Probing for Maximum Employment

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The Challenge

- Finding NAIRU is more challenging
  - Role of global shocks
  - Slow-moving structural changes
  - Short-term, maybe temporary, structural changes

- Solution? “Probing” for full-employment
  - **Benefits**: maximize employment consistent with price stability, bring in marginalized workers
  - **Costs**: inflation overshoot, financial vulnerabilities

- 2010s: Benefits of “probing” outweighed the costs in US

- 2020s: Has the tradeoff changed?
  - What have we learned from the post-pandemic tightening in AEs?
Two Approaches
Advantages of Each Strategy

**Tortoise**
- Better assess lagged effects and fine tune (i.e., “probing”)
- Allows entities to adjust & reduces risk that “something breaks”
- Reduces risk of “overtightening”; i.e., pushing unemployment higher than needed to achieve price stability

**Hare**
- Strengthens central bank credibility
- Inflation stabilizes faster:
  - less likely inflation expectations unanchored
  - fewer changes that make prices/wages “stickier”
- Less tightening overall (i.e., impact on labor market) to achieve price stability
High Level: Similar Strategies & Outcomes

**Policy Interest Rates**

- Australia (green)
- Canada (yellow)
- Euro Area (blue)
- New Zealand (green)
- Norway (brown)
- Sweden (purple)
- UK (red)
- US (dark blue)

Source: BIS

**CPI Inflation (%)**, average annual

- Australia (green)
- Canada (yellow)
- Euro Area (blue)
- New Zealand (green)
- Norway (brown)
- Sweden (purple)
- UK (red)
- US (dark blue)

Source: IMF, World Economic Outlook, Oct. 2023
Notes: QT dates refer to the announced start date for each central bank to reduce its holdings of government securities. This does not include programs for other types of assets (such as corporate bonds) and may not capture any reductions in central bank balance sheets that are not part of the QT program. Source: Dates are based on central bank communications.
**Pace of Rate Hikes**

**Pace of Rate Hikes (over hiking cycle)**

<table>
<thead>
<tr>
<th>Country and Liftoff Date</th>
<th>Mean Hike per Meeting</th>
</tr>
</thead>
<tbody>
<tr>
<td>09/24/21 NO</td>
<td>0.2</td>
</tr>
<tr>
<td>10/07/21 NZ</td>
<td>0.4</td>
</tr>
<tr>
<td>12/16/21 UK</td>
<td>0.3</td>
</tr>
<tr>
<td>03/03/22 CA</td>
<td>0.4</td>
</tr>
<tr>
<td>03/17/22 US</td>
<td>0.5</td>
</tr>
<tr>
<td>05/04/22 AU</td>
<td>0.3</td>
</tr>
<tr>
<td>05/04/22 SW</td>
<td>0.5</td>
</tr>
<tr>
<td>07/27/22 EA</td>
<td>0.4</td>
</tr>
</tbody>
</table>

**Source:** Calculations based on BIS data through 10/31/23.
“Steady Hand” vs. “Supersize” Hikes

# of Supersize Hikes (≥75) vs Small Hikes (≤25)

Source: Calculations based on BIS data through 10/31/23.
Frontloading vs. Backloading Hikes

Source: Calculations based on BIS data through 10/31/23.
Did the Strategy Matter?

What happened to:
1) Output gap/employment
2) Inflation
Start Date → Different Outcomes?

Output Gap (IMF estimates)

- **Note:** Output gap as % of GDP estimated for 2023 and 2024.
- **Source:** IMF, *World Economic Outlook* database, 10/23.
Start Date → Different Outcomes?

CPI and Core Inflation (in %, latest)

Note: Last reported CPI or core inflation data as of 10/31/23.
Source: Country sources.
Tortoise vs. Hare
(Based on Pace/Size/Frontloading)

Source: Calculations based on BIS data through 10/31/23.
Tortoise/Hare → Different Outcomes?

Note: Output gap as % of GDP estimated for 2023 and 2024.
Tortoise/Hare → Different Outcomes?

Note: Last reported CPI or core inflation data as of 10/31/23.
Source: Country sources.
The Winner??
Who were the Tortoises and Hares?

Source: Calculations based on BIS data through 10/31/23.