Inflation and Attention Thresholds

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Inflation Targeting in a World of Large and Persistent Shocks,
National Bank of Ukraine, November 25, 2022
Motivation: Why is High Inflation Dangerous?
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“When inflation is persistently high, households and businesses must pay close attention and incorporate inflation into their economic decisions. When inflation is low and stable, they are freer to focus their attention elsewhere.... Of course, inflation has just about everyone’s attention right now, which highlights a particular risk today: The longer the current bout of high inflation continues, the greater the chance that expectations of higher inflation will become entrenched.” Jerome Powell, 2022
Motivation: Why is Attention Dangerous?

- When people start paying attention to inflation, you get a dynamic feedback -> wage-price spiral
  - Expectations play important role: if people expect rising inflation they will pre-emptively bargain for higher wages
Motivation: Do People Always Pay Attention?

• Rational Inattention Theory:
  • Cognitive recourses are costly / it is hard to think
  • If cognitive costs > benefits of paying attention = no attention
Motivation: Explore Changes in Attention

• Are there shifts in attention to inflation?

• If there are shifts in attention, when do they happen?
  • Central bankers: if you’re worried about the public shifting into a high attention regime because it makes inflation harder to control, you probably want to avoid letting inflation get that high.
  • Extremely relevant for conversations about the “optimal rate of inflation.”
Data

• To do this we need a measure of “attention” that inflation receives.
• We use two sources of data:
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  • Frequency of ”inflation” mentions on Twitter
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• We collect this data for 37 countries to explore if, and where, attention thresholds exist.
• We do this with “threshold regressions,” essentially a way to let the data tell you where relationships change.
Results: U.S.

(a) U.S. ($\hat{\gamma}=3.55$)
Results: Comparing Google and Twitter

Google Data: U.S. (3.55)

Twitter Data: U.S. (3.39)
There’s no evidence of an “inattention” regime in Turkey.

One interpretation of that is that inflation in Turkey is really high, and thus it always yields attention.
### Results: Classification

<table>
<thead>
<tr>
<th>Consistent with U.S.</th>
<th>Intermediate</th>
<th>Not Consistent with U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria (1.99)</td>
<td>Canada (1.88)</td>
<td>Brazil (5.75)</td>
</tr>
<tr>
<td>Belgium (2.02)</td>
<td>Czechia (2.47)</td>
<td>Colombia (4.26)</td>
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<tr>
<td>Chile (3.34)</td>
<td>Finland (1.42)</td>
<td>Estonia (3.32)</td>
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<td>Korea (2.19)</td>
<td>Hungary (3.75)</td>
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<td>Mexico (4.25)</td>
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<td>Saudi Arabia (2.84)</td>
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<td>Sweden (1.25)</td>
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Avg. Inflation=2.33
Results: Habituation?

• A natural question in all this is if people become habituated to the level of inflation they experience.

• E.g.: 4% inflation might seem shocking and garner a lot of attention in a country where the norm is 1% inflation. However, 4% might not be so shocking if you regularly experience 3% inflation.

• We find some evidence that is consistent with a habituation story.
Results: Habituation?
Conclusion

• One of the classic stories about the dangers of high inflation is that it causes firms/households to pay close attention to it.

• We examine the empirical evidence of this and find that attention thresholds do exist in a broad set of countries, and most are between ~2-5% inflation rates.

• We also find some evidence that is supportive of a habituation interpretation.

• Hope you enjoyed my talk, thanks for listening!