The Economic Impacts of COVID -19: **Evidence from a New Public Database Built Using Private Sector Data** FTA Talks October 15, 2020 KRONOS PAYCHEX Intuit )earnin<sup>~</sup> COINOUT affinity womply solutións **burningglass** homebase ŻEARN **OPPORTUNITY** 

Motivation: Measuring the Impacts of COVID-19

- How has COVID-19 affected the American economy and what policies can best mitigate its adverse impacts going forward?
- Since Kuznets (1941), macroeconomic policy decisions have been based on data from surveys of households and businesses
- These data provide vital aggregate information (GDP, unemployment rates), but have two key limitations
  - 1. Available only at low frequencies, often with significant lags
  - 2. Cannot be disaggregated to examine variation across areas or subgroups

## This Project

- We build a publicly available economic tracker using transaction data from several private companies to measure daily economic activity by ZIP code, income group, and industry
- Use these new data to analyze economic impacts of COVID-19 pandemic:
  - 1. [Mechanisms] Why did COVID-19 lead to unprecedented job losses?
  - 2. [Policy Responses] Causal effects of fiscal stabilization policies enacted to date

### Outline

1. Data

- 2. Impacts of COVID-19
- 3. Impacts of Stabilization Policies
- 4. Policy Implications

| Data |  | Impacts of<br>COVID-19 | $\mathbb{Z}$ | Impacts of<br>Stabilization<br>Policies | $\searrow$ | Policy<br>Implications | > |
|------|--|------------------------|--------------|---|------------|------------------------|---|
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**Data Partners** 



#### Changes in Consumer Spending: National Accounts vs. Credit/Debit Card Data

Food Services in Affinity Solutions Purchase Data vs. Monthly Retail Trade Survey



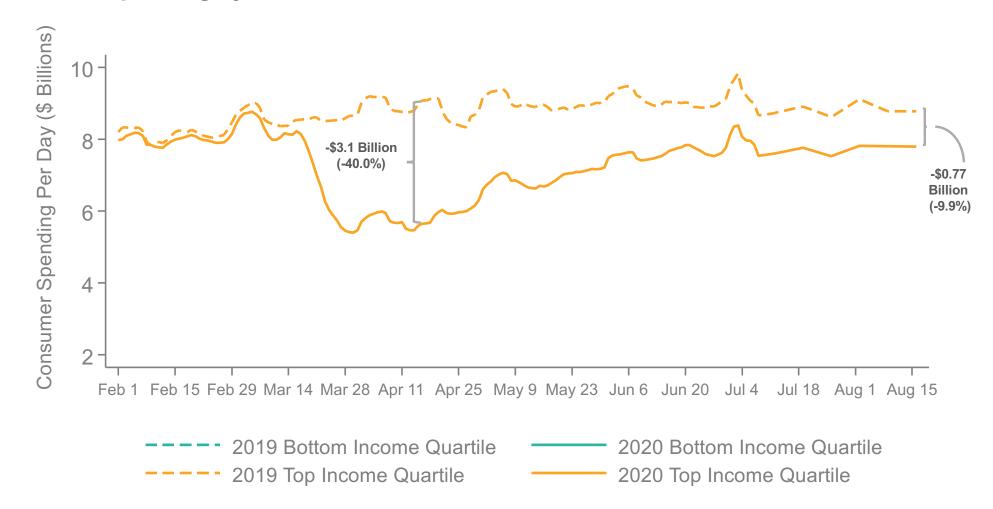
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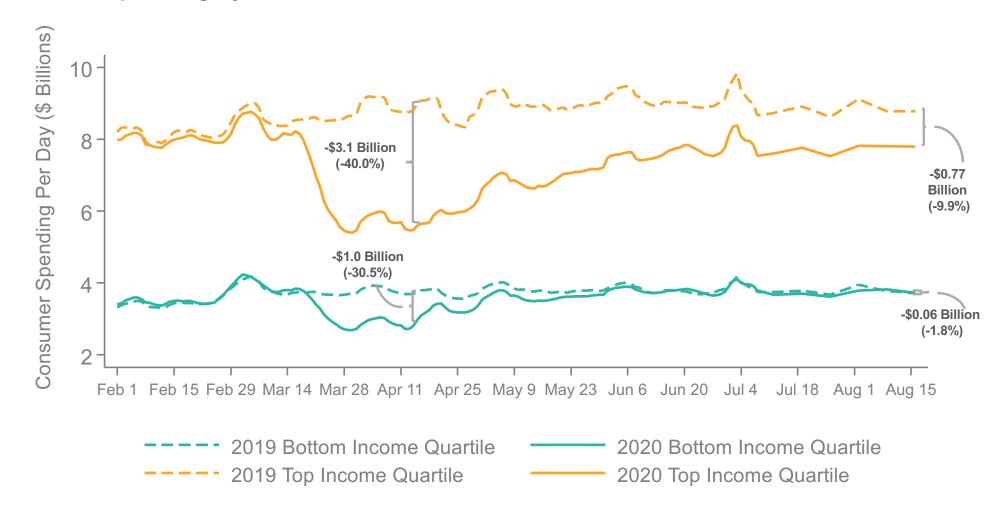




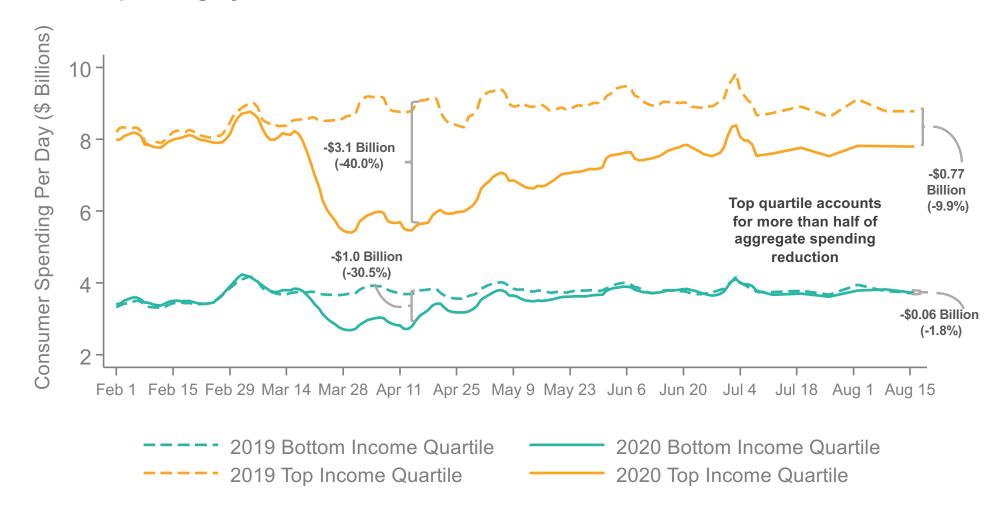
# Impacts of COVID-19



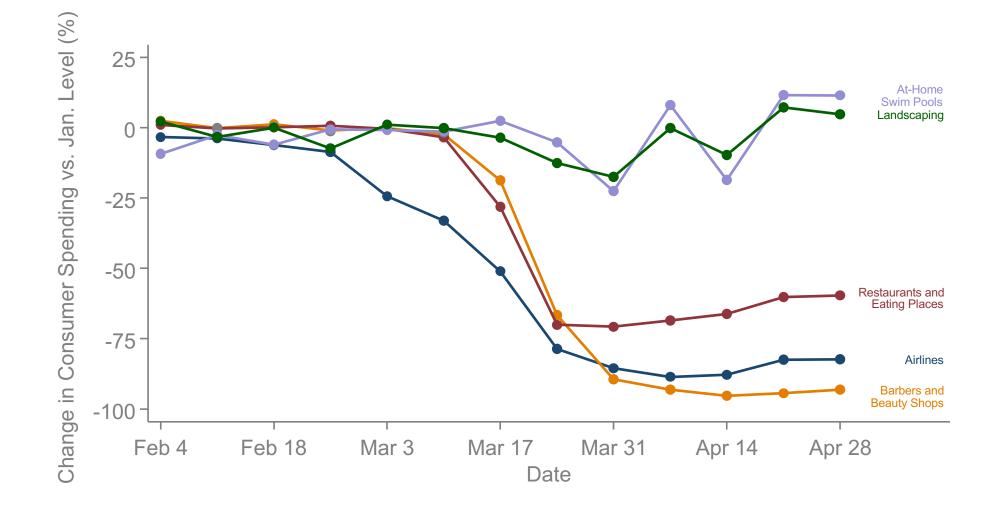
### **Consumer Spending by Income Quartile**



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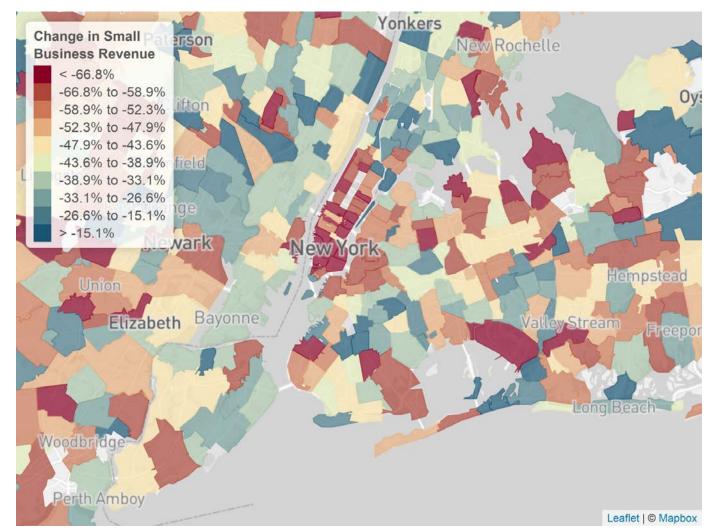


### **Changes in Consumer Spending by Sub-Category**

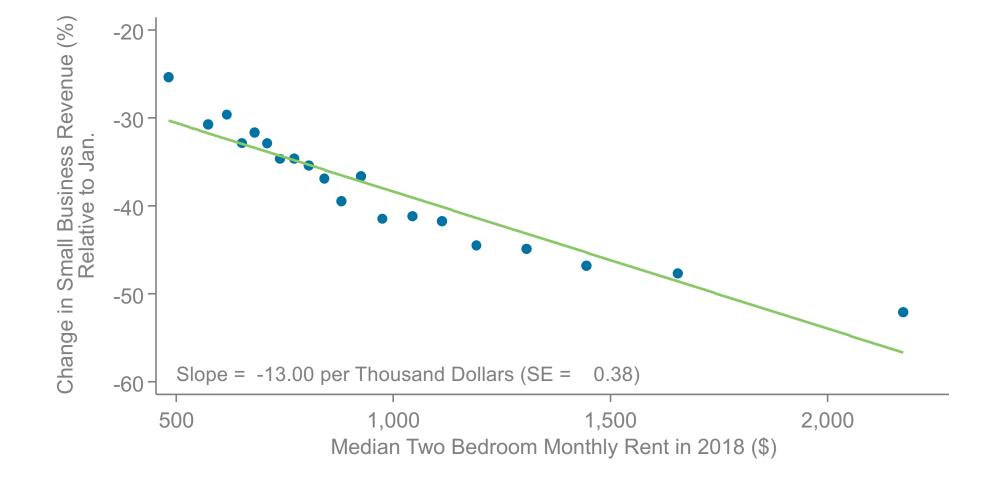


# **Business Revenues**

#### Changes in Small Business Revenues from January to April by ZIP Code New York



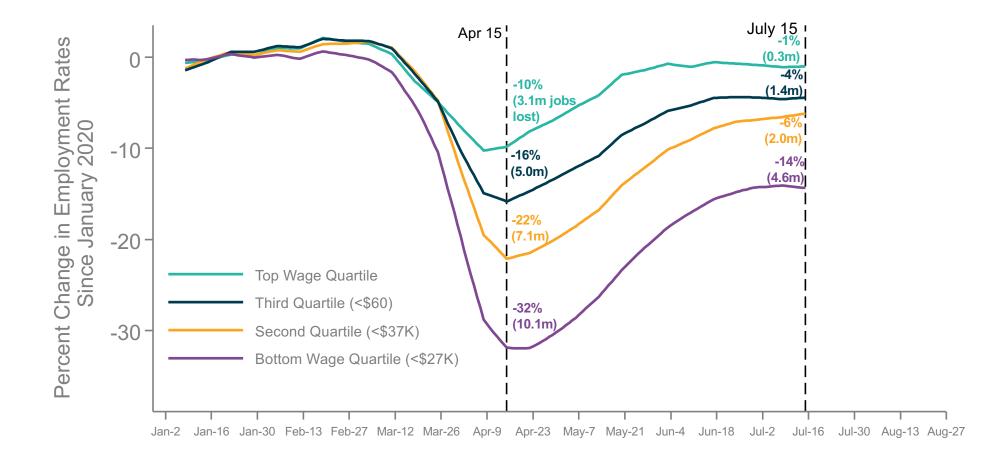
### Changes in Small Business Revenues vs. Rent, by ZIP Code



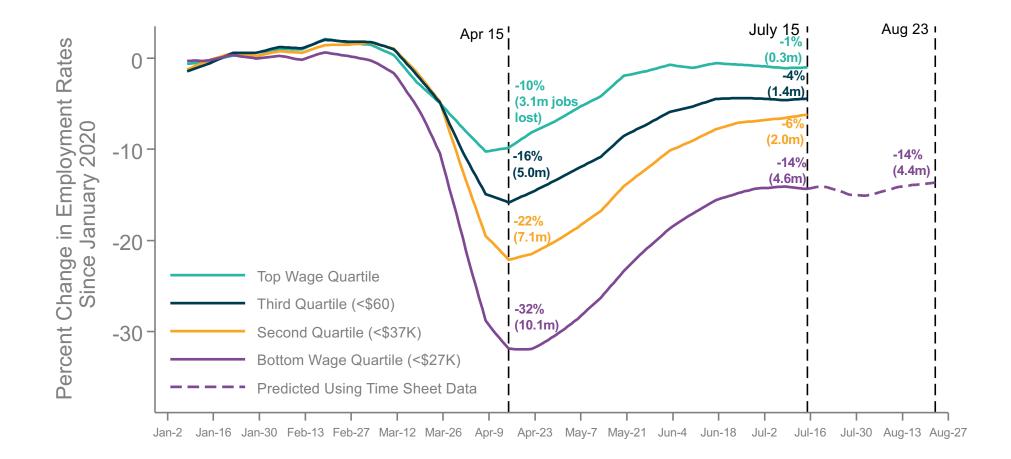


# Employment

### **Employment Changes by Wage Quartile**

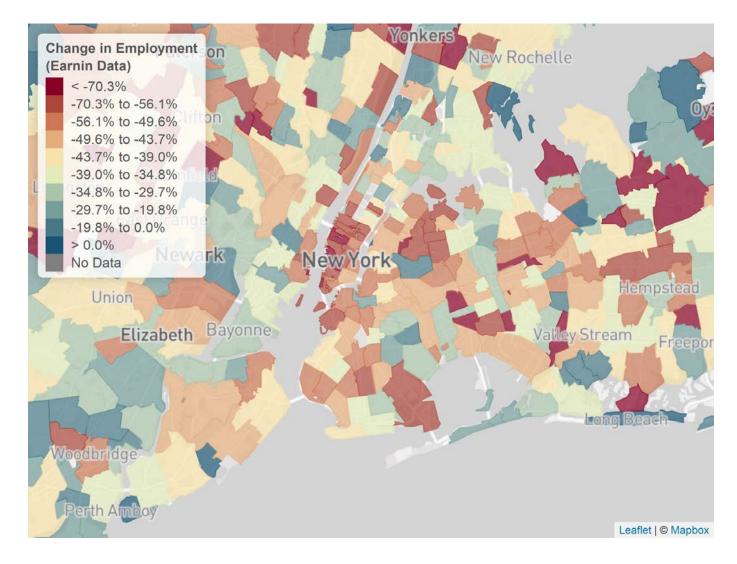


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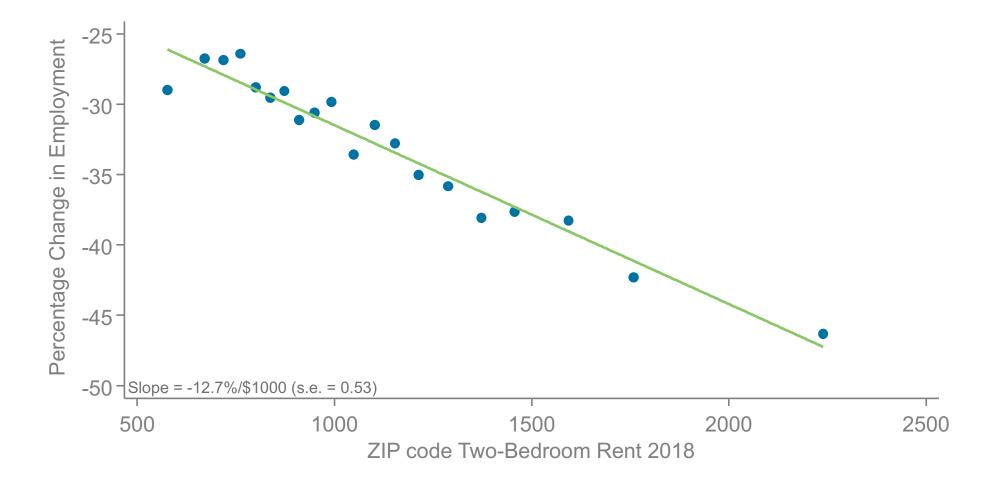


## Changes in Employment Rates by ZIP Code

New York



### Changes in Bottom-Wage-Quartile Employment Rates vs. Rent, by ZIP Code From January to April 2020





## Impacts of Stabilization Policies



# **State-Ordered Reopenings**

### **Causal Effect of Re-Opening on Consumer Spending**

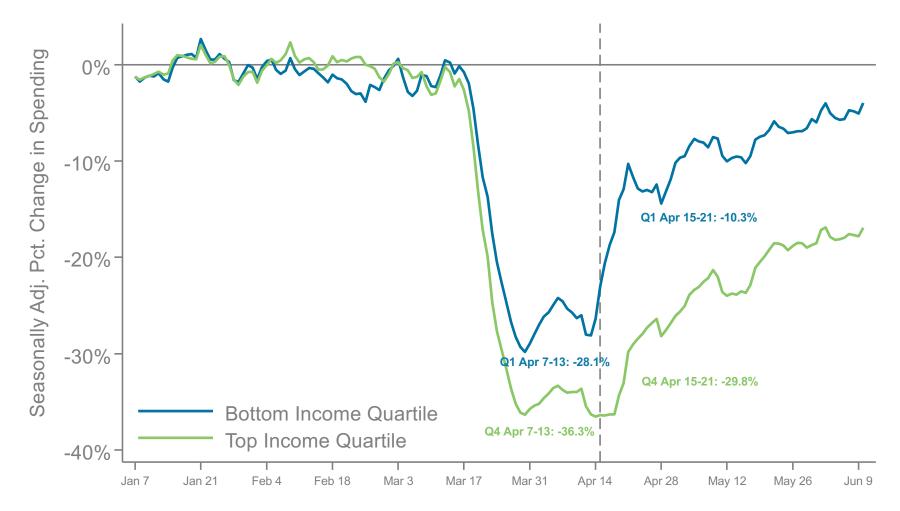
Case Study of New Mexico vs. Colorado





# **Stimulus Payments**



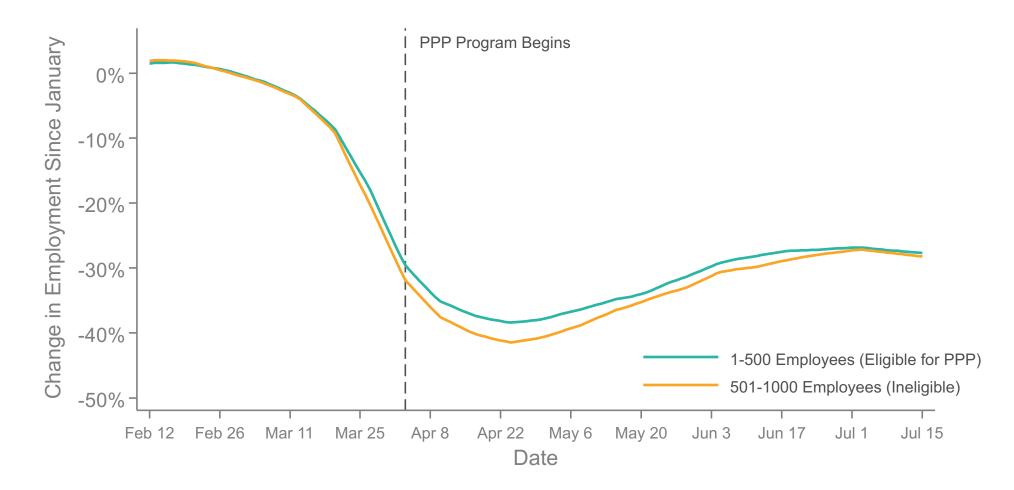




## Loans to Small Businesses

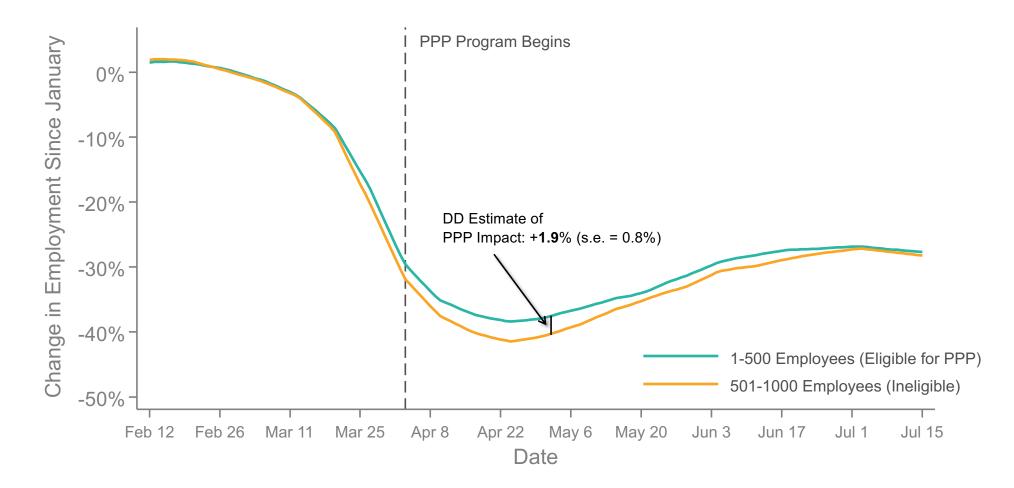
### Impact of Paycheck Protection Program on Low-Wage Employment

Change in Employment Rates by PPP Eligibility, Reweighted to Match Industries, Excl. Food Services



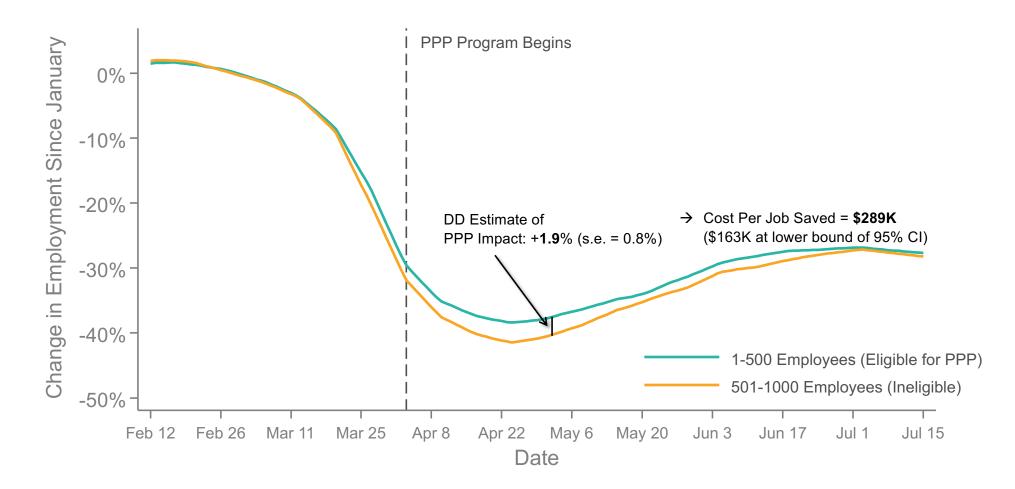
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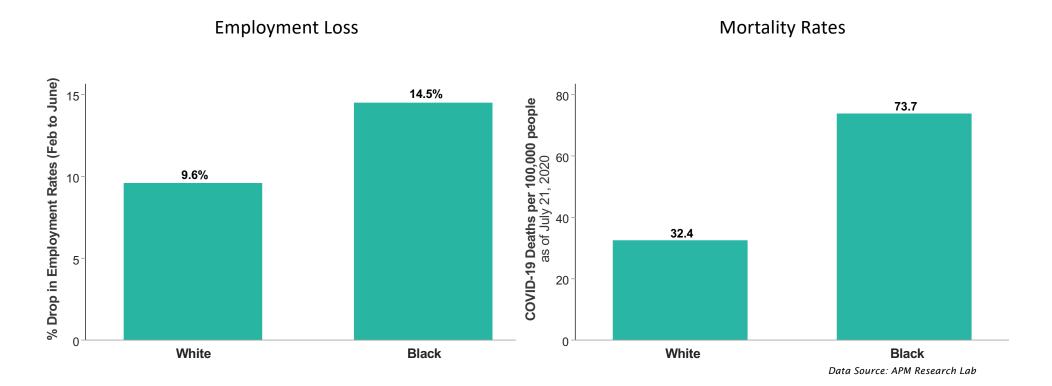


# Long-Term Impacts

## Effects of COVID on Educational Progress by Income Group



## Impacts of COVID-19 on Employment and Mortality by Race





# **Policy Implications**

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- Limited capacity to restore consumer spending via traditional economic tools in the midst of the pandemic
  - Impacts of stimulus and loans/payroll tax cuts to small businesses blunted when spending is constrained by health concerns
  - Long-term solution lies in addressing virus itself and public health efforts to restore consumer confidence

#### **Short-Term Policy Implications**

- In the meantime, may be most fruitful to use economic policy to limit hardship among lowincome workers who have lost their jobs
  - Extending unemployment benefits and social safety net may be a more impactful use of scarce resources than stimulus checks to all households or loans to all businesses
  - May be a role for sectoral training programs and place-based policies targeting hardest hit areas (e.g., low-income workers in affluent counties)
  - Important to take potential long-term impacts on children into account, e.g. in decisions on when to re-open schools vs. businesses

## A New Approach to Economic Policy in the Age of Big Data

- You can see how these metrics are evolving in real-time yourself in your county at <u>www.tracktherecovery.org</u>
- Partnering with government statistical agencies and additional companies to build this into a new platform of "real time national accounts"
- Will support a new approach to public policy in the age of big data: precise feedback as you make policy decisions, permitting adjustments as you go

### **Opportunity Insights Team**





















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