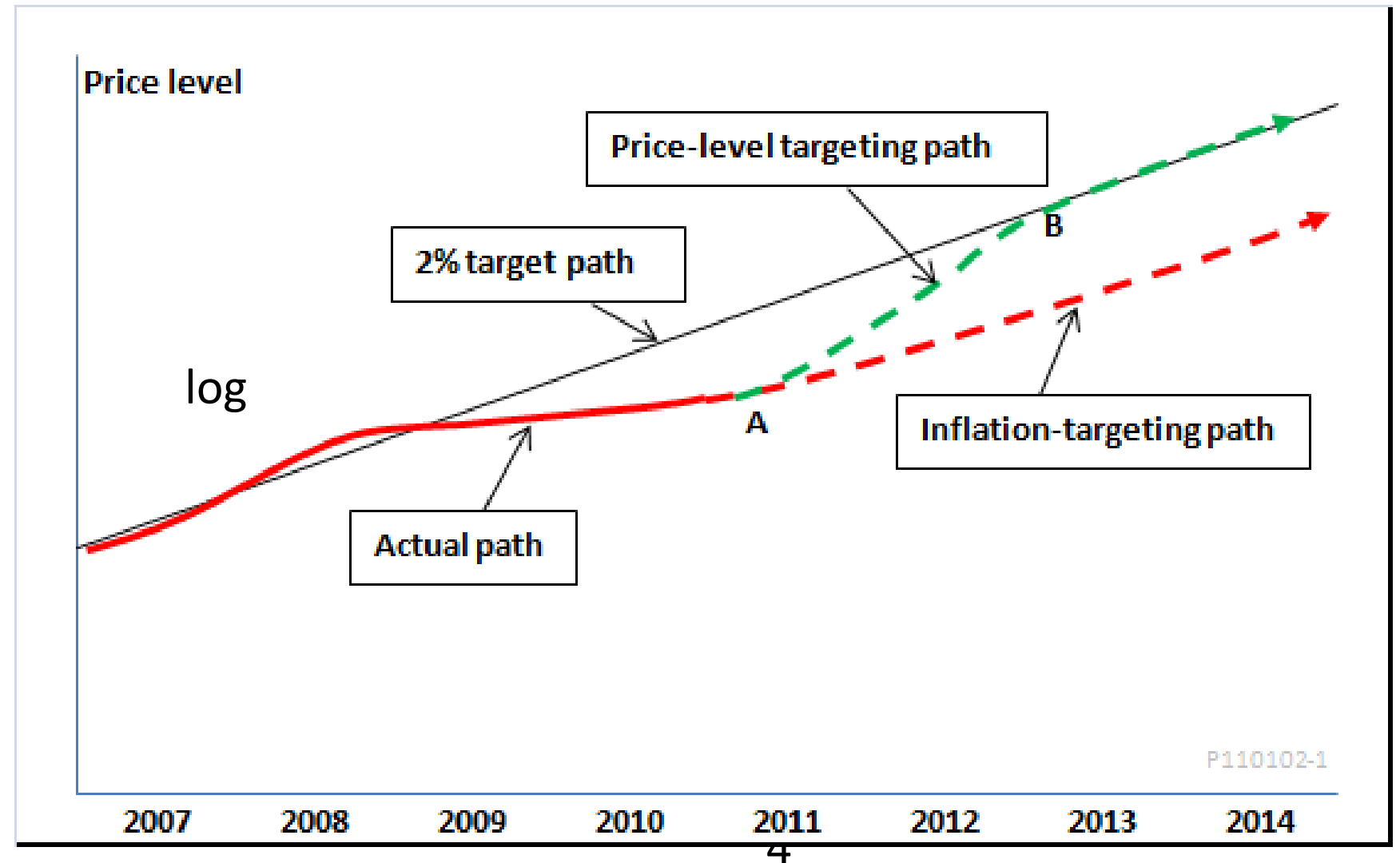
Table 1 Inflation Targets Around the World	
Country	Inflation target (%)
Industrial countries	
New Zealand	1–3
Canada	1–3
United Kingdom	2
Australia	2–3
Sweden	2 ± 1
Switzerland	< 2
Iceland	2.5
Norway	2.5
Emerging countries	
Israel	1–3
Czech Republic	3 ± 1
Korea	2.5–3.5
Poland	2.5 ± 1
Brazil	4.5 ± 2.5
Chile	2–4
Colombia	5 ± 1.5
South Africa	3–6
Thailand	0–3.5
Mexico	3 ± 1
Hungary	3.5 ± 1
Peru	2.5 ± 1
Philippines	5–6

Source: [World Economic Outlook, 2005](#). Table 4.1.

Monetary Policy Frameworks

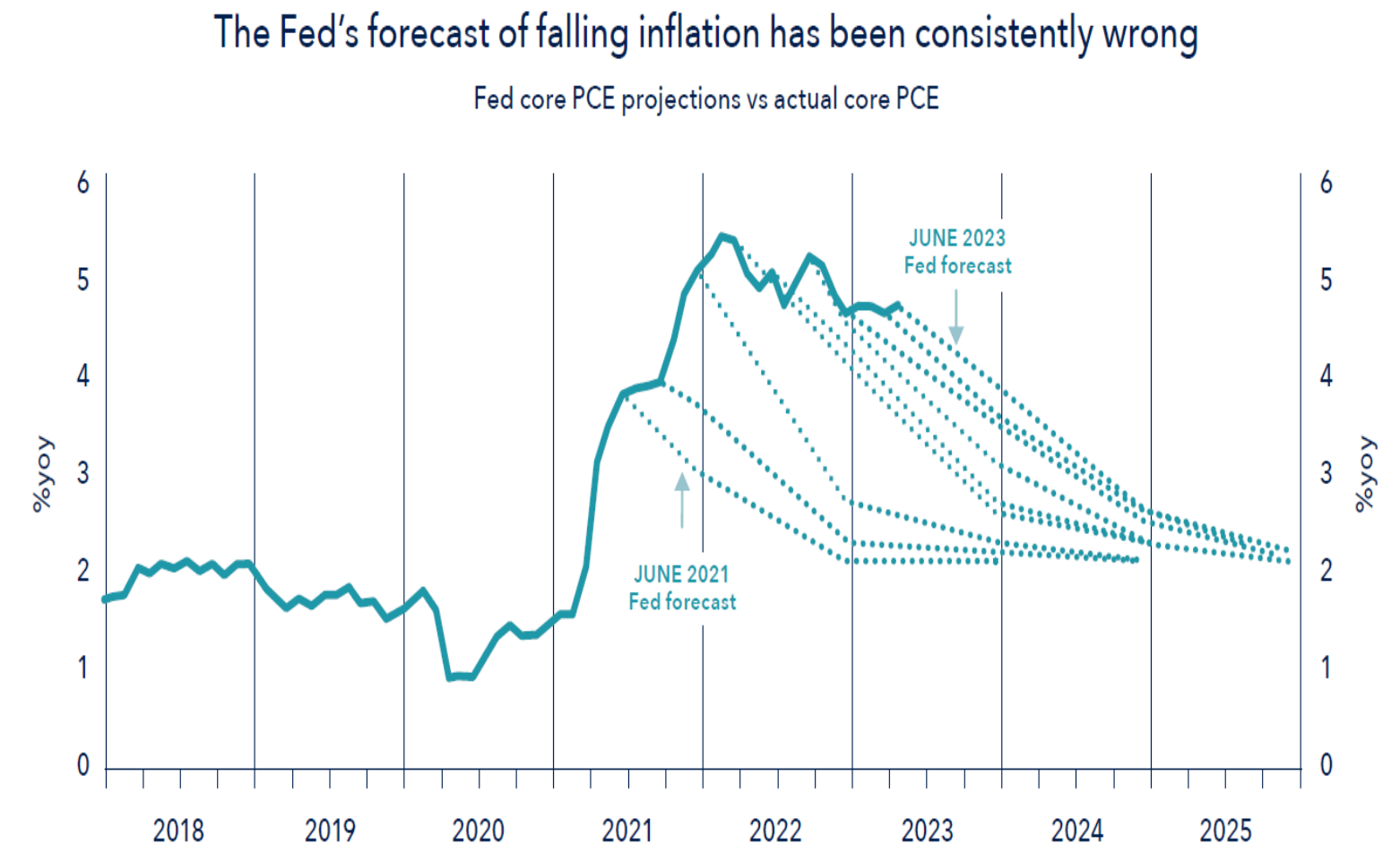
- Inflation Targeting
- Average Inflation Targeting (AIT)
 - Fed's new framework in 2020
 - Average over what horizon?
- Price Level Targeting
 - Bygones are **not** bygones --
- Nominal GDP Targeting
- Exchange Rate Targeting
 - Borrow credibility from outside
 - Loss of monetary sovereignty
- Monetary Targeting

Monetarism



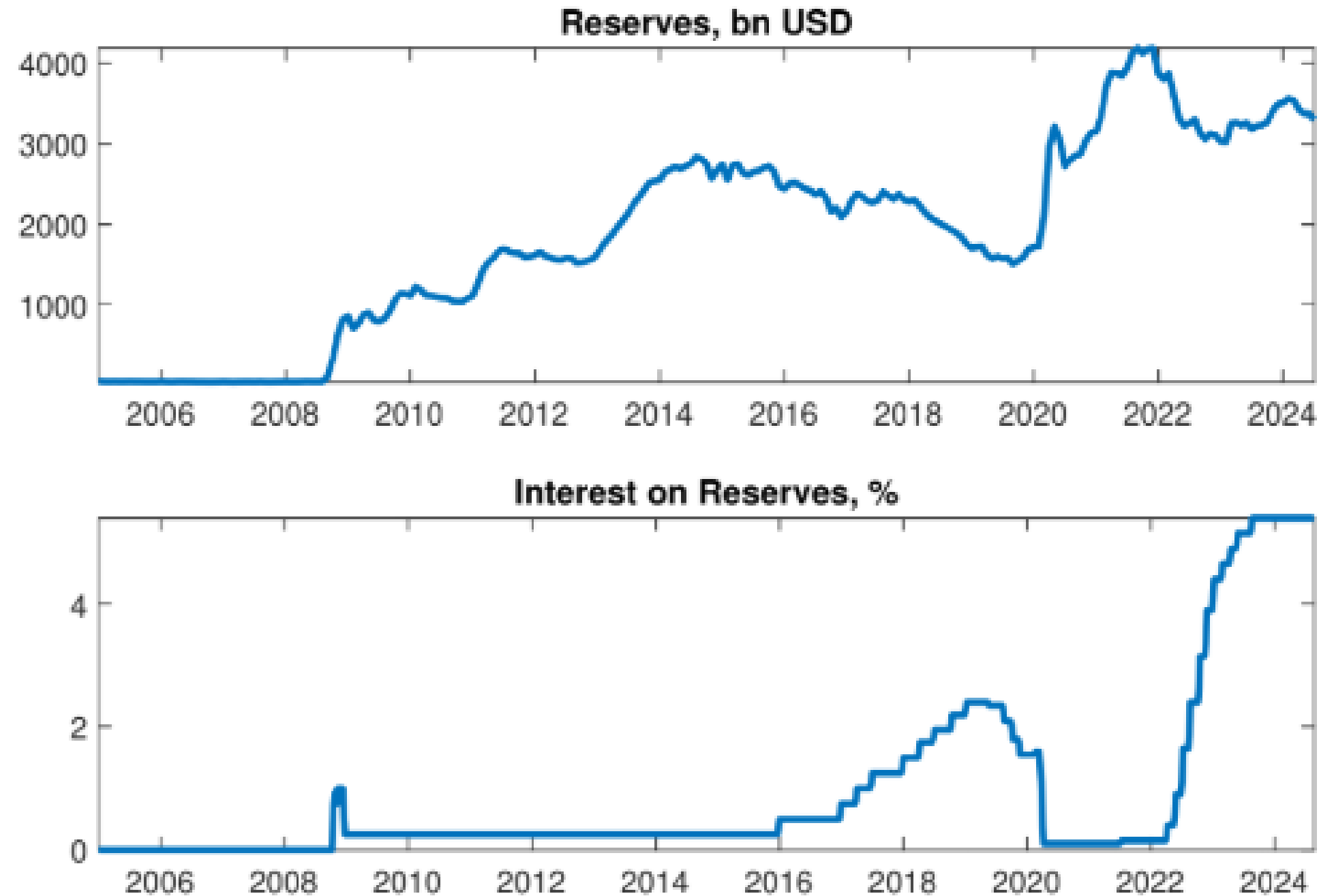
How to Measure Inflation?

- Broad consumption basket like CPI, HICP
- Core inflation
 - Exclude items whose price mean reverts
food, energy
 - Housing, rent for Supercore inflation
- (PPI Producer Price Index)
- How to predict **medium-term** inflation?



Mix of MoPo Instruments (including Unconventional)

- Policy Interest rate
 - On excess reserves
 - On required reserves
- Forward Guidance
- Central Bank Balance Sheet instruments
 - QE/QT
 - Long-dated government bonds
 - Risky assets
 - FX
 - Purchase vs. repo lending activity



Multiple Targets

- Price Stability
- Output Stability
 - Output gap
 - Steady-state GDP growth rate
- Financial Stability & Improved Risk Sharing
 - Depends on types and size of shocks



Divine coincidence (away from ZLB)

Inflation to Correct Financial Distortions

- **Steady-state distortions** (with positive gov debt/money supply)
 - Uninsurable risk, leads to precautionary savings in safe asset, risk-free interest rate is depressed
 - “Inflation tax” on nominal assets can correct pecuniary externalities
- **Imperfect Risk Sharing** across sectors/citizens
Surprise deviation from inflation target
 - Ex-post **redistributes** from savers to borrowers (if >0);
stealth recapitalization (of financial sector)
 - Ex-ante **insures** across sectors/citizens (if markets do not allow perfect risk sharing)
 - Example: no BREXIT shock contract, inflation is adjusted to share associated losses

Monetary Policy: Interest Rate and QE/QT Interaction

- Improve risk-sharing orchestrated by monetary policy depends on duration risk exposure of various sectors in the economy.
- After QE: Private sector holds fewer long-dated bonds (duration risk)
subsequent interest rate policy has to be more aggressive to achieve same impact
- How can interest rate move achieve simultaneously
 1. Manage output gap and inflation
 2. Optimize ex-post redistribution/ex-ante risk sharing
 - Use **preparatory QE/QT** to ensure optimal duration risk exposure of private sector(s)

The Role of Communication in Inflation Targeting

- **Anchoring Inflation Expectations**
 - Transparency: Clear communication of inflation targets and rationale
 - Predictability: Regular updates and guidance on future policy actions
- **Enhancing Credibility and Trust**
 - Accountability: Publishing reports and holding press conferences
 - Building Trust: Consistent and honest communication
- **Managing Market Reactions**
 - Forward Guidance: Influencing market expectations about future policy
 - Crisis Communication: Managing market reactions during economic shocks
- **Educating the Public**
 - Economic Literacy: Explaining goals and mechanisms of inflation targeting
 - Engagement: Using social media, educational programs, and community outreach

EMDE

- Shocks are larger
 - Energy
 - Climate → higher inflation target, target range instead of midpoint target
 - FX
 - Weaker institution/lower reputation capital
 - Communication
 - MoPo spillovers from “safe haven” currencies
 - Sharp increase in AE interest rate may lead to flight to safety capital flows
 - Maintain (local) Safe Asset Status of gov. debt
 - Loss of Safe Asset Status can be self-fulfilling
 - Negative β / risk premium
- ⇒ act early

Fiscal & Financial Dominance

- Monetary Dominance
 - Government/fiscal authority reacts to an interest rate increase (e.g. increases taxes or lowers government expenditures)
 - Same holds in models with
 - New Keynesian models (see later)
 - Real debt
- Fiscal Dominance
 - Government/fiscal authority does NOT react to an interest rate increase (e.g. simply issues more bonds to cover extra interest rate expense)
 - Central bank is ultimately forced to set interest rate so that budget constraints over time hold
 - CB will be forced to monetize debt
- Financial Dominance
 - Fighting inflation might trigger financial crisis

Reviews of Inflation Targeting Frameworks

- Common trends:
 - Public review every 5 years
 - Less appetite to react aggressively (with unconventional monetary policies) if inflation falls below target
 - See through transitory supply shocks
- Fed:
 - No radical changes
 - Fly low to maintain central bank independence
- ECB
 - Debate whether to keep large instrument toolbox
- Bank of Canada
 - Stick to range-target

In Sum

- IT is a **nominal anchor**
which preserves monetary sovereignty (unlike exchange rate targeting)
- **Flexible** Inflation Targeting
 - Inflation + output gap divine coincidence
- **Optimal target [range]** depends on shock (type and size)
- Inflation targeting is **too narrow if** one has
 - More objectives **financial stability**, better risk sharing, FX
 - More instruments interest rate on required reserves, QE/QT
- **Communication** is central in Inflation Targeting Framework
- Special Issues for **EMDE**
- **Review** of Monetary Policy Framework (every 5 years)