
Real-Time Analysis of Economic Data in the COVID-19 Crisis

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Financial and Economic Anatomy of the Crisis

- Pandemic's initial shock was to real activity, but quickly jumped to financial markets
- Contrast with 2008: Initial shock to financial markets, gradual impact on real economy
- Extraordinary fiscal and monetary policy actions
- Crisis contrast: In 2020, much better access to high-frequency data and resulting real-time data analysis

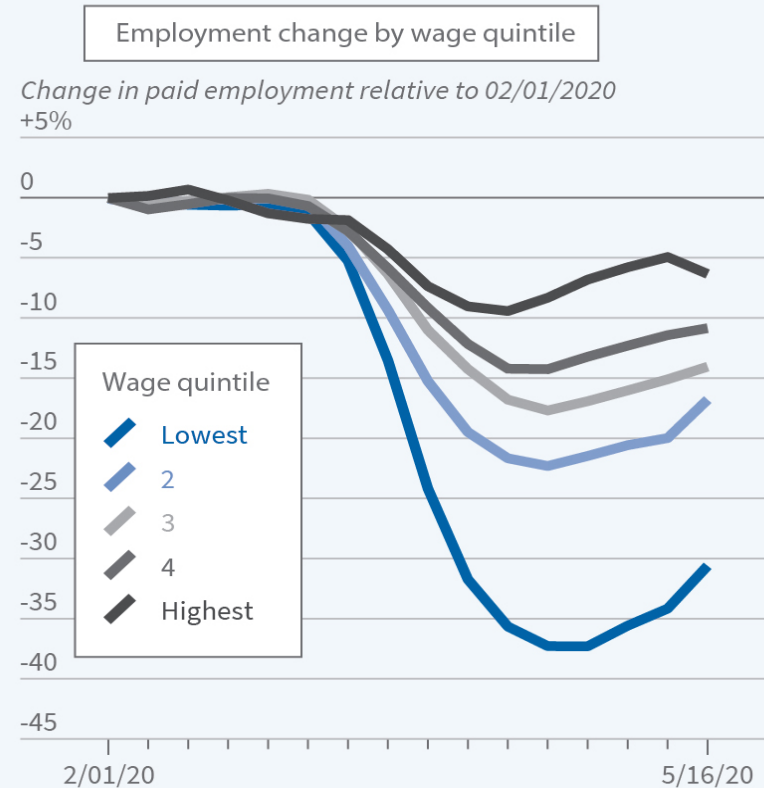
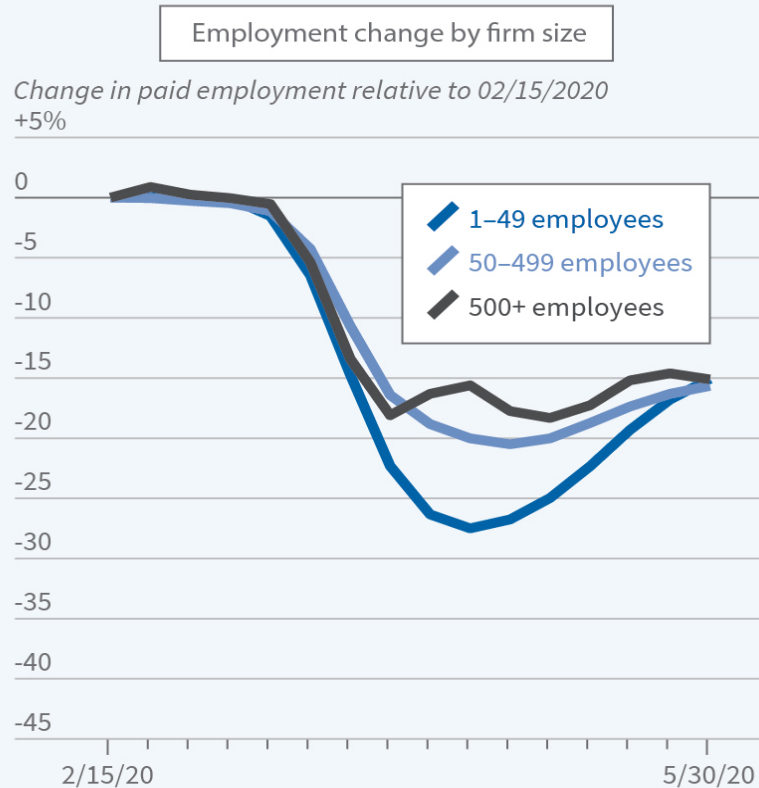
Why Such Rapid Research Response?

- Unprecedented depth and speed of decline in spending and in labor market
- Demand for guidance on impact of policy actions
- Policy discussion of novel issues:
 - How costly are shutdowns in terms of lost jobs?
 - How are households faring?
 - What is the effect of Fed interventions?
 - What has the fiscal stimulus done?

Illustrations of Real-Time Data Tracking

- Job losses (ADP)
- Small business closures (CPS)
- Consumer spending (JPMorganChase)
- Household liquid assets (JPMC)
- Employment Impact of Paycheck Protection Program (Womply/ADP)
- Financial market flows (Morningstar / Thompson-Reuters/ Lipper)

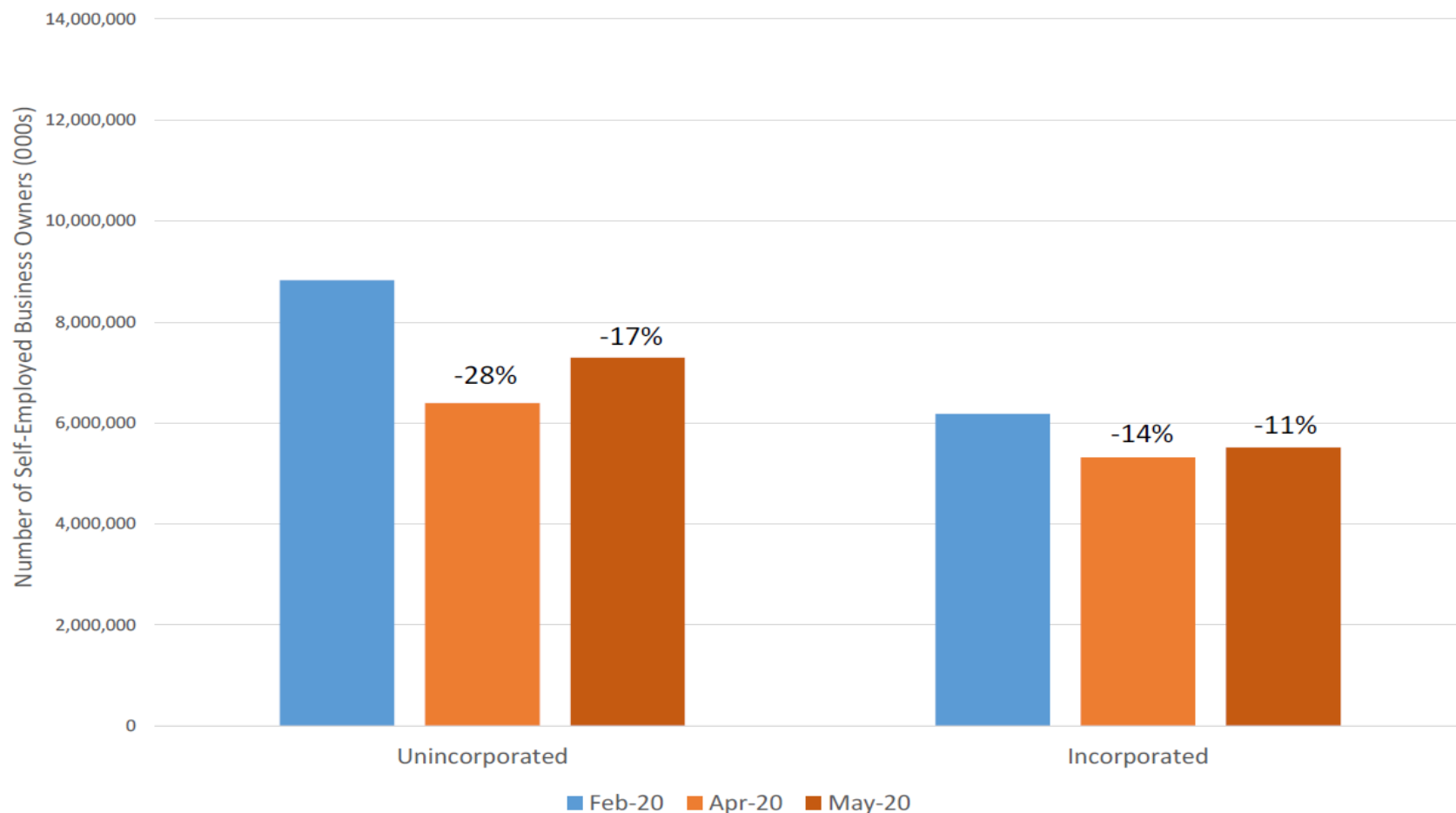
COVID-19 Employment Decline by Firm Size and Wage Level



Source: Researchers' calculations using data from ADP

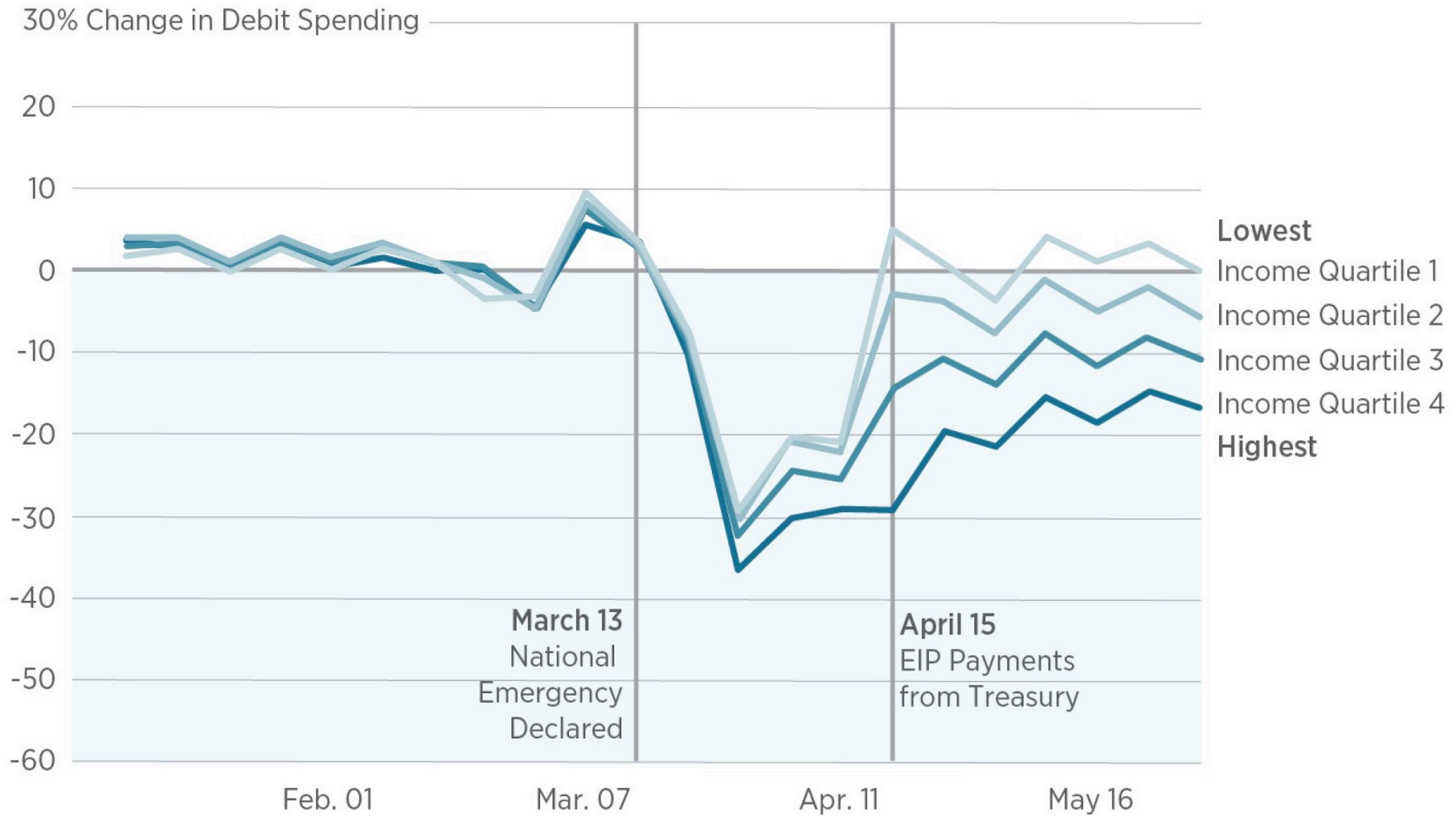
Source: T. Cajner, et al., "The US Labor Market During the Beginning of the Pandemic Recession," NBER working paper 27159, revised August 2020.

Figure 3: Number of Self-Employed Business Owners before and after COVID-19 (Corporation Status)

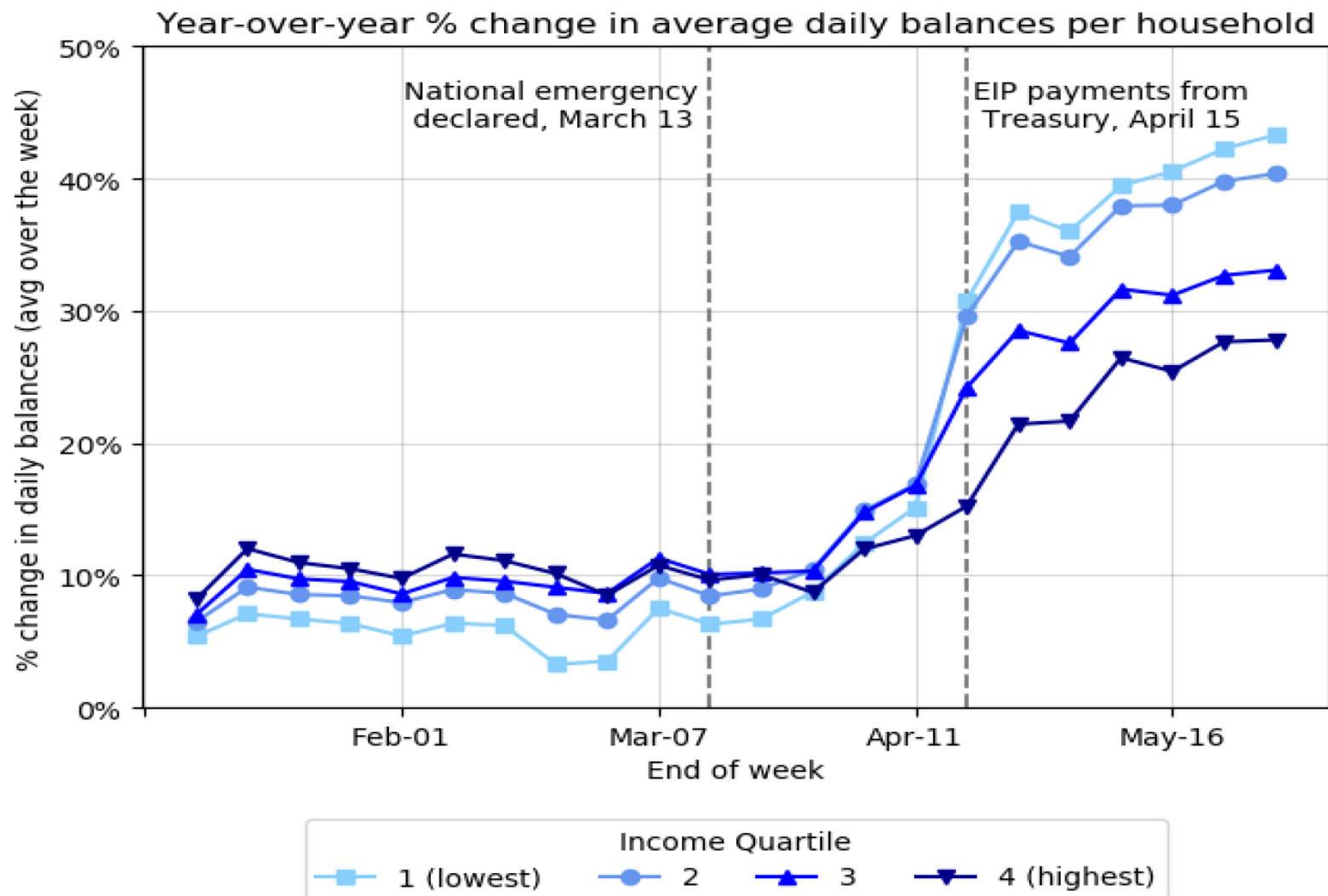


Source: R. Fairlie, “The Impact of COVID-19 on Small Business Owners,” NBER working paper 27462, July 2020.

Year-over-Year Growth in Debit Card Spending, by Income Quartile

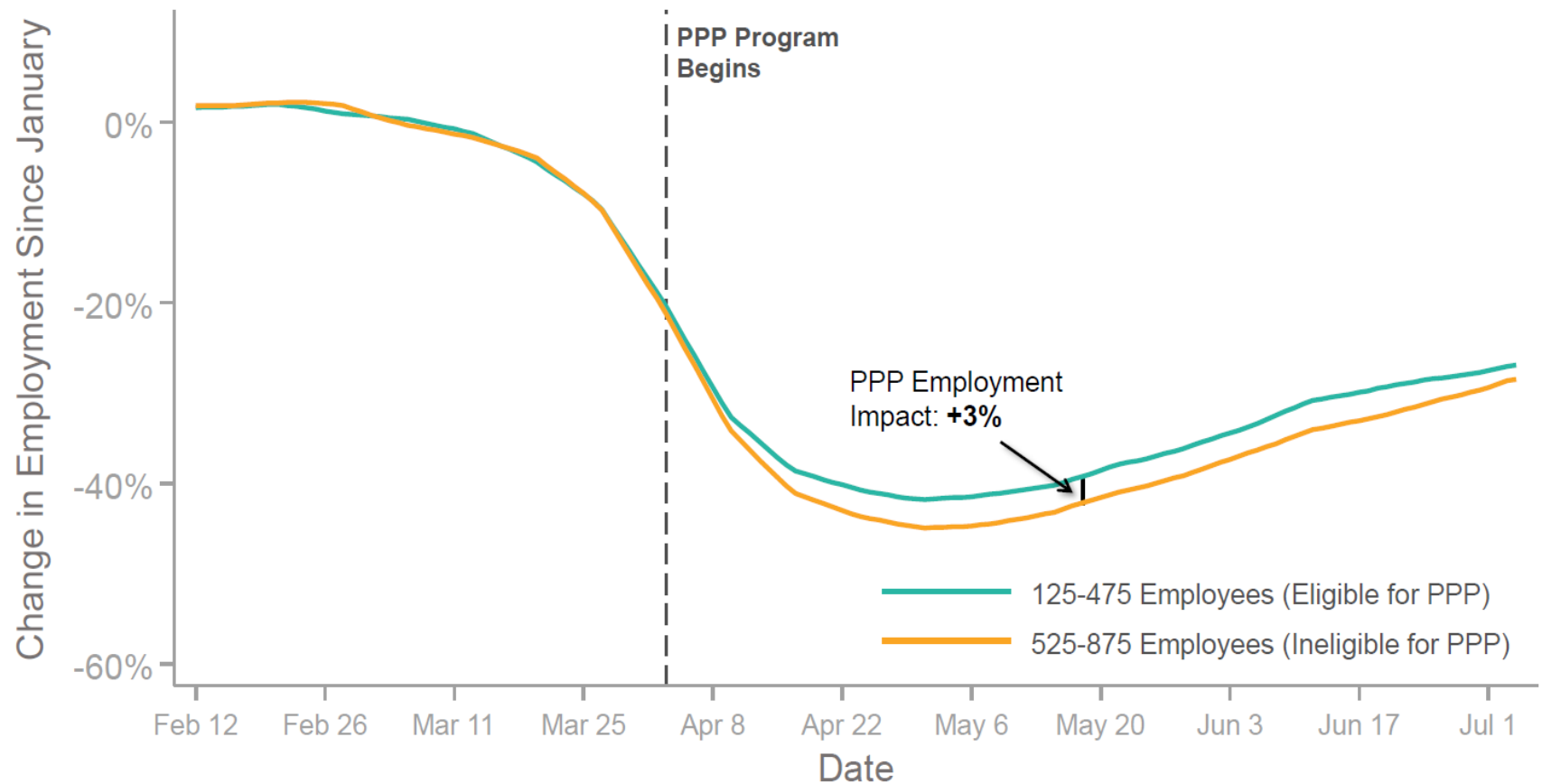


Source: N. Bachas et al., "Initial Impacts of the Pandemic on Consumer Behavior," NBER working paper 27617, July 2020.



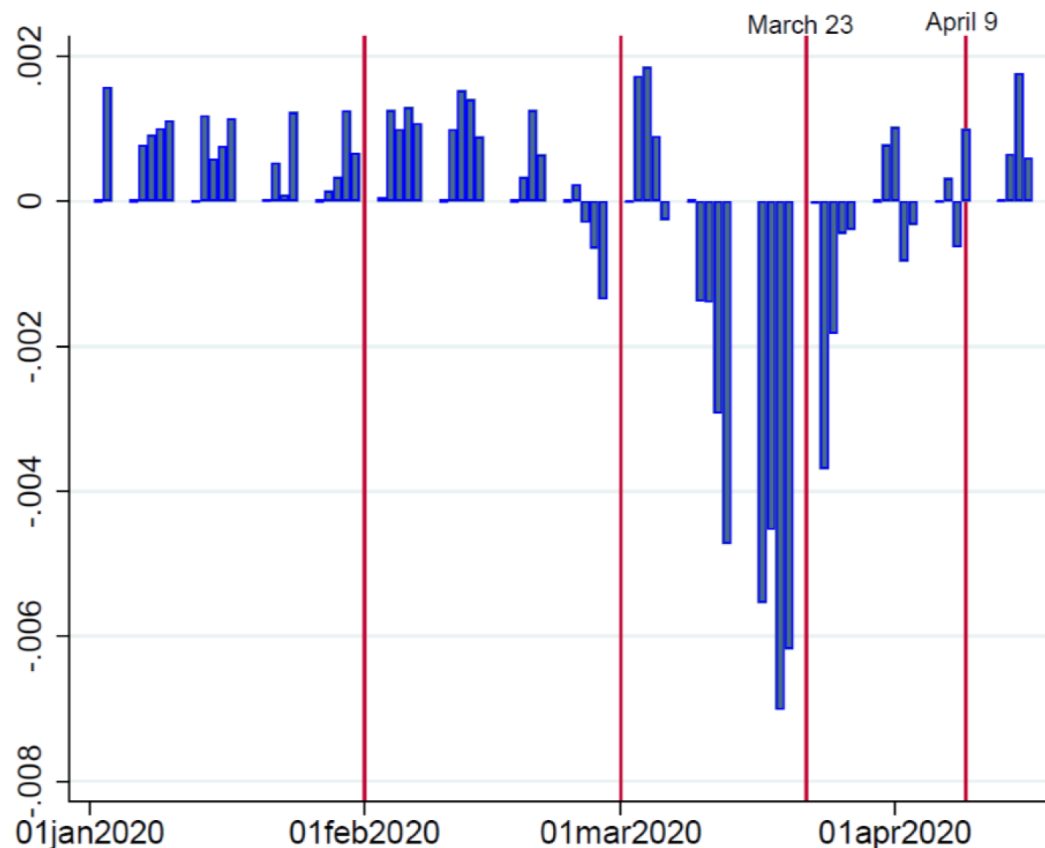
Source: N. Bachas et al., “Initial Impacts of the Pandemic on Consumer Behavior,” NBER working paper 27617, July 2020.

Impact of Paycheck Protection Program on Low-Income Employment



Source: R. Chetty et al. “How Did COVID-19 and Stabilization Policies Affect Spending and Employment?” NBER Working Paper 27431, June 2020.

Daily Net Flows to Corporate Bond Funds and ETFs



Source: Falato, Goldstein, and Hortacsu, "Financial Fragility in the COVID-19 Crisis," NBER working paper 27559, July 2020.

Lessons from Working with Private-Sector and Administrative Data

- Samples can be large without being representative
- Challenge is imputing what is not observed
- Example of debate about impact of PPP loans on firm closures and employee retention
 - Womply sample is smaller firms
 - ADP is larger firms and impact seems greater

Long-Term Research Opportunities Emerging from COVID-19 Crisis

- New questions to study
 - Impact of PPP loans on firm survival
 - Role of Fed interventions in restoring liquidity
- New sources of variation to study old questions
 - Impact of unemployment insurance benefits on job-search and job-finding
 - Role of various financial intermediaries in providing liquidity in a crisis