

Discussion of:  
**Supply Chain Shortages, Large Firms' Market Power, and Inflation**  
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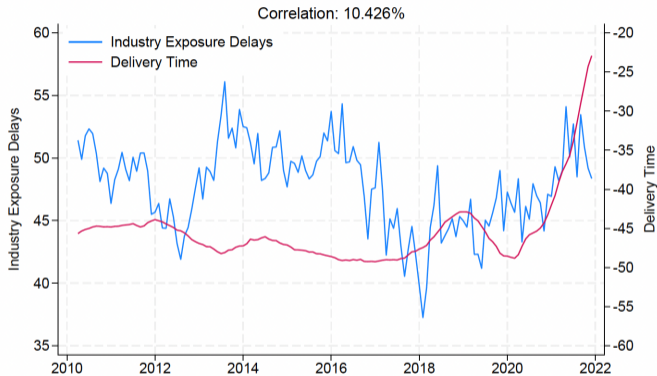
European Central Bank

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# Supply chain shortages, firm performance, and industrial structure

- **Ex-ante ambiguous effect on “superstar firms”**
  - More international and complex supply chain
  - More suppliers, might even get preferential treatment during supply chain shortages
- **Superstars firms shielded from supply chain shortages**
  - Superstars obtain larger deliveries than smaller customers *of the same supplier*
  - Superstars have more suppliers than non-superstars
  - Their suppliers are themselves large and benefit from a size-related advantage
- **Predictions from a Cournot model with supply chain shortages**
  - Superstars acquire market share and experience smaller increases in production costs
  - Superstars increase their markups and profitability

# Supply chain shortages in 2021



- **Delivery Time** (industry-level) captures the shortages that firms in an industry face
- **Industry Exposure Delay** is a proxy for industry-level exposure to port congestion
  - Port congestion not fully capturing the '21 shortage. Is there cross-industry variation?
  - This dynamic also consistent with superstars facing higher demand

# Suppliers seem to favor superstar customers firms during shortages

Panel A		OLS regressions				
Dependent variable	1(Trade > 0)	Containers	Shipments	Weight	Volume	Quantity
	(1)	(2)	(3)	(4)	(5)	(6)
<b>Star × Delivery Time</b>	<b>0.020**</b> (0.010)	<b>0.981***</b> (0.315)	<b>0.364*</b> (0.188)	<b>16.478***</b> (6.267)	<b>1.306***</b> (0.453)	<b>1.167***</b> (0.280)
Star	-0.067*** (0.013)	0.816** (0.336)	0.683*** (0.210)	16.996*** (4.663)	0.636 (0.467)	0.010 (0.280)
<b>Supplier-Year-Qtr FE</b>	Yes	Yes	Yes	Yes	Yes	Yes
Firm's Industry-Year-Qtr FE	Yes	Yes	Yes	Yes	Yes	Yes
Obs.	225,453	225,453	225,453	225,453	225,453	225,453
Adj. R2	0.134	0.144	0.121	0.226	0.170	0.135

- More on the driver of such firm-size related preferential treatment: Are these inputs goods highly specific? Are suppliers unable to substitute away from superstar firms?

# Variation in delivery times likely unrelated to demand shocks

Sample	2019-2021					
	First stage	Second stage				
Dependent variable	Star × Delivery Time	Containers	Shipments	Weight	Volume	Quantity
	(1)	(2)	(3)	(4)	(5)	(6)
Star × Industry Exposure Delays	0.448*** (0.065)					
Star × Delivery Time		2.916*** (0.855)	1.652*** (0.496)	69.791*** (21.884)	3.510*** (1.200)	2.389*** (0.695)
Star	1.029*** (0.113)	0.903 (0.925)	0.307 (0.546)	-9.736 (22.109)	0.828 (1.140)	0.851 (0.742)
Supplier-Year-Qtr FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm's Industry-Year-Qtr FE	Yes	Yes	Yes	Yes	Yes	Yes
Kleibergen-Paap rk Wald F statistic	46.777					
Obs.	39,991	39,991	39,991	39,991	39,991	39,991

- The *shift* component is the congestion of global ports
- The *share* component is the industry exposure to the ports at the beginning of the sample

# Convincing evidence on superstar advantage during shortages

- **The superstar advantage is an interesting fact per se: Cost-push shocks are heterogenous across the size distribution**
  - Irrespective of the demand identification concern
  - Irrespective of the exact mechanism at work
- **It would be interesting to present more descriptives**
  - More evidence across the size distribution of firms
  - Which industries are driving the results?
  - Which countries (e.g., differences in fiscal support, EU vs. US)?
  - Eventually include 2022 data (also interesting in light of the effect on industry dynamics)

# Conceptual framework

- Firms are oligopolists à la Cournot
  - $n$  firms with potentially different marginal costs during shortages
  - Marginal costs of superstars diverge from that of other firms during shortages
- P1 – Firm  $i$ 's market share and markup increase when supply chain shortages increase
- P2 – Supply chain shortages lead to an increase in the dispersion of market shares across firms and to an increase in industry's HHI
- Observationally equivalent to a model with an increase in demand for superstar firms
  - Demand shock might happen because of the shortage (superstars are more reliable in shortages)
  - Demand shock might also happen because of inflation (market power + adaptive expectations)

# A model for 2021? Or also 2022?

- **The authors document that, during supply chain shortages, ...**
  - ... suppliers favor superstar customers
  - ... superstar firms increase their market share, profitability, and markups
  - ... concentrated industries become even more concentrated
  - What about other types of shocks? Climate, uncertainty, global trade restrictions?
  
- **Now imagine a world with supply chain shortages but no generalized inflation (2021)**
  - Superstar firms still get a favorable treatment by their suppliers
  - Would we still observe higher markups? Probably yes according to this paper
  
- **Now imagine a world with generalized inflation and supply-side shocks (2022)**
  - Inflation expectations are heightened *across* products
  - Superstar can exploit their market power



# Summarizing

- **Insightful and impactful paper**
  - Important contribution to our understanding of cost-push shocks
- **My suggestions**
  - More descriptives, like variation across industries and countries
  - A model of 2021? Or also of 2022?
  - Clarify the assumptions behind the aggregation exercise