

LUNCH & LEARN DISCUSSION SERIES

# The Employment and Wage Effects of the Pandemic Recession

11:30 am - 11:35 am

## Welcome and Introductions

Michael Greenstone, Milton Friedman Distinguished Service Professor in Economics; Director, BFI

11:35 am - 11:50 am

## The Employment and Wage Effects of the Pandemic Recession

Erik Hurst, Frank P. and Marianne R. Diassi Distinguished Service Professor of Economics, UChicago Booth School of Business; Deputy Director, BFI

11:50 am - 12:05 pm

## Moderated Conversation

Karen Anderson, Senior Director of Policy, Communications & External Affairs, BFI

Erik Hurst

12:05 pm - 12:30 pm

## Audience Q&A

### Q&A

Submit questions by using the Q&A box below

### Related Research

Dive deeper into the research on today's topic by going to the research section

### Tech support

If you experience technical issues during the discussion, please click "?" for help



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**BF** Becker  
Friedman  
Institute  
FOR ECONOMICS AT UCHICAGO

# *The U.S. Labor Market During the Beginning of the Pandemic Recession*

**Erik Hurst**

Frank P. and Marianne R. Diassi Distinguished Service Professor of  
Economics, UChicago Booth School of Business; Deputy Director, BFI

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# Today

- Use payroll microdata from ADP to chart the labor market at beginning of the Pandemic Recession
  - ① Employment, both aggregate and disaggregated
  - ② Wages
  - ③ Hours
  - ④ Business shutdown/re-entry and employee recall
  - ⑤ Employment response of state re-opening

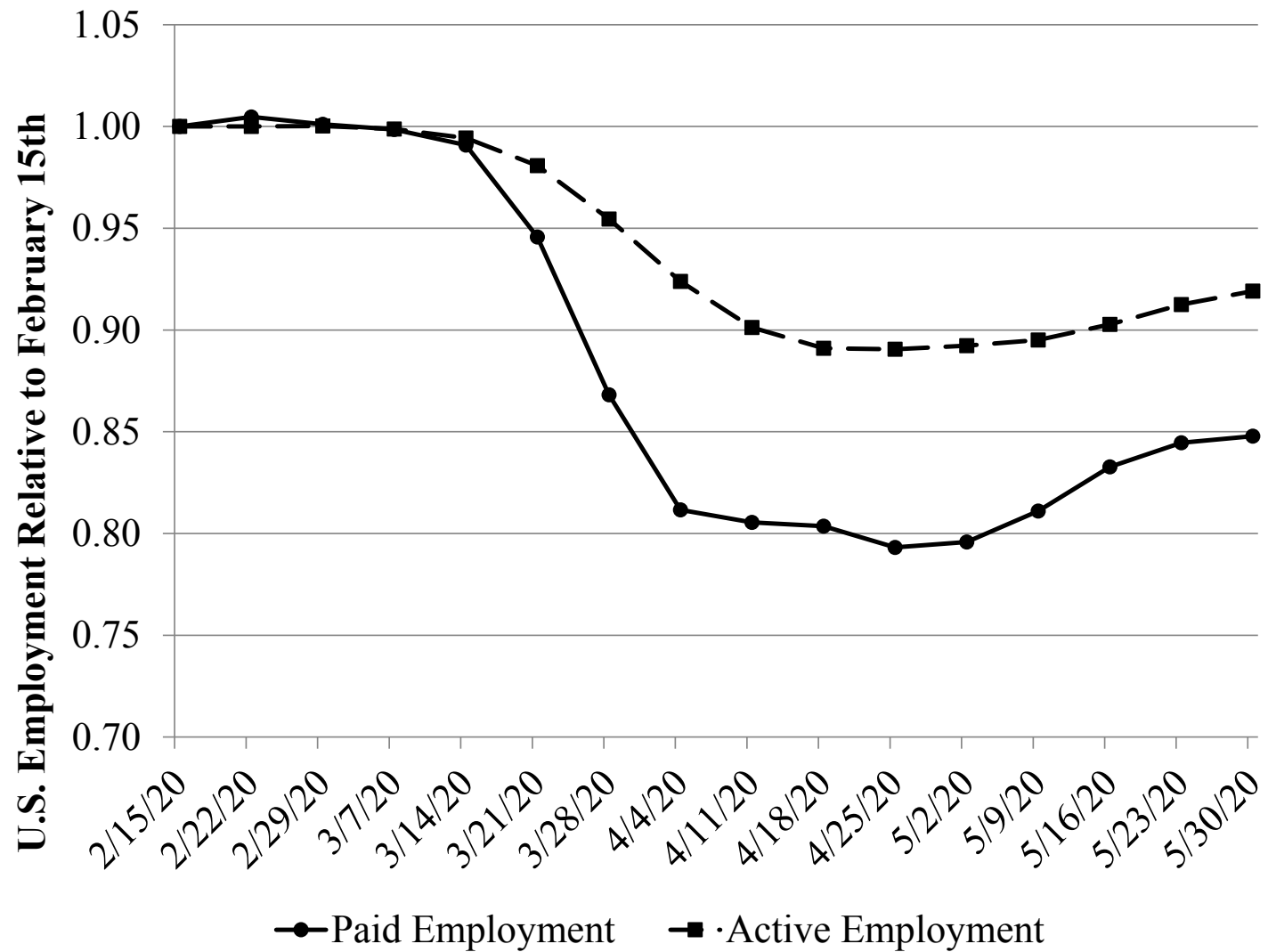
# Benefits of Administrative Payroll Data?

- BLS puts out monthly data on labor market conditions using both business and household data (CES and CPS)
- ADP Payroll Data
  - ① Have data for 26 million workers (about 1/6 of US workforce)
  - ② Broadly nationally representative by firm size and industry
  - ③ Large samples and high frequency (allows for cross-location variation in state policies)
  - ④ Linked employer-employee data (critical for studying worker recall)
  - ⑤ Administrative data for wages (allows for measurement of nominal wage adjustments)

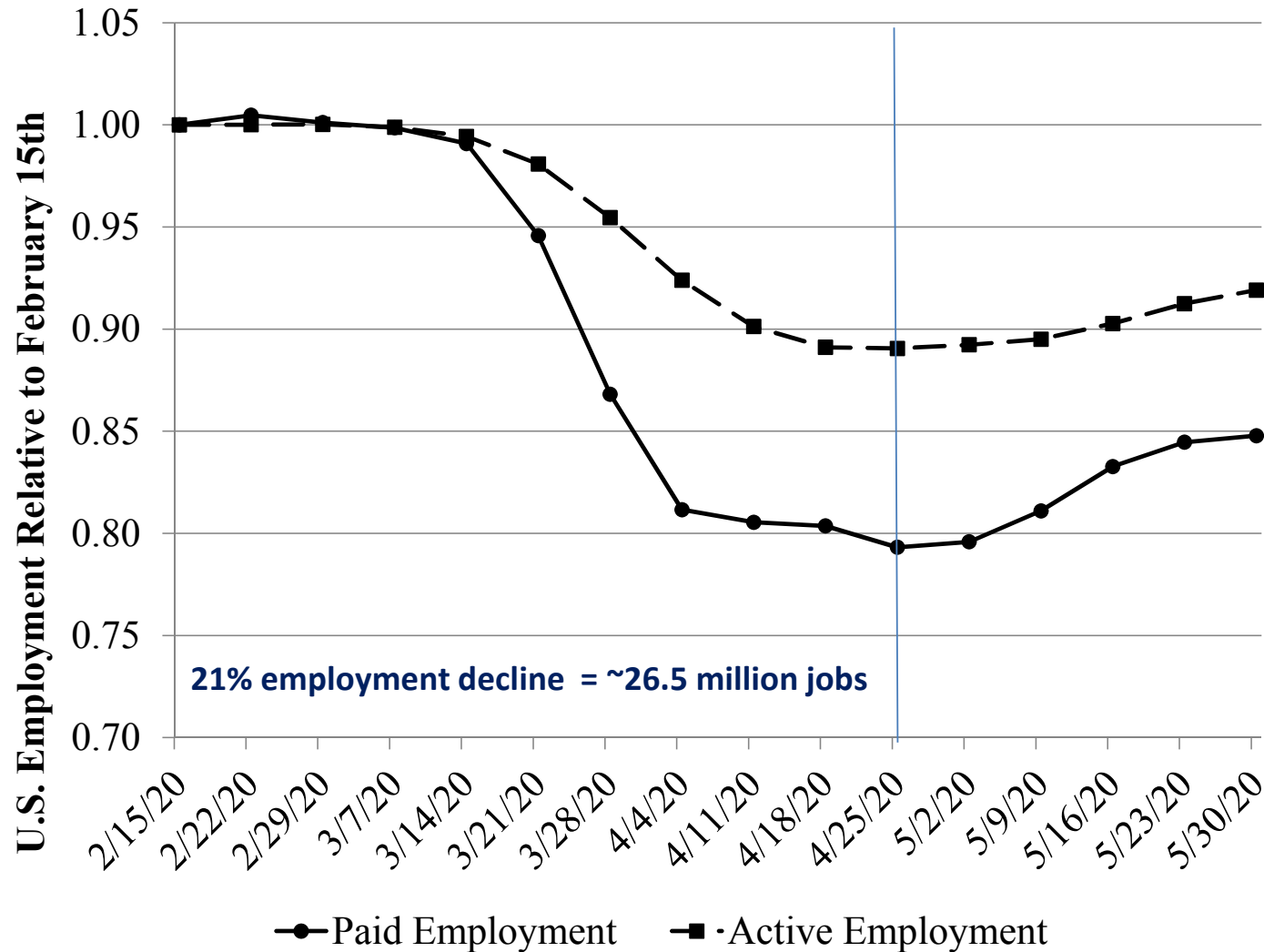


# *Employment*

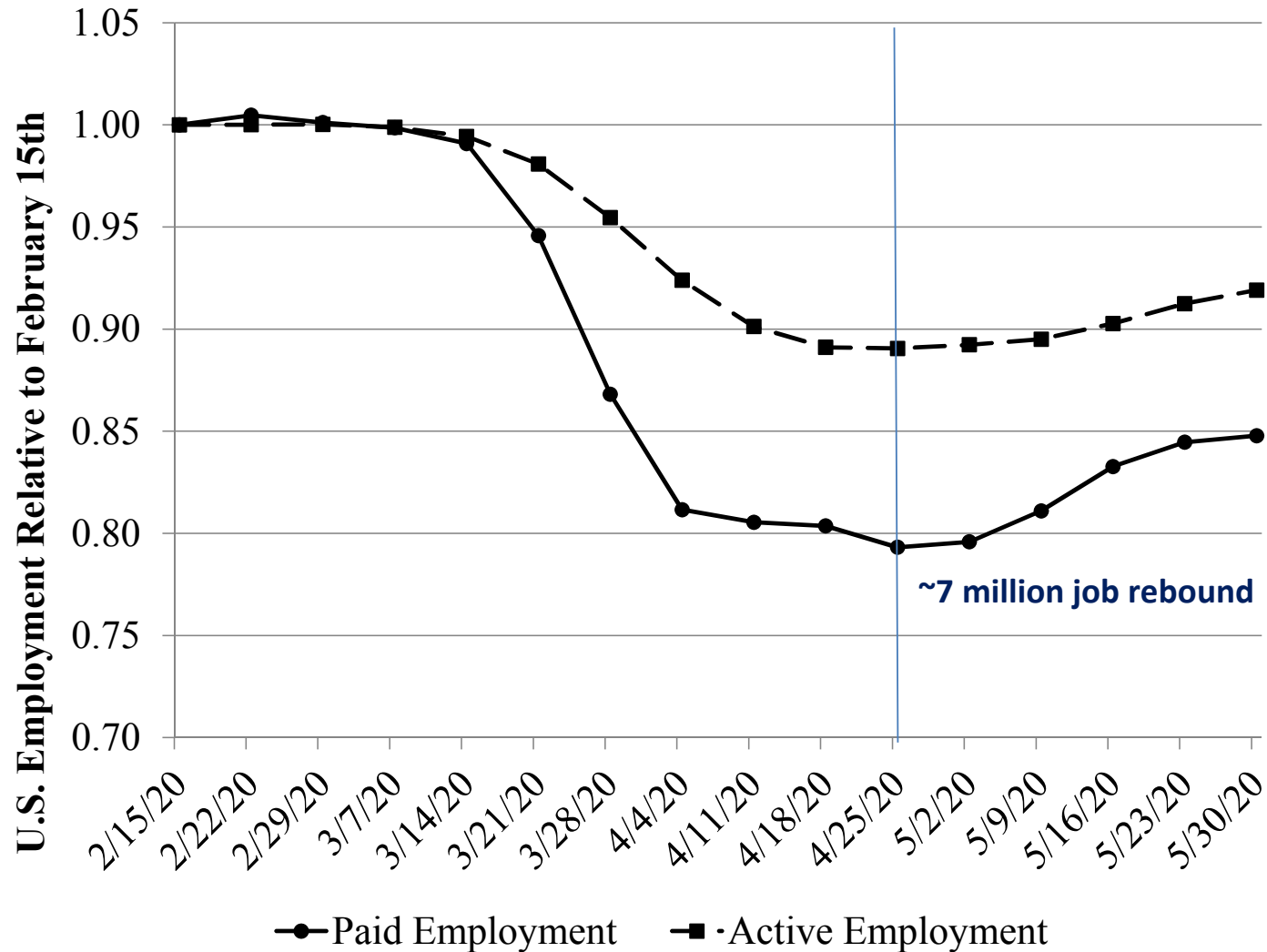
# Active and Paid Employment Since February



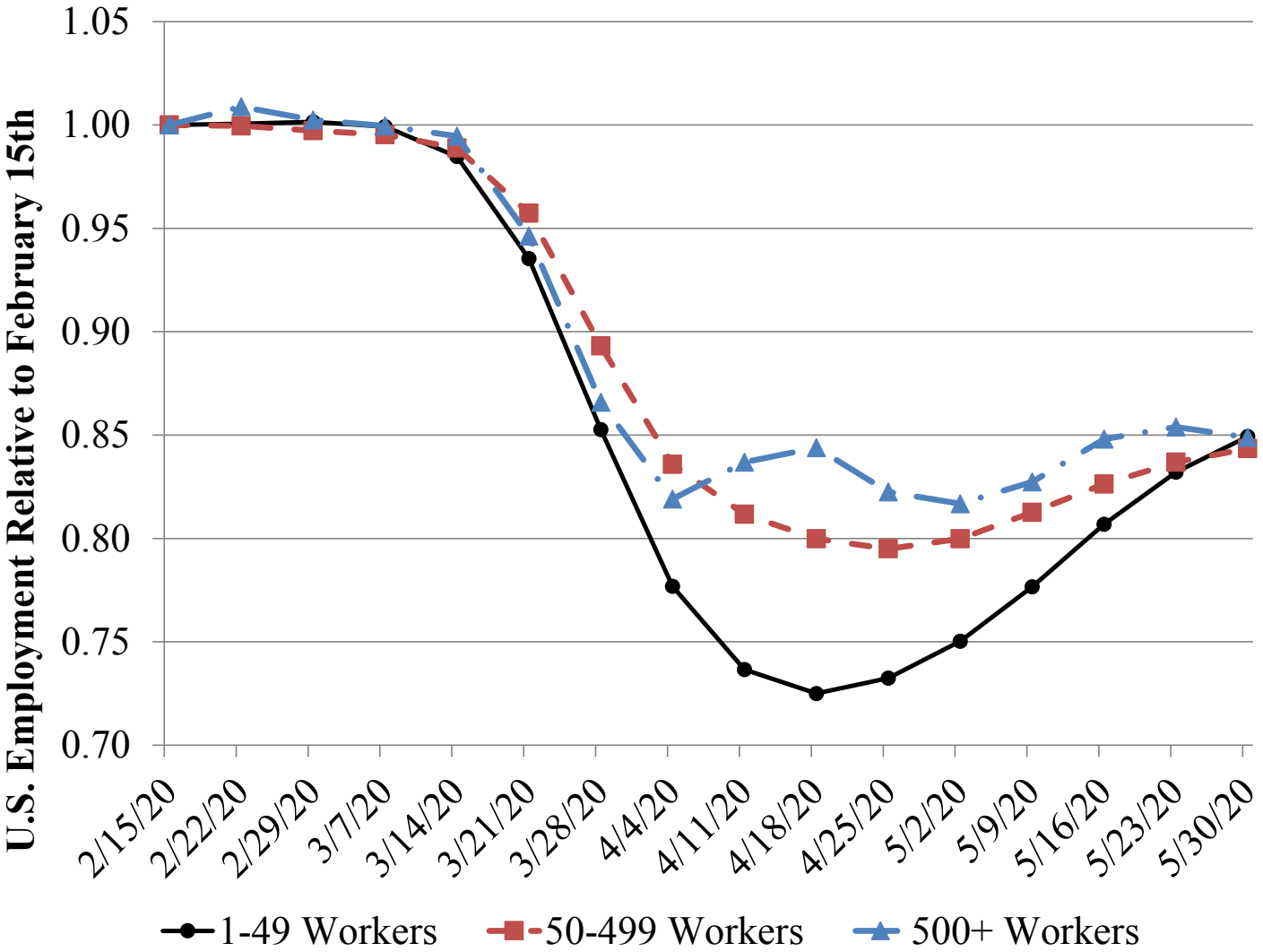
# Active and Paid Employment Since February



# Active and Paid Employment Since February



# Paid Employment by Firm Size



# Paid Employment Changes By 2-Digit Industry

Industry	2/15-4/25	2/15-5/30
Arts, Entertainment and Recreation	-50.7%	-41.5%
Accommodation and Food Services	-45.5%	-34.1%
Retail Trade	-28.7%	-18.5%
Other Services	-25.0%	-17.1%
Transportation and Warehousing	-21.7%	-23.2%
Real Estate, Rental and Leasing	-20.9%	-19.6%
Wholesale Trade	-17.6%	-12.3%
Administrative and Support	-17.0%	-17.1%
Educational Services	-16.6%	-17.5%
Health Care and Social Assistance	-16.5%	-8.8%
Construction	-13.5%	-4.5%
Manufacturing	-12.4%	-8.6%
Professional, Scientific, and Tech Services	-12.1%	-9.1%
Finance and Insurance	-1.3%	-0.7%

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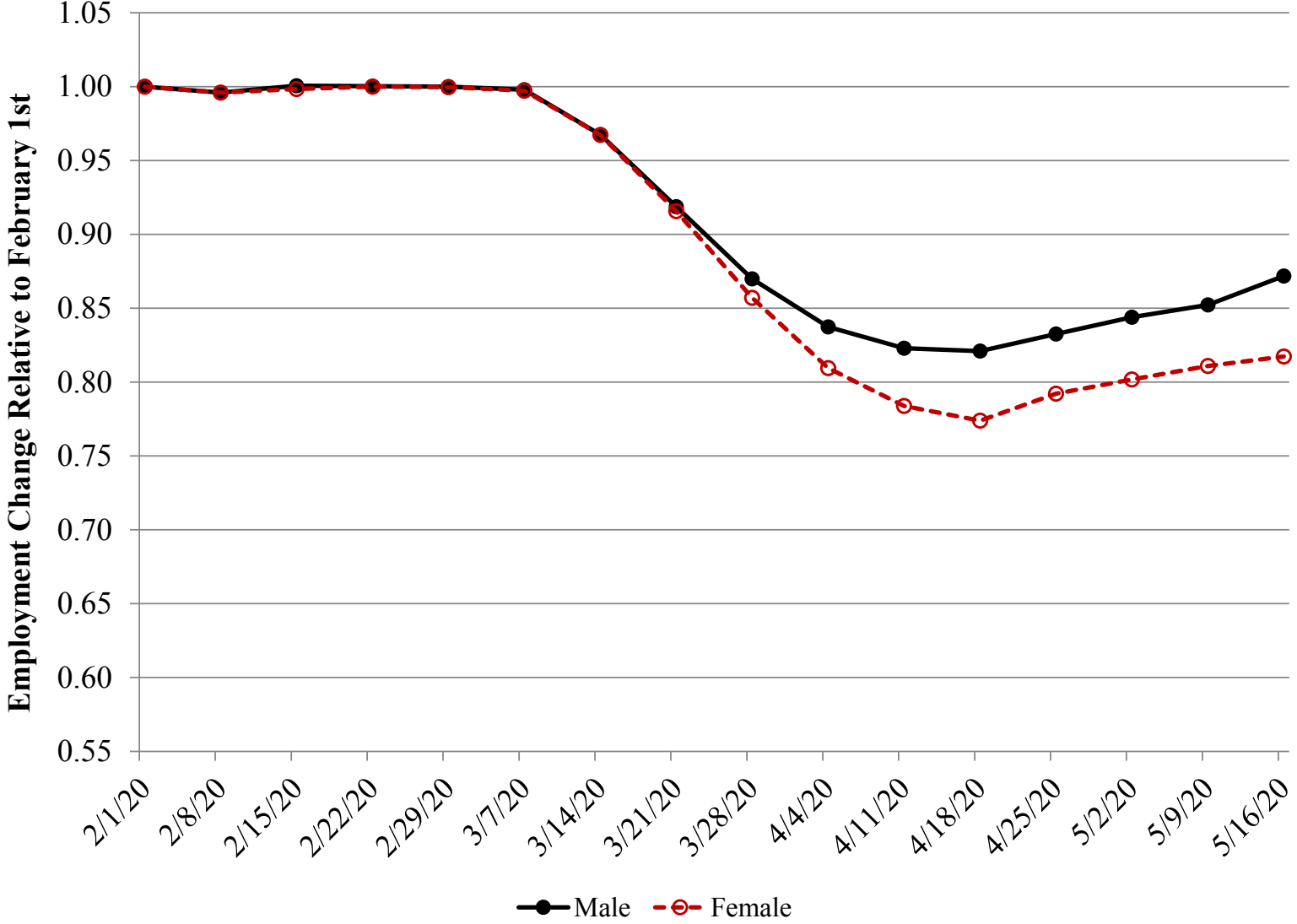
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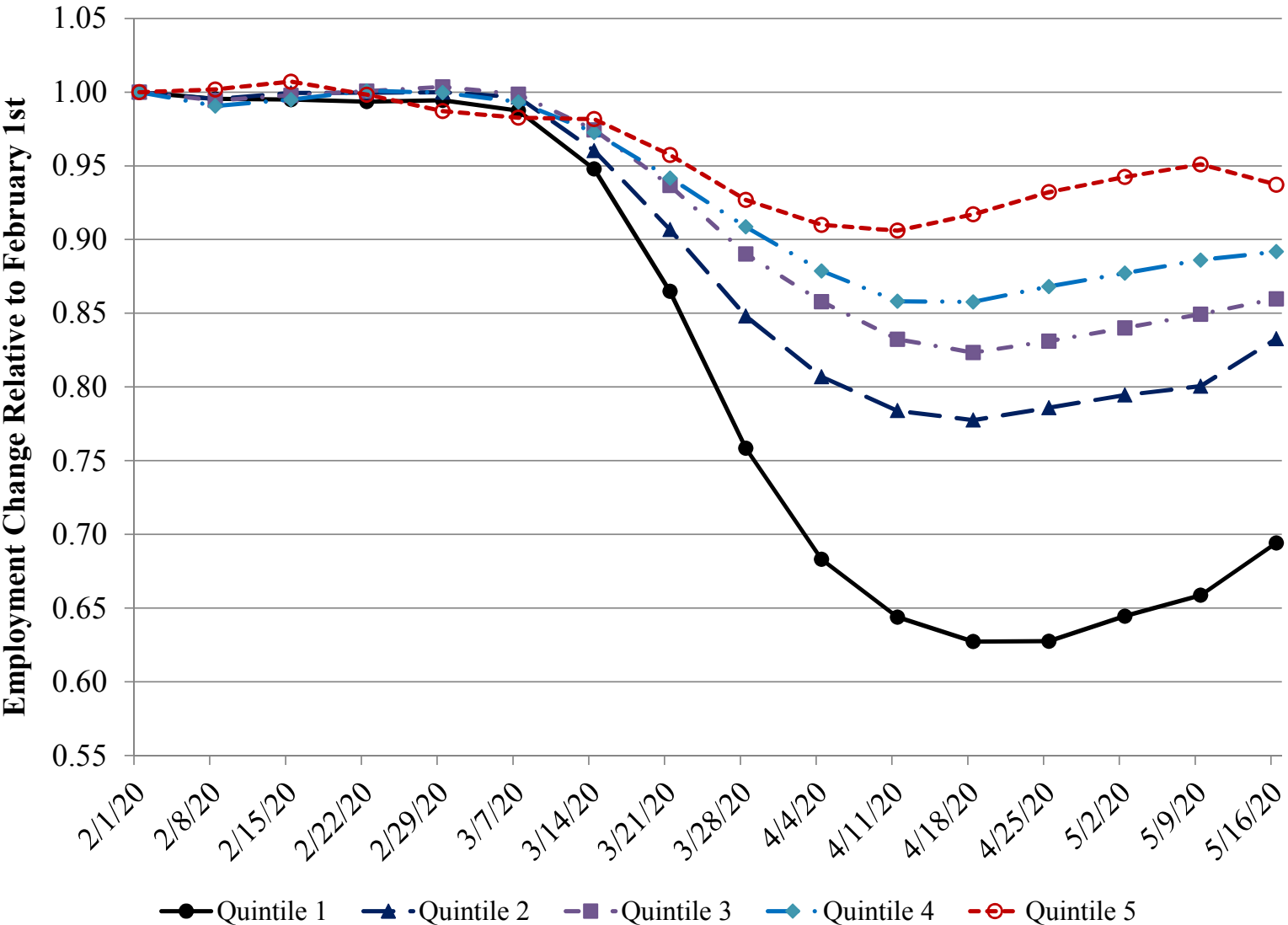
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# Employment Declines by Sex



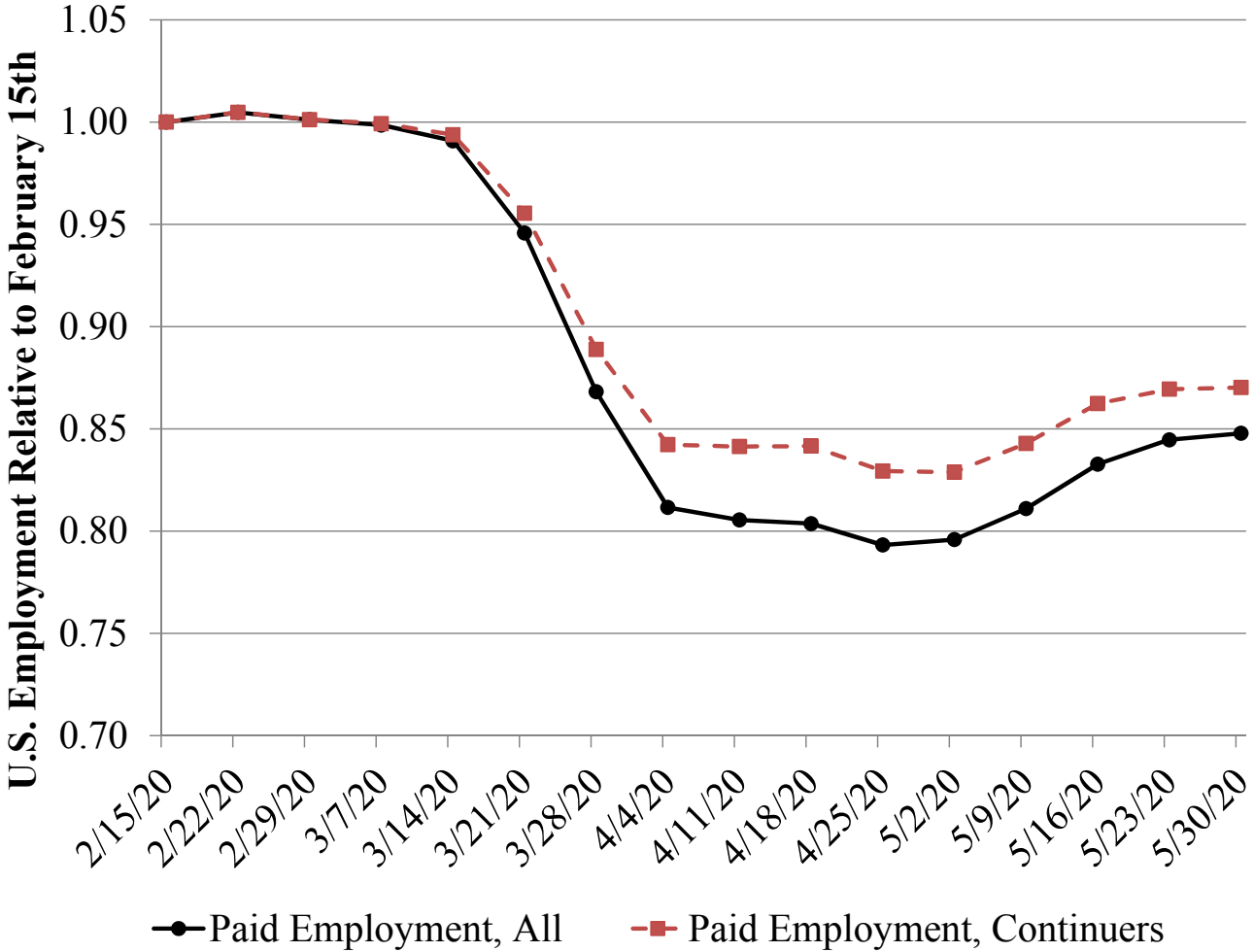
# Employment Declines by Initial Wage Quintile





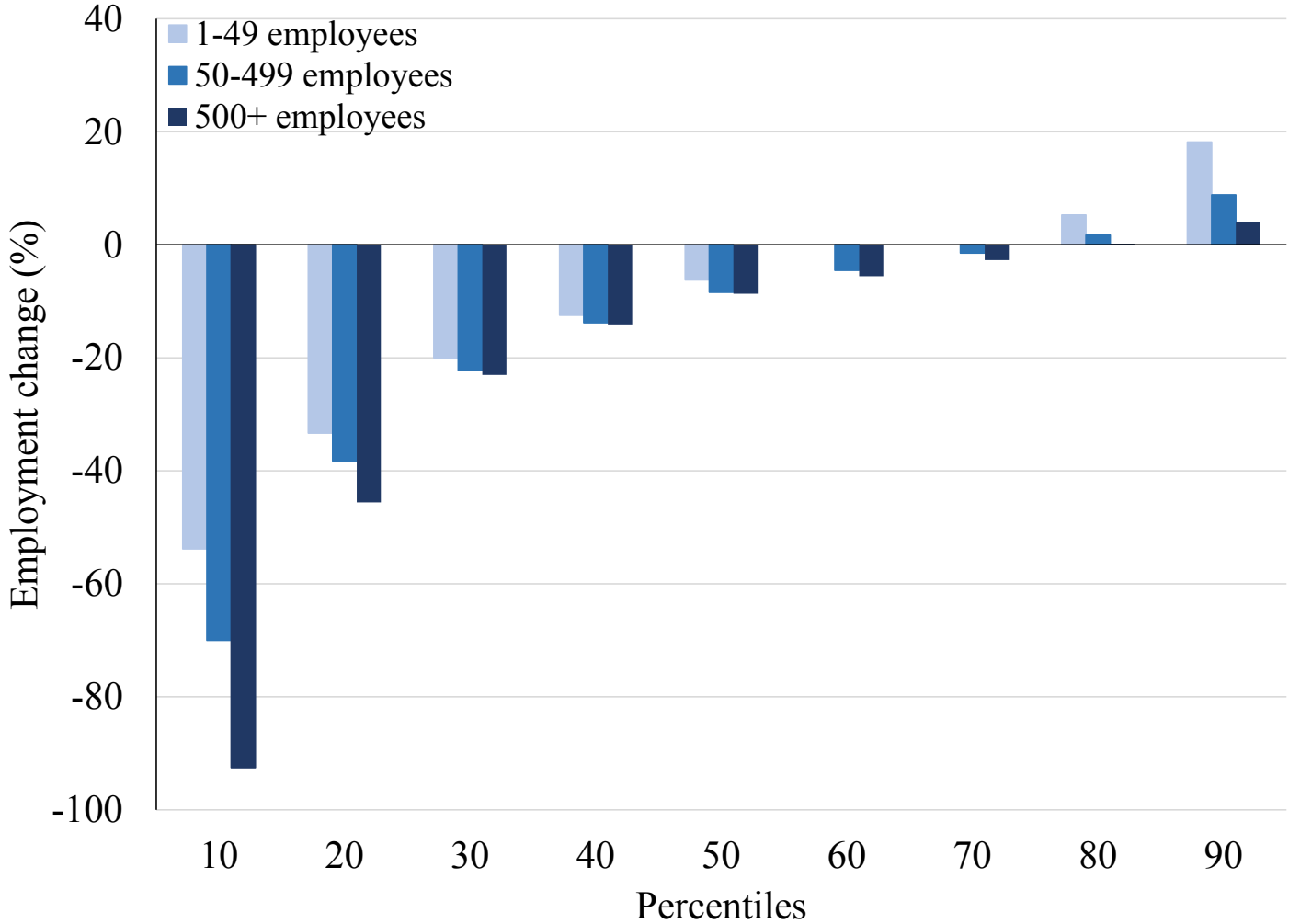
***Business Closure, Re-Entry  
and Recalls***

# Employment in Continuing Firms

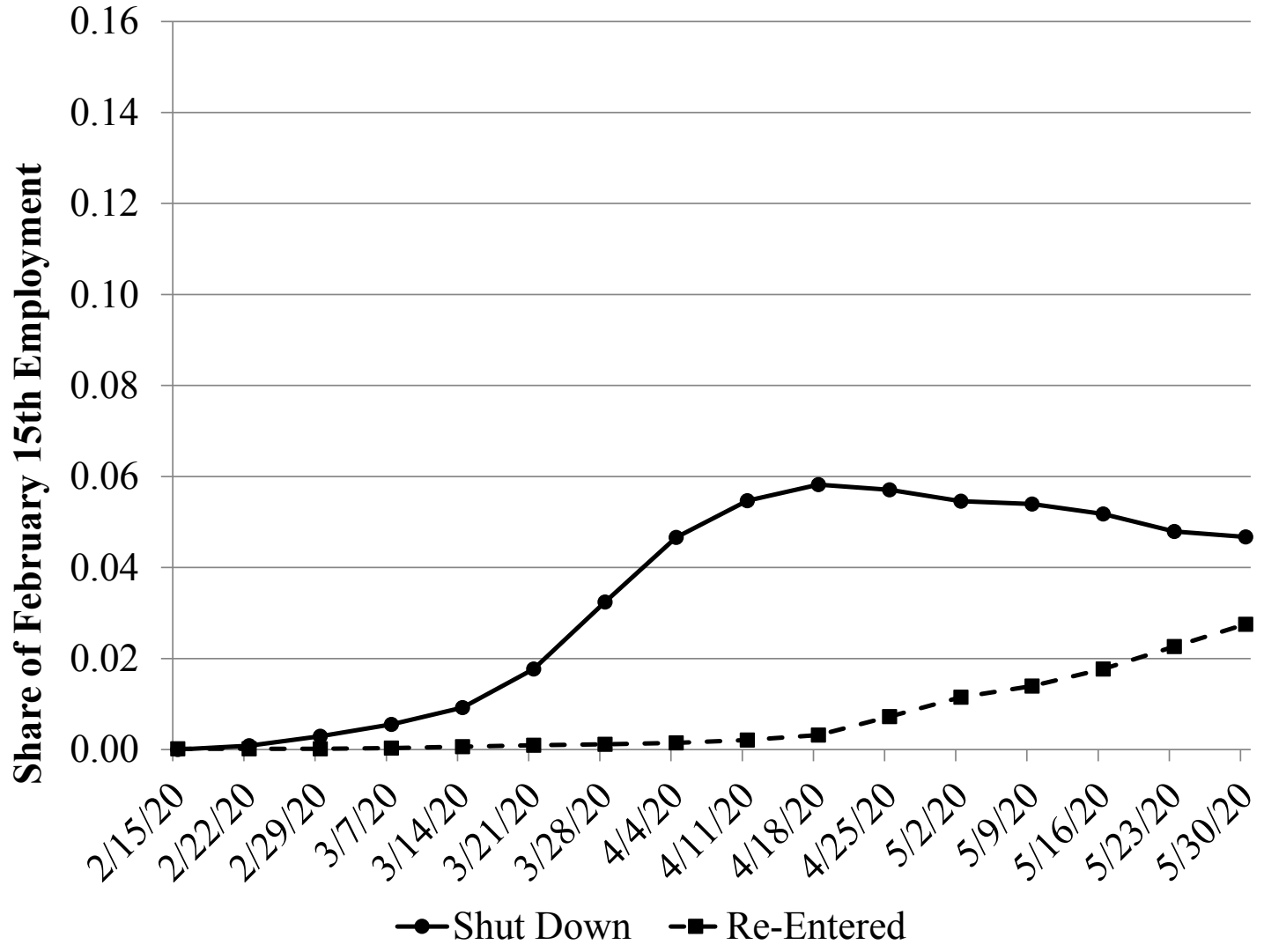


Continuing firms are those firms that make regularly scheduled payroll

# Distribution of Employment Gains 2/15-5/30, Continuing Firms



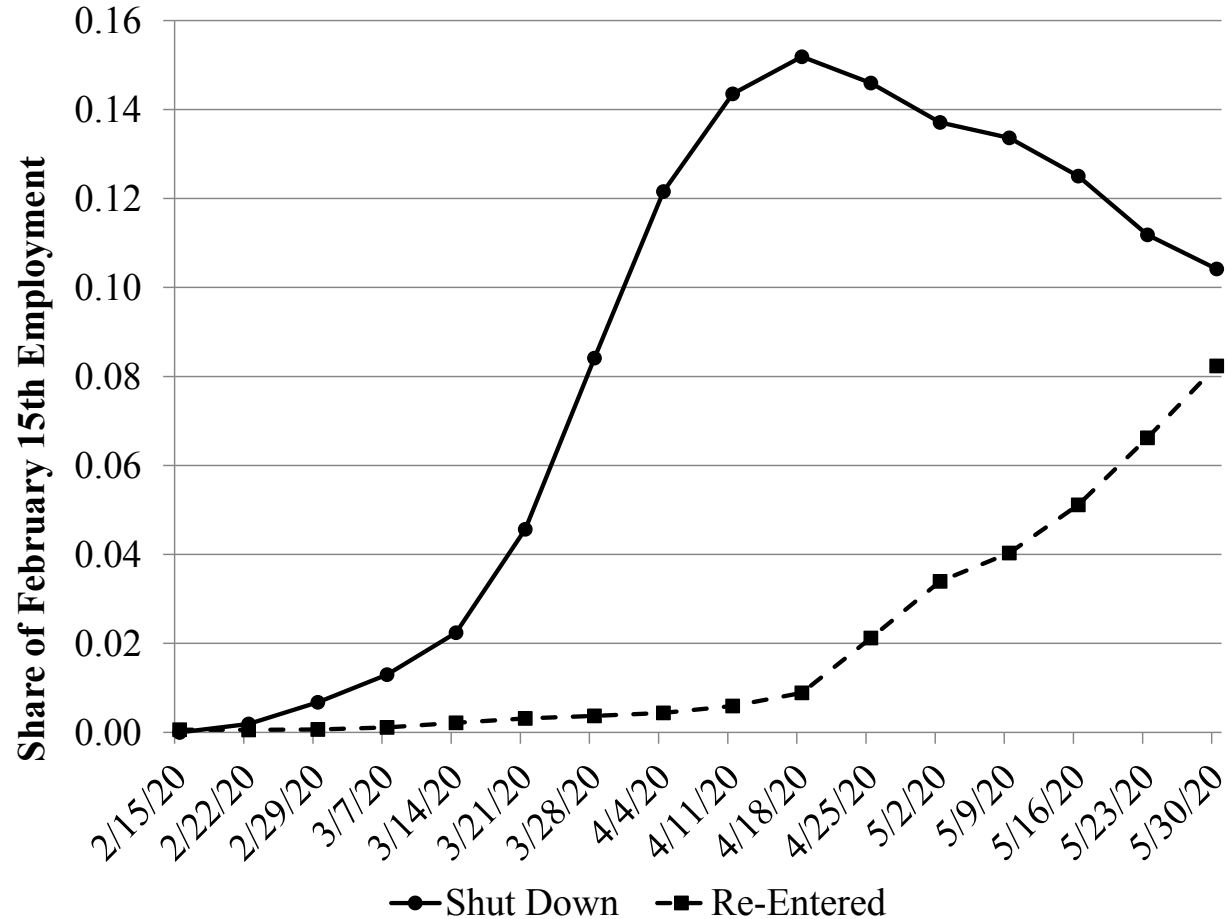
# Current Business Shutdown and Re-Entry



# Decomposition Summary Relative to Feb 15

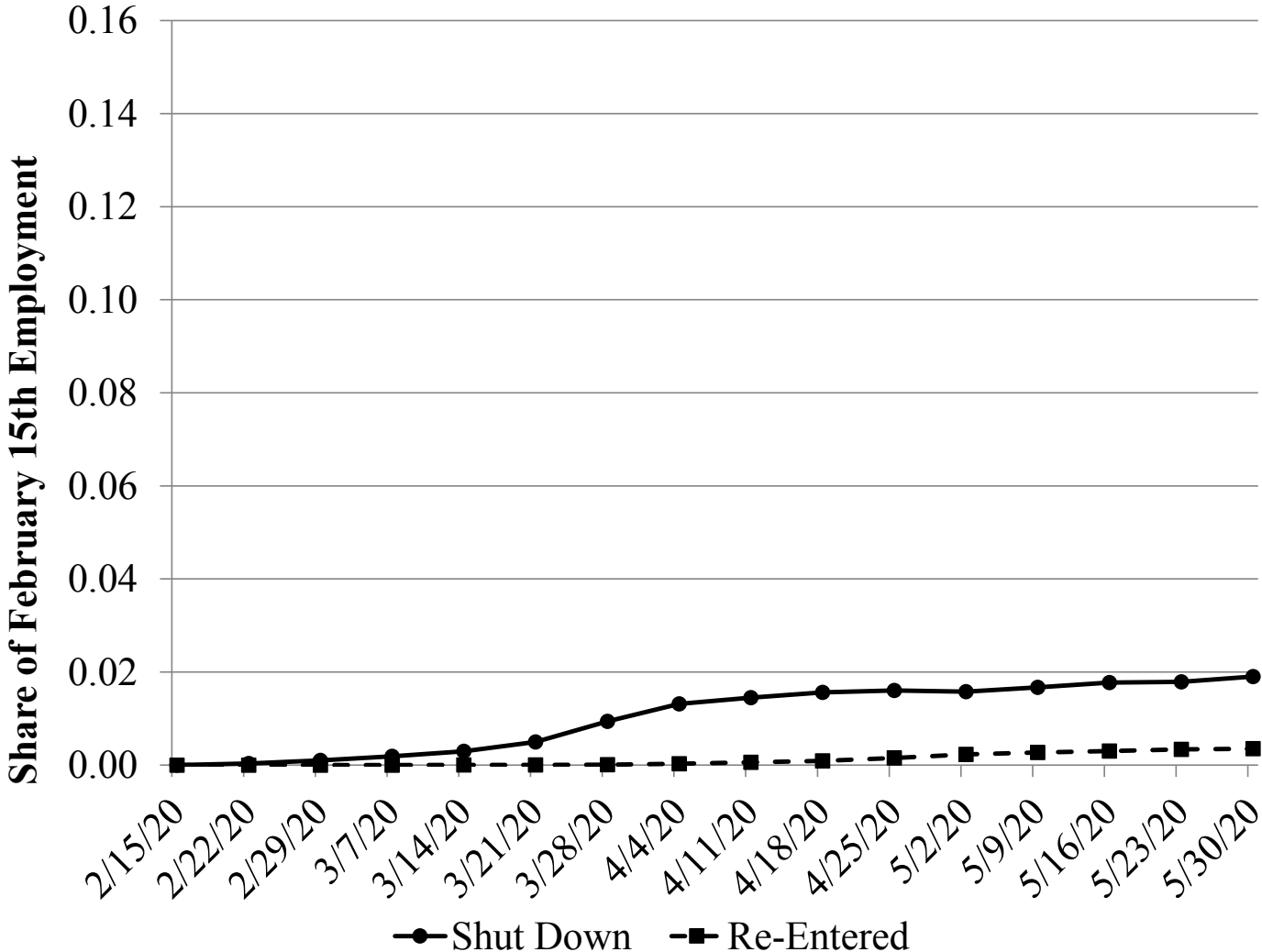
- Employment Declines Through April 25th
  - 77.8% of employment decline due to continuing firms
  - 28.0% of employment decline due to exiting firms
  - 5.8% increase to “new” sample entrants
- Employment Gains April 25th through May 30th
  - 67.3% of subsequent increase due to net hiring in continuing firms
  - 36.4% of subsequent increase due to employment gains in re-opening firms.
  - New sample entrants and new shutdowns roughly cancel

# Firm Shutdown and Re-Entry: Firms < 50 Employees

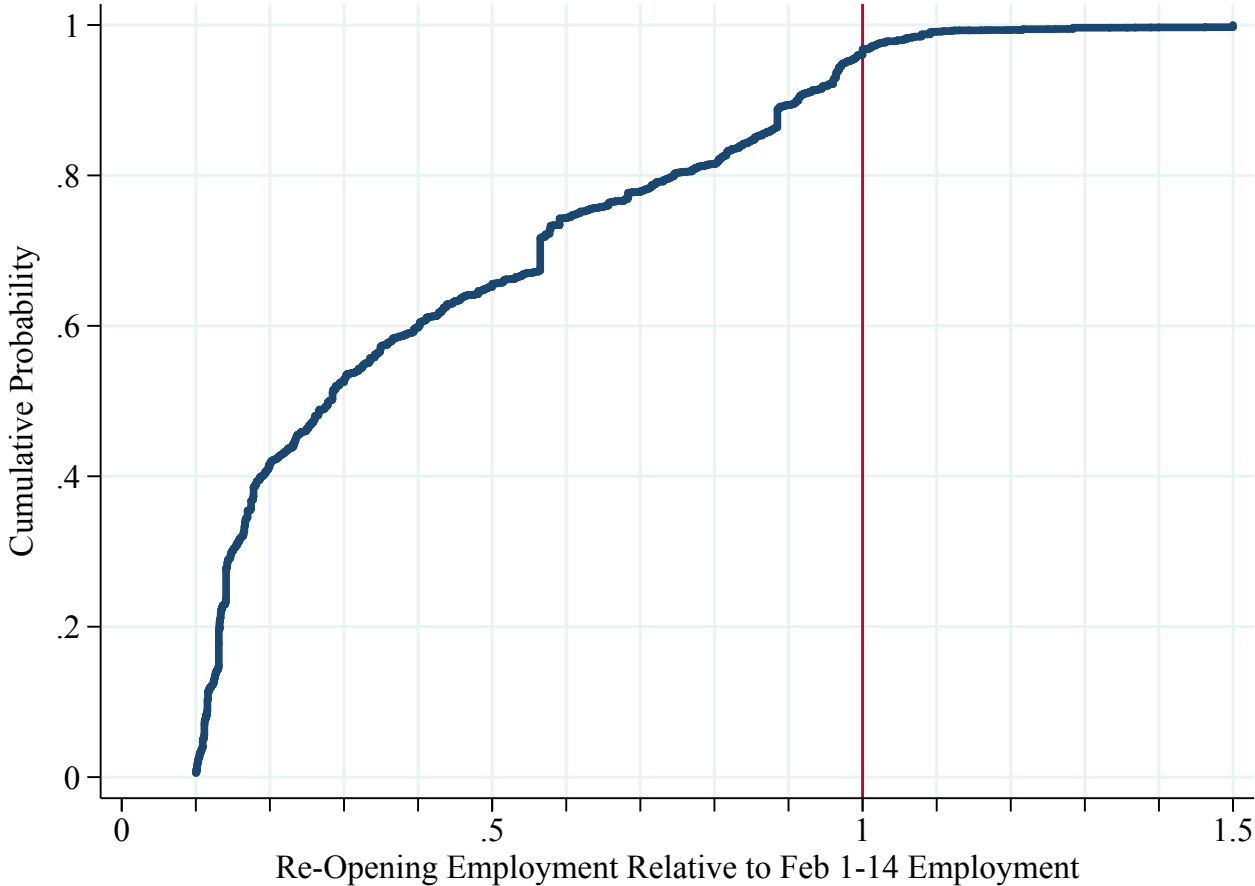


About 50% of employment losses for small firms through late April was due to exit.

# Firm Shutdown and Re-Entry: Firms < 500 Employees

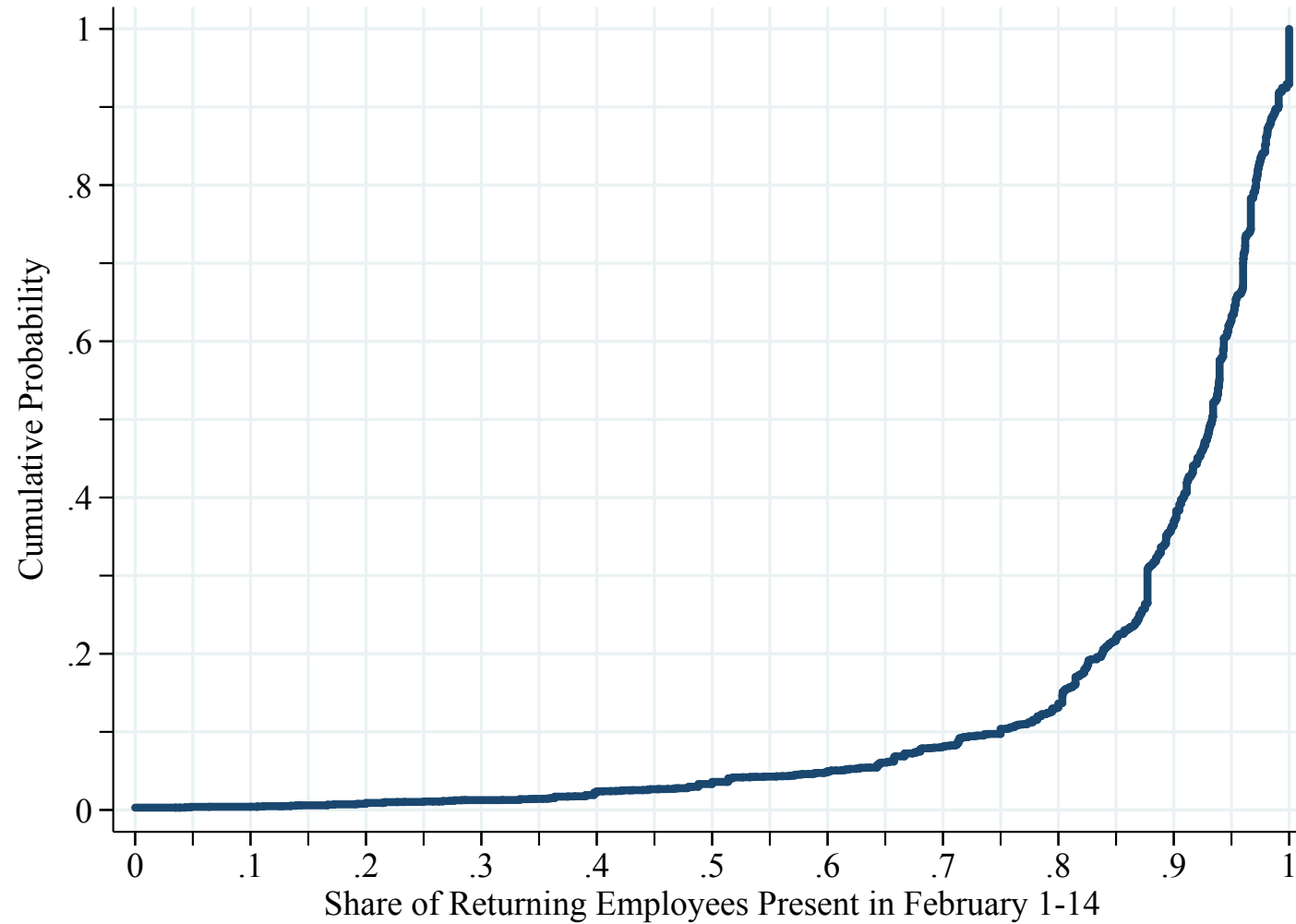


# Firm Size of Re-Entering Firms (Relative to Feb 15)



Median (Mean) re-entering firm is currently at 25% (40%) of their February size.

# Share of Re-Entering Firms' Employment that are Recalls

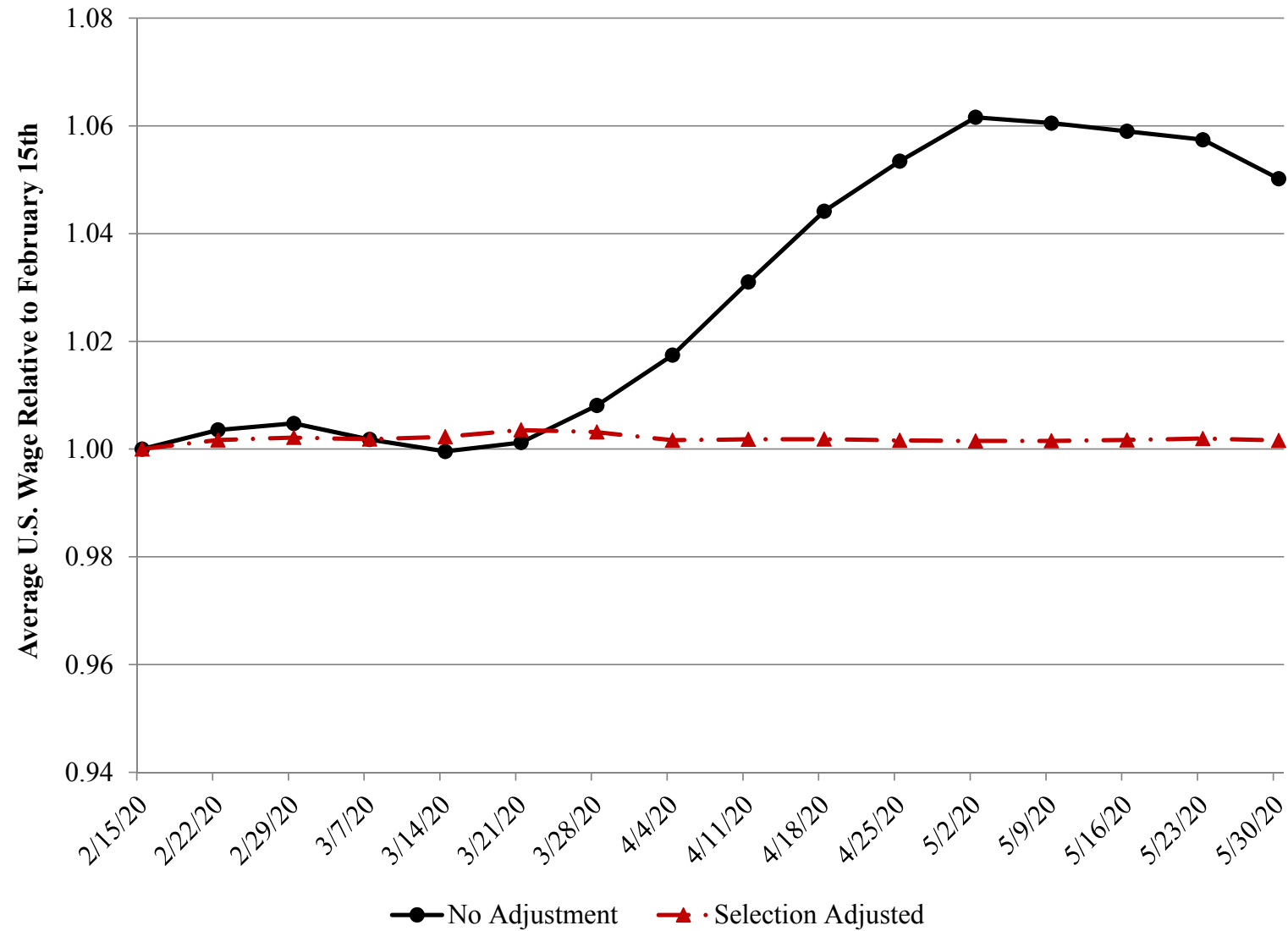


Nearly all employment in re-entering firms are recalled-workers.

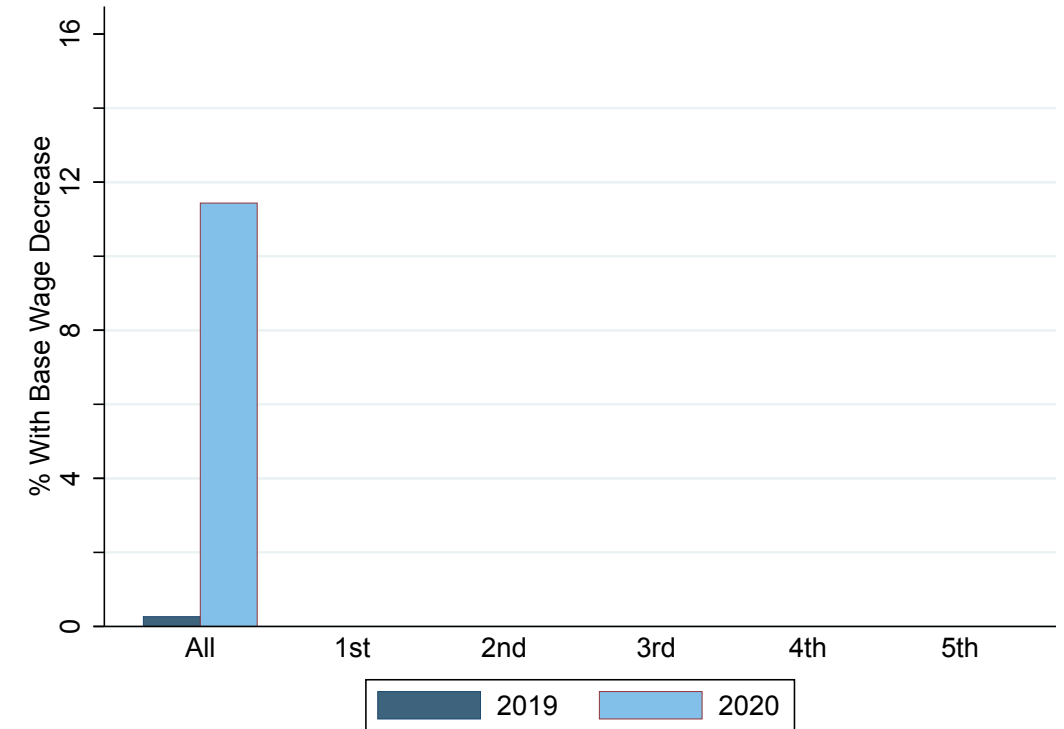
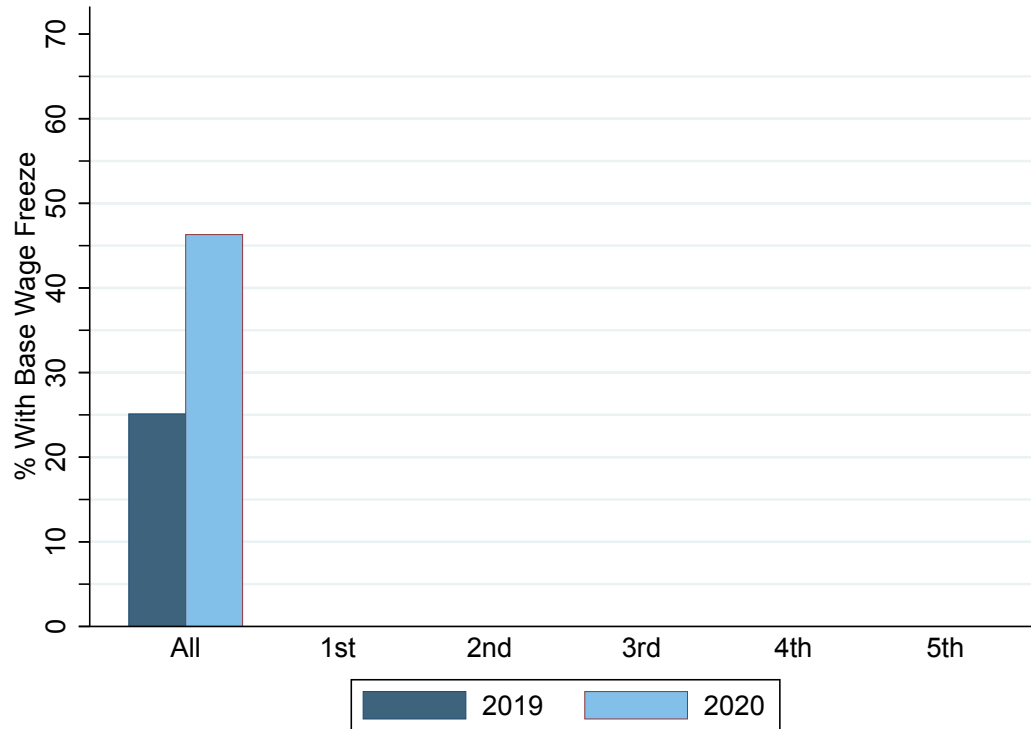


# *Wages*

# Aggregate Wages



# Wage Adjustment: Firms that Traditionally Change Wages in March-May

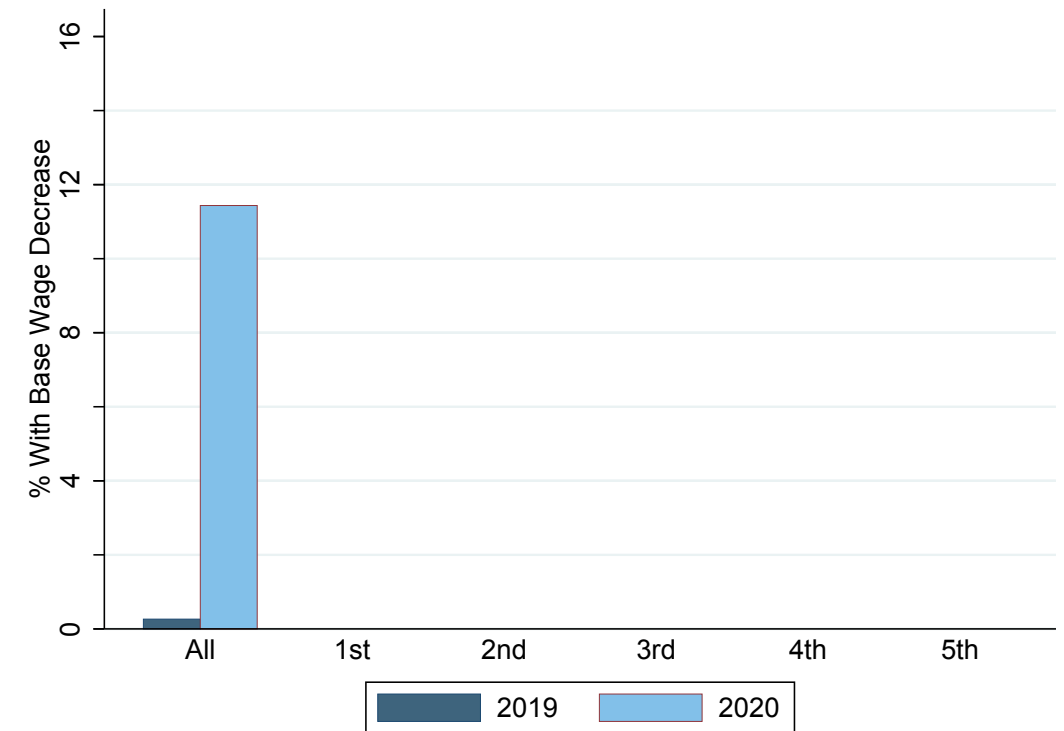
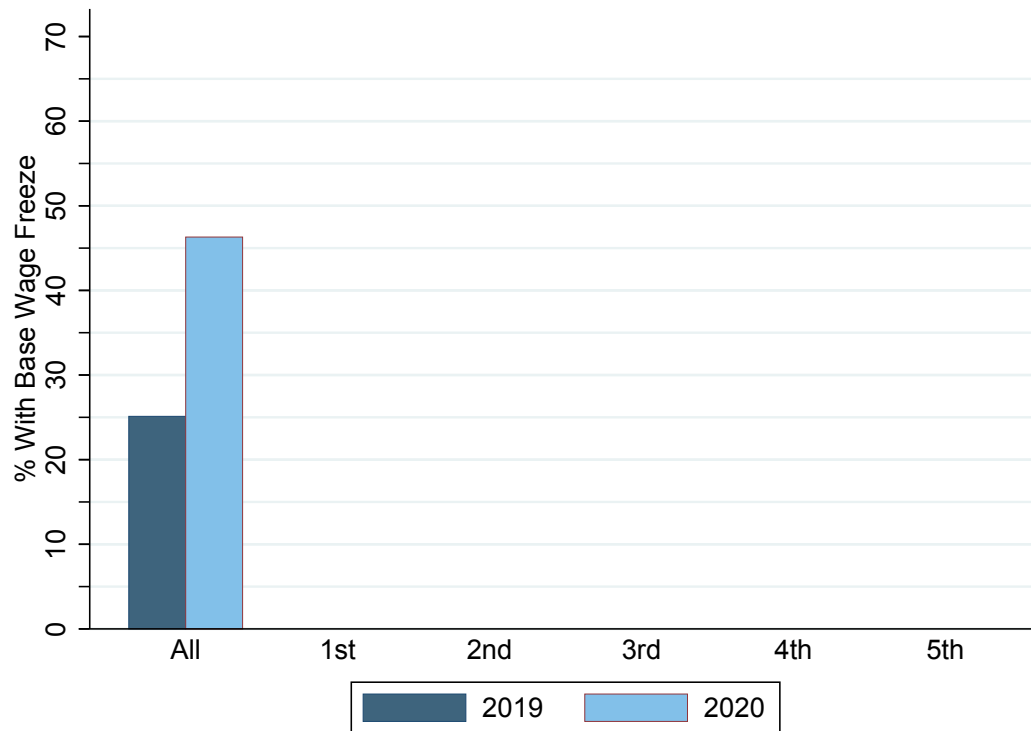


PANEL A: PROBABILITY OF WAGE FREEZE

PANEL B: PROBABILITY OF WAGE CUT

- Sample: Firms that changed most of their wages during 2019 in March, April and May.

# Wage Adjustment: Firms that Traditionally Change Wages in March-May

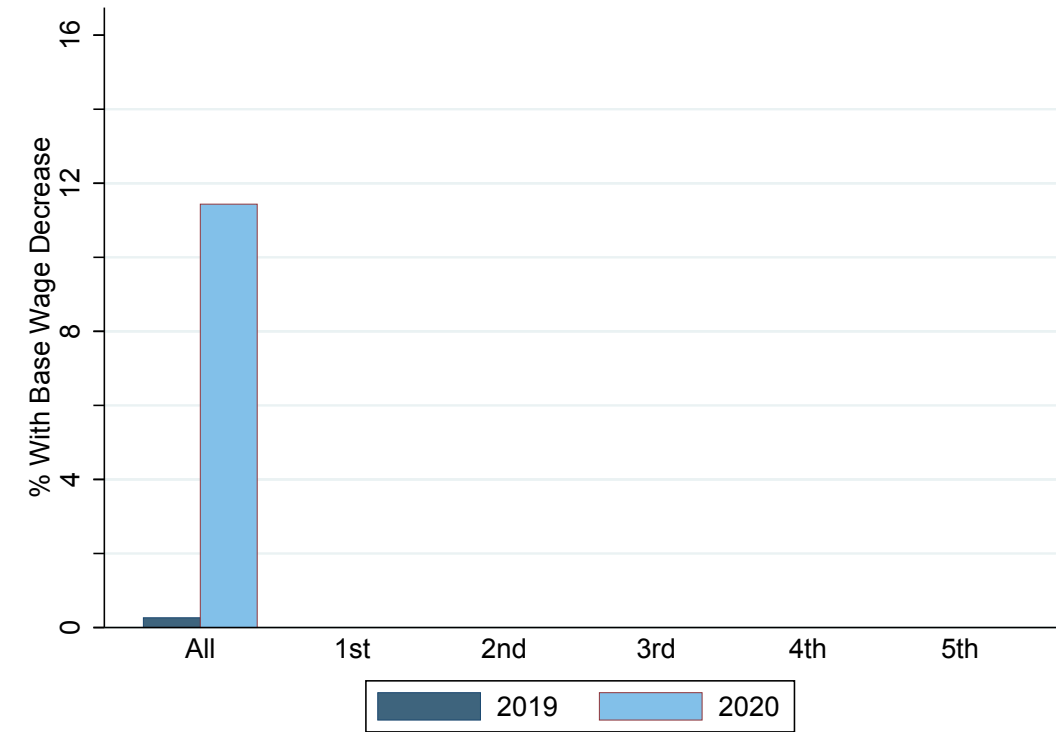
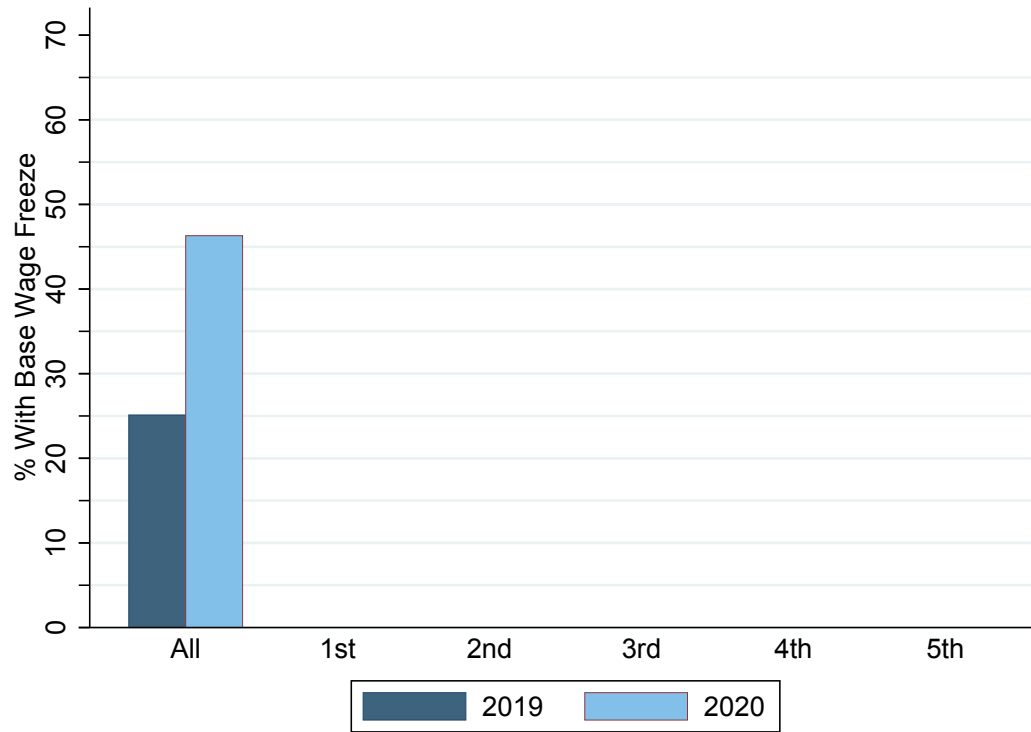


PANEL A: PROBABILITY OF WAGE FREEZE

PANEL B: PROBABILITY OF WAGE CUT

- Sample: Firms that changed most of their wages during 2019 in March, April and May.
- Both wage cuts and wage freezes are more common in 2020

# Wage Adjustment: Firms that Traditionally Change Wages in March-May

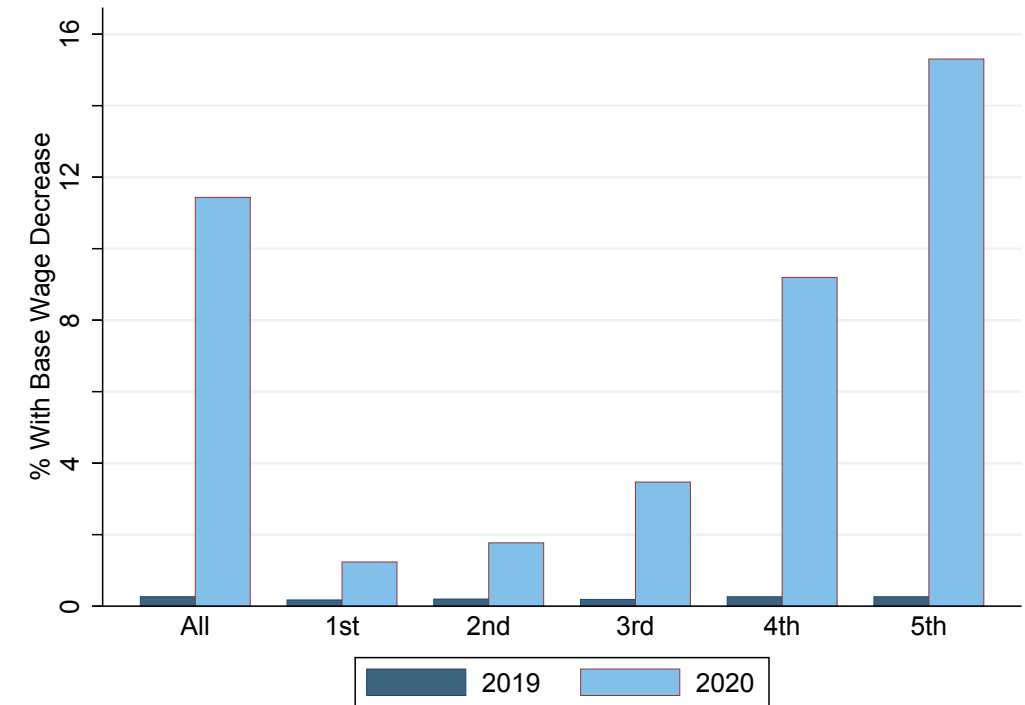
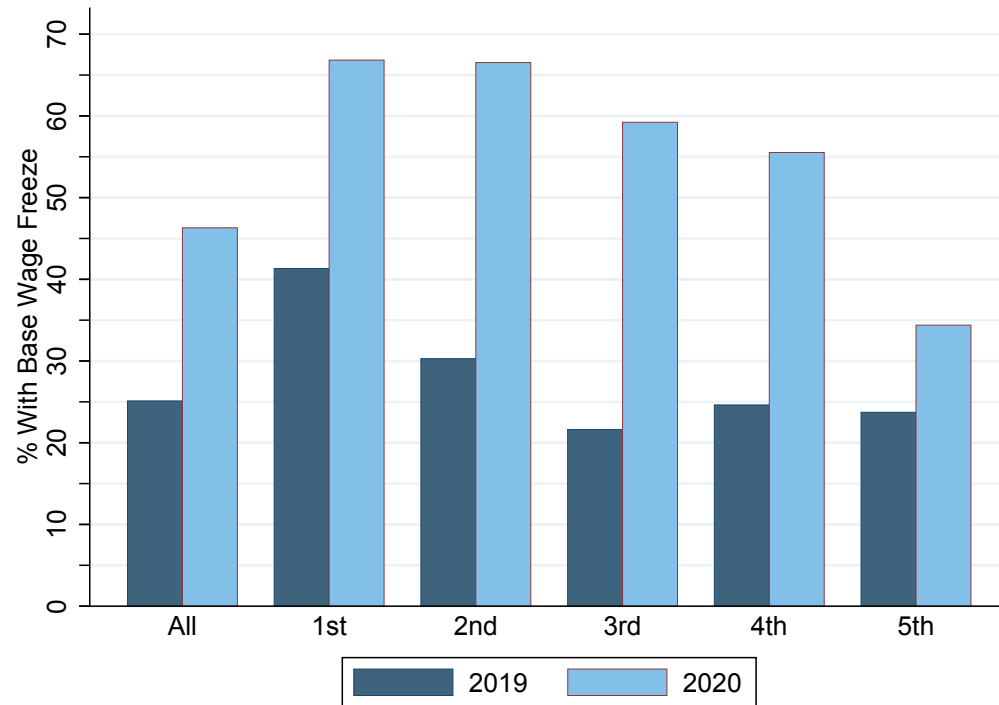


PANEL A: PROBABILITY OF WAGE FREEZE

PANEL B: PROBABILITY OF WAGE CUT

**2020:** 46% with freeze, 11.4% with cut  
**2008-10:** 40% with freeze, 6% with cut

# Wage Adjustment: Firms that Traditionally Change Wages in March-May



PANEL A: PROBABILITY OF WAGE FREEZE

PANEL B: PROBABILITY OF WAGE CUT

**Bottom Quintile Workers:** 67% with freeze, 1.2% with cut

**Top Quintile Workers:** 34% with freeze, 15.3% with cut

The background is a dark blue-tinted photograph of a large, multi-story university building. The building features a prominent central arched entrance with a large window above it. There are several windows on either side of the arch. In the foreground, a group of people is visible, some standing and some sitting, though they are out of focus. The overall scene suggests a campus environment.

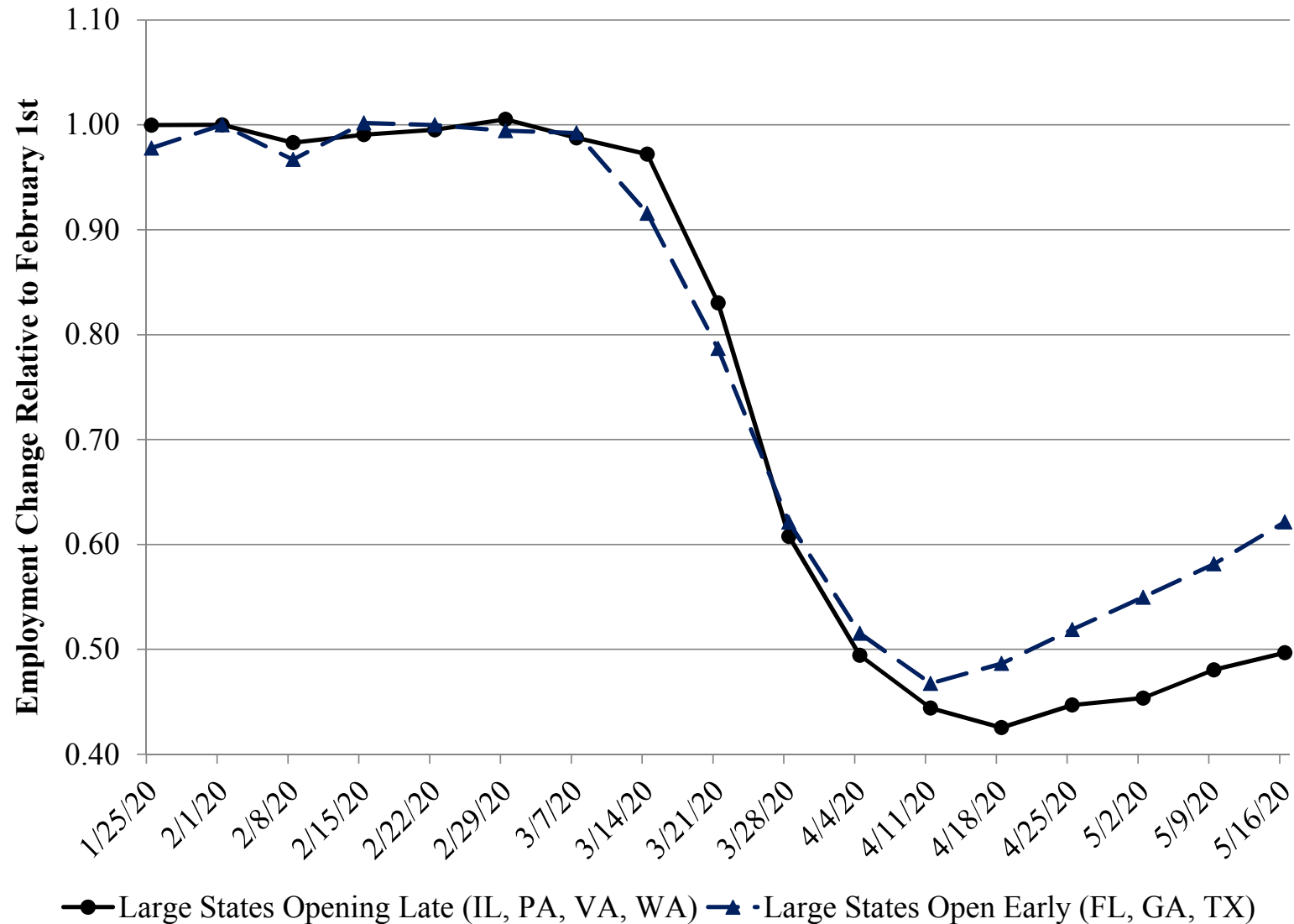
# *Cross State Re-Openings*

# Some Caveats on Cross-State Re-Opening Studies

- Most sectors did not close in most states (essential services in many states include manufacturing, construction, professional services (that can be done from home), finance, some retail, some medical, etc.
- Re-openings often took place at different times within states.
- The difference across most states in the timing of re-opening is small (a few weeks)
- State re-openings are often endogenous to changes in underlying health risks (which vary spatially).

Some caution needed in interpreting causal estimates of employment effects of state re-openings.

# State Re-Opening: Employment in Food/Accomodation



# Summary

- Unprecedented paid employment declines at start of Pandemic Recession
- Concentrated among low wage workers, small firms, and women
- Employment has increased meaningfully (by about 7 million workers) during May.
- Selection effects → average wage increase
- More base wage freezes and cuts than in Great Recession
- Firm shutdown important, but some beginning to re-enter
- Re-entering and growing business mostly recall previous employees
- Not surprisingly, employment increases when states re-open sectors.

The background is a dark blue-tinted image of a university building with a prominent arched entrance. In the foreground, there is a group of people, possibly students, standing in a courtyard or plaza. The overall scene is dimly lit, suggesting an evening or dusk setting.

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