

# Racial Disparities in Unemployment during the COVID-19 Pandemic and Recovery

Robert Fairlie - University of California, Santa Cruz  
Kenneth Couch – University of Connecticut  
Huanan Xu – Indiana University

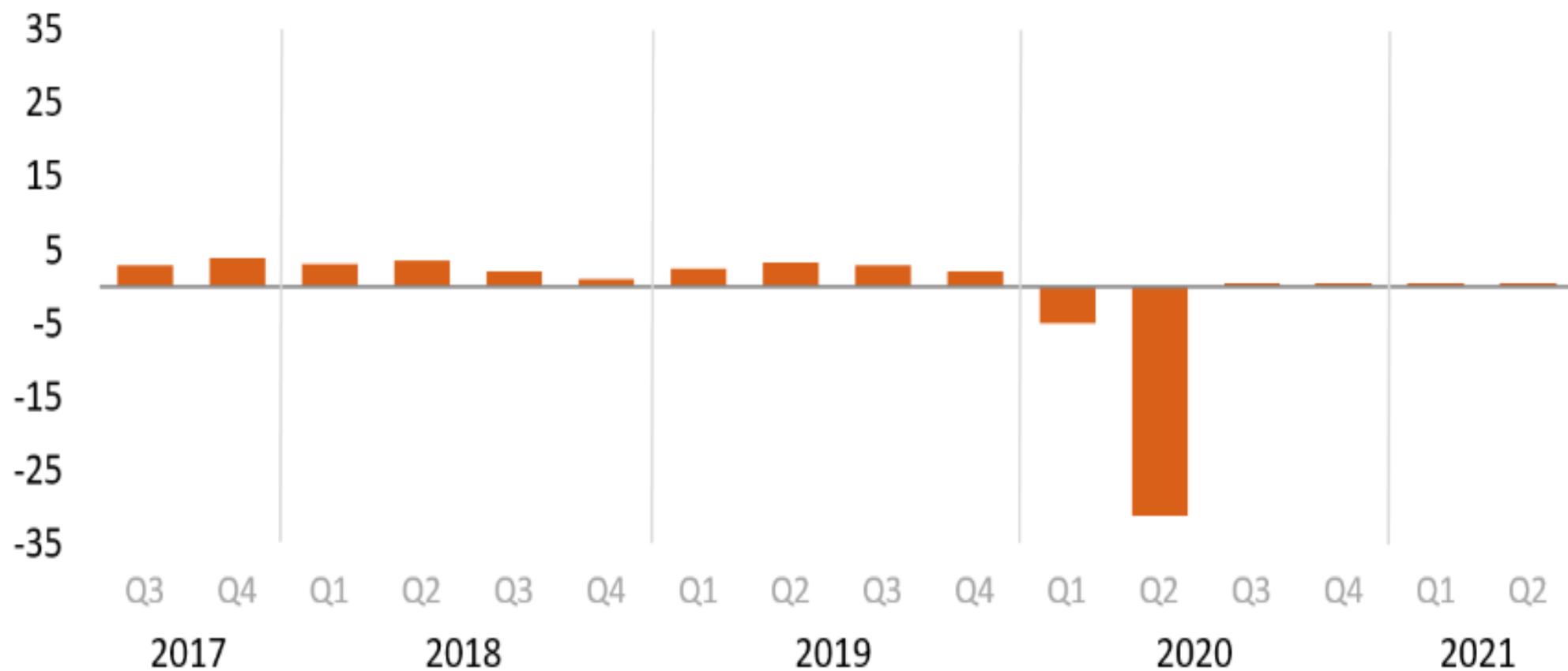
“Racial Disparities in Today's Economy”  
Federal Reserve Bank of Boston Conference

October 4, 2021

# The Pandemic

- March 11, 2020: The World Health Organization (WHO) declared COVID-19 a pandemic.
- March 16, 2020: San Francisco Bay Area imposed shelter-in-place restrictions
- March 19, 2020: State of California
- March 20, 2020: New York State
- By early April: most states imposed social distancing restrictions

## Real GDP: Percent change from preceding quarter



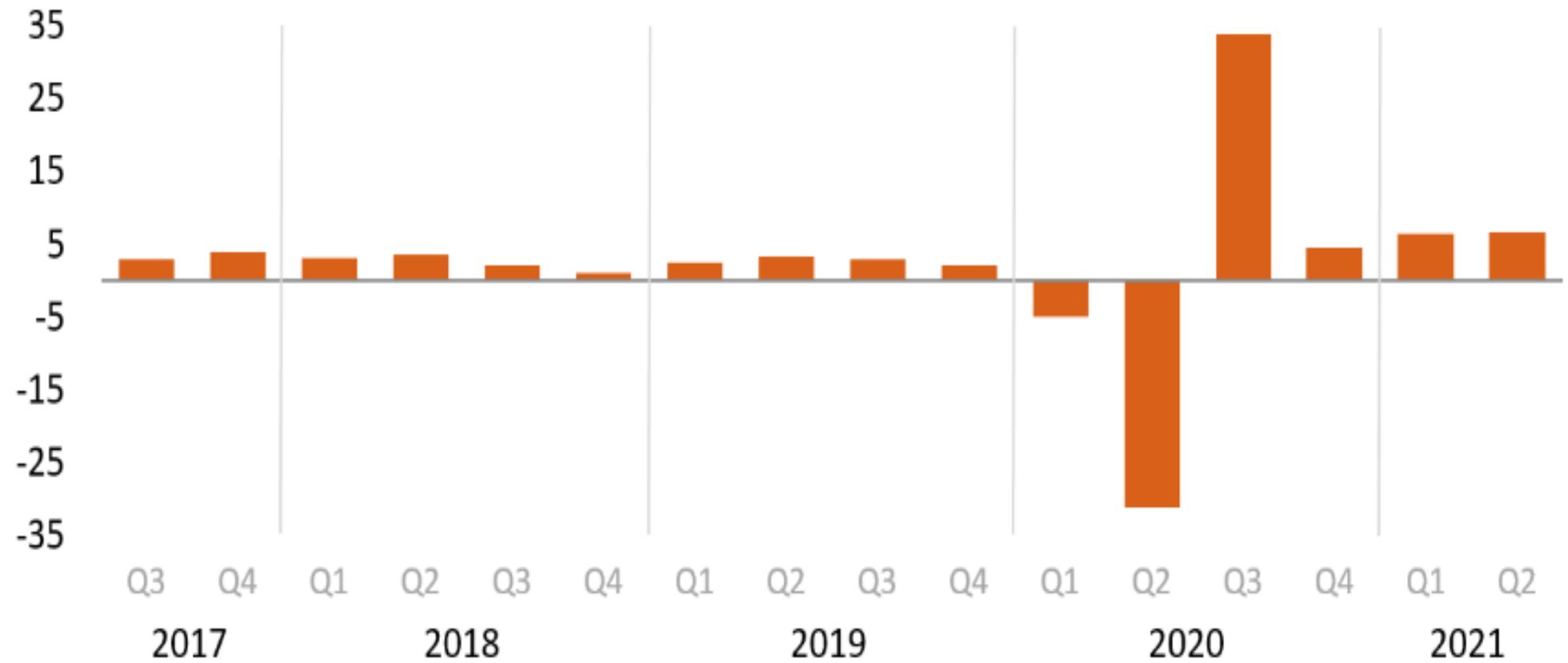
U.S. Bureau of Economic Analysis

Seasonally adjusted at annual rates

# Pandemic Recession

- National Bureau of Economic Research
- Peak: February 2020
- Trough: April 2020
- Length of Contraction: 2 months

## Real GDP: Percent change from preceding quarter



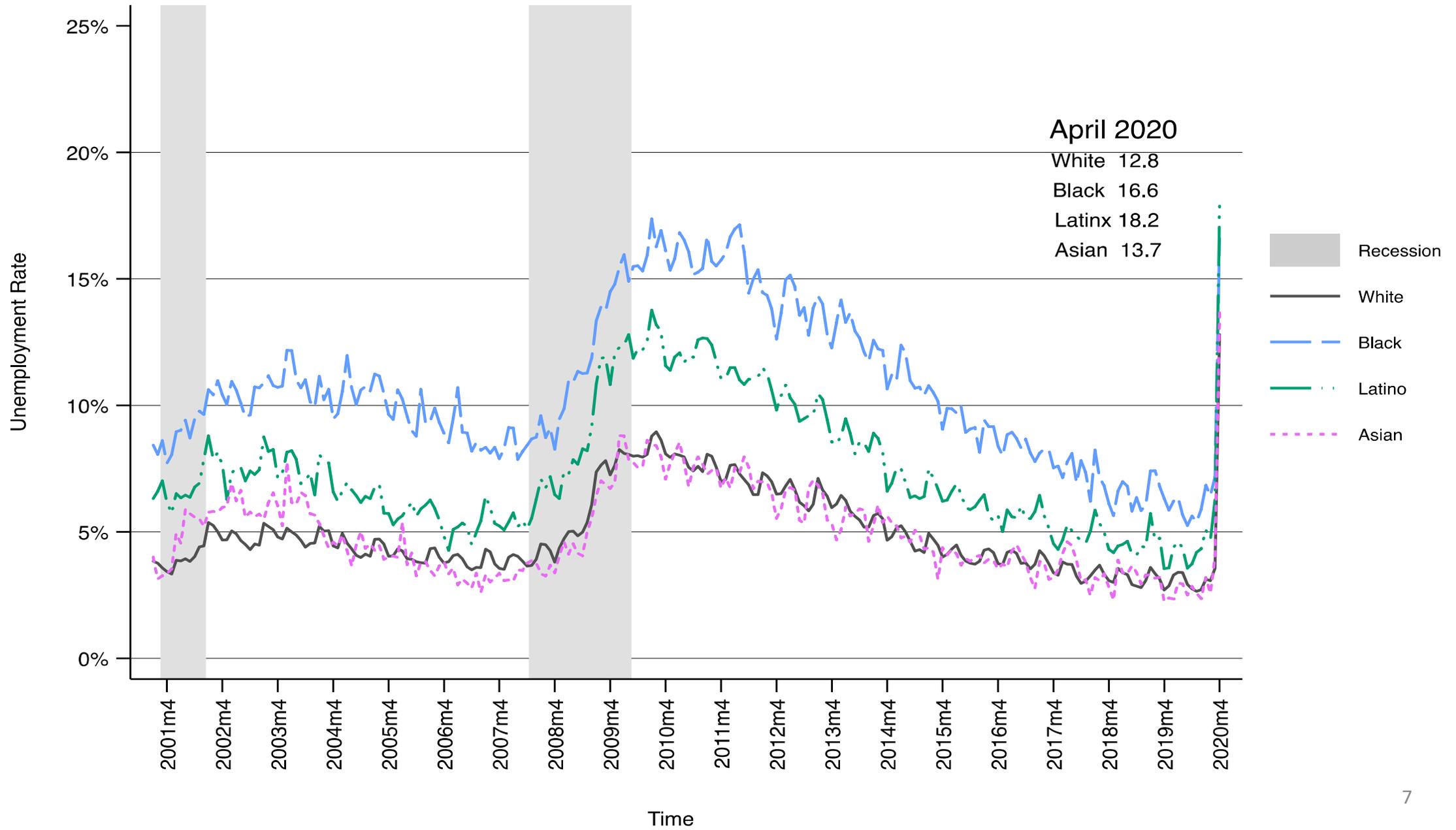
U.S. Bureau of Economic Analysis

Seasonally adjusted at annual rates

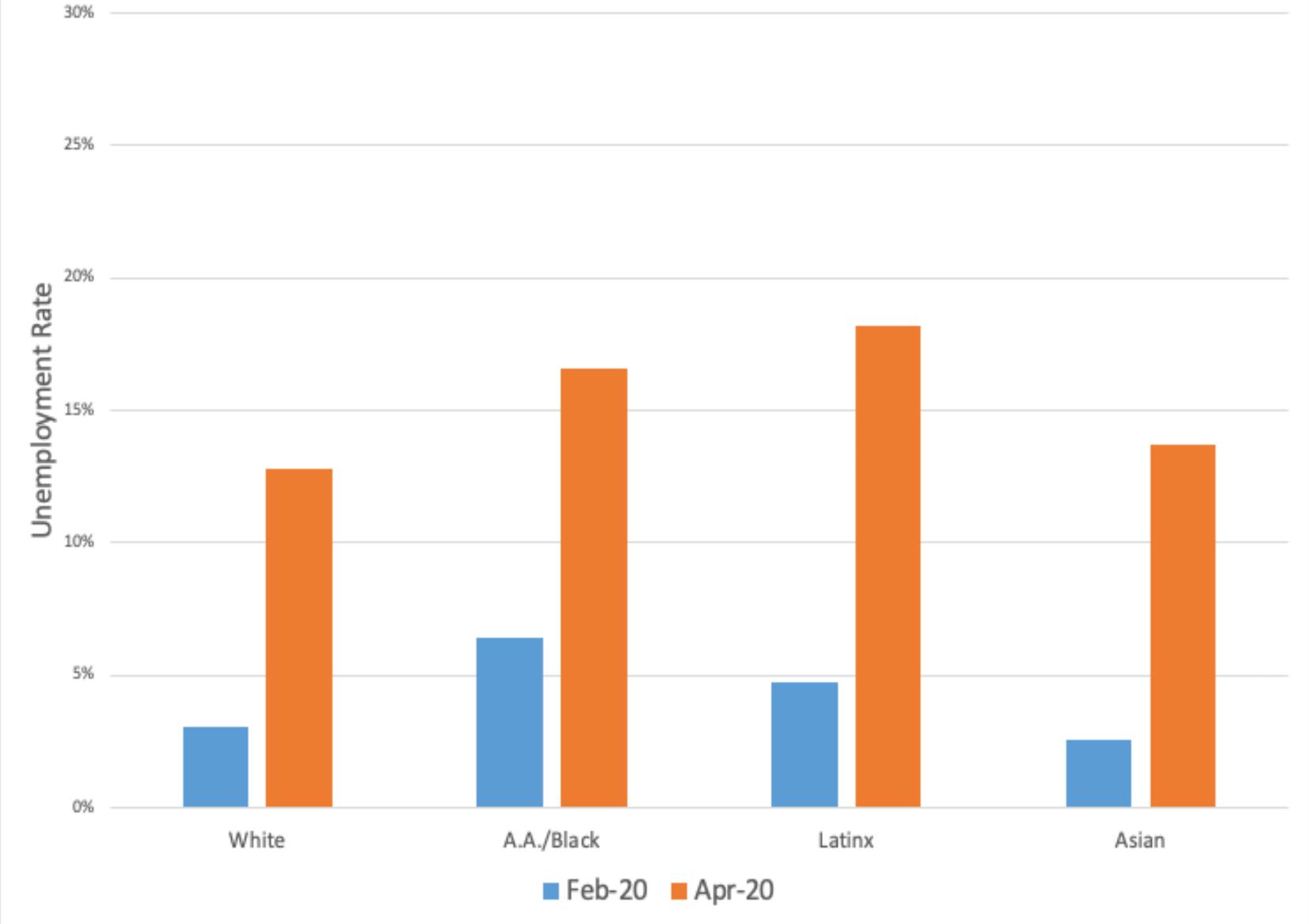
# Unemployment: Key Questions

- How large were the early-stage impacts of COVID-19 on unemployment?
- Were there disproportionate effects on minority unemployment?
- Has unemployment improved in the recovery?
- Has unemployment disproportionately improved?
- What contributed to disproportionate effects?

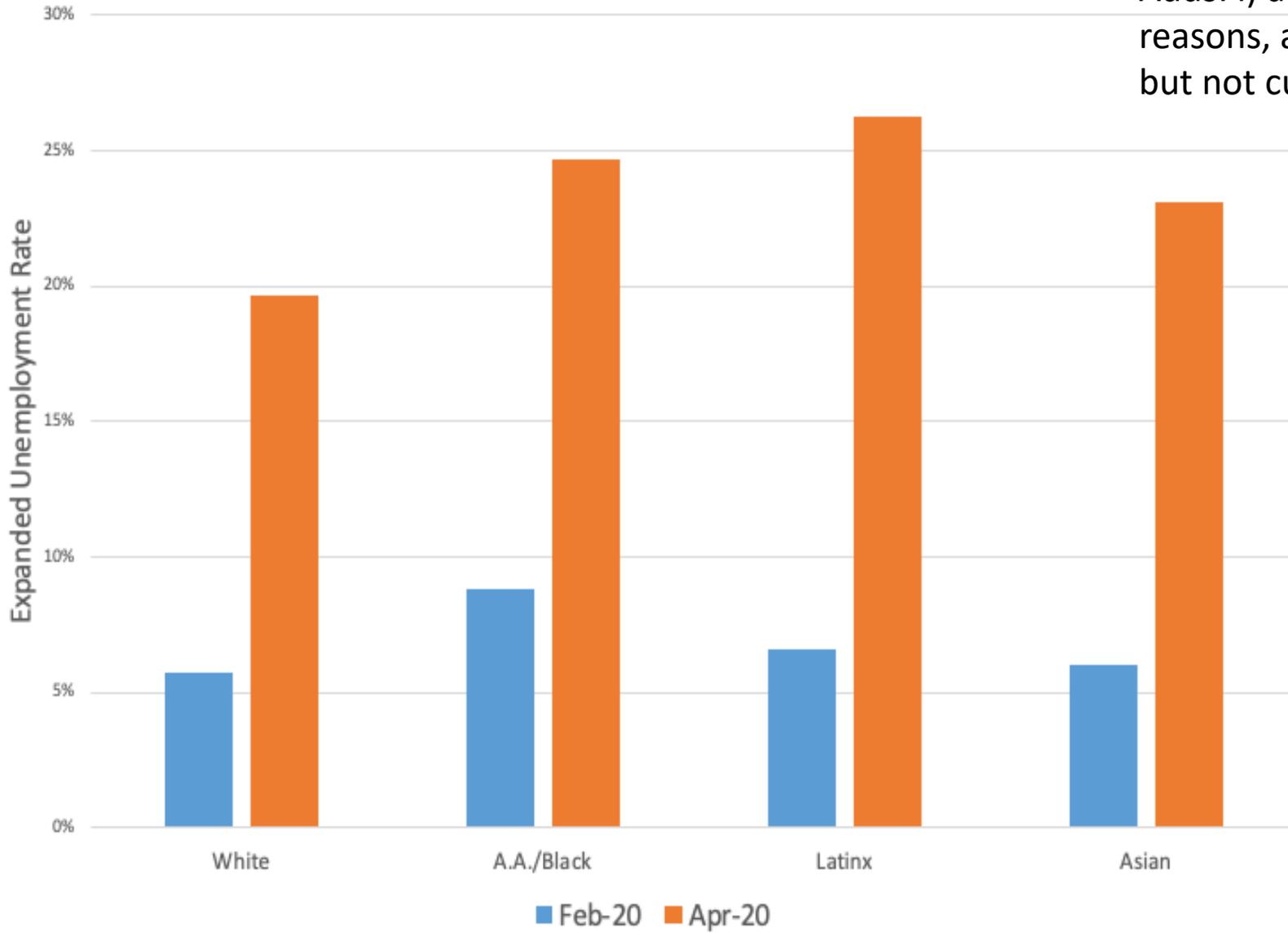
Figure 1. Unemployment Rate by Race, Not Seasonally Adjusted, 2001 January to 2020 April



**Figure 2: Unemployment Rates before and after COVID-19**



**Figure 4: Unemployment Rates before and after COVID-19  
(Upper-Bound Measure)**

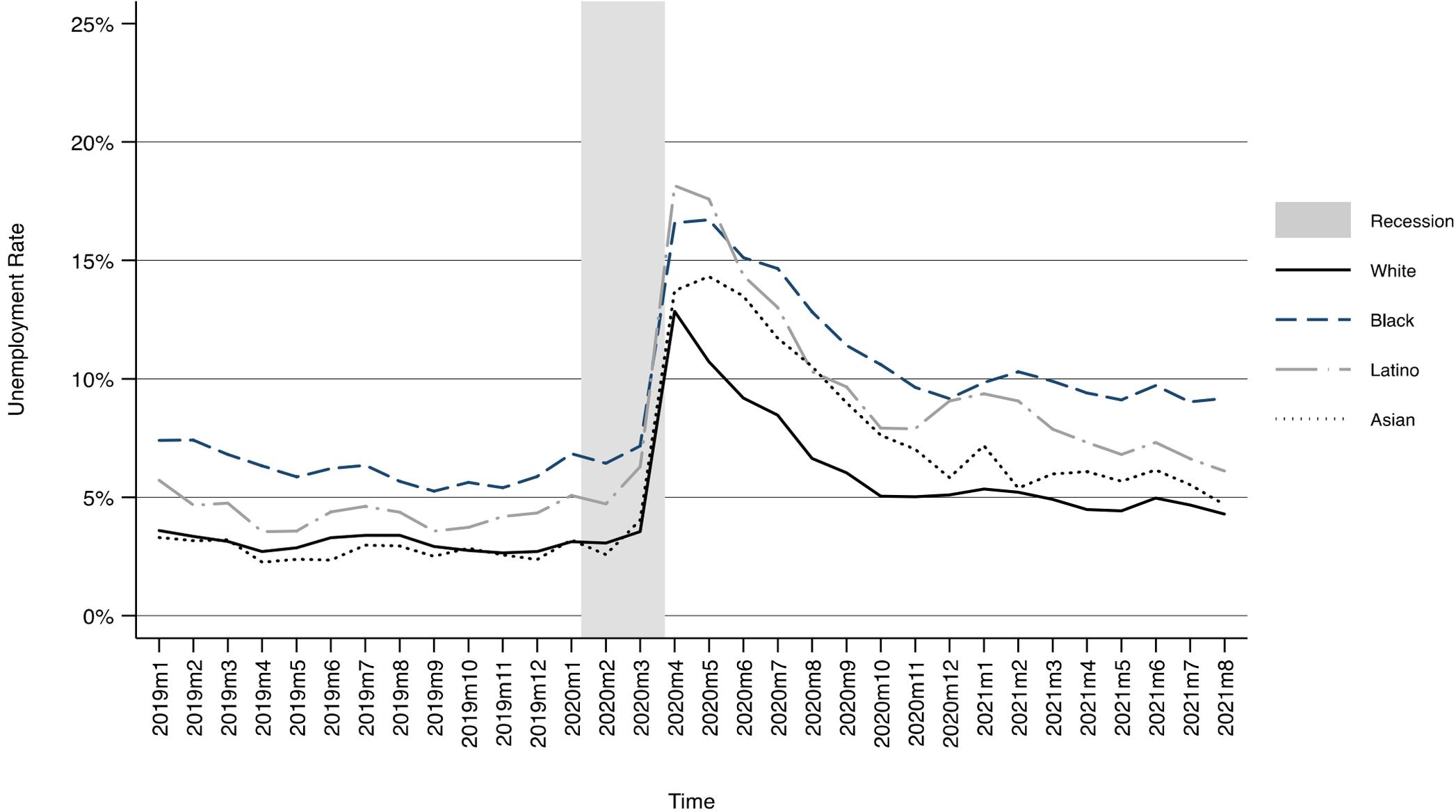


Adds: i) absent from work for other reasons, and ii) NILF wanting a job but not currently looking

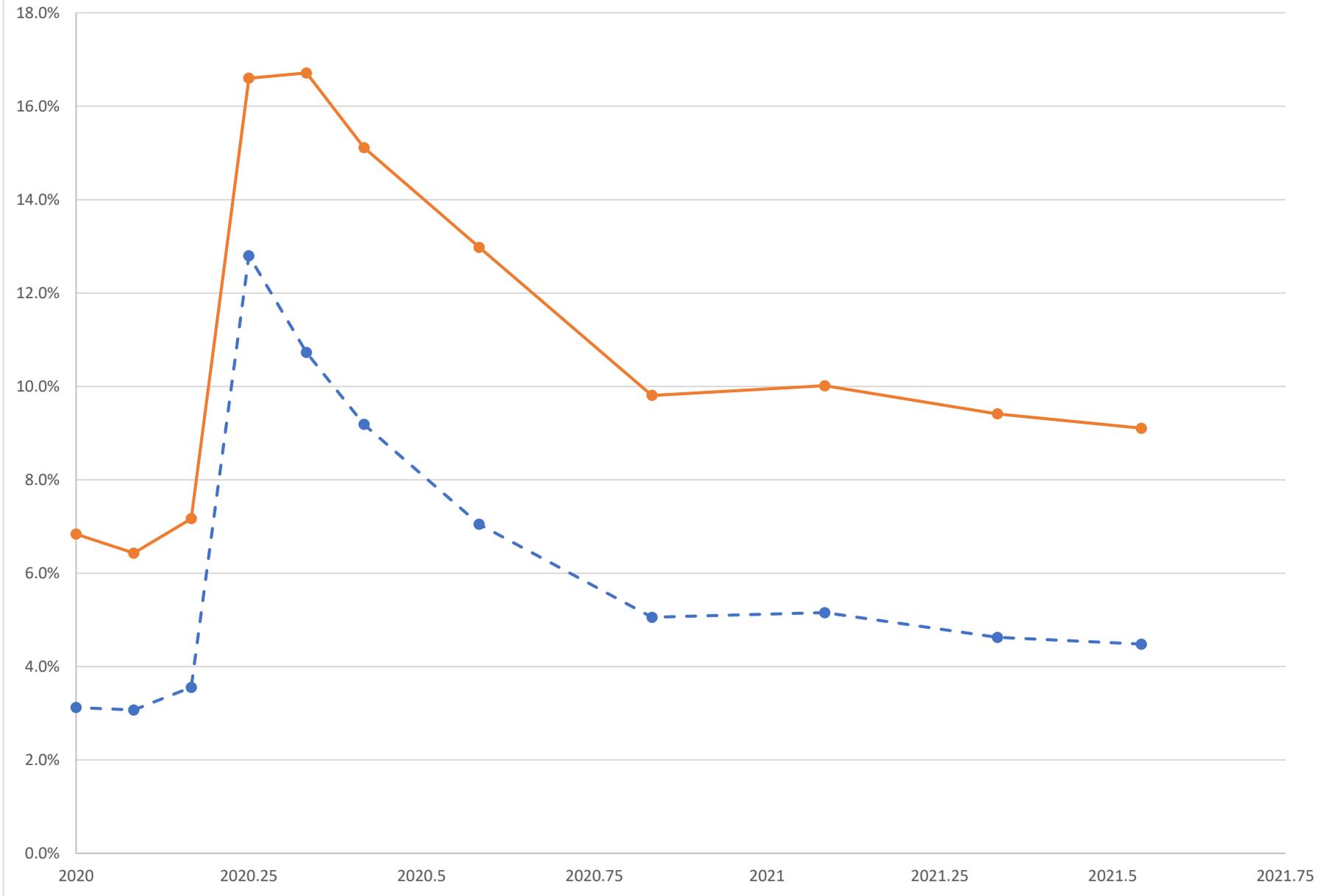
# Data

- Data are the Basic Monthly Files from the Current Population Survey (CPS)
- Source of the official household-based survey measure of unemployment.
- Conducted monthly by the U.S. Bureau of the Census and the U.S. Bureau of Labor Statistics.
- Each survey is representative of the civilian non-institutional population and contains observations for more than 130,000 people.
- Use monthly data over the pandemic focusing on April 2020 to August 2021 (the latest data available).
- Estimate impacts monthly for April-June 2020, and then quarterly to June 2021. 2021 Q3 includes only July and August 2021.

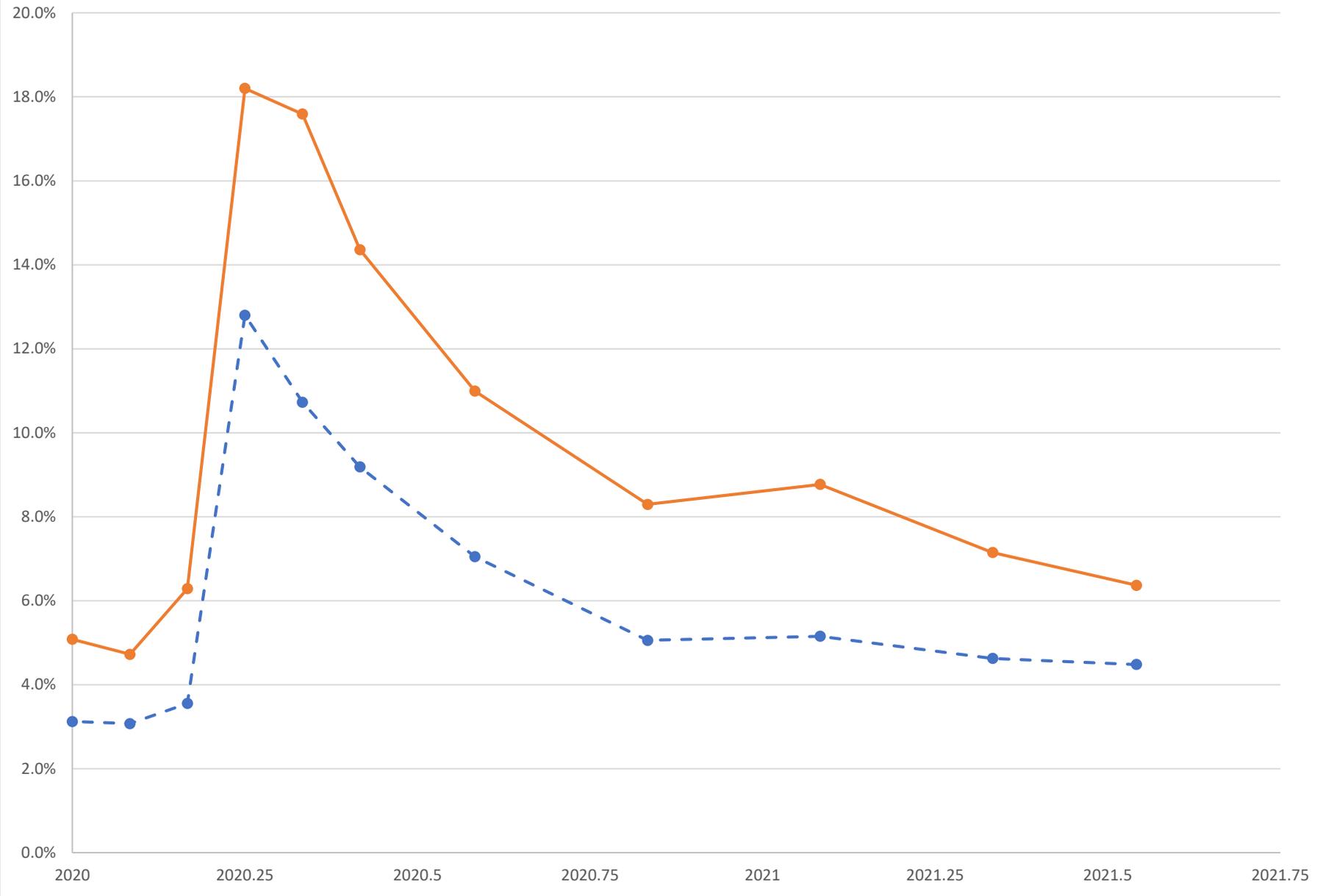
Figure 2. Unadjusted Unemployment Rate by Race, January 2019 to August 2021



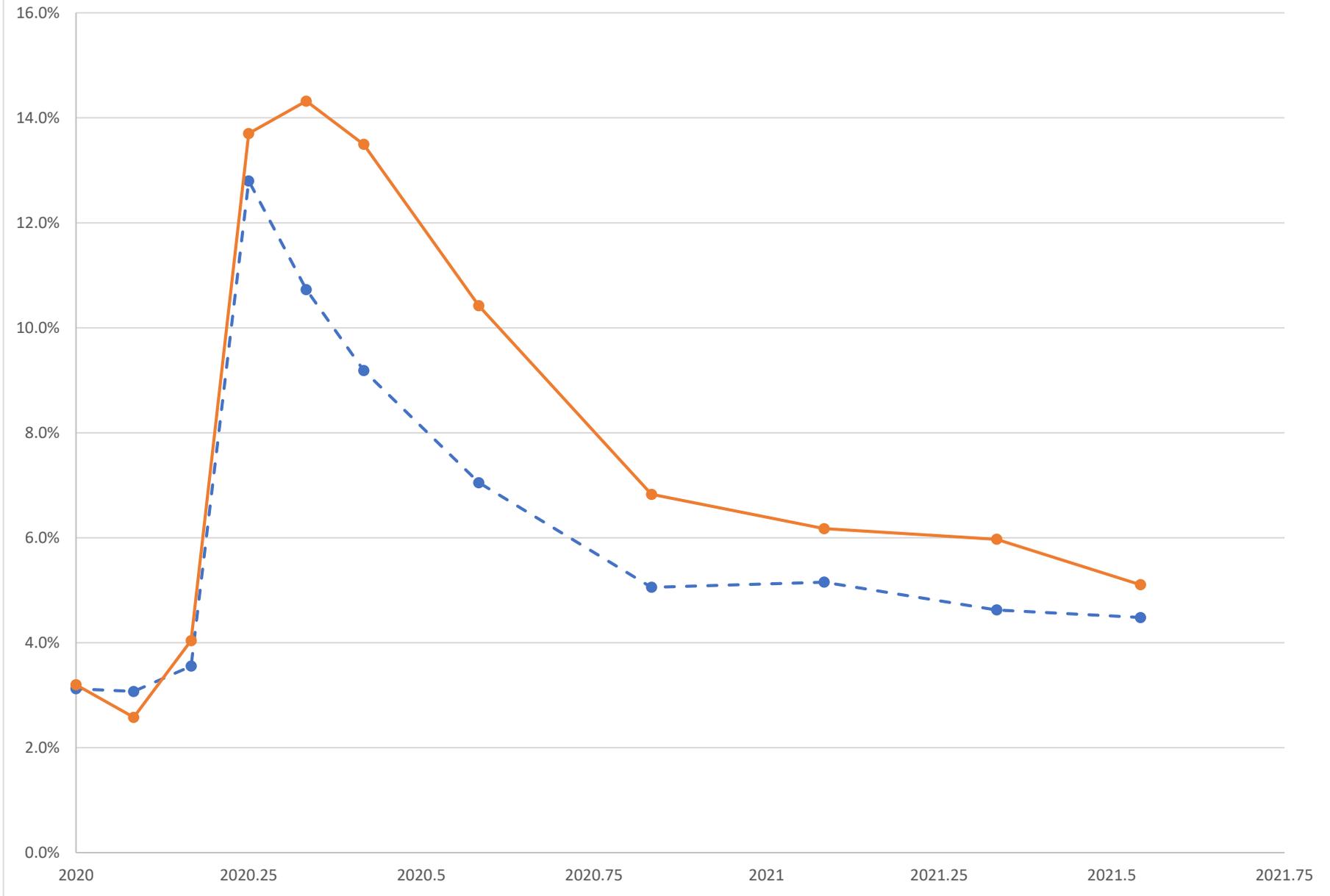
### Black Unemployment (January 2020 to August 2021)



Latinx Unemployment (January 2020 to August 2021)



Asian Unemployment (January 2020 to August 2021)



# Regressions

- Estimate the impacts of COVID-19 on the evolution of racial unemployment rate gaps in the pandemic
- Control for individual, job and geographical characteristics
- Control for pre-pandemic time trends, seasonality and different comparison time periods

### Regression Estimates of Racial Gaps in Unemployment (Relative to Pre-Pandemic Gaps)

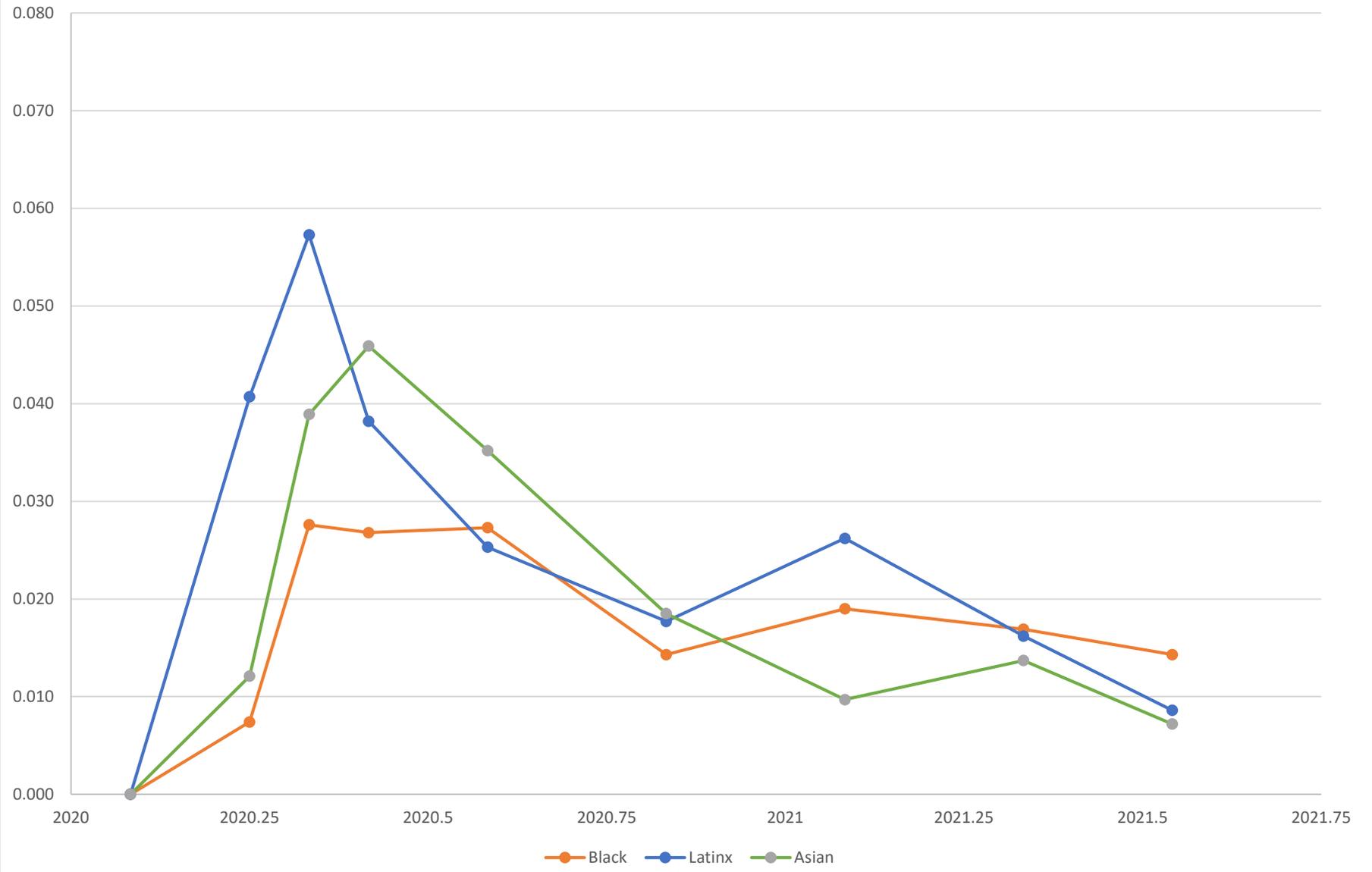


Table 3. Risk Factors for Unemployment from COVID-19

	Risk Factor (Feb.2017 – Feb. 2020)		April 2020 to June 2020
	Black	White	National Unemployment Rate
<b>Essential</b>			
Nonessential industry	16.5%	15.5%	27.2%
Essential industry	83.5%	84.6%	10.4%
<b>Education</b>			
High school dropout	7.9%	4.9%	21.6%
High school grad	31.5%	24.6%	16.1%
Some college	32.5%	28.4%	14.8%
College grad	18.3%	26.9%	9.3%
Graduate school	9.8%	15.2%	5.6%
<b>Region</b>			
Northeast	17.2%	19.3%	14.7%
Midwest	16.2%	26.9%	13.1%
South	57.2%	34.0%	11.2%
West	9.5%	19.8%	14.0%
<b>Experience</b>			
Potential experience (years)	21.4	24	
<b>Major industry</b>			
Agriculture, forestry, fishing, and hunting	0.4%	1.7%	5.0%
Mining	0.2%	0.5%	12.0%
Construction	3.8%	7.0%	12.2%
Manufacturing	8.4%	10.3%	11.2%
Wholesale and retail trade	12.7%	13.1%	14.2%
Transportation and utilities	8.7%	4.9%	12.3%
Information	1.7%	2.0%	12.1%
Financial activities	5.7%	7.4%	5.5%
Professional and business services	10.4%	12.6%	8.9%
Educational and health services	27.1%	23.1%	10.0%
Leisure and hospitality	10.4%	8.2%	33.6%
Other services	4.3%	4.7%	17.9%
Public administration	6.3%	4.7%	3.7%

Table 3. Risk Factors for Unemployment from COVID-19			
	Risk Factor (Feb.2017 – Feb. 2020)		April 2020 to June 2020
<b>Major occupation</b>			
Management, business, and financial operations occupations	11.0%	19.4%	5.4%
Professional and related occupation	19.3%	25.5%	8.1%
Service occupations	24.3%	14.2%	23.1%
Sales and related occupations	9.3%	10.6%	15.5%
Office and administrative support occupations	13.4%	11.2%	11.7%
Farming, fishing, and forestry occupations	0.3%	0.6%	9.5%
Construction and extraction occupations	3.2%	4.7%	15.3%
Installation, maintenance, and repair occupations	2.3%	3.3%	11.2%
Production occupations	6.0%	4.9%	14.9%
Transportation and material moving occupations	10.2%	5.4%	17.0%
<b>Telework</b>			
Share of jobs that can be done at home	32.1%	41.7%	
Less than median			15.9%
More than median			9.7%
<b>Health risk</b>			
Exposed to health risk index (Z-score)	0.12	-0.02	
Less than median			10.3%
More than median			15.5%

Table 4. Decompositions - Unemployment April 2020 to August 2021

	April 2020	May 2020	June 2020	Jul-Sep 2020	Oct-Dec 2020	Jan-Mar 2021	Apr-Jun 2021	Jul-Aug 2021	2019
	Black - White Gap in Unemployment Rate								
	3.8	6.0	5.9	5.9	4.8	4.9	4.8	4.6	3.1
Industry	-0.29	-0.13	0.07	0.15	-0.03	-0.49	-0.27	0.21	0.47
Occupation	1.55	1.39	1.04	0.88	0.87	0.93	0.75	0.58	0.22
Education	0.56	0.65	0.35	0.34	0.20	0.19	0.28	0.31	0.21
State	-0.04	0.20	0.12	0.19	0.13	0.20	0.14	0.14	-0.07
Potential exp.	0.13	0.22	0.20	0.12	0.09	0.20	0.11	0.13	0.3
Telework	0.19	0.12	0.10	-0.01	0.03	0.09	0.09	-0.04	0.03
Health risk	-0.16	-0.10	-0.11	-0.12	-0.09	-0.06	-0.06	-0.08	-0.03

	April 2020	May 2020	June 2020	Jul-Sep 2020	Oct-Dec 2020	Jan-Mar 2021	Apr-Jun 2021	Jul-Aug 2021	2019
	Latinx-White Gap in Unemployment Rate								
	5.4	6.9	5.2	3.9	3.2	3.6	2.5	1.9	1.2
Industry	0.05	-0.14	0.20	0.31	0.53	0.34	0.23	0.13	0.29
Occupation	2.29	1.98	1.26	0.99	0.98	1.30	0.75	0.69	0.48
Education	1.00	1.05	0.47	0.41	0.28	0.45	0.38	0.44	0.41
State	0.10	0.67	0.73	0.85	0.84	0.90	0.77	0.55	0.12
Potential exp.	0.14	0.26	0.21	0.12	0.05	0.10	0.05	0.07	0.11
Telework	0.32	0.17	0.11	-0.01	0.04	0.10	0.09	-0.04	0.04
Health risk	0.11	0.06	0.07	0.06	0.01	0.00	0.01	0.03	0.02

	April 2020	May 2020	June 2020	Jul-Sep 2020	Oct-Dec 2020	Jan-Mar 2021	Apr-Jun 2021	Jul-Aug 2021	2019
	Asian-White Gap in Unemployment Rate								
	0.9	3.6	4.3	3.4	1.8	1.0	1.3	0.6	-0.3
Industry	-0.37	-0.22	-0.11	0.07	0.11	0.06	0.02	0.05	0.27
Occupation	0.19	-0.09	-0.05	0.01	-0.01	0.00	-0.08	-0.13	-0.1
Education	-0.72	-0.85	-0.57	-0.50	-0.29	-0.22	-0.35	-0.40	-0.12
State	0.84	1.24	1.56	1.58	1.18	1.04	1.05	0.91	0.15
Potential exp.	-0.01	0.09	0.07	0.08	0.03	0.07	0.04	0.05	0.09
Telework	-0.04	-0.03	-0.04	0.01	-0.01	-0.01	-0.02	0.02	-0.01
Health risk	0.02	-0.01	0.03	0.04	0.01	0.00	0.00	0.02	0.01

# Summary

- All groups hit hard in early stages of pandemic but all groups have improved in the recovery
- The impacts on racial unemployment rate gaps evolved differently over time
  - The impacts on the Black-White gap are stubbornly large, the impacts on the Latinx-White gap were large early but fell to nearly zero, and the impacts on the Asian-White gap are still positive
- Decompositions show that occupational distributions and educational levels were extremely important in the early stages of the pandemic but generally contributed less in the recovery
- Geographical distributions contributed to larger gaps for Latinx and Asians
- Telework and health risk become much less important in recovery