The Revenue Gap:

An Examination of the State of Minority and Black-owned Businesses with the U.S. Census Annual Business Survey (ABS)

ABSTRACT:

Our project presents a comprehensive analysis of Minority and Black-owned businesses' trajectory using the U.S. Census Annual Business Survey (ABS) from its starting point of 2017 to the latest available data of 2021. Leveraging linear modeling, we scrutinize longitudinal data to uncover nuanced insights into the performance dynamics of Minority-owned enterprises vis-à-vis their White counterparts.

BACKGROUND:

Understanding the stark contrasts in business trajectories can illuminate systemic challenges faced by Minority and Black-owned enterprises, paving the way for targeted support programs. Policymakers and stakeholders can leverage these findings to develop tailored strategies that promote equity, economic resilience, and sustainable growth within marginalized communities. This study serves as a vital tool for fostering a more inclusive and prosperous entrepreneurial landscape.

METHODS:

- Used Census APIs to pull data from Annual Business Survey (ABS) for 2017 – 2021
- 2. Removed all flagged observations, cleaned data,
- 3. Created average annual revenue variable by dividing total annual revenue by number of firms
- 4. Created difference gap variable by subtracting White-owned average annual revenue by each Minority-owned counterpart for the given years
- 5. Fit linear model examining the trend in the difference gap over time

RESULTS: Table 1. Linear Reg. Table

Predictor Estimate 95% C.I.

Time 219.19 158.71, 279.67 <.001

 R^2 / R^2 adjusted: 0.710 / 0.697

* Average annual revenue variable in thousands of dollars

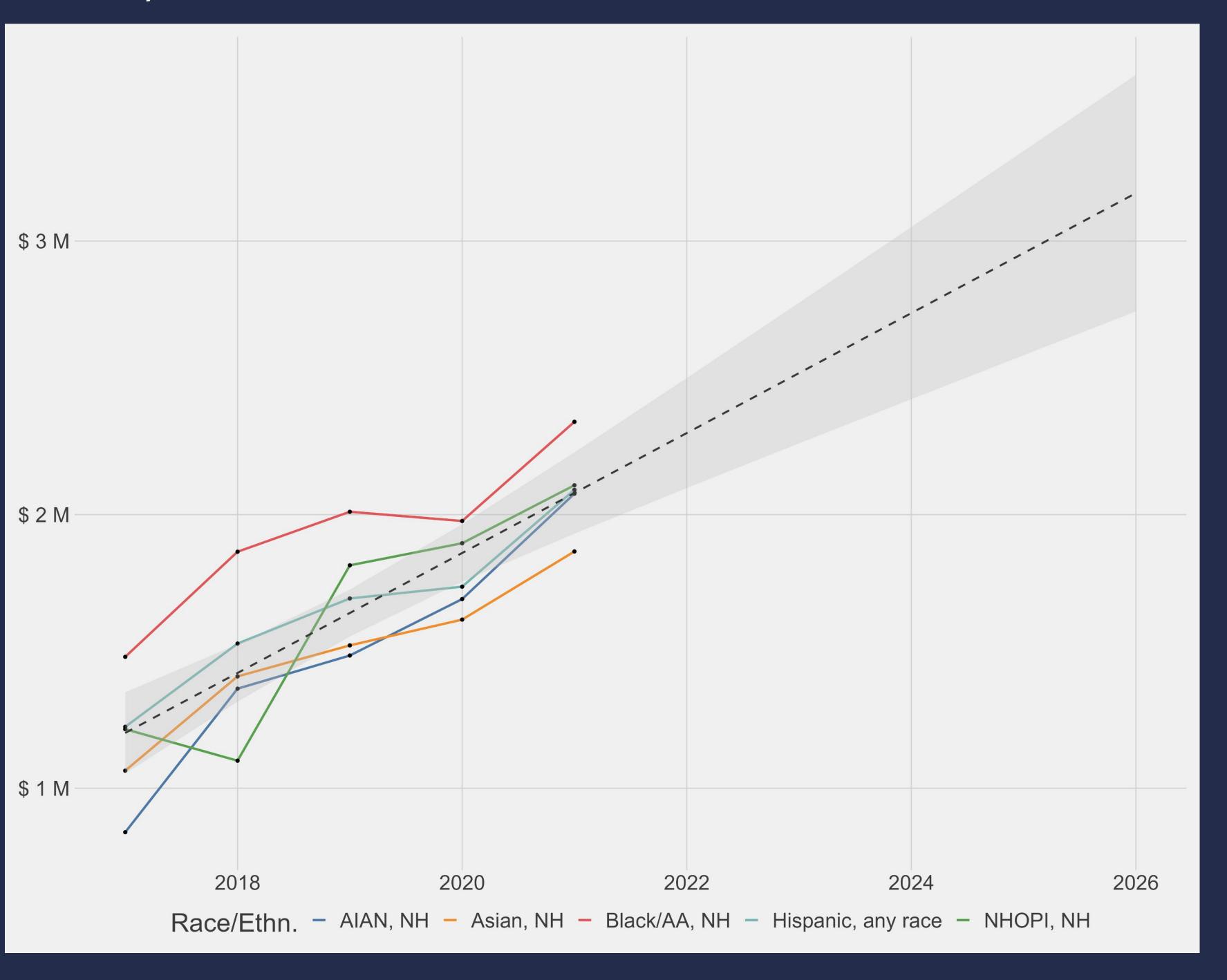
If trends continue linearly, by 2026,

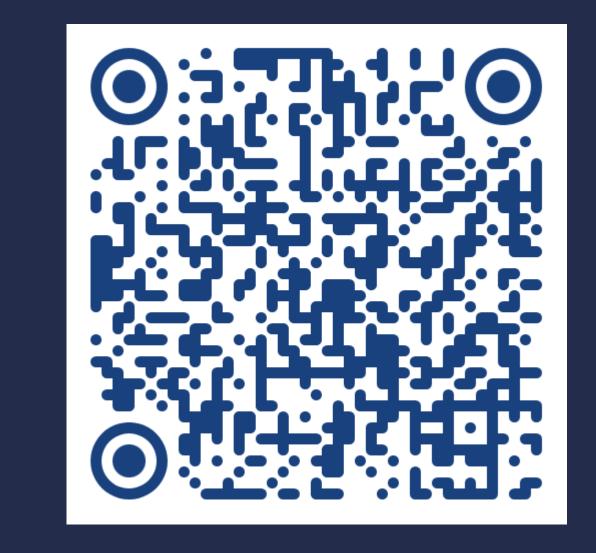
the gap for average revenue between

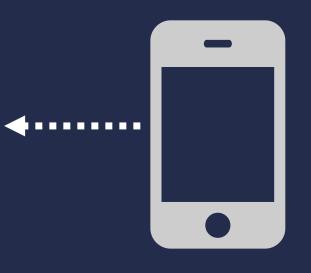
White-owned businesses and

Minority-owned will increase 164%

Fig 1. Forecasted Gap in Average Annual Revenue between Minority-owned and White-owned







Take a picture to access the full GitHub Repo

Fig 2. Average Annual Revenue comparing Minority-owned and White-owned

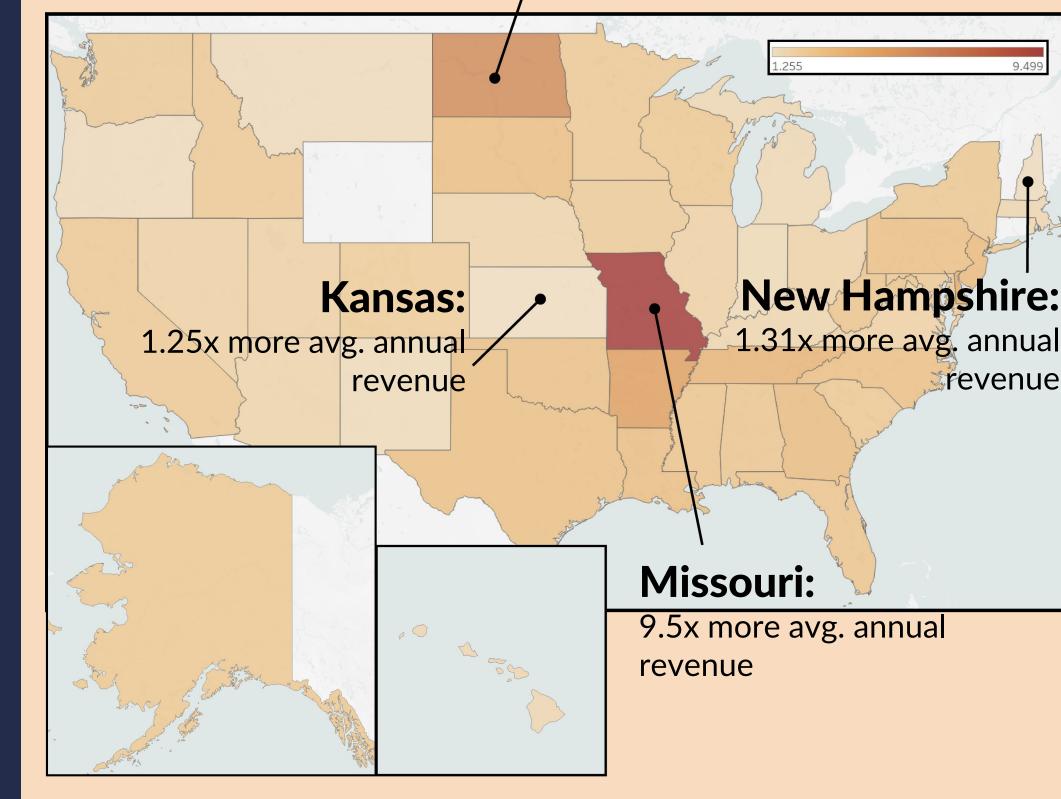


Table 2. Predicted Gap in Average Annual Revenue between Minorityowned and White-owned Businesses

Year	Predicted Estimate	Margin of Error
2017	\$1,202,259	\$148,139.67
2018	\$1,421,450	\$104,750.57
2019	\$1,640,640	\$85,528.48
2020	\$1,859,830	\$104,750.57
2021	\$2,079,021	\$148,139.67
2022	\$2,298,211	\$200,582.07
2023	\$2,517,402	\$256,585.44
2024	\$2,736,592	\$314,251.71
2025	\$2,955,782	\$372,810.01
2026	\$3,174,973	\$431,897.66

Fig 3. Ratio of White-to-Black-owned Businesses' Average Annual Revenue across the States

North Dakota: 5.56x more avg. annual revenue



^{*} State-level data only available for 2017

FUTURE WORK:

Potential extended exploration can consider the following topics...

- Linking ABS data with other historical business records for longitudinal analysis
- Adjusting for inflation of the dollar during the 2017 – 2024 period
- Focusing on other metrics besides annual revenue
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