Discussion of “Optimal inflation in a world of inside money” by Deviatov and Wallace

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Inflation and divisible outside money

- Buyers/sellers live for 3 periods: $CM - DM - CM$
  - $1^{st} CM$: young buyers work $\rightarrow$ $
  - DM$: B/S matched $\rightarrow$ produce/consume $q$
  - $2^{nd} CM$: old matched sellers/unmatched buyers consume

- Suppose $\beta = 1$ and money supply constant (FR), then $q = q^*$

- Inflation is bad for this economy
Heterogeneous buyers

• 2 types of buyers: productive/unproductive in 1\textsuperscript{st} CM

• Productive buyers consume $q^*$; unproductive consume 0

• Inflation: Lump-sum transfer to all young buyers $\rightarrow$ social welfare can increase

• But, ex post
  – productive buyers worse off; unproductive buyers better off
Inflation and inside money

- Matches with monitored-producer and unmonitored-consumer with money: \( \frac{\theta}{K^2} \)

- Matches with monitored-consumer and unmonitored-producer with money: 
  \( (1 - \theta)/K^2 > \frac{\theta}{K^2} \)

- In SS can have
  - unmonitored producers get $1 \rightarrow \text{inflation tax}
  - unmonitored producers get $1 \text{ w.p. less than 1} \rightarrow \text{no inflation}
Ex post effect of inflation?

- Output in monitored-consumer/unmonitored-producer match is higher with inflation than without
  - Monitored buyer seems better off
  - Unmonitored seller better off if value of money increases

- Interesting: Inflation makes everyone better

- Why?
• Difference between no inflation and inflation outcomes?
  – inflation: tax on all money holders
  – no inflation: “tax” on unmonitored producers
  – inflation tax has broader base

• Does result - everyone better off - survive in divisible money world?