ABSTRACT:

In this paper, I examine the role of the time to deliver capital goods orders in determining aggregate investment dynamics. The ratio of unfilled orders to shipments, a measure of this time to deliver, is volatile and countercyclical. Empirically, I show this is explained by state-dependence of the elasticities of shipments and unfilled orders with respect to GDP, driven by financial frictions. I use variation in investment tax incentives and firm-level data to identify the responses of shipments and unfilled orders to an increase in new orders of capital goods. I find that, following an increase in new orders, the increase in shipments is lower for financially constrained firms while the increase in unfilled orders is higher. In downturns, when producers are financially constrained, they will respond to a new order by shipping less than they would in an expansion causing a stronger fall in shipments that drives the state-dependent elasticities. Finally, I build and calibrate a quantitative general equilibrium model that incorporates the choice of time to deliver for the capital goods producer and a financial friction using occasionally binding constraints. The model generates hump-shaped asymmetric responses of investment to real shocks. The strength of the asymmetry increases with the size of the shock. For a fall in GDP of the size of the Great Recession, it takes 16 quarters for investment in the financial friction model to catch-up with the standard model, in line with the slow recovery from this event.