Oil and Blood:
The Color of Wealth in Tulsa, Oklahoma

ACKNOWLEDGEMENTS

STUDY PARTICIPANTS:

The City of Tulsa citizens who gave their time and shared their knowledge and experiences to inform this report.

Contents

Abstract

This study serves as the final contribution to the *Color of Wealth* report series that surveys the economic well-being of people of color in six major cities in the United States (i.e., Miami, Los Angeles, Washington DC, Baltimore, Boston, and Tulsa). In this report, we focus on the city of Tulsa, Oklahoma, and we estimate wealth and income gaps between blacks, whites, and specific Native American tribes (Cherokee, Muscogee [Creek], mixed tribal affiliation, and "other tribes"). We then contextualize these results within the historical narrative of Tulsa, and we compare the ethnic-racial gaps in Tulsa to other cities in the *Color of Wealth* report series. We use novel data from the National Asset Scorecard for Communities of Color (NASCC) survey, which collected detailed information about respondents' specific assets, liabilities, financial resources, and personal savings and investment activity at the household level for various subpopulations, according to race, ethnicity, and country of origin. We find statistically significant lower levels of wealth for blacks, Hispanics, and Muscogee when compared to whites. The largest of these gaps is between blacks and whites and driven mainly by differences in rates of homeownership and entrepreneurship. Furthermore, we find that a greater portion of the wealth gap between whites and blacks is unexplained than for any other racial-ethnic group when controlling for demographic and other household characteristics. These results are consistent with conditions where blacks in Tulsa have faced exceptionally high levels of historical discrimination (e.g., intentional destruction of assets in black communities), which cannot be disentangled from race and cannot be accounted for in observable characteristics.

Executive Summary

- The city of Tulsa became an economic power hub at the turn of the twentieth century due to the discovery of oil fields right across the Arkansas River in 1897. By the 1920s, Tulsa was referred to as the "Oil Capital of the World." This boom created economic prosperity across multiple racial-ethnic groups, including the black entrepreneurs that took advantage of this period of growth.

- While the oil boom led to economic gains for all racial-ethnic groups, the 1921 Tulsa Massacre directly destroyed the gains achieved by black Tulsans. During the massacre, white mobs destroyed thirty-five blocks of businesses and homes in the thriving Greenwood district. The massacre resulted in an estimated 300 deaths and almost 10,000 displaced persons. One of the lasting impacts (aside from death and physical violence) was the dismantling and destruction of wealth and assets within the black community in Tulsa. Restitution has never been made for the survivors or their descendants (Messer et al., 2018a), nor has anyone ever been punished. Albright et al. (2021) estimate that this massacre resulted in a long-term decline in black homeownership and occupational status that has persisted through today.

- Using novel data from the National Asset Scorecard for Communities of Color (NASCC) survey, we investigate the financial health of Tulsa households across all racial-ethnic groups today – a century after the Tulsa Massacre. We document income disparities among racial-ethnic groups in Tulsa. Our survey-weighted estimates of annual household income and earnings levels for racial-ethnic groups in Tulsa are the following: whites ($69,172; $36,325), blacks ($38,206; $20,530), Hispanics ($43,772; $33,093), Cherokees ($87,127; $41,566), Muskogee ($47,059; $32,755), other tribes ($55,740; $49,335), and individuals who self-identified as native American but have no tribal affiliation ($77,411; $39,464).

- Our results suggest that the 1921 Tulsa Massacre and its destruction had a long term effect on wealth accumulation for black Tulsans. We find significant racial wealth inequality in Tulsa. We estimate the survey-weighted mean wealth levels for each of the racial-ethnic groups in Tulsa: whites ($232,560), blacks ($19,033), Hispanics ($73,975), Cherokees ($172,292), Muskogee ($66,438), other tribes ($172,611), and individuals with mixed or no tribal affiliation ($281,613). When compared against whites, we find statistically significant lower levels of wealth only for blacks, Hispanics, and the Muskogee, with the largest disparity between blacks and whites.

- When comparing Tulsa to other NASCC cities that did not experience destruction at the level of the Tulsa Massacre, such as Boston, Washington D.C., Los Angeles, and Miami, we find that Tulsa has the largest black-white wealth and income gaps. In Tulsa, blacks have only 9 percent of the wealth of whites compared to Washington D.C. (28 percent), Los Angeles (34 percent), Boston (36 percent), and Miami (41 percent). For household income, only Los Angeles has a greater black-white gap than Tulsa (36 percent vs. 53 percent).

- The 1921 Tulsa Massacre destroyed many black-owned businesses and homes. Today, we find that differences in assets mainly drive racial-ethnic wealth disparities in Tulsa. In particular, we find that the wealth gap between blacks and whites is driven by differences in rates of entrepreneurship and homeownership between the two groups. In our sample, the gaps in the rates of homeownership and entrepreneurship are 38 percentage points and 12 percentage points, respectively. Compared to the other NASCC cities, Tulsa has the largest homeownership rate gap. In contrast, the entrepreneurship rates of blacks and whites in the other NASCC cities are generally similar for both groups, with the exception of Miami.

- Our analysis of household assets shows differences between black and white households with respect to home, vehicle, and business equity, balances in checking, savings, and money market accounts, and investments in stocks, mutual funds, and investment trusts. The largest gap is for home equity, with an estimated differential of $66,010, followed by differences in the total balance of their checking, savings, and money market accounts ($50,695), the value of investment in stock, mutual funds, and investment trust ($27,749), and business equity ($26,632). In the cases of Hispanics and Native American households, we find, generally speaking, a statistically significant gap for home equity but not for any other type of assets.

- Our household liabilities or debt analysis (including credit cards, installment loans, student loans, medical debt, and debt to friends and relatives) finds that generally, racial-ethnic groups in Tulsa behave similarly regarding debt accumulation and display similar debt levels. Given the existence of racial wealth and income gaps between whites and blacks, whites and Hispanics, and whites and Muskogee, our findings suggest that relative to whites, blacks, Hispanics, and Muskogee households tend to be more indebted.

- The 1921 Tulsa Massacre affected the black entrepreneurial ecosystem in Tulsa. Today, our findings show that Tulsan households with entrepreneurs outperform households made out of employees only in terms of wealth-building. We find compelling results that entrepreneurs, in the long run, tend to generate relatively more wealth, household income, and earnings compared to households without entrepreneurs; the relative gaps are $611,454, $54,271, and $24,179, respectively. Not surprisingly, we find that entrepreneurial households have higher homeownership rates (91 percent vs. 67 percent), are more highly educated (52 vs. 20 percent holding a BA degree or higher), are more likely to be married, and more likely to be born in the US. Additionally, we find statistical significance for the gaps for home equity ($67,138), other real estates ($100,528), vehicle equity ($8,780), business equity ($210,571), and the total balance of checking, savings, and money market

accounts ($81,138). In terms of liabilities, we find that employee households tend to have, on average, larger installment loan debt (gap of $781.8) and medical debt (gap of $2,349). These findings highlight the importance of entrepreneurship in the accumulation of wealth and highlight that creating the right set of incentives for asset building through entrepreneurship can help decrease the wealth and income inequality in Tulsa.

- The decomposition analyses find that a greater portion of the wealth gap between whites and blacks is unexplained (90 percent) than for any other racial-ethnic group after controlling for age, education, gender, and marital status. We interpret the statistically significance of the unexplained component as evidence of historical and contemporary discrimination faced through various markets. In terms of the black-white household income gap, we find that 69 percent is unexplained, leaving only 31 percent explained by age, education, gender, and marital status. We also find that 93 percent of the earning gap is unexplained.

- Our robustness check for the white-black wealth and income decompositions finds that adding wealth-driver covariates (such as household income, homeownership, inheritance, and incarceration exposure) individually and jointly to our baseline model does not change our results. Generally speaking, the explained component remains mostly insignificant. Two possible explanations for this are that observable characteristics alone cannot explain differences in wealth among black and white households. Our results show increasing support for the argument that unexplained factors such as discrimination, prejudice, or racial bias (systematic or not) play a critical role in driving the black-white wealth gap in Tulsa. The second takeaway is that we can not disentangle the racial wealth gap from the multifaceted gaps in wealth and its drivers. In other words, once compared by dividing into the subgroups of white and black households, as done in the Blinder-Oaxaca decomposition, covariates with strong racial correlation will not add much to explaining the gap.

- The wealth, household income, and earnings gap decompositions reveal statistically significant wealth and household income gaps between whites and Hispanics in Tulsa. However, we find no significant differences in earnings. The explained component of the wealth gap accounts for 50 percent of the gap and only 29 percent of the household income gap. On the other hand, the unexplained component plays a key role in the household income gap, accounting for 71 percent but not in the wealth gap. This finding supports the inference that in Tulsa, Hispanics, in comparison to blacks, face less discrimination or negative racial bias that has had a long-term impact on wealth accumulation when analyzing the across-group wealth and income gaps.

- When comparing white and Native American households, the wealth, household income, and earnings gap decompositions demonstrate no statistically significant gaps for wealth, household income, or earnings between whites and Native Americans. Interestingly, when broken down by tribe, we only find statistically significant wealth and household income gaps when comparing whites and Muscogee. For the three decompositions, we find no significance for the explained portion. However, we find evidence for the unexplained components for the wealth and household income gaps, accounting for 110 percent and 87 percent. Out of the different tribal groups we analyzed, the Muscogee were the only ones with evidence of discrimination.

- Our findings establish an association between the wealth boom (oil boom) and the subsequent 1921 Tulsa Massacre and the current household socio-economic comparison across racial-ethnic groups. This analysis highlights the importance of collecting asset, debt, and income information for disaggregated racial-ethnic groups in order to understand the complex landscape of wealth inequality in the United States. Data collected with this level of detail allows for a more precise estimation of the consequences of systemic discrimination, both historical and contemporary, on the ability of historically disadvantaged groups to accumulate wealth.

- Lastly, our findings have implications for the study of how wealth shocks are distributed across racial-ethnic groups and, more specifically, how the benefits of wealth shocks can be mitigated or eliminated for groups that are systematically discriminated against in various arenas. The turn of the twentieth century saw an oil boom that led to a positive wealth shock for all Tulsans, but racial discrimination, including an intentional massacre and destruction of black wealth, eradicated the gains for blacks. These patterns persist to the current day, and, as a result, we must consider how systemic racial-ethnic discrimination reduces the potential benefit of wealth shocks induced by the private or public sector today. One of the latest prominent examples of this is the Paycheck Protection Program (PPP) loans given to small business owners to off-set some of the negative impacts of the COVID-19 pandemic on business activity. However, research shows that black business owners received 30-40 percent lower loan amounts even after controlling for business and lender characteristics.

1. Introduction

Reducing wealth inequality is one of the greatest challenges the U.S. faces today. The rise in income and wealth inequality in the United States over recent decades has increasingly drawn the interest of academic researchers and policymakers. Research has shown that racial wealth disparities are large and persistent (Conley, 1999; Chiteji and Hamilton, 2002; Oliver and Shapiro, 2006) with only a fraction of the gap being driven by racial differences in income (McKernan, Ratcliffe, Steuerle 2015). The racial disparities observed today are rooted in the country's inception and have built over time, in part, due to differences in the ability to transfer wealth intergenerationally (Gittleman and Wolff 2007; Hamilton and Darity, 2014), and, in other parts, due to differential access to housing, employment, education, healthcare, financial services, and other means of economic mobility that have been observed across racial groups.

Building on the documentation of racial disparities arising before the twenty-first century, recent studies have reported an even greater divergence of wealth between whites, blacks, and Hispanics that have stemmed from the Great Recession (Kochhar, Fry, and Taylor, 2011; Shapiro, Meschede, and Osoro, 2013; McKernan, Ratcliffe, Steuerle and Zhang, 2013; Tippett et. al, 2014; Kochar and Fry, 2014) driven by disproportionate declines in asset values and higher rates of home foreclosure for blacks and Hispanics (Tippett et al., 2014).

This report builds on the literature on racial income and wealth inequality by exploring racial differences in wealth accumulation, household income, and earnings across a multitude of households from various racial-ethnic groups in the city of Tulsa, Oklahoma. While pre-existing studies have documented similar outcomes for subpopulations, they have been limited to only studying outcomes across broad racial categories (i.e. blacks, Hispanics, whites, and Asians). This report documents wealth and inequality gaps for much more specific ethnic-racial groups. For example, this report details disaggregated outcomes for blacks, whites, and specific Native American tribes (Cherokee, Muscogee [Creek], non-tribal affiliation, and "other tribes").

The city of Tulsa offers a particularly interesting case study given its swift rise to an economic power hub at the turn of the twentieth century, due to the oil boom and the subsequent economic gains across multiple racial-ethnic groups during that period. This period of economic boom is juxtaposed with the 1921 Tulsa Massacre, which directly destroyed the economic gains achieved by black Tulsans. This act of racial violence led to the destruction of thirty-five blocks of the Greenwood business district in Tulsa and the deaths of 100-300 people (Fain, K., 2017; Messer, C.M., 2021). This report using data collected in 2012 characterizes the wealth and income level for these racial-ethnic groups almost a century after the oil boom and the Tulsa Massacre.

For this analysis, we use a novel dataset from the National Asset Scorecard for Communities of Color project which collected detailed information about respondents' specific assets, liabilities, financial resources, and personal savings and investment activity at the household level for various subpopulations, according to race, ethnicity, and country of origin. This report serves as the final chapter in a series that surveys the economic well-being of people of color in several major cities in the United States (i.e. Baltimore, Boston, Los Angeles, Miami, Tulsa, and Washington DC) with each city being specifically chosen for its racial diversity and/or unique historical, economic features.

The focus of this study is threefold: First, we estimate ethnic-racial gaps in wealth, household income, and earnings across blacks, whites, Hispanics, and Native American tribes in Tulsa. Second, we conduct decompositions of these gaps to estimate the percentage that cannot be explained by observable characteristics, where the unexplained component can be attributed, in part, to discrimination in various markets – labor, financial, etc. Third, we compare black-white wealth gaps in Tulsa to black-white wealth gaps in other NASCC cities to determine if outcomes are substantially worse for blacks in Tulsa given the intentional destruction of black wealth via the Tulsa Massacre.

The rest of this report is structured as follows. In the next section, Section 2, we begin by providing a historical overview of the origins of racial differences in Tulsa. Section 3 presents current demographics and economics characteristics in Tulsa. Section 4 offers an overview of the NASCC methodology. Section 5 discusses our descriptive statistics, regression and decomposition analysis for wealth and income across the various racial-ethnic groups. The section also presents a comparison of Tulsa and four of the other NASCC cities. Section 6 concludes with a discussion of the implications of our results.

2. Tulsa: History and Origins of Racial Differences

The city of Tulsa in what was known as the Indian Territory has experienced many changes since its inception. Today, Tulsa is the second-largest city in the state of Oklahoma, with slightly over 400,000 residents, second only to Oklahoma City. The Tulsa metropolitan area accounts for about ten percent of the state's population. The city was incorporated in 1898 and soon after oil was discovered in Red Fork, a small community southwest of Tulsa across the Arkansas River (Tulsa Preservation Commission, 2019). This oil field spurred tremendous growth in the city as petroleum workers, supplies, equipment flowed into the city and new transportation systems and pipelines were built. Subsequent oil discoveries through the 1930s established the city as the "Oil Capital of the Nation" (Tulsa Preservation Commission, 2019).

Native Americans in Oklahoma. Tulsa is located in historic Indian Territory and on the land of several tribes, including the Wichita, Caddos, Kiowa, Comanche and Quapaw, and Osage (Gibson, 1981, p. 44). Subsequent arrivals of Native Americans to the region were due to the Indian Removal Act of 1830. The U.S. federal policy aimed to remove all Native Americans from their ancestral homes in the eastern part of the United States to the Indian Territory (Oklahoma). In what became known as the Trail of Tears, an estimated 50,000 to 100,000 members of Cherokee, Muscogee, Seminole, Chickasaw, and Choctaw nations, in addition to their African American slaves, were forced to relocate from their traditional homelands. Thousands died on the journey due to exposure to harsh weather, starvation, insufficient rations, diseases, harassment from settlers, and other forms of violence (Johansen, 2007). It has been estimated that one-third to one-half of the Cherokee population may have died on the trek or shortly thereafter (Thornton, 1984).

Oklahoma currently has 39 federally recognized American Indian Tribes. A few of these tribal governments operate on reservation lands, such as the Osage and the Muscogee following the recent U.S. Supreme Court case decision (Healy, 2020). Other tribal governments do not, strictly speaking, have reservation lands but are located on their former reservation lands in Oklahoma that were terminated when Oklahoma became a state in 1907.

There is a long history of deception, displacement, genocide, and violence to seize control of Native American lands and wealth in the U.S. The Osage nation experienced one of the more egregious examples of this in the early 20th century right in the vicinity of Tulsa, Oklahoma. The Osage reservation is located slightly north of Tulsa in a region that would become a lucrative oil-rich area. "The wealth came so quickly that by 1929 each and every allotted Osage had earned $102,534 from oil" (Strickland, 1995). As a result, the Osage experienced unprecedented murder rates as whites attempted to gain control and access to Osage oil during a period known as the Osage Reign of Terror (Strickland, 1995). Specifically, the murders were intended to shift ownership to white people through inheritances as a result of sham marriages. This resulted in a reduction of land and mineral resources owned by Osage families (Fixico, 2011).

Blacks in Oklahoma. There were at least two flows of African Americans into the Oklahoma Territory. First, African Americans were brought as slaves with the Cherokee, Chickasaw, Choctaw, Muscogee, and Seminole tribes when they were forcefully moved to the Oklahoma territory in the 1830s. Those enslaved were freed after a separate treaty in 1866, in the aftermath of the Civil War, and many of the formerly enslaved stayed in Oklahoma (Roberts, 2018). In some cases, these individuals, known as "Freedmen," were incorporated into the tribal nation; in other cases, they moved away and formed their own communities.

Some of the formerly enslaved were incorporated into the various tribal nations; however, in subsequent years many Freedmen (or their descendants) had their tribal citizenship revoked. Recent court cases have reinstated membership for some Freedmen descendants in the Cherokee tribal nation in 2017 (Roberts, 2018). Other individuals formed separate townships. In fact, there were over 50 African American towns established in the post-Civil War era in Oklahoma. Several of these still exist including Boley, Rentiesville, Brooksville, as well as Redbird, just outside of Tulsa (Tulsa World, 2021).

The second flow of black migrants to the Tulsa area occurred in the late 1800s and early 1900s as Tulsa became an oil boom town whose population increased seven-fold in thirty years (Ellsworth, 1982, p. 8). Tribal allotments and

the discovery of oil in 1897 led to an increased inmigration of workers from the southern states, helping to give rise to the Greenwood Tulsa business district, known as Black Wall Street (Knickmeyer, 2021). Greenwood was established by African Americans to meet the needs of black customers who were not served in other parts of Tulsa due to segregation. Workers flocked to the city given the ample employment needs throughout the expanding city. As a result, the thriving Greenwood district boasted a range of businesses and services for the African American community that included hotels, restaurants, markets, beauty salons, and other establishments.

The Tulsa race massacre of 1921 was pivotal in the city's history. A white mob looted, burned, and destroyed 35 blocks of African American homes and businesses in the Greenwood district (Messer et al, 2018a). The massacre resulted in 300 deaths and almost 10,000 displaced persons (Brown, 2021). Indeed, one of the lasting impacts (aside from death and physical violence) was the dismantling and destruction of wealth and assets within the African American community in Tulsa.

Over $4 million were requested in claims by survivors, but none of the requests were granted (Tulsa Race Riot Report). Some estimates put the damage in current dollars at $200 million in property losses alone (Messner et al, 2018b) while others estimate the present value is closer to $610 million in current dollars (Toole, 2021).[1] Restitution has never been made for the survivors or their descendants (Messer et al, 2018a), nor has anyone ever been punished for the actions against the African American community in Tulsa. .

Albright et al (2021) estimate that the effect of the Tulsa Massacre resulted in a long-term decline of black male homeownership of about 4.5 percentage points, which was approximately a 15 percent reduction based on the initial homeownership in Tulsa in 1920, and occupational downgrading for the same community. Their research further shows not only did the effects of the massacre persist to the end of the 20th century but also the magnitude of these effects on black Tulsans had doubled by 2000.

While the Tulsa Massacre was isolated to the Greenwood district, the economic consequences were felt by blacks in other parts of Oklahoma and the rest of the United States. In Oklahoma, it is estimated that blacks outside of Tulsa experienced approximately 75% of the effect, and blacks in the US, particularly those living in racially segregated

neighborhoods and those living in areas that received newspaper coverage of the massacre, experienced declines in homeownership as well (Albright et al 2021).

These results are consistent with other findings in the economics literature on the effects of racial violence on the economic outcomes of blacks in the United States. It has been found that racial violence has led to decreased patent rates (Cook, 2014), voter registration rates (Williams, 2018), property values (Collins and Margo, 2007), and employment, and income (Collins and Margo 2004) for blacks. Racial violence, especially the Tulsa Massacre, targeted black economic progress and still has effects that can be seen in the economic outcomes of blacks compared with other racial groups in the United States today.

Whites in the Oklahoma Territory. White Americans increasingly sought to own land in the Oklahoma territory as population pressures grew in neighboring states of Texas, Missouri, Arkansas, and Kansas (Chang, 2010, p. 3). In particular, the pressure was increased to open up "surplus" lands to white settlers. Under President Lincoln, the first Homestead Act was passed in 1862, which allowed U.S. citizens to claim a public 160-acre plot of land by filling out an application, agreeing to live in and improve the plot for at least five years, and filing for a deed in seven years. Several more Homestead Acts were passed and allowed through 1986 including a specific one for Oklahoma territory in 1889 (Chang, 2010, p. 3). These "public" plots were settled often at the cost of communal tribal lands. In subsequent years, white identity became entrenched in Oklahoma. The Ku Klux Klan found fertile ground for enforcing unity among whites (Chang, 2010, p. 176). In particular, the thrust of this organizing was to unite individuals across social classes in Oklahoma. These coalitions across white Americans were necessary to keep in place existing Jim Crow laws used to disenfranchise African Americans (Shephard, 1983).

Hispanics and Other Racial Groups in Oklahoma.
The Hispanic population in Tulsa was relatively small until recent decades. Historically, there may have been several explorer expeditions on land that later became Oklahoma from Mexico to establish religious missions and to search for gold, including the Coronado Expedition (Oklahoma Historical Society, n.d.; Smith, 1980). From the 1830s to the 1880s, vaqueros and cowboys from Mexico used cattle trails in Indian Territory given the increasing demand for beef in the region (Oklahoma Historical Society, n.d.; Smith, 1980). Railroad development and coal mining

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[1] Some of the differences in the estimates are due to different assumptions regarding the interest rates. For example, Messner et al. (2018b) use a 3 percent interest rate, while Toole (2021) uses a 6 percent interest rate.

brought more immigrants from Mexico and China (the latter were barred from migrating to the U.S. after the 1882 Chinese Exclusion Act) (Oklahoma Historical Society, n.d.). The Mexican Revolution, deportations, and lynchings led to a decline of Mexicans in the early 20th century (Smith, 1980). Puerto Ricans began to move to the state due to military bases, and Venezuelans arrived in Tulsa in the 1970s following the petroleum industry (Oklahoma Historical Society, n.d.).

Recent research has shown that legal status affects how Hispanic immigrants integrate into society especially into newer areas such as Oklahoma and other Midwest and Southern states (Hall and Stringfield, 2014). In recent years, there has been increased immigration to agricultural states for employment. However, on average Tulsa has a comparatively low immigrant population – comprising approximately 11 percent of the city's population (ACS 2019 5-year estimates). This immigrant population is growing quickly. Between 2000 and 2014, the region experienced a 79 percent increase in its foreign-born residents and Hispanics account for the fastest growth among groups (Killman, 2015; Singer, 2015). Tulsa also has a higher percentage of foreign-born residents compared with the rest of the state of Oklahoma (6 percent).

New immigrants to Tulsa in recent years came primarily from Latin America (51 percent) followed by Asia (37 percent). In the city of Tulsa, about 19 percent of residents speak a language other than English at home. Until 2007, Oklahoma was relatively inclusive of its immigrant population (Oklahoma Historical Society, n.d.; Estrada, 2007). For example, a state law in 2001 made the driver's license test available in several languages. Undocumented immigrants were also eligible for in-state tuition, financial aid, and scholarships under a state law passed in 2003. However, anti-immigrant gained momentum in the mid 2000s as the state legislature started to repeal existing programs for undocumented immigrants in Oklahoma.

Ongoing Denial of Rights in Oklahoma. Oklahoma has a history of racial segregation extending into the 20th Century. In fact, Oklahoma was the site of one of the first sit-ins at a segregated drugstore counter in 1958 in Oklahoma City (Hevesi, 2011). The state long resisted efforts to integrate schools, workplaces, and other places of business.

In recent years, Oklahoma lawmakers have continued to oppose the influx of undocumented immigrants to the state. In 2007, the Oklahoma legislature passed a new law that made it more difficult for undocumented immigrants,

"… to obtain government IDs or public assistance. It also gives police authority to check the immigration status of anyone arrested, which can lead to deportations" (Estrada, 2007). Recently Oklahoma lawmakers introduced stringent anti-sanctuary laws for cities in Oklahoma that refused to comply with U.S. federal laws regarding undocumented immigrants (Krehbiel, 2021).

There has been some noticeable improvement in the treatment of the Cherokee Freedman. This year the Cherokee Nation Supreme court removed language requiring blood quantum requirements for citizenship (Walker, 2021). As a result, this has opened up membership to Cherokee Freedmen descendants previously denied. Finally, a recent Supreme Court Case in 2020 re-affirmed the existence of reservation lands for the Muscogee Nation (which includes parts of Tulsa, Oklahoma). This court case may serve as a precedent for other treaty-based reservation lands that were abolished at the time that Oklahoma became a state. It remains to be seen how this increased tribal jurisdiction, authority, and tax base may affect the income and wealth of tribal citizens and non-citizens in the future.

Higher Education Institutions in Tulsa, Oklahoma.
The first schools in Tulsa were tribal schools for the Muscogee with subsequent mission schools for other Native American and non-Native American children (Tulsa Preservation Commission, 2019). Segregated schools for African American students were created in 1908. The University of Tulsa was founded in 1894 and was historically affiliated with the Presbyterian School for Indian Girls, a boarding school in Muscogee, Indian Territory (TU, 2021b).

The Presbyterian Church then chartered it as the Henry Kendall College in 1894. It was the first college in the area, which then was chartered as the University of Tulsa in 1920. It is currently a nondenominational research university with nearly 4,000 students (TU, 2021a). According to Integrated Postsecondary Education Data, about 56 percent of students are white, followed by 8 percent Hispanic, 6 percent Black, 5 percent Asian, and 3 percent Native American. Oral Roberts University was established in 1962 as an evangelical liberal arts university (Wilson, n.d.). It became accredited by the North Central Association of Colleges and Secondary Schools in 1971 (Wilson, n.d.). In Fall 2020, 4,303 students were enrolled (ORU, 2021). Student demographics include 46 percent white, 16 percent African American, 13 percent Hispanic, 3 percent Native American, and 2 percent Asian American.

3. Current Demographics and Economic Characteristics in Tulsa

The discovery of an oil field across the Arkansas Rivers at the turn of the 20th century spurred tremendous population growth in the city of Tulsa. Today, Tulsa is the second-largest city in the state of Oklahoma, with slightly over 400,000 residents, accounting for about ten percent of the state's population. According to the U.S. Census archives,[2] there were 1,390 residents in Tulsa in 1900. By 1910 the number increased to 18,182, a 1200 percent growth in population (see Figure 1). The following decade it grew almost 300 percent, reaching 72,075 in 1920. The main factor contributing to this rapid expansion in population was the oil boom experienced during the early 1900s. By the 1920s, Tulsa had become the base for over 400 petroleum-related companies.

FIGURE 1. Population Growth in Tulsa (1900-1940)
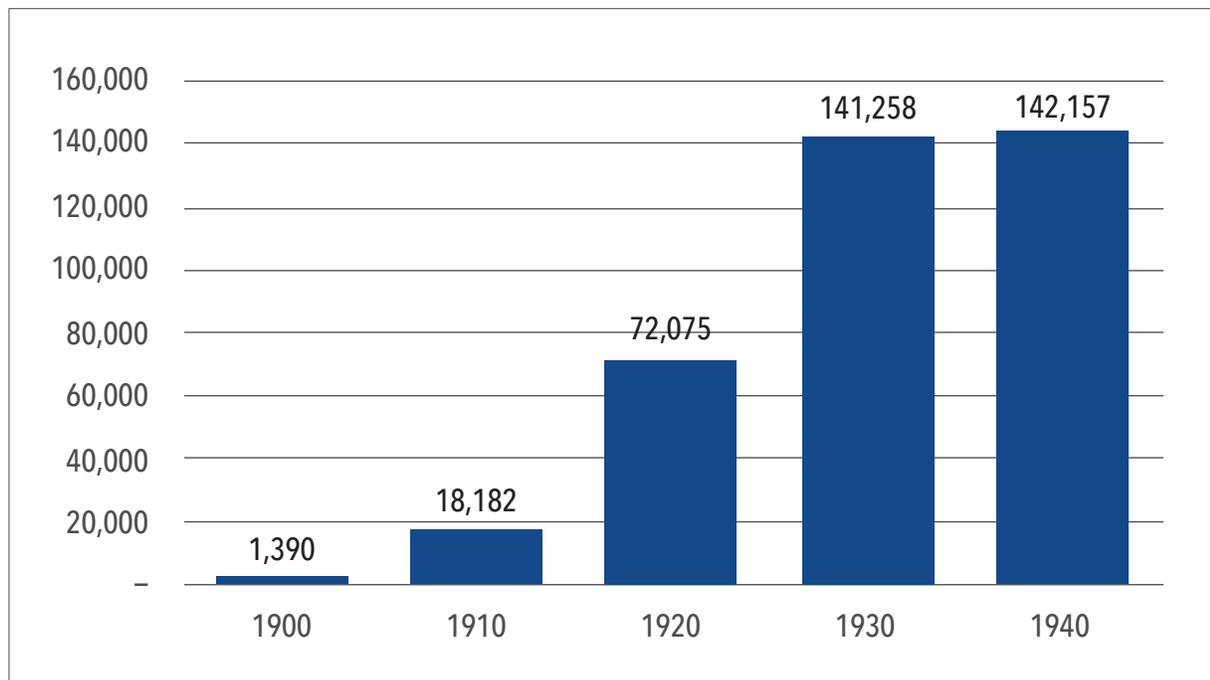
Today, more than a century later, according to the U.S. Census 2019 Population Estimates, the city has a majority non-Hispanic white population (54 percent), followed by Hispanics/Latinos (17 percent), African Americans (15 percent), Native Americans (5 percent), Asians (3 percent) and a combination of other groups, including Native Hawaiians, other Pacific Islanders, and multiracial individuals (8 percent), see Figure 2. The fact that Native Americans represent only 5 percent of the city population shows that most of the population came as settlers from other parts of the US and the world and were not local to the region.

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[2]   Population of the Tulsa metropolitan district: 1940 and 1930 - U.S. Census Archives. https://www.census.gov/library/publications/1920/dec/bulletins/demographics.html

Between 2009 and 2013, the Tulsa metropolitan area had the second-highest percentage of individuals who self-identified with at least one federally recognized tribe (Center for Disease Control, 2020); only the Phoenix-Mesa-Scottsdale has a higher percentage in the country.

The city also has a storied history of racial disparities and demographic changes that continue to shape racial differences and inequitable access to assets, earnings, and employment opportunities.

FIGURE 2. Racial Composition of Tulsa (2019)

Black or African American, 15.2%

Native American, 4.5%

Asian, 3.4%

Other, 0.1%

White, 54.0%

Two or More Races, 7.5%

Hispanic or Latino, 16.5%
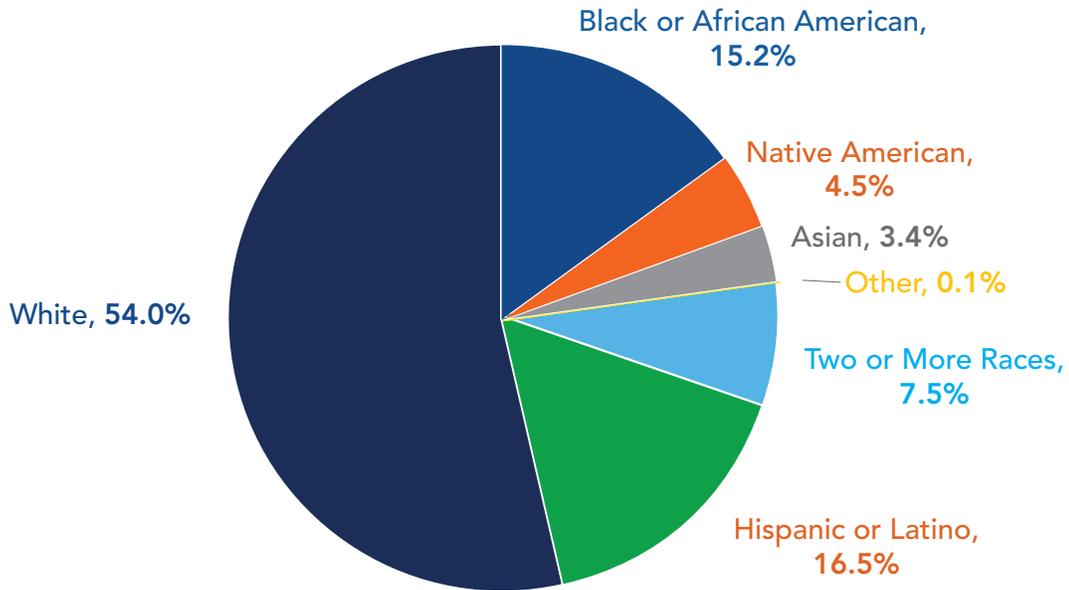
Numbers do not sum to one hundred percent due to rounding.

Source: U.S. Census Bureau – 2019 Quick Facts. QuickFacts data are derived from: Population Estimates, American Community Survey, Census of Population and Housing, Current Population Survey, Small Area Health Insurance Estimates, Small Area Income and Poverty Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, and Building Permits.

Tulsa is a relatively low-income city with nearly 19 percent of the city's residents below the poverty line, although, typically, only five percent are unemployed (ACS 2019 5-year estimates). The city is characterized by an uneven distribution of human capital, incomes, and wealth by race and ethnicity. Less than a third of the city's adults have a bachelor's degree or more (32 percent) and about a fifth of residents are uninsured (19 percent).

After a century, Tulsa still remains a center for the oil industry. However, Tulsa's economy has diversified since then to include the following industries: aerospace (both manufacturing and aviation), health care, energy, machinery, and transportation (distribution and logistics). Aerospace parts manufacturing is 3.4 times more concentrated in the Tulsa MSA than in the U.S. at large, and oil and gas production and machinery manufacturing is 9.5 times more concentrated and produces more than 11 percent of Tulsa's gross regional product. The top-paying industry in the Tulsa Region is public utilities with an average annual salary of $180,312. It does not come as a surprise that mining, quarrying, and oil and gas extraction jobs are the second-highest earnings industry in the region, followed by health care and manufacturing industries.

The largest occupational sectors in the city include educational and health care services (23 percent); arts, entertainment, and recreation (12 percent); professional, scientific, and management (11 percent), retail (11 percent), and manufacturing (10 percent). About one-tenth of workers are employed in government jobs, and 83 percent work as private wage and salary workers. In 2020, the Tulsa Regional Chamber reported the following employers as the largest in the metropolitan statistical area: St. Francis Healthcare System, Wal-Mart and Sam's Clubs, Tulsa Public Schools, American Airlines, and Hillcrest Healthcare System (Willis and Tulsa County Clerk, 2020).

Given the mix of industries and occupations in Tulsa, current unemployment in the city is slightly below the state and the nationwide averages (see Figure 3). According to the Bureau of Labor Statistics, the estimated region-wide unemployment rate in the Tulsa MSA for August 2021 is 2.9 percent. The Tulsa region unemployment rate of 2.9% is slightly below the statewide unemployment rate, which is at 3.3 percent, and significantly below when compared to the national average of 5.2%. These unemployment rates capture the rebound of the economy as the rate of COVID-19 related infections and hospitalizations steadily subside and business activity increases; nevertheless, the recovery has been characterized by a sluggish labor market with historically high resignation rates.

FIGURE 3. Comparing Recent Unemployment Rates

Unemployment Rates

Similarly, per capita income in the Tulsa MSA has been historically stronger than the state's and nation's rates. During the COVID-19 pandemic years, per capita income in Tulsa experienced a slowdown. However, with the economic recovery, it is expected to grow at an average annual rate of 4.8 percent for the next five years. The average weekly wages for all industries in the Tulsa MSA are depicted in

Figure 4. Tulsa City reported having the highest weekly wages in the area. In other words, workers in the Tulsa, OK Metropolitan Statistical Area had an average (mean) hourly wage of $23.94 in May 2020, about 12 percent below the nationwide average of $27.07. The Tulsa, OK Metropolitan Statistical Area includes Creek, Okmulgee, Osage, Pawnee, Rogers, Tulsa, and Wagoner Counties.

FIGURE 4. Average Weekly Wages (2021Q1)

Average weekly wages for all industries by county

Tulsa area, first quarter 2021
(U.S. = $1,289; Area = $1,012)

	$749 or less
	$750 – $899
	$900 or more
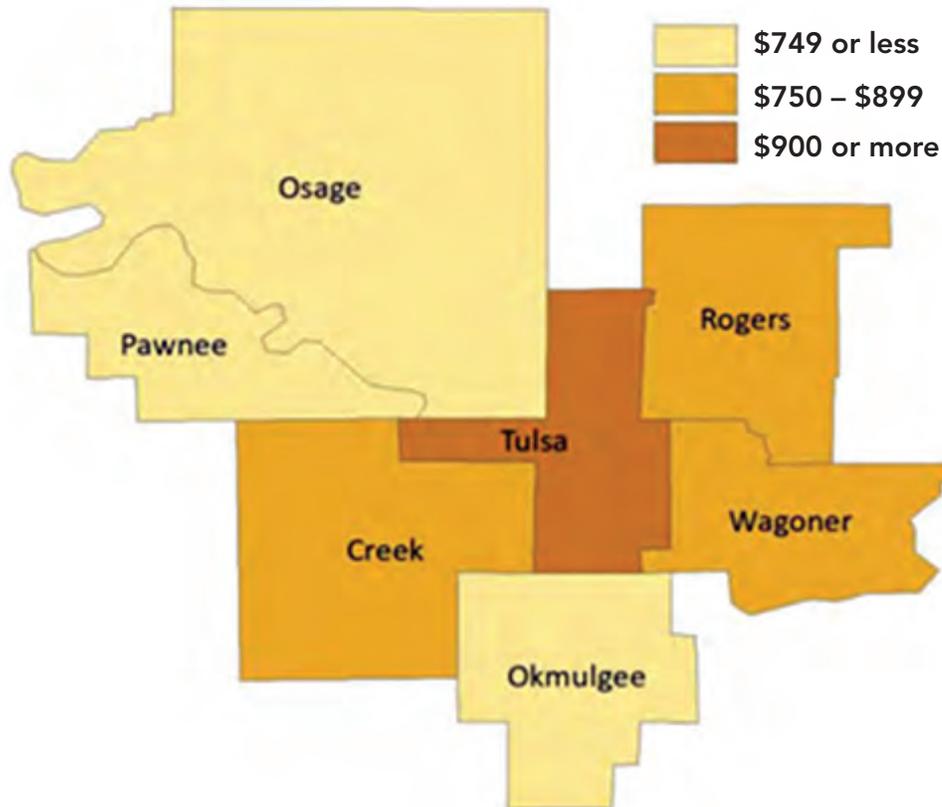
Source: U.S. BLS, Quarterly Census of Employment and Wages.

The median household income in 2019 was about $49,158 and median earnings was $31,559 (ACS 2019 1-year estimates); this amount is about $13,000 lower than the national median household income in 2019 and about $10,000 lower than the national median earnings estimates for 2019. Overall, income and earnings are below the national average on several accounts. Table 1 displays these economic characteristics by race/ethnicity for Tulsa County. Non-Hispanic whites on average have the highest median household income and annual earnings ($62,439 and $38,702, respectively) followed by Native Americans ($52,638 and $30,484, respectively).

While Hispanics and African Americans have the lowest median household income levels ($43,859 and $32,967, respectively), with the median Hispanic household making $10,892 more than the median African American household in Tulsa. In terms of median earnings, both African Americans and Hispanics have approximately similar median annual earnings ($25,369 and $25,337, respectively). At the median, whites make almost double the median household income and about a third more in earnings than African Americans in Tulsa County.

TABLE 1. Median Household Income and Earnings by Race/Ethnicity, Tulsa County 2019

Race/Ethnicity	Median Household Income	Median Annual Earnings
African American/Black	$32,967	$25,369
Hispanic	$43,859	$25,337
Native American	$52,638	$30,484
Non-Hispanic white	$62,439	$38,702

Source: ACS 2019 5-year data. Note: In 2019 dollars for people 16 years and over.

Tulsa is also highly segregated by race and ethnicity. Almost half of the city's African American population resides in north Tulsa, which also happens to have some of the highest poverty rates ranging from 38 to 41 percent across different zip codes (Human Rights Watch [HRW], 2019). In the Human Rights Watch analysis of 2017, north Tulsa also has a much higher unemployment rate (12 percent) compared to the rest of the city's 6 percent unemployment rate.

Additionally, African Americans in Tulsa are 2.3 times more likely to be arrested than white residents. North Tulsa has a disproportionately high amount of traffic stops vis-a-vis predominantly white South Tulsa; an estimated 237 traffic stops per 1,000 residents take place in North Tulsa in contrast with two per 1,000 residents in South Tulsa (HRW, 2019).

Warrant-only arrests also disproportionately affect African American residents. Black Tulsans experience 2.6 times more warrant-only arrests than white residents of Tulsa. Arrests and citations contribute to fines, fees, and/or court expenses that exacerbate poverty and contribute to unemployment. For example, HRW's (2019) analysis of Tulsa Police Department records found that warrants comprised about 40 percent of arrests, many of which were for minor city violations or traffic tickets; court costs were also the third leading reason for booking charges at the Tulsa County jail.

4. Methodology: NASCC Telephone Surveys

This report utilizes the National Asset Scorecard for Communities of Color (NASCC) data collected to improve understanding of the economic well-being of people of color in several major cities across the United States. The NASCC surveys collect detailed data on assets and debts among subpopulations according to race, ethnicity, and country of origin. The survey instruments were designed primarily to gather information about a respondent's specific assets and liabilities – including financial resources, personal savings, and investment activities – at the household level.

The Tulsa NASCC survey was conducted via telephone in the Tulsa Metropolitan Statistical Area (MSA) and included the following counties: Creek, Okmulgee, Osage, Pawnee, Rogers, Tulsa, and Wagoner. The data consists of survey respondents from various racial-ethnic subgroups: White, Black, Hispanic, and Native American disaggregated by tribe (i.e. Cherokee, Muscogee, mixed tribal affiliation, and "other tribes").

The asset and debt modules of the questionnaire replicate questions used in the Panel Study of Income Dynamics (PSID)[3], the longest-running national longitudinal household survey that collects data on employment, income, wealth, expenditures, health, marriage, education, and numerous other topics. For the non-asset and debt-based questions, the NASCC surveys replicated many questions found on the Multi-City Study of Urban

Inequality (MCSUI) survey[4]. The MCSUI was a cross-section survey of four cities – Atlanta, Boston, Detroit, and Los Angeles, collected from 1991 to 1994 to gather socioeconomic data across ethnic and racial groups.

The data collected includes key demographic characteristics, such as age, sex, educational attainment, household composition, nativity, income, and family background. In addition, financial assets (savings and checking accounts, money market funds, government bonds, stocks, retirement accounts, business equity, and life insurance) and tangible assets (houses, vehicles, and other real estate). Debts included credit card debt, student loans, installment loans, medical debt, mortgages, and vehicle debt. We estimate net worth by subtracting debts from assets. The data also tracks information on remittance behavior, the act of sending assets or other resources abroad, mostly characterized to support relatives and friends or for family investments. The survey

also includes weights based on family characteristics in the U.S. Census Bureau's ACS to generate results representative of specific ethnic group characteristics in Tulsa. In this report, we use survey weights in our regression and decomposition analyses to produce estimates that are representative of the Tulsa MSA.

It is essential to highlight some of the limitations of the NASCC data. First, given the detailed data collected on assets and debt types, some variables have missing responses, presenting some challenges. Second, the survey is a cross-section and not longitudinal panel data providing only a snapshot of the individual households interviewed in 2012. Therefore, historical comparisons cannot be made since only one year of data is available. Third, the surveys are not nationally representative because of their focus on comparisons within the Tulsa metropolitan area.

5.   Analysis: Wealth and Income Disparities

Much research has focused on how the intentional destruction of the Greenwood community in 1921 served to undermine the prosperity of blacks in Tulsa and paved the way for the wealth disparities we observe today. *The Destruction of Black Wall Street*, which contains a multitude of oral histories and illustrative narratives, documents a thriving black economic district characterized by a great number of black-owned businesses and relative economic autonomy from the white community (Messer et al., 2018a). However, the Tulsa Massacre put a halt to black prosperity (Messer et al., 2018b).

Existing literature also focuses on how contemporary racial disparity in Tulsa reveals the impact of the massacre 100 years ago. *The True Costs of the Tulsa Race Massacre*, a report by The Brookings Institution, expanded Messer's study, further analyzed how the massacre impacts the contemporary wealth distribution in Tulsa. The paper concludes that "Tulsans in black-majority neighborhoods are largely shut out of jobs in financial firms and institutions" (Perry, A. M., et al., 2021).

Black people, comprising 10% of the Tulsa metropolitan population, own only 1.25% of the area's 20,000 businesses.

Close to 36 percent of black residents who live in north Tulsa account for over one-third of the people in poverty in the city. Similar to this study, *The Case for Reparations* comparatively assesses majority-black north Tulsa and majority-white south Tulsa in well-being, unemployment, infrastructure, etc. It finds that the unemployment rate for black Tulsans is 2.4 times the rate for white people. Furthermore, the differences in life expectancy, poverty rates, and education between north and south Tulsa are significant (Messer, et al., 2018b).

While the above literature well documents the current racial differences in economic well-being across Tulsa, the drivers of these differences have not been fully explored empirically. In this section, we estimate racial disparities in wealth and income, and we use the Oaxaca-Blinder decomposition method to examine the drivers of these differences. We also compare the estimated black-white wealth gaps in Tulsa to black-white wealth gaps in other NASCC cities to determine if outcomes are substantially worse for blacks in Tulsa given the intentional destruction of black wealth generated by the Tulsa Massacre.

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[3] https://psidonline.isr.umich.edu

[4] https://www.icpsr.umich.edu/web/ICPSR/studies/2535

5.1 Descriptive Statistics: Wealth, Income, and Other Characteristics

We start our analysis by providing general descriptive statistics by racial-ethnic groups and comparing these to white Tulsans. Table 2 provides the unweighted summary statistics for our key variables used for our decomposition broken down by broad racial-ethnic groups. *Wealth* is defined as total assets minus total liabilities or debts. *Household Income* is the sum of all earnings from all household members, while *Earnings* are the earnings of the head of the household. *Wealth*, *Household Income*, and *Earnings* are given in 2012 dollar values. *Inheritance and Gifts* is a dummy that equals to one if any member of the household (or their parents) has received a substantial inheritance or gift from any family or friends including stocks, homes, and contributions to down payments for a mortgage, help pay for college, or loans without interests, etc. *Entrepreneur* and *Self-Employed* are dummy variables with one if true and zero otherwise. *Incarceration Exposure* is a binary variable with a value of one if any household member has been to jail, prison, reformatory school, or youth detention center.

We also include standard demographic variables such as Age, given in levels, and binary variables for education (*BA Degree or Higher*); marital status (*Married*); gender (*Female*), and US-born (*US Born*). We find that relative to white households, black heads of household tend to be younger (50.64 vs. 57.07 for whites), less educated, with 15 percent having a bachelor's degree or higher (vs. 30 percent for whites), are less likely to be married (32 percent vs. 70 percent for whites). The rates for female and US-born are similar for both black and white households. For Hispanics, we find that relative to whites, they tend to be younger (45.20 vs. 57.07 for whites) and have a lower percentage of US-born (51 percent vs. 98 percent for whites), as expected given the high rate of the immigrant population within the Hispanic community relative to whites nationally. Last but not least, in the case of Native Americans, we find that the demographics are very comparable to those of white households, with only one exception: marriage rate (51 percent vs. 70 percent or whites).

TABLE 2. Summary Stats: White vs. Black, Hispanic, and Native American Households

			Whites vs. Blacks		Whites vs. Hispanics		Whites vs. Native Americans	
	All	White	Black	Diff	Hispanic	Diff	Native American	Diff
Wealth	144,588.27	21,3075.47	19,481.93	193,593.54***	82,204.02	130,871.45*	189,173.53	23,901.94
Household Income	50,737.20	57,276.62	30,385.53	26,891.09***	40,586.41	16,690.21**	61,394.26	-4,117.64
Earnings	32,991.58	35,708.11	16,289.13	19,418.98***	31,627.59	4,080.52	40,307.18	-4,599.07
Homeownership	0.69	0.88	0.50	0.38***	0.60	0.28***	0.70	0.18***
Inheritance and Gifts	0.29	0.33	0.15	0.17*	0.25	0.08	0.32	0.01
Entrepreneur	0.08	0.13	0.02	0.12**	0.01	0.12**	0.12	0.02
Self-Employed	0.05	0.04	0.06	-0.02	0.01	0.03	0.05	-0.01
Incarceration Exposure	0.19	0.10	0.20	-0.10	0.12	-0.02	0.28	-0.17***
Age	53.72	57.07	50.64	6.43**	45.20	11.87***	57.52	-0.45
BA Degree or Higher	0.23	0.30	0.15	0.15*	0.22	0.08	0.22	0.09
Married	0.53	0.70	0.32	0.38***	0.57	0.13	0.51	0.19**
Female	0.69	0.73	0.77	-0.04	0.61	0.12	0.69	0.04
US Born	0.89	0.98	1.00	-0.02	0.51	0.47***	1.00	-0.02
Observations	**396**	**89**	**66**	**155**	**77**	**166**	**156**	**245**

In terms of the wealth and income variables, Table 2 shows that the unweighted average wealth in our Tulsa sample is $144,588.[5] However, wealth varies tremendously by racial-ethnic groups. For example, the wealth level for white households is $213,075 compared to $19,481 for blacks, $82,204 for Hispanics, and $189,173 for Native Americans. The racial wealth gap is statistically significant between whites and blacks and whites and Hispanics. Surprisingly, the wealth gap is not significant when comparing whites and Native Americans in Tulsa. This could be attributed to the earning and political power of Native Americans in Tulsa. We find similar trends for the household income gaps across the racial-ethnic groups with respect to white households. Of note is that in terms of earnings, we find that the earnings gap relative to white is statistically significant only for Black heads of household. Hispanic and Native American families tend to earn statistically the same as white households in Tulsa. This highlights the existence of barriers that penalizes black Tulsans in the local labor markets. We find evidence of compounding effects in other local markets such as the real estate markets, in which the homeownership rate gap is 38 percent relative to white households, the largest gap across all of the racial-ethnic groups.

This finding is important because racial disparities in homeownership tend to amplify other forms of inequalities given that homeownership affects multiple socio-economic dimensions, including: the quality of the neighborhood and school district, the size of the business loan you are able to qualify for (because homes can be used as collateral for business loans or can be refinanced), etc. Last but not least, as an asset, a home can be passed down as a bequest to family members. Our findings support these hypotheses. In Tulsa, we find white-black gaps in inheritance receivership (17 percentage point gap) and entrepreneurship rate (12 percentage point gap).

Research shows that inheritance (or intergenerational transfers) and gifts received from family and friends play an important role in wealth and income generation. By definition, only those generations that own assets can leave a bequest to younger generations. Therefore, as a social construct, wealth is path-dependent from a historical perspective and can, directly and indirectly, affect present levels of the racial wealth and income gaps. By some estimates, bequests and transfers account for at least half of aggregate wealth (Gale and Scholz 1994), have recently averaged 3 percent of total household disposable personal income (Feiveson and Sabelhaus 2018), and account for more of the racial wealth gap than any other demographic or socioeconomic indicator (Hamilton and Darity, 2010). This also means that any interruption of wealth-building activity that involves a particular group will have future consequences on wealth levels for that specific group with respect to others, such as in the case of the Tulsa Massacre. We find corroborative evidence showing that white Tulsan households are twice as likely to receive inheritance or gifts from family and friends. The percentage of white households that reported receiving a substantial inheritance or gift from family and friends is 33 percent relative to 15 percent for blacks, the largest gap across all racial-ethnic groups and the only statistically significant one (we find no significance for Hispanics or Native Americans).

Having an active and healthy entrepreneurial and business ecosystem helps build and maintain wealth within a community. Before 1921, Tulsa was one of the most prominent Black Wall Streets in the US, with a very active business community. Today, we find that the entrepreneurship rate for whites is 6.5 times larger than that of blacks (13 percent vs. 2 percent respectively), and the gap is statistically significant. This gap is similar to the gap for Hispanics, who have moved to Tulsa in recent decades. However, we find no significant gap between whites and Native Americans in terms of entrepreneurship rates.

On the other hand, an impediment to building wealth and income is incarceration. One channel through which incarceration affects wealth is through the interruption of earnings. Additionally, having an incarceration record reduces future employment opportunities and hence future income for the affected family member and the household. Recent research finds that incarceration exposure reduces household income and disproportionately affects black communities (Colston et al., 2021; García-Perez et al., 2020).

Although not statistically significant, we find that black households are twice as likely to be exposed to incarceration, with 20 percent of respondents stating that at least one of the people within the household has been to jail, prison, or a juvenile correction facility. Our findings show that incarceration exposure is a concern disproportionately affecting Native Americans. We find statistically significant incarceration exposure for Native Americans relative to white households, with 28 percent of Native Americans reporting incarceration exposure compared to only 10 percent of white Tulsan households. In other words, Native Americans are 2.8 times more likely to experience incarceration exposure than white households.

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[5] The ACS weighted means for wealth, household income, and earnings are given as part of the decomposition analysis later in this section.

TABLE 3. Wealth and Earnings Summary Statistics: Median

	Statistic	Whites	Blacks	Hispanics	Native Americans
Wealth	Median	78,005	5,000	8,800	57,850
	(N)	(55)	(45)	(51)	(92)
Household Income	Median	50,000	22,000	30,000	34,000
	(N)	(76)	(55)	(68)	(129)
Earnings	Median	31,000	9,000	22,000	32,000
	(N)	(36)	(30)	(44)	(61)
Observations in Full Sample		**89**	**66**	**77**	**156**

Now, it is possible that outlier households or super-rich Tulsans drive the wealth and income gaps shown in Table 2. Therefore, in Table 3 we provide the point estimate of the median across wealth, household income, and earnings among different ethnic groups. We find that while the wealth of whites remains the greatest ($78,005), followed by Native Americans ($57,850), the wealth of blacks and Hispanic households significantly lag behind, with a median wealth of $5,000 and $8,800 respectively. For household income and earnings, the relation between different ethnic groups remains the same, but the gap of household earnings between whites, blacks, and Hispanics are narrower, with white households having a median household income of $50,000, compared to $22,000 for blacks, and $30,000 for Hispanics. Native Americans show a median household income of $34,000. These results indicate that all groups suffer from large outlier effects, which push the means reported in Table 2 to the right. The outlier wealth effect is larger for Hispanics and blacks.

Table 4 provides the summary statistics and compares whites to members of different tribes. One interesting finding is that Native American households of mixed tribes or that claim no single tribe affiliation tend to

have the largest wealth level ($303,268), even larger than white households in Tulsa. Muscogee Native Americans tend to have the lowest level of wealth, with a mean wealth of $53,892. In contrast, Cherokee and Other Tribe households have similar wealth to white households with $180,738 and $180,189, respectively. Therefore, a surprising result is that we find statistically significant wealth and household earning differences between whites and Muscogees only, and not for any of the other groups when compared to white households. Muscogee households also lag behind whites and other Native American tribes in homeownership, entrepreneurship, and education. Our findings show that incarceration exposure primarily affects Cherokee, Other Tribes, and the Mix or No Tribe households. Muscogee households have similar incarceration exposure as white households. In terms of marital status, only Mixed or No Tribe affiliation households are different from white households, with only 40 percent reporting being married compared to 70 percent for white households. We find that white and Native American households across different tribes in our sample are very similar in inheritance and gifts received, self-employment, age, gender, and US-born.

TABLE 4. Summary Stats: White vs. Native American Households by Tribe

	Whites vs. Cherokees			Whites vs. Muscogees		Whites vs. Other Tribes		Whites vs. Mixed or No Tribe	
	White	Cherokee	Diff	Muscogee	Diff	Other Tribes	Diff	Mixed or No Tribe	Diff
Wealth	21,3075.47	180,738.30	32,337.17	53,891.81	159,183.66**	180,189.74	32,885.73	303,268.83	-90,193.35
Household Income	57,276.62	88,572.37	-31,295.75	36,702.33	20,574.29*	50,163.00	7,113.62	58,838.89	-1,562.27
Earnings	35,708.11	39,386.61	-3,678.50	38,032.88	-2,324.76	47,239.40	-11,531.29	35,999.47	-291.36
Homeownership	0.88	0.80	0.08	0.62	0.26*	0.67	0.21*	0.68	0.20*
Inheritance and Gifts	0.33	0.36	-0.04	0.24	0.08	0.36	-0.04	0.30	0.03
Entrepreneur	0.13	0.11	0.02	0.00	0.13***	0.14	-0.00	0.17	-0.04
Self-Employed	0.04	0.07	-0.02	0.03	0.01	0.03	0.02	0.06	-0.02
Incarceration Exposure	0.10	0.32	-0.22**	0.21	-0.11	0.31	-0.20*	0.26	-0.15*
Age	57.07	54.77	2.30	57.31	-0.24	56.03	1.04	61.43	-4.37
BA Degree or Higher	0.30	0.23	0.08	0.14	0.17*	0.19	0.11	0.28	0.03
Married	0.70	0.61	0.08	0.48	0.21	0.53	0.17	0.40	0.29**
Female	0.73	0.70	0.03	0.66	0.08	0.69	0.04	0.68	0.05
US Born	0.98	1.00	-0.02	1.00	-0.02	1.00	-0.02	1.00	-0.02
Observations	89	44	133	29	118	36	125	47	136

The above analysis shows that one important and common characteristic of the racial-ethnic groups for which we found statistically significant wealth and income gaps, such as African Americans, Hispanics, and Muscogees, is the low rate of entrepreneurship compared to white households. An interesting question to explore is how different are families with entrepreneurs compared to those without any entrepreneurs. We find very compelling results that entrepreneurs, in the long run, tend to generate relatively more wealth, household income, and earnings compared to households without entrepreneurs; the relative gaps are $611,454, $54,271, and $24,179, respectively (see Table 5). Not surprisingly, we find that entrepreneurial families have higher homeownership rates (91 percent vs. 67 percent), are more educated (52 vs. 20 percent hold a BA degree or higher), are more likely to be married, and are US born. These results highlight that creating the right set of incentives for asset building through entrepreneurship can help in decreasing the wealth and income inequality in Tulsa.

TABLE 5. Summary Stats: Employees vs. Entrepreneurs

	No Entrepreneur	Entrepreneur	Diff
Wealth	112792.66	724246.69	-611454.03**
Household Income	46039.09	100310.34	-54271.25*
Earnings	30106.57	54285.71	-24179.15*
Homeownership	0.67	0.91	-0.24***
Inheritance and Gifts	0.27	0.45	-0.18
Incarceration Exposure	0.19	0.15	0.04
Age	53.39	57.41	-4.01
BA Degree or Higher	0.20	0.52	-0.31**
Married	0.51	0.70	-0.18*
Female	0.69	0.70	-0.00
US Born	0.88	1.00	-0.12***
Observations	**363**	**33**	**396**

5.2 Comparison to Other NASCC Cities

One important question is whether the differential correlation that we see in Tulsa is unique to this particular city. It could be possible similar household behavior and magnitudes are found throughout the United States, and the wealth and income gaps are not necessarily unique to Tulsa. To tackle this question, we compare the survey samples from the other NASCC cities conducted around the same time. This list of cities includes Boston, Miami, Los Angeles, and Washington DC. We purposely exclude Baltimore, given the analysis was conducted much later and under a slightly different methodology. The below comparison focuses on analyzing the means across each of the city samples. Given that the NASCC surveys were conducted at different times, the data on wealth, household income, and earnings are in 2012 dollars. For a more detailed analysis of the sample for each city see the *Color of Wealth* reports for the corresponding cities (Muñoz et al. 2015; De La Cruz-Viesca et al. 2016; Kijakazi et al., 2016; Aja et al., 2019).

TABLE 6. PART 1 – Across NASCC Cities Comparison

	City of Tulsa			Boston			Washington, DC		
VARIABLES	White	Black	Diff	White	Black	Diff	White	Black	Diff
Wealth	213075.47	19481.93	193593.54***	262643.33	93594.49	183821.27**	629804.01	177293.90	452510.11***
Household Income	57276.62	30385.53	26891.09***	77572.87	56577.88	20671.75*	129436.73	98828.96	30607.77*
Earnings	35708.11	16289.13	19418.98***	52804.71	40683.11		72534.47	69064.83	3469.65
Homeownership	0.88	0.50	0.38***	0.53	0.40	0.14*	0.86	0.66	0.20***
Inheritance and Gifts	0.33	0.15	0.17*	0.35	0.24	0.09	0.47	0.30	0.17**
Entrepreneur	0.13	0.02	0.12**	0.07	0.07	-0.02	0.09	0.10	-0.01
Self-Employed	0.04	0.06	-0.02	0.06	0.01	0.05*	0.06	0.03	0.03
Incarceration Exposure	0.10	0.20	-0.10	0.12	0.18	-0.06	0.07	0.12	-0.05
Age	57.07	50.64	6.43**	51.91	50.88	1.67	51.60	49.05	2.55
BA Degree or Higher	0.30	0.15	0.15*	0.44	0.38	0.06	0.77	0.46	0.31***
Married	0.70	0.32	0.38***	0.47	0.39	0.08	0.58	0.36	0.22***
Female	0.73	0.77	-0.04	0.56	0.76	-0.21***	0.53	0.65	-0.12*
US Born	0.98	1.00	-0.02	0.76	0.95	-0.20***	0.92	0.95	-0.03
Observations	89	66	155	171	94	253	153	129	282

TABLE 6. PART 2 – Across NASCC Cities Comparison

	Los Angeles			Miami		
	White	Black	Diff	White	Black	Diff
Wealth	847376.31	291012.86	556363.45**	372202.65	152090.58	220112.06*
Household Income	134920.84	48209.90	86710.94***	97756.28	62955.52	34800.76*
Earnings	94930.20	38973.66	55956.53***	74271.20	40002.59	34268.61*
Homeownership	0.79	0.51	0.27**	0.81	0.62	0.19***
Inheritance and Gifts	0.38	0.20	0.17	0.39	0.25	0.14*
Entrepreneur	0.11	0.04	0.06	0.16	0.05	0.10*
Self-Employed	0.07	0.07	0.00	0.06	0.03	0.02
Incarceration Exposure	0.11	0.20	-0.09	0.10	0.16	-0.06
Age	61.98	59.52	2.46	60.93	56.22	4.71*
BA Degree or Higher	0.59	0.42	0.17	0.46	0.33	0.13
Married	0.57	0.24	0.33***	0.58	0.28	0.30***
Female	0.68	0.71	-0.03	0.60	0.72	-0.12
US Born	0.88	0.98	-0.10*	0.92	0.98	-0.06
Observations	56	45	101	90	158	248

The five-city comparison is reported in Table 6. Our findings show the city of Tulsa has the largest wealth and income gaps of all of the NASCC cities. For example, in terms of the percentage of the black-white wealth gap the size of the gap is 91 percent for Tulsa, while for DC is 72 percent, for Los Angeles is 66 percent, for Boston is 64 percent, and for Miami is 59 percent. In terms of the household income gap, only Los Angeles has a larger black-white income gap than Tulsa, 64 percent versus 47 percent.

Similarly for earnings, in which Los Angeles has the largest white-black earnings gap (59 percent) followed by that of Tulsa (54 percent). The findings for the wealth gap highlights that two of the major sources driving these differential effects are homeownership rates (38 percent gap) and entrepreneurship (12 percent gap). Compared to the other NASCC cities, Tulsa has the largest homeownership rate gap and the entrepreneurship rates of

blacks and whites in the other cities are generally similar for both groups, with a minor exception for Miami, for which we find some weak statistical significance.

Research has shown that unmarried heads of households tend to have lower wealth levels. For example, using the US National Longitudinal Survey of Youth (NLSY79), Zagorsky (2005) finds married respondents experience per person net worth increases of 77 percent over single respondents. Additionally, the author finds that divorced respondents experience a drop in their wealth. Hence, the fact that there is a 38 percent white-black marriage gap, driven partly by the high incarceration of blacks in Tulsa, could also contribute to the wealth gap in the city. We find similar results in the other cities, with the exception of Boston, for which we find no statistically significant difference in marriage rates between white and black households.

5.3 Wealth Analysis: Assets and Liabilities

To understand what drives some of the wealth inequalities in Tulsa, we look at the composition of assets and liabilities at the household level across the different racial-ethnic groups. Table 7 provides the summary statistics for the total assets and liabilities by racial-ethnic group. The list of assets includes home equity, other real estate, vehicle,

business equity, total account balances for checking, savings and money market accounts, total value for stocks, mutual funds and investment trusts, retirement assets, and other assets. For debt, the list includes credit cards, installment loans, student loans, medical, legal, friends and family debts.

TABLE 7. Assets and Debts: White vs. Black, Hispanic, and Native American Households

			Whites vs. Blacks			Whites vs. Hispanics		Whites vs. Native Americans	
	All	White	Black	Diff	Hispanic	Diff	Native American	Diff
All Assets								
Home Equity	74715.08	105944.05	39933.33	66010.71***	58978.87	46965.17***	77757.28	28186.77*
Other Real Estate	19340.30	24847.06	4545.45	20301.60	15894.84	8952.22	24973.39	-126.33
Vehicle Equity	8879.10	9157.32	4446.55	4710.77**	8509.68	647.64	10746.36	-1589.04
Business Equity	15235.16	26632.18	0.00	26632.18*	1081.08	25551.10	16440.84	10191.34
Checking, Savings, and Money Market Accounts	36588.63	55591.26	4896.65	50694.61**	37705.44	17885.83	41081.55	14509.71
Stocks, Mutual Funds, Inv Trusts	15093.03	27905.42	156.25	27749.17*	10373.33	17532.09	15513.96	12391.46
Retirement Assets	19800.64	32622.77	4920.63	27702.14	13791.94	18830.83	21587.50	11035.27
Other Assets	10763.86	11738.10	7296.72	4441.37	8309.86	3428.24	13298.61	-1560.52
All Liabilities (Debts)								
Credit Card Debt	2761.15	3605.86	6686.84	-3080.98	1533.54	2072.32	1322.60	2283.26*
Installment Loan Debt	758.14	170.45	164.62	5.84	1090.74	-920.29	1224.03	-1053.57
Student Loan Debt	4463.41	3727.27	9942.86	-6215.58	2691.78	1035.49	3605.59	121.68
Medical Debt	2285.52	757.65	2403.17	-1645.53	782.40	-24.75	3946.38	-3188.73
Legal Debt	10.28	0.00	0.00	0.00	33.78	-33.78	9.80	-9.80
Debt to Friends and Relatives	99.79	0.00	0.00	0.00	136.76	-136.76	187.01	-187.01
Observations	**396**	**89**	**66**	**155**	**77**	**166**	**156**	**245**

A key takeaway from the results shown in Table 7 is that household wealth differentials across racial-ethnic groups are mainly driven by asset-building behavior and not by debt minimization. In other words, we find that in Tulsa racial-ethnic groups behave fairly similar when it comes to debt acquisition levels. This means that blacks in Tulsa, who on average, have lower wealth levels tend to have similar amounts of debts across all liability categories, which means black households are more likely to be in debt relative to white Tulsans.

When it comes to assets, we observe statistically significant differences between black and white households when it comes to home, vehicle, and business equity; balances in checking, savings and money market accounts; and investments in stocks, mutual funds, and investment trusts. The largest gap is for home equity, showing a differential of $66,010, followed by balances in checking, savings, and money market accounts ($50,695), value of investment in stock, mutual funds, and investment trust ($27,749), and business equity ($26,632).

Although, the two latter ones are just weakly significant at the 90 percent confidence level. The fact that investment in stock markets comes in third is not surprising, since Tulsa is a blue-collar city, which aligns with investment habits of real estate and savings (checking, savings, and money market accounts.)

In terms of Hispanics and native American households, generally, we find statistically significant gaps for home equity but not for any other type of asset or debt, with only one exception credit card debt for native Americans is lower than white households, but its effect is only weakly significant.

TABLE 8. Assets and Debts: White vs. Native American Households by Tribe

	Whites vs. Cherokees			Whites vs. Muscogees		Whites vs. Other Tribes		Whites vs. Mixed or No Tribe	
	White	Cherokee	Diff	Muscogee	Diff	Other Tribes	Diff	Mixed or No Tribe	Diff
All Assets									
Home Equity	105944.05	74611.29	31332.75*	68946.43	36997.62*	93424.24	12519.81	74545.45	31398.59*
Other Real Estate	24847.06	11818.39	13028.67	14413.79	10433.27	12218.75	12628.31	53711.11	-28864.05
Vehicle Equity	9157.32	8731.90	425.42	6184.62	2972.70	12183.87	-3026.55	14979.73	-5822.41
Business Equity	26632.18	8256.00	18376.18	0.00	26632.18*	24000.00	2632.18	29090.91	-2458.73
Checking, Savings, and Money Market Accounts	55591.26	42565.32	13025.94	31698.71	23892.55	33691.17	21900.10	51397.34	4193.92
Stocks, Mutual Funds, Inv Trusts	27905.42	20425.00	7480.42	50.00	27855.42*	3921.88	23983.55*	29154.97	-1249.55
Retirement Assets	32622.77	19658.54	12964.24	6571.43	26051.34	25968.16	6654.61	30046.51	2576.26
Other Assets	11738.10	27756.10	-16018.00	142.86	11595.24*	11470.59	267.51	9341.46	2396.63
All Liabilities (Debts)									
Credit Card Debt	3605.86	1540.15	2065.71	2104.17	1501.70	598.39	3007.48**	1206.12	2399.75*
Installment Loan Debt	170.45	1911.63	-1741.17	2793.10	-2622.65	91.67	78.79	478.26	-307.81
Student Loan Debt	3727.27	4186.05	-458.77	5674.25	-1946.98	2373.83	1353.44	2741.02	986.25
Medical Debt	757.65	1259.52	-501.88	11152.22	-10394.58	1574.29	-816.64	3975.56	-3217.91
Legal Debt	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33.33	-33.33
Debt to Friends and Relatives	0.00	18.60	-18.60	0.00	0.00	0.00	0.00	608.70	-608.70
Observations	**89**	**44**	**133**	**29**	**118**	**36**	**125**	**47**	**136**

Table 8 provides the summary statistics for the total assets and liabilities divided by tribes. In terms of assets, we find only some significance (although weak) for the home equity when comparing whites to Cherokees, Muscogee, and mixed or no tribe Native Americans – the size of the home equity gaps are $31,333, $36,98, and $31,399 respectably. Generally speaking, we do not find evidence of differential gap with respect to whites for Cherokees, Other Tribes, or Mixed or No Tribes Native Americans in any of the other listed assets. When comparing whites and Muscogee, we find weak significance for business equity, stocks, mutual funds and investment trusts and other assets – with whites showing higher amounts. In terms of debt or liabilities, we find that for the most part the households from different Native American tribes behave similar to white households, with the only exception being credit card debt, in which whites have larger credit card debts than Native Americans from Other Tribes, or Mixed or No Tribes.

Lastly, in Table 9 we compare the assets and liabilities between households with employees and those with at least one entrepreneur. We find that there exist huge gaps between entrepreneurs and employees across different types of assets as expected. We find statistical significance for the gaps for home equity ($67,138), other real estate ($100,528), vehicle equity ($8,780), business equity ($210,571), and the total balance of checking, savings, and money market accounts ($81,138). In terms of liabilities, we find that employees tend to have on average larger installment loan debt (gap of $781.8) and medical debt (gap of $2,349).

TABLE 9. Assets and Debts: Employees vs. Entrepreneurs

	Employees	Entrepreneur	Diff
All Assets			
Home Equity	68892.77	136031.25	-67138.48***
Other Real Estate	11245.81	111774.19	-100528.38*
Vehicle Equity	8123.56	16903.45	-8779.89**
Business Equity	0.00	210571.68	-210571.68***
Checking, Savings, and Money Market Accounts	29728.60	110866.28	-81137.68*
Stocks, Mutual Funds, Inv Trusts	12461.68	46857.14	-34395.46
Retirement Assets	17613.79	45137.93	-27524.15
Other Assets	9634.91	23483.33	-13848.42
All Liabilities (Debts)			
Credit Card Debt	2827.10	2053.33	773.76
Installment Loan Debt	822.45	40.63	781.83*
Student Loan Debt	4471.45	4375.00	96.45
Medical Debt	2478.17	129.03	2349.14**
Legal Debt	11.20	0.00	11.20
Debt to Friends and Relatives	108.72	0.00	108.72
Observations	**363**	**33**	**396**

5.4 Decomposition Analysis: Wealth and Income Gaps

The above findings suggest that the wealth and income disparities that we see seem to be driven by differences in entrepreneurship and homeownership rates between whites and blacks. However, access to credit and other resources can significantly affect both the ability to start a business and to own a home. Therefore, in this section, we explore to what extent we can decompose the existence of inequalities into those that we can observe and those that we are not able to control for such discrimination, racism, among others, and their amplification mechanisms through society.

With that aim in mind, in this section, we estimate racial differences in wealth (or net worth), household income, and head of household earnings using the Blinder-Oaxaca decomposition to shed some light on these disparities. Specifically, we use a twofold decomposition method with a pooled regression model. This method decomposes the gap in average outcomes (e.g., wealth, household income, and head of household earnings) into one component that can be explained by observable differences in age, education levels, and gender, and another component that differences in these covariates cannot explain. The unexplained component can be attributed to unobservable characteristics across racial and ethnic groups, including exposure to discrimination or the effects of significant local shocks such as the Tulsa massacre have in various markets – labor, housing, financial, education, healthcare, among others (Oaxaca, 1973; Blinder, 1973; Card and Krueger 1992; Fortin et al, 2011). Therefore, here we follow the literature and interpret the statistical significance of the unexplained component as evidence of discrimination.

It is worth noting that in all of our decomposition results discussed below, we use survey weights based on family characteristics in the U.S. Census Bureau's ACS to generate results representative of specific ethnic group characteristics in Tulsa MSA.

Black-White Wealth and Income Gap Decompositions

We start by decomposing the racial wealth, household income, and earnings gaps between black and white households in Tulsa. Table 10 shows the average dollar amount for total net worth by racial-ethnic groups. Our wealth variable is measured as the total household net worth – calculated by subtracting each respondent's reported total debts from total assets. The value of total assets includes home equity, other real estates, vehicle

equity, business equity, money in checking, savings, and money market accounts, government bonds, stocks, mutual funds, retirement assets, and other assets. Total debt includes debts from credit cards, installment loans, student loans, medical bills, legal bills, money owed to friends and relatives, and other debts.

Our subsample is composed of 155 households (89 whites and 66 blacks) of which we were able to obtain or calculate the net worth, household income, and earnings of 99, 130, and 65 households respectively. We use these observations to perform our decompositions below.

For each of our Blinder-Oaxaca decompositions discussed below, "group 1" denotes the comparison racial group (whites), and "group 2" represents the minority racial or ethnic group of interest. The rows titled "group 1" and "group 2" give the average outcome of each racial group, and the row titled "difference" shows the difference in outcome between the two groups. Positive differences mean that the average outcome for whites was higher than that for the comparison racial/ethnic group. The units for these estimates are in levels.

Table 10 gives the results of the black-white decompositions of the wealth, household income, and earning gaps. We find substantial differences in the average wealth gap across black and white households in Tulsa. The gap between the average wealth of whites and that of blacks is $213,527, equivalent to 92 percent. In other words, the average black household wealth in Tulsa represents only 8 percent of the wealth owned by the average white household. Interestingly, the wealth gap is not explained by group differences in age, education, gender, and marital status. The findings show that 90 percent of the black-white wealth gap is unexplained, which the literature attribute to other unobserved sources including historical and systematic discrimination (Oaxaca, 1973; Blinder, 1973; Card and Krueger 1992; Fortin et al., 2011).

In terms of the black-white household income gap, we find a gap of $30,967, of which 69 percent is unexplained, leaving only 31 percent to be explained by age, education, gender, and marital status. We also find that the unexplained portion of the earning gap accounts for 93 percent of the earning gap of $15,795.

Taking a deeper look into both the explained and unexplained components of the three decompositions, we find that only for the household income gap the explained component is significant. This effect is driven by the contribution of the differences in marital status. There is also evidence of differing returns to marital status as shown by the significance of the predictor on the unexplained component for both wealth and household income, showing a narrowing of the unexplained component of

the wealth and household income gaps. These findings are important because they highlight the importance of marriage in building wealth. Research has shown that the white-black differential rate of incarceration has affected wealth accumulation, one of the channels through which is low marriage rates (Colston et al. 2021). Similarly, we find that education level has differential returns for black and white as shown by the statistical significance of the unexplained component of the wealth gap.

TABLE 10. Whites vs. Blacks: Decomposition of the Wealth, Household Earnings, and Earnings Gaps

	Wealth			Household Income			Earnings		
VARIABLES	overall	explained	unexplained	overall	explained	unexplained	overall	explained	unexplained
group_1	232,560***			69,172***			36,325***		
	(55,630)			(4,926)			(5,714)		
group_2	19,033***			38,206***			20,530***		
	(7,233)			(4,821)			(3,680)		
difference	213,527***			30,967***			15,795**		
	(56,098)			(6,893)			(6,796)		
explained	20,783			9,626**			1,046		
	(28,704)			(4,501)			(4,675)		
unexplained	192,744***			21,341***			14,749**		
	(48,069)			(7,436)			(6,694)		
Age		3,713	1.027e+06		14,376	157,443		548.0	-32,614
		(53,115)	(742,235)		(9,719)	(125,384)		(4,603)	(116,468)
Age^2		33,761	-392,218		-14,974	-88,726		164.4	17,206
		(60,381)	(397,790)		(10,202)	(68,260)		(4,338)	(59,056)
BA Degree or Higher		22,544	64,854**		2,650	-610.0		5,085	-6,675
		(17,838)	(31,019)		(2,341)	(3,804)		(3,141)	(5,172)
Female		-808.4	49,372		123.2	-973.9		-227.6	1,603
		(6,463)	(75,291)		(431.8)	(10,024)		(1,179)	(13,142)
Married		-38,426*	-109,206**		7,451**	-14,428**		-4,524	-6,473
		(22,171)	(44,057)		(3,185)	(7,099)		(4,201)	(13,169)
Constant			-447,168			-31,364			41,703
			(337,383)			(54,858)			(49,138)
Observations	99	99	99	130	130	130	65	65	65

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Robustness Checks

The baseline wealth decomposition results shown in Table 10 say that 90 percent of the gap is unexplained, a very large percentage of the gap. It is possible that these results suffer from omitted variable bias. We conduct multiple robustness checks in which we include additional covariates separately to the baseline model to test our results sensitivity. In particular, we are interested in knowing if differences in key wealth-building drivers such as household income, homeownership, inheritance, and incarceration exposure can serve to better explain the black-white wealth gap.

Table 11 shows the results of our robustness checks. For compactness purposes, we report only group means, the difference (or gap), and the explained and unexplained portions of the gap. All of the models control for the same covariates as in Table 10. Column (1) shows our baseline results. Columns (2)-(5) add each covariate separately to the baseline model in column (1) – column (2) adds household income; column (3) adds homeownership rates; column (4) adds a dummy for receiving a substantial inheritance or gifts from family or friends, and column (5) adds a dummy if the household has had incarceration exposure. Lastly, column (6) adds household income, homeownership, inheritance, and incarceration exposure jointly to the baseline model. As part of the robustness checks, we are unable to include entrepreneurship rates due to the low number of entrepreneurs in the black subsample that does not allow us to conduct the decomposition.

TABLE 11. Whites vs. Blacks Wealth Gap Decomposition Robustness Checks

VARIABLES	(1) Baseline	(2) +HH Income	(3) +Homeownership	(4) +Inheritance	(5) +Incarceration	(6) +All
group_1	232,560*** (55,630)	236,992*** (56,652)	232,560*** (54,031)	232,560*** (55,739)	232,560*** (55,746)	236,992*** (55,461)
group_2	19,033*** (7,233)	20,375*** (7,587)	19,033** (7,451)	19,033*** (7,274)	19,033*** (7,234)	20,375*** (7,697)
difference	213,527*** (56,098)	216,618*** (57,158)	213,527*** (54,543)	213,527*** (56,211)	213,527*** (56,213)	216,618*** (55,993)
explained	20,783 (28,704)	30,522 (36,696)	62,371** (31,744)	29,261 (32,672)	21,231 (28,758)	60,174 (38,533)
unexplained	192,744*** (48,069)	186,096*** (52,617)	151,156*** (48,540)	184,266*** (56,383)	192,296*** (48,401)	156,443*** (57,259)
Observations	99	95	99	99	99	95

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Our findings provide some useful and interesting insights. We find that the addition of wealth-building covariates individually and jointly to our baseline model does not change our results. Generally speaking, the explained portion remains mostly insignificant. One exemption is when we add homeownership in column (3) for which the explained portion is now statistically significant at the 95 percent level. However, the gap ($213,27) and the unexplained portion (70.8 percent) remain very large. There are two major takeaways from these robustness checks. The first one is that differences in wealth among black and white households cannot be explained by observable characteristics alone.

Our results, show increasing support for the argument that unexplained factors such as discrimination, prejudice, or racial bias (systematic or not) play an important role in driving the black-white wealth gap in Tulsa. The second takeaway is that we cannot disentangle the racial wealth gap from the multifaceted gaps in wealth and its drivers. In short, once compared by dividing into subgroups of white and black households, covariates that have a strong racial correlation will not add much to explaining the gap.

White-Hispanic Wealth and Income Gap Decompositions

Table 12 shows the wealth, household income, and earnings gap decomposition comparing whites and Hispanics in Tulsa. The findings show statistically significant wealth and household income gaps between whites and Hispanics, of $158,586 and $25,401 respectively. However, we find no significant differences in earnings. The explained component of the wealth gap accounts for 50 percent of the gap, and only 29 percent of the household income gap.

On the other hand, the unexplained component seems to play a key role in the household income gap, accounting for 71 percent, but not in the wealth gap. This finding supports the inference that in Tulsa, blacks face more unobserved discrimination that has had a long-term impact on the accumulation of wealth than Hispanics when analyzing the across-group wealth and income gaps.

TABLE 12. Whites vs. Hispanics: Decomposition of the Wealth, Household Earnings, and Earnings Gaps

VARIABLES	Wealth			Household Income			Earnings		
	overall	explained	unexplained	overall	explained	unexplained	overall	explained	unexplained
group_1	232,560*** (53,006)			69,172*** (4,796)			36,325*** (5,205)		
group_2	73,975** (36,224)			43,772*** (4,745)			33,093*** (4,558)		
difference	158,586** (64,202)			25,401*** (6,746)			3,232 (6,919)		
explained	79,443* (44,944)			7,292* (4,402)			3,981 (4,129)		
unexplained	79,142 (81,716)			18,108*** (6,740)			-748.4 (6,838)		
Age		-9,639 (102,926)	1.424e+06** (718,275)		24,979* (14,008)	135,298		3,228 (10,254)	-95,756 (109,386)
Age^2		82,045 (96,867)	-705,910* (400,120)		-24,071* (13,504)	-68,519		-2,379 (9,903)	59,339 (54,835)
BA Degree or Higher		15,800 (17,567)	71,867** (35,140)		2,823 (1,847)	1,786		4,258 (2,852)	-7,648 (5,703)
Female		-294.3 (4,194)	35,140 (75,801)		-2,031 (1,598)	19,836**		-2,051 (2,155)	19,431* (9,997)
Married		-8,469 (14,228)	-193,358*** (64,156)		5,593** (2,507)	-12,723* (6,608)		925.7 (2,333)	-15,715 (13,678)
Constant			-552,125* (332,789)			-57,568 (51,972)			39,601 (47,937)
Observations	104	104	104	142	142	142	78	78	78

Robust standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

White-Native American Wealth and Income Decomposition

Table 13 shows the wealth, household income, and earnings gap decomposition comparing whites and Native Americans in Tulsa. The findings show no statistically significant gaps for wealth, household income, or earnings between whites and Native Americans. A potential explanation for this interesting result is that Native Americans obtain payments generated from oil, land, and gaming/casinos, which are then shared among the community and different members of the tribes (Dean, 2017; Haslett and Romero, 2020).

TABLE 13. Whites vs. Native Americans: Decomposition of the Wealth, Household Earnings, and Earnings Gaps

VARIABLES	Wealth			Household Income			Earnings		
	overall	explained	unexplained	overall	explained	unexplained	overall	explained	unexplained
group_1	232,560*** (55,792)			69,172*** (4,850)			36,325*** (5,082)		
group_2	187,522*** (38,719)			70,804*** (9,414)			41,912*** (4,477)		
difference	45,038 (67,911)			-1,632 (10,590)			-5,587 (6,773)		
explained	55,070* (32,428)			11,272** (5,469)			5,720 (3,927)		
unexplained	-10,032 (64,936)			-12,904 (12,284)			-11,307* (6,479)		
Age		-11,581 (38,023)	1.423e+06 (1.196e+06)		-160.2 (1,293)	325,835* (178,335)		152.8 (2,944)	-30,416 (108,902)
Age^2		29,035 (47,643)	-703,984 (703,555)		326.6 (2,387)	-208,433** (105,790)		256.5 (2,040)	14,054 (56,117)
BA Degree or Higher		38,329 (26,550)	-54,845 (51,565)		4,755 (3,542)	-8,249 (8,328)		4,527* (2,751)	-8,044 (5,813)
Female		321.6 (1,812)	32,353 (77,710)		722.0 (1,109)	-12,213 (12,141)		179.9 (1,341)	15,366 (10,815)
Married		-1,035 (9,997)	-195,988*** (64,000)		5,629* (3,094)	-12,635 (11,042)		603.9 (1,602)	-16,852 (14,083)
Constant			-511,046 (509,634)			-97,210 (73,730)			14,584 (46,694)
Observations	146	146	146	203	203	203	96	96	96

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

We take a deeper look by conducting the wealth and income decompositions broken down by tribe. We first look at the Cherokee tribe, one of the major tribes around Tulsa. The results are tabulated in Table 14. Consistent with the results in Table 13, we find no statistically significant gaps for wealth, household income, or earnings between whites and Cherokees.

TABLE 14. Whites vs. Cherokees: Decomposition of the Wealth, Household Earnings, and Earnings Gaps

VARIABLES	Wealth			Household Income			Earnings		
	overall	explained	unexplained	overall	explained	unexplained	overall	explained	unexplained
group_1	232,560*** (53,648)			69,172*** (4,721)			36,325*** (5,246)		
group_2	172,292*** (40,954)			87,127*** (22,437)			41,566*** (7,195)		
difference	60,268 (67,493)			-17,954 (22,928)			-5,241 (8,904)		
explained	34,128 (31,396)			10,996 (8,952)			3,263 (3,951)		
unexplained	26,139 (62,463)			-28,950 (26,124)			-8,504 (7,936)		
Age		40,339 (54,262)	-1.102e+06 (1.033e+06)		2,064 (6,068)	181,764 (368,994)		-299.2 (1,862)	-34,734 (154,327)
Age^2		-18,349 (45,833)	775,379 (564,246)		-1,392 (5,379)	-153,308 (238,621)		619.3 (2,528)	20,169 (87,796)
BA Degree or Higher		22,841 (19,590)	39,693 (31,087)		4,704 (5,675)	-23,474 (25,849)		2,507 (2,390)	-2,209 (7,131)
Female		-910.3 (5,680)	-52,331 (81,262)		123.4 (1,923)	-37,415 (35,279)		425.2 (1,841)	24,284* (14,617)
Married		-9,791 (12,617)	-232,571*** (66,058)		5,496 (5,059)	-48,253 (30,860)		11.02 (1,352)	-22,001 (15,444)
Constant			597,851 (494,268)			51,737 (136,051)			5,988 (59,888)
Observations	84	84	84	113	113	113	58	58	58

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Similarly, we conduct the wealth and income decompositions comparing whites and Muscogee. The results are tabulated in Table 15. Interestingly, in the case of the comparison between whites and Muscogee, we find statistically significant gaps for wealth and household income. For the three decompositions, we find no significance for the explained portion. However, we find evidence for the unexplained components for the wealth and household income gaps, accounting for 110 percent and 87 percent. Of the tribal groups we analyzed, the Muscogee were the only tribe with statistical evidence of discrimination. A deeper analysis of why we observe wealth and income gaps only for the Muscogee tribe relative to whites is left to future research.

TABLE 15. Whites vs Muscogee (Creeks): Decomposition of the Wealth, Household Earnings, and Earnings Gaps

VARIABLES	Wealth			Household Income			Earnings		
	overall	explained	unexplained	overall	explained	unexplained	overall	explained	unexplained
group_1	232,560*** (58,588)			69,172*** (5,092)			36,325*** (5,328)		
group_2	66,438** (31,312)			47,059*** (8,278)			32,755** (13,949)		
difference	166,122** (66,430)			22,113** (9,719)			3,570 (14,932)		
explained	-17,734 (49,435)			2,950 (5,177)			5,366 (6,405)		
unexplained	183,856** (78,488)			19,163** (8,158)			-1,796 (10,091)		
Age		-21,710 (58,991)	-351,055 (899,896)		-13,165 (11,968)	2,769 (143,919)		-1,124 (6,351)	180,025* (108,603)
Age^2		3,807 (31,793)	227,829 (504,543)		12,495 (12,622)	-41,544 (83,611)		2,024 (6,152)	-117,704** (57,729)
BA Degree or Higher		15,607 (27,580)	37,739 (39,996)		4,065 (2,861)	632.1 (4,477)		2,591 (3,113)	-725.8 (3,634)
Female		3,251 (19,663)	17,767 (55,510)		-1,598 (2,175)	16,843* (9,465)		723.3 (3,070)	30,838*** (11,841)
Married		-18,689 (29,479)	-177,164*** (68,014)		1,153 (2,286)	-20,661** (9,445)		1,152 (3,250)	-27,638** (13,818)
Constant			428,740 (386,498)			61,124 (58,779)			-66,591 (44,142)
Observations	70	70	70	99	99	99	43	43	43

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Our results show no evidence of wealth, household income, and earning gaps for household members of other tribes (see Table 16) or with a mixed composition or no tribal affiliation (see Table 17).

TABLE 16. Whites vs. Other Tribes: Decomposition of the Wealth, Household Earnings, and Earnings Gaps

VARIABLES	Wealth			Household Income			Earnings		
	overall	explained	unexplained	overall	explained	unexplained	overall	explained	unexplained
group_1	232,560*** (54,769)			69,172*** (4,780)			36,325*** (5,177)		
group_2	172,611*** (53,176)			55,740*** (7,344)			49,335*** (9,817)		
difference	59,949 (76,337)			13,433 (8,763)			-13,010 (11,099)		
explained	21,092 (47,179)			5,224 (5,117)			-1,106 (5,492)		
unexplained	38,857 (64,881)			8,209 (7,131)			-11,904 (9,710)		
Age		45,078 (74,535)	633,252 (850,510)		10,843 (10,492)	92,521 (153,084)		-8,585 (12,873)	-224,509* (129,239)
Age^2		-23,037 (50,438)	-152,046 (456,786)		-13,137 (11,360)	-38,181 (79,966)		7,575 (12,160)	118,644* (68,548)
BA Degree or Higher		28,018 (29,941)	-57,498 (43,293)		3,907 (3,430)	-10,083** (4,774)		3,084 (3,445)	-14,168* (7,656)
Female		-1,138 (11,642)	123,910 (102,896)		-9.310 (128.4)	8,657 (11,609)		37.50 (683.1)	11,904 (11,470)
Married		-27,829 (24,137)	-134,042** (55,326)		3,619 (2,363)	-4,839 (6,749)		-3,218 (3,226)	-6,753 (13,735)
Constant			-374,719 (411,251)			-39,866 (73,931)			102,978* (58,493)
Observations	77	77	77	106	106	106	50	50	50

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

TABLE 17. Whites vs. Mixed or No Tribal Affiliation: Decomposition of the Wealth, Household Earnings, and Earnings Gaps

VARIABLES	Wealth			Household Income			Earnings		
	overall	explained	unexplained	overall	explained	unexplained	overall	explained	unexplained
group_1	232,560*** (55,295)			69,172*** (4,820)			36,325*** (5,213)		
group_2	281,613** (127,481)			77,411*** (21,773)			39,464*** (6,874)		
difference	-49,053 (138,957)			-8,239 (22,300)			-3,139 (8,627)		
explained	39,303 (79,408)			4,964 (5,732)			115.0 (4,927)		
unexplained	-88,356 (109,746)			-13,202 (20,097)			-3,254 (7,868)		
Age		-45,350 (84,246)	4.814e+06*** (1.593e+06)		1,556 (5,361)	740,124*** (281,266)		-361.9 (6,619)	131,479 (134,326)
Age^2		64,292 (116,528)	-2.743e+06*** (923,507)		-2,950 (7,557)	-475,427*** (173,009)		-2,029 (7,986)	-61,754 (69,996)
BA Degree or Higher		44,374 (47,611)	-191,548** (84,294)		2,972 (3,613)	1,195 (15,774)		4,170 (3,322)	-5,535 (5,033)
Female		3,863 (14,179)	142,116 (98,435)		807.1 (1,634)	-15,515 (15,395)		-7.328 (248.4)	4,860 (12,468)
Married		-27,876 (26,259)	-116,602* (65,157)		2,579 (4,112)	6,763 (10,366)		-1,657 (5,557)	-13,281 (11,797)
Constant			-1.994e+06*** (742,247)			-270,342** (120,712)			-59,024 (62,903)
Observations	77	77	77	110	110	110	50	50	50

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

6. Implications and Conclusion

This study concludes *The Color of Wealth* report series, which documents wealth and income disparities in six American cities: Tulsa, Washington D.C., Boston, Los Angeles, Baltimore, and Miami. We utilized data from the National Asset Scorecard for Communities of Color to report differences in the asset and liability holdings, labor force outcomes, and other financial activities between various racial-ethnic groups. While it is beyond the scope of this report series to identify the causal mechanisms driving disparities between groups, the reports provide strong descriptive evidence of key drivers of these disparities that, when combined with results from the literature, paint a strong narrative of why we observe wealth and income differences between groups.

In this report, we find significant racial-ethnic differences in income and wealth in Tulsa. Specifically, we find that blacks, Hispanics, and the Muscogee have less wealth relative to whites, with blacks having the least wealth. We also find lower levels of household income for these same groups and lower earnings for blacks and Hispanics when compared to whites. When comparing estimates of the black-white wealth gap across five NASCC cities, we find that Tulsa has the largest black-white wealth gap.

In our sample, this is driven by large gaps between blacks and whites in homeownership and entrepreneurship rates in Tulsa, which lead to lower asset levels for blacks. Furthermore, we find that a greater portion of the wealth gap between whites and blacks is unexplained than for any other racial-ethnic group when controlling for demographic and productivity characteristics. Even when adding controls for drivers of wealth, the unexplained portion of the wealth gap remains exceptionally high, providing support for factors that we are not able to control for such as racial bias and discrimination.

These results are consistent with conditions where blacks in Tulsa have faced exceptionally high levels of historical discrimination (e.g., intentional destruction of assets in black communities), which cannot be disentangled from race and cannot be accounted for in observable characteristics. These results align well with Albright et al. 2021, who find that the Tulsa massacre caused a decrease in homeownership and occupational status for blacks that grew cumulatively over the course of the twentieth century. Our results seem to pick up the effect of this massacre, where we also find large gaps in homeownership and business ownership (i.e. entrepreneurship) between blacks and whites.

While our estimates of the black-white wealth gap align well with the economics and history literature, more research is needed to fully understand our findings for Muscogee and Hispanic populations. For Hispanics, we find a significant wealth gap, but half of the gap is explained by differences in demographics and productivity characteristics. While, for the Muscogee, nearly the full gap is unexplained, which suggests they also face high levels of discrimination. However, a larger sample of the Muscogee is needed to paint a full picture.

This analysis highlights the importance of collecting asset, debt, and income information for disaggregated racial-ethnic groups in order to understand the complex landscape of wealth inequality in the United States. Data collected with this level of detail allows for a more precise estimation of the consequences of systemic discrimination, both historical and contemporary, on the ability of historically disadvantaged groups to accumulate wealth.

Furthermore, these results have implications for the study of how wealth shocks are distributed across racial-ethnic groups and, more specifically, how the benefits of wealth shocks can be mitigated or eliminated for groups that are systematically discriminated against in various arenas. The turn of the twentieth century saw an oil boom that led to a positive wealth shock for all Tulsans, but racial discrimination, including an intentional massacre and destruction of black wealth, eradicated the gains for blacks. These patterns persist to the current day, and, as a result, we must consider how systemic racial-ethnic discrimination reduces the potential benefit of wealth shocks induced by the private or public sector today.

One of the latest prominent examples of this is the Paycheck Protection Program (PPP) loans given to small business owners to offset some of the negative impacts of the COVID-19 pandemic on business activity. These PPP loans essentially functioned as an off-setting positive

wealth shocks to small business owners. Since these loans carry a low interest rates of one percent and the loans were considered to be forgivable by the government which meant business owners did not have to pay them back as long as they show they the funds were used to cover labor and qualified operating costs. However, research shows that black business owners received 30-40 percent lower loan amounts even after controlling for business and lender characteristics (Atkins, Cook, and Seamans, 2021; Camara et al., 2021).

This example highlights how systematic discrimination in the financial industry prevented black business owners from accessing the needed help during the pandemic, which likely amplified the contemporaneous racial wealth gap. Therefore, this report helps accentuate the need to fully account for the historical mechanisms of systemic discrimination when studying policies targeting the closing of racial-ethnic wealth and income gaps.

References

Aja, A. A., Beesing, G., Bustillo, D., Clealand, D., Paul, M., Zaw, K., Price, A., Darity Jr, W.A., Hamilton, D. (2019). "The Color of Wealth in Miami." Durham, NC: Duke University.

Albright, Alex, Jeremy Cook, James Feigenbaum, Laura Kincaide, Jason Long, Nathan Nunn. (2021). "After The Burning: The Economic Effects of The 1921 Tulsa Race Massacre." NBER Working Paper 28985. July 2021.

Atkins, R., Cook, L.D., and Seamans, R. (2021). "Discrimination in Lending? Evidence from the Paycheck Protection Program. Working Paper.

Bazar, Emily. (2008). "Strict immigration law rattles Okla. businesses." USA Today. January 8, 2008.Retrieved from: https://www.fosterglobal.com/news/StrictImmigrationLawRattlesOklaBusinesses.pdf

Brown, DeNeen L. (2021). "Tensions Erupt in Tulsa as City Commemorates 1921 Race Massacre." Washington Post, May 30, 2021. Retrieved from: https://www.washingtonpost.com/history/2021/05/29/tulsa-race-massacre-centennial-reparations-tensions/

Camara, M., D.Van, A., Darity Jr., W., Garcia, R.E., Harper, J., Johnson, B., Malone, A., McKoy, H., Webb, C., and Wright, G. (2021). "Black Wall Street of the South: From Reconstruction to the Pandemic." Samuel DuBois Cook Center on Social Equity at Duke University. Duke University.

Chang, David A. (2010). "The Color of the Land: Race, Nation, and the Politics of Landownership in Oklahoma, 1832-1929." University of North Carolina Press, 2010.

City of Tulsa. "The New Tulsans Welcoming Plan." Retrieved from:http://www.cityoftulsa.org/media/8524/nt-englishplan-4pg-web.pdf.

Collins, William and Robert Margo. (2007). "The Economic Aftermath of the 1960s Riots in American Cities: Evidence from Property Values." Journal of Economic History, 67 (4), 849–883.

Collins, William J. and Robert A. Margo. (2004). "The Labor Market Effects of the 1960s Riots." Brookings-Wharton Papers on Urban Affairs, 2004 (1), 1–46.

Colston, A, Darity Jr., W., García, R., Russell, L., and Zumaeta, J. (2021). "The Color of Wealth in Baltimore". The Samuel DuBois Cook Center on Social Equity at Duke University, Duke University, p.1-48.

Cook, Lisa. (2014). "Violence and Economic Activity: Evidence from African American Patents, 1870– 1940." Journal of Economic Growth, 19 (2), 221–257.

De La Cruz-Viesca, M., Chen, Z., Ong, P.M., Hamilton, D. and Darity Jr, W.A., 2016. The color of wealth in Los Angeles. *Durham, NC/New York/Los Angeles: Duke University/The New School/University of California, Los Angeles.*

Dean, K.D. (2017). "The Economic Impact of Tribal Nations in Oklahoma: Fiscal Year 2017." Oklahoma City University: Center for Native American and Urban Studies.

Ellsworth, S. (1982). "Death in a promised land: The Tulsa race riot of 1921." LA: Louisiana State University Press.

Estrada, Ismael and Keith Oppenheim. (2007). "Oklahoma Targets Illegal Immigrants with Tough New Law." CNN Website, November 1, 2007. https://www.cnn.com/2007/US/11/02/oklahoma.immigration/

Fain, K. (2017). "The devastation of Black Wall Street." JSTOR Daily, 5. https://daily.jstor.org/the-devastation-of-black-wall-street/

Feiveson, L., and Sabelhaus, J. (2018). "How Does Intergenerational Wealth Transmission Affect Wealth Concentration" FEDS Notes No. 20218-06-01.

Fixico, Donald L. (2011). "The invasion of Indian Country in the Twentieth Century. University Press of Colorado, Chapter 2.

Franklin, J.H. and Ellsworth, S. (2001). "History Knows No Fences: An Overview." *Tulsa Race Riot: A Report by the Oklahoma Commission to Study the Tulsa Race Riot of 1921*. pp. 21–36. http://www.okhistory.org/research/forms/freport.pdf.

Gale, W.G., and Scholz, J.K. (1994). "Intergenerational Transfers and the Accumulation of Wealth." Journal of Economic Perspectives, Volume 8 (4), 144-160.

García-Perez, M., Gaither, S. and Darity Jr., W., (2020). "Baltimore Study: Credit Score." Washington, DC: Washington Center for Equitable Growth. Working Paper.

Gibson, Arrell Morgan. (1981). *Oklahoma, A history of Five Centuries.* University of Oklahoma Press, 1981.

Hall, Matthew, and Jonathan Stringfield. (2004) "Undocumented migration and the residential segregation of Mexicans in new destinations." *Social Science Research*, 47, 61-78

Hamilton, D. and Darity Jr., W., (2010). "Can 'baby bonds' Eliminate the Racial Wealth Gap in Putative Post-Racial America?" The Review of Black Political Economy, 37(3-4), pp.207-216.

Haslett, C., and Romero, L. (2020). "For Tribes, Casinos Fund What the Government Doesn't. Now, They are Closed." April 29, 2020 (1:36PM), Accessed on November 7, 2021. Link: https://abcnews.go.com/Politics/tribes-casinos-fund-government-doesnt-now-closed/story?id=70371212

Healy, Jack. (2020). "For Oklahoma Tribe, Vindication at Long Last". The New York Times. July 11, 2020. Retrieved from: https://www.nytimes.com/2020/07/11/us/muscogee-creek-nation-oklahoma.html

Hevesi, Dennis. (2011). "Clara Luper, a Leader of Civil Rights Sit-Ins, Dies at 88." New York Times Obituary. June 11. 2011. https://www.nytimes.com/2011/06/12/us/12luper.html

Human Rights Watch. (2019). "Get on the Ground!". Policing, Poverty, and Racial Inequality in Tulsa, Oklahoma: A Case Study of US Law Enforcement." https://www.hrw.org/report/2019/09/12/get-ground-policing-poverty-and-racial-inequality-tulsa-oklahoma/case-study-us.

Johansen, Bruce E. (2007). *The Native Peoples of North America: A History*. New Brunswick, NJ: Rutgers University Press.

Kijakazi, K., Atkins, R.M.B., Paul, M., Price, A.E., Hamilton, D. and Darity Jr., W.A., (2016). "The Color of Wealth in the Nation's Capital." *Durham, NC: Duke University*.

Killman, Curtis.(2015). "Hispanics Lead Overall State, Tulsa County Growth Since 2010, Census Shows." Tulsa World. July 7, 2015. Retrieved from: https://tulsaworld.com/news/local/hispanics-lead-overall-state-tulsa-county-growth-since-2010-census-shows/article_564326bb-9d3c-5124-a052-af2ca3274e1e.html.

Knickmeyer, Ellen. (2021). "The foundation of the wealth': Why Black Wall Street boomed." AP News. June 1, 2021. Retrieved from: https://apnews.com/article/ok-state-wire-business-race-and-ethnicity-874fade343fc7515210117c4efe1335f

Krehbiel, Randy. (2021). "Lawmakers OK with sanctuary state for guns, not for illegal immigrants." Tulsa World. May 7, 2021. Retrieved from: https://tulsaworld.com/news/state-and-regional/govt-and-politics/lawmakers-ok-with-sanctuary-state-for-guns-not-for-illegal-immigrants/article_7de3f45c-9192-11eb-bf66-4f6a6d8628f5.html

McAuliffe, Dennis. (1994). *The Deaths of Sybil Bolton: An American History*. Crown, 1994.

Messer, C.M. (2021). *The Tulsa Massacre and Its Context. In The 1921 Tulsa Race Massacre*. Palgrave Macmillan, Cham. pp. 1-19.

Messer, C. M., Shriver, T.E., and Beamon, K.K. (2018a). "Official frames and the Tulsa Race Riot of 1921: The Struggle for Reparations." *Sociology of Race and Ethnicity* 4, no. 3 (2018a): 386-399.

Messer, C. M., Shriver, T.E., and Adams, A. E. (2018b). "The Destruction of Black Wall Street: Tulsa's 1921 Riot and the Eradication of Accumulated Wealth." American Journal of Economics and Sociology 77, no. 3-4: 789-819.

Miles, Tiya. (2019). "Uncle Tom was an Indian: Tracing the Red in Black Slavery." in *Relational Formations of Race: Theory, Method, and Practice*, eds. Natalia Molina, Daniel Martinez Hosang, and Ramon A. Gutierrez (pgs. 121-144).

Muñoz, A. P, Kim, M., Chang, M., Jackson, R. O., Hamilton, D., and Darity Jr., W.A. (2015). "The Color of Wealth in Boston." Boston: Federal Reserve Bank of Boston. Retrieved from: https://www.bostonfed.org/publications/one-time-pubs/color-of-wealth.aspx.

Oklahoma Historical Society. (N.d). "Latino History in Oklahoma." Retrieved from: https://www.okhistory.org/learn/latino.

Oral Roberts University. (2021). "Quick Facts." https://oru.edu/about-oru/quick-facts.php.

Perdue, Theda. (1980). *Nations Remembered: An Oral History of the Five Civilized Tribes*, 1865-1907. No. 1. ABC-CLIO, 1980.

Perry, Andre M., Barr, Anthony and Romer, Carl, (2021). The True Costs of the Tulsa Race Massacre, 100 Years Later. The Brookings Institution. https://www.brookings.edu/research/the-true-costs-of-the-tulsa-race-massacre-100-years-later/

Roberts, Alaina. (2018). "How Native Americans Adopted Slavery from White Settlers." Al Jazeera, 27, 2018. Retrieved from: https://www.aljazeeDecemberra.com/opinions/2018/12/27/how-native-americans-adopted-slavery-from-white-settlers

Shepard, R. Bruce.(1983). "Diplomatic racism: Canadian government and Black migration from Oklahoma, 1905-1912." Great Plains Quarterly 3, no. 1: 5-16.

Singer, Audrey. (2015). "A Typology of Immigrant Gateways, 2014". Metropolitan Policy Program at Brookings Institute. https://www.brookings.edu/wp-content/uploads/2016/07/Gateways-2014-update-1.pdf.

Smith, Michael M. (1980). *Mexicans in Oklahoma*. University of Oklahoma Press.

Strickland, Rennard. (1995). Osage oil: Mineral law, murder, mayhem, and manipulation. Natural Resources & Environment, 10(1), 39-43.

The University of Tulsa. (2021a). "TU Fast Facts." https://utulsa.edu/about/tu-fast-facts/.

—. (2021b). "History & Traditions." https://utulsa.edu/about/history-traditions/.

Thornton, Russell. (1984). "Cherokee population losses during the Trail of Tears: A new perspective and a new estimate." Ethnohistory (1984): 289-300.

Toole, Tucker C. (2021). Thousands lost everything in the Tulsa Race Massacre—including my family." National Geographic. May 28, 2021. https://www.nationalgeographic.com/history/article/thousands-lost-everything-tulsa-race-massacre-including-my-family

Tulsa World. (2021). "Throwback Tulsa: The 13 Historic All-Black Towns that Remain in Oklahoma." June 19, 2021. Retrieved from: https://tulsaworld.com/news/local/history/throwback-tulsa-the-13-historic-all-black-towns-that-remain-in-oklahoma/collection_7d1d7b5d-662c-54a0-a072-bc560fdf6756.html#1

US Centers for Disease Control and Prevention. "American Indian and Alaska Native Populations." Retrieved from: https://www.cdc.gov/tribal/tribes-organizations-health/tribes-metro-populations.html.

Walker, Mark. (2021). "Cherokee Nation Addresses Bias Against Descendants of Enslaved People." New York Times, February 24, 2021. Retrieved from: https://www.nytimes.com/2021/02/24/us/politics/cherokee-nation-black-freedmen.html

Williams, Jhacova, (2018). "Historical Lynchings and Contemporary Voting Behavior of Blacks," Louisiana State University. Working Paper.

Willis, Michael and Tulsa County Clerk. (2020). Tulsa County, Oklahoma Comprehensive Annual Financial Report for the Year Ended June 30, 2020. Tulsa County Clerk. https://www.tulsacounty.org/Audit/CAFR_2020_web.pdf.

Wilson, Linda D. (n.d.) "Oral Roberts University." Oklahoma Historical Society. Retrieved from https://www.okhistory.org/publications/enc/entry.php?entry=OR001.

Zagorsky, J.L. (2005). "Marriage and Divorce's Impact on Wealth." *Journal of Sociology*. The Australian Sociological Association, Volume 41(4): 406-424.

Appendix

Summary of Color of Wealth Report Series

1.1 Los Angeles

The findings in this report from the National Asset Scorecard for Communities of Color (NASCC) survey reveal major disparities in wealth accumulation across various racial and ethnic groups in Los Angeles. This report features estimates for the following racial-ethnic groups in the Los Angeles Metropolitan Statistical Area (MSA): Mexicans, other Latinos (inclusive of Puerto Ricans, Cubans, Salvadorans, other South Americans, other Central Americans, and Europeans), Asian Indians, Chinese (inclusive of Taiwanese), Japanese, Korean, Filipino, and Vietnamese. Among African Americans, data are disaggregated by nativity—U.S. black descendants and recent immigrants from the African continent. Our analysis shows that with respect to types and size of household assets and debt, there are significant differences across race, ethnicity, and ancestral origin. The report explores what factors are related to wealth accumulation for particular racial and ethnic groups, such as historical context, local asset markets, and intergenerational wealth transfers.

Key Findings

- White households in Los Angeles have a median net worth of $355,000. In comparison, Mexicans and U.S. blacks have a median wealth of $3,500 and $4,000, respectively. Among nonwhite groups, Japanese ($592,000), Asian Indian ($460,000), and Chinese ($408,200) households had higher median wealth than whites. All other racial and ethnic groups had much lower median net worth than white households—African blacks ($72,000), other Latinos ($42,500), Koreans ($23,400), Vietnamese ($61,500), and Filipinos ($243,000).

- Racial and ethnic differences in net worth show the extreme financial vulnerability faced by some nonwhite households. U.S. black and Mexican households have 1 percent of the wealth of whites in Los Angeles—or one cent for every dollar of wealth held by the average white household in the metro area. Koreans hold 7 percent, other Latinos have 12 percent, and Vietnamese possess 17 percent of the wealth of white households.

- The median value of liquid assets for Mexicans and other Latinos is striking, zero dollars and only $7, respectively, whereas, the median value of liquid assets for white households was $110,000. This not only implies possible financial hardship in the long term, but also makes short-term financial disruption much more likely.

- Japanese households had by far the highest median total value of assets at $595,000. Asian Indians ($460,000), Chinese ($408,500), and white households ($355,000) were also among those with high median values of total assets. Filipino and African black households fall in the middle of the distribution—$243,000 and $152,000 respectively. Median total asset values for all other racial and ethnic groups were significantly lower.

- Mexicans were the least likely to be banked and most likely to lack financial savings.

- Wealth differentials across racial groups in the Los Angeles NASCC survey are far more pronounced than income differentials. White households (40.7 percent) were far more likely to hold assets in stocks, mutual funds, and investment trusts. Only 18 percent of African black, 21.5 percent of U.S. blacks, 7.6 percent of Mexicans, 7.3 percent of other Latinos, 23.6 percent of Korean, and 9.9 percent of Vietnamese owned stocks, mutual funds, or other investments or trusts. The percentage of Chinese, Japanese and Asian Indian that have these types of financial assets was much higher when compared with whites—48.8 percent, 60.8 percent, and 58.6 percent, respectively.

- White households are more likely to be homeowners (68 percent), along with Chinese (68 percent) and Japanese (64 percent) households. By contrast, approximately two-fifths of U.S. blacks, 44 percent of African blacks, and 45 percent of Mexican households were homeowners. Fifty-seven percent of Filipinos were more likely to own a home, which was slightly higher than 53 percent of Vietnamese. Both Korean (40 percent) and Asian Indian (40 percent) households were among the least likely groups to be homeowners.

- Similar to homeownership, owning a vehicle has far-reaching repercussions. Those who own vehicles have access to job opportunities beyond the zones of public transportation. It enables them to work late or take unusual shifts because they have their own transportation. Those least likely to own a vehicle were U.S. black (72 percent) and Vietnamese (83 percent) households. In comparison, 87 percent of whites in the Los Angeles MSA own a vehicle.

1.2 Baltimore

The Color of Wealth in Baltimore is part of a series of reports that examines the social and economic conditions of people of color among six metropolitan areas in the United States: Los Angeles, DC, Tulsa, Miami, Boston, and Baltimore. The purpose of this report is twofold: First, the report details racial differences in asset and debt accumulation, household income, intergenerational asset transfers, and household net worth across the city of Baltimore. Second, the report assesses the impact of household exposure to incarceration on household income and wealth accumulation. While most research focuses on the direct financial impact of incarceration on an individual, in the form of removal from the labor force or the penalty of a criminal record on subsequent employment, this report sheds light on the impact of incarceration on wealth accumulation. Our findings show a statistically significant racial gap in earnings and net worth and an incarceration penalty on earnings and wealth accumulation. Interestingly, the white-black racial household income and wealth gaps disappear when the reference group is whites with incarceration exposure. This reveals that statistically speaking, the size of the racial gap is equivalent to the incarceration penalty. Our racial gap decompositions based on incarceration exposure also corroborate these results. We find no statistically significant difference in the earnings between blacks with and without incarceration exposure. These findings are very troubling and suggest that society's association of blackness with criminality has a similar effect to that of the incarceration penalty.

Key Findings

- According to the Justice Policy Institute and the Prison Policy Initiative, the city of Baltimore has an incarceration rate three times that of the national average. Our study estimates that blacks are exposed to incarceration at a rate three times that of whites in Baltimore. We find that the persistent black-white wealth gap is exacerbated by incarceration, affecting disproportionately more black households. The consequences manifest in different financial dimensions, including financial retirement plan access, stock market investments, and other financial service account usage. We find that households with incarceration exposure are more dependent on using cash.

- Our findings show a negative correlation between incarceration exposure and homeownership, possessing a vehicle, owning a business, and owning a business. Across all these assets, black households with incarceration exposure have the lowest proportions, indicating significant ownership gaps in all these indicators. The gap in ownership of a vehicle, which is needed to commute to work, is 25 percent, regardless of race between persons with incarceration and no incarceration exposure.

- Our study finds that in vivo transfers for white households (35 percent) are more than double those of black households (17 percent). It is interesting to note that our sample yields the same results for white households with and with no incarceration exposure. Additionally, over 42 percent of white households with no incarceration exposure report having received an inheritance or gift, compared to about 25 percent of black households with no incarceration. When exposed to incarceration, the numbers for white and black families are 31 percent and 19 percent, respectively.

- The responses suggest that white households with no incarceration exposure have the highest rates of holding student loans (38 percent), indicating higher enrollment rates in the education system; nevertheless, it also shows a higher dependency on loans to cover for education compared to black (28 percent), a ten percentage-point difference. It also could mean that black households depend on other means, like scholarships and financial aid for funding their education.

- Debt derived from fines, fees, or costs associated with a criminal sentence (not including legal bills) is another variable that displays white households with no incarceration exposure having the lowest rate (virtually zero) among all respondents. In comparison, black households with incarceration exposure have the highest rate (15 percent). Black households with no incarceration exposure experience much higher debts due to legal bills (7 percent) and fees (2 percent). When comparing both household populations with exposure to incarceration, 8 percent of white households and 15 percent of black households responded to having

incurred debt due to fines and fees. This last finding illustrates a systemic bias with a devastating financial impact on our society.

- Financial hardship generated from medical bills needs special attention because it provides a glimpse of having access to healthcare resources and the health status of household members. Survey results indicate that 12 percent of white households with no incarceration exposure incurred debt due to medical bills compared to white households with no incarceration exposure with 27 percent (more than double) and black households with no incarceration exposure with 34 percent (almost triple). We cannot establish a significant difference between black households with and with no incarceration exposure based on the responses.

- We find that on average black households tend to be younger by approximately 4 years, but the difference is not statistically significant; have lower education (16 percent with BA degree or higher versus 43 percent for whites); are less likely to be married; are more likely to headed by females; have a similar likelihood to be born in the US as whites, and are more likely to be exposed to incarceration (37 percent versus 26 percent for whites although it is not statistically significant).

- The results show substantial and statistically significant white-black racial earnings, household income, and net worth gaps of $29,929, $43,008, and $187,835, respectively. White households have higher average earnings, household income, and wealth of $61,725 and $76,378 and 217,858, respectively. In Baltimore, the median net worth for black households is $0, whereas, for white households, it is $59,430. When comparing white and black households without incarceration exposure, we find substantial and statistically significant gaps in earnings, household income, and wealth of $34,183, $56,163, and $265,273, respectively.

- The findings show statistically significant evidence of an incarceration exposure penalty on household income and wealth. Households with incarceration exposure have lower annual household income (gap of $32,380) and lower household net worth (a gap of $194,117) compared to households with no incarceration history. These effects are the largest for white households, given their higher wealth and income levels. Comparing only white households with and without incarceration history, we find household income and net worth gaps that are statistically significant: $60,680 and $384,327,

respectively. Interestingly, when we perform the intra-group comparison for black households with and without incarceration history, we find only a significant wealth gap but not for household income. This is due to differences in wealth accumulation opportunities for black households with no incarceration – for example, they have higher home equity, higher stock values, and retirement assets.

- Our findings show white-black wealth and income gaps are equivalent in size to the incarceration exposure penalty that households with incarceration exposure experience. We use the incarceration penalty estimates for the intra-group comparison for whites as our benchmark to validate these results. We then estimate the white-black wealth and income gaps using only whites with incarceration exposure as our reference group. We find no statistically significant racial income and wealth gaps using only whites with incarceration exposure as the reference group. In sum, whites with incarceration exposure have similar household income and wealth as blacks with and without incarceration exposure. Our racial gap decompositions based on incarceration exposure also corroborate these results.

- We find drastic differences in how blacks and whites accumulate wealth. The results show that home equity and other real estate investments are the two main contributors to total assets for black households in Baltimore. For white households, the main contributor to total assets is retirement assets, followed by home equity. Whites also hold a significant portion of their total assets in stocks, mutual funds, and other assets; this is not the case for black households. In terms of debt, we find that legal and medical debts are the top two liabilities for white households. In contrast, student loans and other debts are the main two liabilities for blacks. Interestingly, we only observe statistical significance only on some assets components but not on liabilities. Particularly, we find that whites tend to have larger values for other real estate, vehicle equity, checking/savings/money market accounts, stocks, mutual funds, and retirement assets. When making the comparison by incarceration exposure, we find similar patterns as for the racial comparisons.

- Oaxaca-Blinder racial gap decomposition results show substantial racial differences in the average earnings of blacks and whites in Baltimore. The gap in average earnings is $33,970, with only 34 percent of this gap explained by group differences in age, education, and

gender. In other words, 66 percent is unexplained, indicative of potential discrimination that contributes to the racial earning gap. We also find a substantial difference between the average net worth of blacks and whites in Baltimore. The difference is 0.63 standard deviations, and it is statistically significant, with only 28 percent of this gap explained by group differences in age, education, gender, and marital status, which means that 72 percent is unexplained.

- The Oaxaca-Blinder incarceration exposure gap decompositions show statistically significant differences in the average earnings for whites with family exposure to incarceration. We find a difference of $39,403, with those exposed to incarceration earning less than those not exposed. However, we find no statistical significance for both the explained and the unexplained parts. This could be interpreted as incarceration being the primary factor driving the difference, identifying a causal effect. On the other hand, for blacks, we find no statistically significant difference in the earnings between the two groups – blacks with and without incarceration exposure. The explained and unexplained portions are also insignificant. This is consistent with the idea that society's association of blackness with criminality implies the incarceration penalty is distributed across all black households equally independent of incarceration history.

- The Oaxaca-Blinder incarceration exposure decompositions for net worth provide evidence of a statistically significant gap in the average net worth for both whites and blacks, with those without family incarceration history having higher net worth values. For whites, we find a difference of 0.745 standard deviations, with only 4.2 percent of this difference explained by group differences in age, education, gender, and marital status. For blacks, we find a smaller difference of 0.181 standard deviations, with 27 percent of the difference being explained by group differences in age, education, gender, and marital status.

- The Oaxaca-Blinder racial and incarceration exposure gap decomposition results confirm that incarceration exposure has a negative effect on earnings ($39,403) and wealth (0.745 standard deviations) for whites. If we take the impact for whites as our baseline for gauging the effects of incarceration exposure and compare them to the racial gap effects for earnings ($33,970) and wealth (0.633 standard deviations), we find them to be very similar in both magnitude and significance. These effects go away when we compare only whites with incarceration

exposure and blacks with and without incarceration. This suggests that the racial income and wealth gaps we see are equivalent to the incarceration exposure penalty. This is interesting, yet not surprising, given the faulty association of blackness with criminality in our society.

1.3 Washington, DC

This study of the racial wealth gap in Washington, DC, is the third in a series of reports drawn from data from the National Asset Scorecard for Communities of Color (NASCC) project, gathered from five metropolitan areas. The first and second reports focused on the Boston and Los Angeles metropolitan areas (De La Cruz-Viesca et al. 2016; Muñoz et al. 2015). In the previous reports, disparities in net worth were examined by race and by the demographic makeup of each metropolitan area. The Boston study highlighted communities from the Caribbean but included African American, Asian, and other Latino communities. The Los Angeles report focused on several Asian American communities, as well as African American, recent African immigrant, and Mexican communities. This report will include households from African American, African immigrant, Latino, Chinese, Korean, Vietnamese, and Asian Indian communities, as well as the District's multiracial population, with White households as the comparison group. Black people born in the United States who lived in Washington, DC, the metropolitan area will be the focus of this study.

This report provides the history, status, and implications of the racial wealth gap in the Washington, DC, metropolitan area. Unlike the prior reports, this study includes a more extensive historical context for the racial wealth gap in the nation's capital. Given the substantial presence of Black people in the District since its inception and the unique role of the District as the nation's seat of government, we examine the role of policy-based structural barriers in the accumulation or dissipation of wealth across different racial and ethnic groups but focus on Black people. We also examine the events, programs, and practices that led to these policies.

To establish the context for the racial makeup and distribution of wealth, the first chapter of the report discusses the demographic evolution of the city. The Urban Institute has assembled extensive resources on Washington, DC, that will serve as key sources for this report. These include Our Changing City1—online demographic information—and NeighborhoodInfoDC (http://neighborhoodinfodc.org/), which contains statistical,

descriptive, and policy information. The second chapter examines the implications of the historic distribution of wealth on housing and gentrification. The third chapter presents the methodology for data collection to measure the contemporary racial wealth gap and core descriptive findings from the survey.

Key Findings

- White households in DC have a net worth 81 times greater than Black households. In 2013 and 2014, the typical White household in DC had a net worth of $284,000. Black American households, in contrast, had a net worth of $3,500.

- Home values are significantly lower for Black families. Much of Americans' net worth is in their homes. Yet here, too, there are sharp disparities. The typical home value for Black households in DC is $250,000, about two-thirds of the home value for White and Latino households.

- More distressing, homeownership disparities are not a function of education. Higher education is closely tied to higher incomes, which should make homeownership more attainable. But in DC, 80 percent of Whites with a high school diploma or less are homeowners, while fewer than 45 percent of all Blacks in the District are homeowners. Fifty-eight percent of Black households do not own homes.

1.4 Miami

The findings in this report from the National Asset Scorecard for Communities of Color (NASCC) survey reveal major disparities in wealth accumulation and income across various racial and ethnic groups in metropolitan Miami. The NASCC survey was developed to fill a void in existing national data sets that rarely collect data disaggregated by specific national origin in a localized context. The NASCC survey collects detailed data on assets and debts among subpopulations, according to race, ethnicity, and country of origin.

The NASCC instrument measures the range and extent of asset and debt holdings, not just by broadly defined groups (e.g. whites, blacks, Latinxs and Asians), but by racial and ethnic groups partitioned by more refined categories of ancestral origin (e.g. whites, U.S. descendant blacks, Caribbean blacks, Cubans, Puerto Ricans, South Americans, and other Latinos). This type of disaggregation allows for a more specific examination of variations in asset holdings both across and within broadly defined racial and

ethnic groups. This report explores factors that are related to wealth accumulation for particular racial and ethnic groups, including historical context, local asset market conditions, and intergenerational wealth transfers.

Key Findings

- Median wealth for white households was estimated at $107,000. In contrast, Puerto Rican households had negative median wealth (-$3,940). South Americans and U.S. blacks had a fraction of the wealth of white households, at $1,200 and $3,700, respectively.

- The median value of liquid assets for U.S. blacks and Puerto Ricans was only $11 and $200, respectively. The median value of liquid assets among Caribbean blacks and South Americans was around $2,000 and for Cubans, it was $3,200. Other Latinx households had liquid assets of $5,000. White households had a substantially higher median value of liquid assets at $10,750.

- Median asset value was highest for white households, at $113,500. U.S. blacks had the lowest median total asset value, $6,700, which amounted to less than 6 percent of the median asset value of white households. The median total asset value of Puerto Ricans was only 9 percent of the white value; for South Americans, it was only 11 percent and for Caribbean blacks only 12 percent.

- Differences in net worth by race are more likely to have been driven by differences in asset ownership, rather than debt. Median non-household debt did not differ significantly across groups, with Cubans having the lowest median debt levels at zero.

- There are large disparities in checking and savings account access between whites and other racial and ethnic groups. U.S. blacks (57 percent), Caribbean blacks (71.1 percent), Puerto Ricans (69.7 percent), South Americans (76.9 percent), and Other Hispanics (66.2 percent) are far less likely to own checking accounts than whites (93.2 percent) households. Cubans (83.6 percent) also are less likely to hold checking accounts than whites, but not by as wide a margin. The findings suggest a possible market gap for affordable and appropriate financial services in communities of color in Miami.

1.5 Boston

The widening wealth gap in the United States is a worrisome sign that millions of families nationwide do not have enough assets to offer better opportunities for future generations. Wealth allows families to make investments in homes, education, and business creation. On the basis of data collected using the National Asset Scorecard for Communities of Color (NASCC) survey, we report that, when analyzed by race, wealth accumulation is vastly unequal. By means of the NASCC survey, researchers have collected, for the first time, detailed data on assets and debts among subpopulations, according to race, ethnicity, and country of origin—granular detail ordinarily unavailable in public datasets. In this analysis, we focus on estimates for U.S.-born blacks, Caribbean blacks, Cape Verdeans, Puerto Ricans, and Dominicans in the Boston Metropolitan Statistical Area (MSA). Our analysis shows that with respect to types and size of assets and debt held, the data collected on white households and nonwhite households exhibit large differences. The result is that the net worth of whites as compared with nonwhites is staggeringly divergent.

While it has been common to lump the experiences of all blacks and all Hispanics together, in fact, subcategories of blacks and Hispanics—for example, Puerto Ricans and Dominicans, or U.S. blacks and Caribbean black immigrants—exhibit import and differences. The level of detail needed to differentiate among these groups has not been available until the implementation of the NASCC survey.

There exist key differences in liquid assets, which may be thought of as representing buffers to income and expenditure shocks. The typical white household in Boston is more likely than nonwhite households to own every type of liquid asset. For example, close to half of Puerto Ricans and a quarter of U.S. blacks are unbanked (that is, they do not have bank accounts) compared with only 7 percent of whites. For every dollar, the typical white household has in liquid assets (excluding cash), U.S. blacks have 2 cents, Caribbean blacks 14 cents, and Puerto Ricans and Dominicans less than 1 cent. Whites and nonwhites also exhibit key differences in less-liquid assets that are primarily associated with homeownership, basic transportation, and retirement or health savings. While most white households (56 percent) own retirement accounts, only one-fifth of U.S and Caribbean blacks have them. Only 8 percent of Dominicans and 16 percent of Puerto Ricans have such accounts. Most whites—79 percent—own a home, whereas only one-third of U.S. blacks, less than one-fifth of Dominicans and Puerto Ricans, and only half of the Caribbean blacks are homeowners.

Key Findings

- Nonwhite households have only a fraction of the net worth attributed to white households. While white households have a median wealth of $247,500, Dominicans and U.S. blacks have a median wealth of close to zero. Of all nonwhite groups for which estimates could be made, Caribbean black households have the highest median wealth with $12,000, which is only 5 percent of the wealth attributed to white households in the Boston MSA.

- The typical white household in Boston is more likely than nonwhite households to own every type of liquid asset. For example, close to half of Puerto Ricans and a quarter of U.S. blacks don't have either a savings or checking account, compared to only 7% of whites.

- Whites and nonwhites also exhibit important differences in assets that associated with homeownership, basic transportation, and retirement. Close to 80% of whites own a home, whereas only one-third of U.S. blacks, less than one-fifth of Dominicans and Puerto Ricans, and only half of Caribbean blacks are homeowners. And while most white households (56 percent) own retirement accounts, only one-fifth of U.S and Caribbean blacks, and 8 percent of Dominicans have them.

- Although members of communities of color are less likely to own homes, among homeowners they are more likely to have mortgage debt. Nonwhite households are more likely than whites to have student loans and medical debt.