FEDERAL RESERVE BANK of ATLANTA

Data Gaps During the Pandemic: Insights From a Data Consumer

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Economic information used by the Atlanta Fed in support of monetary policy

Regional Economic Information Network (REIN)

Produced by Atlanta Fed

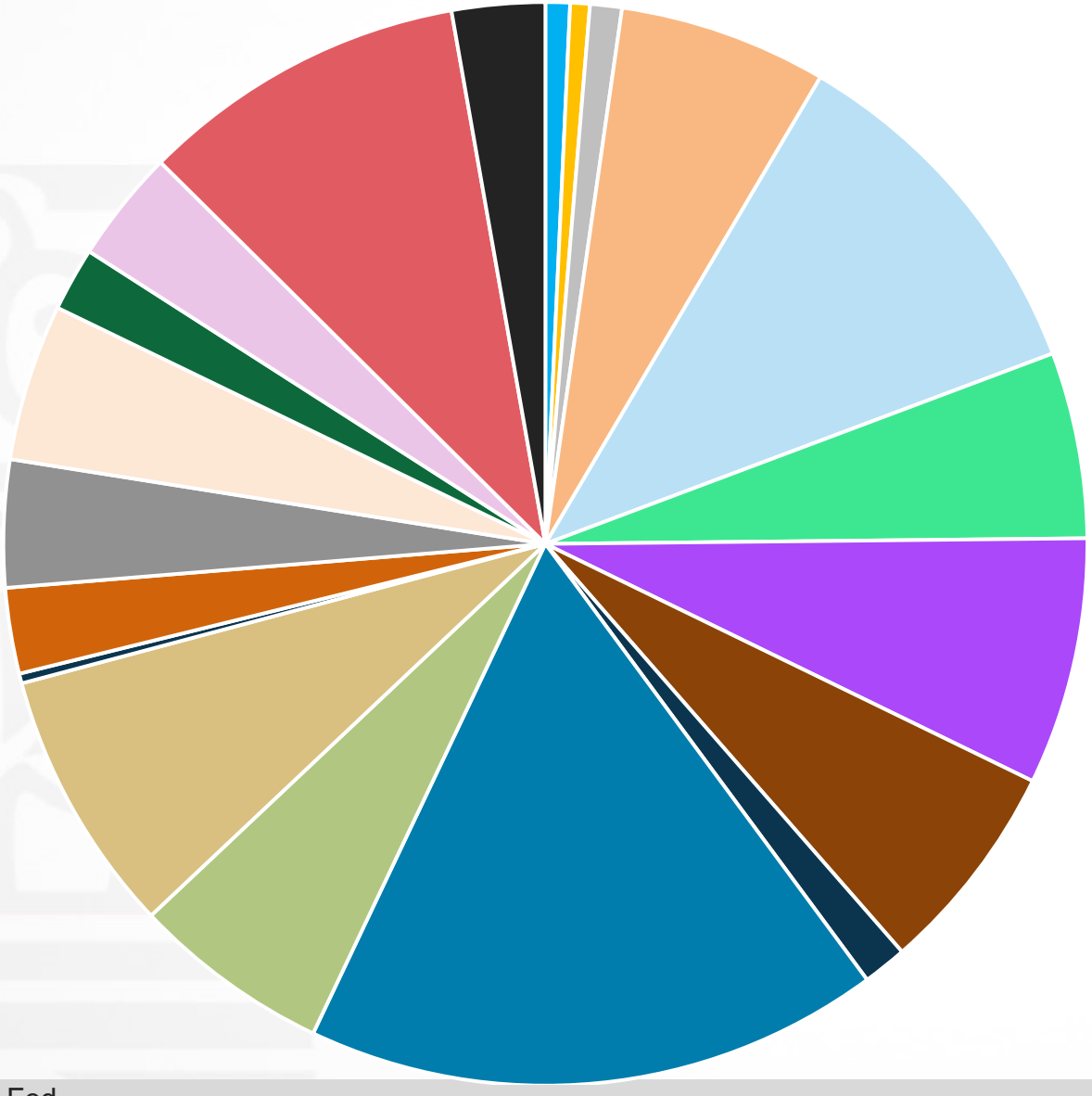
Economic Survey Research Center

- Business Inflation Expectations (BIE)
- The CFO Survey
- Consumer Payments Survey
- Survey of Business Uncertainty
- Outreach Lab

External data sources

- Official Government Statistics/Data
- Additional Data Sources

Atlanta Fed Regional Economic Information Network (REIN): 1369 District contact interviews in 2020



- 11 - Agriculture, Forestry, Fishing and Hunting
- 21 - Mining, Quarrying, and Oil and Gas Extraction
- 22 - Utilities
- 23 - Construction
- 31-33 - Manufacturing
- 42 - Wholesale Trade
- 44-45 - Retail Trade
- 48-49 - Transportation and Warehousing
- 51 - Information
- 52 - Finance and Insurance
- 53 - Real Estate and Rental and Leasing
- 54 - Professional, Scientific, and Technical Services
- 55 - Management of Companies and Enterprises
- 56 - Administrative and Support and Waste Management and Remediation Services
- 61 - Educational Services
- 62 - Health Care and Social Assistance
- 71 - Arts, Entertainment, and Recreation
- 72 - Accommodation and Food Services
- 81 - Other Services (except Public Administration)
- 92 - Public Administration

Source: Atlanta Fed

Data Gaps During the Pandemic

- Given the sudden and abrupt changes during the initial lockdown stage of the pandemic, a clear data need was assessing changes in household and business situations
- This highlighted the importance of data sources that provided dynamic/panel views
  a) Datasets where information is available over time for individuals/businesses (example: Current Population Survey)
  b) Datasets where households and businesses are asked questions about experiences in the past, current conditions, and expectations of the future (example: Current Population Survey, Atlanta Fed Business Surveys)

Data Gaps: Small Businesses

How does the Federal Reserve affect inflation and employment?

"As the Federal Reserve conducts monetary policy, it influences employment and inflation primarily through using its policy tools to influence the availability and cost of credit in the economy."

Source: https://www.federalreserve.gov/faqs/money_12856.htm

Challenge: The impact of the pandemic was extremely different than a typical business cycle downturn, and the most impacted industries had a higher concentration of small businesses.

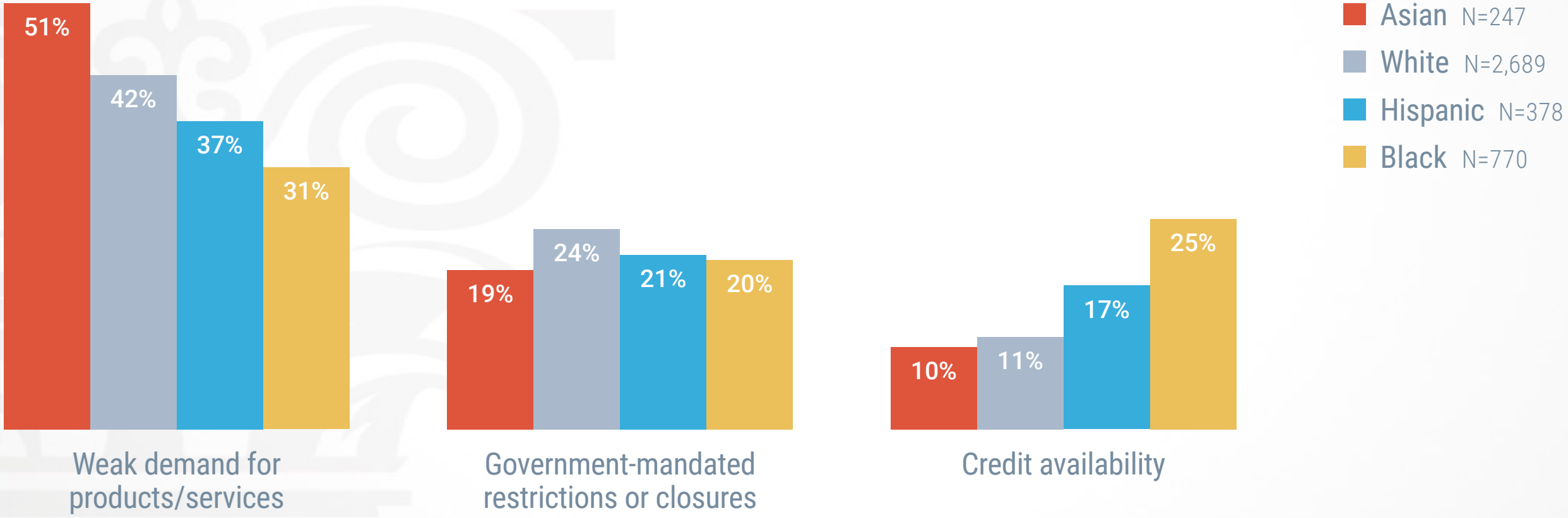
Federal Reserve Small Business Credit Survey

- Annual survey produced as a collaboration among the 12 Federal Reserve Banks
- 2020 SBCS survey conducted in the fall and data/results released in early 2021
- Limitations of the survey: it is a convenience-sample
- Efforts to reduce this data gap: partnership with Census on the development of a finance module for the 2021 Annual Business Survey

Federal Reserve Small Business Credit Survey

SINGLE MOST IMPORTANT CHALLENGE FIRMS EXPECT TO FACE AS A RESULT OF THE PANDEMIC,

Next 12 Months[1,2,3] (% of nonemployers expecting one or more pandemic-related challenges)



Source: Federal Reserve Small Business Credit Survey

Data Gaps: Measuring Progress Toward a More Inclusive Economy

"I believe the Federal Reserve Bank of Atlanta, and the Federal Reserve more generally, can play an important role in helping to reduce racial inequities and bring about a more inclusive economy."

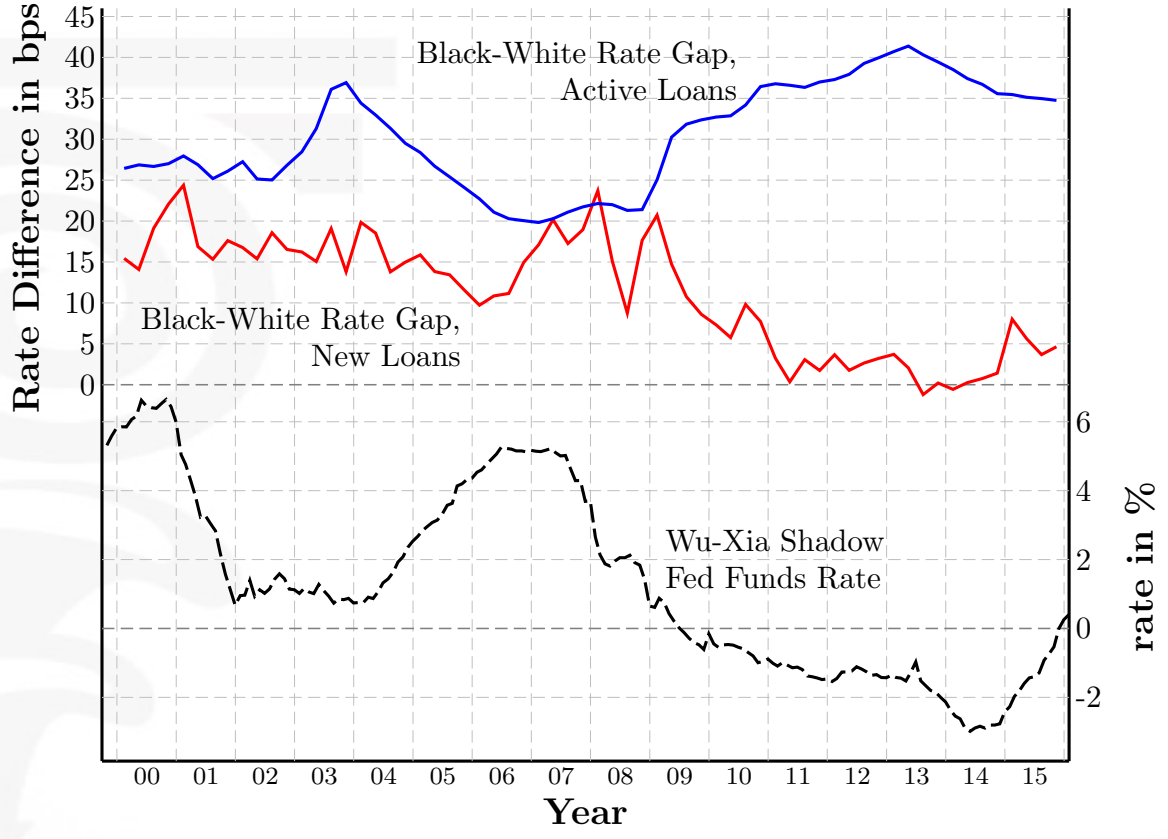
--Raphael Bostic

Federal Reserve's Racism and the Economy Webinar Series

- Employment
- Education
- Housing
- Economics Profession
- Entrepreneurship

Data Challenges: Complicated Matching Efforts Required to Study Racial Disparities

Figure 1: Rates on outstanding mortgages: Black versus Non-Hispanic White Borrowers for mortgages originated between 1996-2015

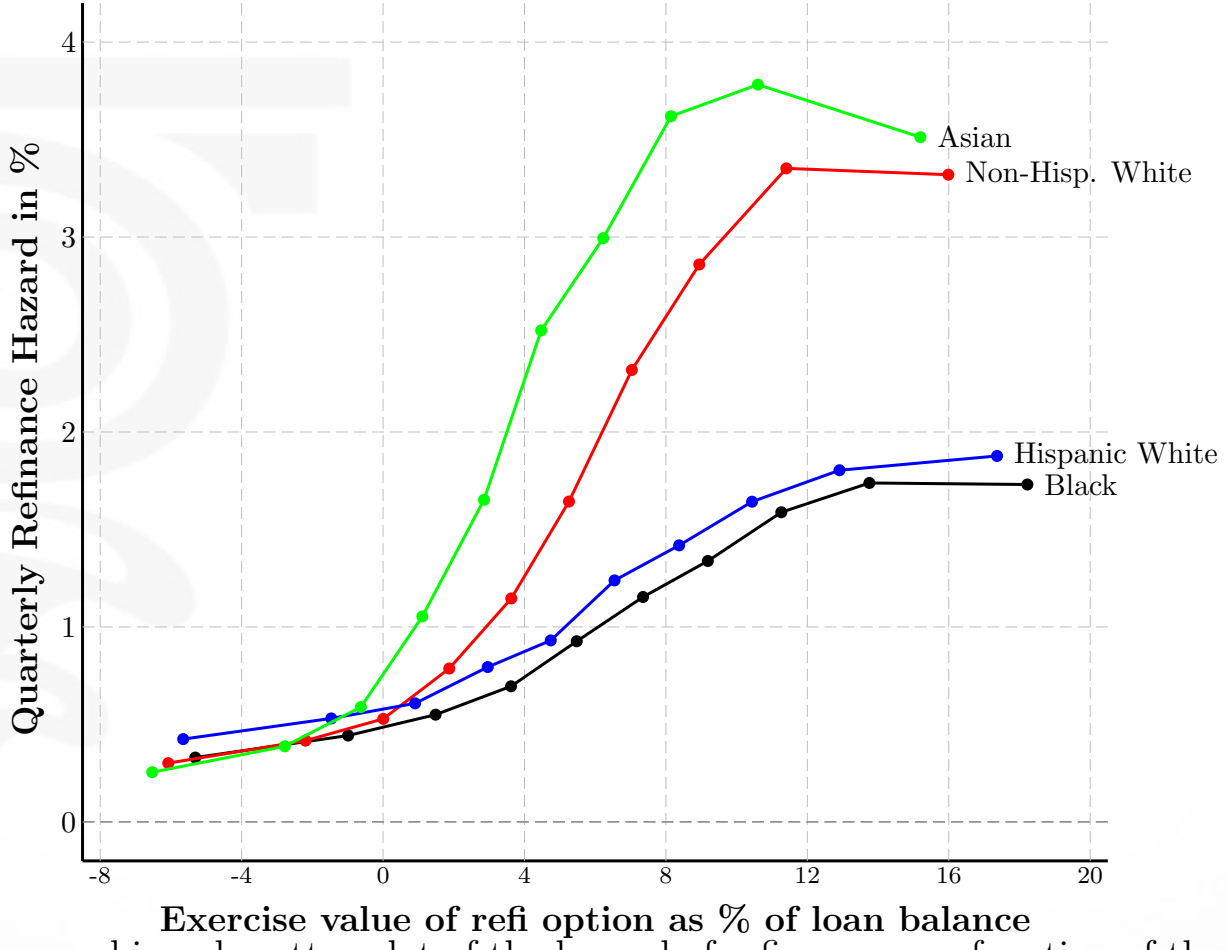


Notes: This figure displays the rate gap for Black and Non-Hispanic White borrowers with 30-year FRMs. New Loans are originated in the quarter and Active loans are all outstanding loans. Data to compute the rate gaps comes from the HMDA-McDash database. The Wu-Xia Shadow Fed Funds rate comes from https://www.frbatlanta.org/cqer/research/wu-xia-shadow-federal-funds-rate.

Source: "Mortgage Prepayment, Race, and Monetary Policy," Gerardi et al (2020)

Data Challenges: Complicated Matching Efforts Required to Study Racial Disparities

Figure 6: Responses to gain from exercising the refinance option.



Notes: This figure shows a binned scatter plot of the hazard of refinance as a function of the gain from exercising the refinance option as calculated in Deng et al. (2000).

Source: "Mortgage Prepayment, Race, and Monetary Policy," Gerardi et al (2020)

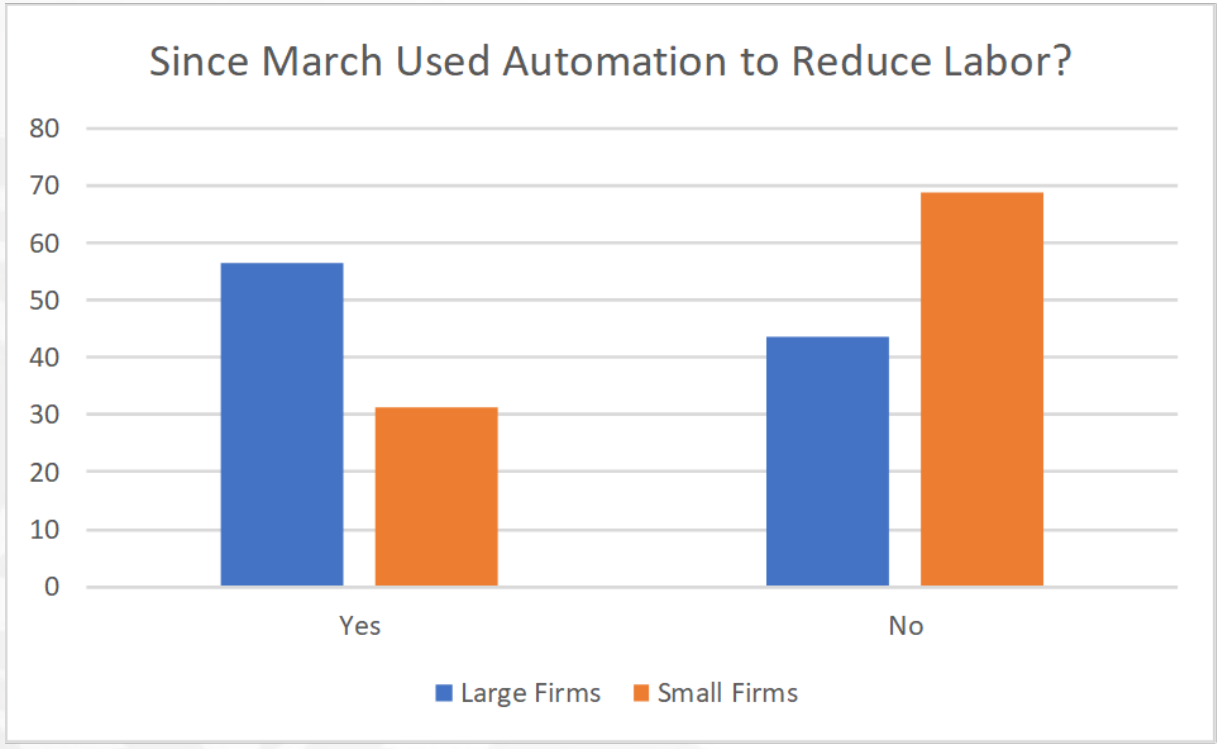
Data Challenges: Future of Work

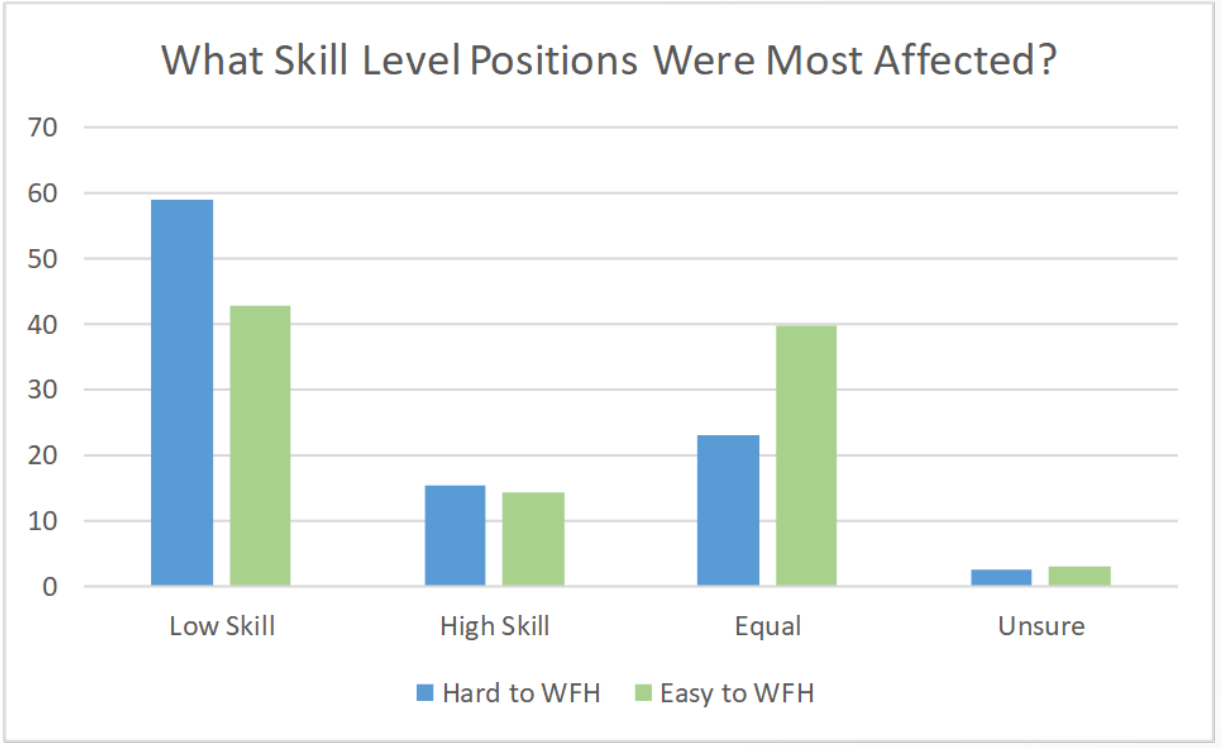
Survey of Business Uncertainty (May 11–May 22, 2020) What percentage of your full-time employees…					
(Employment-weighted mean) Share of employees that …					
	Rarely or never	1 full day per week	2 to 4 full days per week	5 full days per week	Paid working days at home as a percent of all working days
…Worked from home in 2019?	90.3%	3.4%	2.9%	3.4%	5.5%
…Will work from home after the coronavirus pandemic?	73.0%	6.9%	9.9%	10.3%	16.6%
Survey of Business Uncertainty (Jan 11–Jan 22, 2021) What percentage of your full-time employees…					
…Currently work from home?	63.8%	3.9%	15.0%	15.4%	25.3%
…Will work from home after the coronavirus pandemic?	73.1%	6.8%	12.4%	6.0%	14.6%
BLS' *American Time Use Survey* (2017-2018)					
Full-Time Workers	89.8%	3.8%	3.8%	2.6%	5.2%

Note: In computing the SBU statistics, we weight each firm by its employment and further weight industries to match the one-digit distribution of payroll employment in the U.S. economy. We drop firms with responses that don't sum to approximately 100 percent across the response options for a given question. ATUS data cover full-time workers and are extracted from table 3 at the link below. Paid working days at home as a percent of all working days calculated by converting the number of days at home to a fraction of the workweek and multiplying by the respective share in each category.

Sources: Bureau of Labor Statistics (BLS) *ATUS (https://www.bls.gov/news.release/flex2.t03.htm);* Survey of Business Uncertainty conducted by the Federal Reserve Bank of Atlanta, Stanford University, and the University of Chicago Booth School of Business; authors' calculations

Data Gaps: Automation





Question wording: Since March, has your business implemented, or do you plan to implement automation or technology to reduce your reliance on labor?

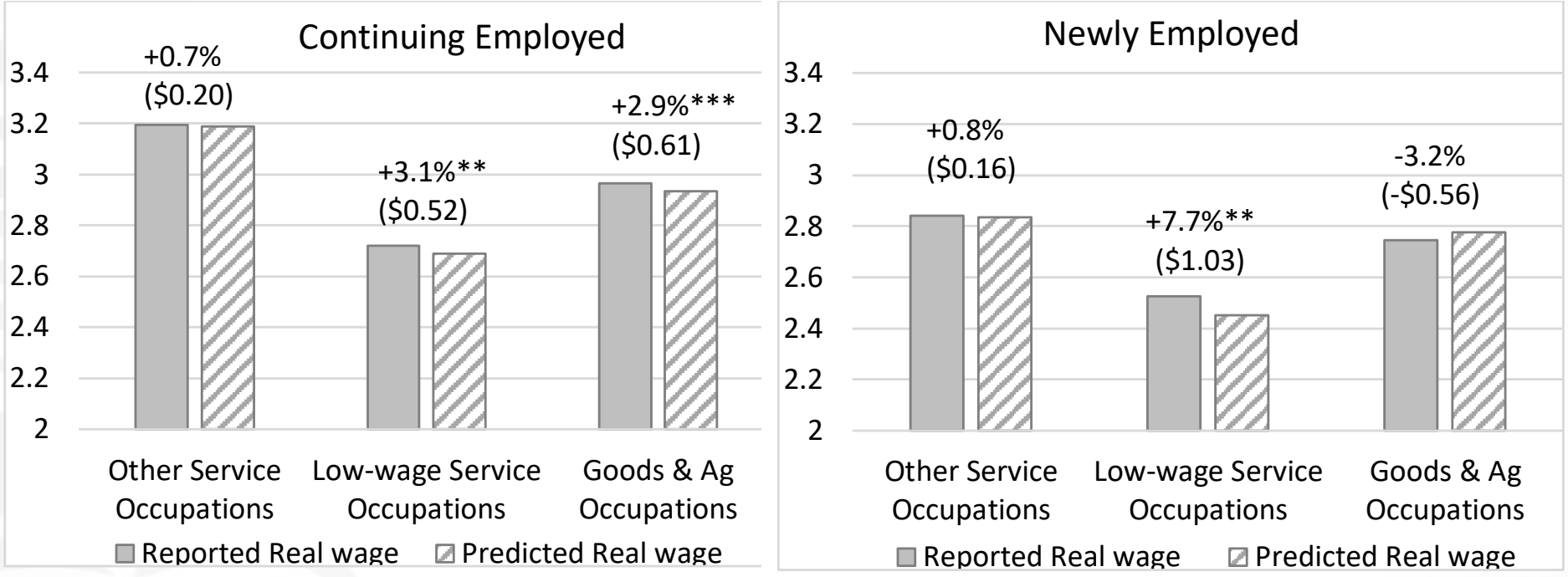
Note: Above figure reports share of firms

Question wording: Which of the following best describes the skill level of the positions affected by the automation or technology you've implemented or plan to implement to reduce your reliance on labor? Note: **Low-skill** positions are defined as routine, manual tasks that do not require a college degree or specialized training. **High-skill** positions are defined as nonroutine, creative tasks that require specialized training or a college degree. (Only displayed if answered "yes" to implemented automation)
Note: Above figure reports share of firms

Source: *The CFO Survey* conducted by the Federal Reserve Bank of Atlanta, Federal Reserve Bank of Richmond, and Duke University's Fuqua School of Business. 2020:Q4 (fielded from November 30 to December 11, 2020).

Data Gaps: Assessing Labor Supply Response During Pandemic

Figure 3: Average Reported versus Predicted Wages for Workers in January–March 2021, by Occupation Group and Employment Status

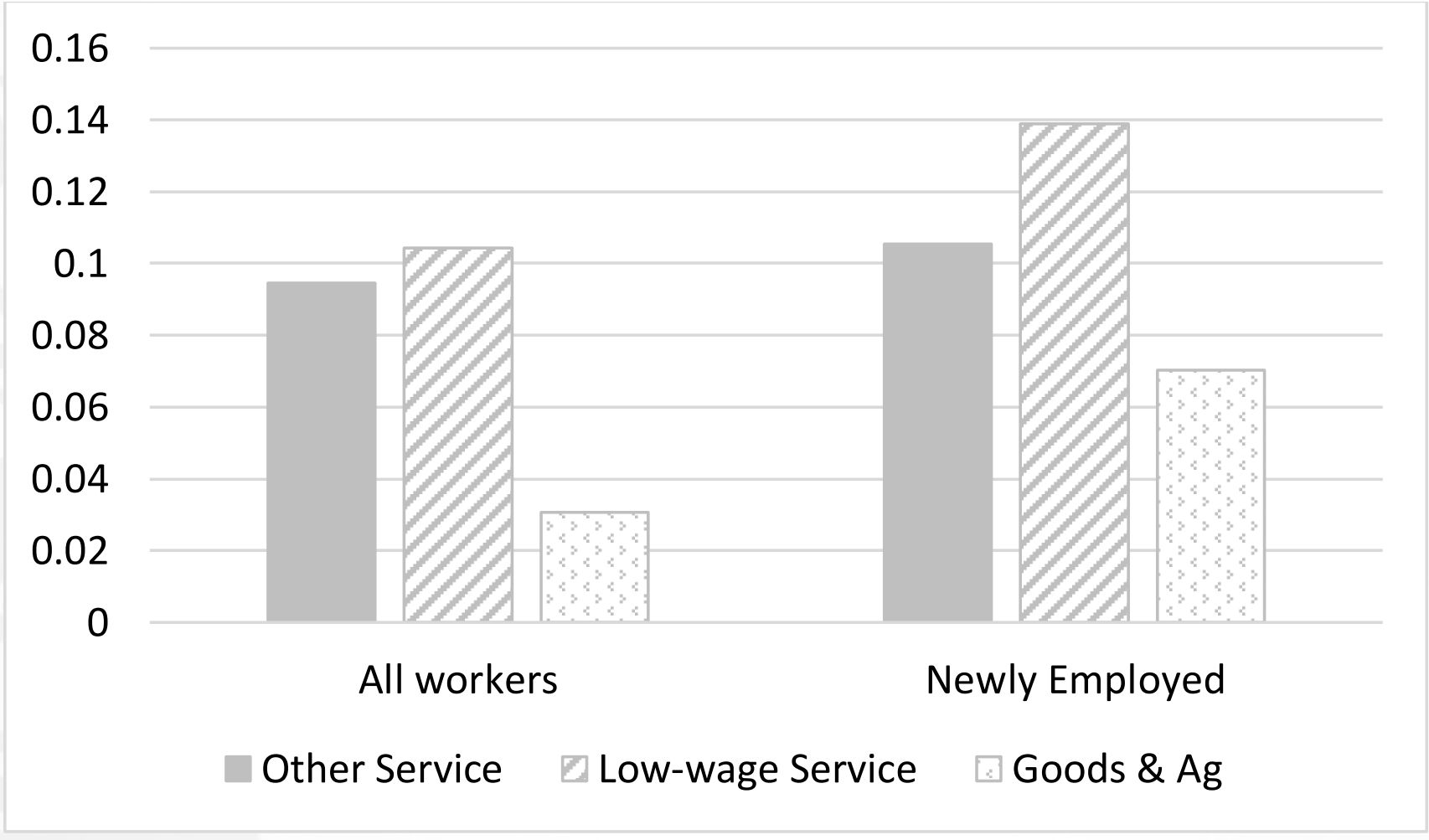


Note: Newly employed workers are workers who were not employed in at least one of the two previous months. Reported wages are from January to March 2021. Predicted wages are calculated for workers in January–March 2021 using OLS wage regression parameters estimated from data in January–March 2020. Log real wage regressors include age, age squared, female and married indicators, five education categories, three race categories, 13 industry categories, nine census division categories, and month indicators. **, *** indicate that the difference between reported and predicted wages is statistically significantly different at the 95 and 99 percent confidence level, respectively.
Source: Author's calculations from the Current Population Survey

Source: "Wage Pressures in the Labor Market: What Do They Say?" Hotchkiss (2021)

Data Gaps: Assessing Labor Supply Response During Pandemic

Figure 4: Share of Workers Who Are Women with Children under 12 Years Old



Source: Author's calculations from the Current Population Survey, January–March 2020 and 2021

Conclusions

- The impact of the pandemic on the economy was unlike any previous aggregate economic downturn over the past 70 years.
- Data from government statistical agencies were critical to understanding changes in economic conditions and new government statistics and survey data debuted during the pandemic seized on opportunities to help fill data gaps
- Going forward, structural shifts resulting from the pandemic along with a heighted focus on economic inclusion highlight additional data gaps that would be beneficial to address
- Partnership opportunities, such as with the Atlanta Fed, can help close some of these data gaps

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