

“Strike While the Iron is Hot -
Optimal Monetary Policy with a Nonlinear Phillips Curve”
by Karadi, Nakov, Nuño, Pastén and Thaler

Alberto Martin

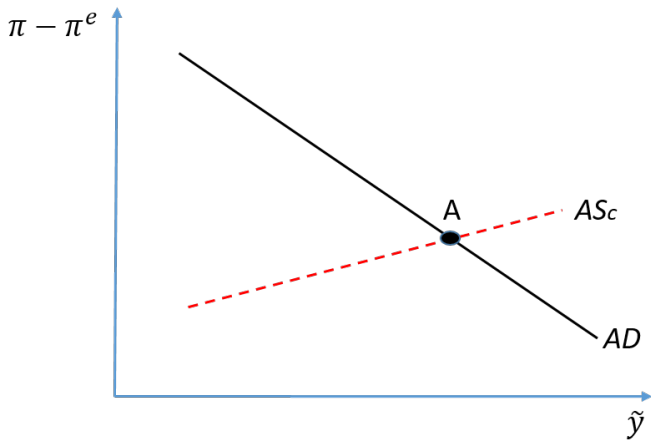
CREi, UPF and BSE

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Introduction

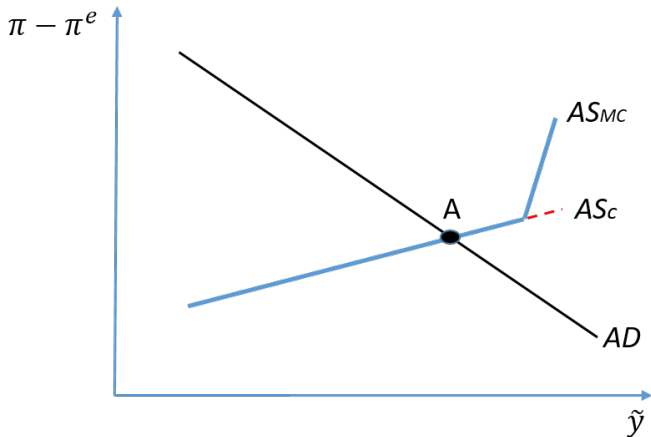
- Menu-cost economy à la Golosov-Lucas
- Goals:
 - ▶ Understand trade-off between inflation and output gap at different levels of inflation
 - ▶ Characterize optimal monetary policy

Overview: Calvo economy



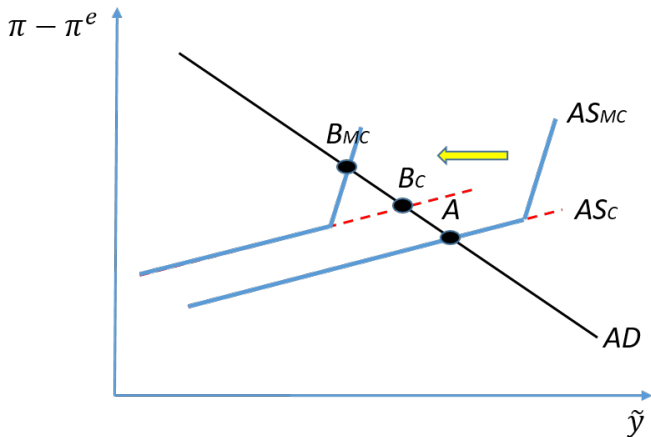
- Simple AD-AS in calvo model

Overview: menu-cost economy



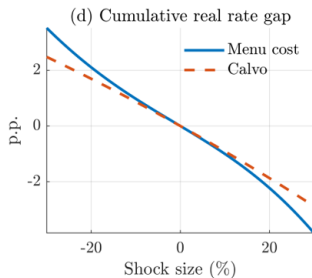
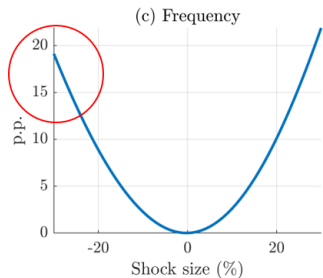
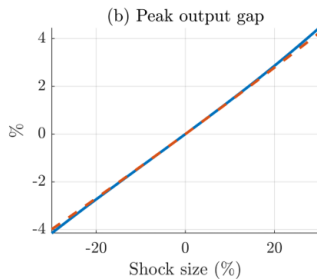
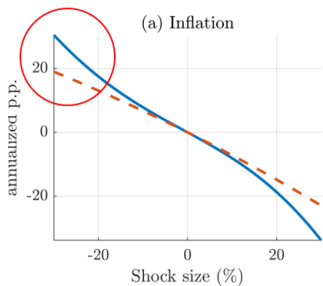
- Menu-cost economy: nonlinear AS (steeper for high levels of π)
 - ▶ Intuition: higher inflation \rightarrow higher frequency of price changes

Overview: cost-push shocks

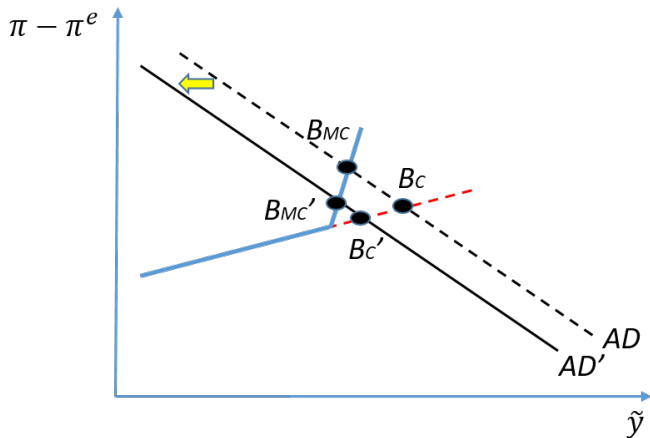


- In response to cost-push shocks, menu-cost economy features:
 - ▶ Higher inflation
 - ▶ More negative output gap

Effect of cost-push shocks (Taylor rule)

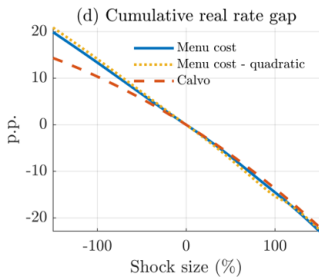
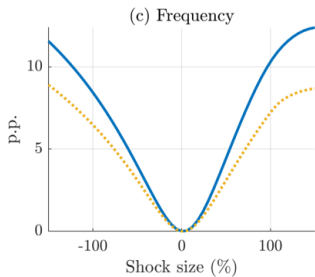
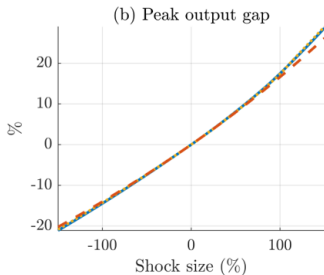
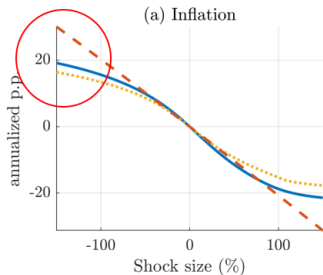


Overview: implications for monetary policy



- Less reason to “lean against the wind” in menu cost economy
 - ▶ “Sacrifice ratio” is more favorable in menu cost economy, and...
 - ▶ ...lower inflation saves on menu costs

Effect of cost-push shocks (optimal monetary policy)



General reaction

- **Key takeaways:** in menu-cost economy
 - ▶ Phillips curve is non-linear
 - ▶ Monetary policy responds more aggressively to cost-push shocks
 - ▶ “Divine coincidence” continues to hold for demand shocks

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- **A lot to like:**
 - ▶ Technically impressive yet clear
 - Significant contribution to understanding this class of models
 - Other results: positive steady-state inflation rate, asymmetries, etc...
 - ▶ Bottom line sensible and intuitive

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- **Key takeaways:** in menu-cost economy
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 - ▶ Bottom line sensible and intuitive
- **My discussion:** how does it affect our views...
 - ▶ ...of monetary policy?
 - ▶ ...more generally, of economic policy in high inflation environments?

1. Calvo vs. menu costs (positive)

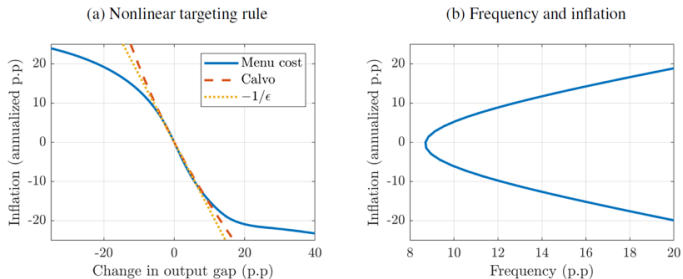
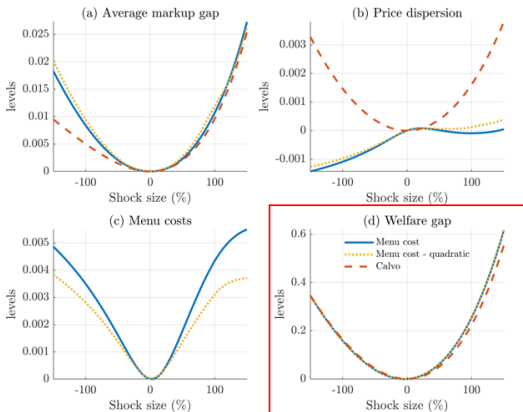


Figure 6: Optimal target rule.

- When do Calvo and menu-cost worlds differ?
 - ▶ Very large cost-push shocks (-50%) and very high levels of inflation ($\geq 15\%$)
- How relevant is the distinction in practice?
 - ▶ e.g., how often would difference have mattered in last 50 years?

1. Calvo vs. menu costs (normative)



- Perhaps optimal policy does not matter often, but effect on welfare is significant
 - ▶ Not really...gains from lower price dispersion \approx losses from menu costs

2. Benefits (and costs) of striking while iron is hot

- What is the cost of doing policy as usual?
 - ▶ Suppose simple Taylor rule: nearly optimal in Calvo world
 - ▶ This paper: potentially costly in high-inflation environments
 - ▶ How high are these costs? Welfare losses (total and per cost-push “episode”)?

2. Benefits (and costs) of striking while iron is hot

- What is the cost of doing policy as usual?
 - ▶ Suppose simple Taylor rule: nearly optimal in Calvo world
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 - ▶ How high are these costs? Welfare losses (total and per cost-push “episode”)?
- Are there risks of “striking while the iron is hot...”?
 - ▶ Key takeaway: be aggressive on inflation when Phillips curve is steep
 - In model, trade-offs are known perfectly
 - In practice, need to assess where we are: flat or steep segment?
 - Can we know this in real time? What data? Price-change frequency?
 - ▶ Caution under uncertainty may mitigate gains of policy

3. Alternative environments / policies

- You have the Ferrari! Drive it on other countries / policies
- High-inflation environments
 - ▶ Large shocks / high inflation are more common elsewhere
 - ▶ Worth exploring evidence from high-inflation countries
 - ▶ Widespread view: cost of disinflation is not linear
 - Less costly to reduce inflation from 20% to 10%, than from 10% to 0%
- Going beyond monetary policy
 - ▶ Mechanism emphasized in the paper has implications for other policies
 - ▶ Example: cost of fiscal consolidation
 - The fiscal multiplier should be smaller when inflation is high
 - Is this consistent with evidence? (e.g. Milei's Argentina)

Conclusions

- Technically impressive, yet clear paper
- Bound to become widely cited in the literature
- Main suggestion: stress significance for our views on monetary policy / inflation