Race, Ethnicity, and Economic Statistics for the 21st Century

The findings from the 2020 U.S. Census of Population in comparison to those of the 2010 Census illustrate the increasing racial and ethnic diversity of the population in the United States, as well as a rise in the number of people who identify as multiracial (Jensen et al. 2023). The U.S. Census Bureau has developed a series of innovative reports and interactive data visualizations to help the public explore and analyze various measures of racial and ethnic composition and diversity measures, such as the <u>diversity index</u>, prevalence maps, prevalence rankings, and <u>diffusion scores</u>.

As a result of the increasing racial and ethnic diversity of the population, race and ethnicity categories and definitions may need to be updated if the demographic statistics on which government officials, business decision makers, and private citizens rely are to clearly present the changing U.S. population. This conference volume explores the production of meaningful and innovative economic statistics by race and ethnicity that accurately and appropriately depict the complex racial and ethnic diversity of the U.S. population in the 21st century. Papers in this volume examine the consequences for economic analyses of different measurement choices concerning race and ethnicity in administrative vs. survey data sets, and apply the existing data in creative ways to better characterize the changing U.S. workforce and illuminate important policy questions.

Accurate indicators of race and ethnicity in individual-level micro data sets are necessary to measure and understand the sources of group differences in economic and social outcomes including racial and ethnic disparities in earnings, employment, educational attainment, intergenerational mobility, and safety net program participation. Such indicators are also essential to measure the extent of racial and ethnic segregation by residential neighborhoods, occupations and firms, and schools. Comparable measures of race and ethnicity over time are needed to accurately track historical changes in group differences in economic and social outcomes and changes in racial and ethnic segregation. A key trade-off in the collection of race and ethnicity in economic statistics for the changing U.S. population (highlighted in the papers in this volume) concerns that of using the same questions and categories over time to maintain historical consistency vs. modifying questions to better reflect contemporaneous views of racial and ethnic identity and to provide more accurate measures at a point in time.

U.S. federal statistical agencies follow the standards on race and ethnicity set by the U.S. Office of Management and Budget (OMB). These standards, previously revised in 1997, have guided how the federal government collects and presents data on race and ethnicity. State and local governments, school districts, and many social service organizations also often use race and ethnicity questions that follow the federal government guidelines. The 1997 <u>OMB standards</u> identified five minimum categories: White, Black or African American, American Indian or Alaska Native, Asian, and Native Hawaiian or Other Pacific Islander. The Census Bureau has been required by Congress to include a sixth category, Some Other Race, for people who do not identify with any of the OMB race categories. Other agencies also have allowed respondents to indicate Some Other Race. For ethnicity, the 1997 OMB standards classified individuals in one of two categories: "Hispanic or Latino" or "Not Hispanic or Latino." Two separate questions, a first one on ethnicity (Hispanic or Not Hispanic) and a second one on race, typically have been used by

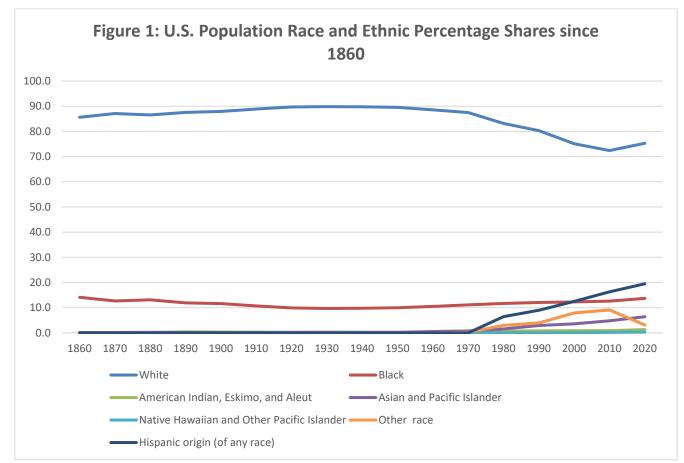
federal agencies to implement the approach indicated by the 1997 OMB standards.

On March 29, 2024 OMB provided their final decisions on the revision of <u>Statistical Policy</u> <u>Directive (SPD) No.15</u> that governs standards for the classification of federal data on race and ethnicity (U.S. Office of Management and Budget 2024). The SPD had undergone an extensive period for comments by stakeholders and government officials. The revised standards now advise that federal statistics agencies collect race and ethnicity in a single combined question; add the new category of Middle Eastern and North Africa to the list of race categories; collect detailed race and ethnicity data by default; and update certain terms or definitions of race and ethnicity categories. Several chapters of this volume provide background on the demographic trends and methodological innovations that motivated the updated federal approach to collecting data on race and ethnicity, and others analyze the implications of the revisions for consistently tracking changes in U.S. economic outcomes by race and ethnicity.

I. Background Facts

a. Changes in the US Racial and Ethnic Composition over US Censuses

After a long period of relative stability in the White population share from 1860 to 1970, the racial and ethnic composition of the U.S. population changed dramatically over the past five decades, as seen in Figure 1. This figure is based on decennial U.S. Census data from 1860 onward; we show new and expanded race and/or ethnic categories as they have been added to the U.S. Census over the years. The proportion of the population self-reporting (or having another household member report) a race other than White has greatly increased since 1970. There also has been a large increase in the share of the population that identifies as Hispanic, reaching almost 20 percent in the 2020 U.S. Census. These changes in measured U.S. racial and ethnic composition have been driven by high rates of immigration and large shifts in the mix of countries of origin of immigrants away from traditional European source countries and towards the Americas and Asia since the major reform of U.S. immigration policy in 1965 (Figure 2). They also reflect changes in U.S. Census enumeration methods and in the societal norms that impact how individuals self-identify along race and ethnic categories.



Source: Gibson, C., & Jung, K. (2002). *Historical census statistics on population totals by race, 1790 to 1990, and by Hispanic origin, 1790 to 1990, for the United States, regions, divisions, and states.* Washington, DC: US Census Bureau. Humes, Karen, Nicholas A. Jones, and Roberto R. Ramirez. "Overview of race and Hispanic origin: 2010." (2011): 1-23. Grieco, Elizabeth M., and Rachel C. Cassidy. *Overview of race and Hispanic origin, 2000.* Vol. 8, no. 2. US Department of Commerce, Economics and Statistics Administration, US Census Bureau, 2001. US Census Bureau, Quick Facts, 2020 US Census Data (https://www.census.gov/quickfacts/fact/table/US/PST045221). Note: Race categories total to 100%; Hispanic origin is reported as separate percentage for individuals of any race category. Native Hawaiian and Other Pacific Islander is a separate category from Asian starting in 2000 US Census onward.

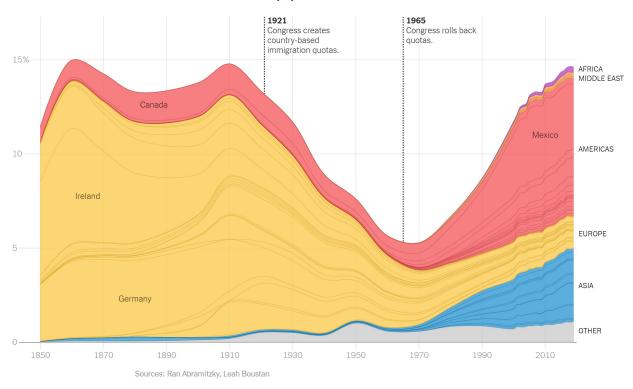
b. Changes in the Country of Origin for U.S. Immigrants over time

Changes in the immigrant country of origin arising from both economic and political considerations here and abroad (Abramitzky and Boustan 2017, 2022) are one important determinant of changes in the racial and ethnic composition of the U.S In Figure 2, the immigrant flows over time are represented in different colors depending upon their origin region: Europe, Americas, Asia, Africa, Middle East, and Other regions. In the mid 19th Century, immigration to the U.S. was drawn primarily from European countries (especially Ireland and Germany). Country-of-origin quotas in U.S. immigration law in the 1920s in response to increased immigration from Southern and Eastern Europe and the earlier Chinese Exclusion Act of 1882 tried to cement in the earlier 19th century

pattern of source countries for immigration and to reduce overall immigration rates. Subsequently, after major changes in U.S. immigration laws including the elimination of country-of-origin quotas starting in 1965, there has been an upward trend in immigration flows from the Americas (including a large influx from Mexico) and Asia, greatly altering U.S. racial and ethnic composition.

The changes in source countries of U.S. immigrants over the past 60 years have motivated the inclusion of expanded and novel race and ethnic categories (and their various combinations) to more accurately describe the U.S. population. Increasingly, it has become important to be able to distinguish among new arrivals from similar race or ethnic populations in the United States as there may be significant differences in their social and economic conditions. Race or ethnic category aggregation may obscure significant heterogeneity in certain groups such as Asians, Hispanics, and the African American/Black population, for example, as shown in chapters in this volume.

Figure 2:



Share of the U.S. population that was born abroad

c. Racial and Ethnic Differences in Median Earnings

Data collection by governmental agencies have facilitated our ability to measure differences and changes in economic and social outcomes across race and ethnic groups and to explore within group variation in outcomes. Measured racial and ethnic group disparities in key outcomes or access to programs from governmental sources are often an input into policy advocacy and policy formulation and may help to identify a novel or persistent problem in a particular population. Substantial racial and ethnic differences are apparent today for many economic outcomes (such as earnings, employment, and income) although the relative contributions of different sources (e.g., current discrimination vs. inequality of opportunity due to pre-market conditions or historical

discrimination) remain contentious. When consistent data are available over an extended time period, researchers may also be able to conduct credible program evaluations. We illustrate in the table below the persistence of group differences in U.S. labor market outcomes through a straightforward comparison of contemporaneous differences by race and ethnicity in the median weekly earnings of U.S. full-time wage and salary workers between the ages 25 to 54 (from the second quarter of 2024). Black men earn 80% of what White men earn, Hispanic men earn 74% and Asian Men earn 129%. Comparing the weekly median earnings for different race or ethnic groups relative to White women, we find that Black women earn 84% of what White women earn, Hispanic women earn 67%, and Asian women earn 132% of that amount.

Median Weekly Earnings of U.S.			
me Wage and Salary Workers, 25 to 54, 2024 Q2			
	Male	Female	
White	1361	1113	
Black	1093	937	
Hispanic	1003	885	
Asian	1756	1465	

Source: BLS, "Usual Weekly Earnings of Wage & Salary Workers," <u>https://www.bls.gov/news.release/wkyeng.t03.htm</u>

II. Measuring Race and Ethnicity in the Federal Statistical System

The four chapters in the first part of the book illustrate (i) the ongoing challenges to measuring race and ethnicity in the federal statistical system of a large, changing, and diverse nation; and (ii) the implications of changes in official methods of collecting race and ethnicity for consistently tracking racial and ethnic group changes in labor market outcomes. Official definitions of existing race and ethnic groups are not necessarily widely agreed upon at a point in time. And over time some agreed upon definitions may change based on political, legal and social changes. Thus, it is not surprising that the questions and methods for measuring race and ethnicity have changed through the history of the U.S. decennial censuses and the federal statistical system.

In chapter 1, "Measuring the Racial and Ethnic Composition and Diversity of the United States Population: Historical Challenges and Contemporary Opportunities," Nicholas Jones, Eric Jensen, Karen Battle, and Rachel Marks provide a historical review of race questions contained in the U.S. decennial censuses starting with the first one in 1790. They document the larger changes made over the years to accommodate changing norms and modes of racial and ethnic identification. The paper provides a useful backdrop to understanding the current topics and issues related to the collection, comparison, and analysis of race and ethnic categories across time and surveys, serving as a foundation for the rest of the volume. The authors highlight U.S. Census Bureau's efforts to communicate findings on racial and ethnic diversity from the 2020 Census results. They also summarize the work undertaken by the federal statistical system to review and revise the guidelines for federal data on race and ethnicity with the goal of improving future data on U.S. race and ethnicity. These guidelines are contained in the 2024 revision of OMB SPD No. 15 which proposes a combined race and ethnicity question because prior research has shown such an approach improves the accuracy of results and reduces respondent burden. The authors further discuss the advances made to address and account for the changes in race and ethnicity measures over time including "adjustment" factors to help data users bridge from earlier to updated OMB race/ethnicity used by Canada and Australia.

In chapter 2, "Data Collection Without Definitions," Stephan Lefebvre and William Darity challenge the need for providing explicit definitions for the existing federal race and ethnicity categories. Their central thesis focuses on the inconsistencies and ambiguity embedded in the existing definitions and categories. They note that the definitions themselves may create unnecessary ambiguity and confusion for respondents. The authors detail that the definitions contain circular logic, are inconsistent across categories, and lack comprehensiveness; often the categories conflate race with related concepts such as ancestry and nationality. The implication is that formal definitions are likely to do little to assist respondents and instead may unnecessarily constrain the identity choices of individuals and groups. The authors analyze a proposal to dispense with definitions for the race and ethnic categories altogether. They argue that eliminating definitions for race and ethnicity categories would eliminate the frequent need to update definitions and might increase data comparability over time.

In chapter 3, "Measuring Potential Effects of Introducing the 2024 Race and Ethnicity Standards into the Current Population Survey," Mark Loewenstein, David Piccone and Anne Polivka explore the potential effect of changes to federal race and ethnicity definitions using a nationally representative data set. The Current Population Survey (CPS) currently follows the 1997 OMB standards, which prescribes race and Hispanic ethnicity be asked in separate questions. Under this approach, Hispanics can be of any race, everyone is identified as being Hispanic or not, and every race group has a Hispanic, non-Hispanic designation associated with it. In 2024, OMB updated the standards to stipulate that race and ethnicity be asked in one question and that a distinct category be added for Middle Eastern and North African. Loewenstein, Piccone, and Polivka examine the CPS microdata to assess the effects that the 2024 standards might have on CPS time series estimates. Their estimates imply that individuals who indicate they are Middle Eastern or North African will likely be among those who previously would have indicated that they are White, however the proportion is small. In contrast, Hispanics make up a large proportion of the population. "Other Race" responses in the CPS provide a lower bound estimate of the number of individuals who will identify as Hispanic in a combined question while responses to the ethnicity question provide an upper bound. Results from the Census Bureau's National Content test suggest that the upper bound estimate is likely to be closer to the mark. Loewenstein, Piccone, and Polivka calculate the labor force estimates corresponding to the lower and upper bounds. The authors provide suggestions on how to construct an experimental series that may be more comparable across time. They also note, given the CPS rotation pattern, that administering a combined question to all respondents (rather than just to the usual one quarter of the sample who are new entrants or reentrants) the month that the combined question is introduced to the CPS could provide an approach to obtaining tighter estimates of the effect of change in standards.

In a similar vein, Kevin McKinney and John Abowd explore in chapter 4, "Estimating the Potential Impact of Combined Race and Ethnicity Reporting on Long-Term Earnings Statistics," how combining the race and ethnicity questions into a single question may affect the reporting on long-term earnings by subgroups. They attempt to disentangle the differences in long-term real earnings associated with self-reported racial and ethnic identities as distinct from country of origin with a focus on foreign-born persons from countries that are majority Hispanic and from countries in the Middle East and North Africa (MENA). The authors combine individual-level earnings data from the Longitudinal Employer-Household Dynamics data (based on state-level unemployment insurance earnings records), race and ethnicity information from the 2010 Census, and place of birth information from Social Security Administration data. Their findings show that there are nuanced differences in estimates of long-term earnings (spanning 2010-2015) across the various race and ethnicity combinations within countries of origin. Their results indicate that, relative to the two separate questions, the single-question format will lose some detailed information for certain immigrant groups, although the effects vary across immigrant subgroups and are not uniform in nature. For example, the authors note that some respondents may only answer Hispanic in the updated single race/ethnicity question and not indicate one of the past racial categories making it increasingly difficult to identify Afro-Latinos in the data and their distinctive experiences. Similar concerns arise for other smaller MENA populations. Their findings suggest that providing country of birth data for the foreign born may enhance historical comparability.

In summary, the first section of the book explores the ongoing challenges to measuring race and ethnicity inherent in a large country with a diverse and changing population. The chapters in this section provide evidence that our conclusions on socioeconomic outcomes by demographic groups may differ depending upon how the definitions of racial and ethnic groups are worded and on how racial and ethnic questions are ordered. The work may be of particular interest to academics and policymakers who use Census and other standard data sets to understand policy interventions and programs aimed at reducing disparity among economic and racial groups.

III. Implications of Mismeasured and Imputed Race and Ethnicity

The next set of chapters in the volume focus on the problems that occur when race and ethnic categories are mismeasured or need to be imputed in important domains including criminal justice, child welfare, and employment. The authors propose new approaches to improve measurement or account for systematic mismeasurement of race and ethnicity in administrative, survey, and online social network data sets. All levels of government and researchers rely on these data to assess progress (or the lack of) in various social and economic characteristics in certain populations over time and across space. When the questions and category definitions are poorly understood by the respondents or when those recording race and ethnicity information face little incentive for accurate reporting, the data collected and imputed may contain serious measurement errors harming assessments of program effectiveness or the identification of racial or ethnic group disparities (and whether measured disparities are "warranted" or represent bias or discrimination).

In chapter 5, "Race and Ethnicity (Mis)measurement in the U.S. Criminal Justice System," Keith Finlay, Elizabeth Luh, and Michael Mueller-Smith examine how systematic mismeasurement of race and ethnicity in administrative data may lead to an underestimate of racial and ethnic disparities in criminal justice outcomes. Their analysis focuses on how race and ethnicity are recorded by administrative agents in the U.S. criminal justice system, how operational concerns limit corrections to misreported race and ethnicity, and the implications for measures of racial disparities in criminal justice outcomes from administrative data sources. They quantify mismeasurement of race and

ethnicity in the criminal justice system using novel linkages of administrative micro-data from the Criminal Justice Administrative Record System (CJARS) to race and ethnicity composites from U.S. Census Bureau data mostly based on self-reported or family-reported race and ethnicity. Finlay, Luh, and Mueller-Smith find substantial inconsistencies between agency-recorded race/ethnicity labels and Census Bureau composites - the agency label is not consistent with the composite measure for 17 percent of criminal defendants and 10 percent of prison inmates. Criminal justice agencies appear to be particularly poor at measuring the race/ethnicity of individuals identified in Census Bureau data as Hispanic, Asian, Pacific Islander, or American Indian and Alaska Native (AIAN). Using estimated correspondences between agency reported and Census Bureau composite race and ethnicity, the authors find that federal series on incarceration rates that use small survey samples to impute racial and ethnic prison population shares, appear to have substantially underestimated the incarceration rates of Blacks, Whites, and AIANs. Research on U.S. crime and justice topics increasingly use administrative data. Finlay, Luh, and Mueller-Smith's analysis indicates that the underestimate of racial and ethnic disparities in criminal justice outcomes can potentially be improved by individual-level micro data linkages of multiple administrative and Census data sources as in CJARS.

E. Jason Baron, Joseph Doyle, Natalia Emanuel, Peter Hull and Joseph Ryan explore another case of race and ethnic mismeasurement in chapter 6, "Unwarranted Disparity in High-Stakes Decisions: Race Measurement and Policy Responses." Their analysis focuses on racial discrimination in child protective services (ChPS) and how racial misclassification in administrative ChPS data may affect measures of overall and unwarranted racial disparities in foster care placement and other ChPS case outcomes. They build on earlier work by Baron et al. (2024) who exploit the quasi-random allocation of calls to ChPS screeners and then investigators in Michigan, and who find that even among children with the same potential for maltreatment at home, calls with maltreatment allegations are much more likely to result in foster care placement for Black children than for White children. The new work in this volume by Baron et al. assesses racial misclassification in administrative ChPS data by linking the Michigan ChPS administrative data to public school records containing a "self-reported" measure of the child's race reported by the child or child's guardian. They find that ChPS investigators misclassify 8 to 9 percent of Black and White children relative to their self-reported race, and that racial misclassification leads to an understatement by about 24 percent of unwarranted racial disparity in foster care decisions. Baron et al. further extend their analysis to examine unwarranted disparities in multi-stage systems, such as initial call screening to determine whether an investigation is warranted plus the investigation itself in the ChPS setting, to assess how taking account discrimination in an earlier stage (screening) should impact algorithmic recommendations at a later stage (investigation to determine whether foster care placement is warranted).

In chapter 7 on "Quantifying the Uncertainty of Imputed Demographic Disparity Estimates: The Dual-Bootstrap," Benjamin Lu, Jia Wan, Jacob Goldin, Daniel E. Ho, and Derek Ouyang investigate how imputing race or ethnicity can affect the uncertainty (standard errors) of estimates of average differences in an outcome by racial or ethnic groups. The authors focus on a common problem where survey or administrative data contain important outcomes of interest but where race or ethnicity data is not collected or has low response rates. Their approach accounts for the sampling uncertainty inherent in standard analyses but also explicitly incorporates the measurement uncertainty associated with the imputation that is required to address non-response or non-collection of race or ethnicity measures in the primary survey of interest. The authors develop a dual-bootstrap approach with an application in a BISG (Bayesian Improved Surname Geocoding) setting and find that BISG race imputation does not appear to significantly increase estimation uncertainty. Lu et al. show in an example analyzing health outcomes that the widths of the dual-bootstrap and single-bootstrap confidence intervals for the estimates are essentially the same for the race groups Asian and Pacific Islander, Black, Hispanic, and

White populations; these results indicate that imputation does not necessarily result in estimates with larger variances. On the other hand, they also find that that imputations for small populations which are less represented in training data may result in larger estimated variances. The authors conclude that bias in estimates of group difference rather than imprecision of such estimates is likely the predominant worry from BISG race imputation.

Alexander Berry, Elizabeth Maloney, and David Neumark examine alternative methods to identify or infer race and/or ethnic identity for firms using publicly (or approximately public) available datasets in chapter 8, "The Missing Link? Using LinkedIn Data to Measure Race, Ethnic, and Gender Differences in Employment Outcomes at Individual Companies." The analysis in the chapter is motivated by the fact that the data necessary to detect racial, ethnic, and gender discrimination at the firm level is not always publicly available. Berry, Maloney, and Neumark's exploratory analysis attempts to use information extracted from LinkedIn data to measure the racial, ethnic, and gender composition of individual company workforces. The authors use readily available tools to predict individuals' race, ethnicity, and gender based on their names and LinkedIn profile pictures and then compare their estimates from scraped *LinkedIn* data to those from two alternative sources: the American Community Survey (ACS) and company diversity (or EEO-1) reports. After demonstrating that their estimates are reasonable, Berry, Maloney, and Neumark apply their methodology to analyze the race, ethnic, and gender composition of hires and mass layoffs at two large companies. They also explore the use of the LinkedIn data to analyze race, ethnic, and gender differences in promotions. The authors conclude that LinkedIn data has the potential to be useful for assisting in the enforcement of anti-discrimination laws and could prove a valuable research tool to study worker mobility within and across firms and how worker mobility patterns differ by race, gender, and ethnicity.

In summary, the papers in this section aim to identify whether misclassification of race and ethnicity affects estimates of important outcome. Two of the papers find that misclassification of race and ethnicity in administrative data is widespread and leads to underestimates of the degree of incarceration and incidence of discrimination. However, one paper finds that, even though imperfect, racial and ethnic classification available from commercially-available data may be good enough to identify within firm instances of discrimination. We also learn that race imputation may come at the cost of accuracy (larger standard errors) for relatively small populations in existing data sets. These papers highlight the potential costs to researchers and policymakers of having misclassified, missing or erroneous measures of race and ethnicity.

IV. Applications

The final four chapters provide different examples of the ways in which innovative data collection, data linkages, and data disaggregation can facilitate novel research focusing on racial and ethnic populations and their social and economic progress. Bruce Meyer, Nikolas Mittag, and Derek Wu motivate chapter 8, "Race, Ethnicity, and Measurement Error," by observing that the accuracy of analyses of racial and ethnic disparities of economic outcomes and access to the safety net based on survey data depends on survey accuracy not varying by race and ethnicity. They review the evidence provided by eighteen empirical studies that link various Census survey data sets to administrative data to assess the accuracy of individuals' responses about the receipt of safety net and retirement programs (SNAP, Social Security, Unemployment Insurance, TANF, Medicaid, Medicare, and private pensions) and how reporting accuracy varies by race and ethnicity. Meyer, Mittag, and Wu find that Blacks and Hispanics are consistently more likely to fail to report program receipt than Whites. In most studies, false reports of program receipt are also higher for Blacks and Hispanics, but underreporting is

typically the dominant error. Furthermore, this pattern persists when one controls for other covariates besides race and ethnicity. The authors conclude that measurement error in the major U.S. Census survey data sets tends to systematically understate safety net program receipt by Blacks and Hispanics relative to Whites.

Francisca Antman and Brian Duncan hypothesize in chapter 10, "Ethnic Identity and Anti-Immigrant Sentiment: Evidence from Proposition," that racial and ethnic tensions may affect individuals' responses to survey questions about their racial and ethnic identity. They test for such a phenomenon by examining how survey responses to the Census and the CPS were affected by local support for California's Proposition 187, a 1994 ballot initiative that was designed to deny social services to undocumented immigrants. Antman and Duncan anticipate that individuals' willingness to identify as Mexican was affected by local support for Proposition 187 since much of the anger behind Proposition 187 was directed at Mexicans. The authors predict that individuals who might be more likely to be perceived as Mexican because of a last name or direct paternal lineage would be less likely to identify as Mexican. In contrast, individuals who were less likely to be viewed as Mexican and faced fewer adverse consequences might be more likely to identify as Mexican as the result of their increased ethnic awareness. Antman and Duncan's empirical test involves estimating an equation using pre- and post-Proposition 187 data and interacting a post-Proposition 187 indicator with the share of the county vote share in favor of Proposition 187. Separate equations are estimated for individuals with varying strengths of Mexican ancestry. The estimation results are in accord with the authors' hypotheses.

In chapter 11, Natalie Gubbay, Brandon Hawkins, Illenin Kondo, Kevin Rinz, John Voorheis, and Abigail Wozniak illustrate how the creation of a rich public use dataset based on linking restrictedaccess U.S. government administrative data may improve our ability to track economic outcomes by demographic groups across geographic areas and be a useful input into policy analyses. They link the universe of household 1040 tax filings from 2008 to 2019 and the universe of individual W-2 filings to construct a novel dataset called Income Distributions and Dynamics in America (IDDA). The IDDA is very large, allowing granular analysis for many U.S. demographic groups, for geographic areas below the national level, and for intersections of demography and sub-national geography. Using this dataset, the authors explore the evolution of income inequality and mobility for subnational race and ethnic groups, and they compare IDDA estimates with those in the CPS (and with the ACS in an appendix). Kondo et al. find broadly similar aggregate patterns in the estimates from the tax data and the public survey data. For example, 75-25 percentile income gap estimates align well between IDDA and the CPS. However, there are stark differences at a more granular level: the CPS is not well suited for producing distributional estimates for many racial and ethnic groups at the state level. The authors conclude by looking at a couple of applications of the IDDA. In the first, they show that in contrast to other racial and gender groups, the labor earnings of Blacks in the upper half of the income distribution have fallen relative to Whites since the Great Recession. In the second, they show that since the Great Recession the earnings of Native people living inside Native areas have fallen relative to that of Native people living outside Native areas.

Randall Akee, Sonya Porter and Emilia Simeonova also demonstrate the benefits of linking administrative data sets to increase the sample size for smaller and hard-to-count race and ethnic groups. In chapter 12, "Earnings Inequality and Immobility for Hispanics and Asians: An Examination of Variation Across Subgroups," Akee, Porter, and Simeonova examine earnings inequality and earnings immobility within U.S. Hispanic and Asian ethnic and racial groups over the period of 2005-2015 using confidential-use data linked from the ACS to Internal Revenue Service W-2 and 1099 forms. Because of the large sample size of their administrative data sources, the authors are able to disaggregate the Hispanic and Asian categories into their subgroups and distinguish between

individuals who are long-term residents or native-born Hispanics and Asians and those who are recent (post-2005) immigrants to the United States. The disaggregation of data into these smaller subpopulations is often impossible in standard data sets given sample size limitations in survey data sets or lack of information on immigrant arrival status or labor force attachment. The results show that for the Asian and Hispanic population aged 18-45, earnings inequality is constant or slightly decreasing for the long-term legal resident and native-born populations over the 2005-2015 period. The addition of new labor market entrants appears to be a driving force for observed increases in earnings inequality over time for some relatively small populations. New Asian and/or Hispanic immigrants to the United States contribute significantly to the earnings inequality within these groups at both the aggregate and disaggregated levels. The authors also show that there are significant differences across the various subgroups in their average earnings, inequality measures, and share of the top and bottom 10 percent of earnings. Akee, Porter, and Simeonova's analysis highlights that our existing race and ethnicity measures for broad categories obscure significant variation across subgroups and that these different subgroups have significantly different experiences, earnings and outcomes.

In summary, this final section provides novel directions for research where more complete and wellspecified data may exist for race and ethnic groups. We learn that political influences and prevailing sentiment may play a role in shaping how individuals self-identify. We also learn that response rates for certain survey questions (such as program receipt) may differ across race and ethnic groups and that these differences may play a role in leading to an underestimate of program use and provision for certain groups. Finally, we see in the last two chapters that administrative data can helpus identify socioeconomic characteristics and outcome for smaller race and ethnic groups. Linked longitudinal Census and administrative data may play an important role in future research examining dynamic and intergenerational outcomes by race and ethnicity.

Closing Thoughts

The papers in this volume illuminate the challenges in accurately measuring the race and ethnicity of the U.S. population and how systematic mismeasurement impacts our understanding of levels and trends in economic and social outcomes by race and ethnicity. They also illustrate how new data, linkages between large representative administrative and survey data sets and innovative methods can improve the accuracy of race and ethnicity measurement and yield novel insights into racial and ethnic group disparities in multiple areas including the labor market, health care, criminal justice system, and social safety net programs.

References

Abramitzky, Ran, and Leah Boustan. 2017. "Immigration in American Economic History." *Journal of Economic Literature* 55(4): 1311-1345.

Abramitzky, Ran and Leah Boustan. 2022. *Streets of Gold: America's Untold Story of Immigrant Success*. New York: Public Affairs.

Baron, Jason, Joseph Doyle, Natalia Emanuel, Peter Hull, and Joseph Ryan. 2024. "Discrimination in Multi-Phase Systems: Evidence from Child Protection." *Quarterly Journal of Economics* 139(3): 1611-64.

Jensen, Eric, Nicholas Jones, Megan Rabe, Beverly Pratt, Lauren Medina, Kimberly Orozco and Lindsay Spell. 2023. "2020 U.S. Population More Racially and Ethnically Diverse Than Measured in 2010." US Census Bureau, America Counts: Stories.

 $\frac{https://www.census.gov/library/stories/2021/08/2020-united-states-population-more-racially-ethnically-diverse-than-2010.html}{\label{eq:census}}$

U.S. Office of Management and Budget. 2024. "The 2024 Statistical Policy Directive No. 15." Resource Website. <u>https://spd15revision.gov/content/spd15revision/en/2024-spd15.html</u>