

Spatial and Sectoral Reallocation of Firms, Workers and Jobs Induced by the Pandemic*

By

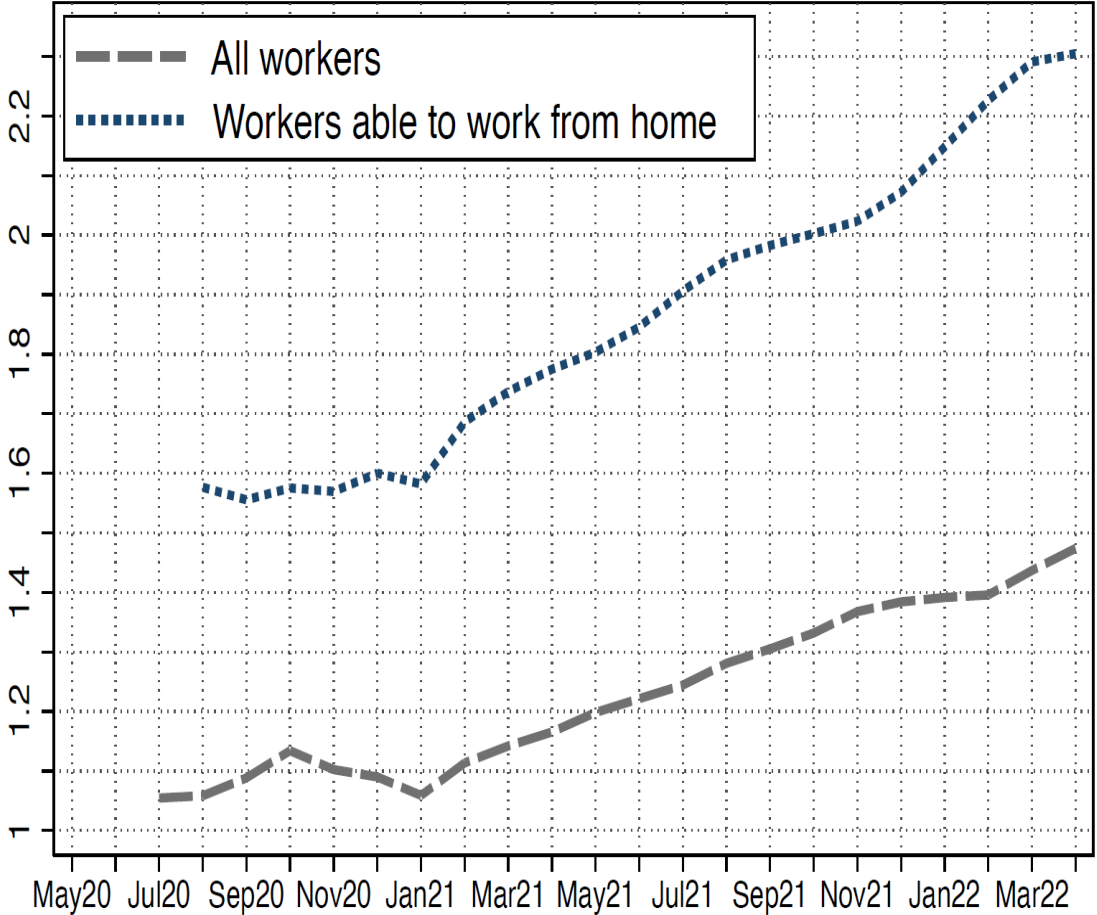
John Haltiwanger

University of Maryland and NBER

*This presentation draws upon collaborative research with numerous co-authors (cited in the presentation). All views are my own.

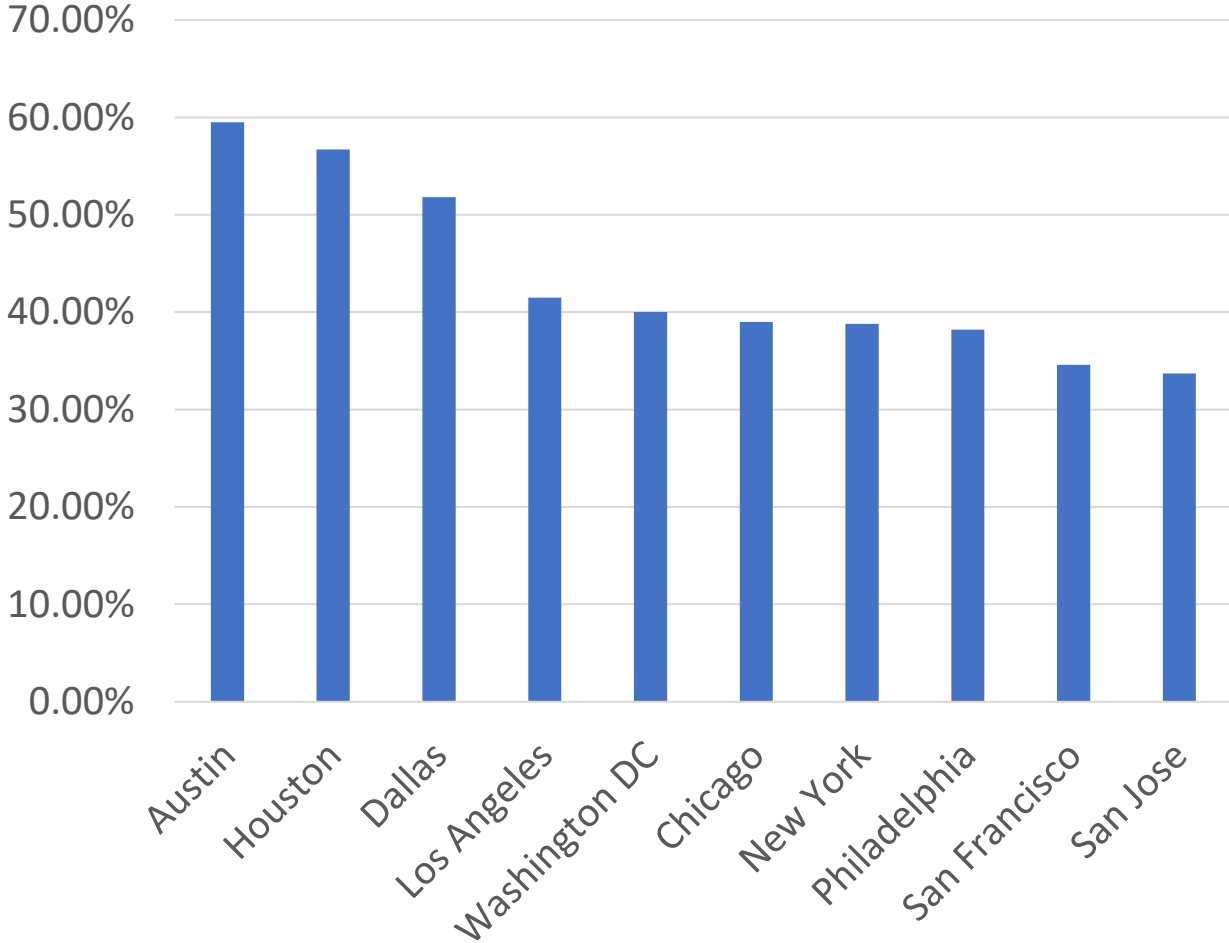
Two Critical Changes as we emerge from Pandemic

Average Days per Week Working From Home
After the Pandemic Ends: Employer plans



Source: Barrero, Bloom and Davis (2021, updates)

Office Occupancy Rates as of 5/11/2022
(100% January 2020)



Source: Kastle.com

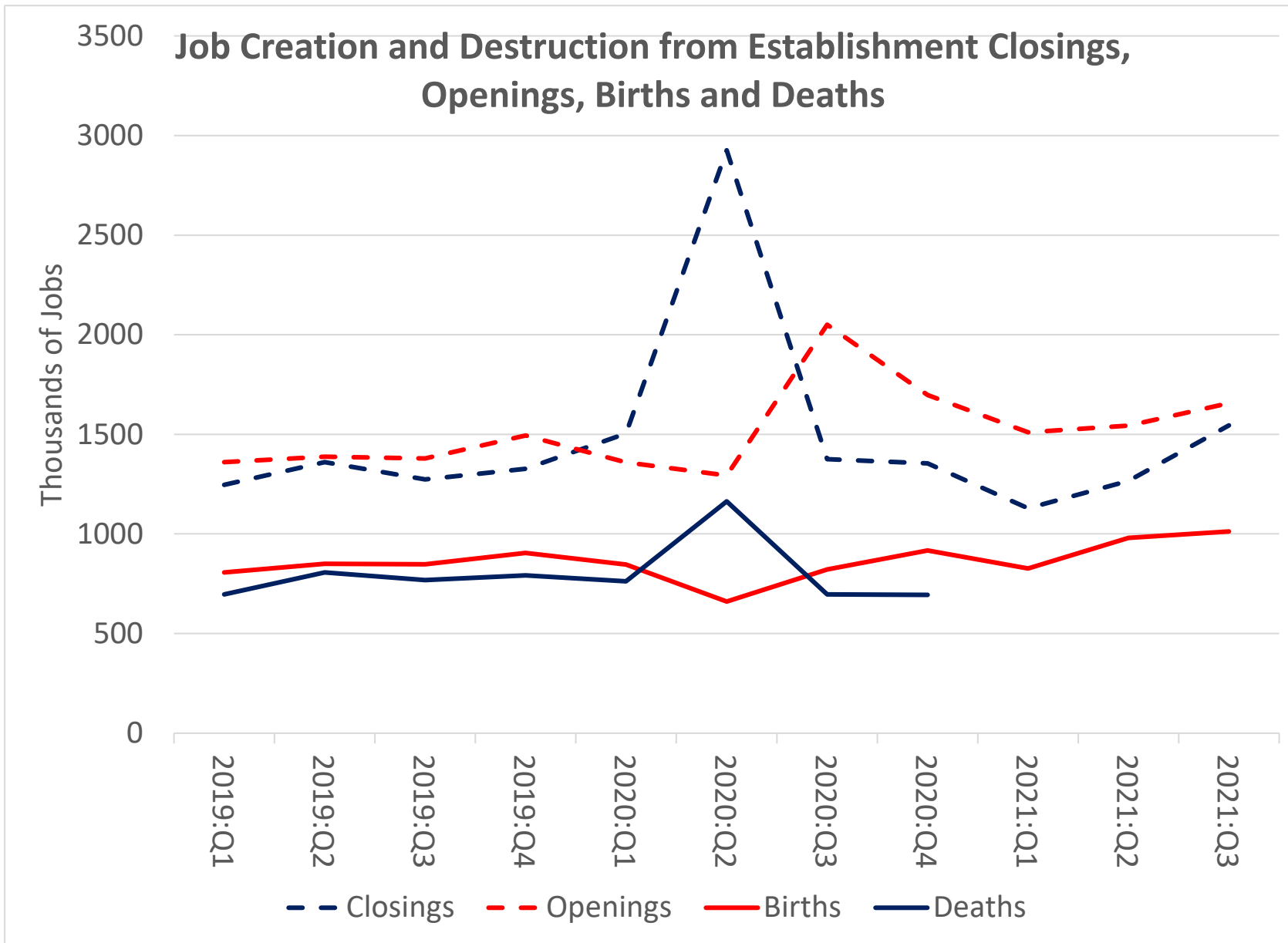
Open questions

What has been and will be the impact on firm, job and worker turnover?

- What does the change in business practices and model imply for business entry, exit as well as job and worker turnover?
- Is there likely to be a spatial reallocation of activity given the shift away from central city office occupancy?
- What are the changes in technology that have and/or will facilitate these changes?
- What types of business are likely to be successful (and less successful) in this changing environment?

Focus here:

- Gold standard databases tracking firm, job and worker turnover emerge with a lag. Now data through 2021:3 from some of the databases.
- New business applications data available in real time at high frequency:
 - Business entry is a leading indicator for job creation, structural change, innovation and productivity growth



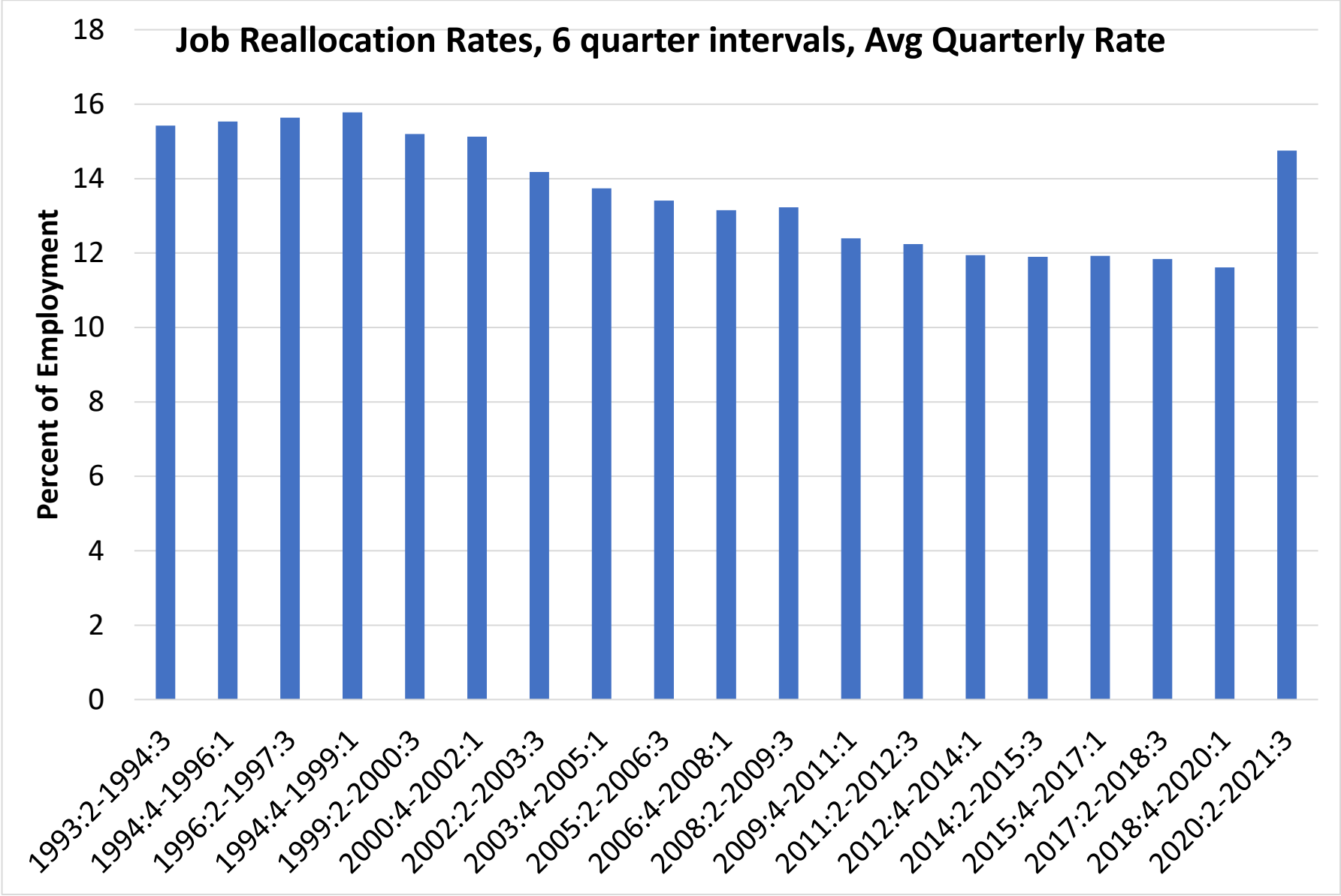
Spike in closings induced job destruction but partly transitory.

Permanent closings (deaths) contributed about 1.2 million to job destruction in 2nd Quarter of 2020.

Establishment openings Spike initially reflects Re-openings.

Steady but substantial increase in job creation from Establishment Births.

Establishment births both from new firms and existing firms



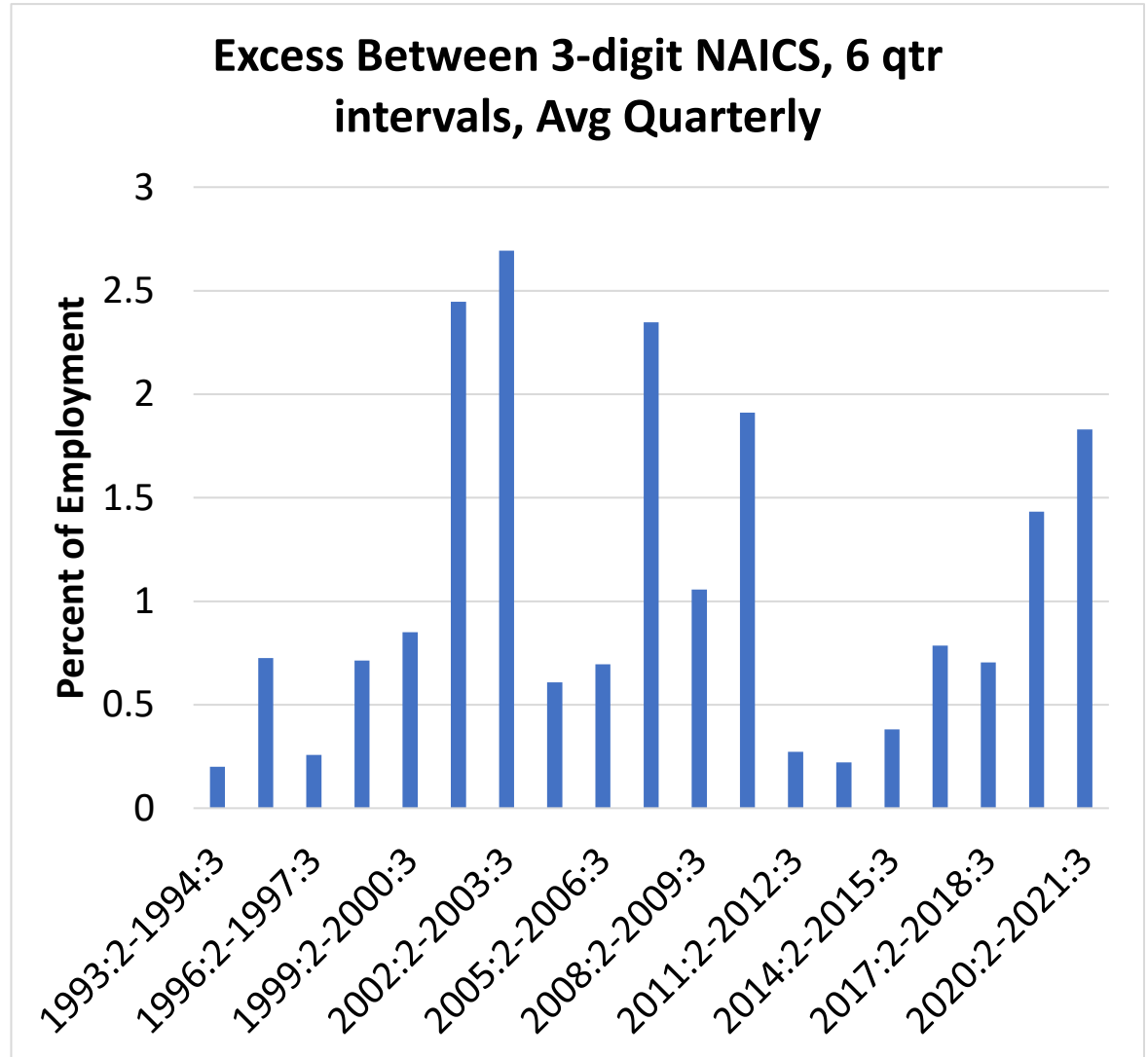
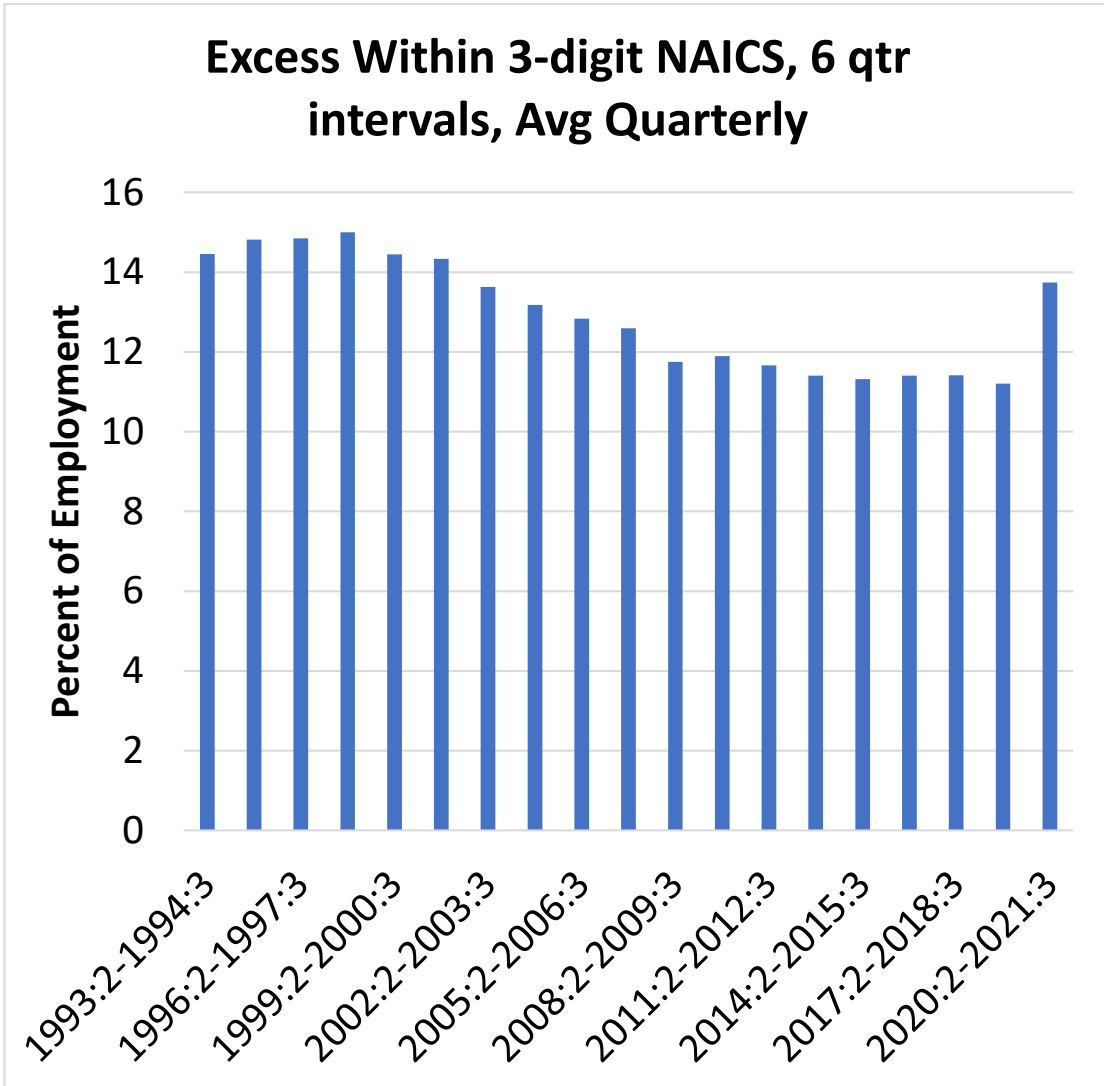
Job Reallocation=
Job Creation+
Job Destruction

Secular Decline in
Pace of Reallocation
(Business Dynamism)
Pre-Pandemic

Increase in Pandemic
to levels not seen
early 2000s

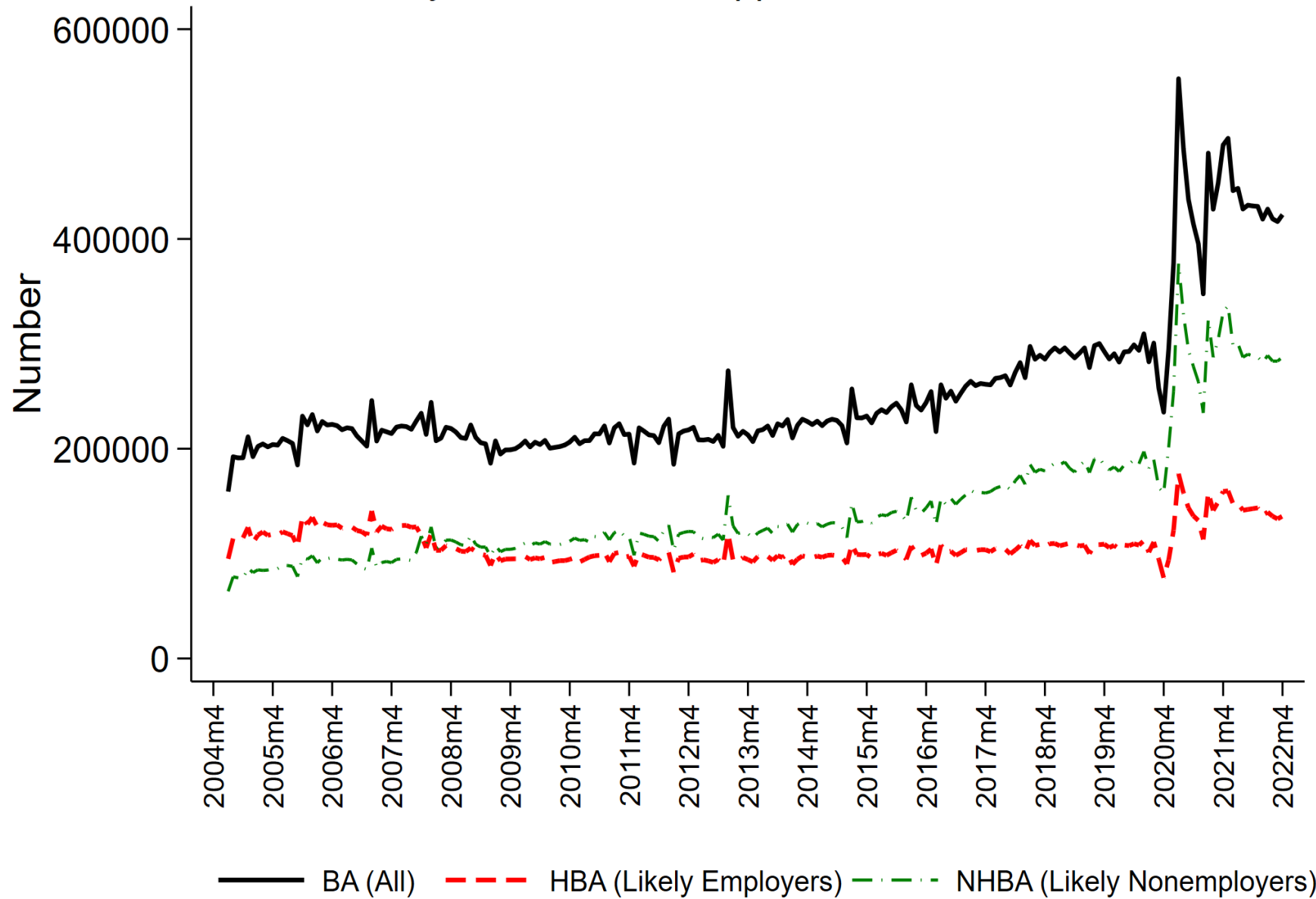
Source: BED

Both within and between industry reallocation increased



Source: BED, Excess=Job Reallocation less absolute value of Net Growth

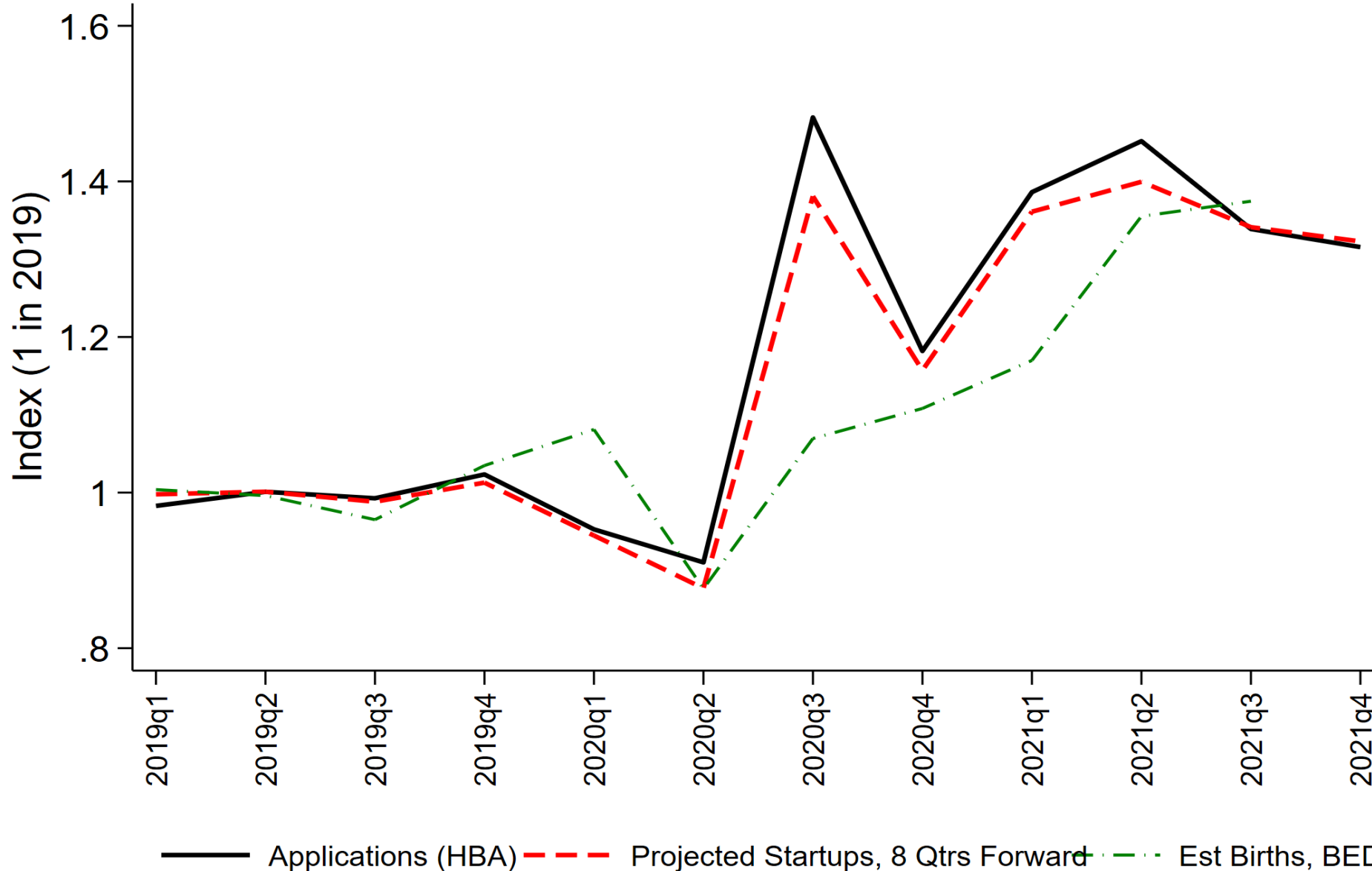
Monthly New Business Applications, 2004:7-2022:4



New Business Applications:

1. Surged in Pandemic.
2. HBA highly predictive of actual employer startups
3. NHBA predictive of new nonemployer businesses.
3. Leading indicator of Reallocation.

Applications, Projected Startups and Establishment Births



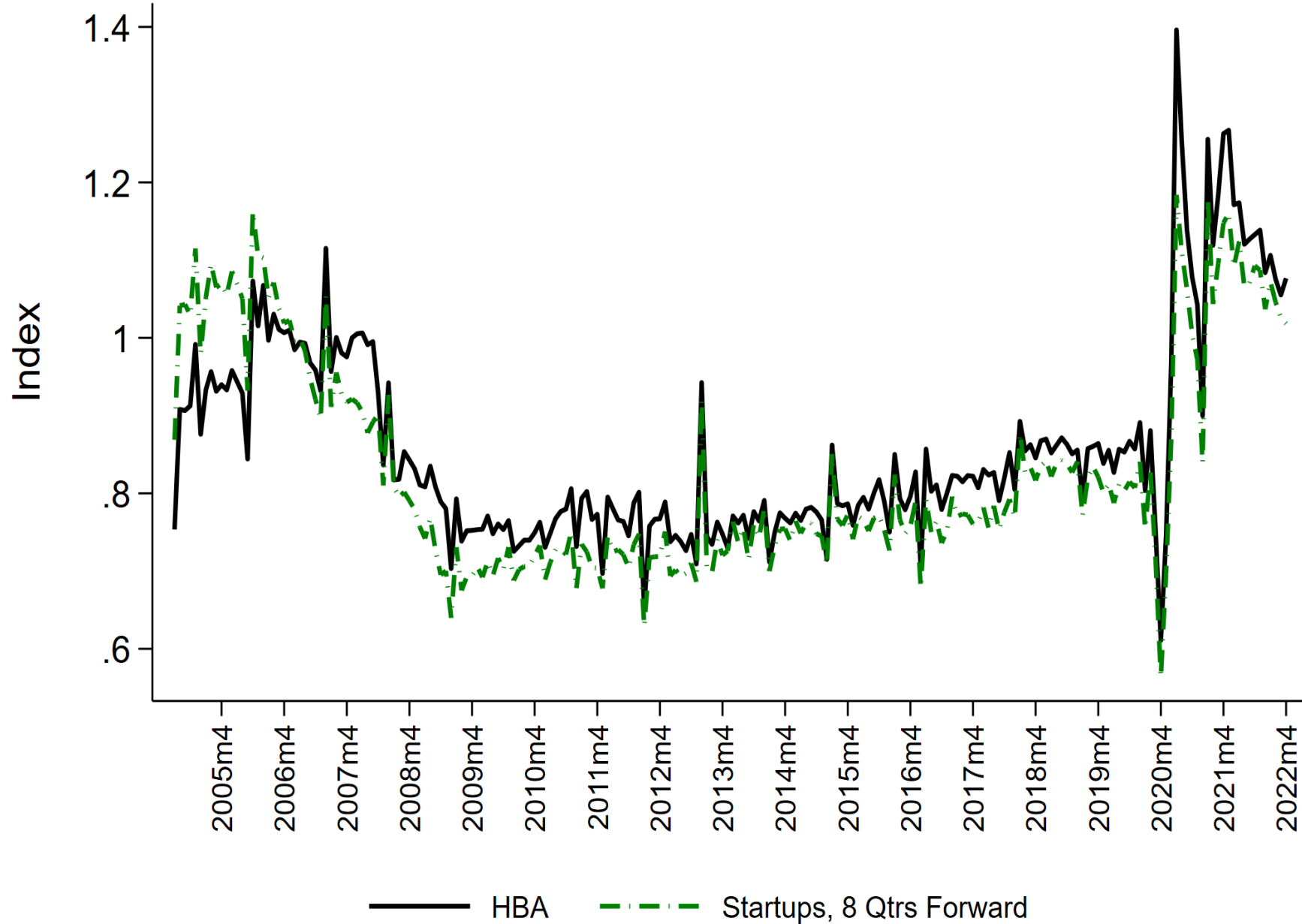
Surge in Applications beginning to show up in Establishment Births.

Startups emerge from applications with a lag

Projected Startups have historically been very accurate.

Most applications don't transit to actual businesses but elasticity of actual startups with respect to applications is close to one.

Monthly HBA and Business Formations (norm=1 in 2006)

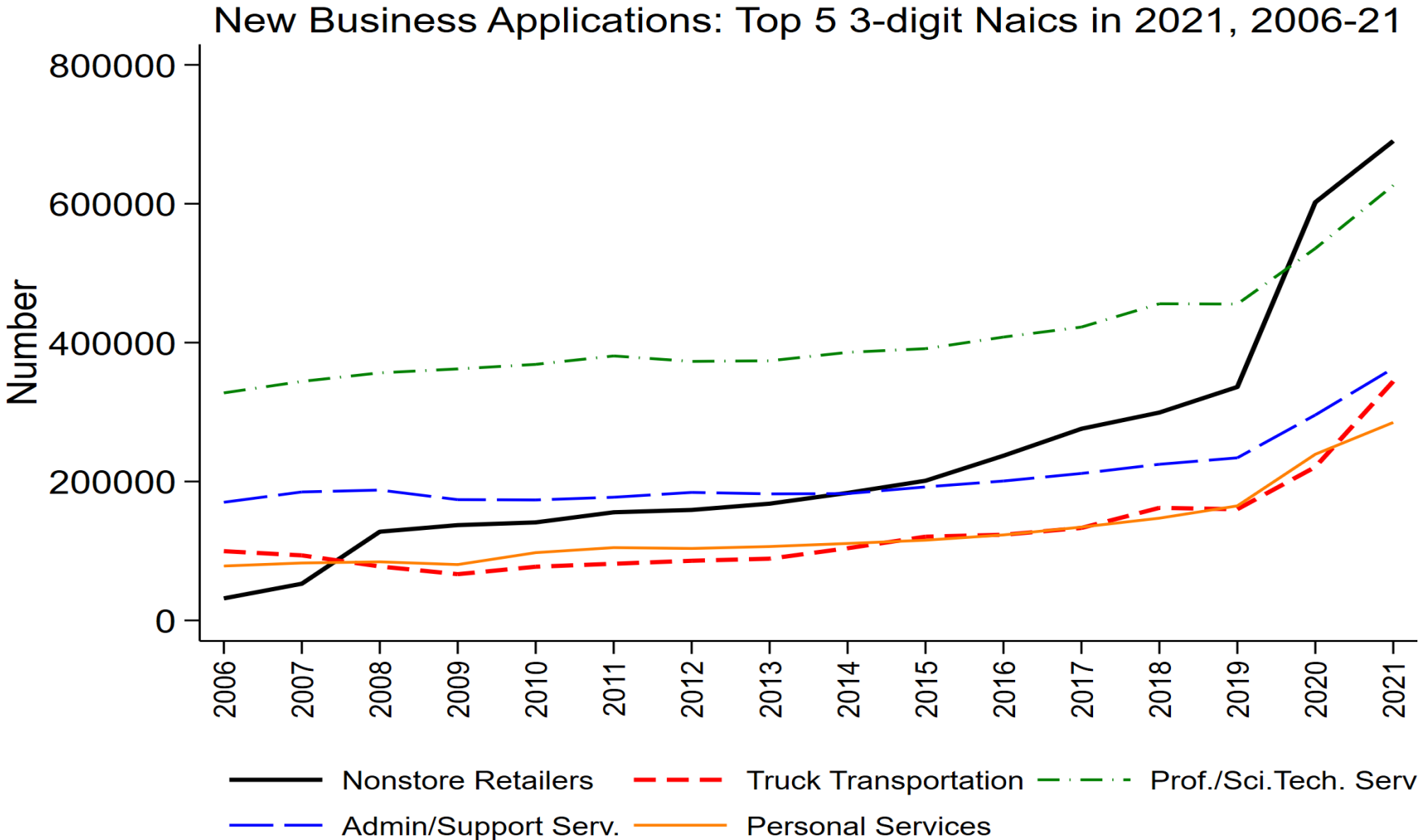


Startups, 8 qtrs. Forward=
Actual through 2017:4

Projected, 2018:1-2022:4

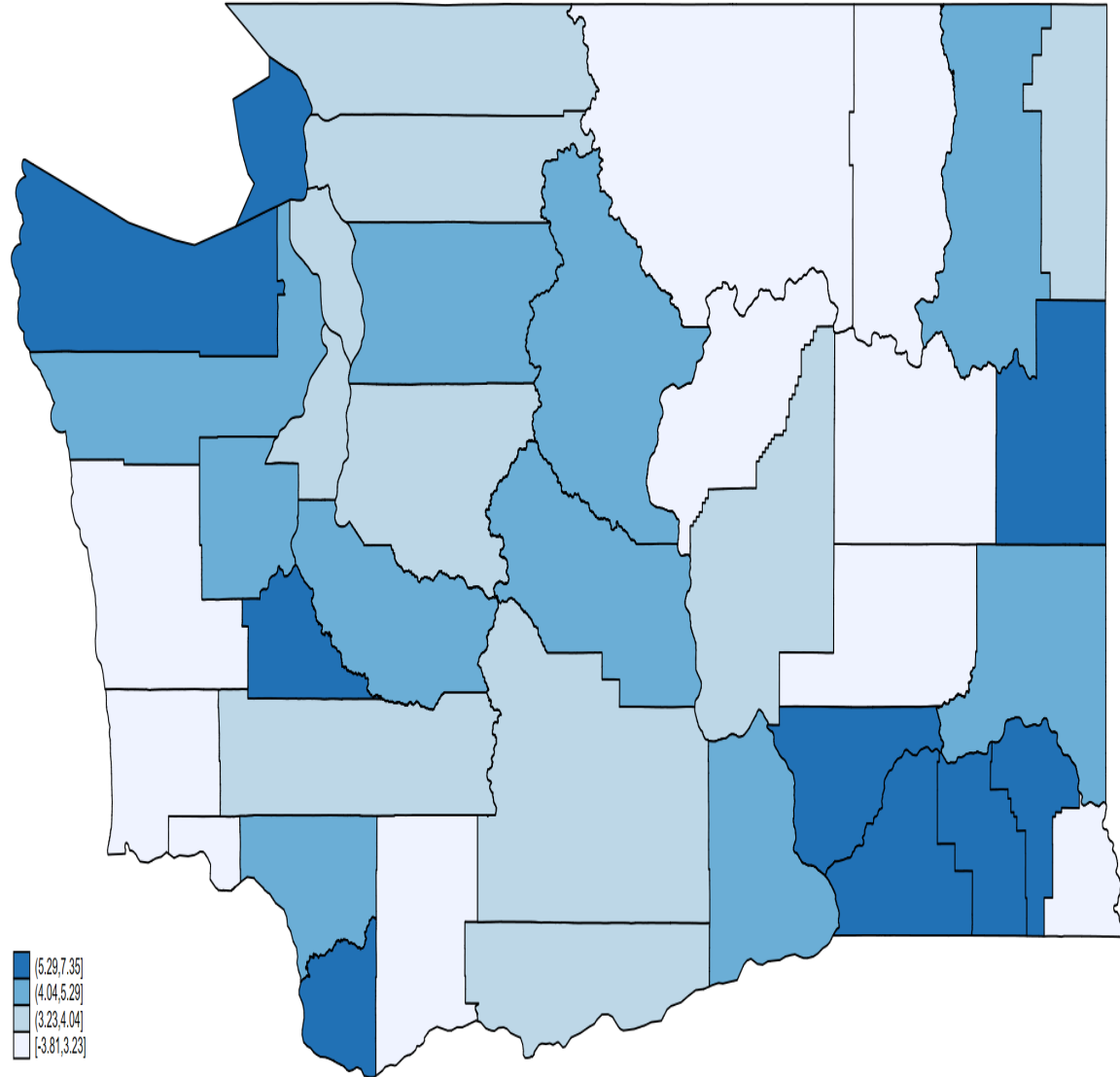
Historically, tight
relationship between
new applications (for
likely employers)
and actual startups

Five 3-digit (NAICS) sectors account for 50% of Surge



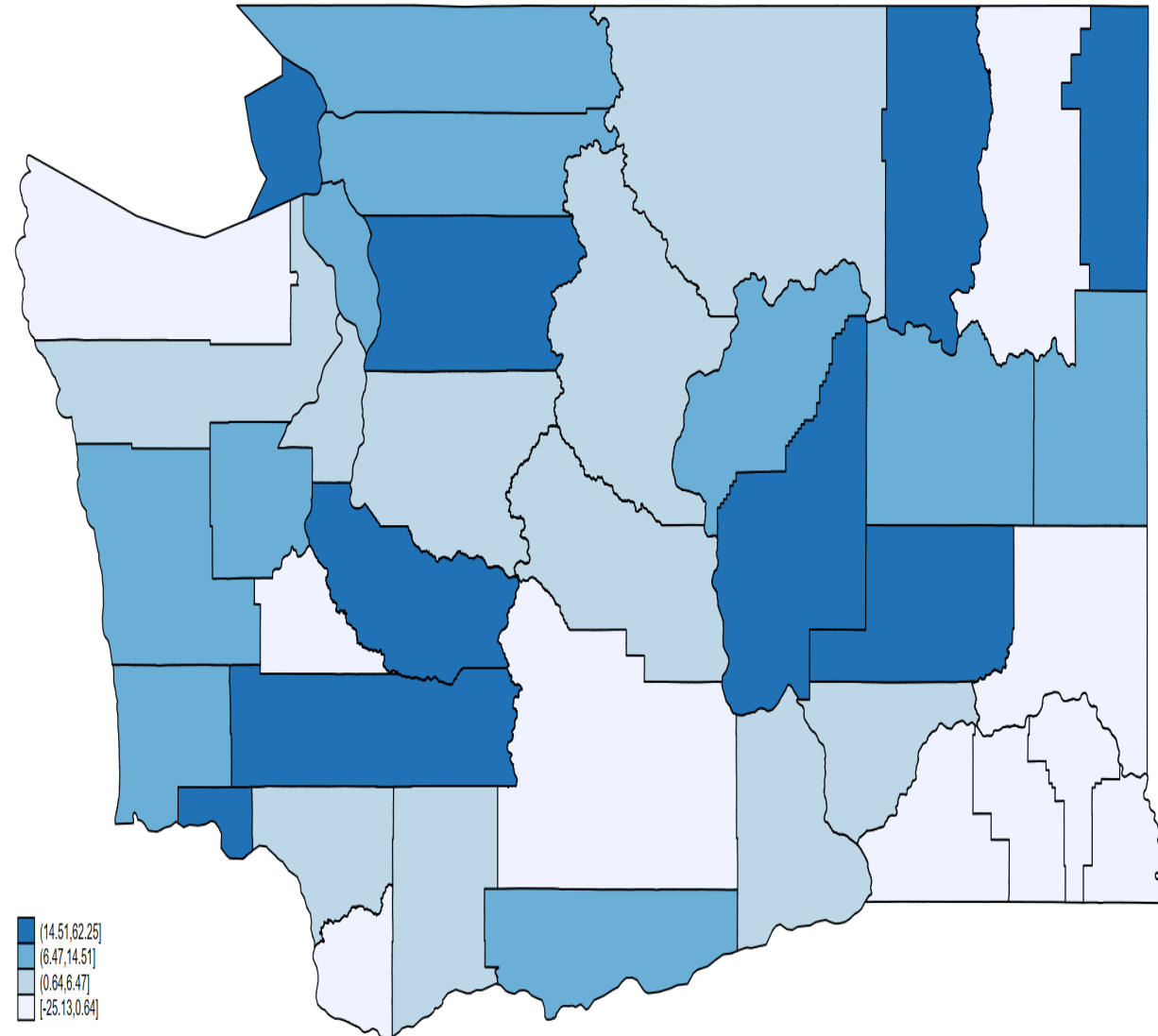
Source: Tabulations from the BFS.

Average annual growth rate of New Business Applications, 2010-19. State of Washington



Corr(Pct Urban 2010, Growth BA)=0.46

Average annual growth rate of New Business Applications, 2019-20, State of Washington

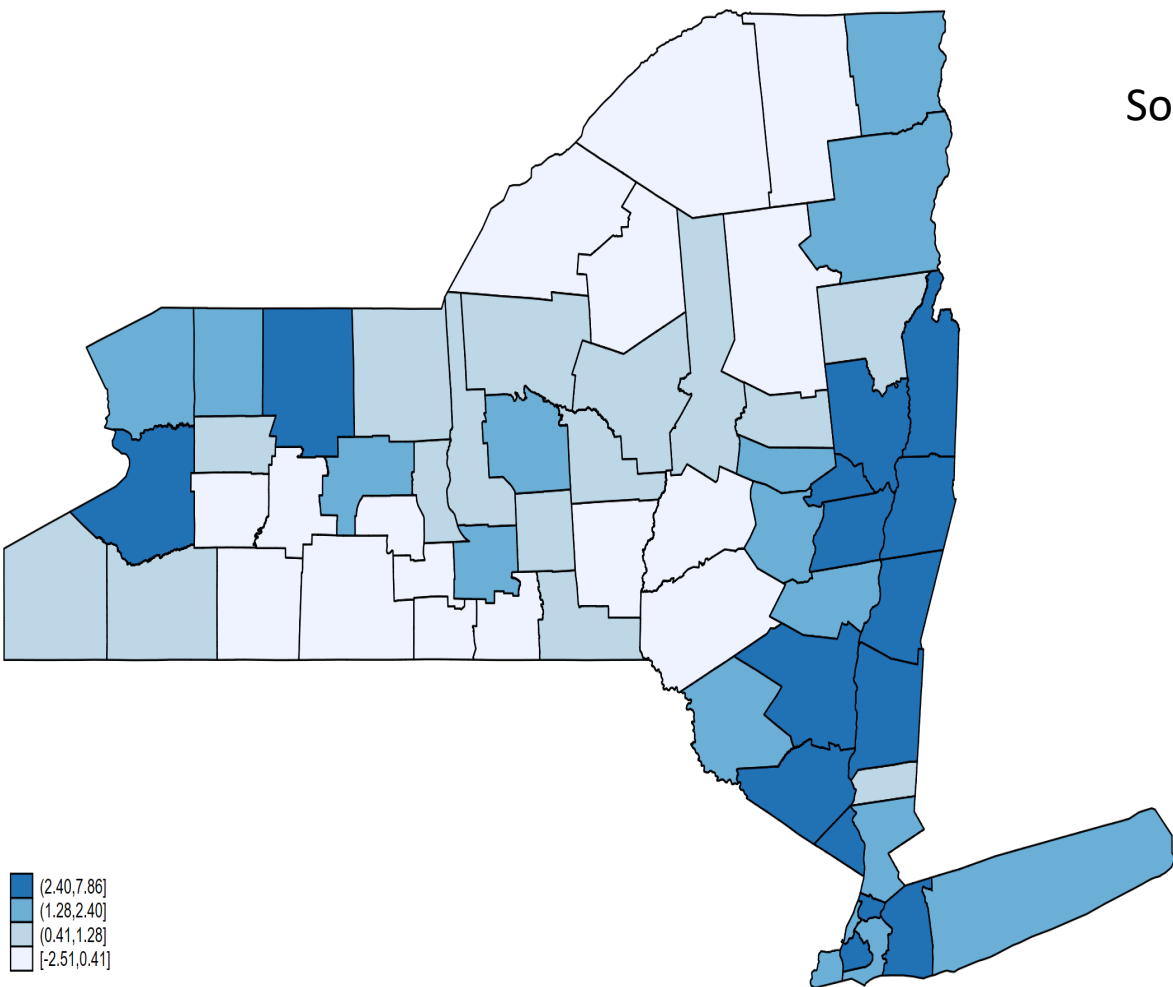


Corr(Pct Urban 2010, Growth BA)=-0.30

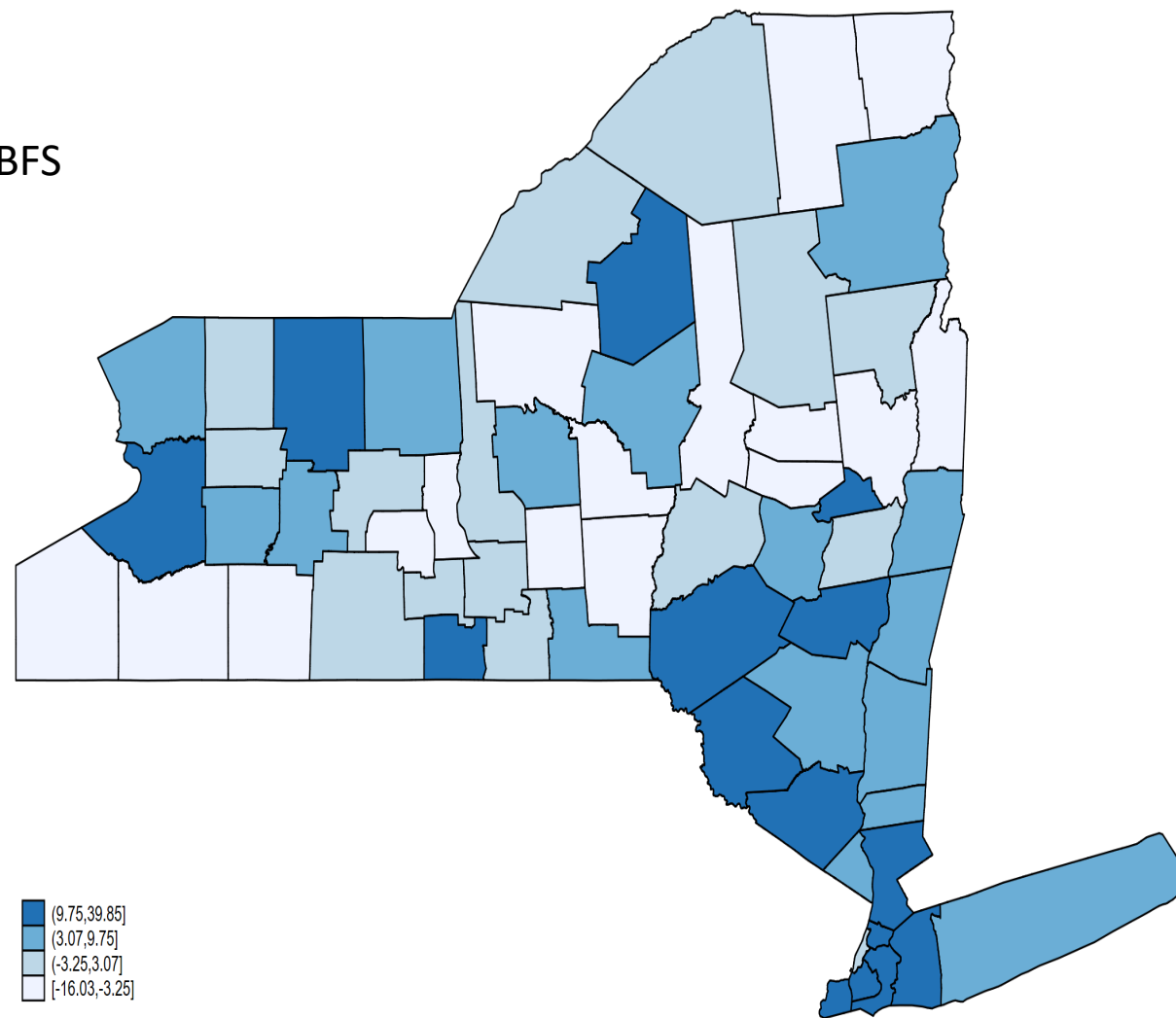
Average annual growth rate of New Business Applications, 2010-19, New York

Average annual growth rate of New Business Applications, 2019-20, State of Washington

Source: BFS

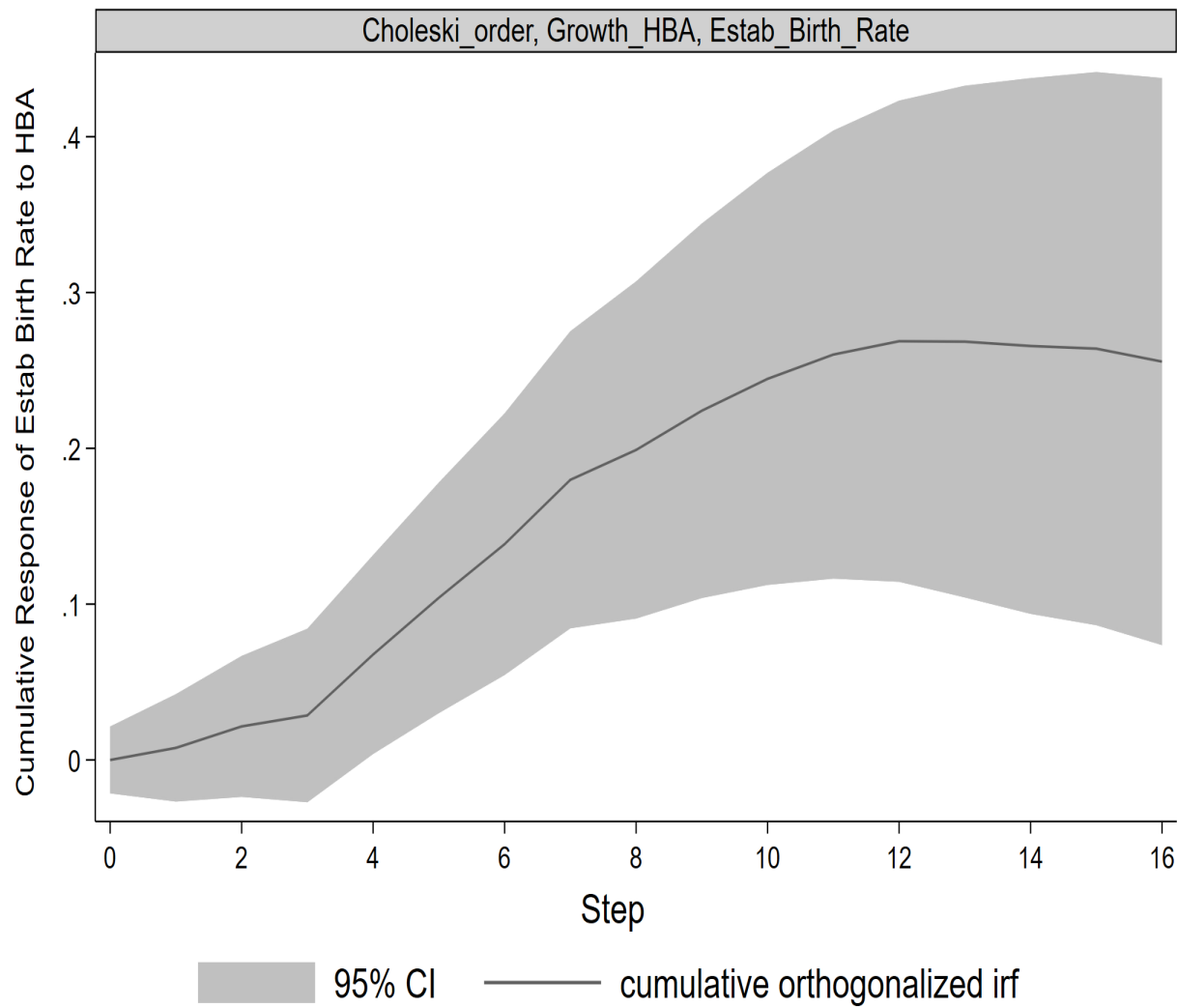


Manhattan (NY County) avg growth of 1.4%
Queens (Queens County) avg growth of 2%

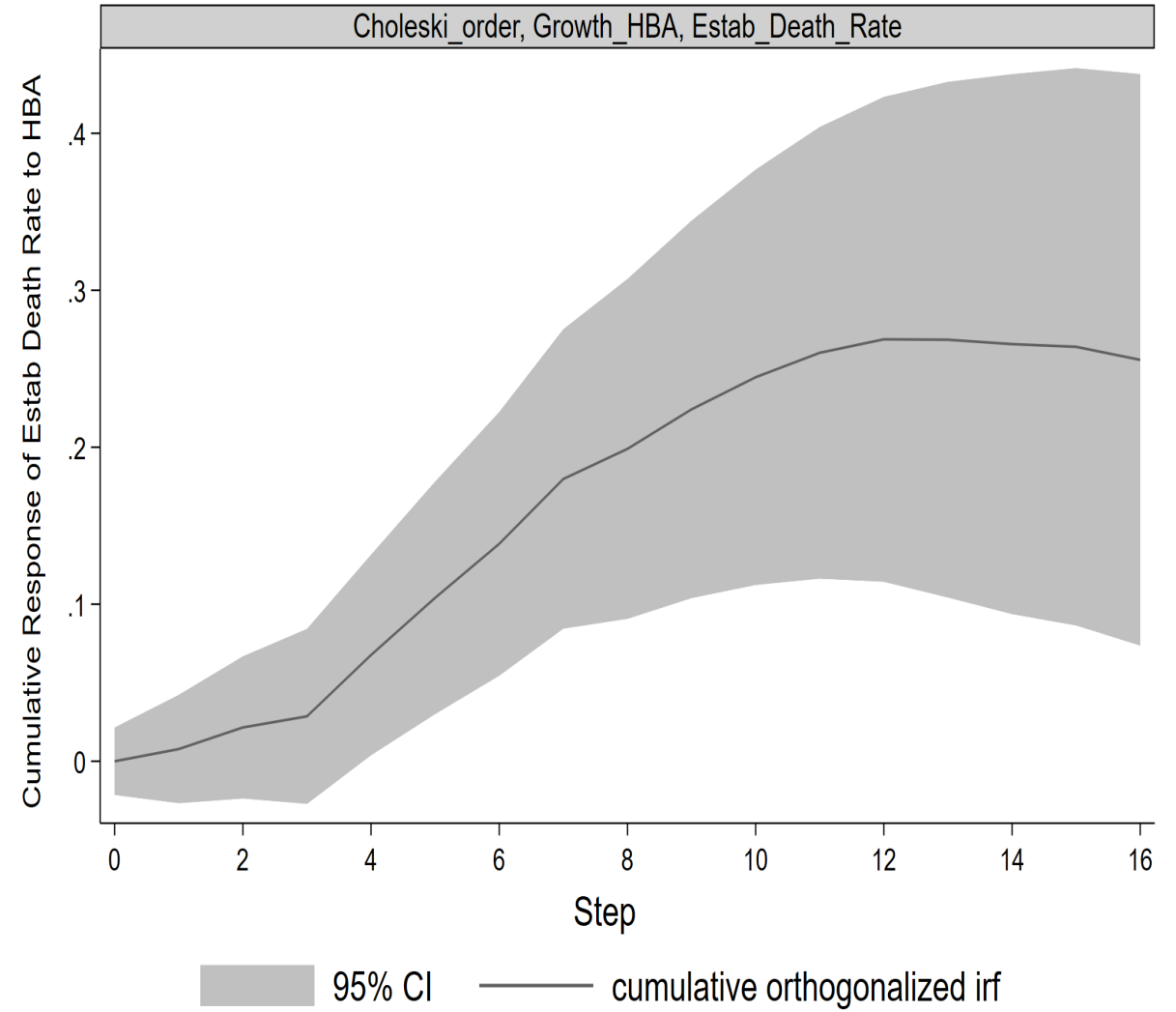


Manhattan (NY County) avg growth of -1.7%
Queens (Queens County) avg growth of 12.7%
All counties surrounding Manhattan growth > 9.75%

New Business Applications Leading Indicator for Business Turnover



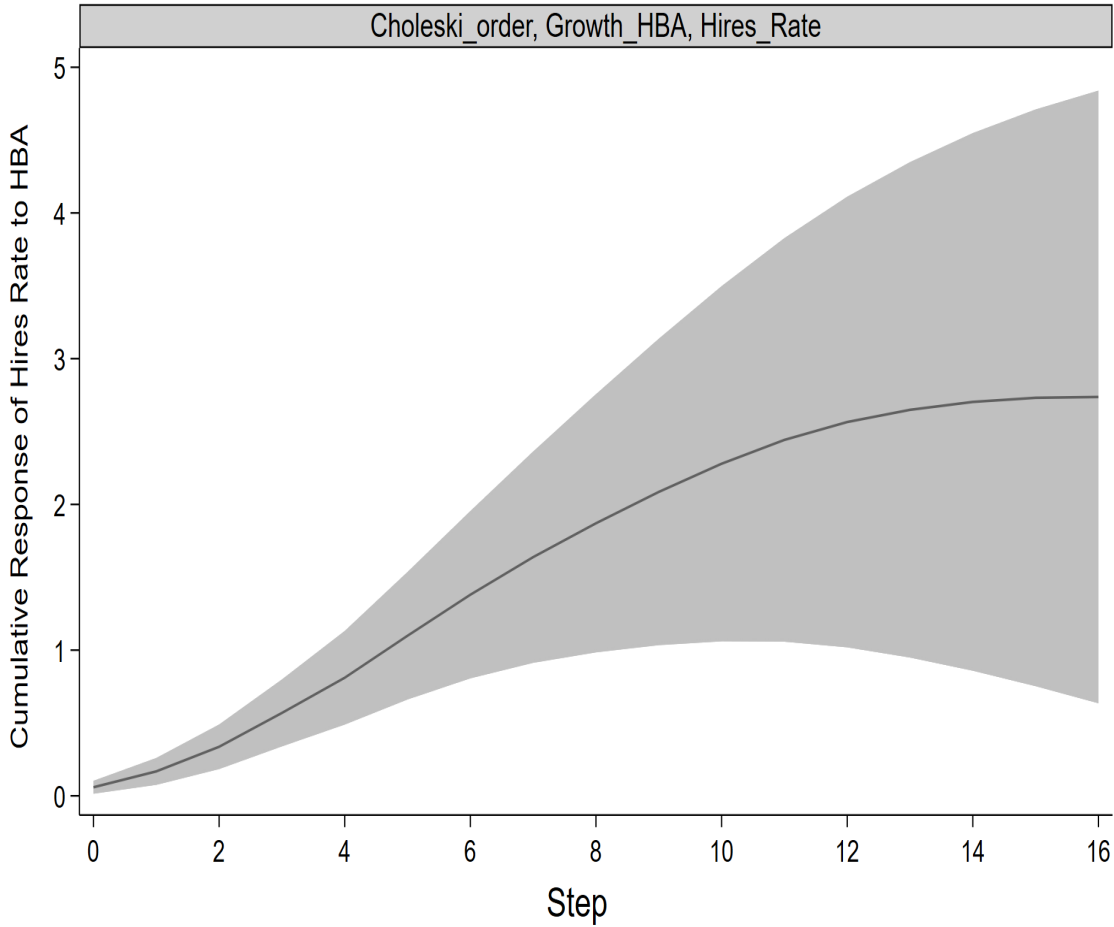
Graphs by irfname, impulse variable, and response variable



Graphs by irfname, impulse variable, and response variable

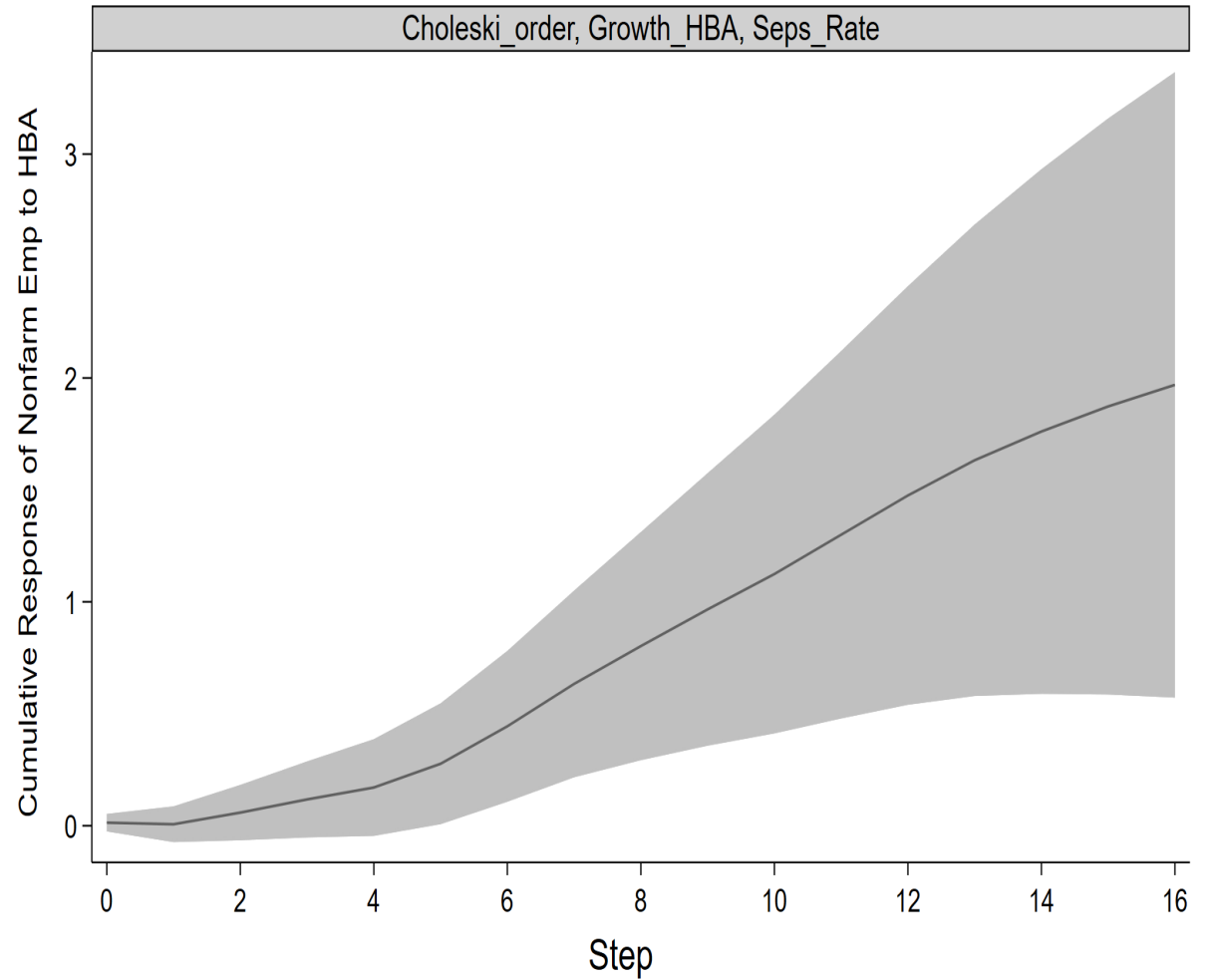
Source: BFS and BED, Tabulations by Haltiwanger (2022)

New Business Applications Leading Indicator for Worker Turnover



95% CI cumulative orthogonalized irf

Graphs by irfname, impulse variable, and response variable



95% CI cumulative orthogonalized irf

Graphs by irfname, impulse variable, and response variable

Open Questions

Young businesses are especially fragile

- In Great Recession, young businesses hit hard given adverse financial conditions
- In Pandemic, favorable financial conditions.
- But now contractionary monetary policy to combat inflation
- Impact on surge in young businesses?

Surge in young businesses and reallocation bucking secular decline over the last couple of decades

- Changing market structure and business models shifting activity to large, mature businesses
- Rising frictions: occupational licensing, non-competes, employment-at-will, zoning (see Davis and Haltiwanger (2015)). These dampening factors have not gone away.
- Can this recent surge reverse the trend? Or is it just transitory?

References

Barrero, Jose Maria, Nicholas Bloom, and Steven J. Davis (2021). "Why Working from Home Will Stick," NBER Working Papers 28731, National Bureau of Economic Research, Inc.

Davis, Steven, and John Haltiwanger (2015) "Labor Market Fluidity and Economic Performance" in Re-Evaluating Labor Market Dynamics 2014 Jackson Hole Symposium Volume Published by the Federal Reserve Bank of Kansas City, 17-108.

Davis, Steven, and John Haltiwanger (2019). "Dynamism Diminished: The Role of Housing Markets and Credit Conditions" NBER Working Paper No. 25466, January.

Decker, Ryan A., and John Haltiwanger (2022). "Business entry and exit in the COVID-19 pandemic: A preliminary look at official data," FEDS Notes. Washington: Board of Governors of the Federal Reserve System, May 06, 2022, <https://doi.org/10.17016/2380-7172.3129>.

Haltiwanger, John. (2022) "Entrepreneurship During the COVID-19 Pandemic: Evidence from the Business Formation Statistics." NBER Working Paper no. 28912. (forthcoming, *NBER Entrepreneurship and Innovation Policy and the Economy*, 2022)