References

# Discussion of

# Michele Andreolli, Natalie Rickard, and Paolo Surico Non-Essential Business Cycles

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European Central Bank

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The views expressed here are solely those of the authors and do not necessarily reflect the views of the ECB or the Eurosystem



Proposes and brings corroborating evidence on a novel BC amplification mechanism

References

- Components
  - 1. (New evidence) Non-essential (luxury,  $\partial Q^{E}/\partial l > 1$ ) goods-producing sectors are more sensitive to BC fluctuations than essential (inferior/normal,  $\partial Q^{E}/\partial l \leq 1$ ) sectors.
  - 2. (New evidence) Workers in non-essential sectors earn less than those in essential sectors (note, not frontline vs. not-frontline during COVID)
  - 3. (Assumption) Workers in non-essential sectors have higher MPC (hand-to-mouth)

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  - 3. (Assumption) Workers in non-essential sectors have higher MPC (hand-to-mouth)
- New theoretical model: The three-way interaction of the components amplify business cycles

#### Praise

Literature

Convincing story; potentially more relevant for BC analysis than alternative sectoral partitions (durable - non-durable; manufacturing - services; tradable - non-tradable)

► Well-executed paper

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Literature

Convincing story; potentially more relevant for BC analysis than alternative sectoral partitions (durable - non-durable; manufacturing - services; tradable - non-tradable)

- Well-executed paper
- Comments/questions:
  - 1. Relationship to relevant literature
  - 2. Heterogeneity in price (and wage) rigidity
  - 3. Earnings and MPC
  - 4. (Bit unfair:) Why should we care?

References

### Trading down vs essential-non-essential sectors

- Related story: trading down (Jaimovich, Rebelo and Wong, 2019)
  - Households substitute to lower-quality goods in recessions
  - Production of lower-quality goods uses less labor
  - Drop in labor share amplifies downturn

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- Related story: trading down (Jaimovich, Rebelo and Wong, 2019)
  - Households substitute to lower-quality goods in recessions
  - Production of lower-quality goods uses less labor
  - Drop in labor share amplifies downturn
- ▶ Different, but related story: within-sector versus across-sectors substitution
- Relative relevance of the two mechanisms: elasticity of substitution within sectors can be potentially much higher than across sectors: trading down potentially more important

Conclusion

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### Heterogeneity in price (and wage) stickiness

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Earnings and MPC

Puzzles?

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- Heterogeneity can affect amplification: If prices of essentials drop during downturn, it leaves room for non-essential spending to drop less
- Response to essential vs. non-essential prices to monetary policy shocks: significant difference



Earnings and MPC

Puzzles?

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### Heterogeneity in price (and wage) stickiness

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  Rent
  5.5%
  N/A
  Used car
  5.53%
  100%
  Heterogeneity can affect amplification: If prices of essentials drop during downturn, it leaves room for non-essential spending to drop less
  Food at home
  11.63%
  40%
- Microdata (Nakamura and Steinsson, 2008): essential frequency is 39% >> 21% average (includes used car (100%), gas (67%))

	F F0/	NI / A
Rent	5.5%	N/A
Used car	5.53%	100%
Communication	2.59%	34%
Food at home	11.63%	16%
Utilities	5.21%	40%
Children's clothes	0.96%	3.7%
Gas and v. maint.	6.14%	67.4%
Health	4.9%	6.35%
Personal care	0.97%	4.83%
Essential	37.9%	39.2%

Puzzles?

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#### Earning distribution across sectors

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Robustness: Would be important to see which sector(s) drive this result: e.g. report earning distributions by major sectors



Puzzles?

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#### Earning distribution across sectors

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 A surprising result of the paper is that earnings in non-essential sectors are lower than earnings in essential sectors

- Robustness: Would be important to see which sector(s) drive this result: e.g. report earning distributions by major sectors
- Story: is this the consequence of some features of these sectors, or this just happens to be the case?



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## $\mathsf{Earnings} \text{ and } \mathsf{MPC}$

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- Assumption is reasonable: MPC decreases with income on average
- However, from previous research including some of the authors' we know that income is not a sufficient statistic: high-income (wealthy) hand-to-mouth agents

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# Earnings and MPC

- ▶ The model assumes that low productivity/low earning agents have high MPC
- Assumption is reasonable: MPC decreases with income on average
- However, from previous research including some of the authors' we know that income is not a sufficient statistic: high-income (wealthy) hand-to-mouth agents
- No smoking gun: The paper does not show that MPC of workers in non-essential sectors are higher than MPCs of workers in essential sectors, even though - as far as I understand - this is essential for most of the quantitative effects in the model

### Why should we care?

Literature

Unfair question: We should care when someone improves our understanding of reality.

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- Unfair question: We should care when someone improves our understanding of reality.
- ► A good story improves the attractiveness of theoretical frameworks
- However, if the goal is to arrive at the simplest realistic model: textbook New Keynesian DSGE and HANK models capture key business cycle co-movements.
- Open question: which new key business cycle fact/puzzle can this model explain?

#### Conclusion

Literature

▶ Nice paper with a convincing story, structural model and supporting evidence

References

### Conclusion

- ▶ Nice paper with a convincing story, structural model and supporting evidence
- Comments/wishlist

- Importance relative to within sector trading down
- Robustness to heterogeneity in price and wage stickiness
- Any way to get closer to directly show that non-essential workers have high MPC?
- Any puzzles solved?

Puzzles?

References

#### References I

Literature

Jaimovich, Nir, Sergio Rebelo, and Arlene Wong (2019) "Trading Down and the Business Cycle," *Journal of Monetary Economics*, Vol. 102, pp. 96–121.

Nakamura, Emi and Jón Steinsson (2008) "Five Facts about Prices: A Reevaluation of Menu Cost Models," *The Quarterly Journal of Economics*, Vol. 123, pp. 1415–1464.