

Comments on: "Macroeconomic and Monetary Policy Implications of Limited Participation" by Juan M. Morelli

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This paper



Question: What is the effect of a higher equity markets participation on the transmission of monetary policy?

- Build a two-agent NK model with a share φ with access to equity markets (participants \mathcal{P}) and a share $(1-\varphi)$ without access to (risky)-equity (non participants \mathcal{N}).
- The Tobin's Q drives the valuation of capital and thus affect the return on equity.
- Main result of the paper: a higher φ dampens the effects of monetary policy shocks.
- Monetary policy affects the economy primarily via participants stochastic discount factor impacting firms capital costs.
- Empirical results show differential consumption responses and output drops validated with micro data and high-frequency shocks.

This paper: main results



Model

- 1. Participants are individually more exposed to risk because returns on equity are more volatile than the interest rate with EZ preferences. Also, because profits and labor income are procyclical.
- 2. Externality: Given the same total savings by \mathcal{N} , higher participation reduces per-capita exposure because risk is distributed among more households and each household also decreases debt.
- 3. \Rightarrow Consumption and investment less volatile. The latter due to its dependence on the SDF. \Rightarrow GDP less volatile

Empirical

- 1. Using CEX finds a lower correlation between FF_t and ΔC_{it} for participants
- 2. New! Industrial production responses to Monetary policy shocks correlate with equity market participation in the time series

Agenda



- 1. Comments on the Empirical Facts
- 2. Comments on the Model
- 3. Some Suggestions
- 4. Conclusions

Comments on the Empirical Facts



The model suggests that you must convince us that households who hold equity have a more responsive consumption than people who hold only bonds.

I propose the following specification:

$$\log C_{it+s} - \log C_{it-1} = \frac{\alpha_t}{\alpha_t} + \alpha_k^s + \beta_0^s + \beta_1^s \mathcal{I}_i^h + \beta_2^s \mathcal{I}_i^h F F_t + \beta_3^s F F_t + \beta_2^s \mathcal{I}_i^h F F_t + \Gamma^s X_{it} + \epsilon_{it}, \quad k = 0, \dots 3.$$

- 1. Study the dynamic responses of ΔC_{it+h} to FF_t conditional on \mathcal{I}_i^h .
- 2. Show the average effect of monetary policy on consumption.
- Condition on other accounts of households portfolios, like liquid-illiquid assets, and even HtM households.
 Account for the interaction between these features. Show that equity is special.
- 4. Extra: Can you use a continuum \mathcal{I}_i^k ? Are there nonlinearities? Can you use a different shock, like EBP? Correlations with IP?

Comments on the Model



Consumption side of the model is a combination of different Euler equations

$$1 = \mathbb{E}_t \left\{ \Lambda_{t,t+1}^N \frac{R_t}{\Pi_{t+1}} \right\}, \tag{1-\varphi}$$

$$1 - \Psi_{Dt} = \mathbb{E}_t \left\{ \Lambda_{t,t+1}^P \frac{1}{\Pi_{t+1}} \left(R_{bt}(D_{t+1}) + D_{t+1} R_b'(D_{t+1}) \right) \right\}, \quad \varphi$$
 (2)

$$Q_{dt} = \mathbb{E}_t \left\{ \Lambda_{t,t+1}^P \left(d_{t+1} + Q_{dt+1} \right) \right\}, \qquad \qquad \varphi$$
 (3)

- 1. Can you comment on how key is assuming that the level of bonds remain the same? That seems the key assumption that generates the damening effect.
- 2. What is the role of the debt-elastic interest rate in eq. (2)?
- 3. In the paper, you claim there is a role for labor income. This model has no role for labor income in the short run besides the SDF, which enters indirectly. The same with profits. If so, how? Also, are profits procyclical, why?
- 4. Can you try with another shock that appears in all equations? A shock to β for example?
- 5. The results on the MEI shock suggests that the shock with stronger effects operate through the equations with larger weight.
- 6. Consumption versus investment. Which is the largest contributor to GDP responses.

Some Suggestions



- 1. Discuss possible determinants of the evolution of participation. For instance, the secular decline in interest rates and/or fiscal issues. This may be key also for the transmission of monetary policy with the dampening happening for other reasons and not the rise in equity participation.
- 2. Partial v/s general equilibrium. The empirical fact has a flavor of a partial equilibrium exercise (not sure). If the shock is well identified and α_t absorbs all other macro fluctuations what the regression shows is a partial equilibrium effect. Can you show this in the model? How can we think about a PE+GE decomposition in your model?
- 3. To understand the final effect of this channel on consumption is key to understand the dynamics of consumption. Show how is the cummulative response of consumption in both cases and compare them with the "more dynamic" empirical exercise.

Suggestion: An alternative model



- 1. A TANK model where there is a share of HtM consumers and a share of unconstrained workers, under some assumptions, would also fit this data well
- In TANK, there is amplification of monetary policy shocks if markups are countercyclical. Contractionary monetary policy makes markups (and profits) go down, so there is redistribution from low to high MPC workers. In that case there is amplification.
- Wage rigidities can switch the ciclicality of price markups. If wages are sufficiently rigid, markups can be
 procyclical and monetary policy is less effective because now there is reditribution from high MPC to low
 MPC households.
- 4. This is also consistent with the empirical evidence in which unconstrained households have more cyclical incomes, but since they have lower MPCs, higher financial participation generates a dampening of monetary policy shocks.

Conclusion



- The paper convincingly shows that financial participation shapes policy transmission.
- It could go further by clarifying identification, and convincing us that equity is special for consumption fluctuations.
- And situating the mechanism in contrast to other ones which could generate the same macro observables, like a TANK model.