Discussion of: "Aggregate-Demand Amplification of Supply Disruptions: The Entry-Exit Multiplier"

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Motivation

The coronavirus pandemic affected both **supply** and **demand**.

Data shows:

- Increase in exit rates, comparable to the 2008 financial crisis aftermath.
- Strong decline in entry followed by an overshooting, but with no comparable economic recovery.
- Decline in the number of available varieties.

The theoretical model(s) presented internalizes these features (*free entry with fixed costs of production and love for variety*). Focus on the propagation of a negative technology shock, which serves as a proxy for the Covid-19 outbreak.

Results

1. Entry-Exit multiplier: sticky prices amplify TFP shocks $\rightarrow$ role of intensive and extensive margins.

$$\frac{dN_t^{EF}}{dA_t} = \frac{1}{\theta}\frac{\bar{L}}{f} \quad vs. \quad \frac{dN_t^{ES}}{dA_t} = \frac{\bar{L}}{f}$$

   The higher θ, the more desirable intensive adjustments are.

2. Aggregate demand amplification $\rightarrow$ concavity of C with respect to N. The higher θ, the lower the benefit of variety is (less distortion).

3. Entry recovery with no economic recovery $\rightarrow$ output gap is always negative (second order).

4. Bonus: align cyclicality of labor supply between RBC and NK models.

Pros

1. Entry and exit dynamics are important per se for the propagation of shocks (BGM (2007 and 2012) and many more). Even more now with the quite exceptional responses those variables are showing.
2. Similarly, the relevance of love-for-variety models has never been so high. It is interesting to study the (welfare) effects of the lack of varieties.

- Within the new Covid-related literature, role of stickiness with entry/exit dynamics (comparison with ERT (2020) for instance).
- Structure of the paper: main mechanism is clean thanks to the reduced-form framework.
- Results come from price stickiness, but they can be easily generalized to various adjustment frictions (EPL, capital adjustment...).

Questions and Suggestions

- Is Covid-19 sufficiently represented? Sectoral shock, infection, heterogeneity, lockdown, policies (numerous SIR models). I think the strength of this framework is in its universal result and flexible mechanism.

1. As shown in the data, entry and exit seem to recover at different speeds. Can you disentangle them in a model of net entry? Also for policies.
2. Can you explore more the reduction in varieties? Here it moves 1-to-1 with the number of firms. With the pandemic, both endogenous choices and exogenous constraints due to the lockdown, with reallocation (Ascari, Colciago and Silvestrini 2021).

Questions and Suggestions (II)

- Numerical nonlinear model presents reasonable drop in output and output gap but the drop in operating firms seems very large.
- Markup cyclicality?
- Generalized C.E.S. but also oligopolistic competition could be interesting to have different benefits of variety.
- Exit patterns in the data seem to be very heterogeneous across countries (role of subsidies?).

Minor typos:

- Year missing in citing Dixit and Stiglitz on page 16 (or is it on purpose to refer to the model and not to the paper?).
- $p_t)P_t$ instead of p_t/P_t on page 19.