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

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

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

30% Change in Debit Spending

-60  -50  -40  -30  -20  -10   0   10   20   30

Feb. 01  Mar. 07  Apr. 11  May 16

March 13
National Emergency Declared

April 15
EIP Payments from Treasury

Lowest
Income Quartile 1
Income Quartile 2
Income Quartile 3
Income Quartile 4
Highest

Impact of Paycheck Protection Program on Low-Income Employment

Daily Net Flows to Corporate Bond Funds and ETFs

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