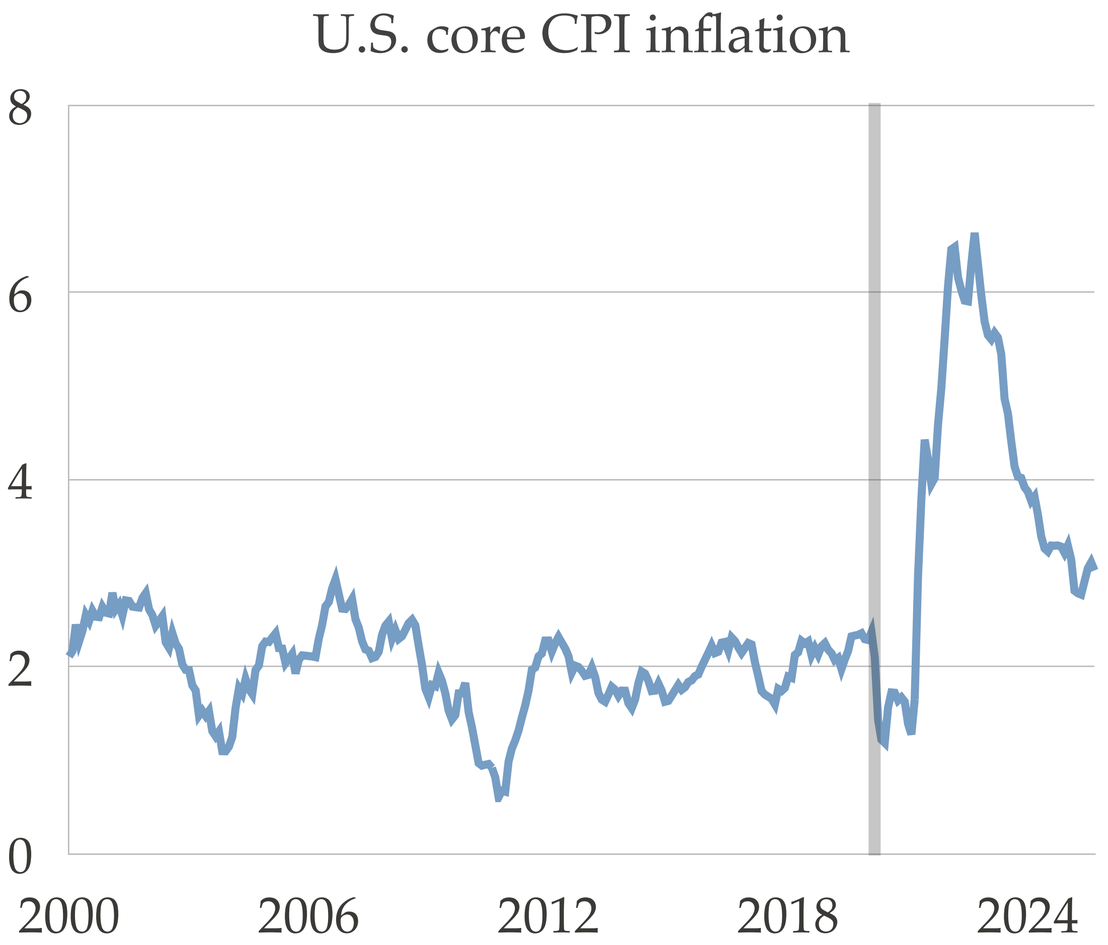
Supply Chain Uncertainty, Energy Prices, and Inflation

Discussion by Ludwig Straub, Harvard

What drove the Covid inflation?



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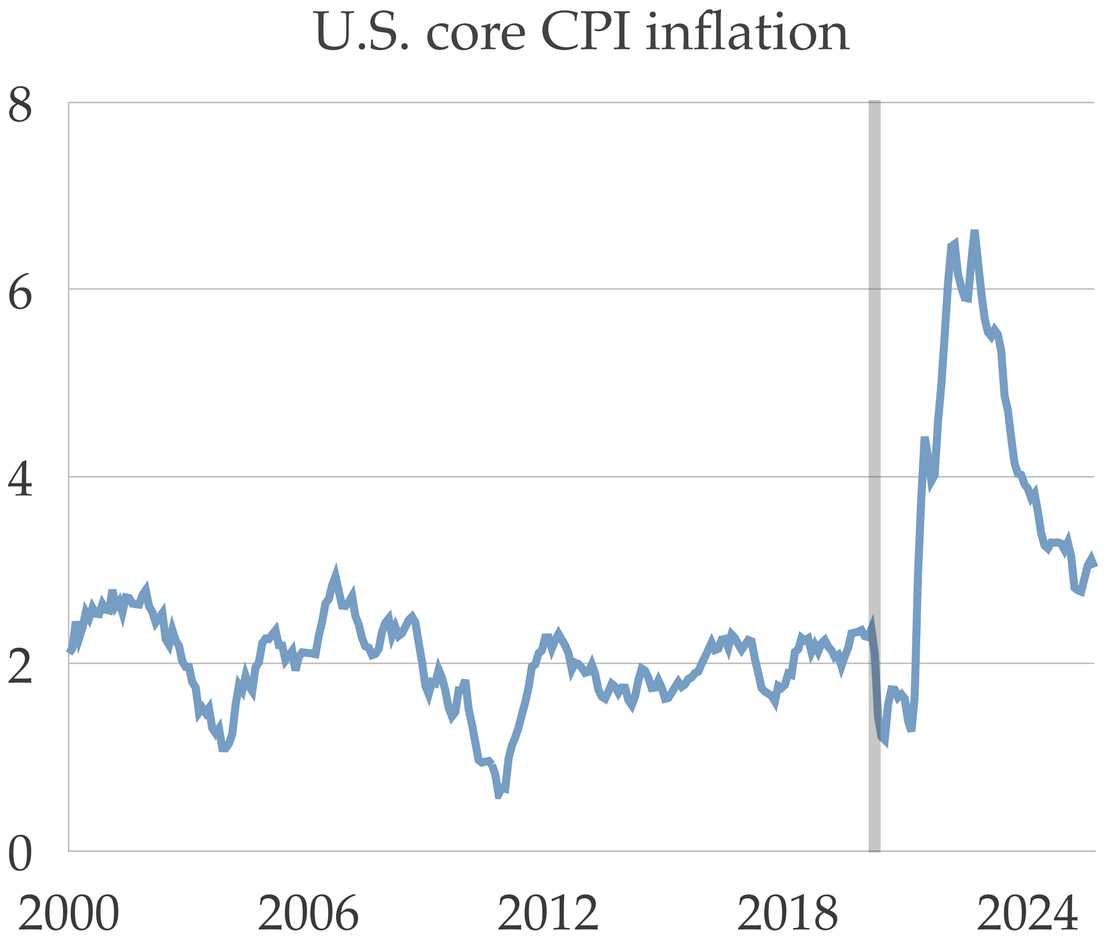

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- Energy shocks?
- Supply chain disruptions?
- Capacity constraints?
- Inflation expectations?
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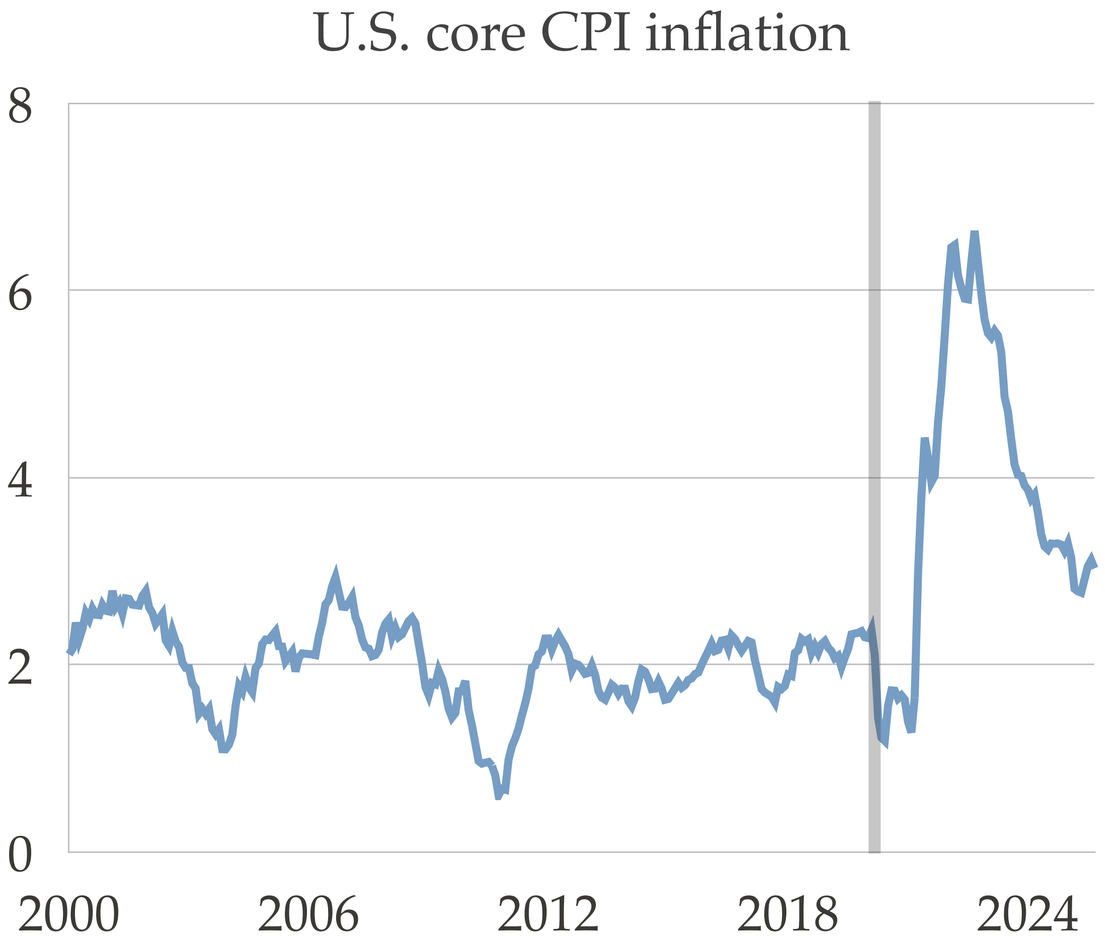

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This paper!

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- Energy prices become *extra inflationary* during times of transportation risk
  - Interaction: transportation risk ↔ energy shocks

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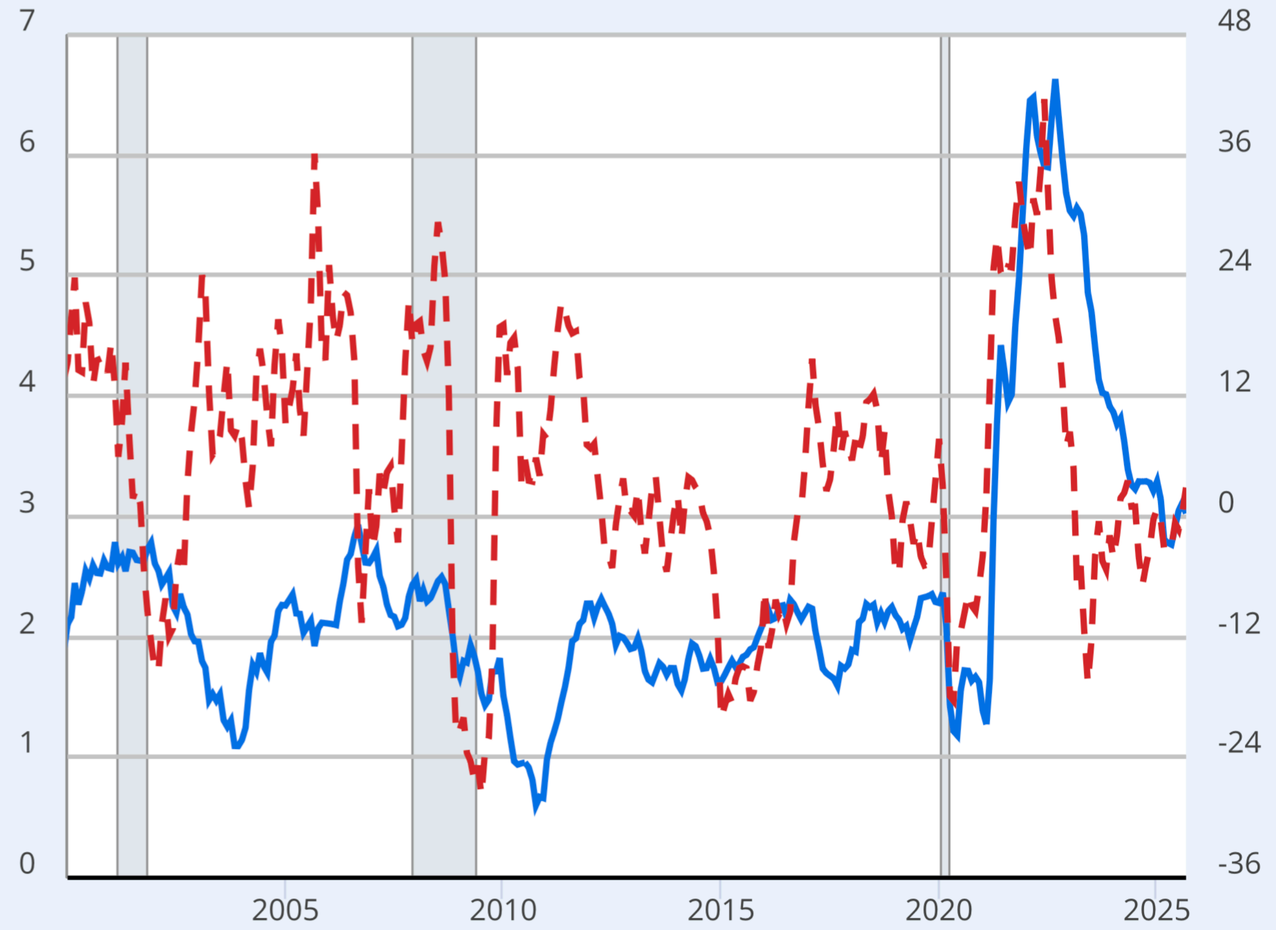

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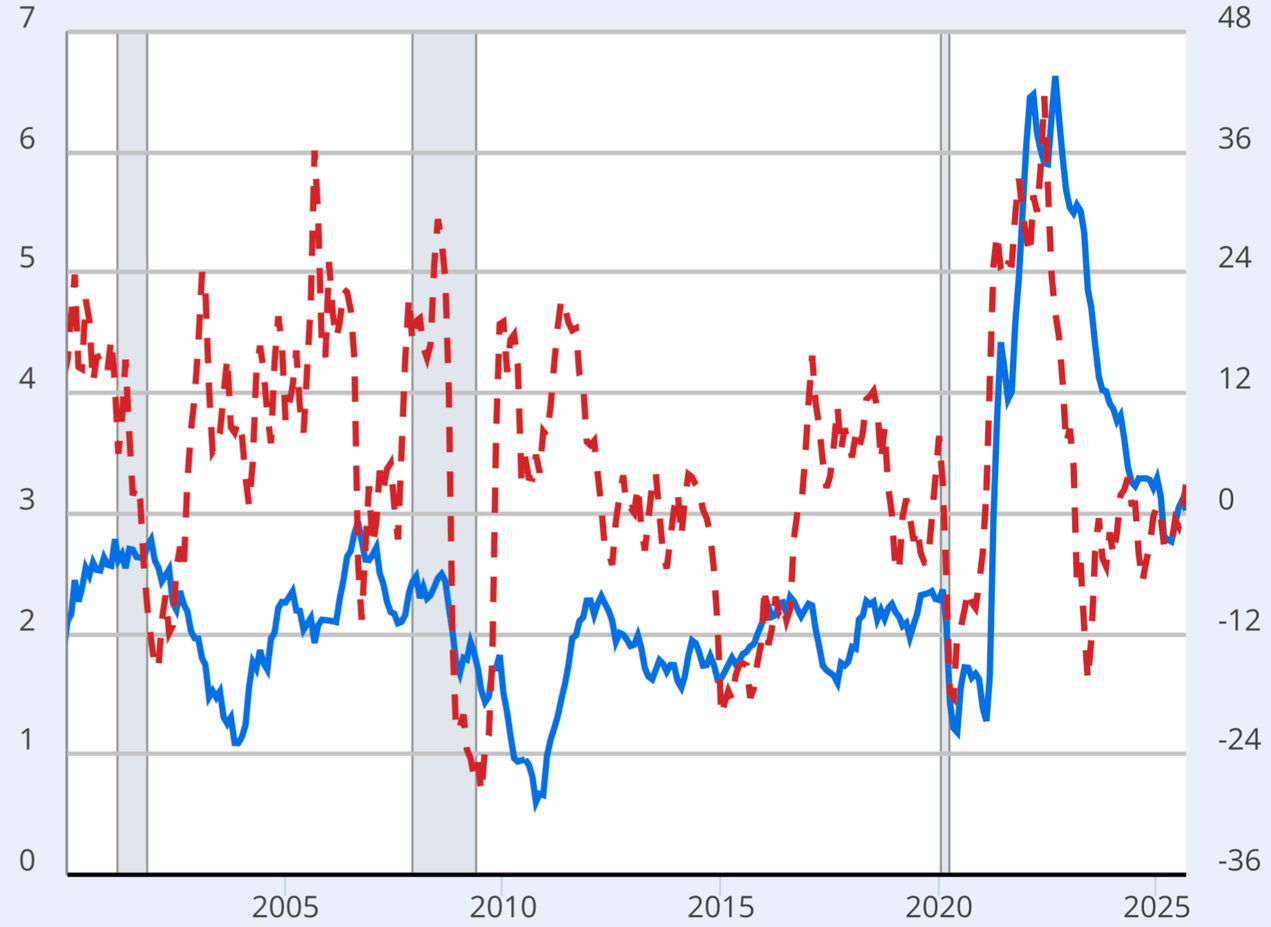
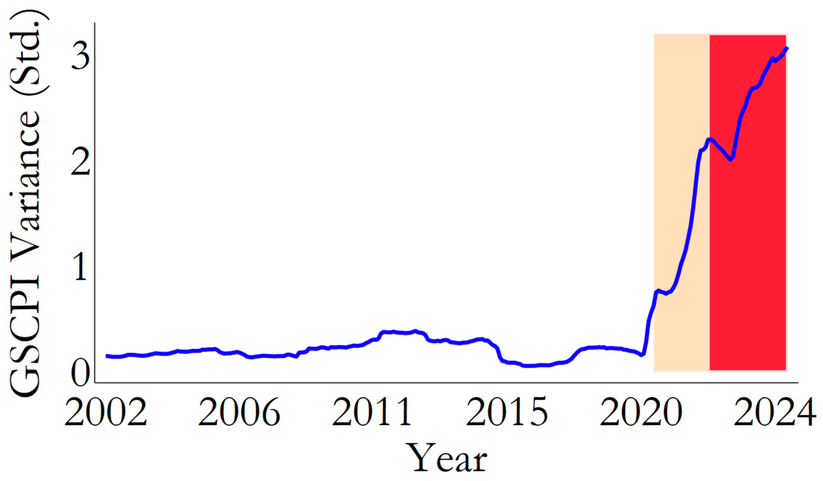


Var (Global Supply Chain Pressure Index)



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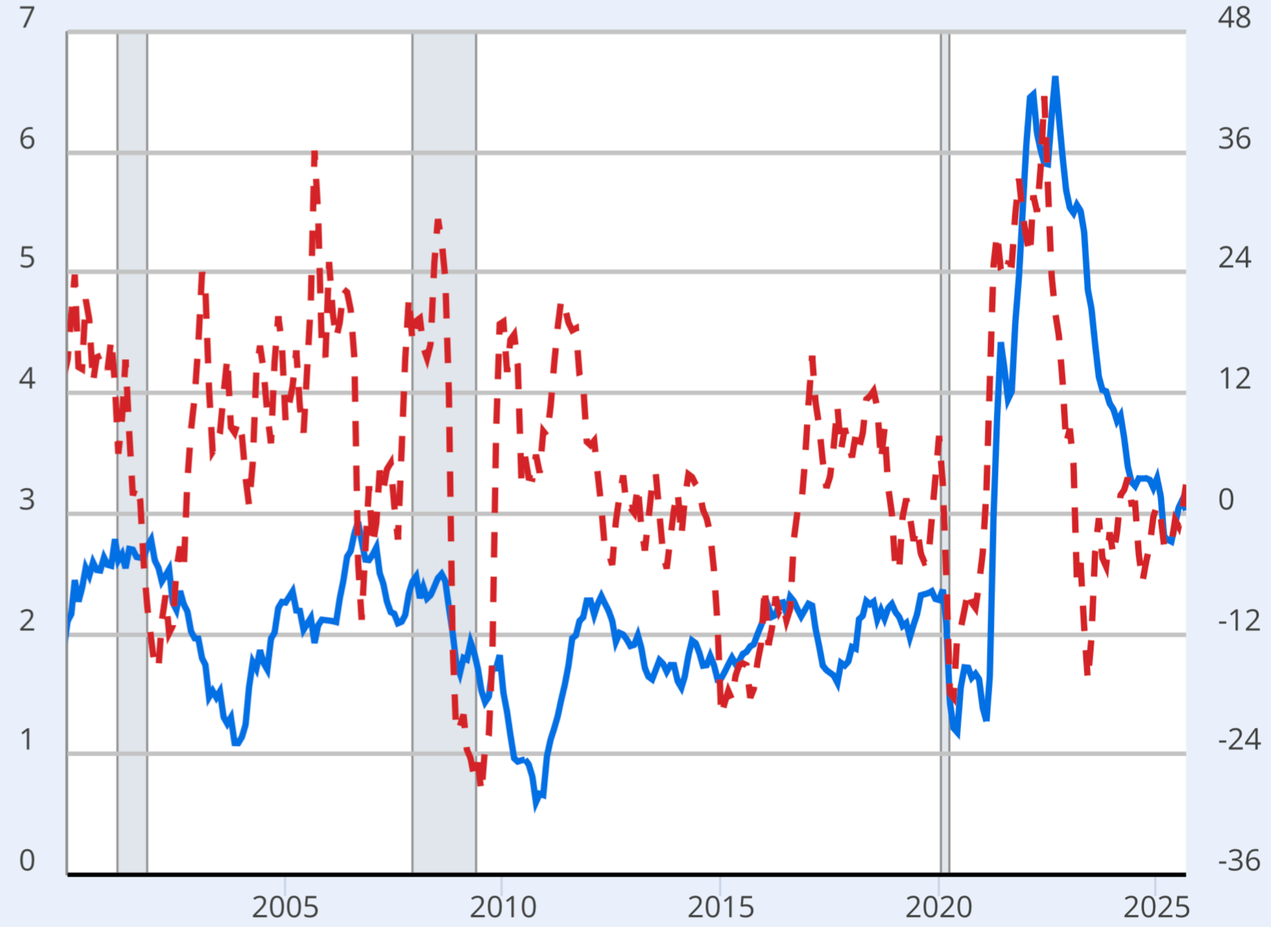

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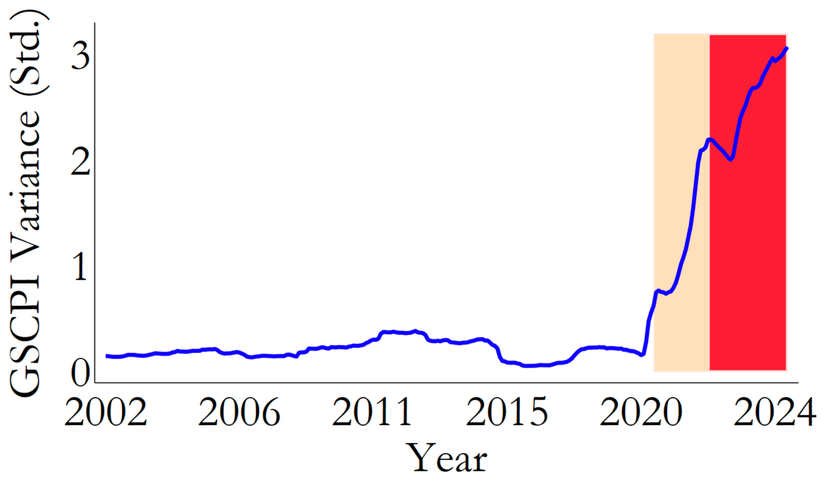

(a) Rolling variance of GSCPI

Paper's mechanism explains this …
… but so can others?
(e.g. fiscal policy, reallocation, any other post-Covid inflation story)

Revisiting the local projections

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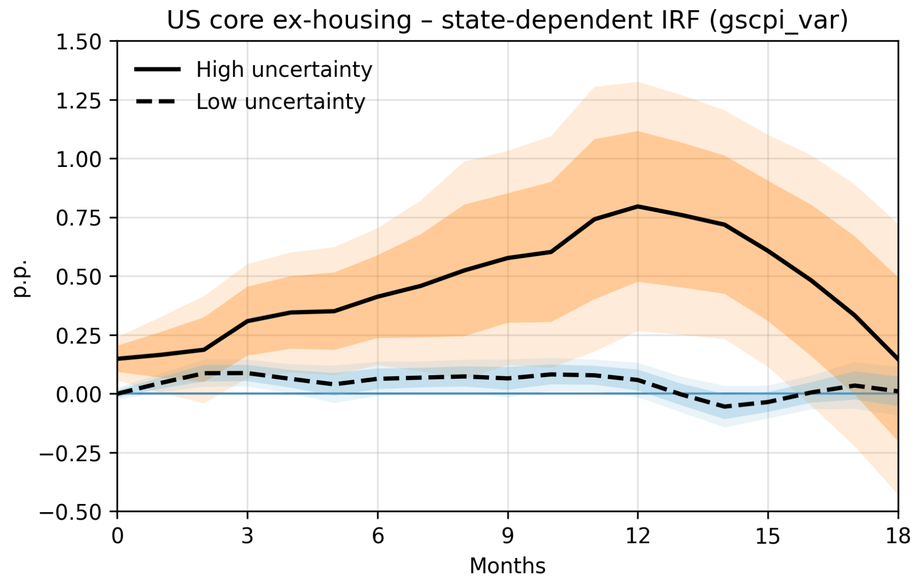

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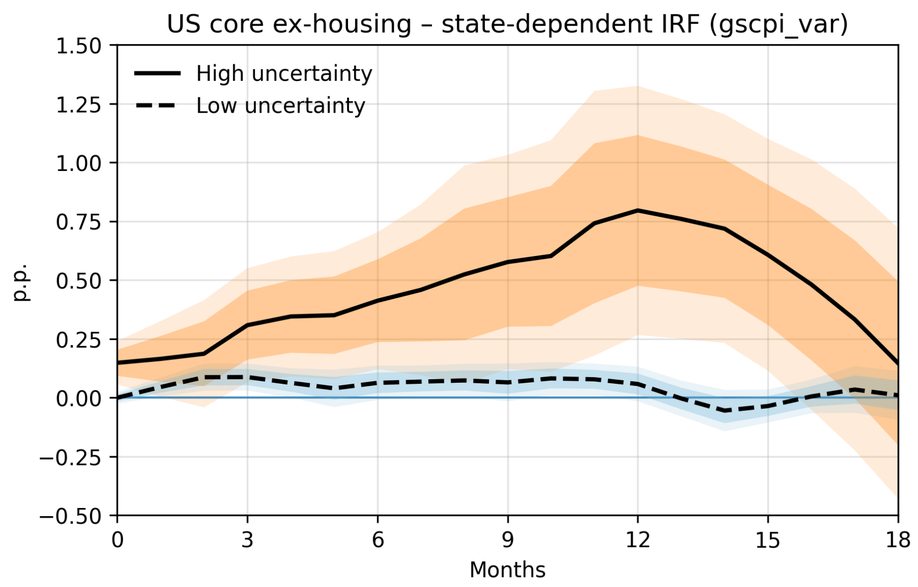
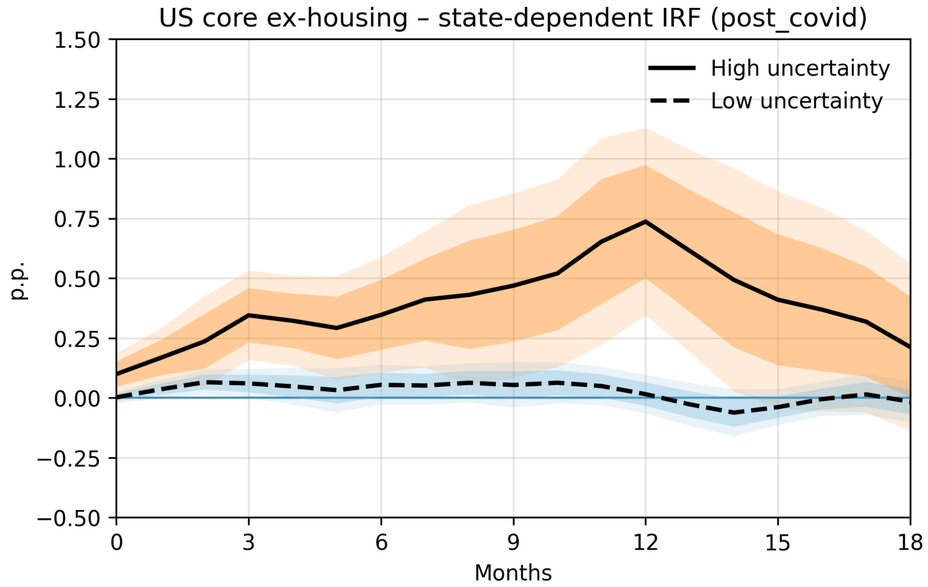


IRFs with post-Covid dummy



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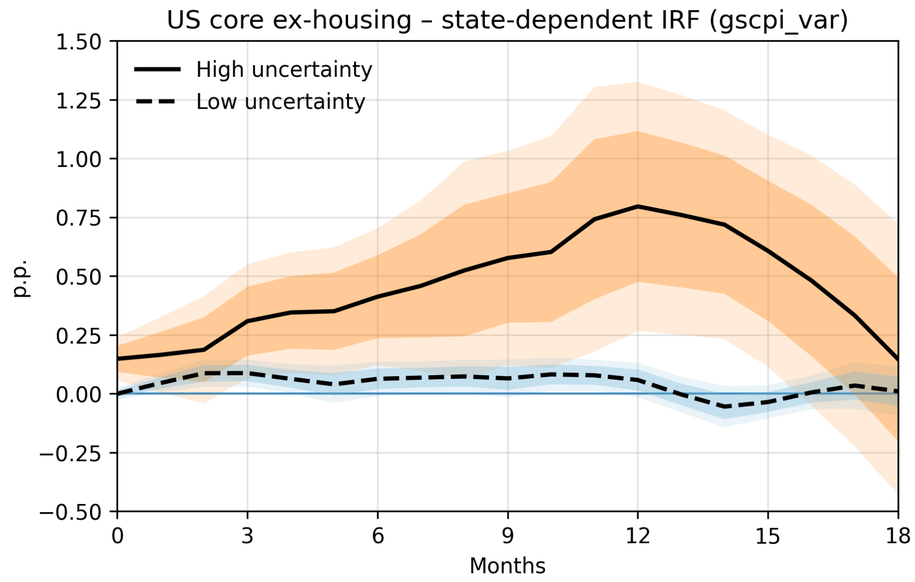

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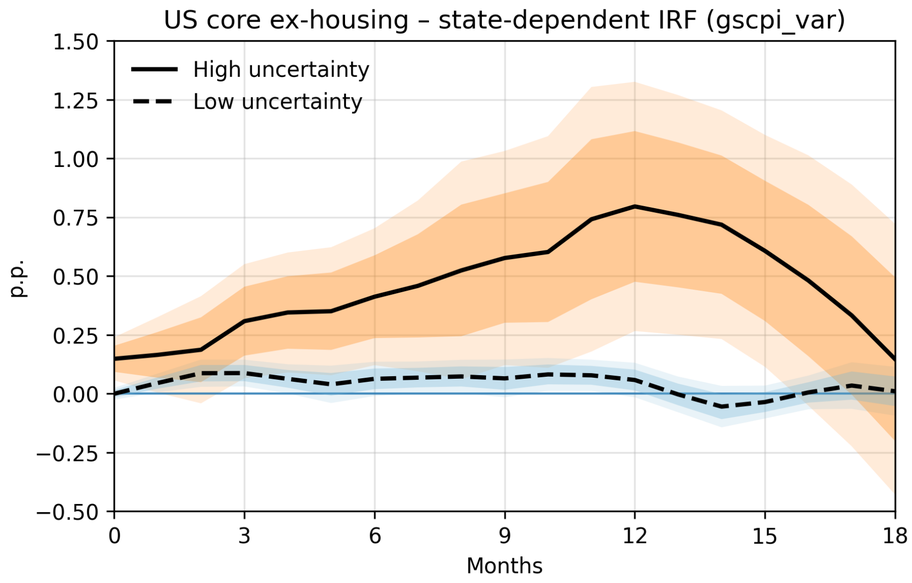
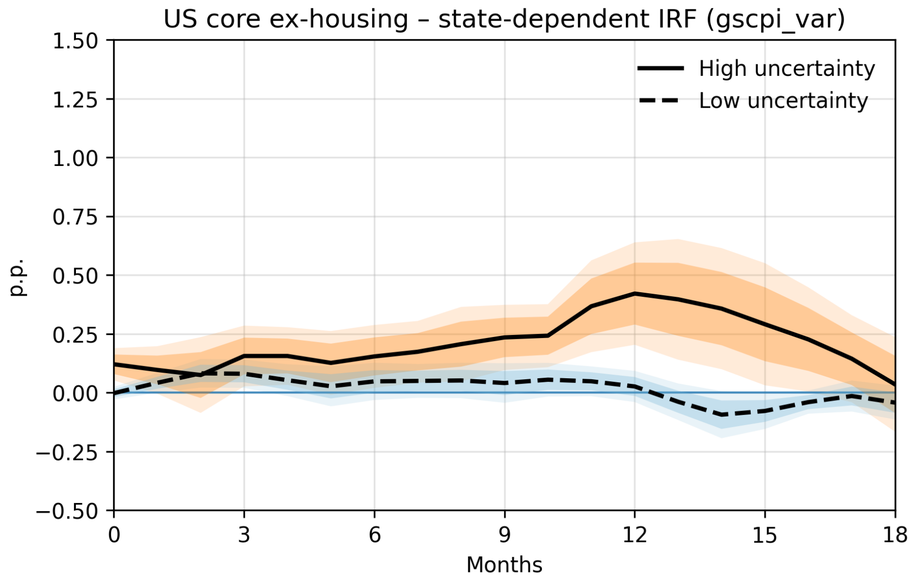


IRFs without inflation surge



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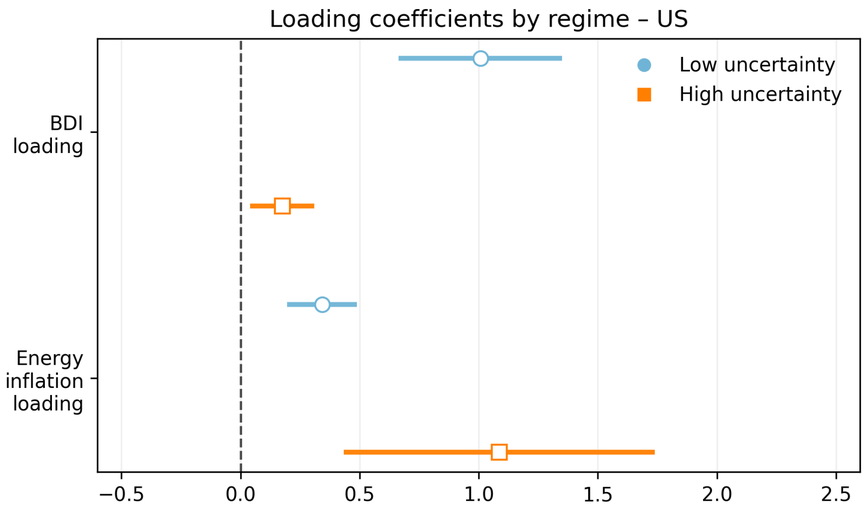

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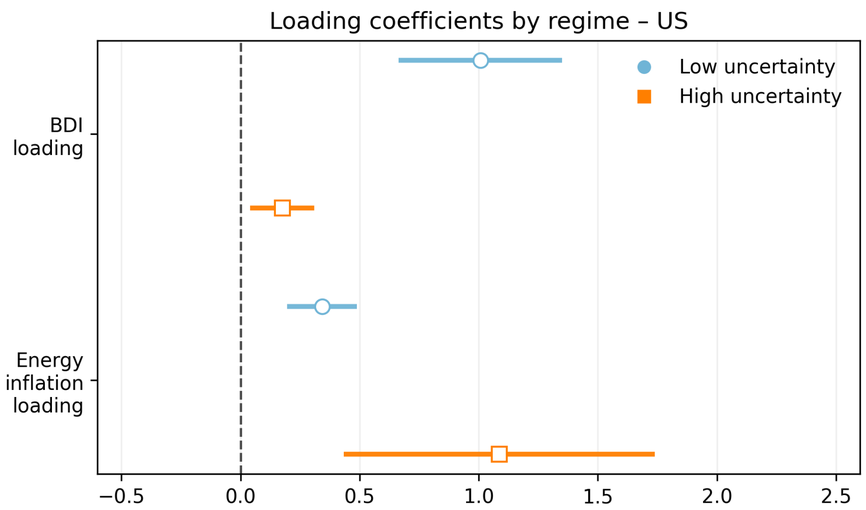
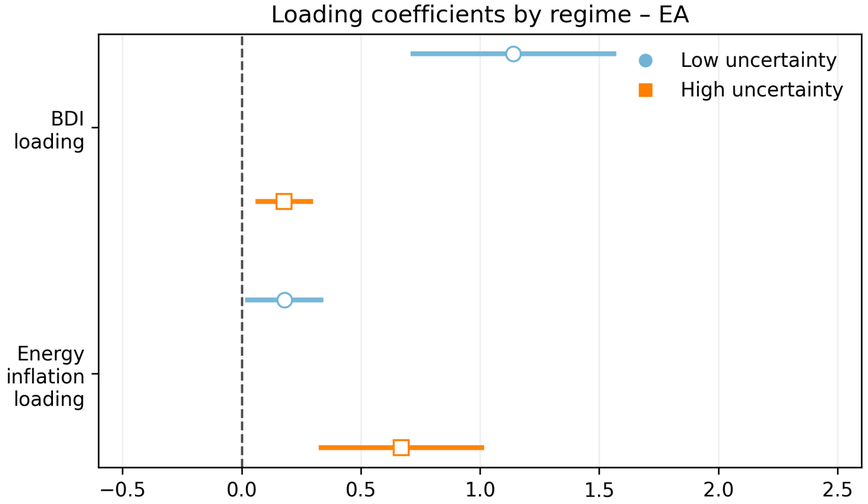


Loadings during 2009-2019



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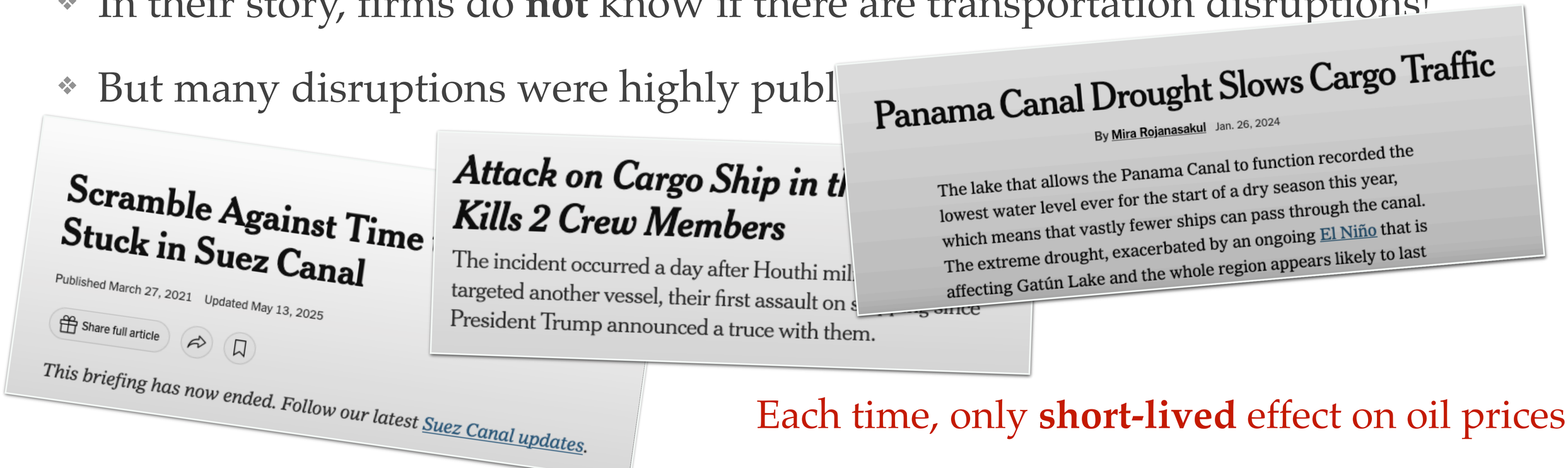

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Each time, only **short-lived** effect on oil prices.

How well is the model executed?

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Firms

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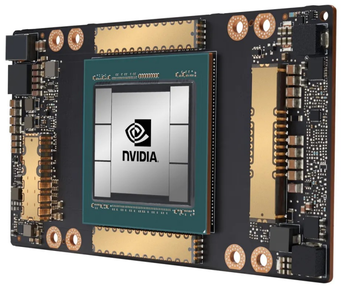

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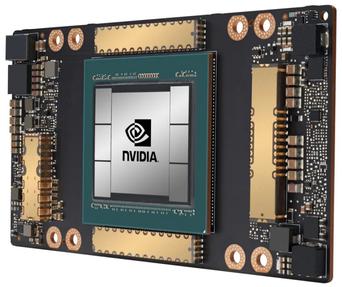

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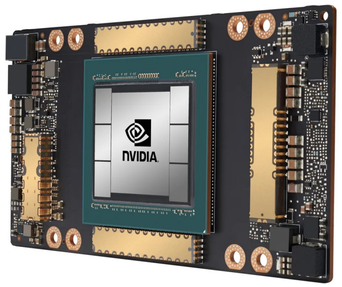

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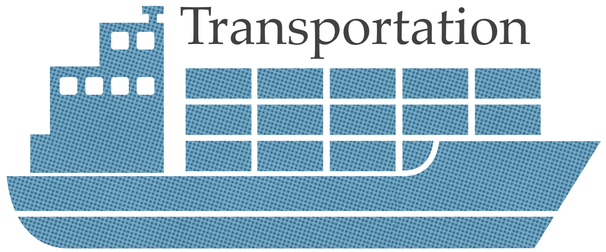

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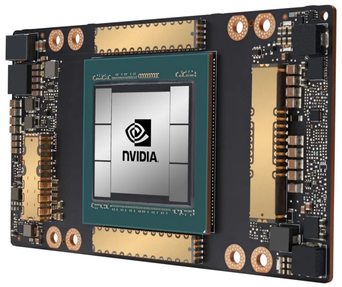

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i.i.d. oil supply shock

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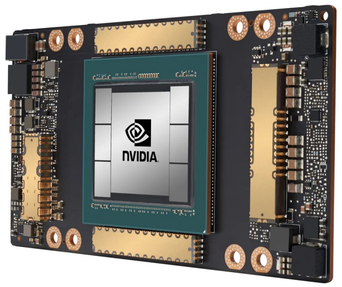

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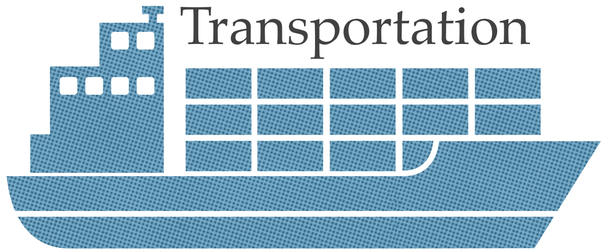

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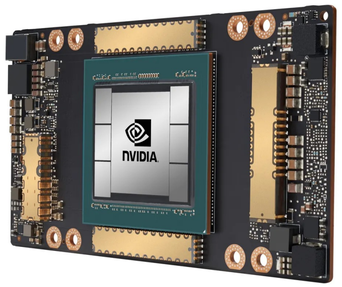

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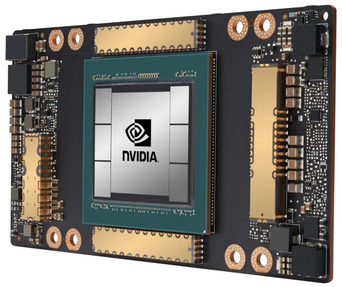

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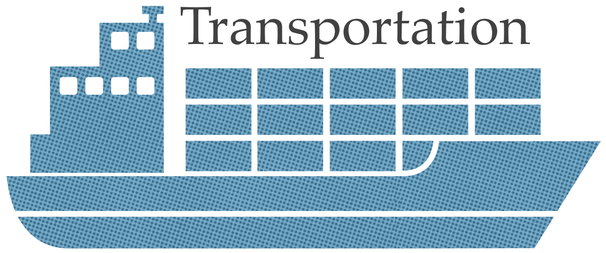

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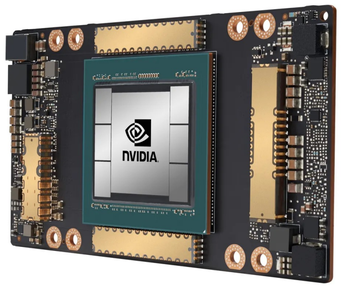

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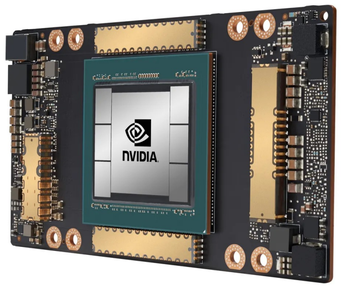
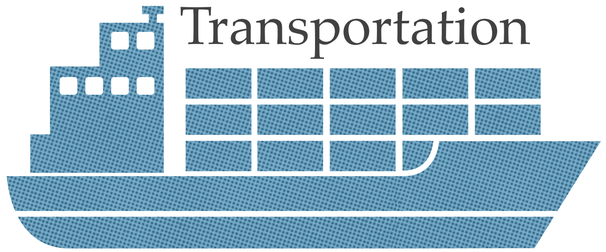


Chips

- Can't they talk to chip suppliers?
- What iid vs AR(1) is flipped?



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- Data from Atlanta Fed's Business Inflation Expectations Survey
- Firms are "adaptive": forecast future costs entirely based on past costs

(and not what is driving past costs!)

Fast and slow exposure to oil shocks

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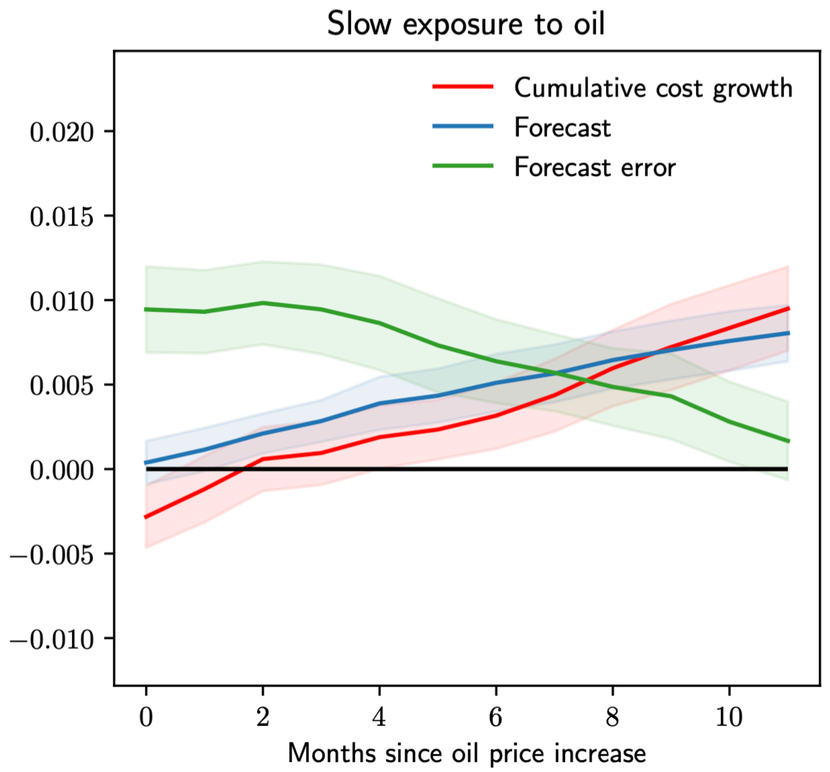
Downstream firms whose costs are only **slowly** affected, do not forecast higher costs!



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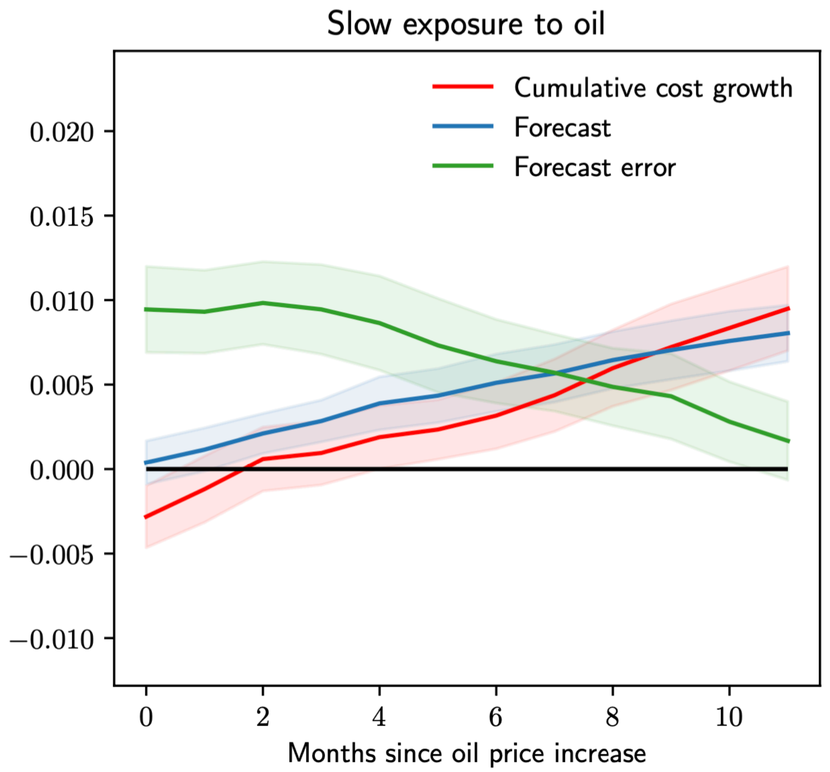

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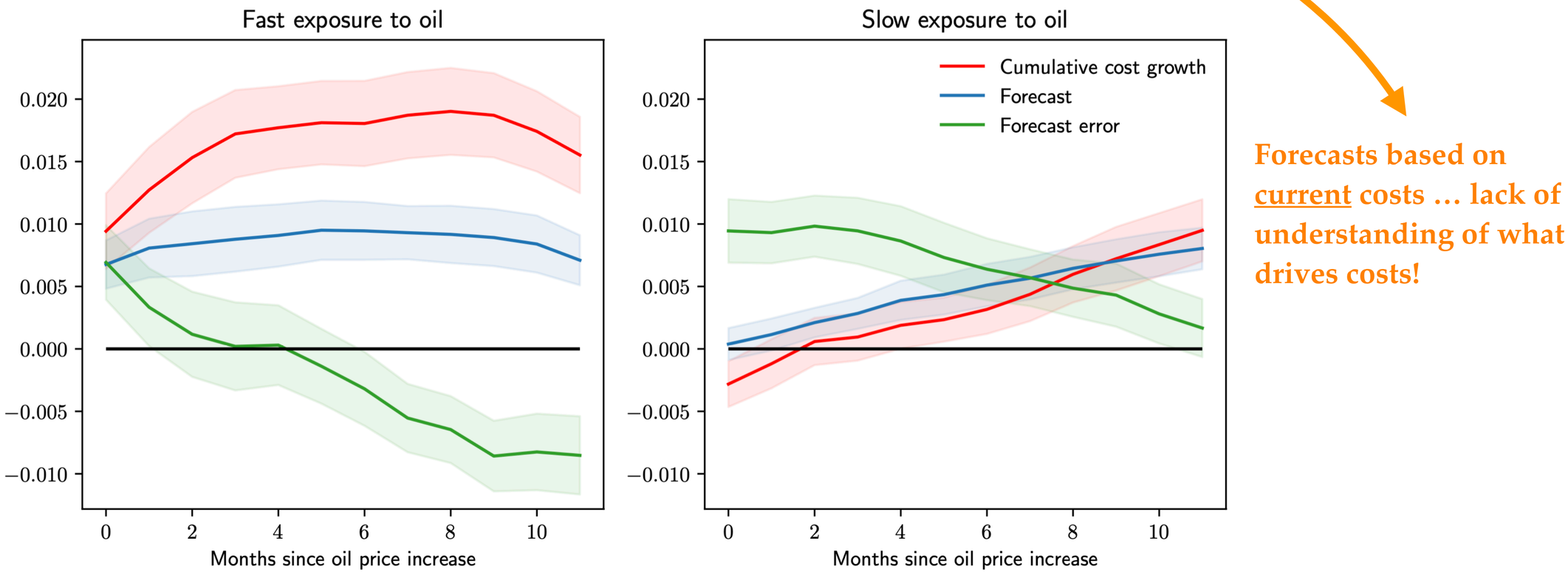

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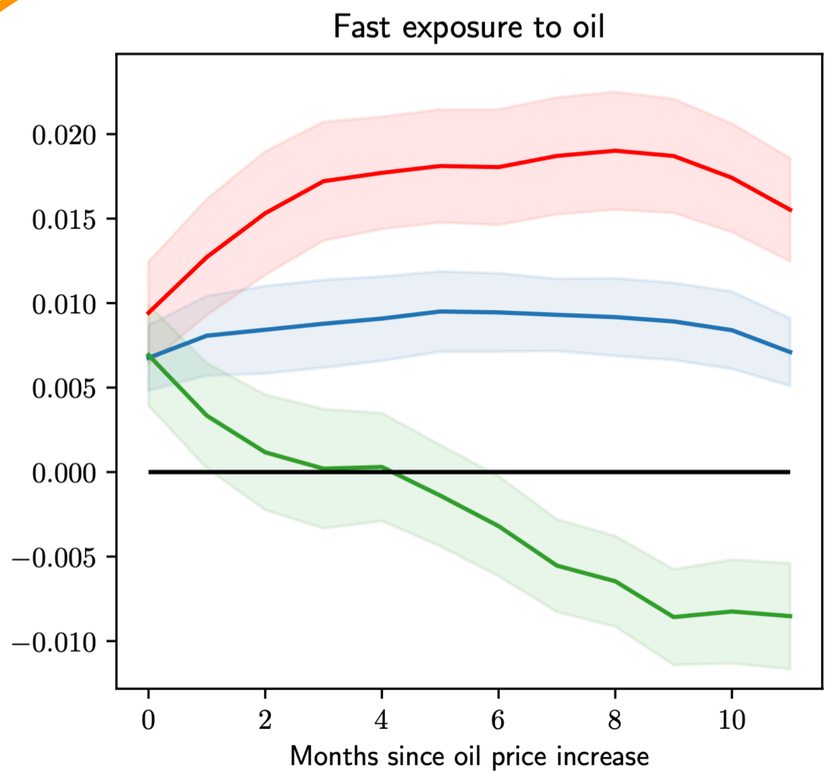
Overreaction



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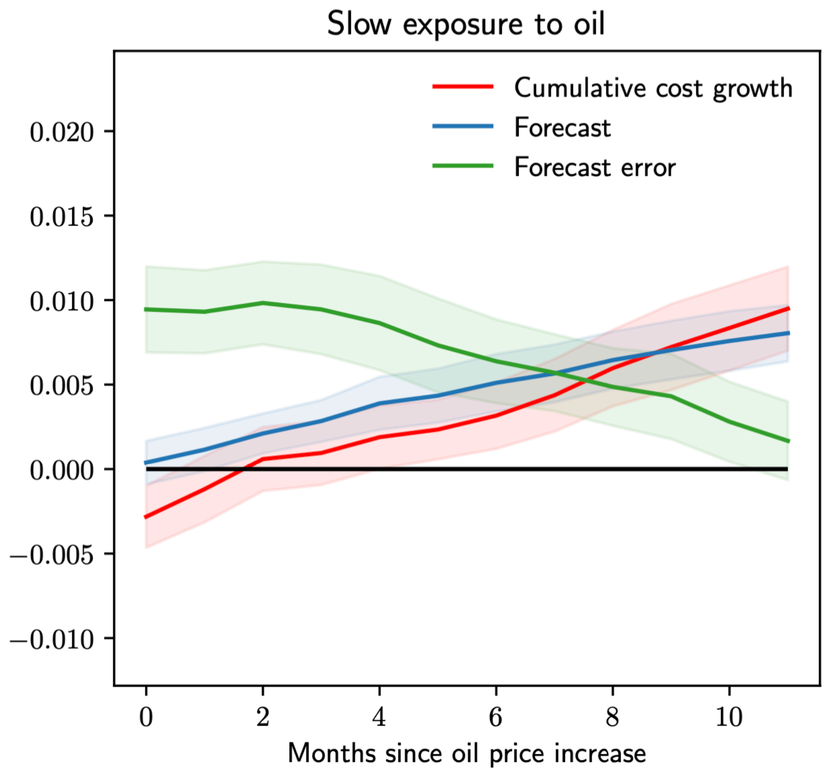

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- Very interesting paper, on an extremely important topic:
  - How much firms know about and learn from their own costs!
  - Apply this to the post-Covid inflation episode

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  - How much firms know about and learn from their own costs!
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- **My take**:
  - Not fully convinced (yet!) by evidence in paper …
  - … but I do think firms learn from their own costs! (cf Hugo Monnery's JMP)
  - Model is very neat!