

UPDATED THROUGH OCTOBER 2023 | NATIONAL

EQUITABLE GROWTH INDICATORS

Raji Chakrabarti, Natalia Emanuel, Dan Garcia,
Ben Lahey, and Maxim Pinkovskiy

Full Report Highlights

- **INFLATION**

Housing inflation is driving most of the demographic inflation differences, in particular the higher inflation of the poorest 40% and of households headed by people under age 25.

- **EARNINGS**

The Black earnings gap is slowly but consistently shrinking for both Black men and women, though it remains large.

- **EMPLOYMENT**

Gaps in employment and unemployment rates across different racial and ethnic groups have come close to pre-pandemic levels, but convergence has stalled, and in some cases reversed slightly.

- **CONSUMER SPENDING**

The lower income, the less educated, and the young experienced a significantly faster recovery in spending since the pandemic. The spending recovery among the young (25-34) has weakened considerably over this year, with their spending on gas and restaurants having stalled in real terms.

- **WEALTH**

Growth in wealth after 2019 was faster for some groups with little wealth relative to population – especially in real estate holdings – but did not meaningfully reduce stark wealth inequalities across demographic groups.

WEALTH

UPDATED THROUGH 2023:Q3 | NATIONAL

Raji Chakrabarti, Natalia Emanuel, and Ben Lahey

Takeaways | Wealth

- Wealth is distributed disproportionately across demographic groups. People with the most wealth tend to have high incomes, be college graduates, be over 55 years old, or be white. We define wealth as a group's assets minus its liabilities.
- Growth in wealth since the pandemic has been especially pronounced for white people, people under 40 years old, people in the bottom half of the wealth distribution, the college educated, and the 20th to 60th percentiles of income earners.
- Groups with less wealth than their population share in 2019 often had relatively rapid growth in real estate assets since the pandemic while groups with more wealth than their population share in 2019 often had relatively rapid growth in financial assets in the ensuing years. Three notable exceptions are White households, the college educated, and the top 0.1% of wealth holders, who experienced relatively rapid growth in both real estate and financial assets despite having more wealth than their population shares in 2019.
- Demographic wealth inequalities remain similar in 2023 as they were in 2019, despite comparatively rapid wealth growth among some of the least wealthy demographic groups.

Full Report Highlights

- **INFLATION**
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- **EARNINGS**
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- **WEALTH**
Growth in wealth after 2019 was faster for some groups with little wealth relative to population – especially in real estate holdings – but did not meaningfully reduce stark wealth inequalities across demographic groups.

Data & Methods

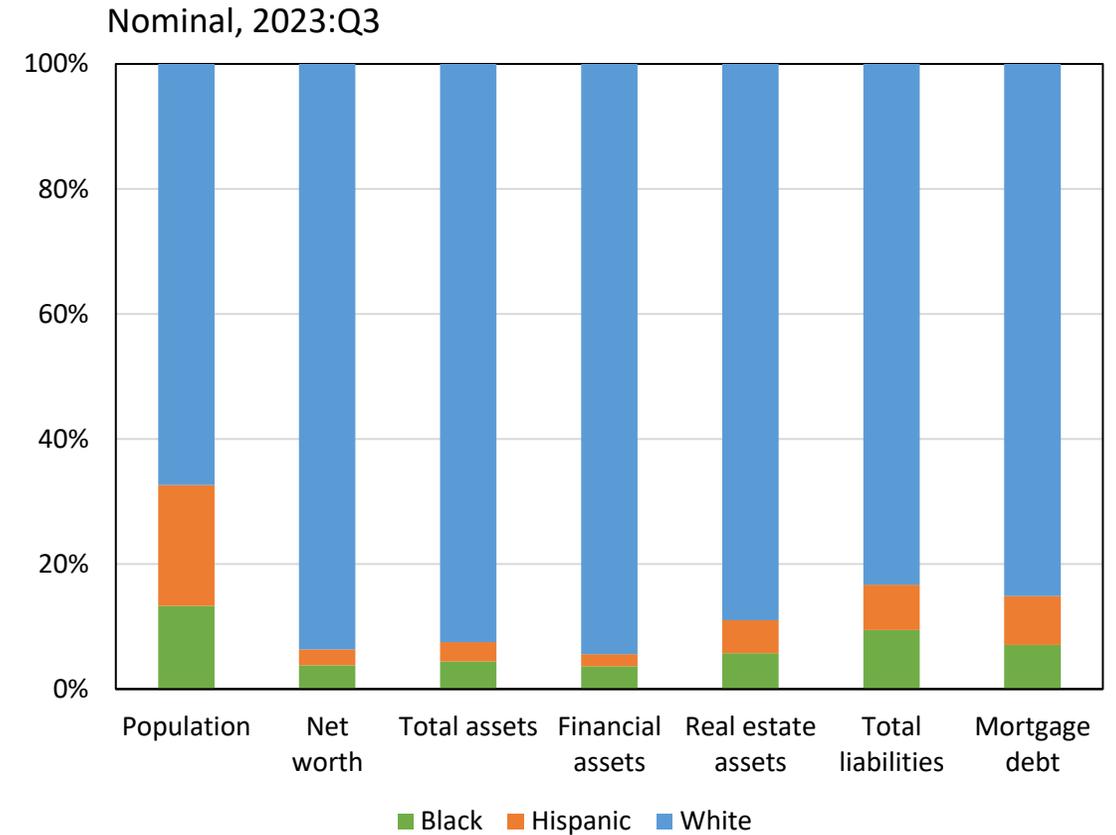
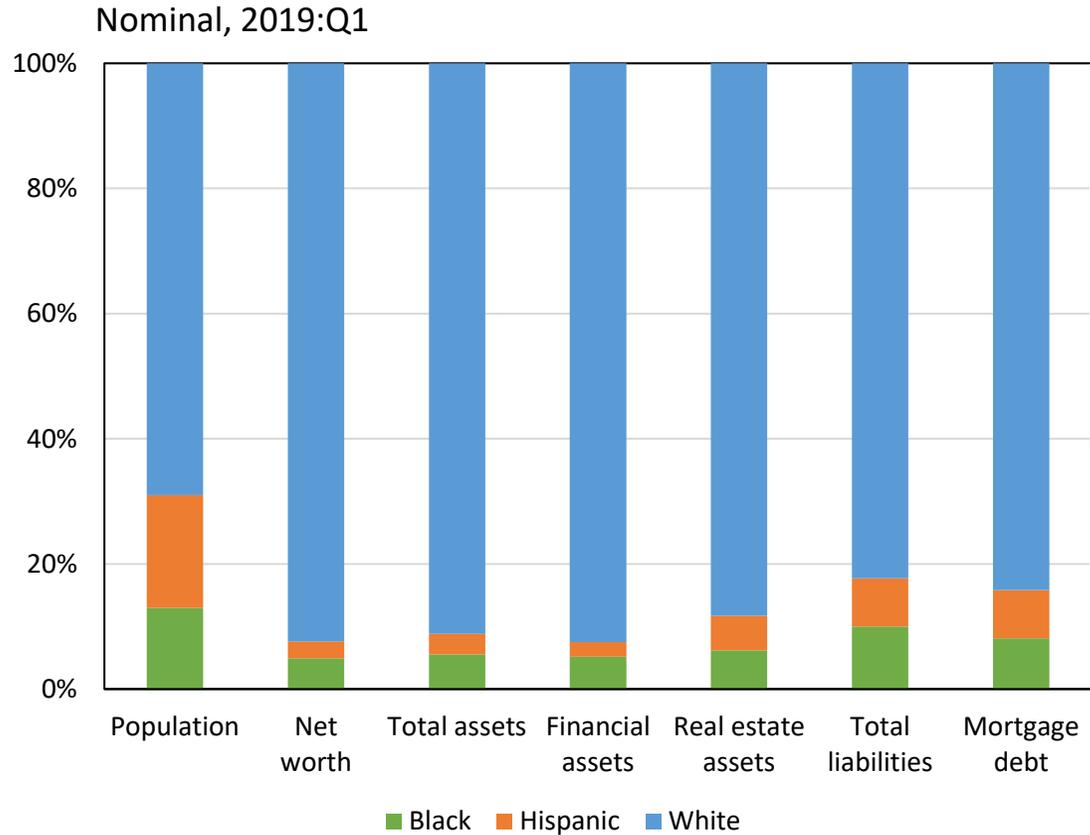
- The Board of Governors of the Federal Reserve System publish the Distributional Financial Accounts (DFA) as a unique source of data on wealth holdings across demographic and economic groups
- The DFA combine sectoral balance sheet data from the Financial Accounts with individual-level holdings from the Survey of Consumer Finances as described in Batty et al. (2019)
- We plot nominal holdings by group in each wealth category in line charts and each group's share of population and nominal wealth types in bar graphs, drawing on the Current Population Survey for demographic population data.
- Where possible we also present real holdings by deflating each group's holdings using [demographic price indices](#) created by the authors.

WEALTH

BY RACE & ETHNICITY

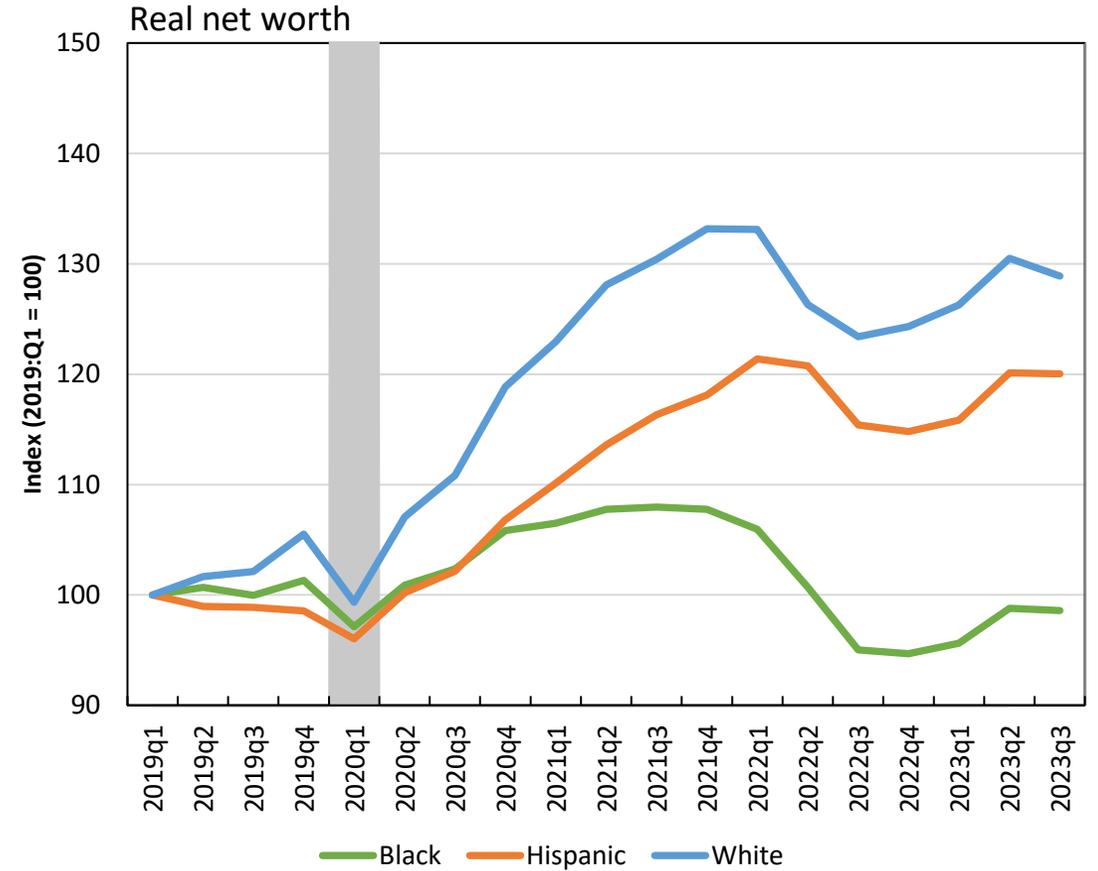
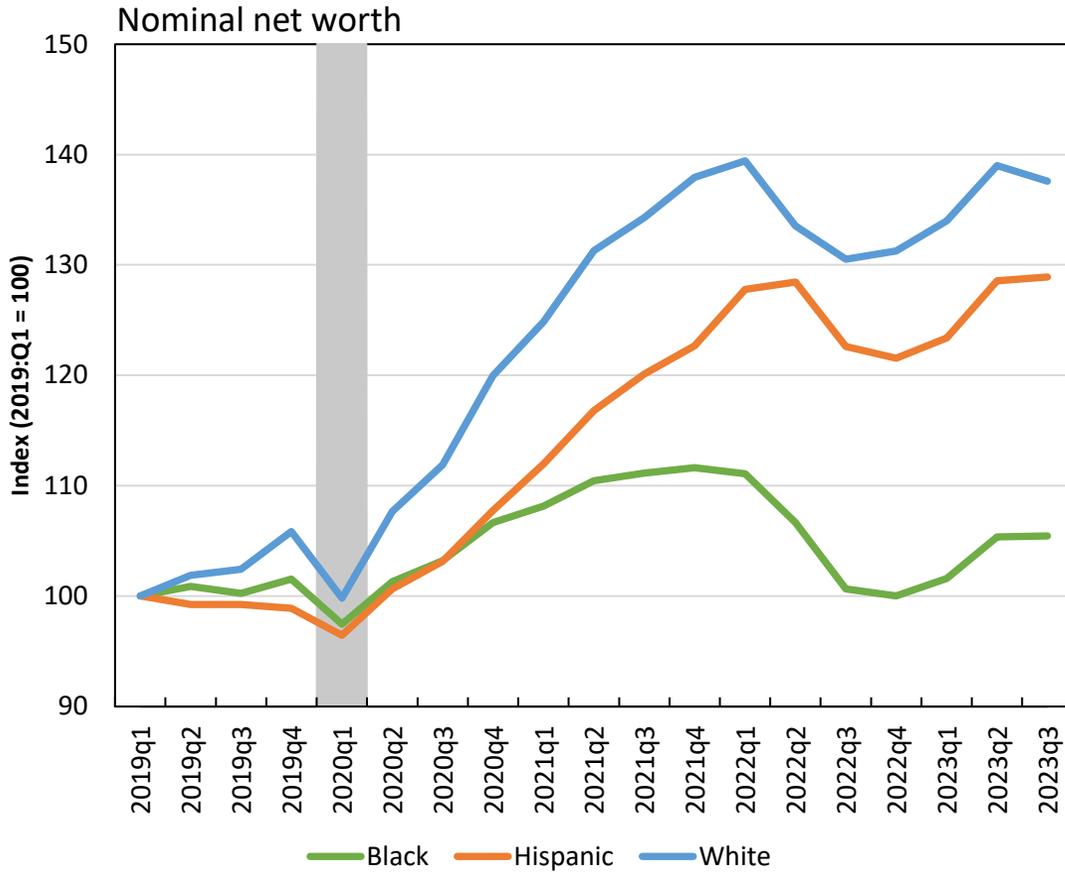


Population and Ownership Shares by Race & Ethnicity



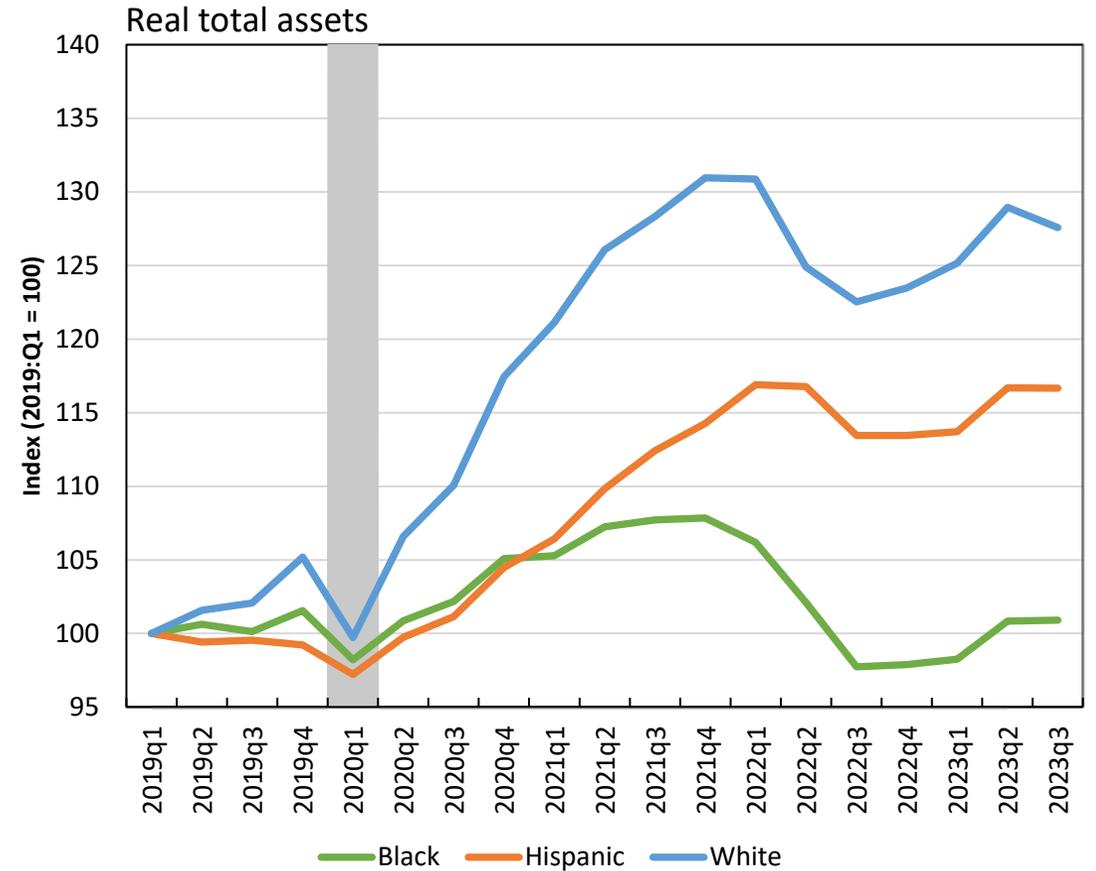
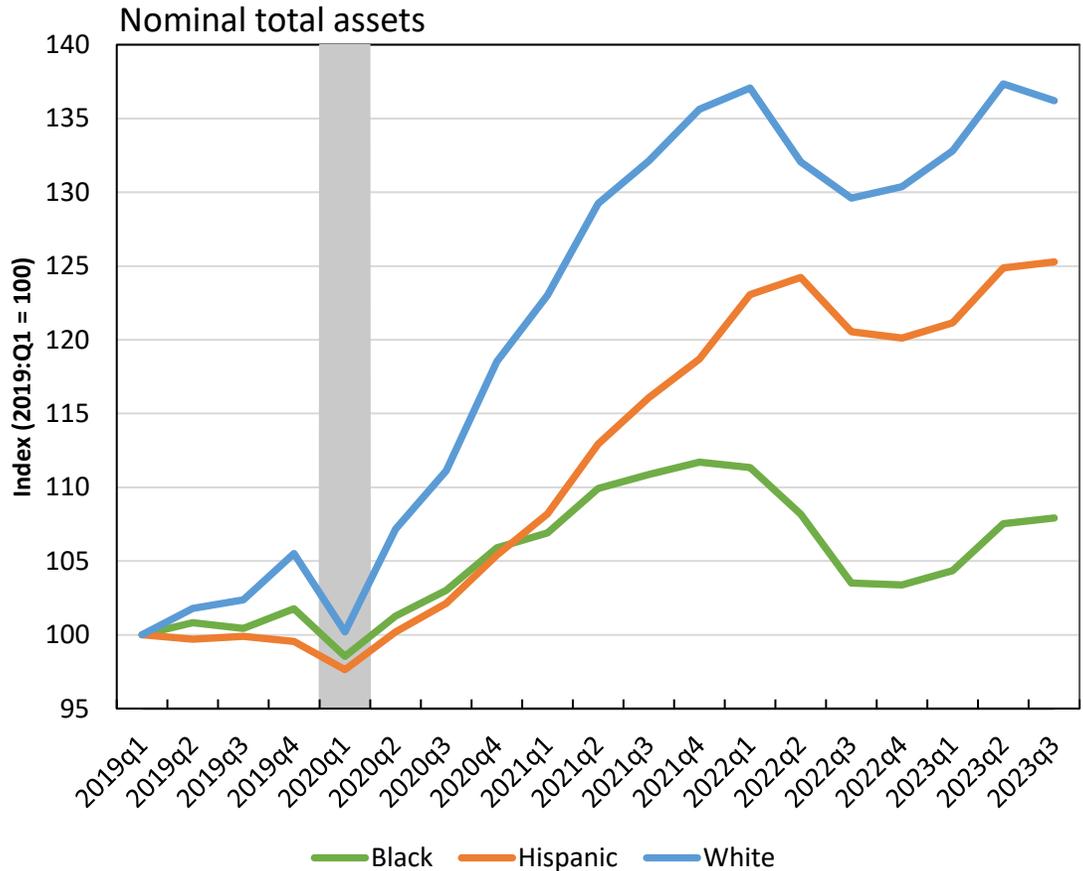
Sources: Distributional Financial Accounts via Federal Reserve, Current Population Survey via IPUMS, Consumer Price Index via Haver Analytics, and authors' calculations. "Net worth" is total assets less total liabilities. Note: Asian, American Indian, Pacific Islander, and other groups are excluded for sample size concerns.

Net Worth by Racial and Ethnic Group



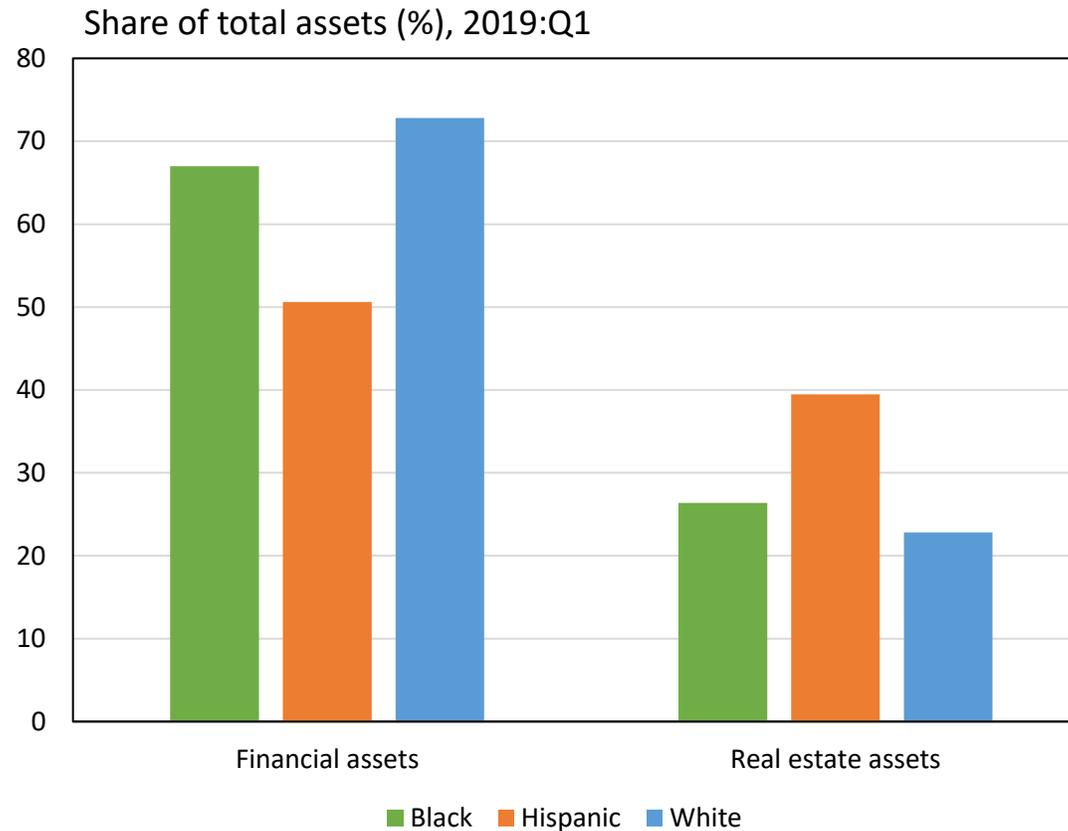
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Total Assets by Racial and Ethnic Group



Sources: Distributional Financial Accounts via Federal Reserve, Current Population Survey via IPUMS, Consumer Price Index via Haver Analytics, and authors' calculations. Note: Asian, American Indian, Pacific Islander, and other groups are excluded for sample size concerns.

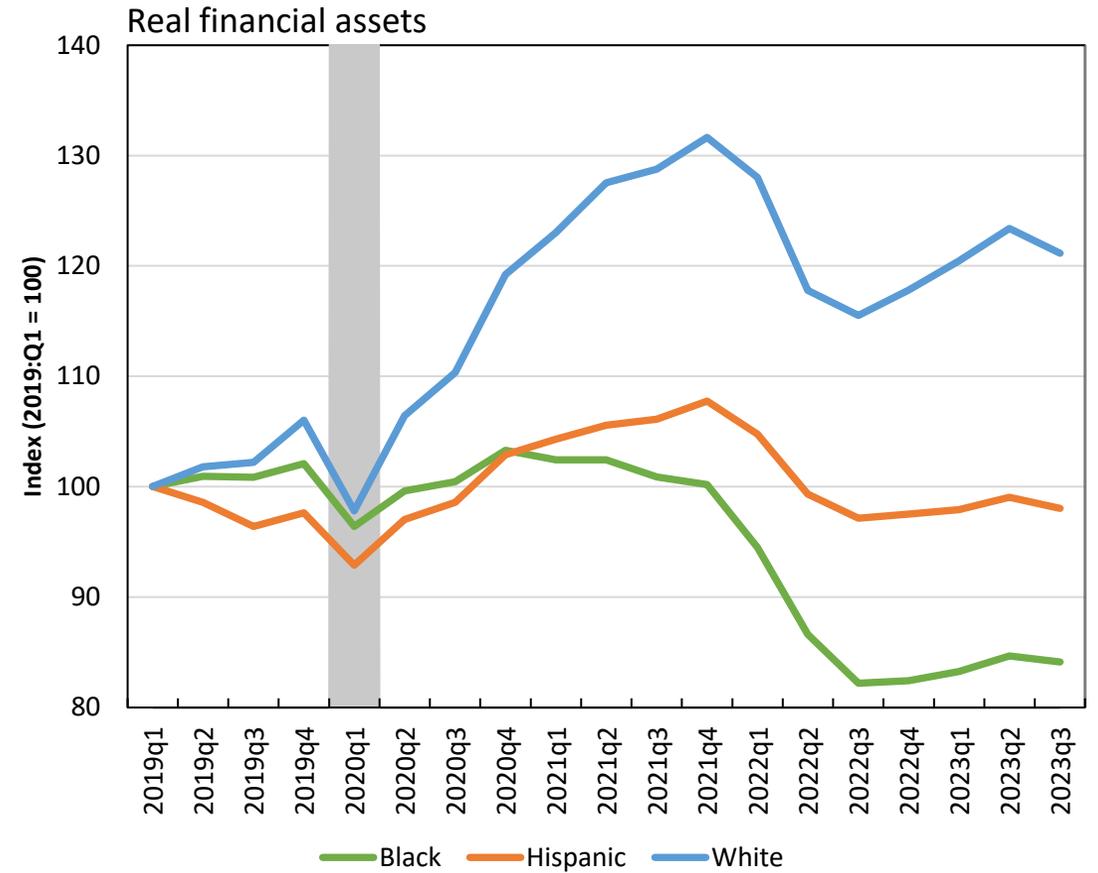
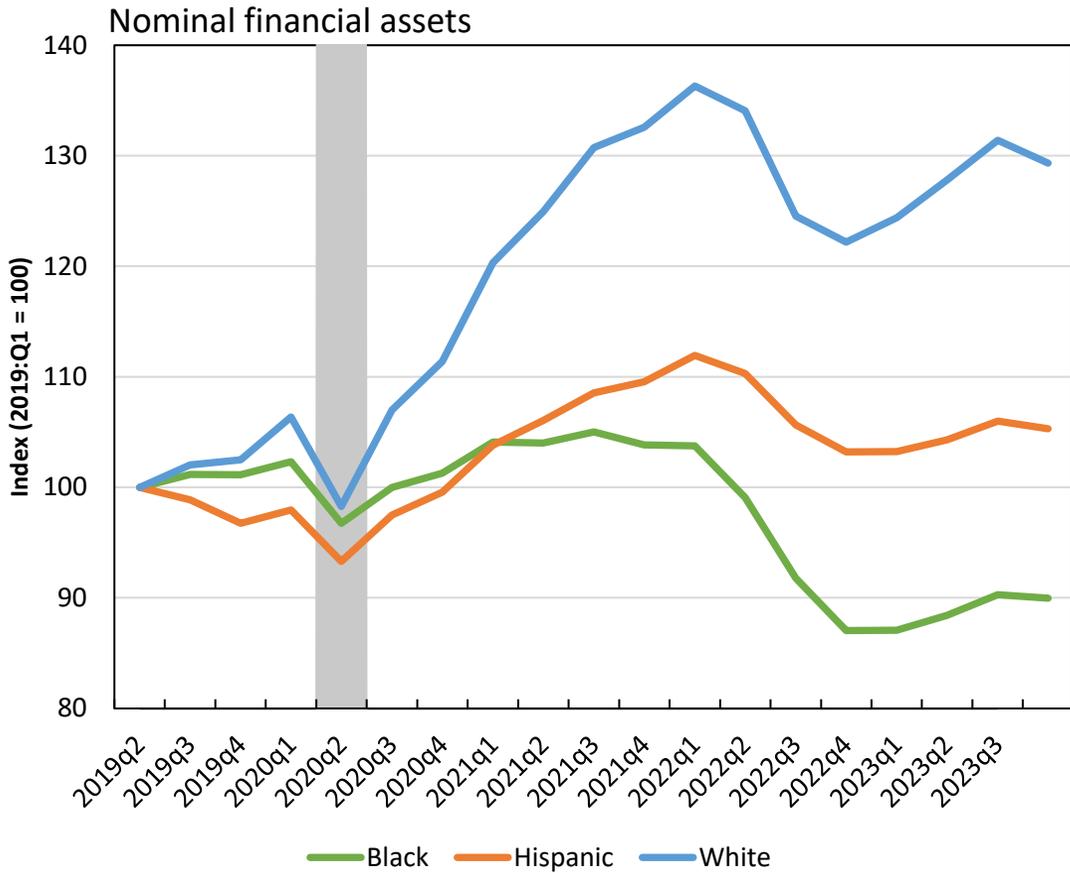
Composition of Total Assets by Racial and Ethnic Group



Source: Distributional Financial Accounts via Federal Reserve.

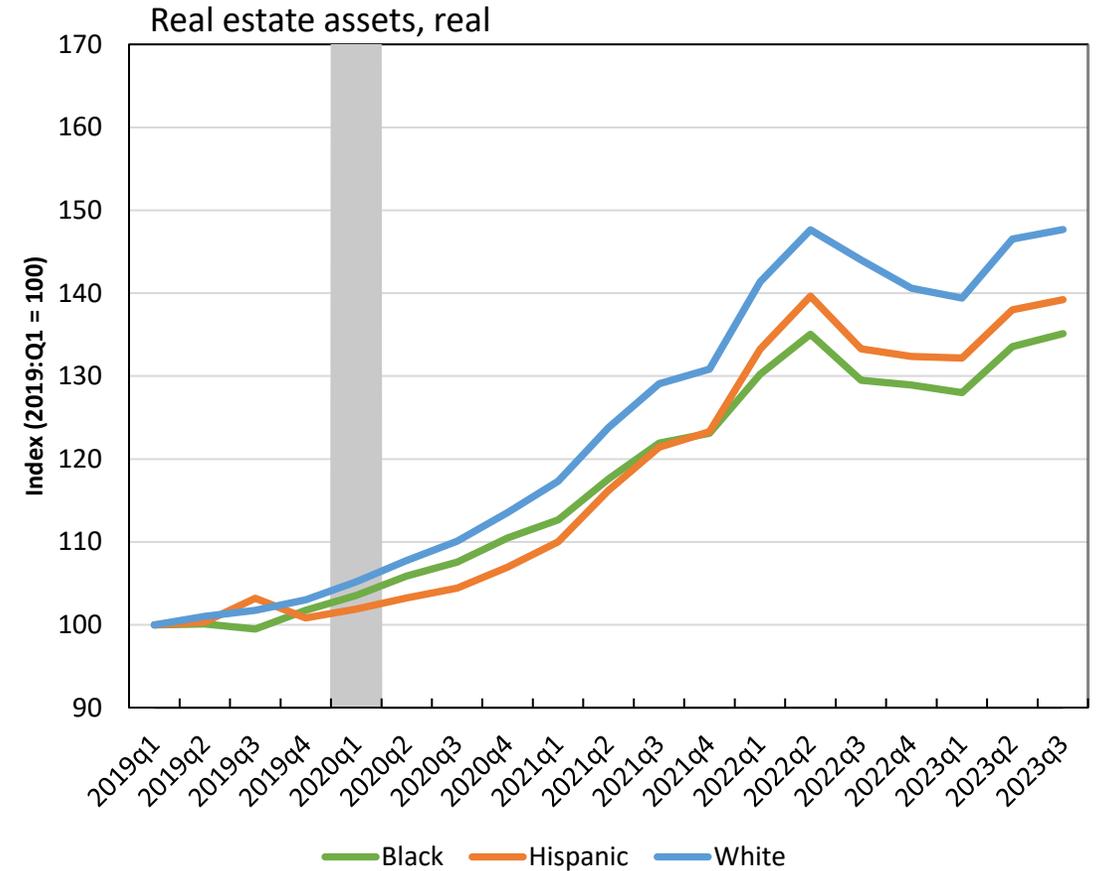
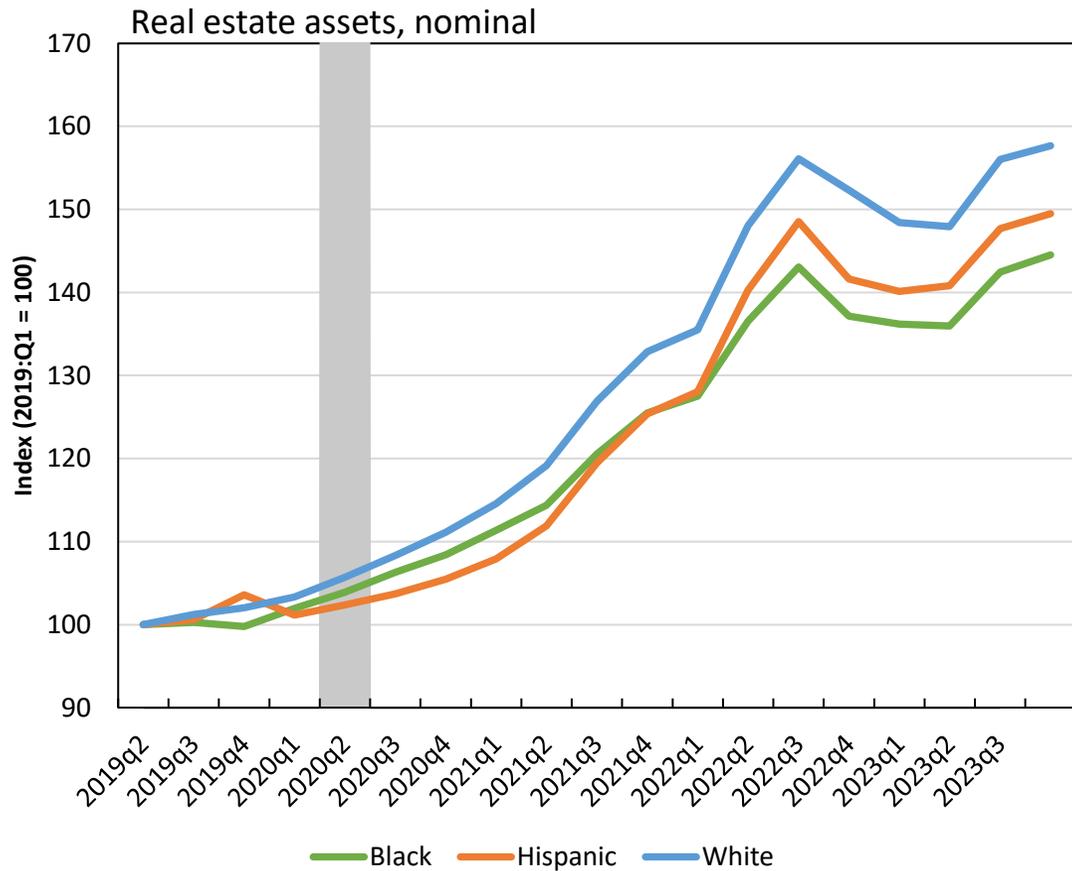
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Financial Assets by Racial and Ethnic Group



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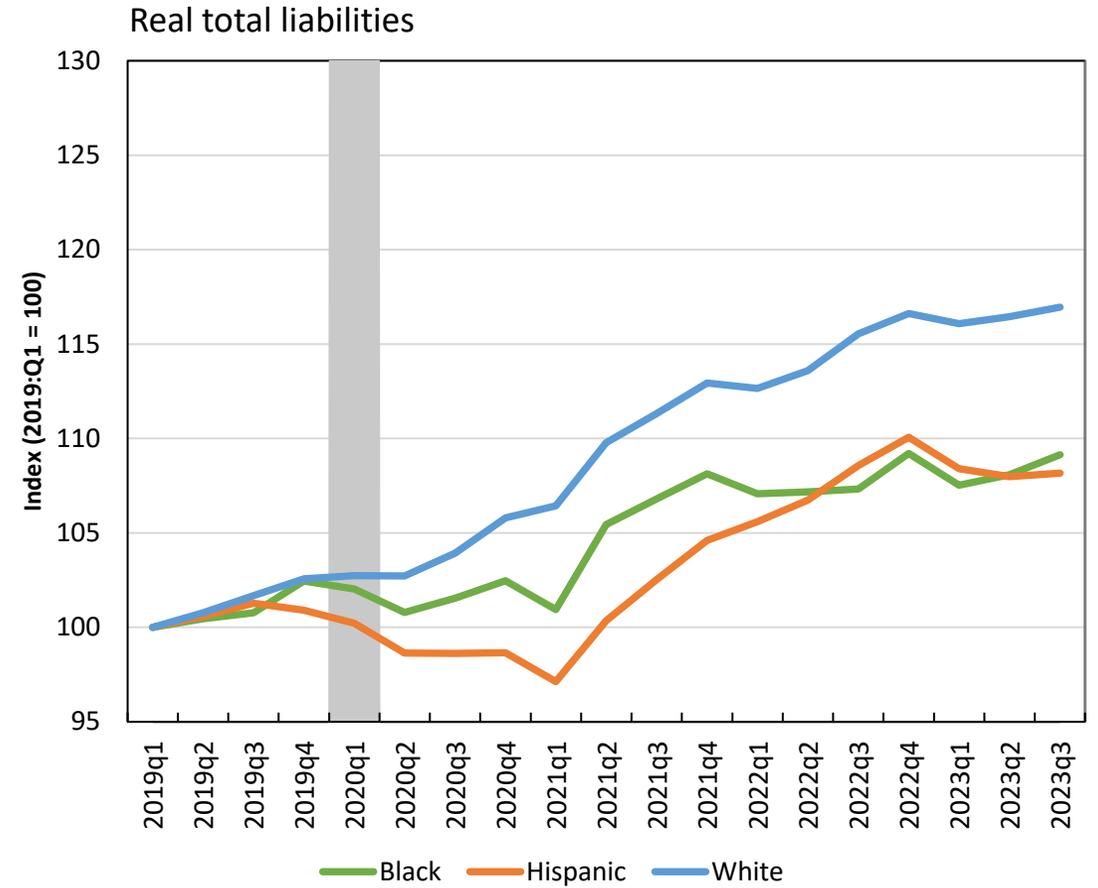
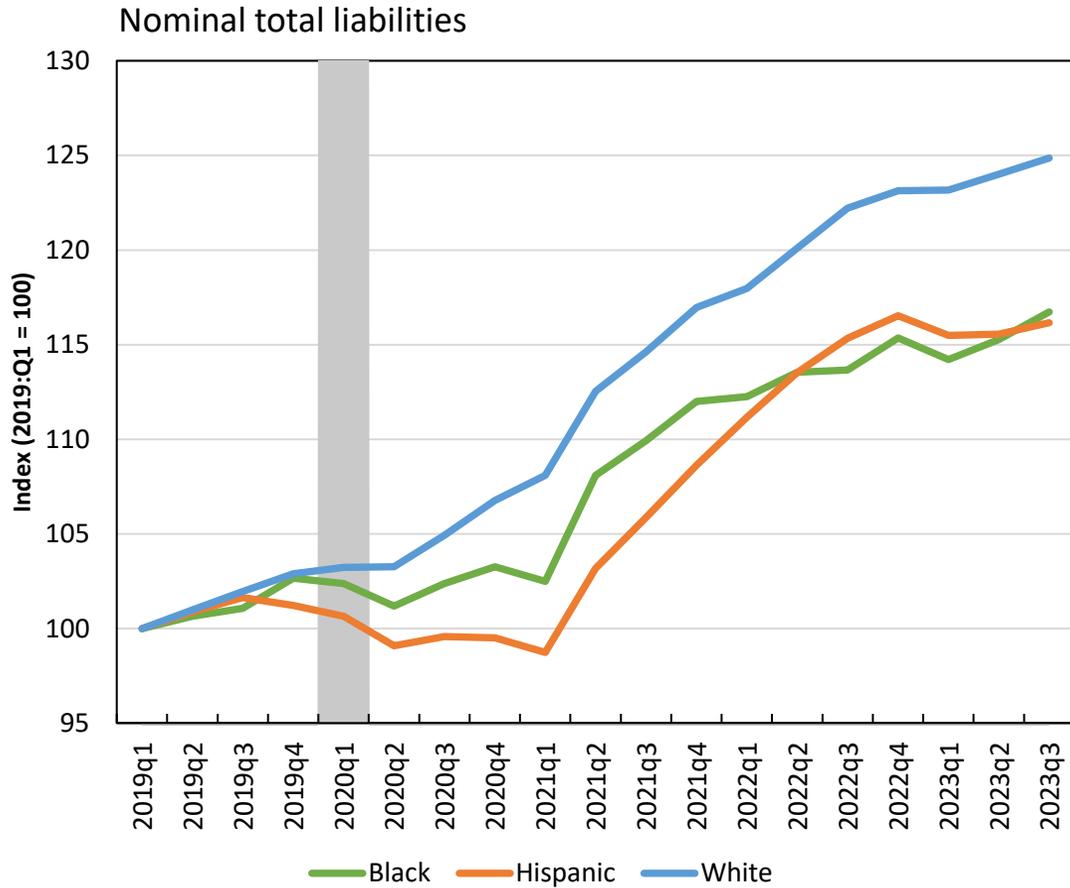
Real Estate Assets by Racial and Ethnic Group



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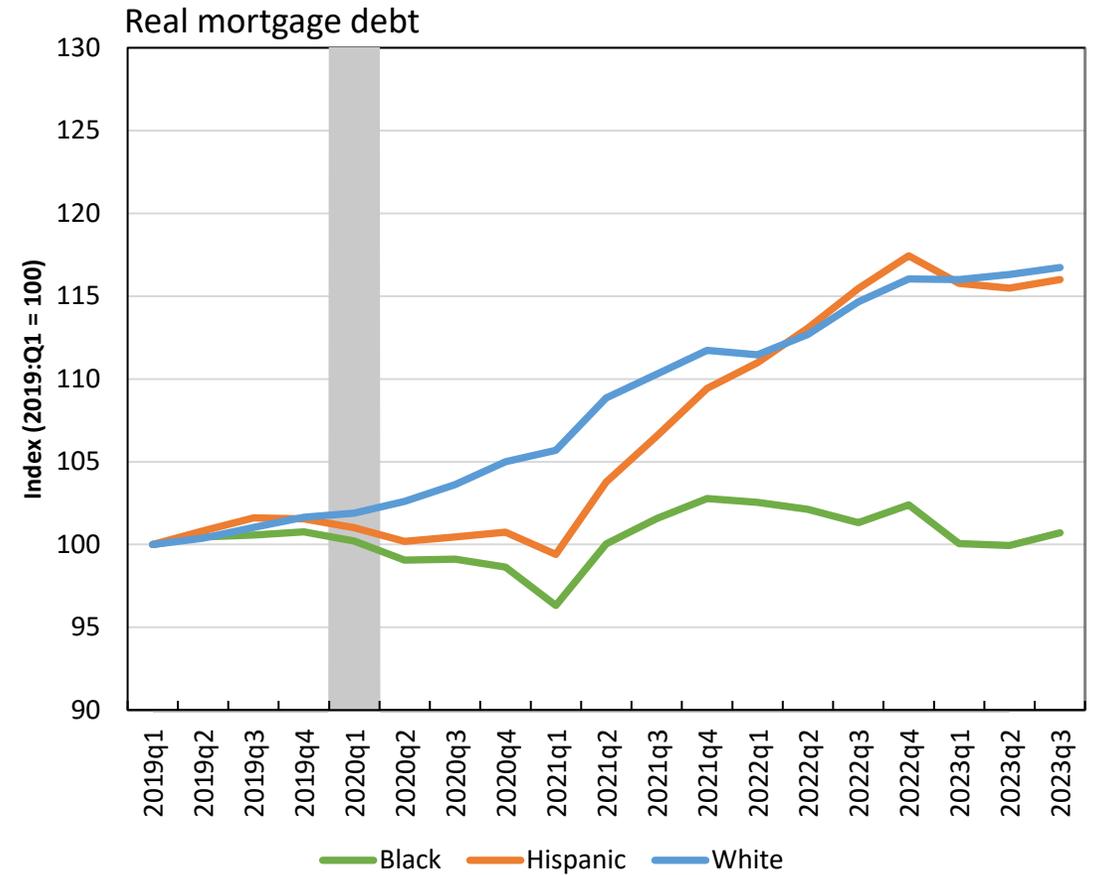
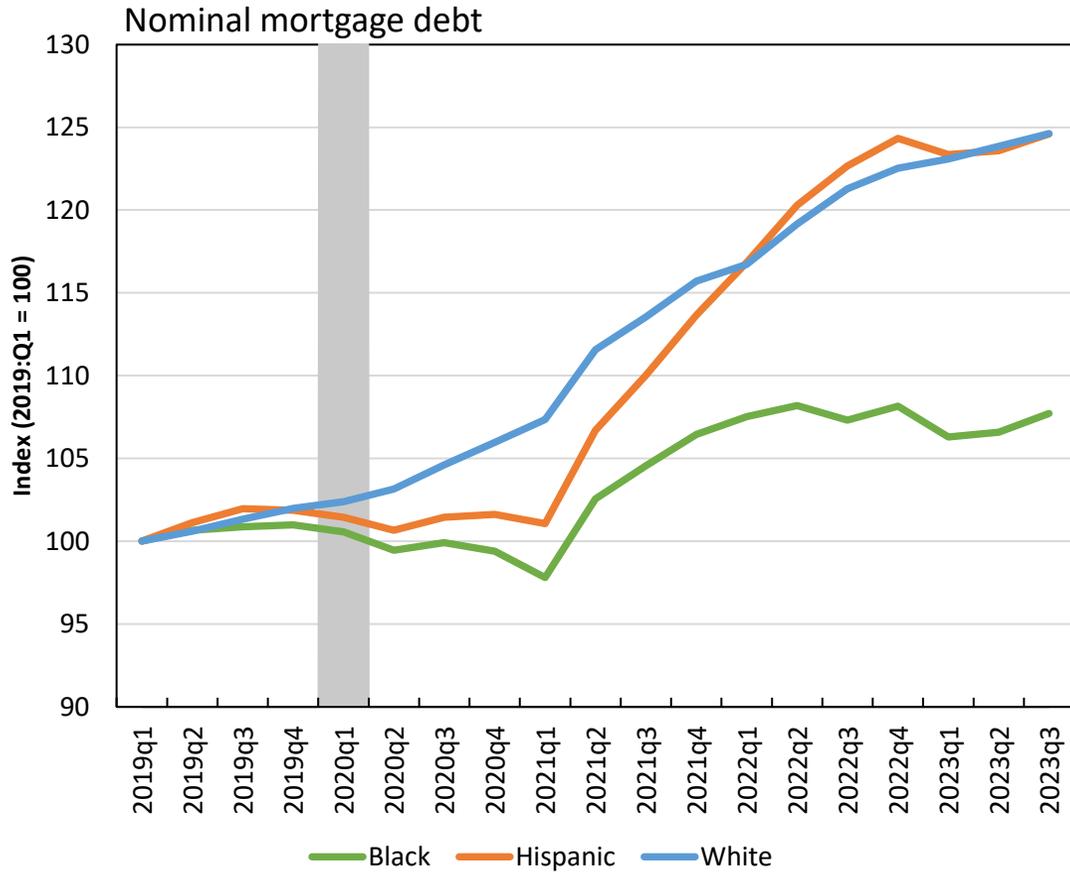
Total Liabilities by Racial and Ethnic Group



Sources: Distributional Financial Accounts via Federal Reserve, Current Population Survey via IPUMS, Consumer Price Index via Haver Analytics and authors' calculations.

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Mortgage Debt by Racial and Ethnic Group



Sources: Distributional Financial Accounts via Federal Reserve, Current Population Survey via IPUMS, Consumer Price Index via Haver Analytics and authors' calculations.

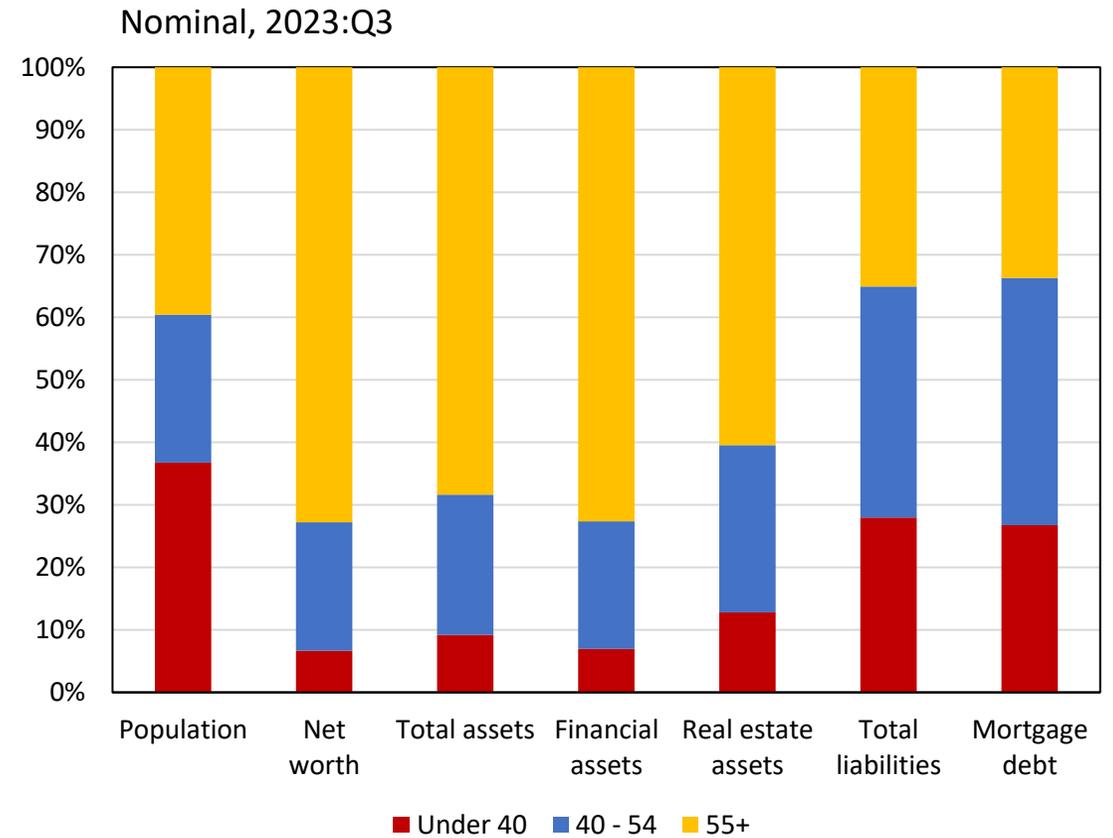
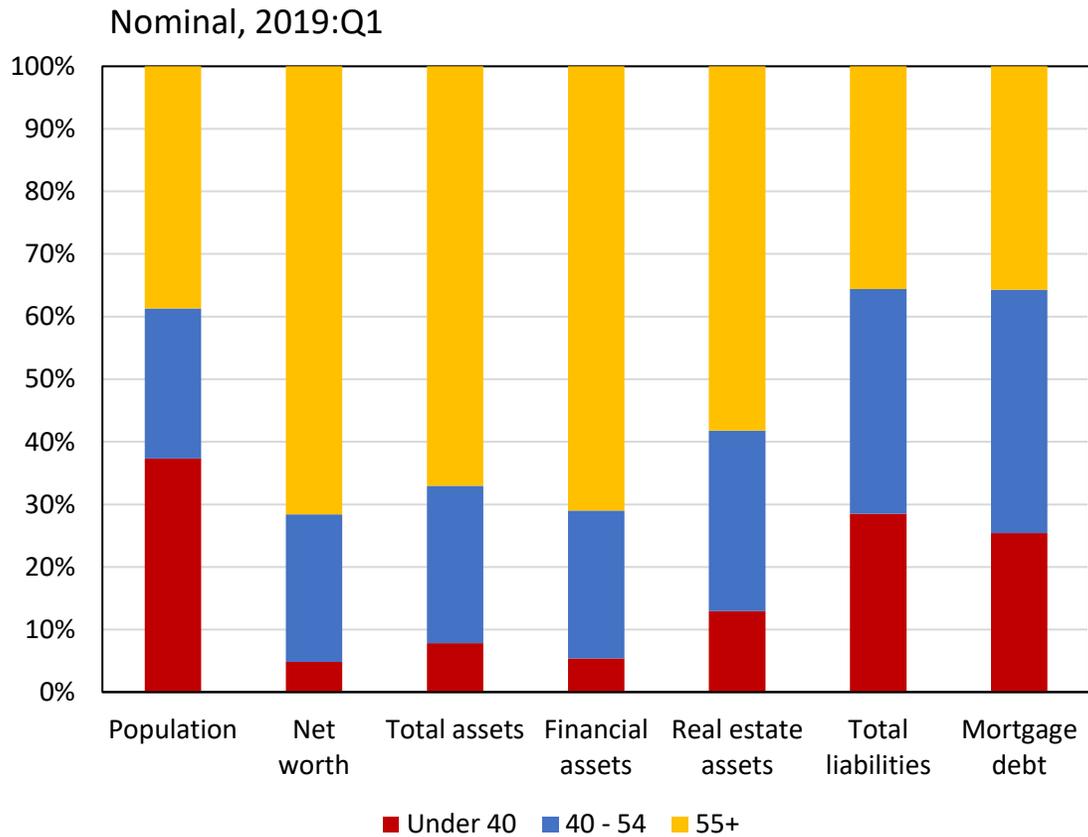
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WEALTH

BY AGE

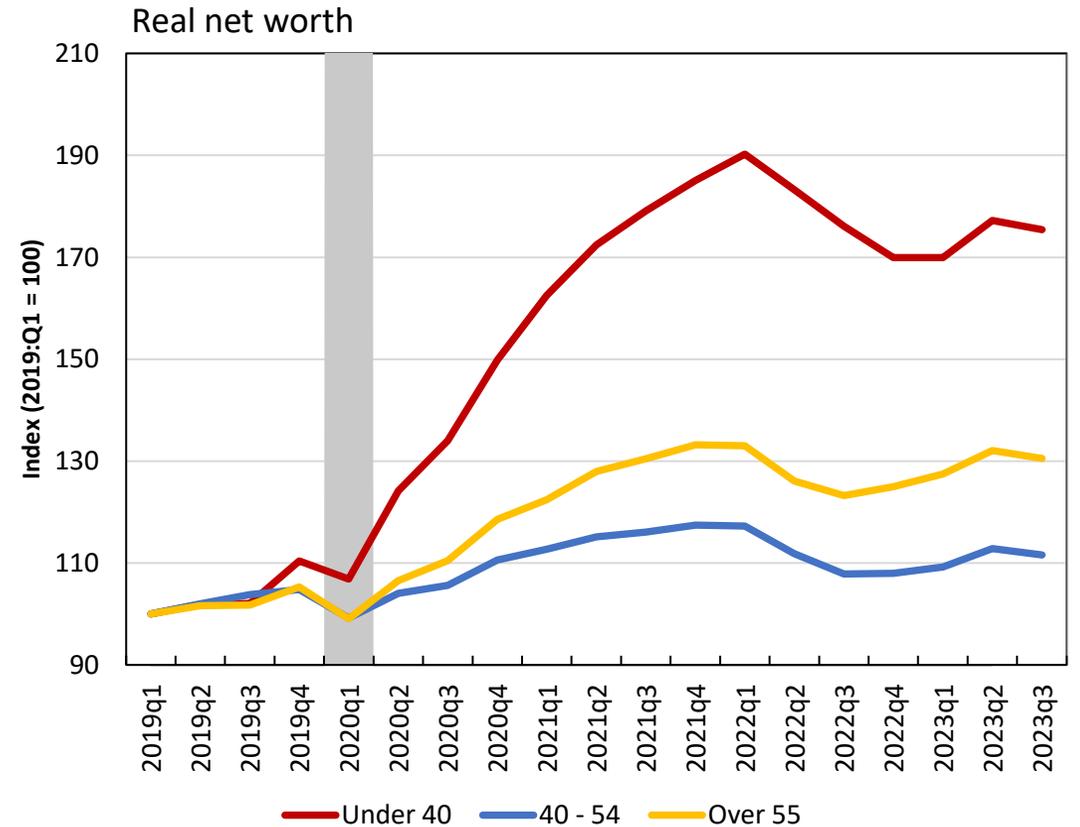
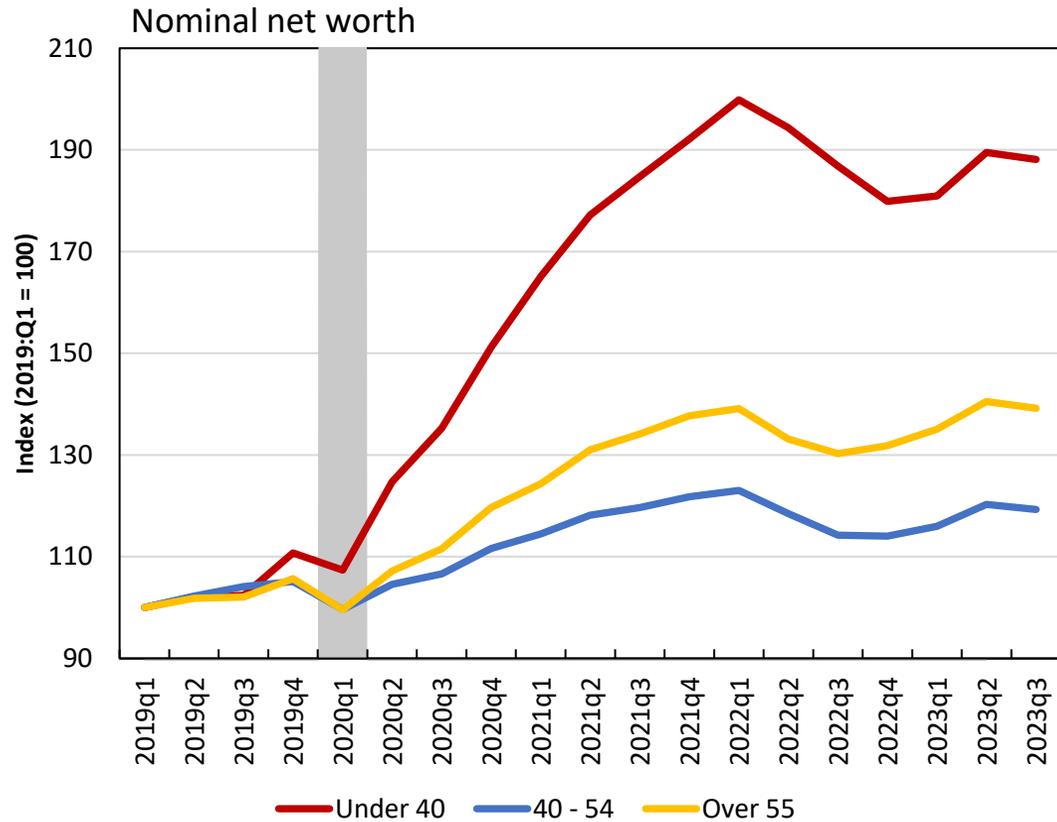


Population and Ownership Shares by Age Group



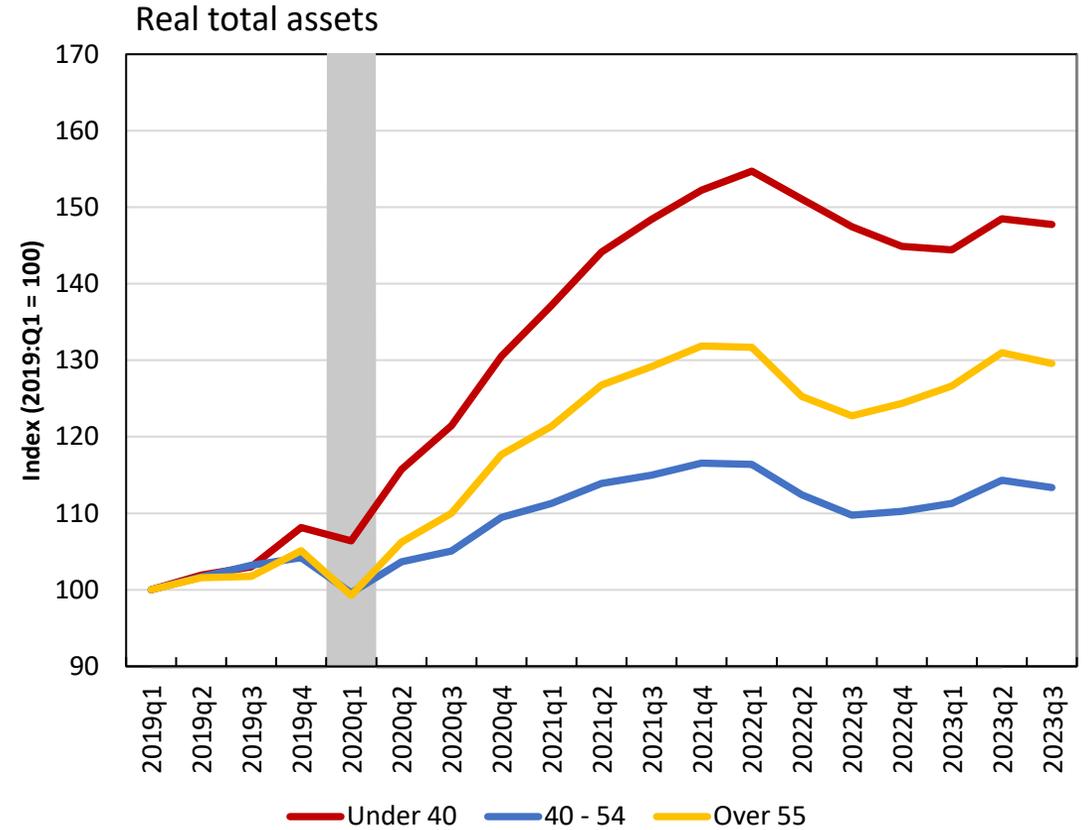
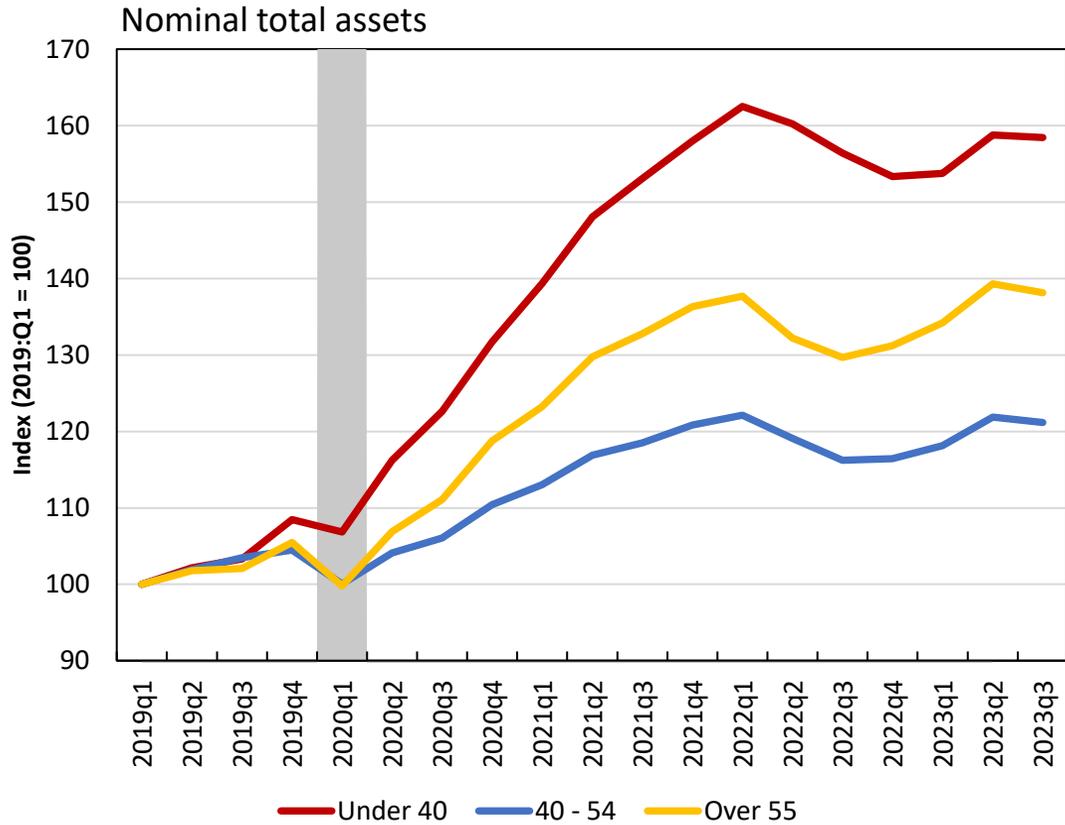
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Net Worth by Age Group



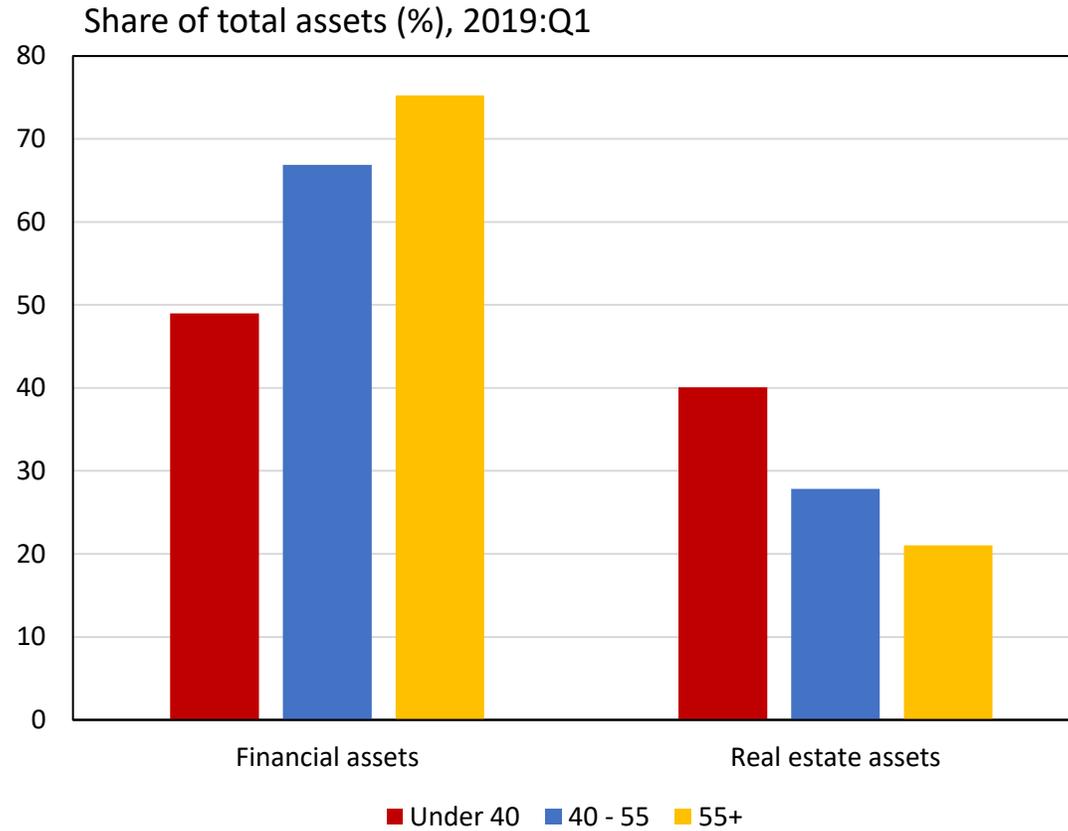
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Total Assets by Age Group



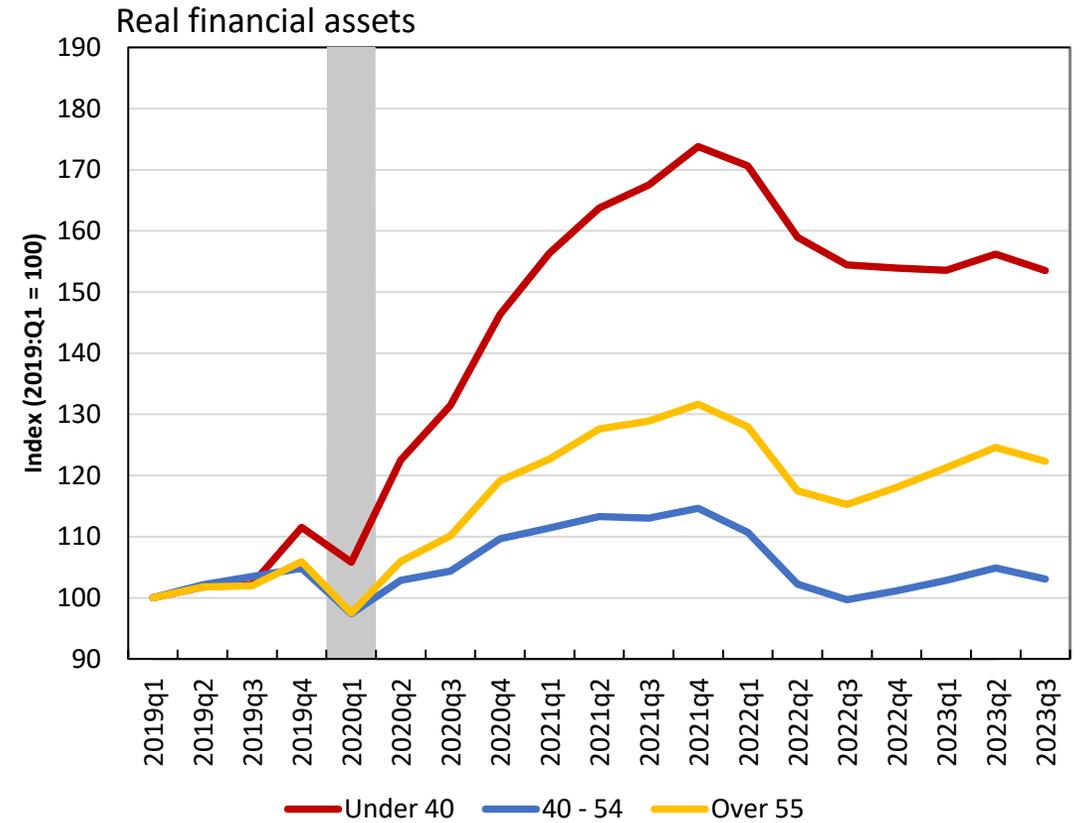
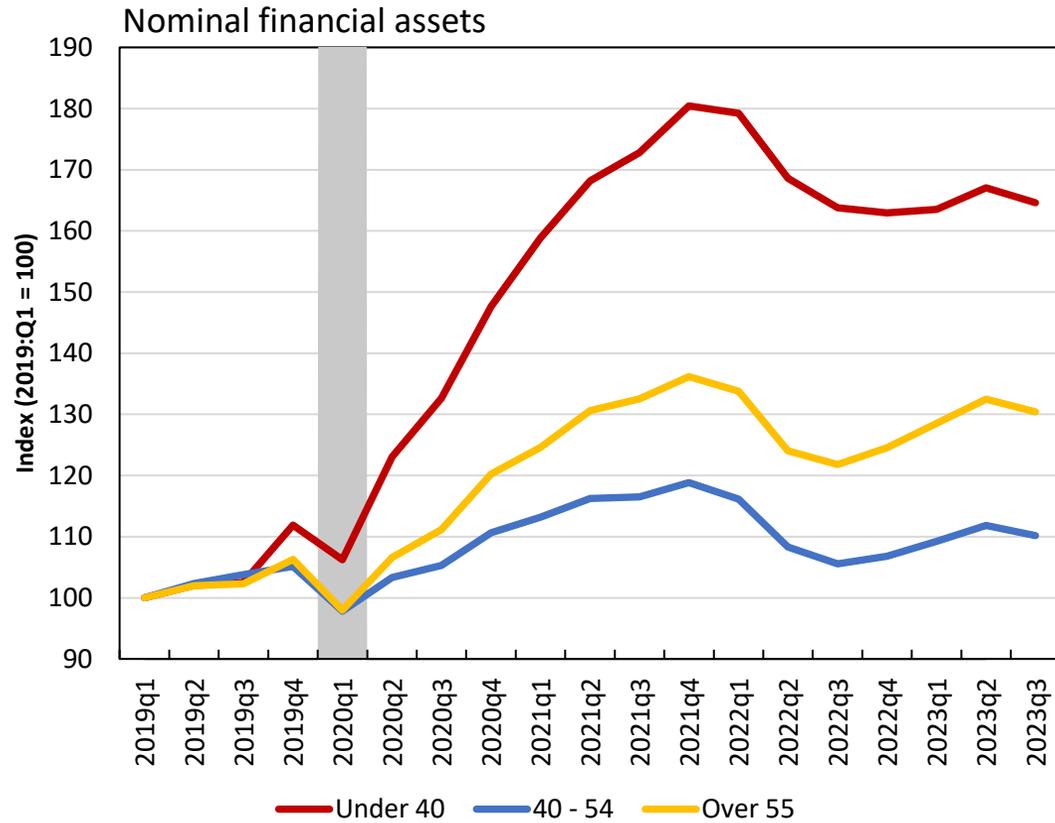
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Composition of Total Assets by Age Group



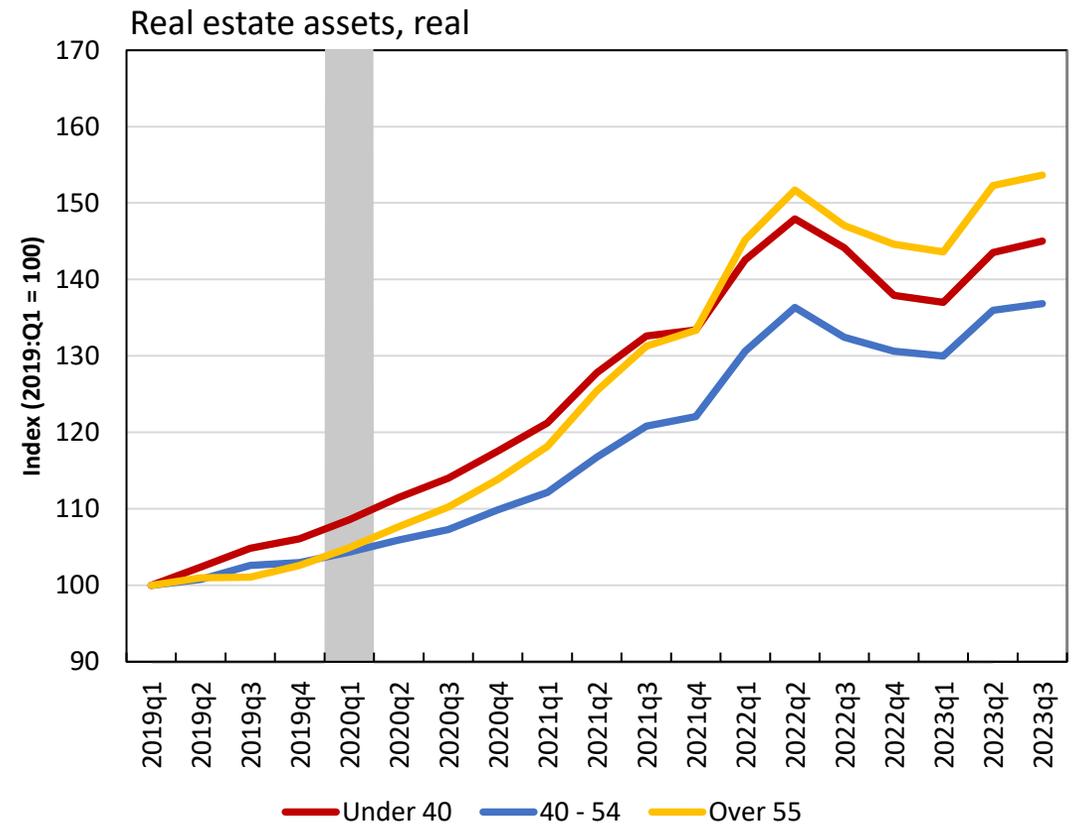
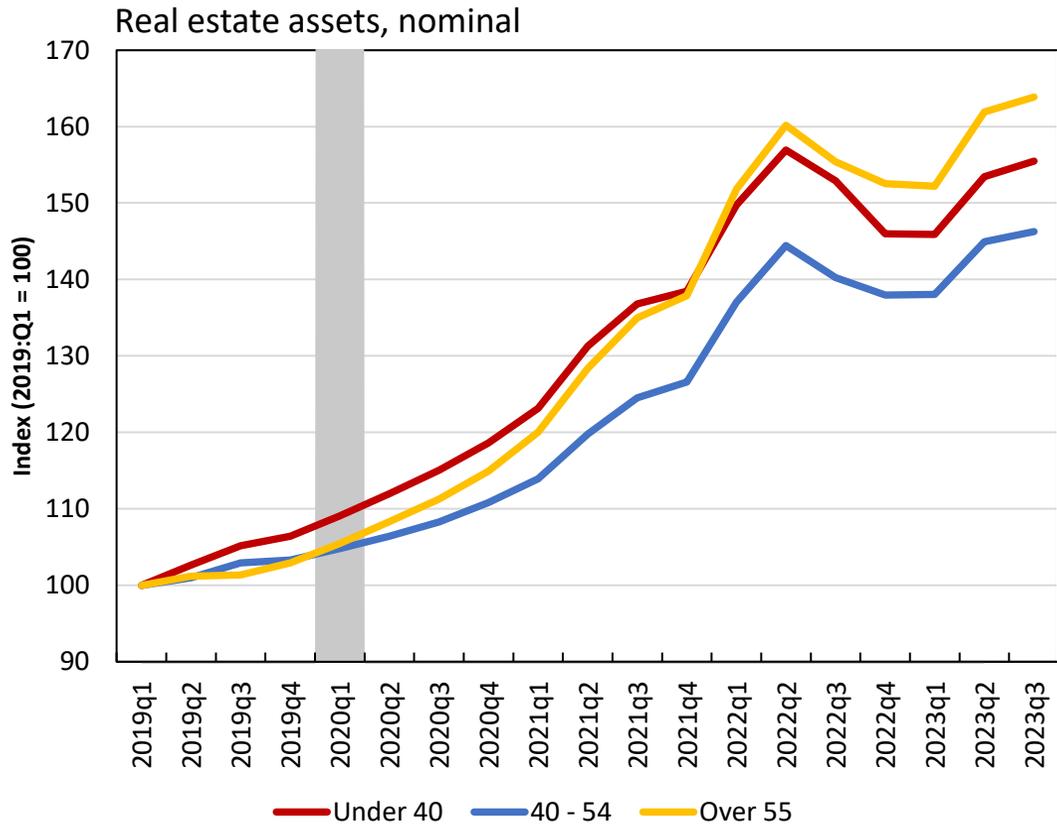
Source: Distributional Financial Accounts via Federal Reserve.

Financial Assets by Age Group



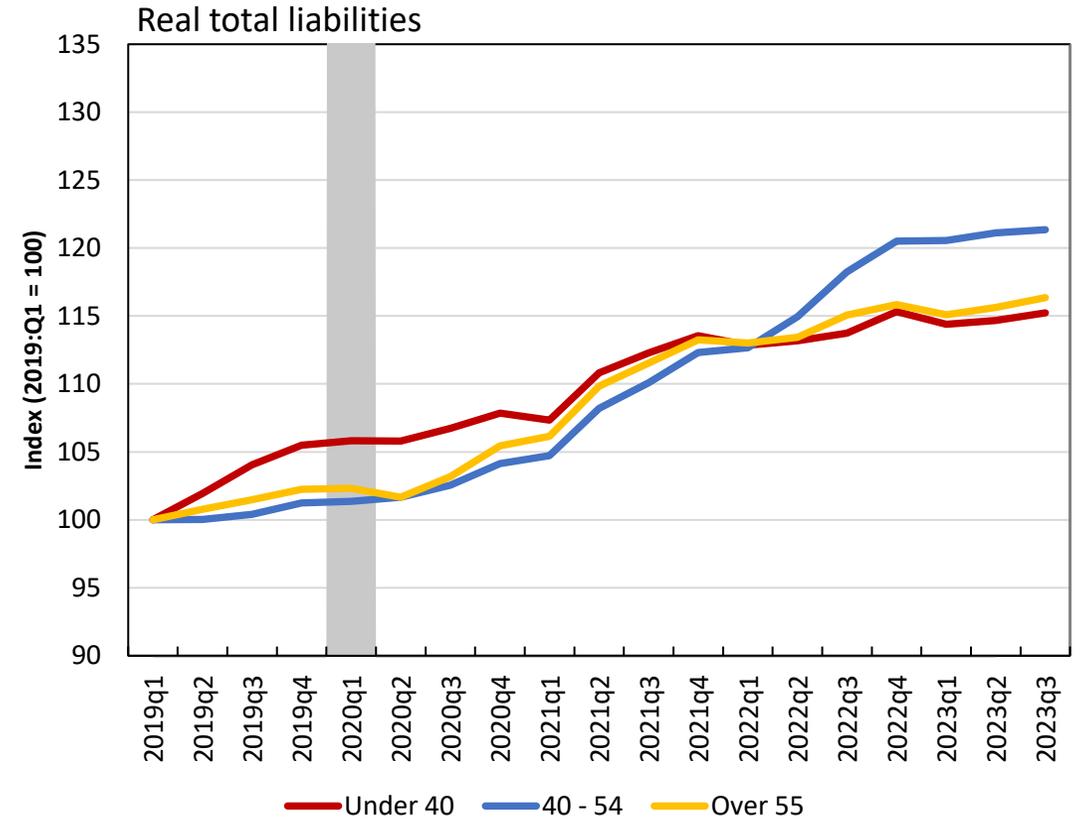
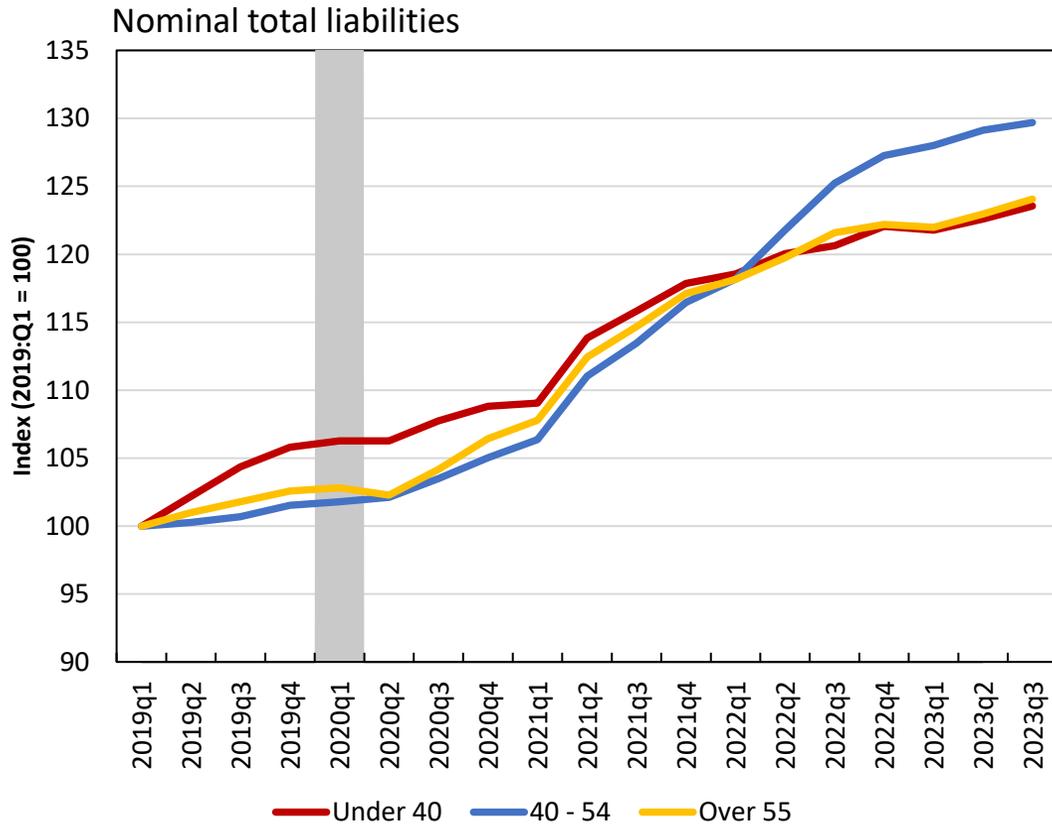
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Real Estate Assets by Age Group



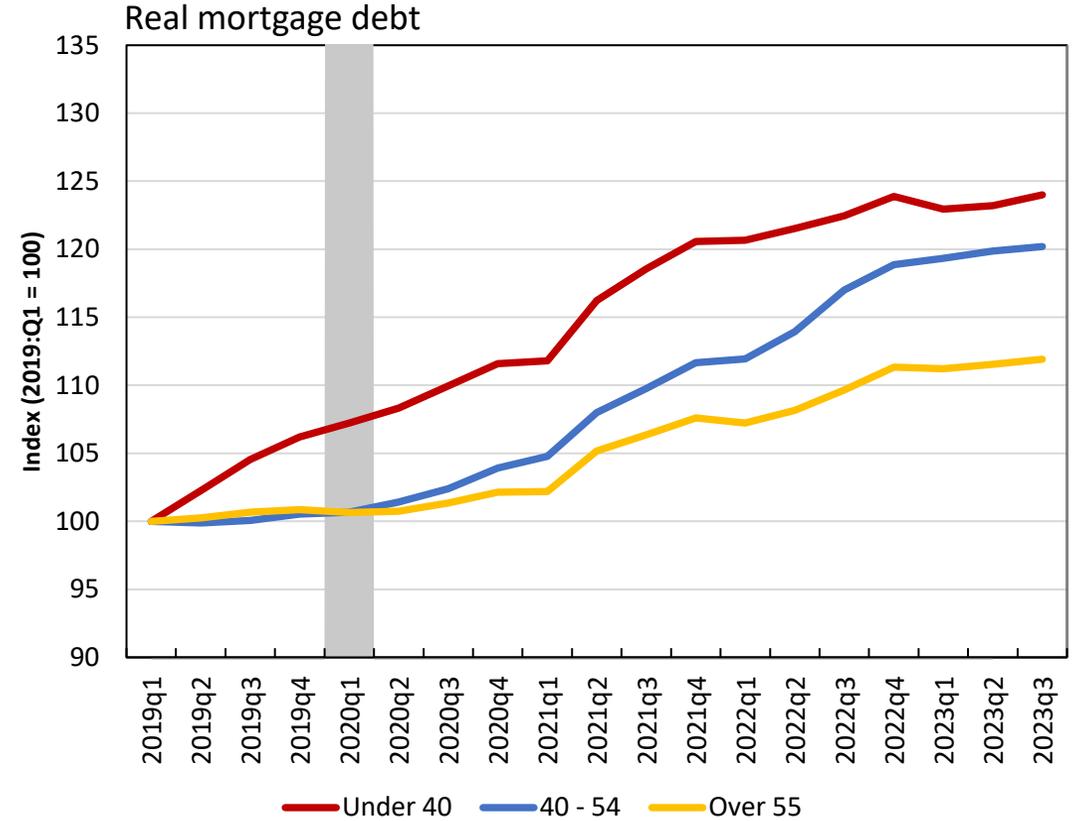
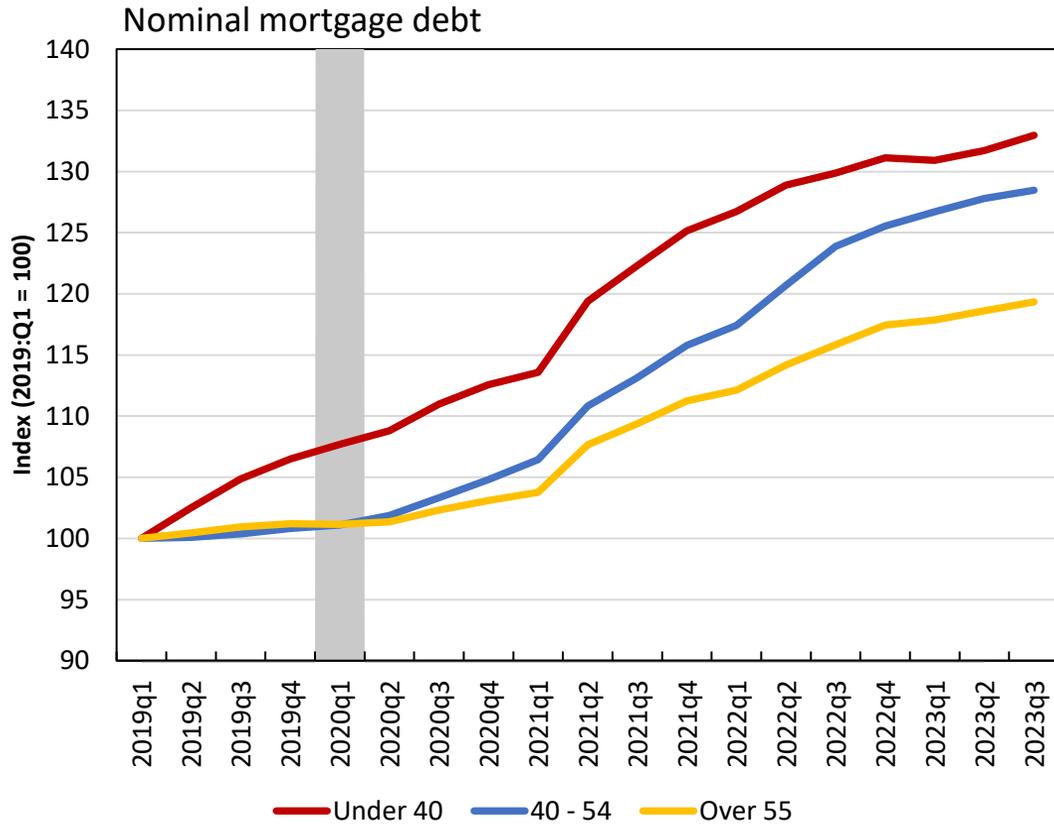
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Total Liabilities by Age Group



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Mortgage Debt by Age Group



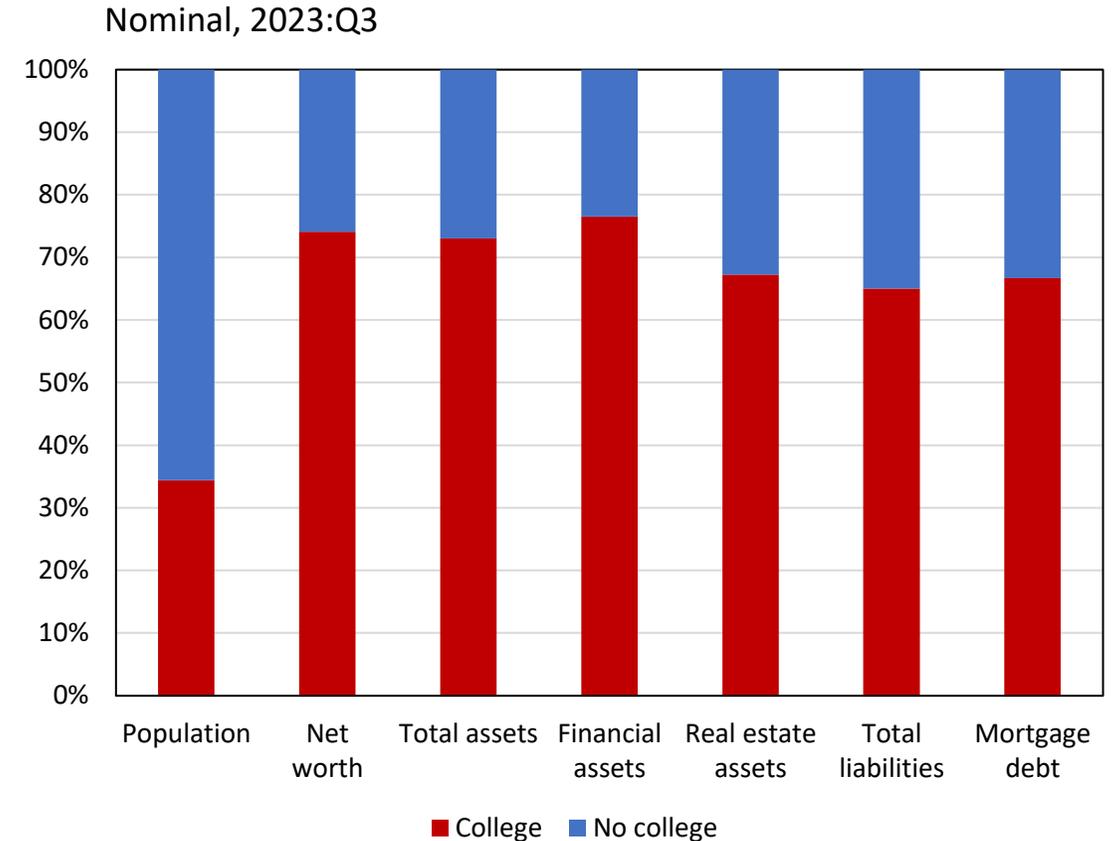
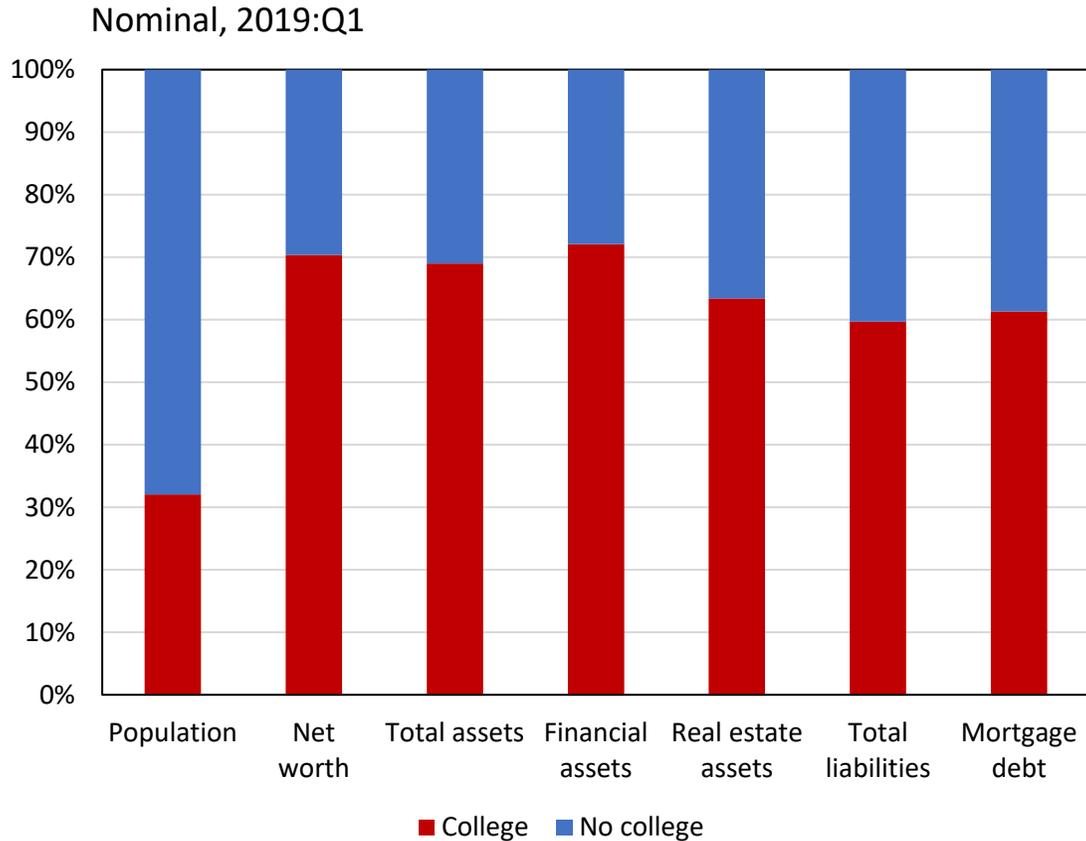
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WEALTH

BY EDUCATION

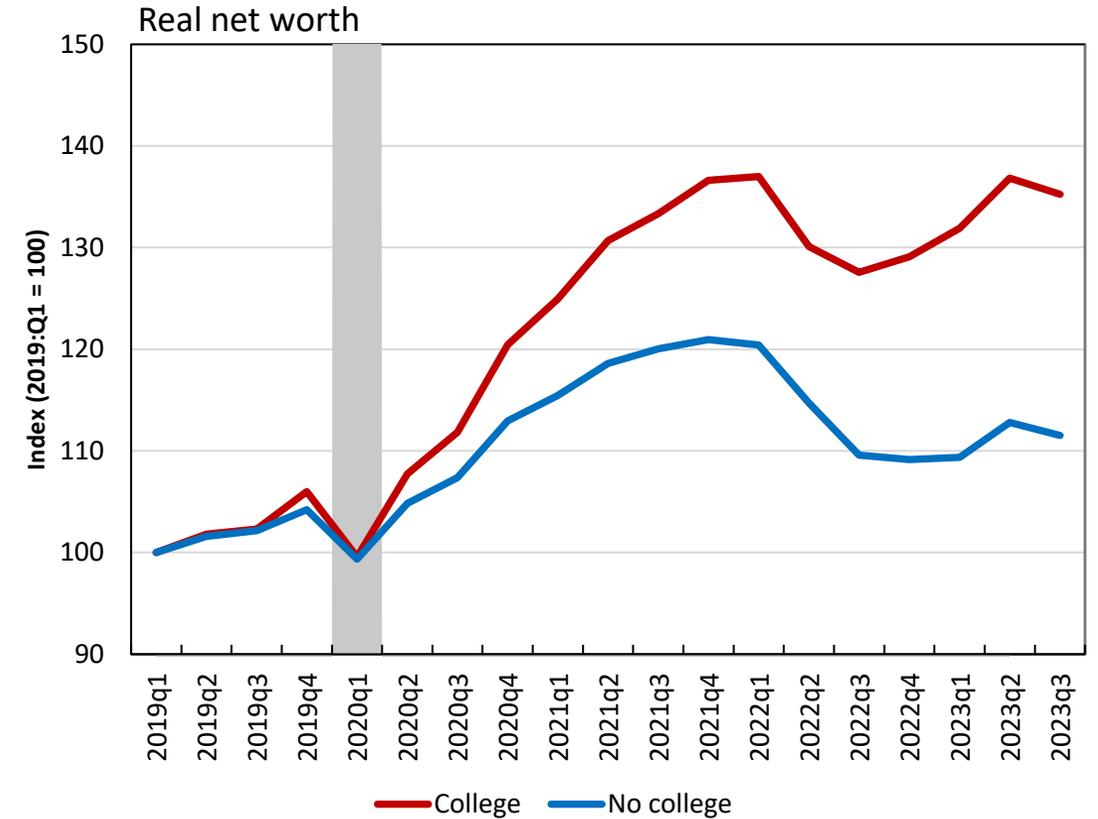
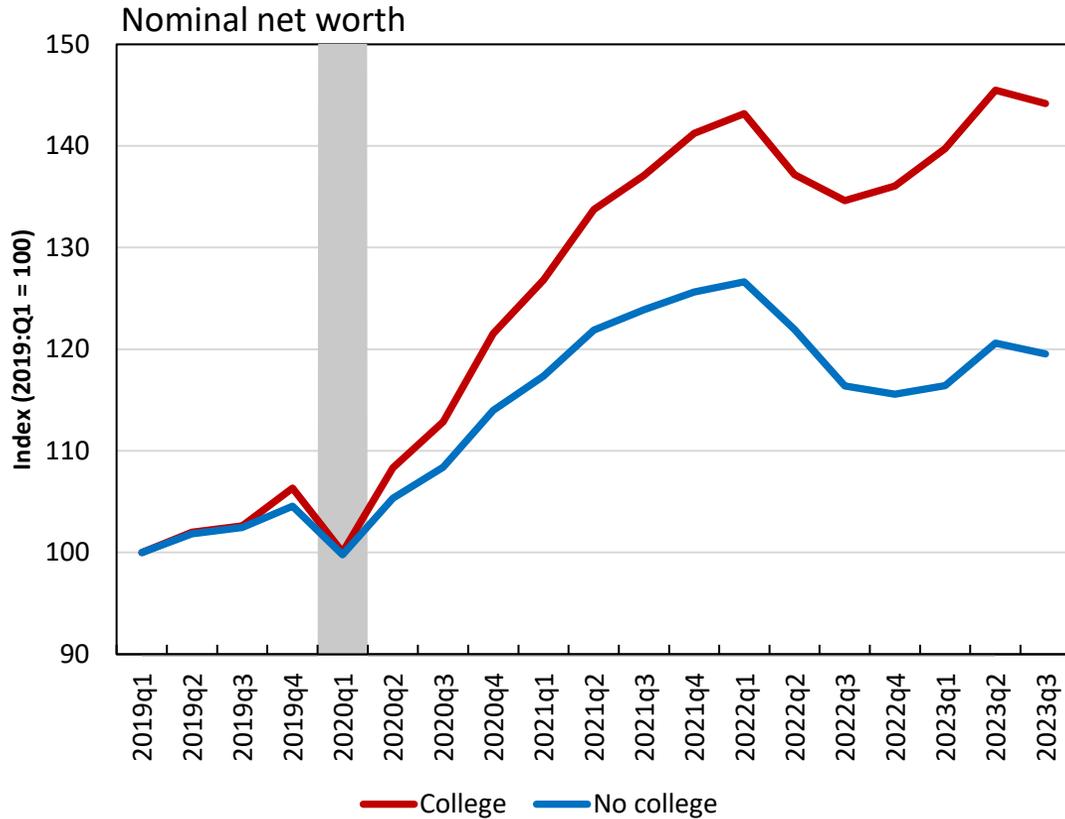


Population and Ownership Shares by Education Group



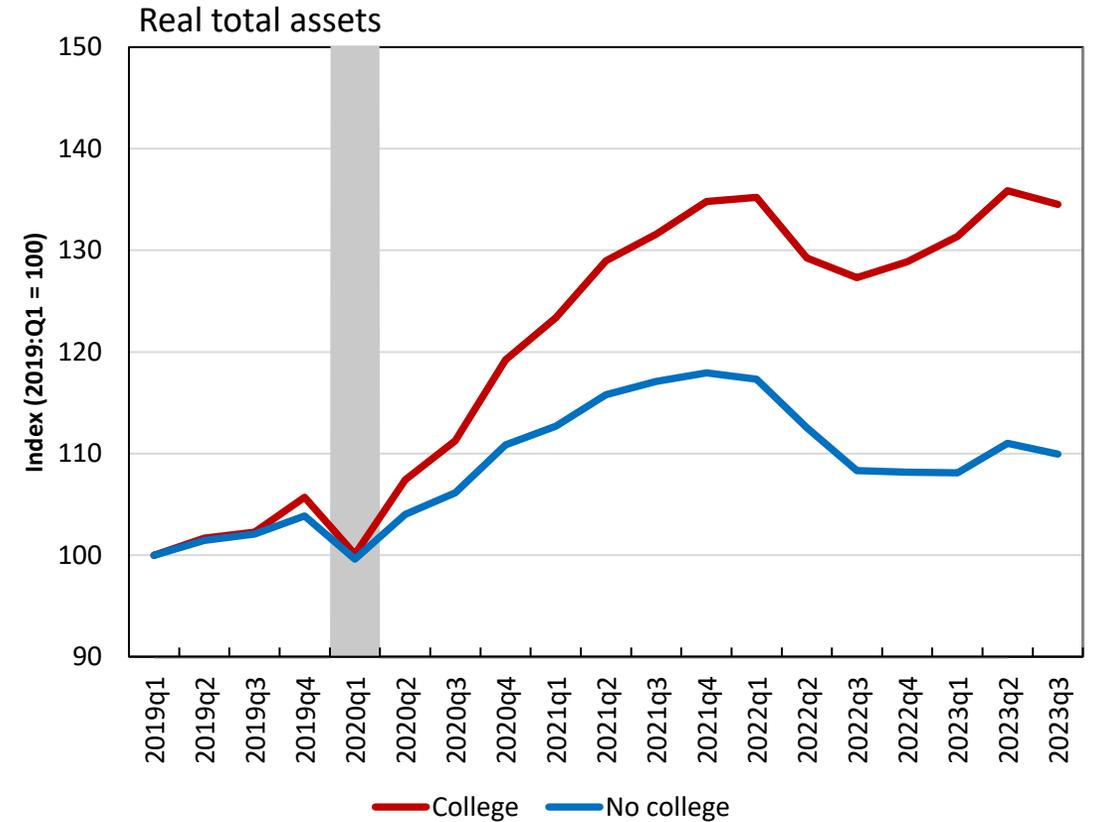
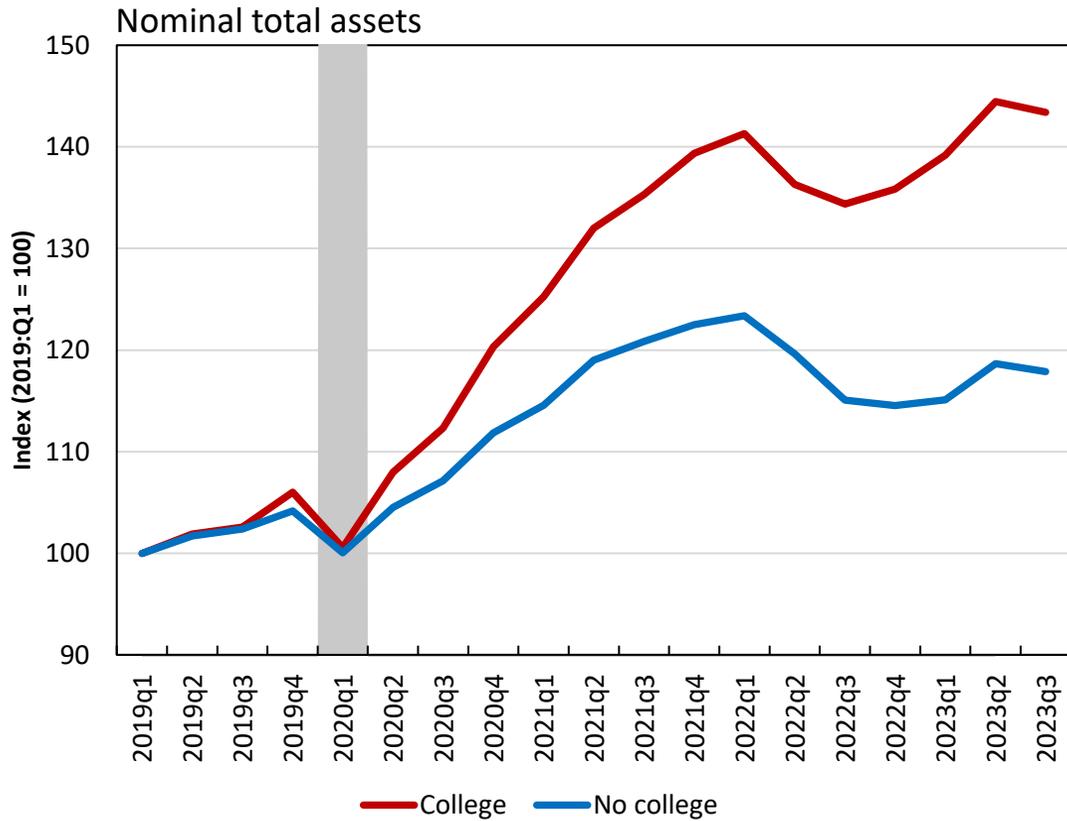
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Net Worth by Education Group



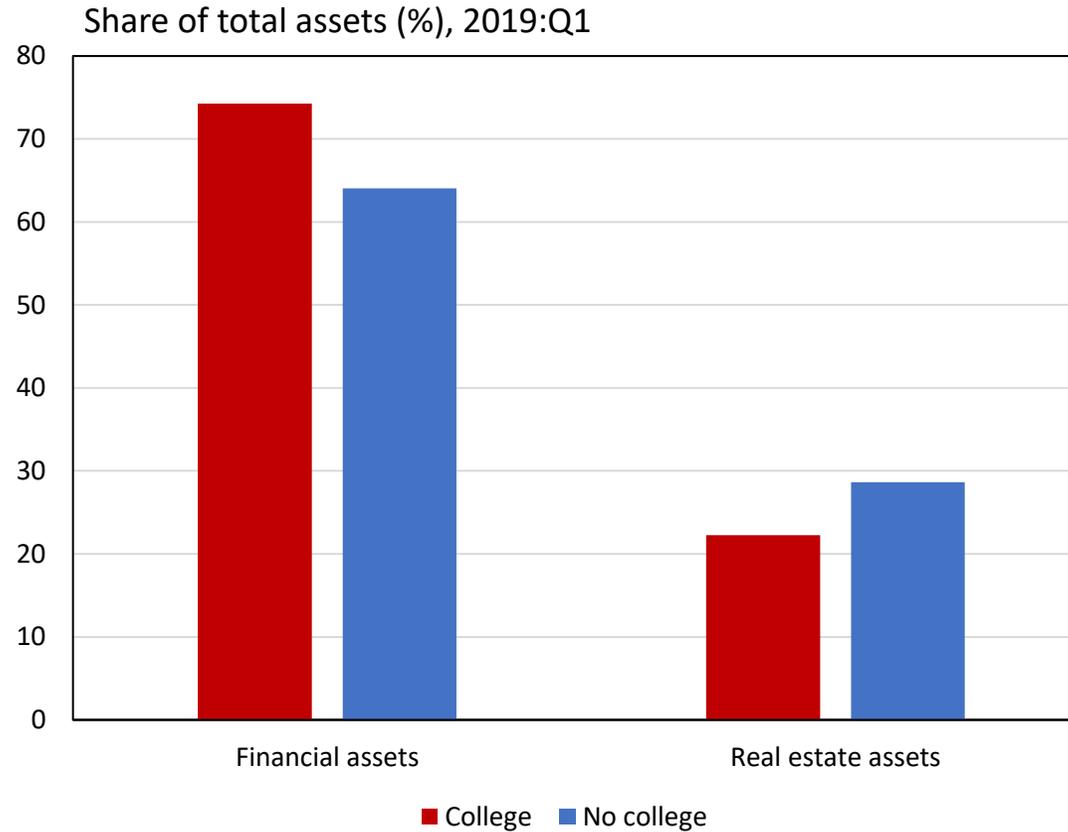
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Total Assets by Education Group



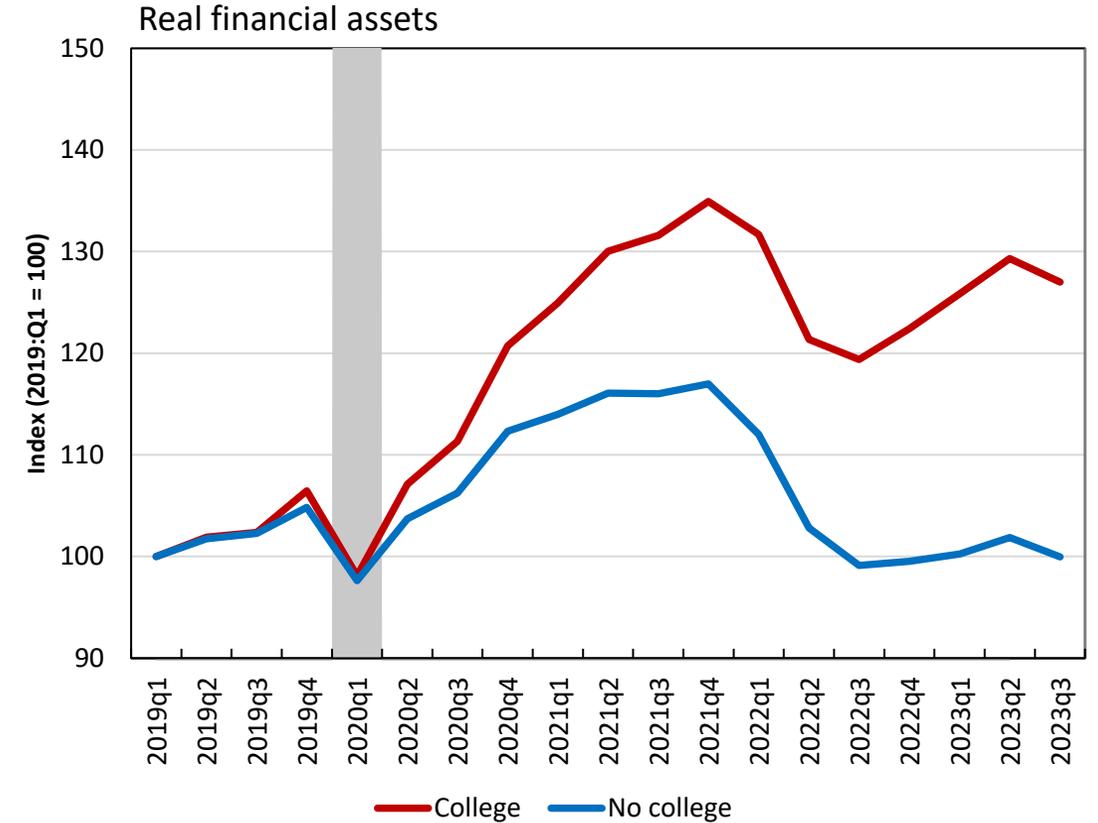
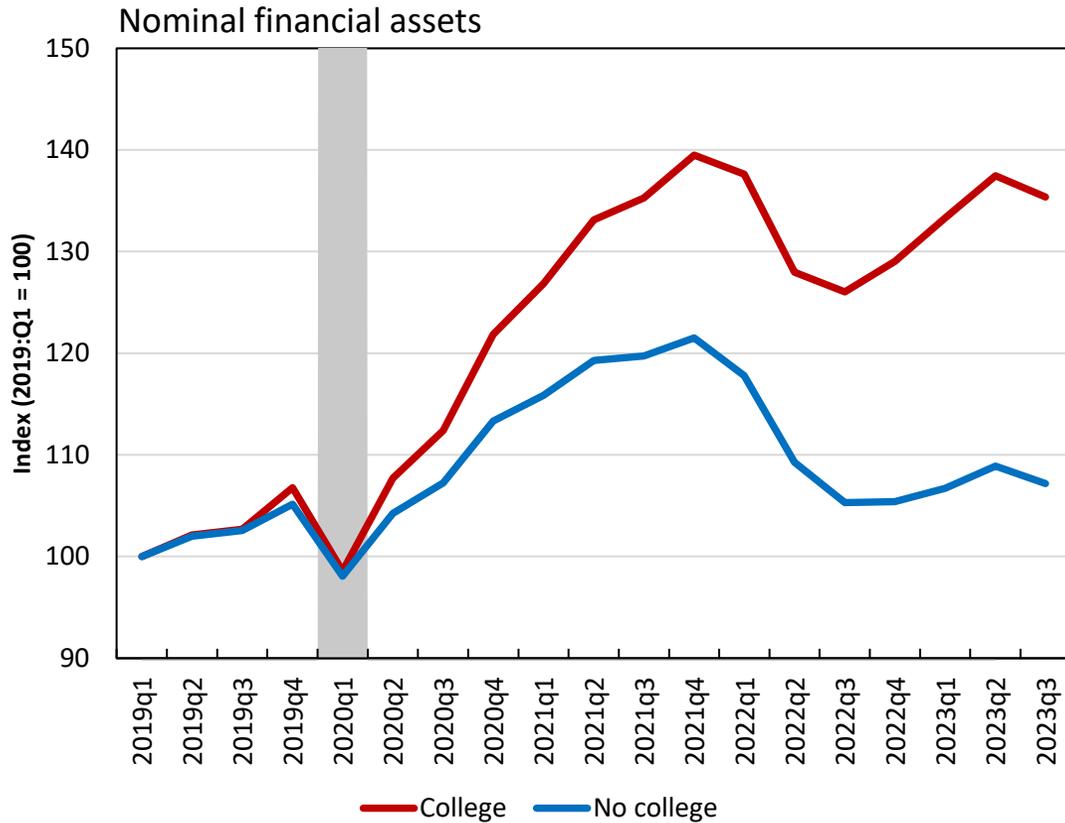
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Composition of Total Assets by Education



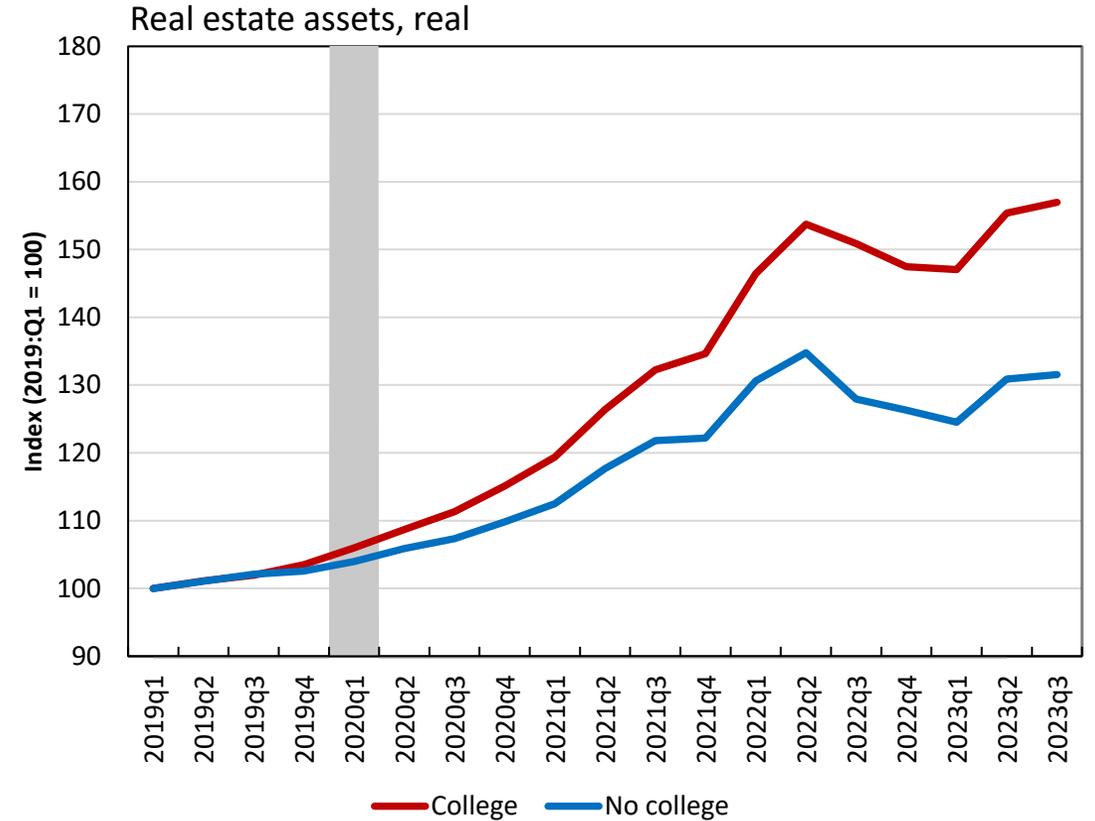
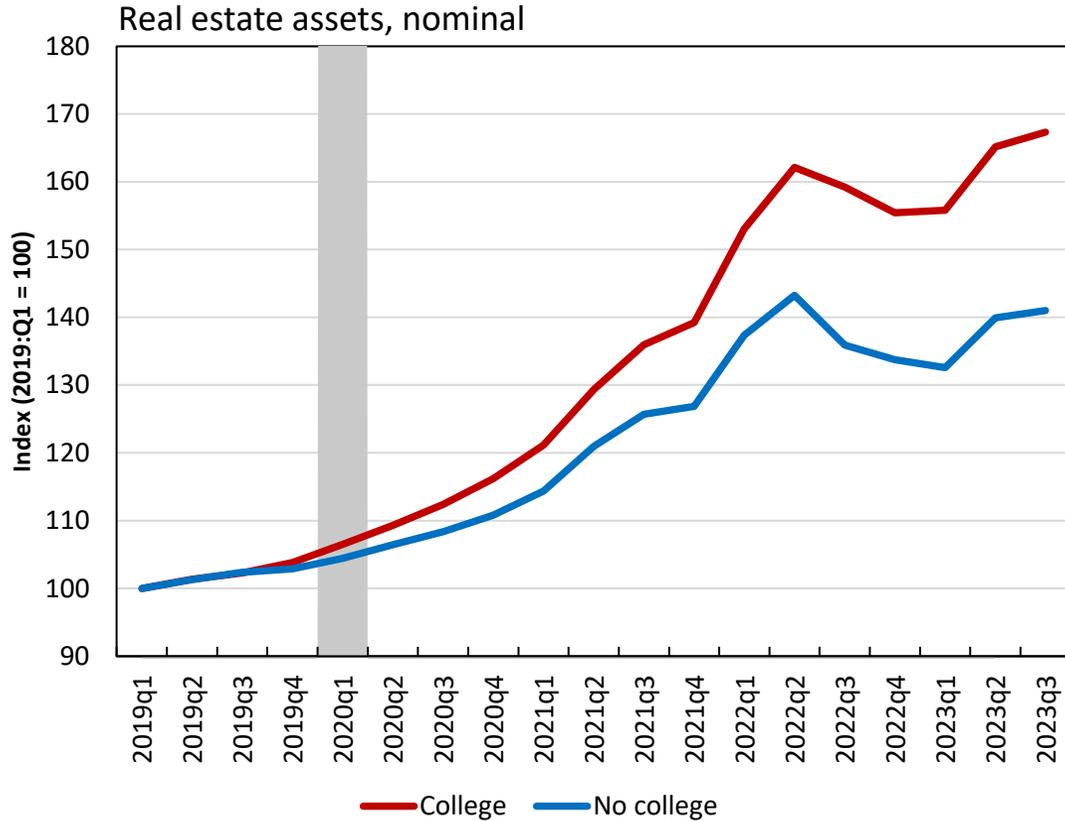
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Financial Assets by Education Group



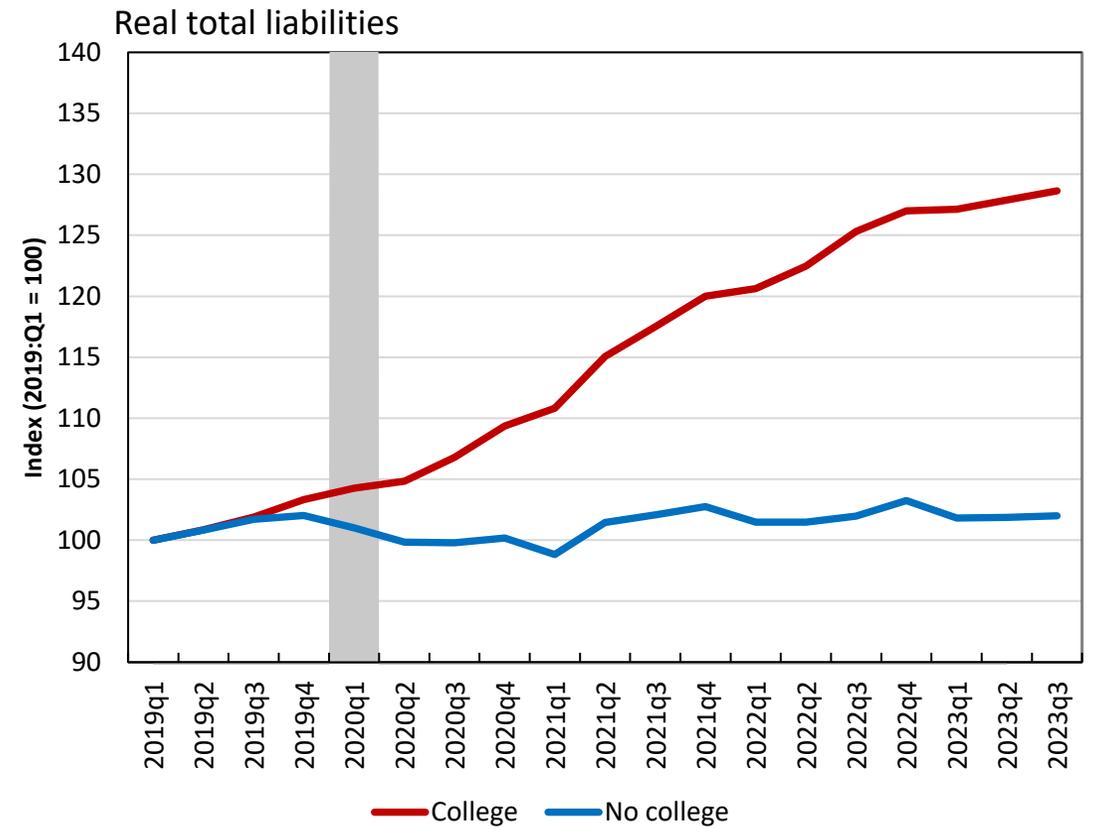
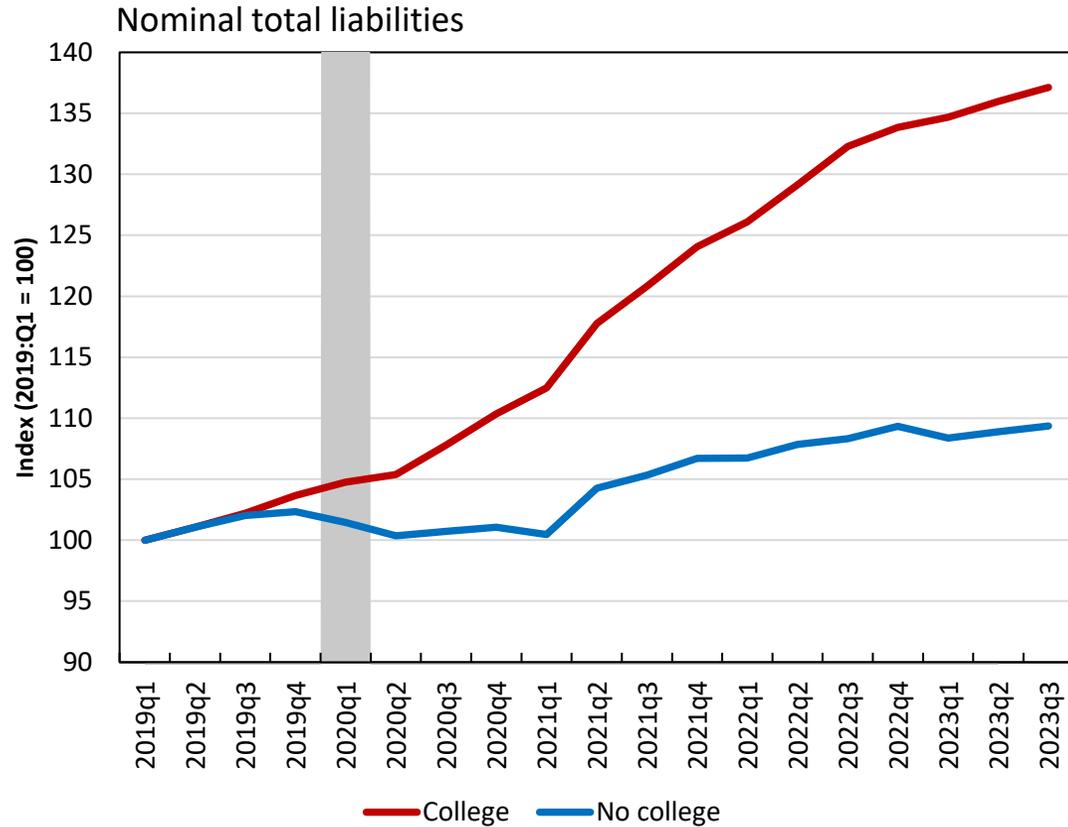
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Real Estate Assets by Education Group



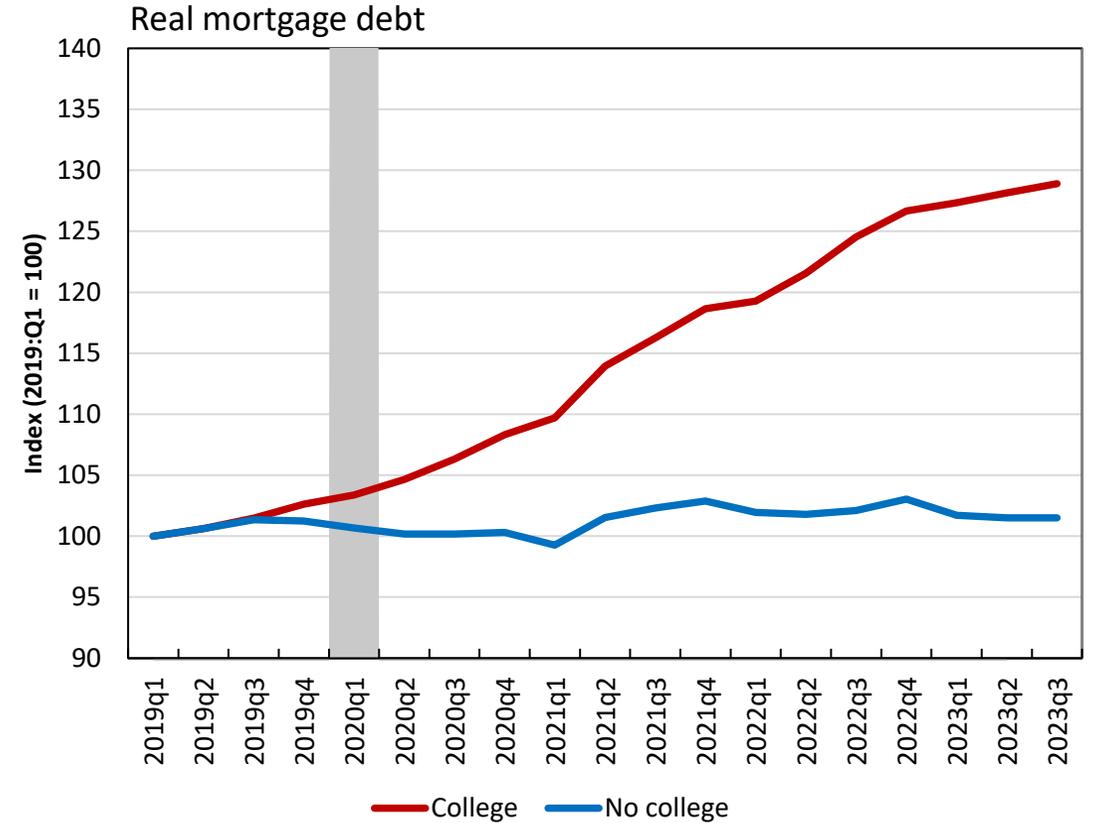
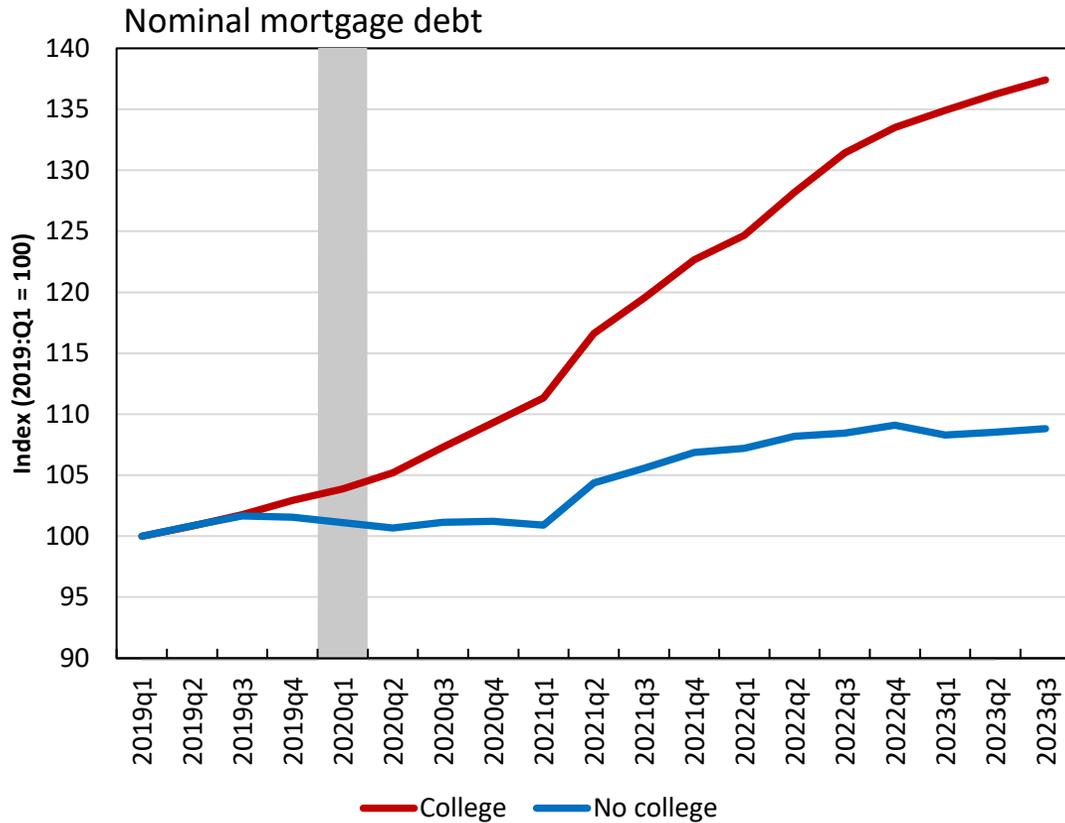
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Total Liabilities by Education Group



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Mortgage Debt by Education Group



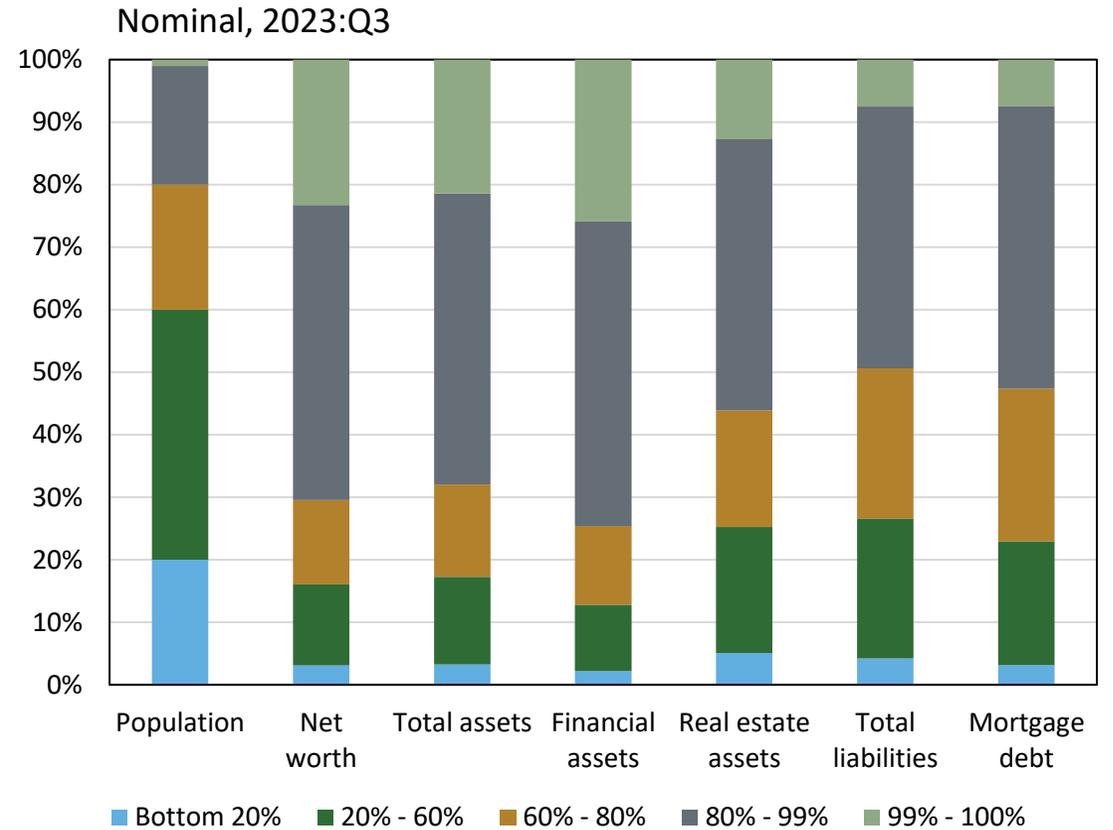
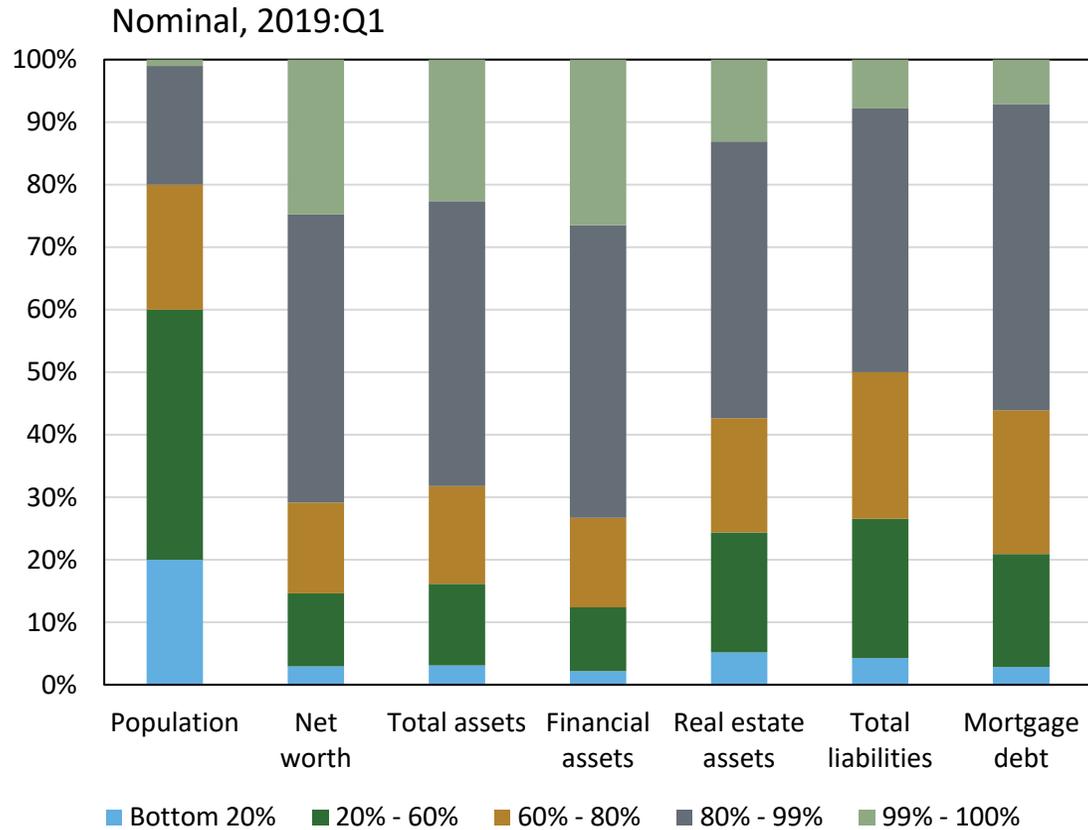
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WEALTH

BY INCOME PERCENTILE

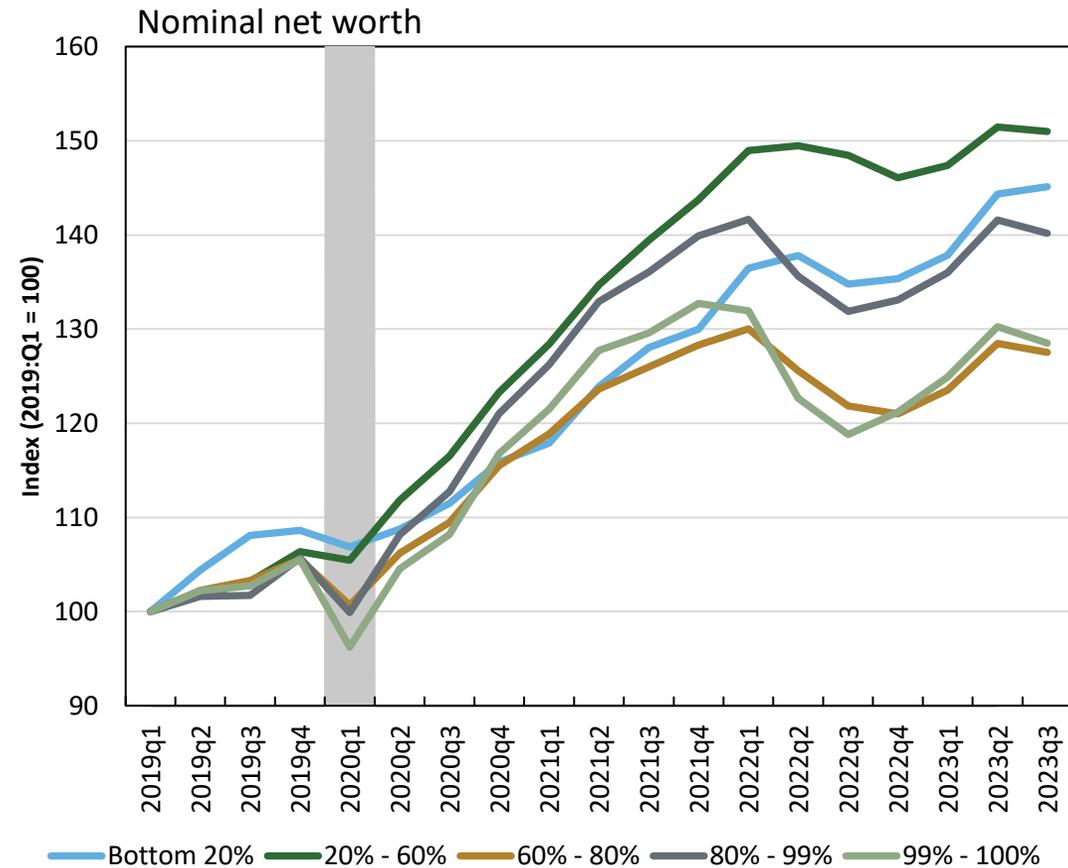


Population and Ownership Shares by Income Percentile



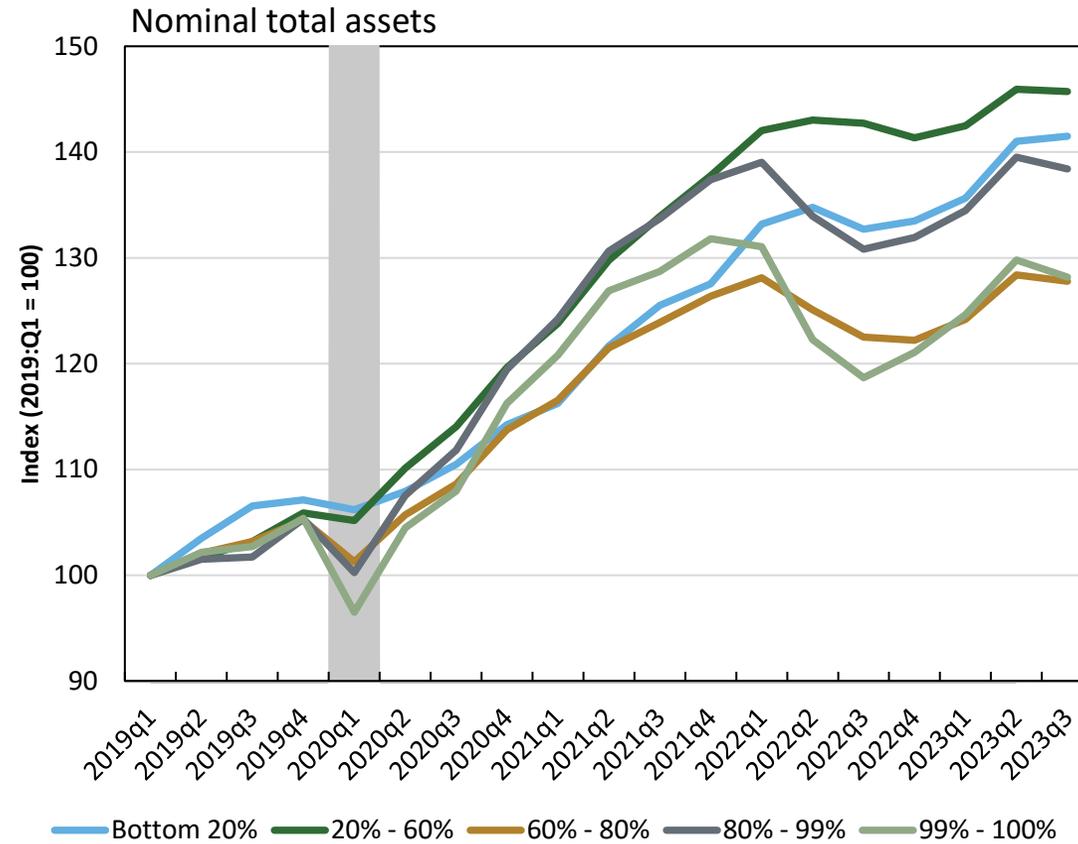
Sources: Distributional Financial Accounts via Federal Reserve, Current Population Survey via IPUMS, Consumer Price Index via Haver Analytics and authors' calculations. "Net worth" is total assets less total liabilities.

Net Worth by Income Percentile



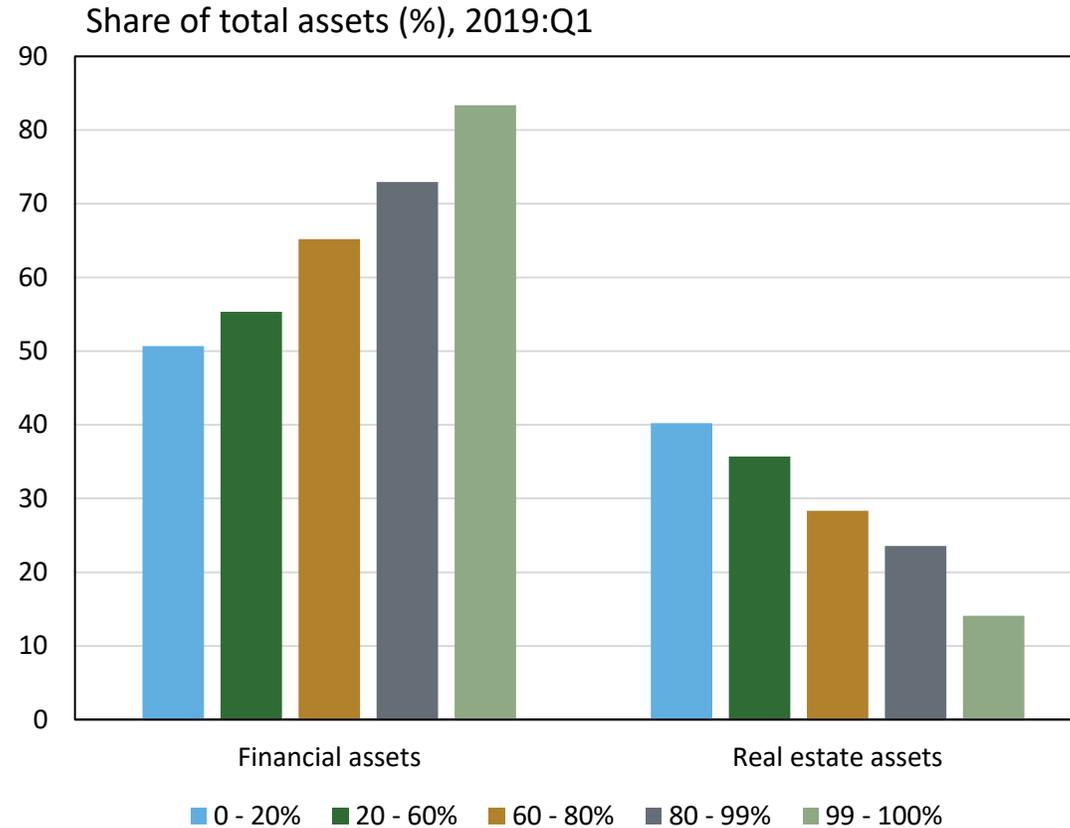
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Total Assets by Income Percentile



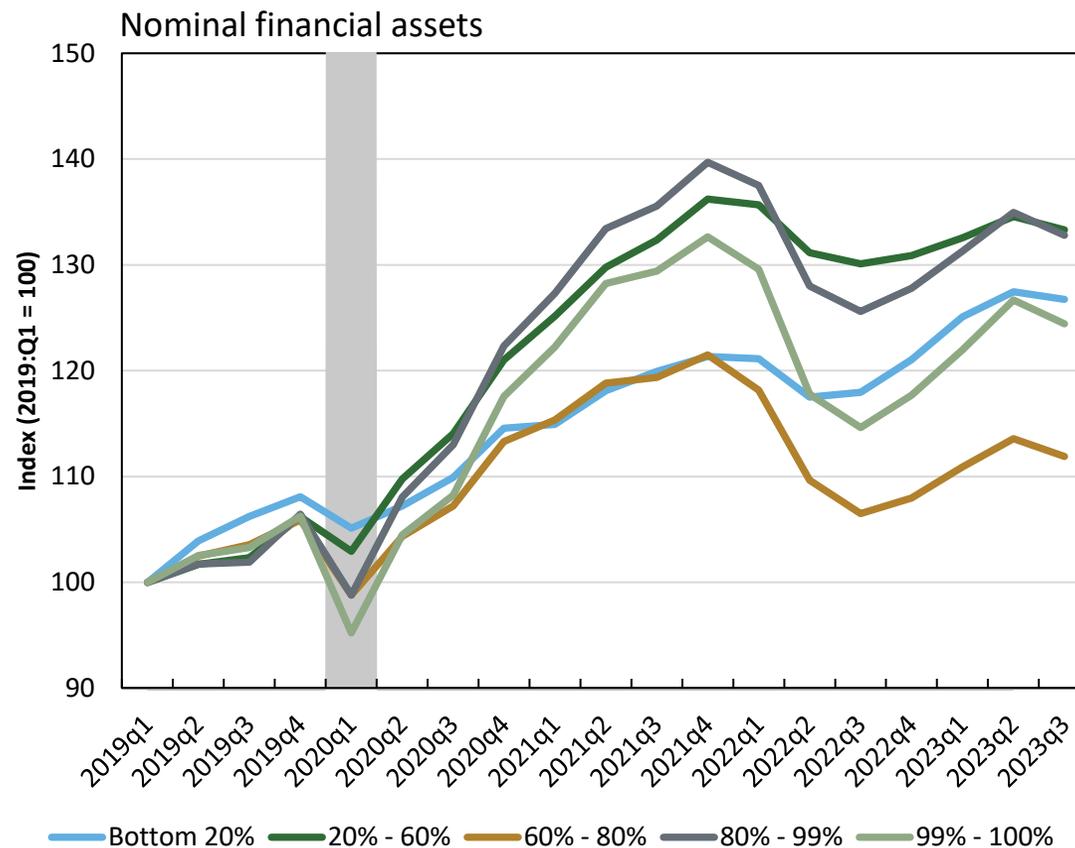
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Composition of Total Assets by Income Percentile



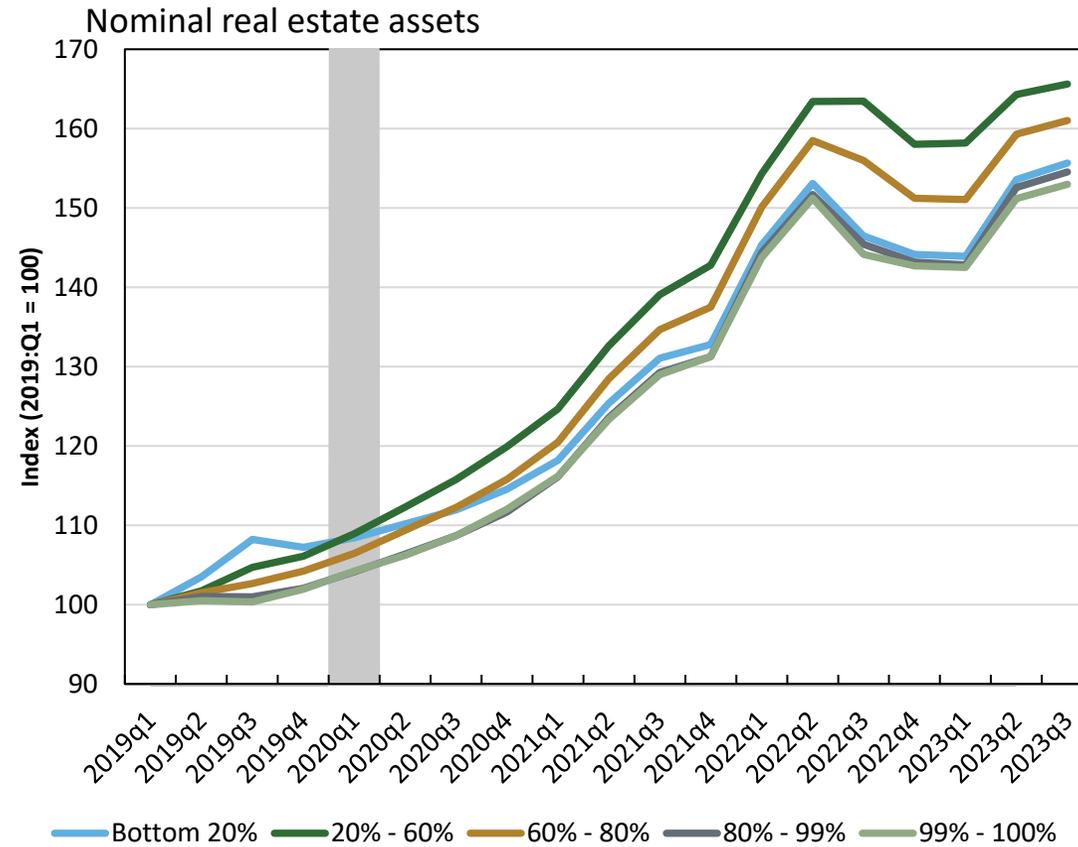
Source: Distributional Financial Accounts via Federal Reserve.

Financial Assets by Income Percentile



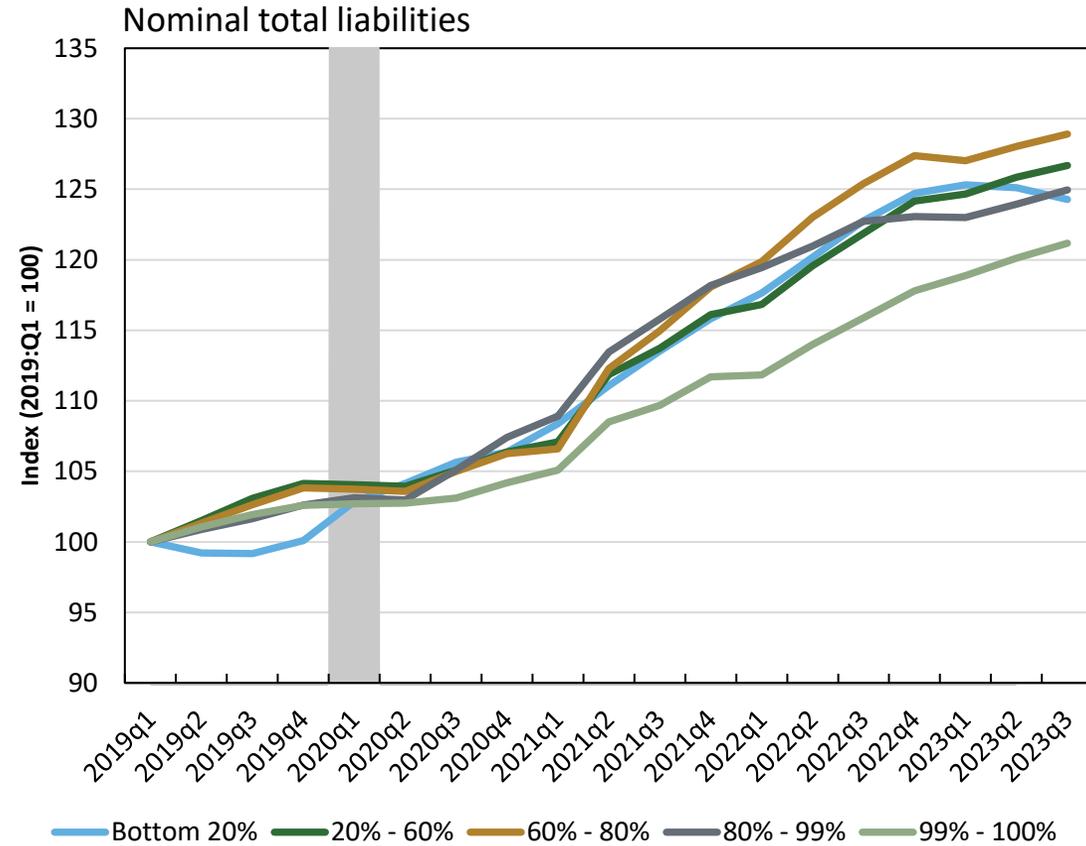
Sources: Distributional Financial Accounts via Federal Reserve, Current Population Survey via IPUMS, Consumer Price Index via Haver Analytics, and authors' calculations.

Real Estate Assets by Income Percentile



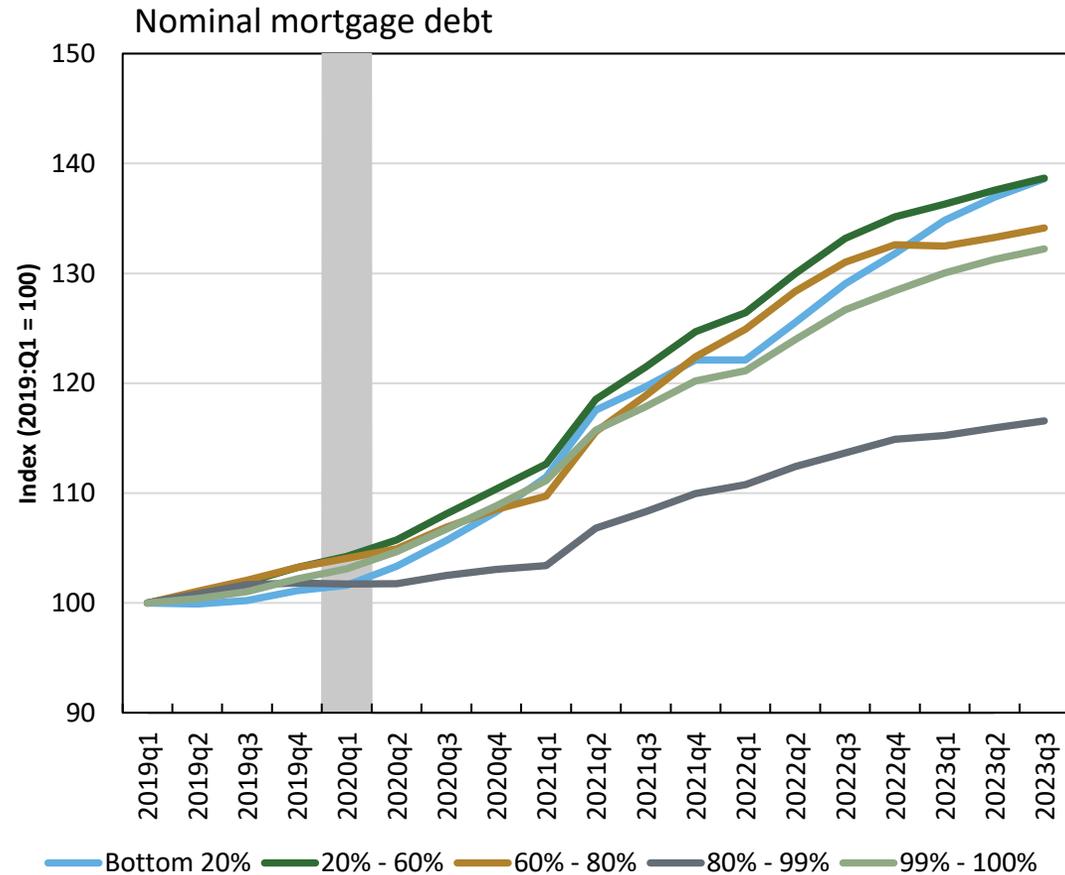
Sources: Distributional Financial Accounts via Federal Reserve, Current Population Survey via IPUMS, Consumer Price Index via Haver Analytics, and authors' calculations.

Total Liabilities by Income Percentile



Sources: Distributional Financial Accounts via Federal Reserve, Current Population Survey via IPUMS, Consumer Price Index via Haver Analytics, and authors' calculations.

Mortgage Debt by Income Percentile



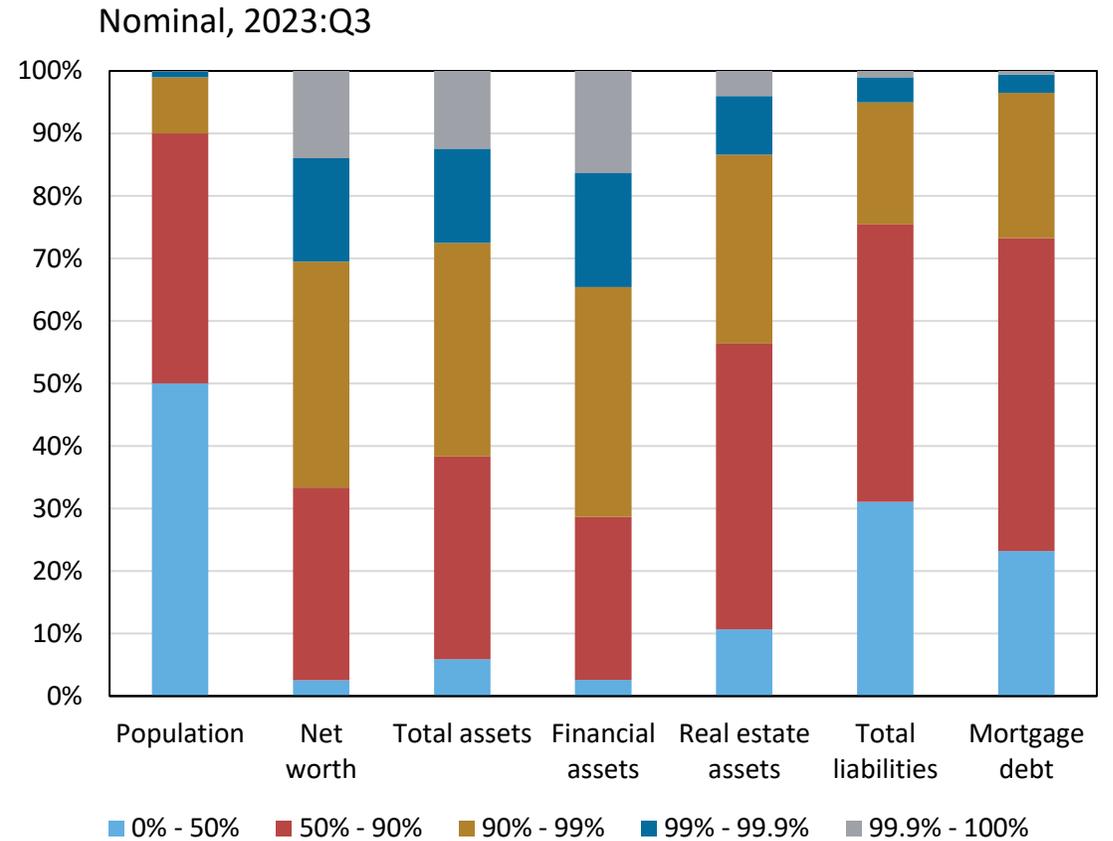
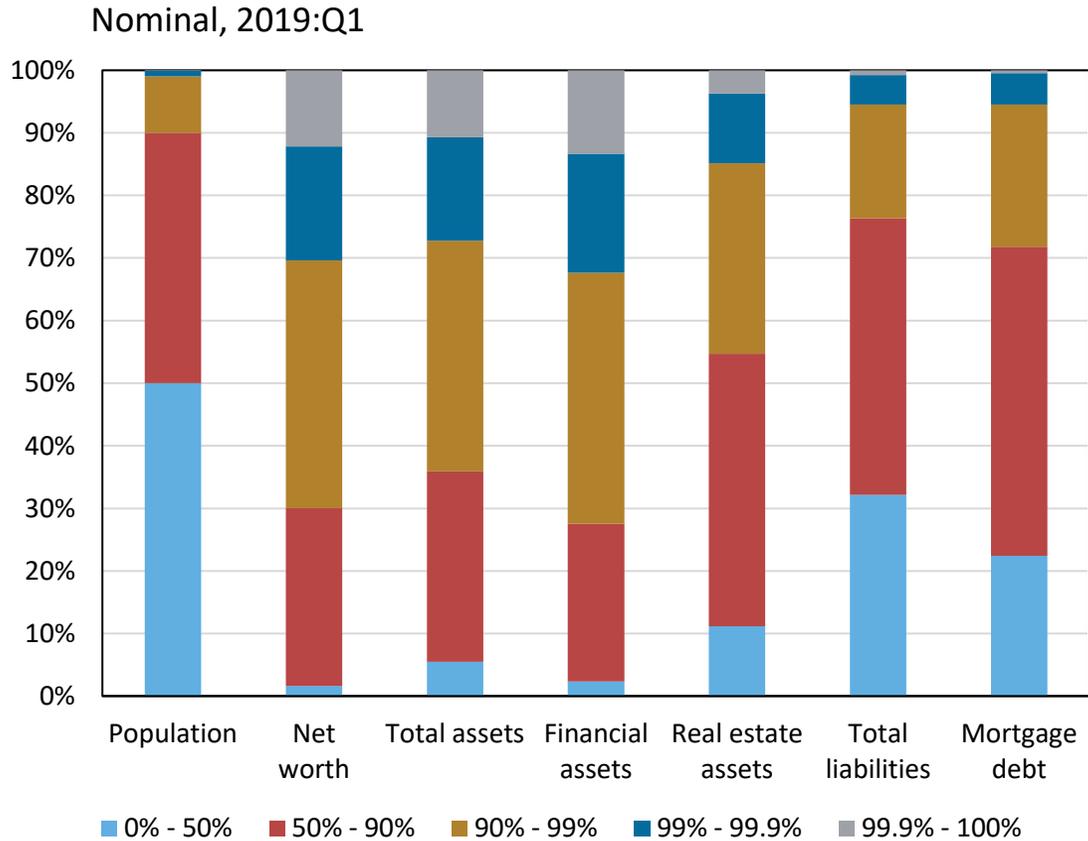
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WEALTH

BY WEALTH PERCENTILE

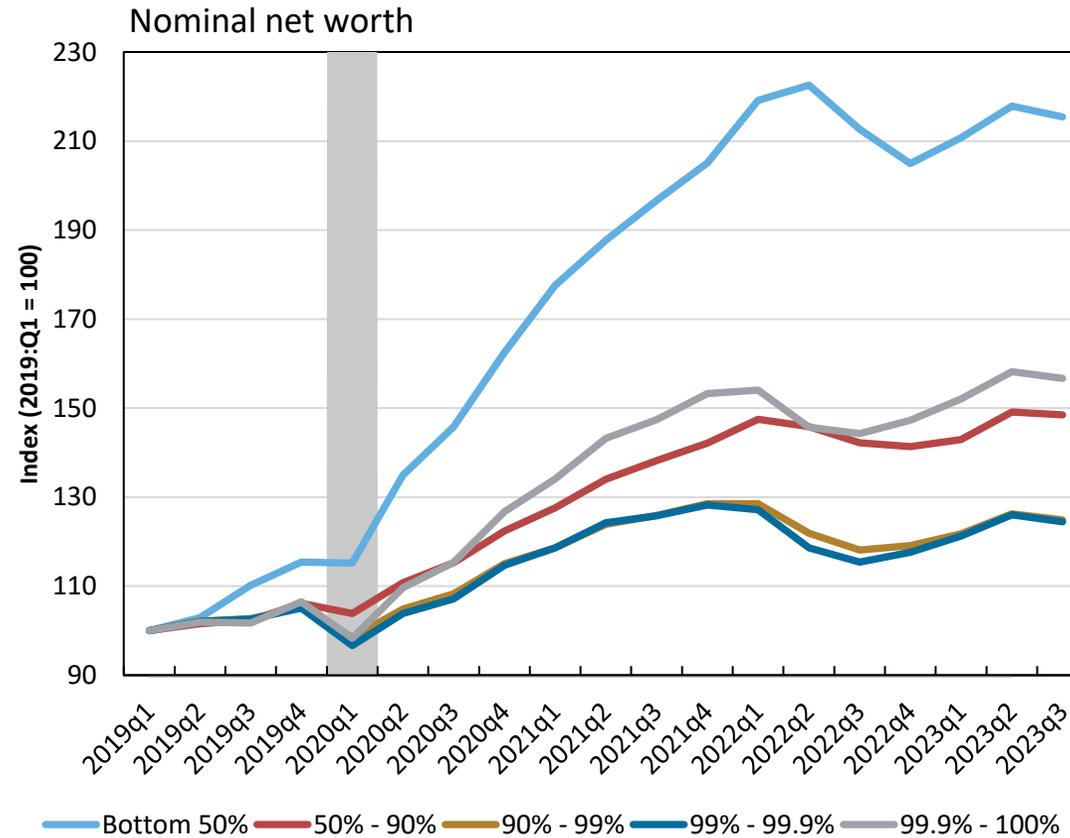


Population and Ownership Shares by Wealth Percentile



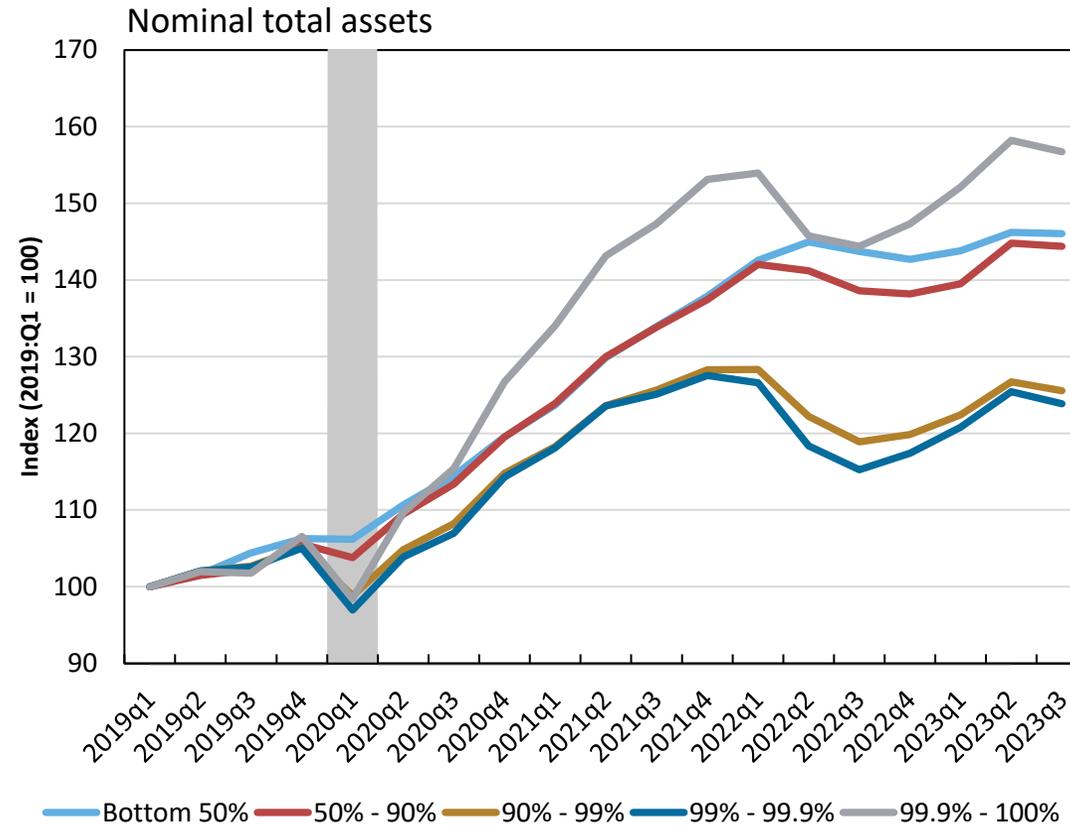
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Net Worth by Wealth Percentile



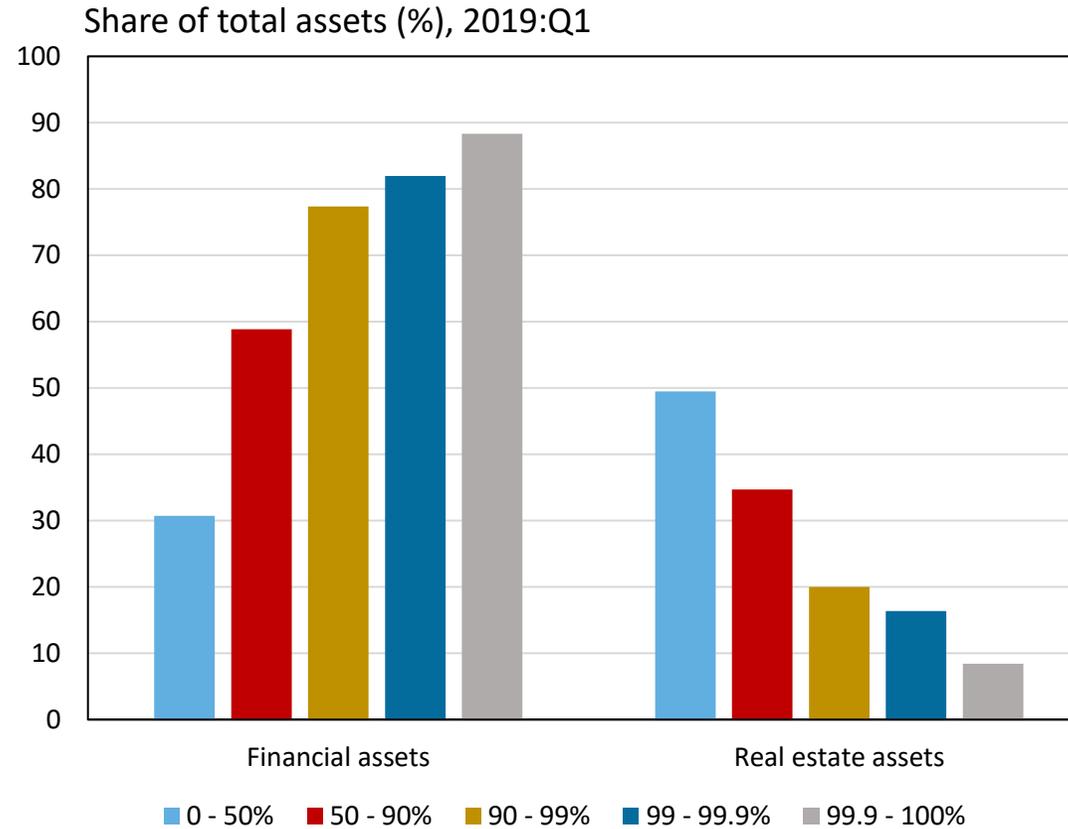
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Total Assets by Wealth Percentile



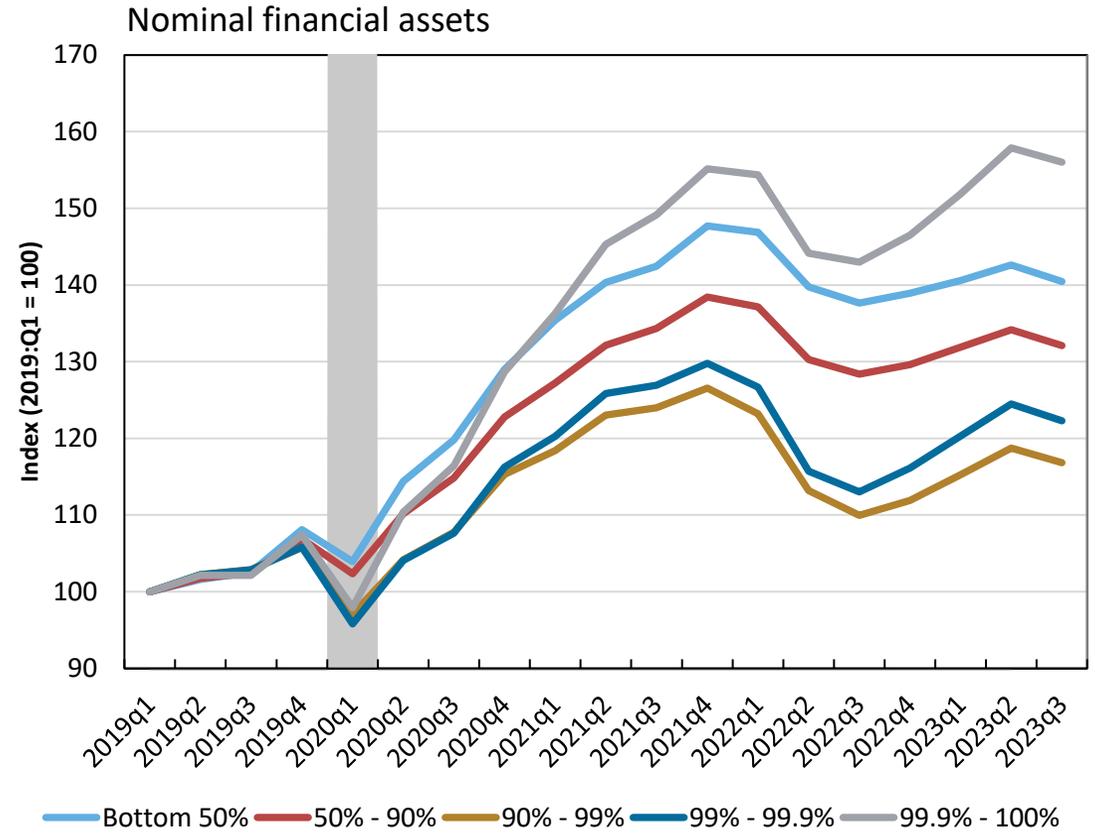
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Composition of Total Assets by Wealth Percentile



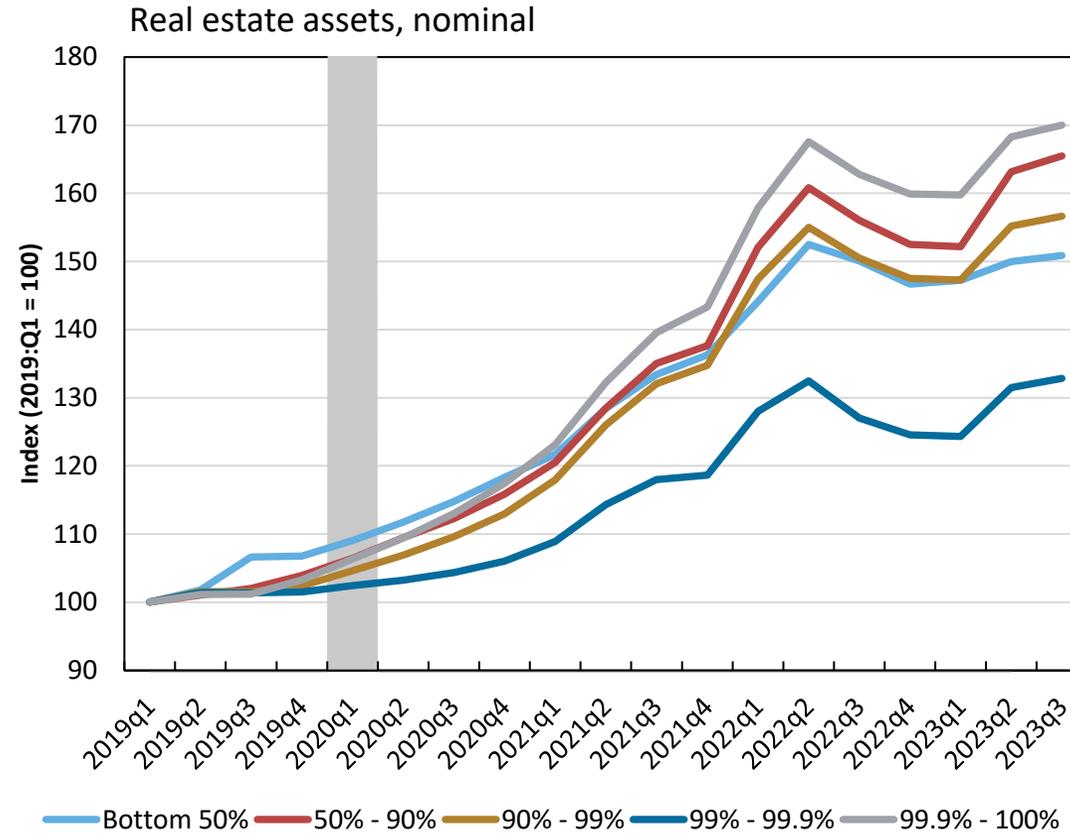
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Financial Assets by Wealth Percentile



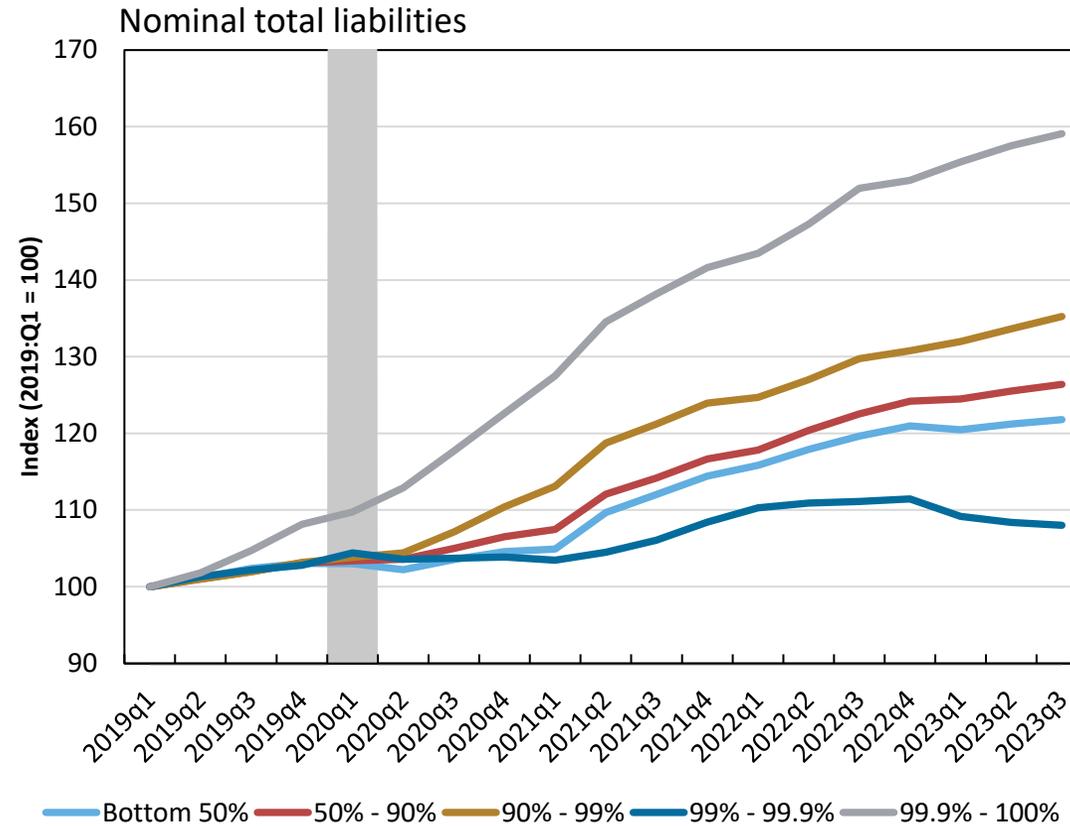
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Real Estate Assets by Wealth Percentile



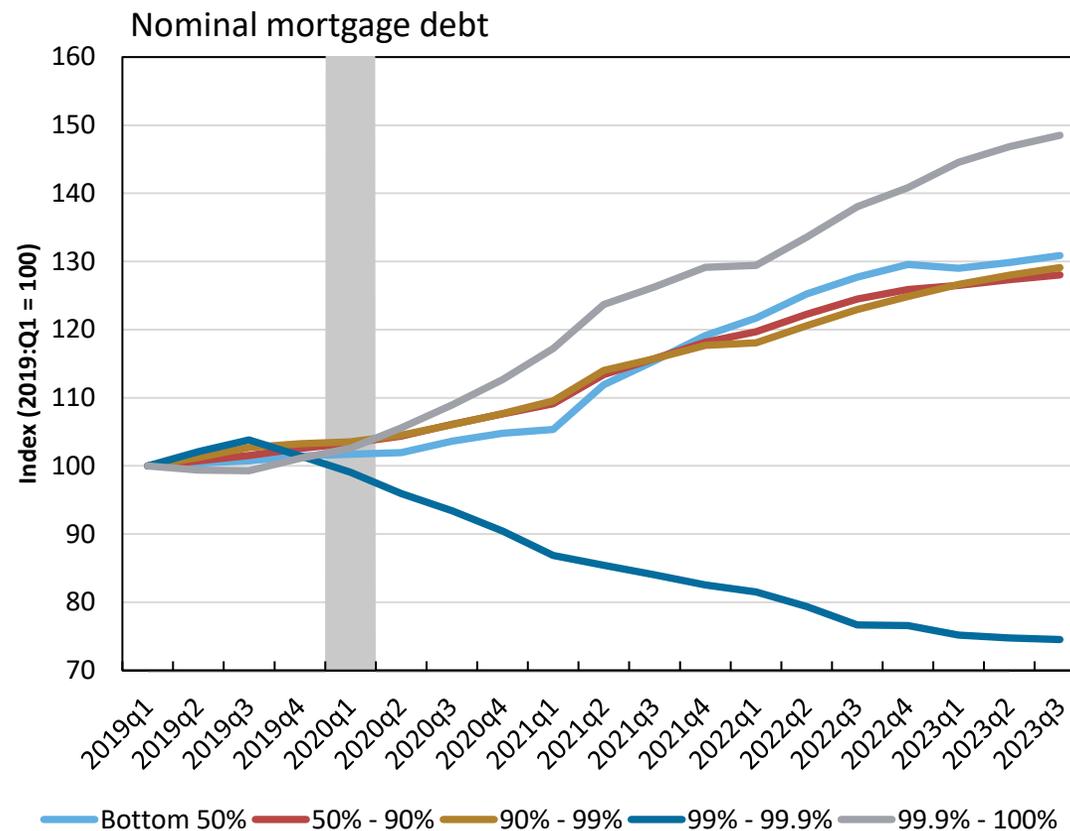
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Total Liabilities by Wealth Percentile



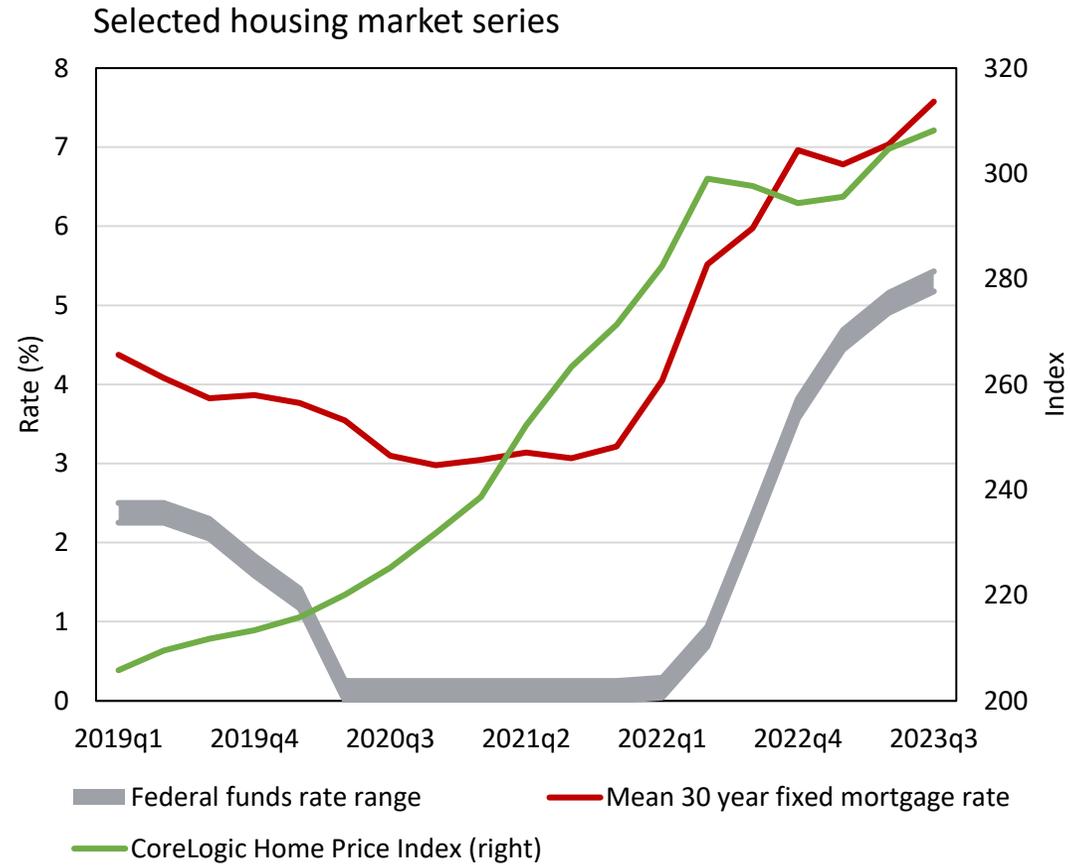
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Mortgage Debt by Wealth Percentile



Sources: Distributional Financial Accounts via Federal Reserve, Current Population Survey via IPUMS, Consumer Price Index via Haver Analytics, and authors' calculations.

Selected Housing Market Series



Sources: FRED via Federal Reserve Bank of St. Louis; CoreLogic.

INFLATION

UPDATED THROUGH OCT. 2023 | NATIONAL

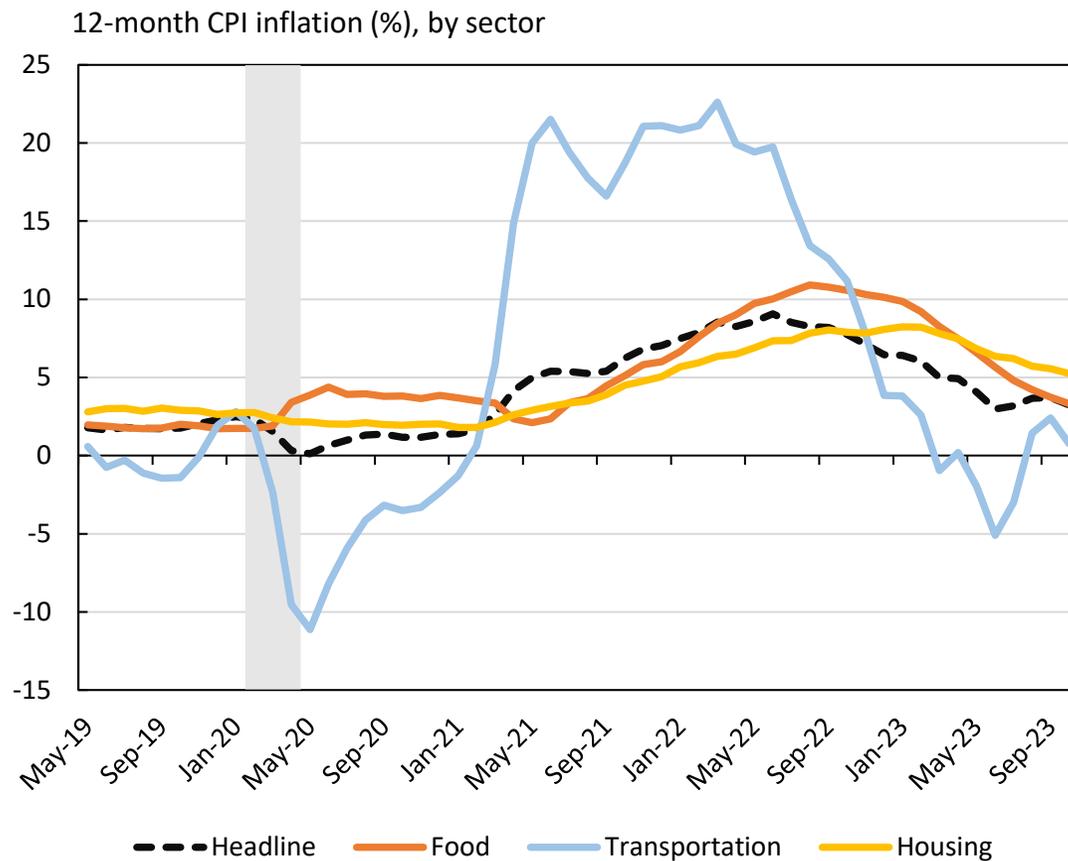
Takeaways | Inflation

- Housing inflation is above headline inflation, while transportation inflation is just below headline inflation.
- AAPI households have somewhat (0.35 percentage point) higher inflation than the national average, while Hispanic and Black households have only slightly higher, and white households have slightly lower inflation than the national average. AAPI households are particularly affected by housing inflation.
- The bottom 40% of the household income distribution experiences inflation rates 0.16 percentage point higher than the rest of the income distribution, likely driven by their higher exposure to housing inflation.
- Young households (under 25) are experiencing inflation 0.35 percentage point higher than the national average, likely driven by their higher exposure to housing inflation.
- Rural households are experiencing 0.68 percentage point less inflation than urban households are, likely because of their greater exposure to transportation and lower exposure to housing inflation
- Inflation is highest in the South (0.41 percentage points above the national average), and lowest in the Northeast (0.55 percentage point below).

Data & Methods

- Data on inflation by demographic groups are not produced by the Bureau of Labor Statistics.
- To calculate demographic inflation, we exploit the fact that the Consumer Expenditure Survey (CEX) can be used to compute spending shares of various consumption categories (for example, cereal, rent, and used cars) by demographic group (for example, Black, Hispanic, some college, and aged 45-54).
- To compute the contribution of a consumption category in a particular city to demographic inflation for a specific group, we take that group's spending share on that category in that city (from the CEX) in the previous year and multiply it by the twelve-month inflation for that consumption category in that city (from the Consumer Price Index).
- We then add up all the contributions to get an inflation index for the demographic group.
- Our method is similar to the previous literature, for example, Hobijn and Lagakos (2005), McGranahan and Paulson (2006), and Jaravel (2019). We are the first to exploit price variation across cities whereas the above-mentioned studies assume people in different demographic groups and cities face the same prices.

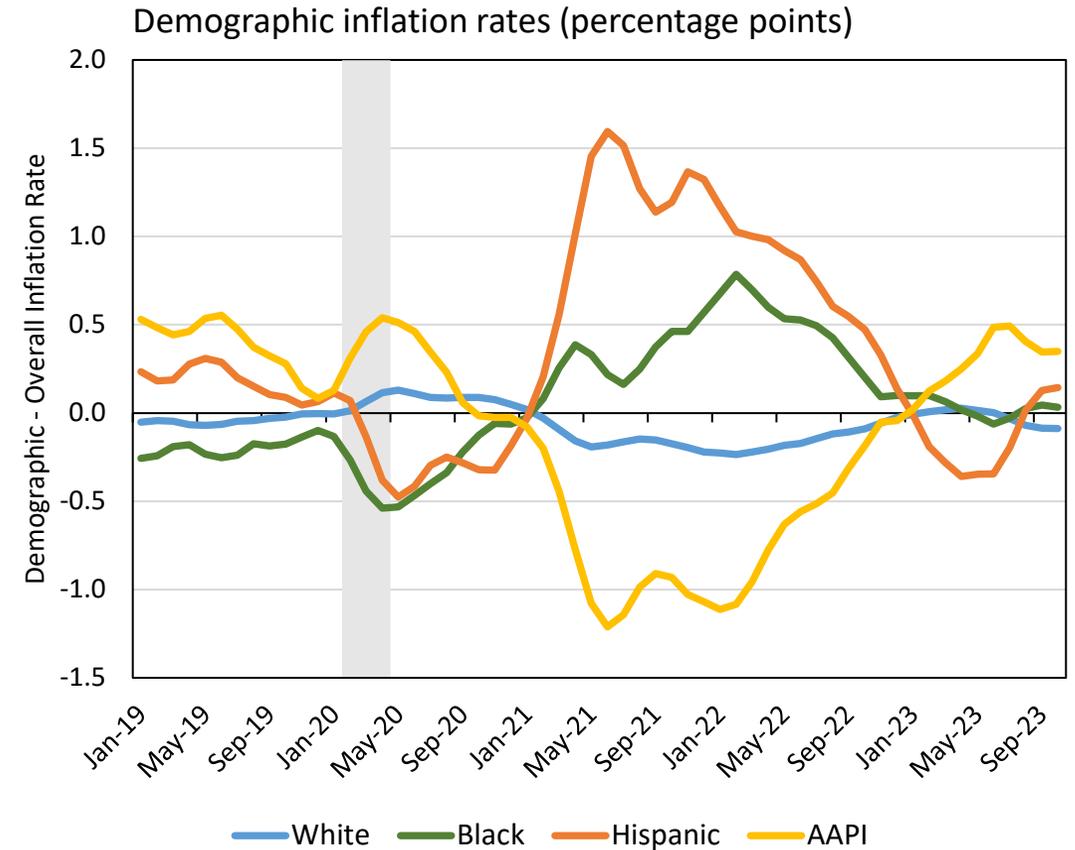
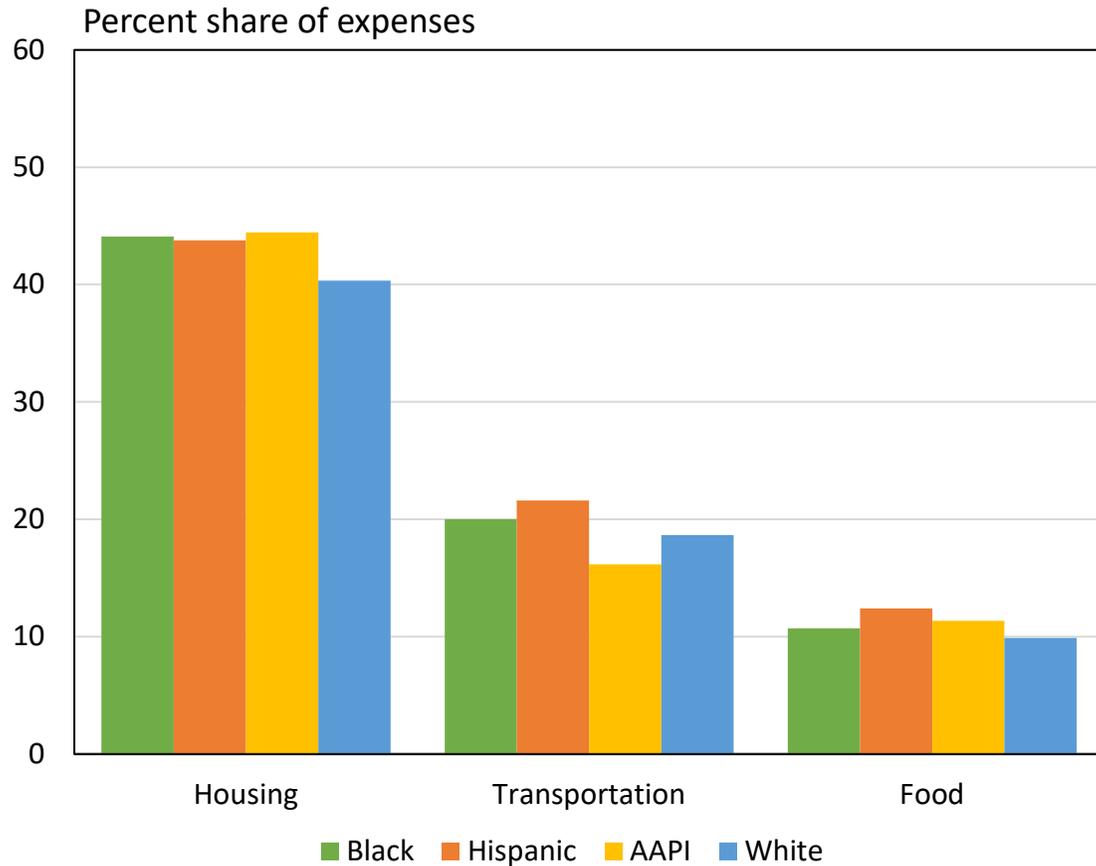
Inflation by Sector



Sources: CPI via Haver Analytics; authors' calculations.

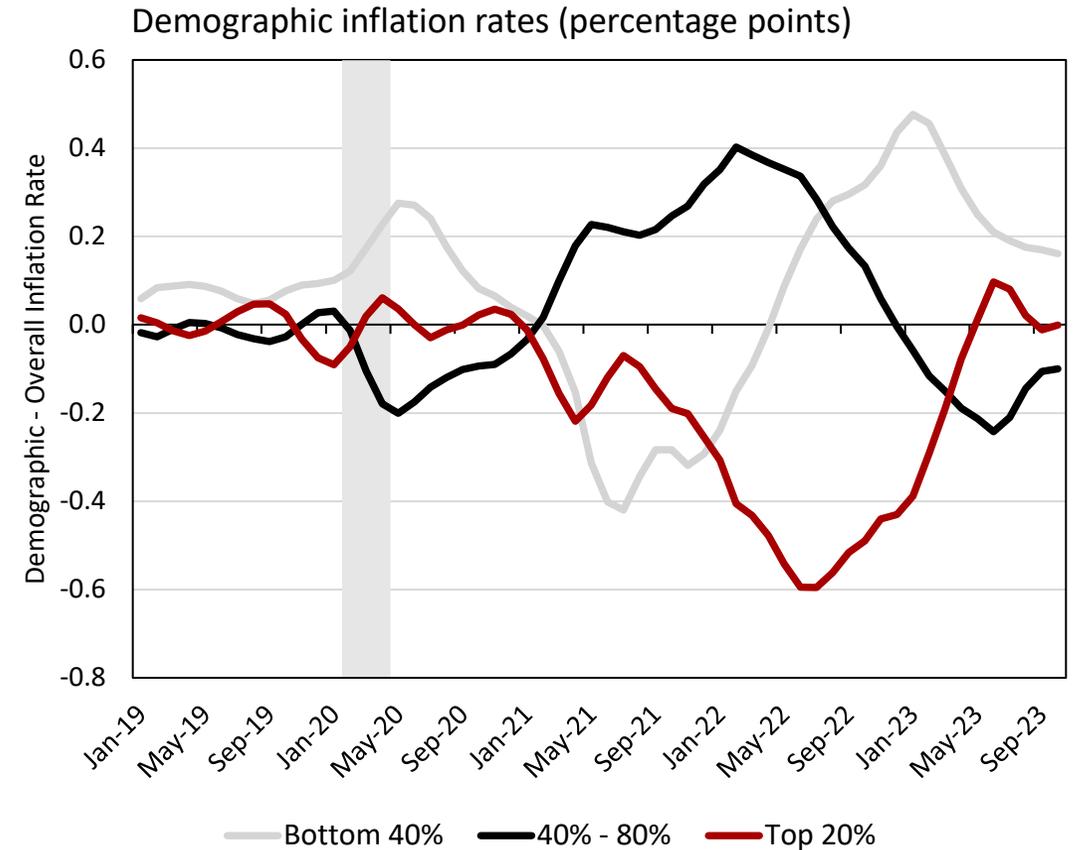
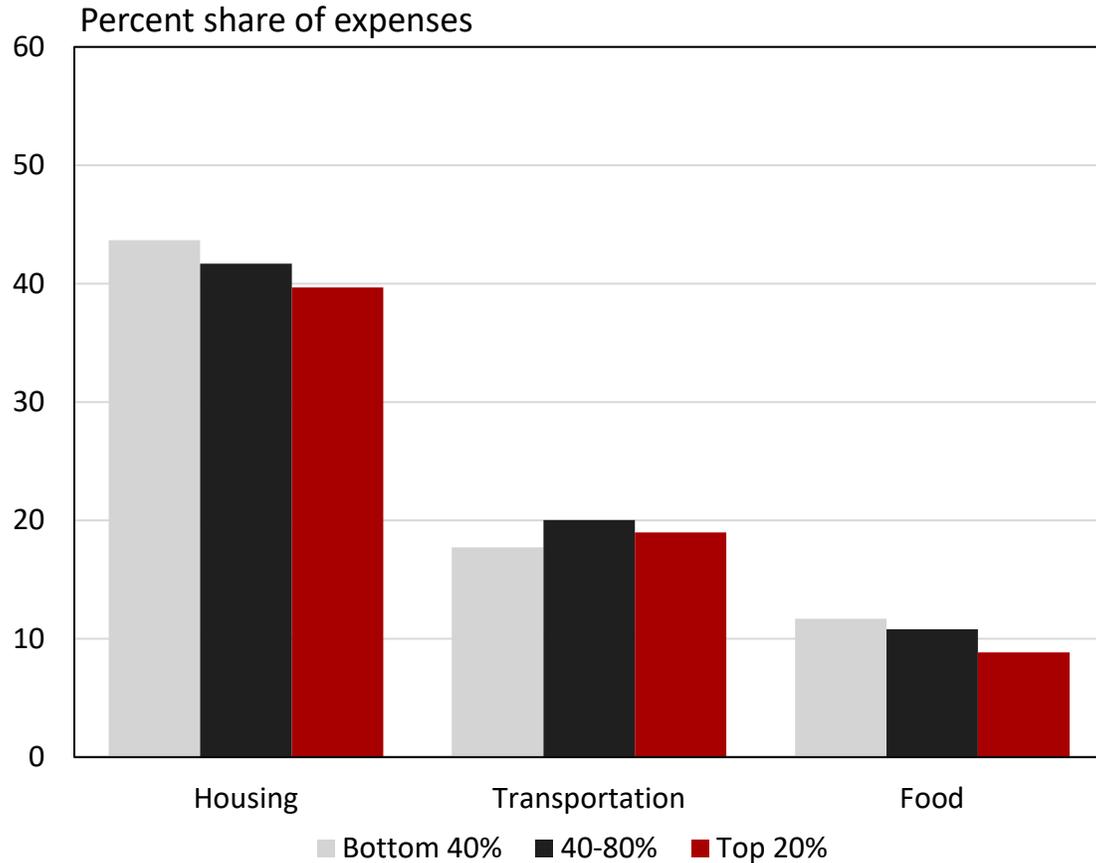
Note: Shaded region indicates the COVID-19 recession.

Demographic Inflation by Race/Ethnicity



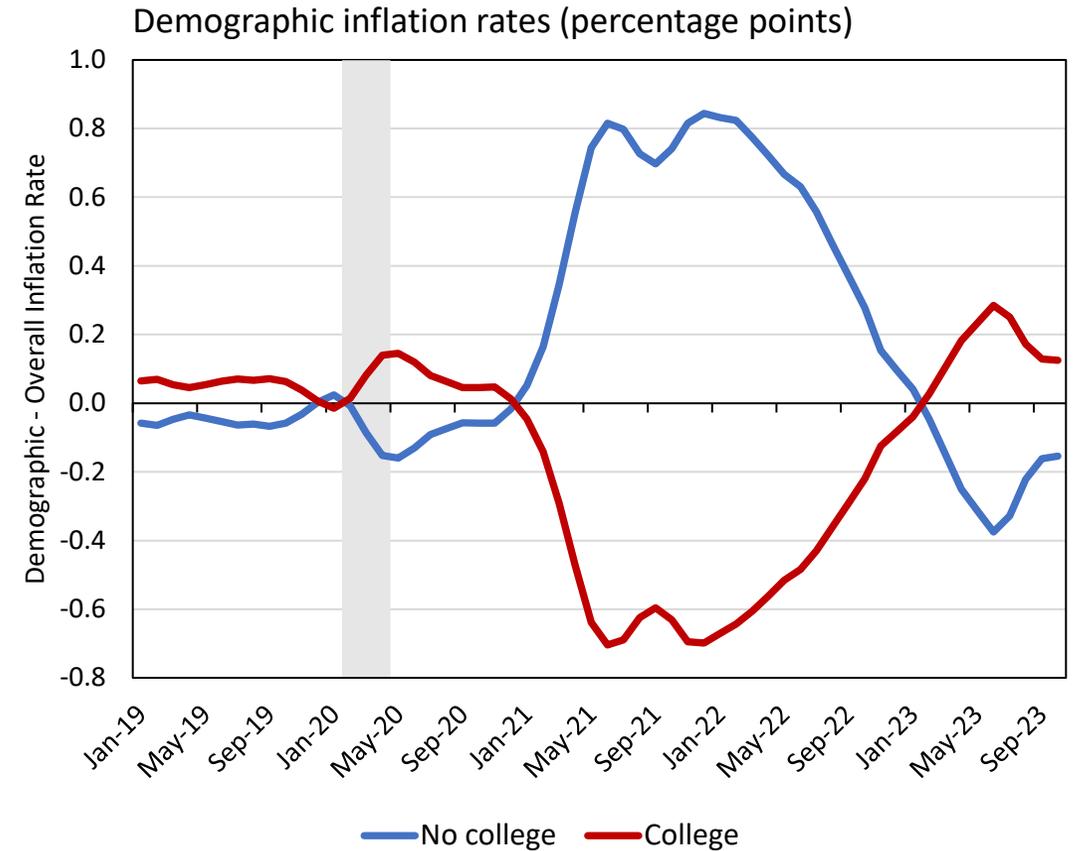
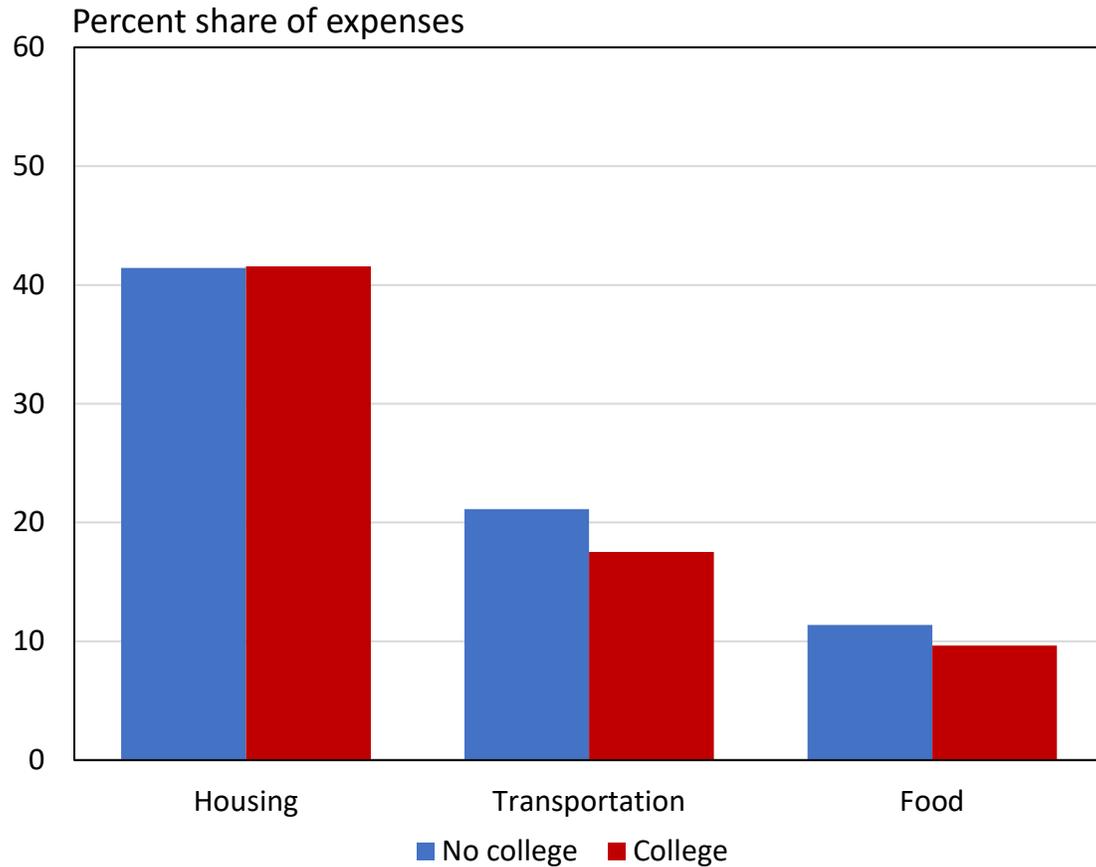
Sources: BLS Consumer Expenditure Survey microdata; BLS Consumer Price Indexes.
 Notes: Expenditure shares use 2021 CEX microdata. Shaded region indicates the COVID-19 recession.

Demographic Inflation by Income



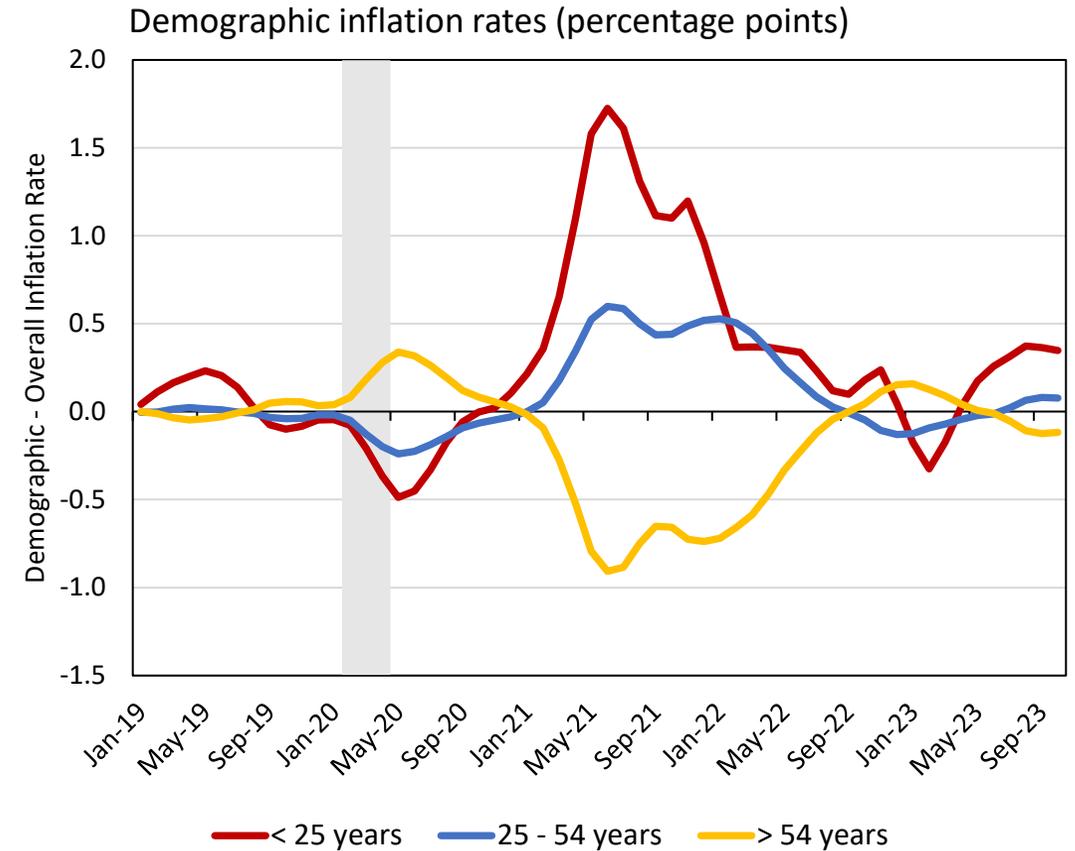
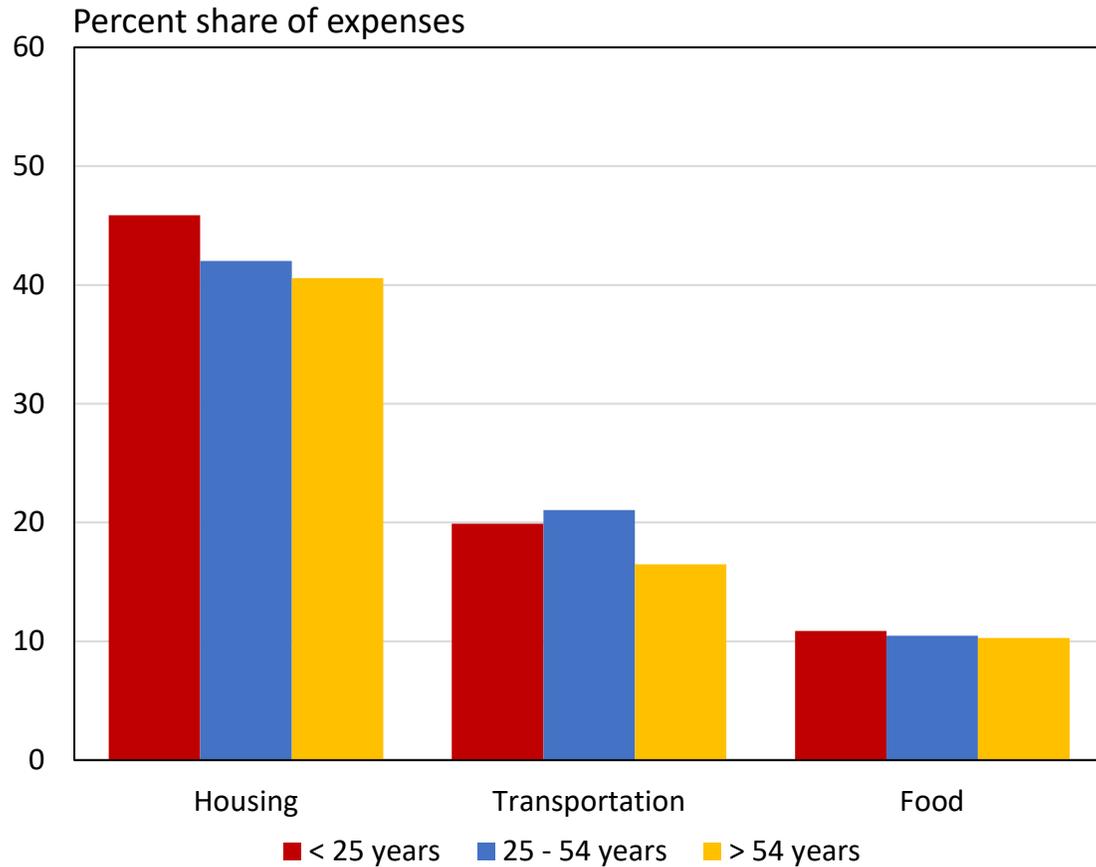
Sources: BLS Consumer Expenditure Survey microdata; BLS Consumer Price Indexes.
 Notes: Expenditure shares use 2021 CEX microdata. Shaded region indicates the COVID-19 recession.

Demographic Inflation by Education



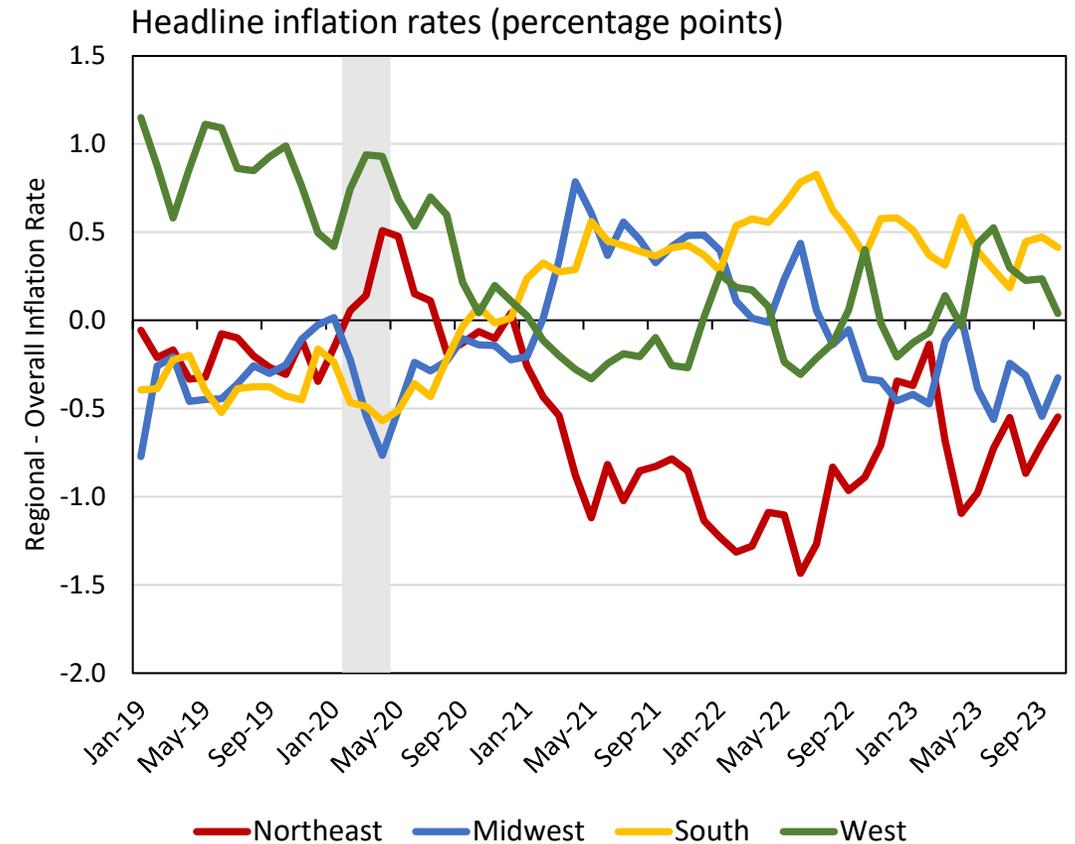
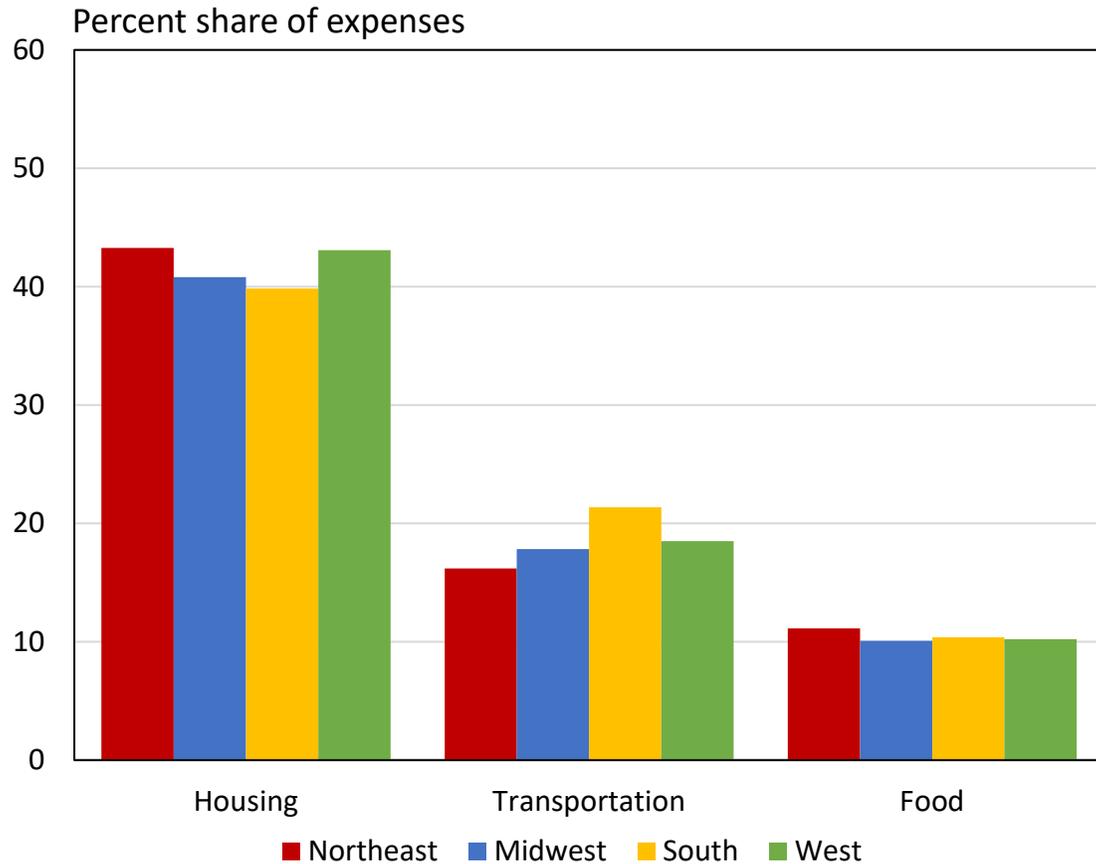
Sources: BLS Consumer Expenditure Survey microdata; BLS Consumer Price Indexes.
 Notes: Expenditure shares use 2021 CEX microdata. Shaded region indicates the COVID-19 recession.

Demographic Inflation by Age



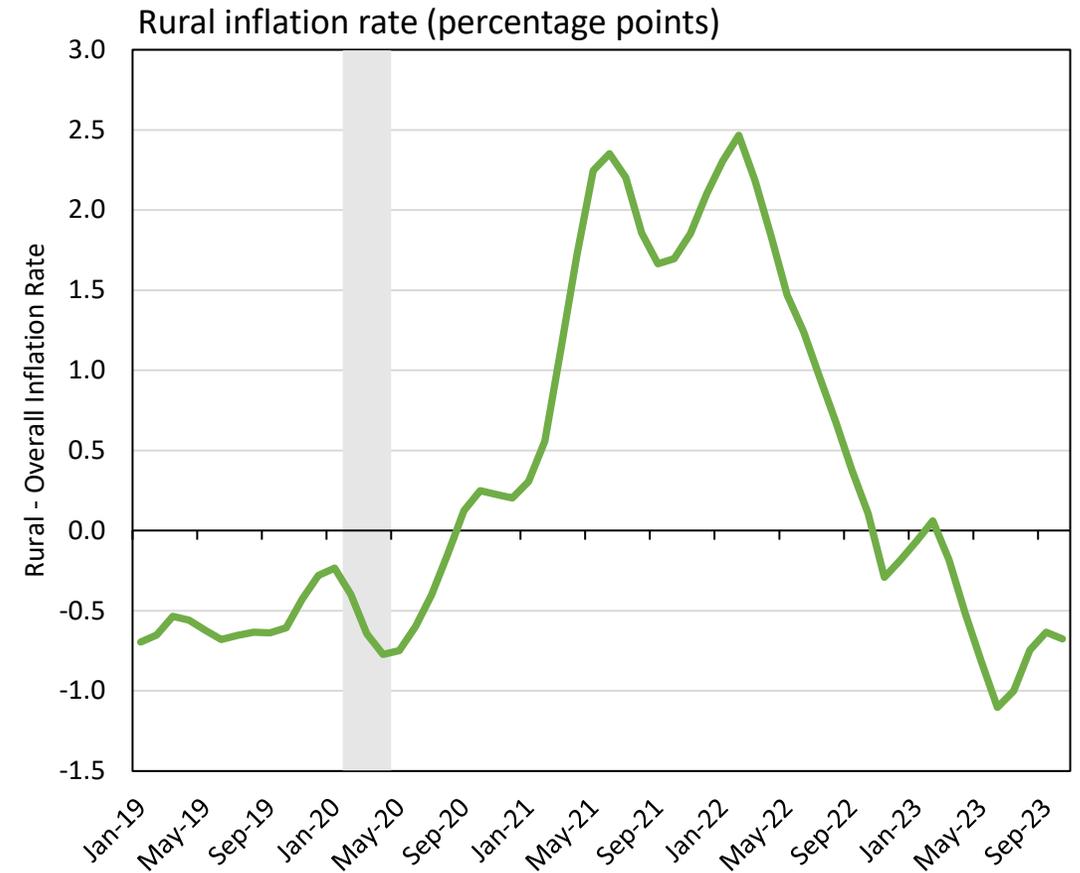
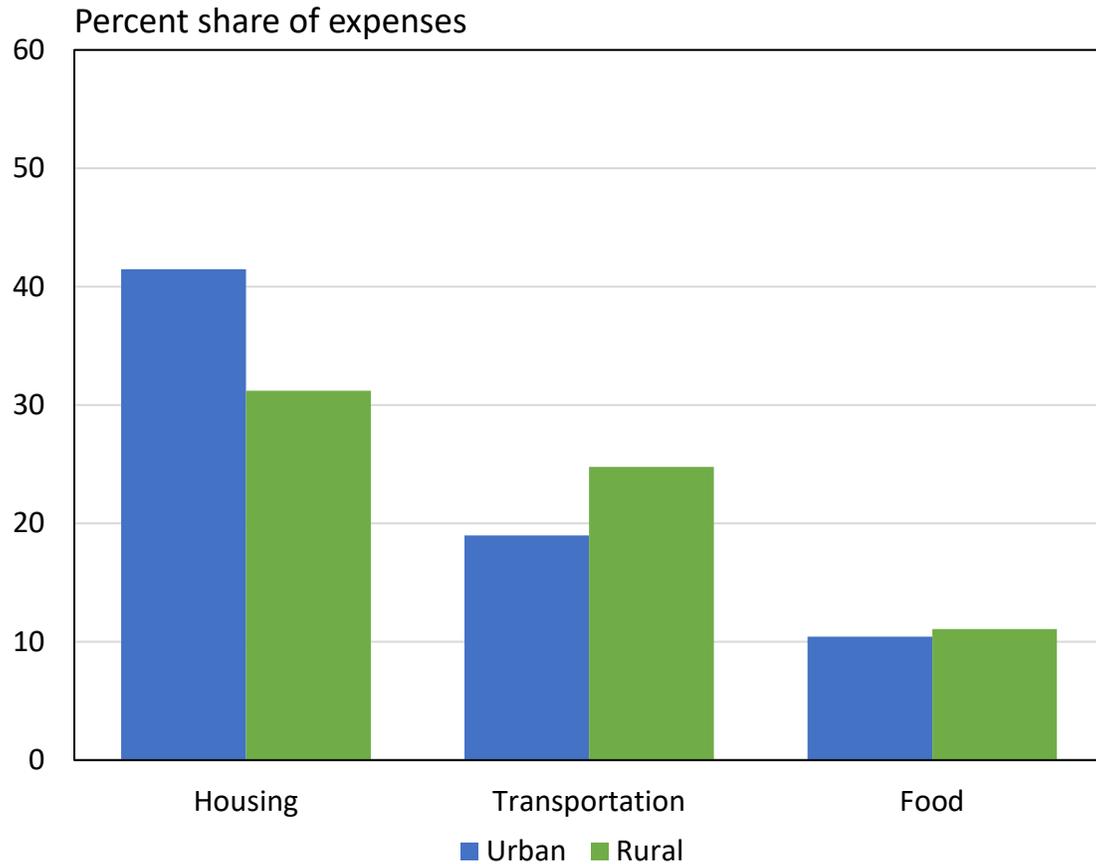
Sources: BLS Consumer Expenditure Survey microdata; BLS Consumer Price Indexes.
 Notes: Expenditure shares use 2021 CEX microdata. Shaded region indicates the COVID-19 recession.

Demographic Inflation by U.S. Region



Sources: BLS Consumer Expenditure Survey microdata; BLS Consumer Price Indexes.
 Notes: Expenditure shares use 2021 CEX microdata. Shaded region indicates the COVID-19 recession.

Demographic Inflation by Urban Status



Sources: BLS Consumer Expenditure Survey microdata; BLS Consumer Price Indexes.
 Notes: Expenditure shares use 2021 CEX microdata. Shaded region indicates the COVID-19 recession.



EARNINGS

UPDATED THROUGH OCT. 2023 | NATIONAL

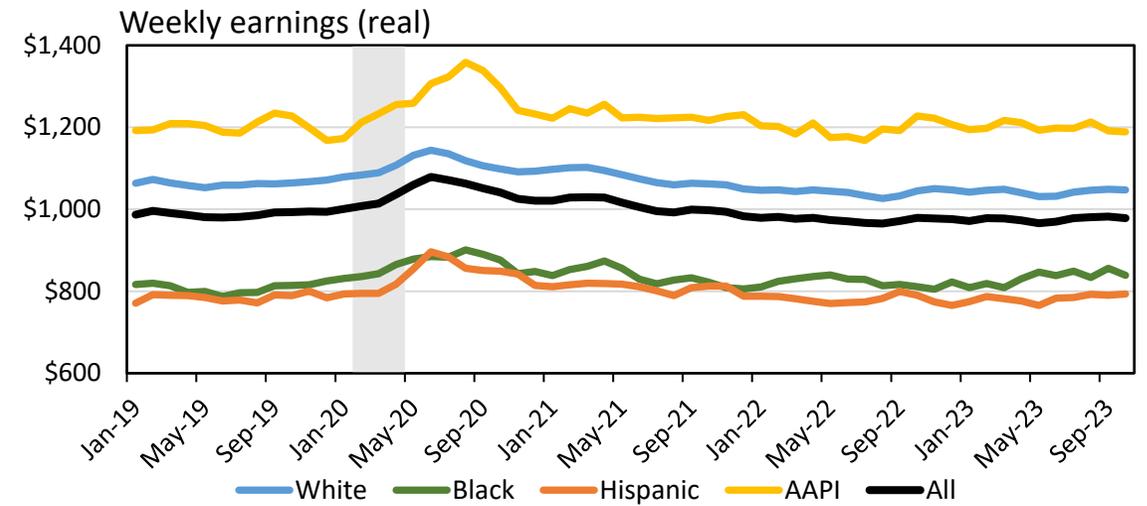
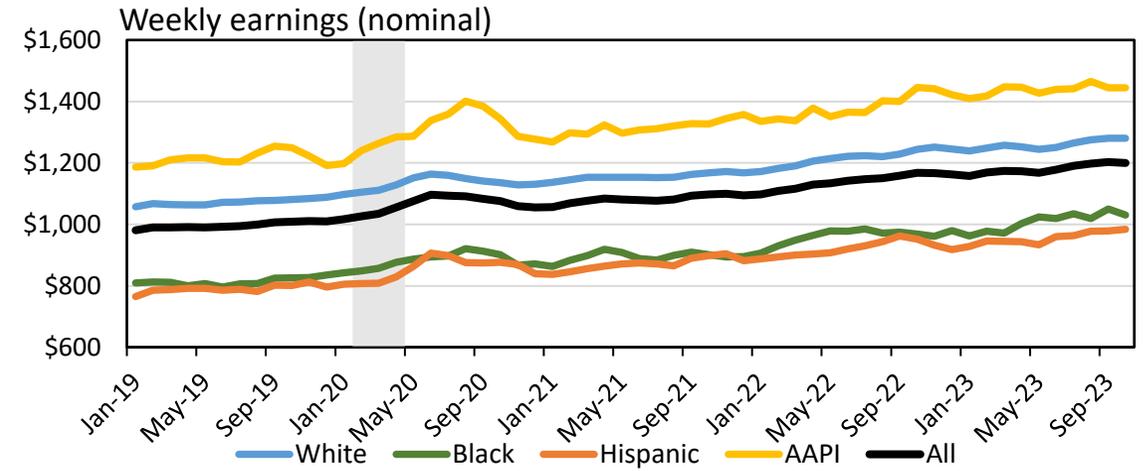
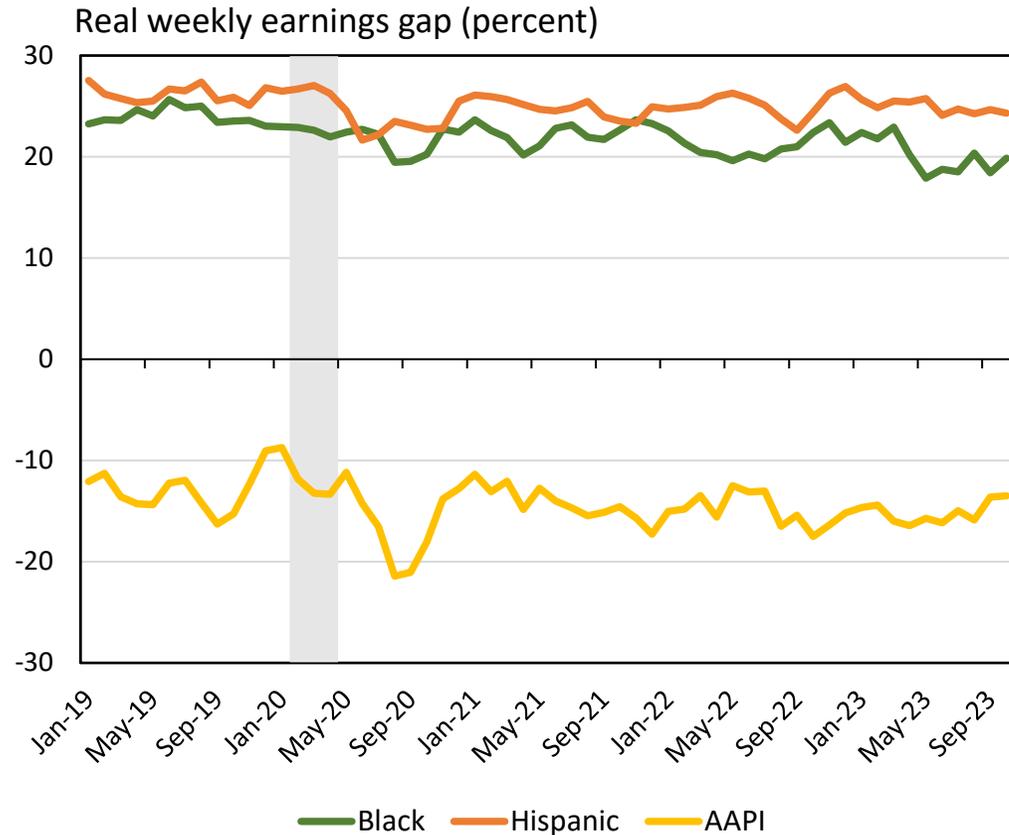
Takeaways | Earnings

- The Black earnings gap has been on a slow declining trend since before the pandemic, falling from 23.5% in October 2019 to 20% in October 2023.
- The Hispanic and AAPI earnings gap have generally remained stable over this period.
- The college premium has declined to less than 80% after being nearly 86% in July 2022. It has oscillated since the pandemic but has never attained its pre-pandemic highs.
- The gender earnings gap has been on a slowly declining trend since the pre-pandemic period, reaching 18% in September 2023.
- The rural-urban gap has varied over the pandemic and is now 23%, higher than the 19% in October 2023.

Data & Methods

- We compute real earnings by deflating nominal earnings for each demographic using our estimates of demographic-specific inflation.
- Comparable nonveterans are male high school graduates reweighted by age, race and birthplace to match veterans.
- Gaps are defined as the percentage difference in earnings between a majority group and a minority group in the labor market.
- The gender gap is defined as the percentage difference between male and female earnings.
- The racial gaps are defined as the percentage differences between earnings of white non-Hispanic workers and earnings of workers of the race or ethnicity in question.
- The college premium is defined as the percentage difference between earnings of college graduates and earnings of workers who did not graduate from college.

Real/Nominal Earnings by Race/Ethnicity

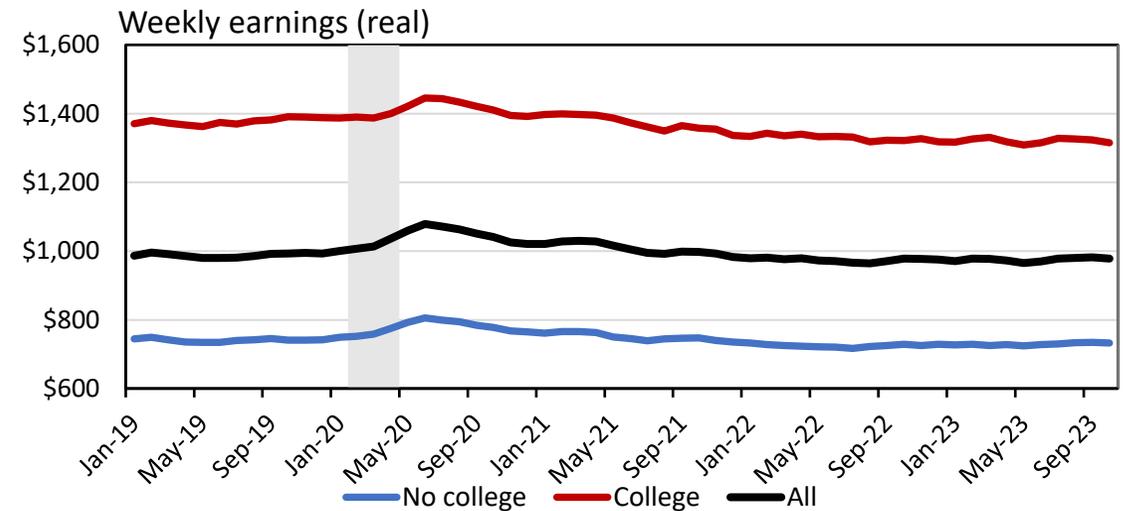
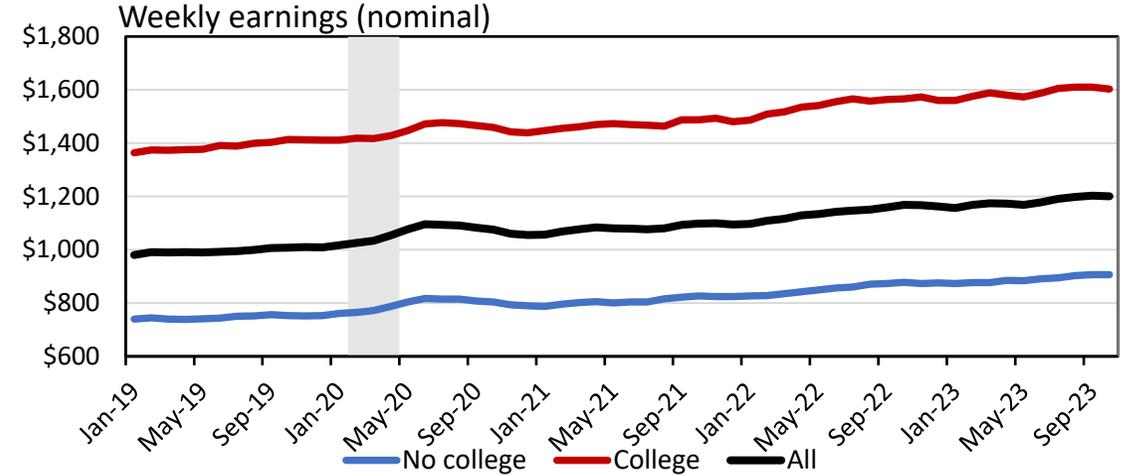
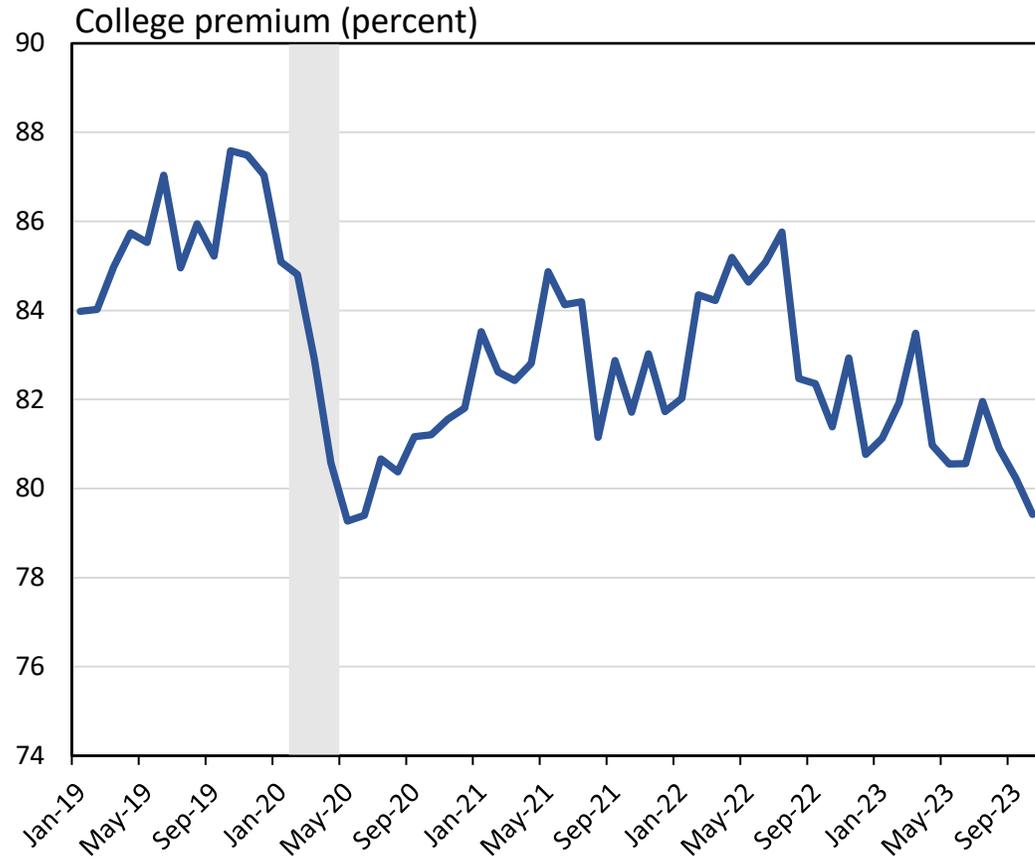


Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Real earnings uses corresponding demographic prices, indexed to January 2019. Shaded region indicates the COVID-19 recession. The race gap is defined here as the percent less in real earnings that the average Black/Hispanic/AAPI American earns on average compared to white Americans. For instance, a gap of 20% implies that the average Black/Hispanic/AAPI American earns 80% of the average white American.

Individual weekly earnings from April 2023 onward are top coded to \$2884.61, in accordance with pre-April 2023 CPS data conventions for continuity.

Real/Nominal Earnings by Education

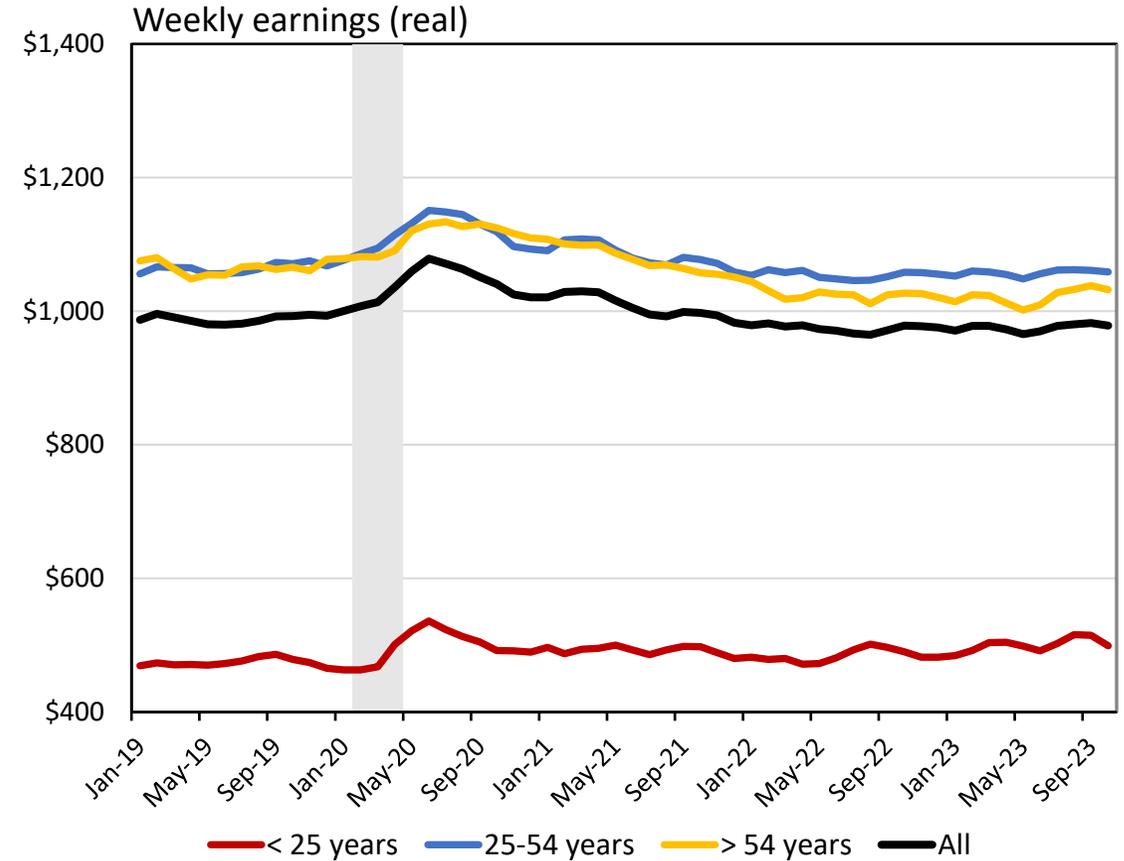
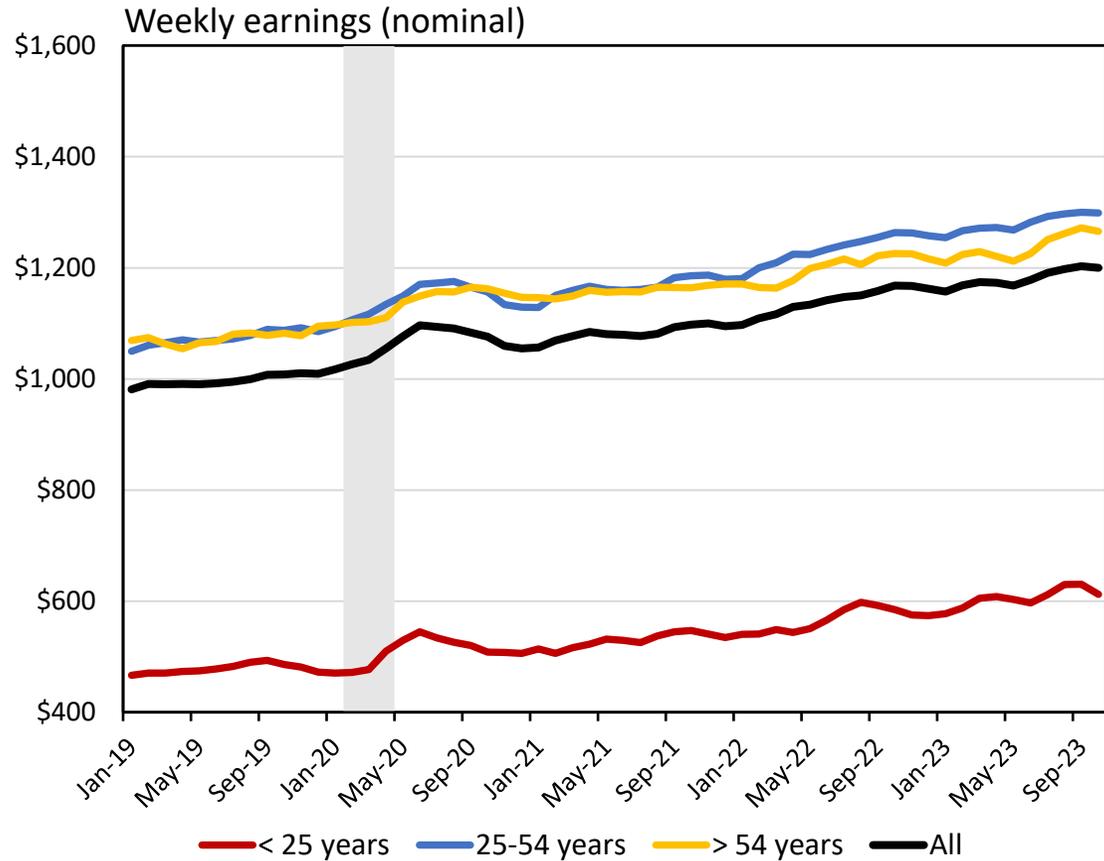


Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Real earnings uses corresponding demographic prices, indexed to January 2019. Shaded region indicates the COVID-19 recession. College premium is defined here as the percent more that college graduates earn (weekly) on average compared to non-graduates. For instance, a gap of 80% implies that the average graduate earns 80% more than the average non-graduate.

Individual weekly earnings from April 2023 onward are top coded to \$2884.61, in accordance with pre-April 2023 CPS data conventions for continuity.

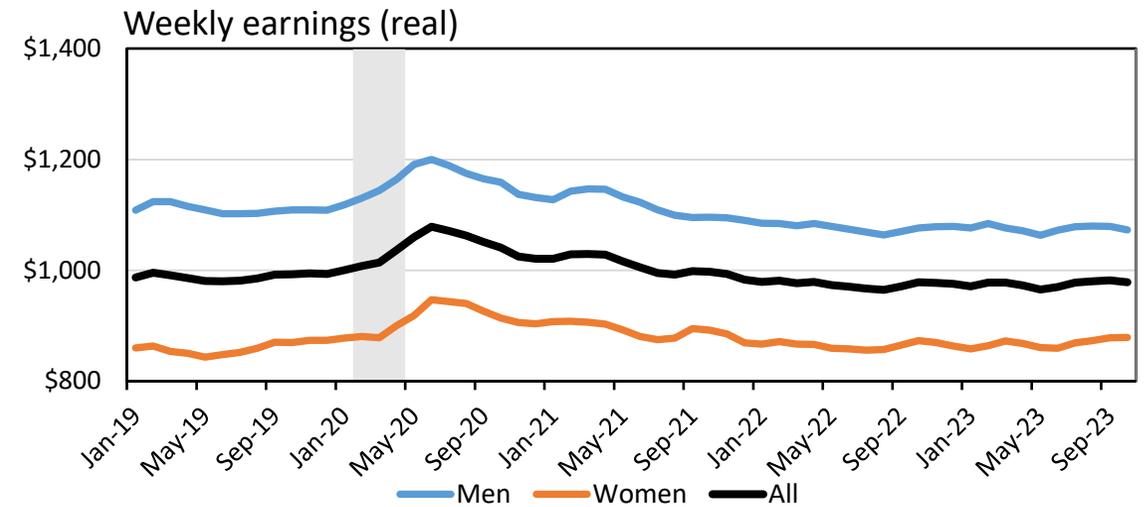
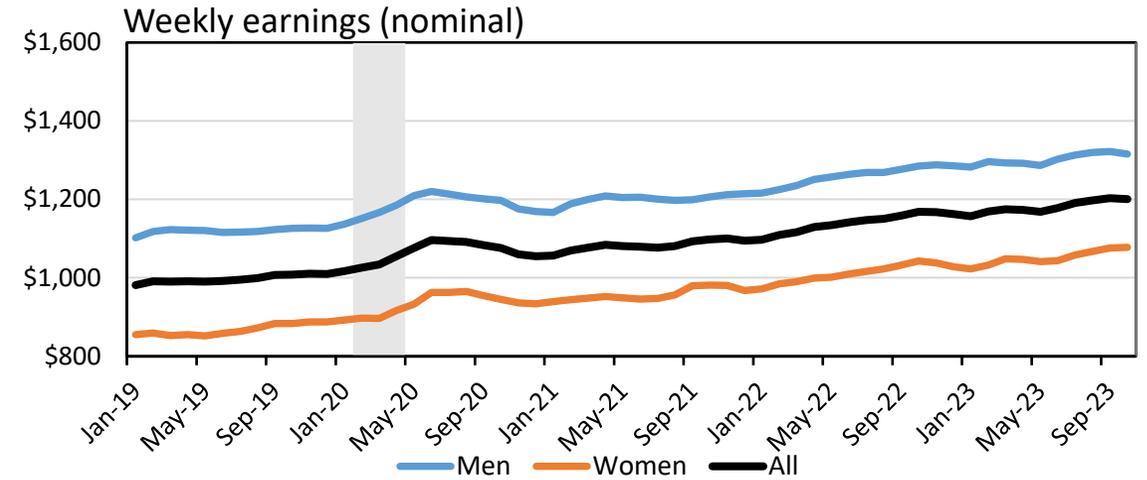
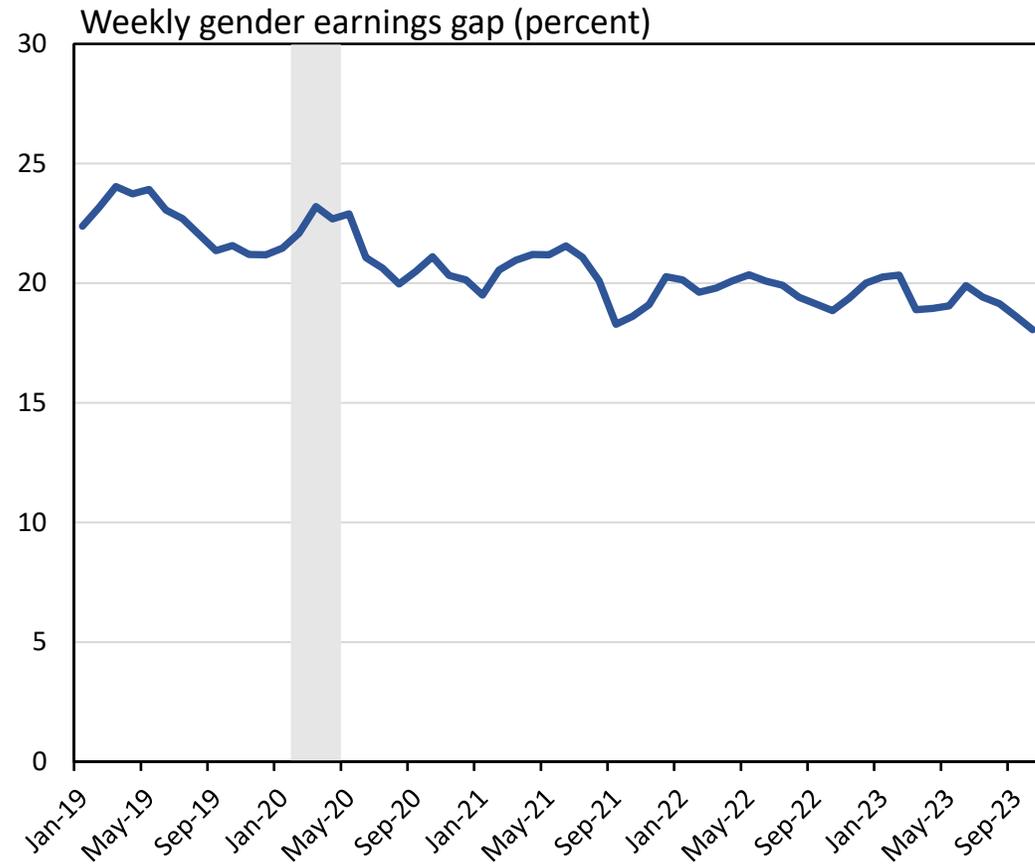
Real/Nominal Earnings by Age



Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations; three-month moving averages.
 Notes: Real earnings uses corresponding demographic prices, indexed to January 2019. Shaded region indicates the COVID-19 recession.

Individual weekly earnings from April 2023 onward are top coded to \$2884.61, in accordance with pre-April 2023 CPS data conventions for continuity.

Real/Nominal Earnings by Gender

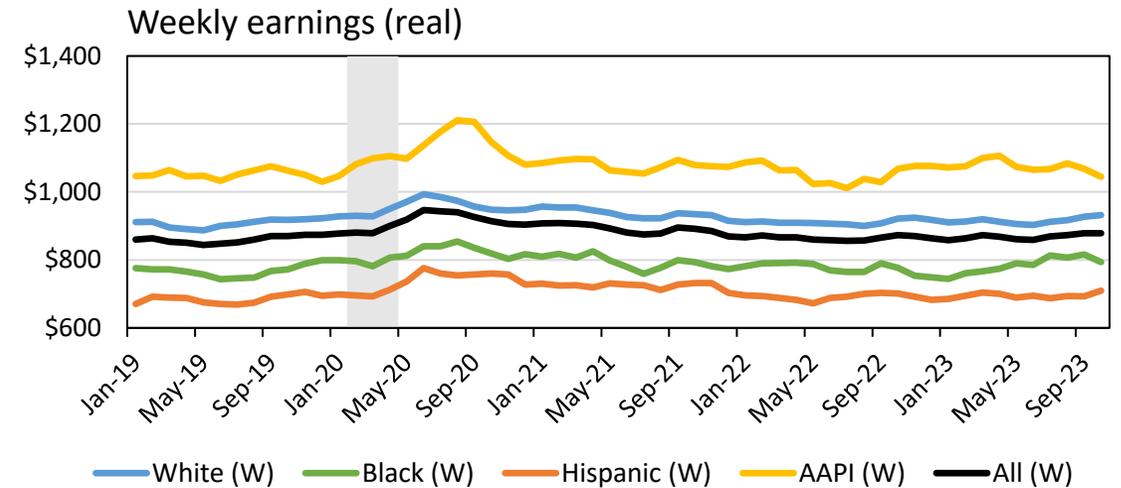
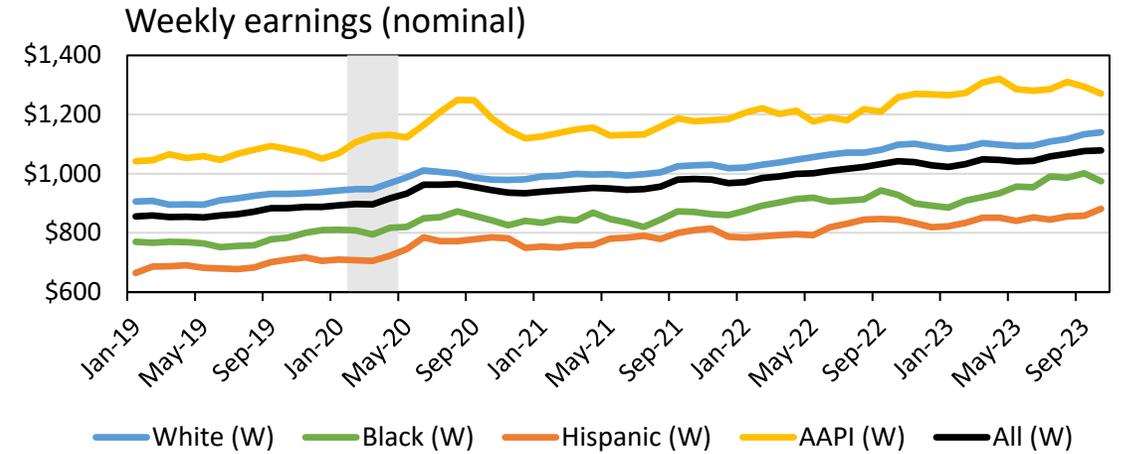
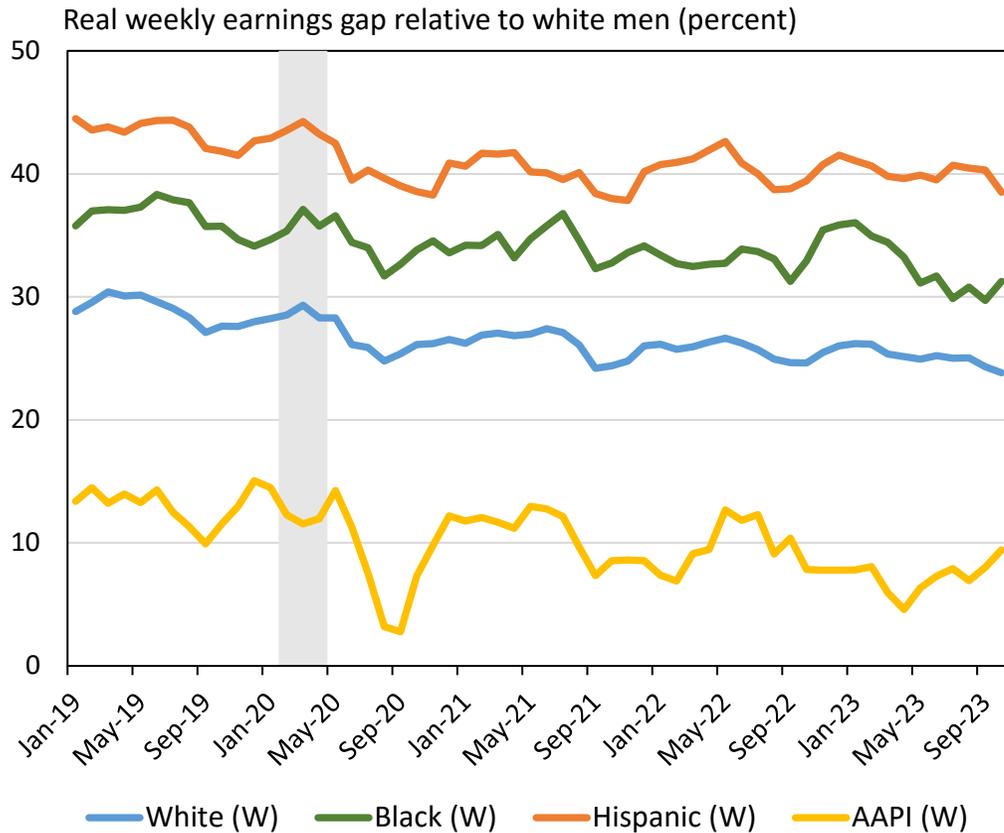


Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations; three-month moving averages.

Notes: Real earnings uses corresponding demographic prices, indexed to January 2019. Shaded region indicates the COVID-19 recession. The gender gap is defined here as the percent less that women earn on average compared to men. For instance, a gap of 20% implies that the average woman earns 80% of the average man.

Individual weekly earnings from April 2023 onward are top coded to \$2884.61, in accordance with pre-April 2023 CPS data conventions for continuity.

Real/Nominal Earnings by Race x Gender (Women)

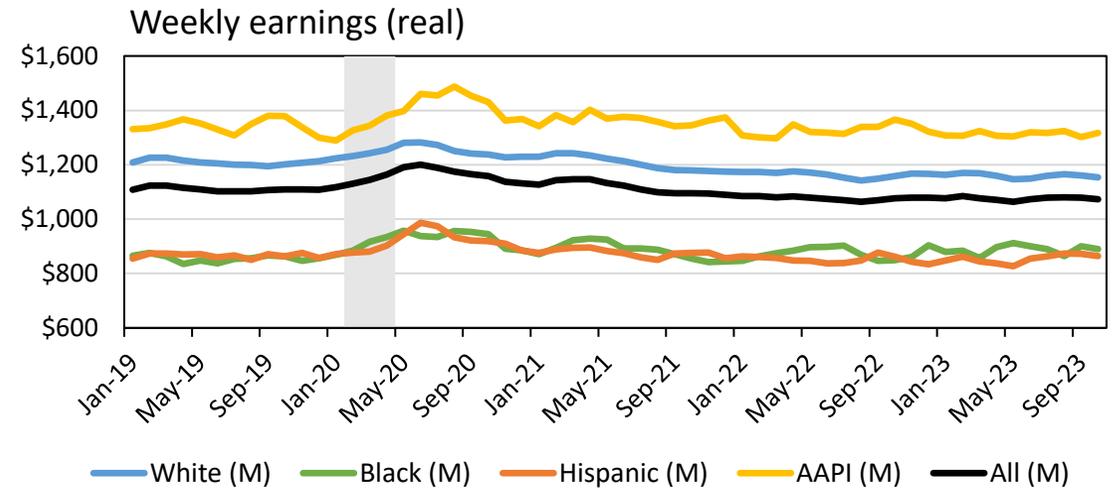
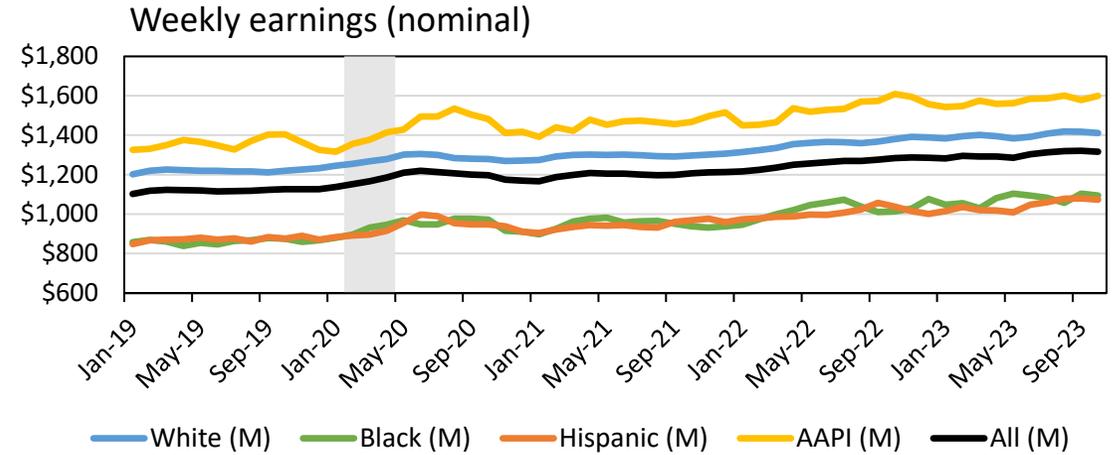
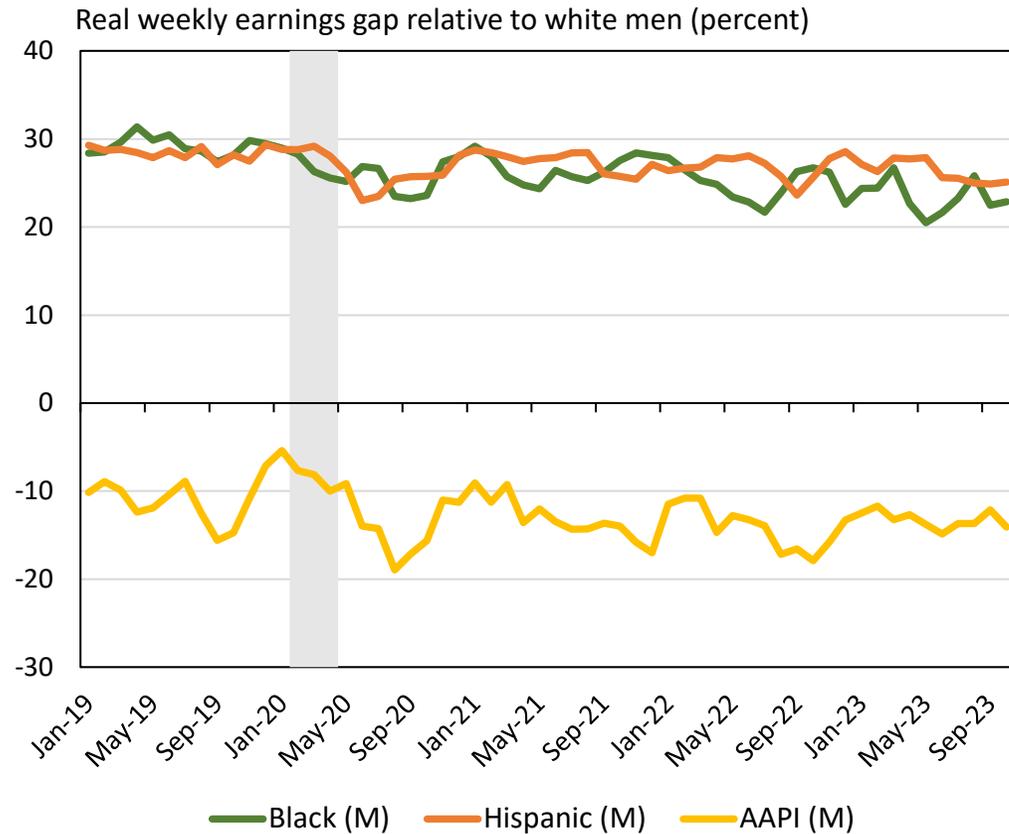


Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations; three-month moving averages.

Notes: Real earnings uses corresponding demographic prices, indexed to January 2019. Shaded region indicates the COVID-19 recession. The earnings gap is defined here as the percent less that a woman of each racial/ethnic group earns on average compared to white men. For instance, a gap of 40% implies that the average Black/Hispanic/AAPI/white woman earns 60% of the average white man.

Individual weekly earnings from April 2023 onward are top coded to \$2884.61, in accordance with pre-April 2023 CPS data conventions for continuity.

Real/Nominal Earnings by Race x Gender (Men)

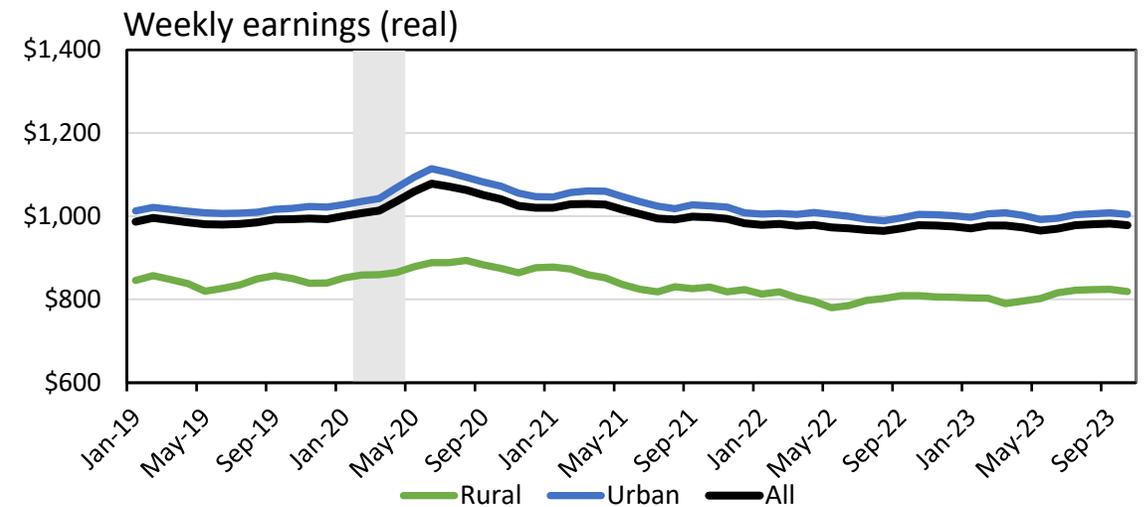
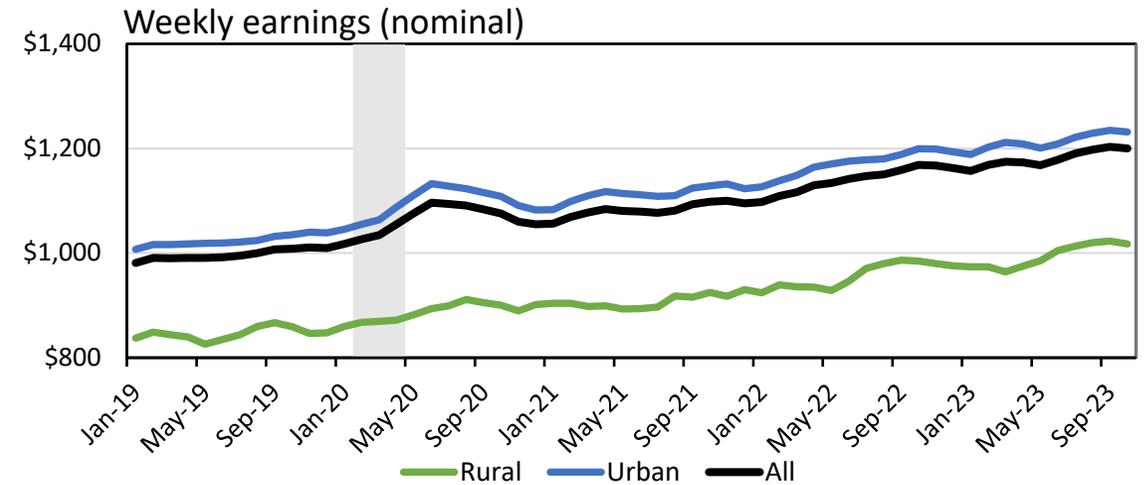
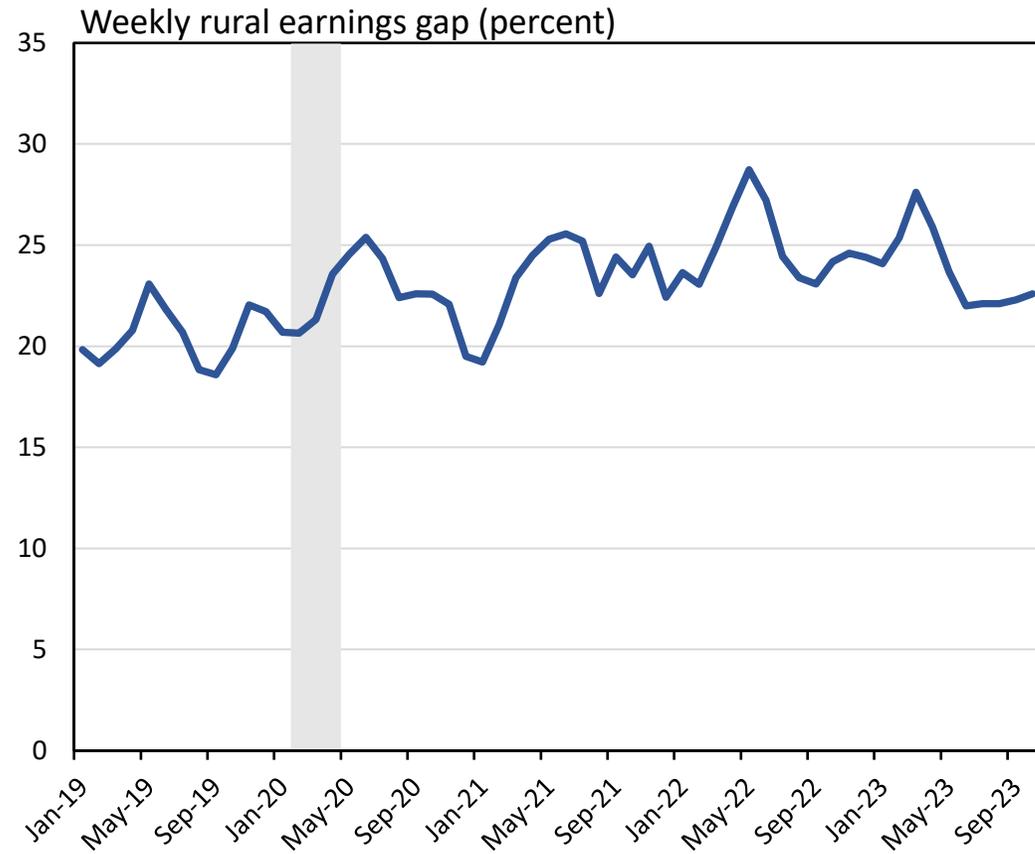


Sources: U.S. Census Bureau/BLS - Current Population Survey microdata, authors' calculations, three-month moving averages.

Notes: Real earnings uses corresponding demographic prices, indexed to January 2019. Shaded region indicates the COVID-19 recession. The earnings gap is defined here as the percent less that a man of each racial/ethnic group earns on average compared to white men. For instance, a gap of 20% implies that the average Black/Hispanic/AAPI man earns 80% of the average white man.

Individual weekly earnings from April 2023 onward are top coded to \$2884.61, in accordance with pre-April 2023 CPS data conventions for continuity.

Real/Nominal Earnings by Urban Status

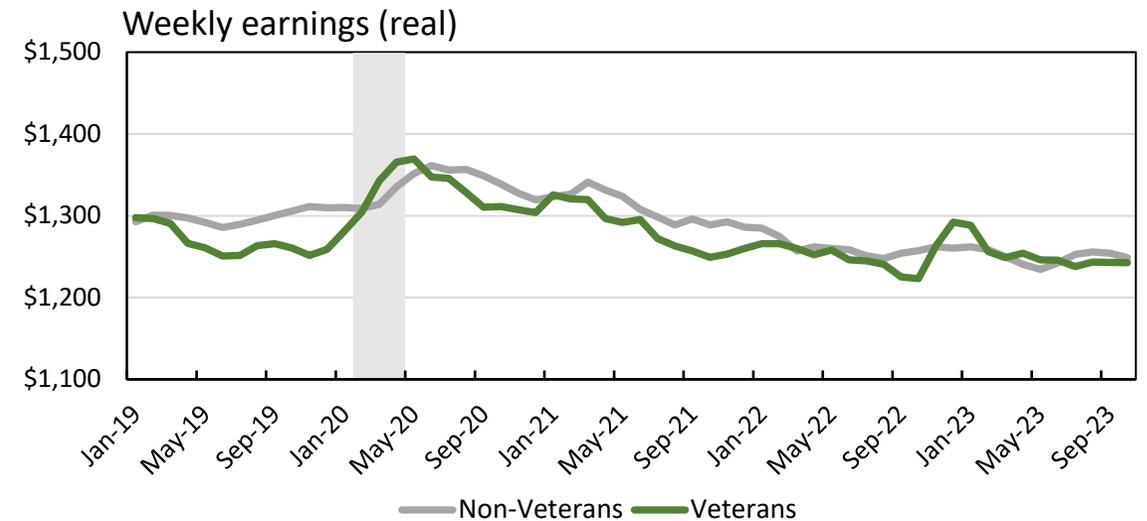
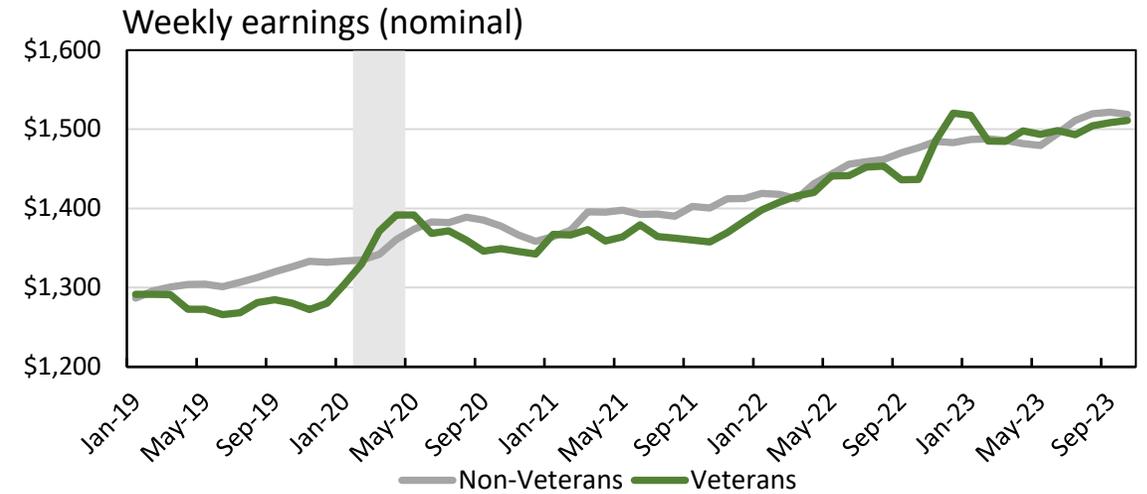
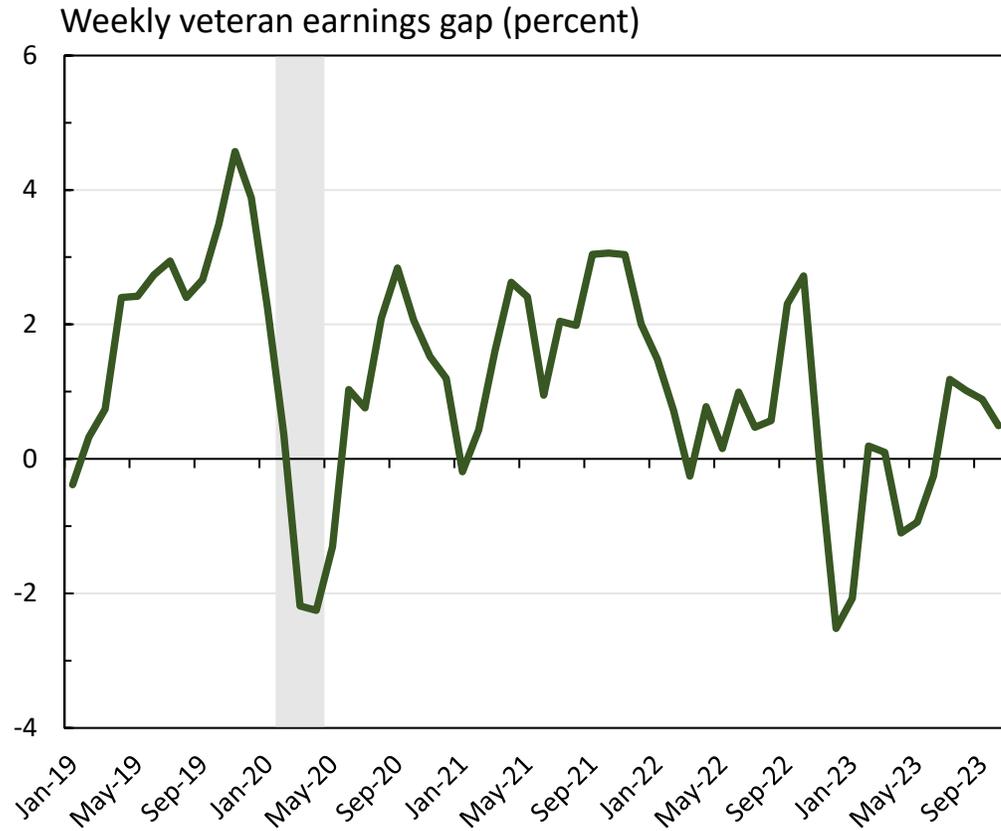


Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Real earnings uses corresponding demographic prices, indexed to January 2019. Shaded region indicates the COVID-19 recession. The rural earnings gap is defined here as the percent less that an average rural resident earns on average relative to an urban resident. For instance, a gap of 20% implies that the average rural resident earns 80% of the average urban resident.

Individual weekly earnings from April 2023 onward are top coded to \$2884.61, in accordance with pre-April 2023 CPS data conventions for continuity.

Real/Nominal Earnings by Veteran Status*



Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Real earnings uses corresponding demographic prices, indexed to January 2019. *The non-veteran sample is propensity reweighted toward non-veterans with similar demographic characteristics. Shaded region indicates the COVID-19 recession. The veteran gap is defined here as the percent less that veterans earn on average compared to non-veterans. For instance, a gap of 20% implies that the average veteran earns 80% of the average non-veteran.

Individual weekly earnings from April 2023 onward are top coded to \$2884.61, in accordance with pre-April 2023 CPS data conventions for continuity.

EMPLOYMENT

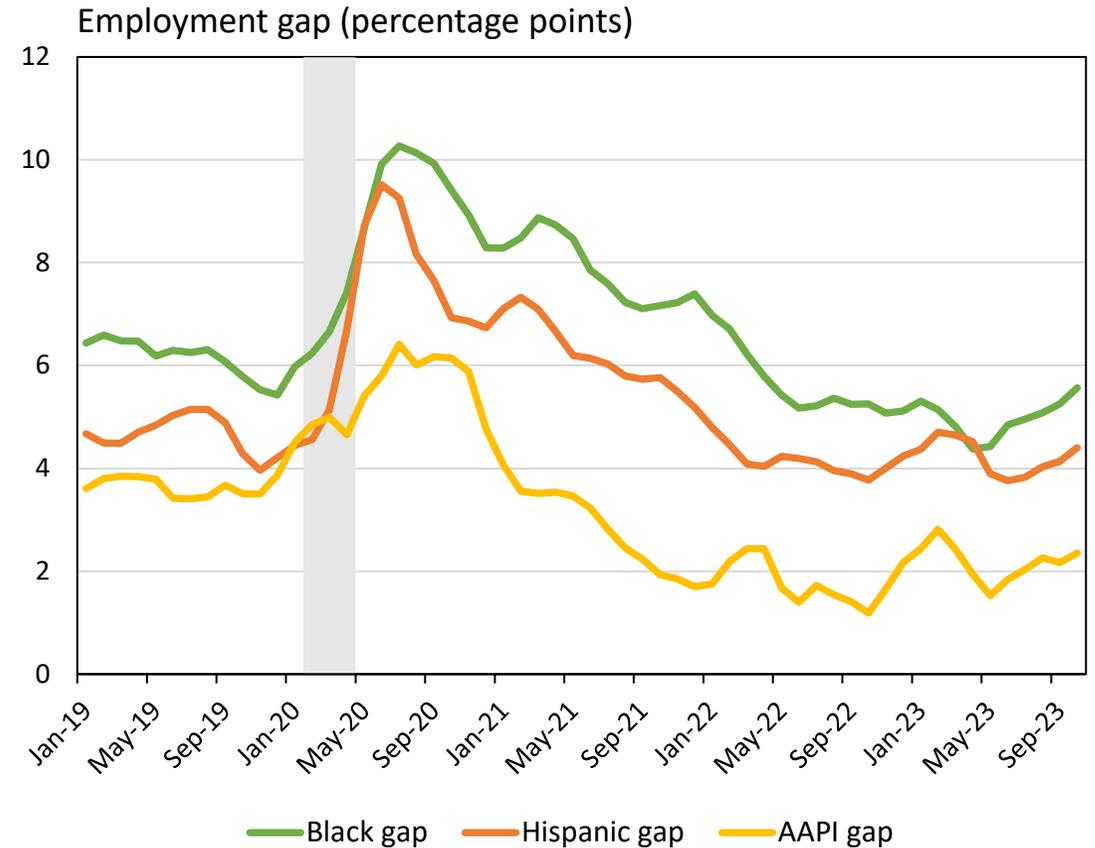
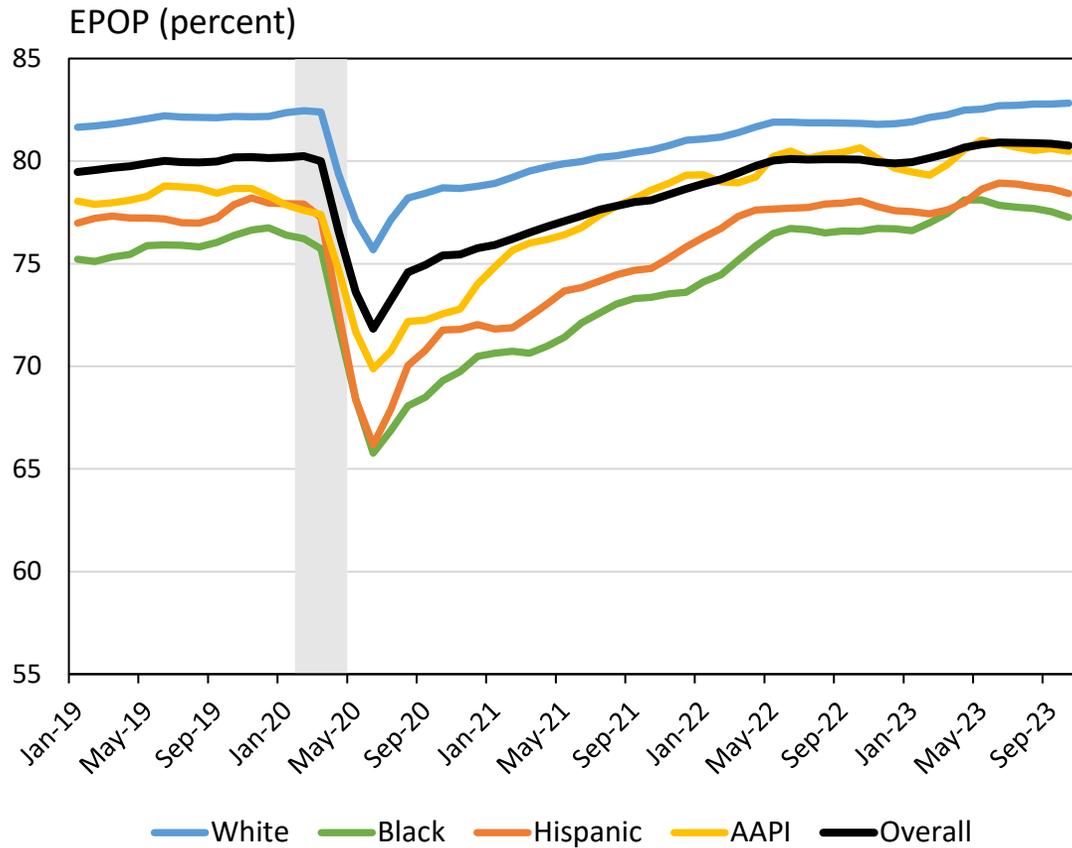
EMPLOYMENT TO POPULATION RATIO | NATIONAL
UPDATED THROUGH OCT. 2023

Takeaways | EPOP

- The gender gap has continued its decline from late 2020 into October 2023, though the decline of the college gap has stopped.
- Both AAPI and Hispanic men have had higher employment than white men since the beginning of the summer. Employment for Black men has leveled off 7.8 percentage points below the national average.
- Employment rates for Black and AAPI women have been on a multiyear trend of convergence towards the average employment rate for women, but both are down from their post-pandemic highs in May 2023.
- The urban-rural employment gap is at 3.5 percentage points and is rising towards its post-pandemic peak of four percentage points in March 2023.
- Employment for veterans remains four percentage points below that of comparable non-veterans*, although disability status and education explain much of this gap.

**Comparable nonveterans are male high school graduates reweighted by age, race and birthplace to match veterans.*

EPOP by Race/Ethnicity

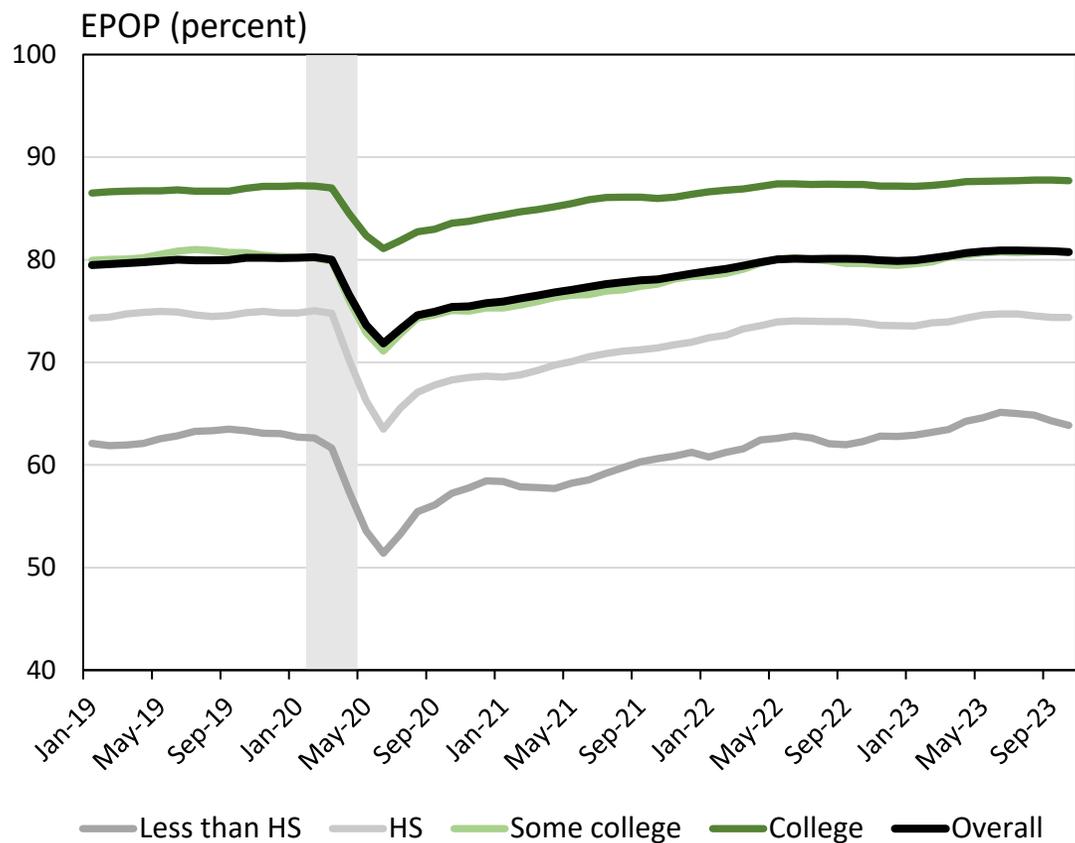


Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

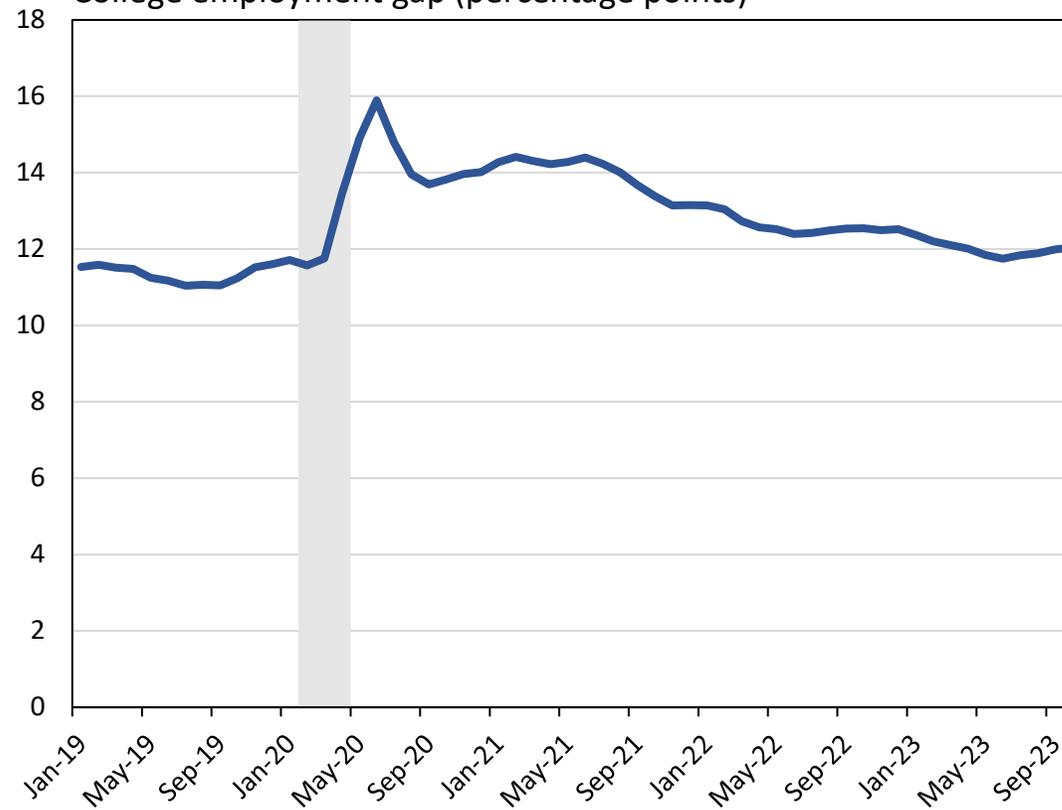
Notes: Restricted to prime-age individuals (25-54). Shaded region indicates the COVID-19 recession.

Employment gap defined relative to white employment.

EPOP by Education



College employment gap (percentage points)

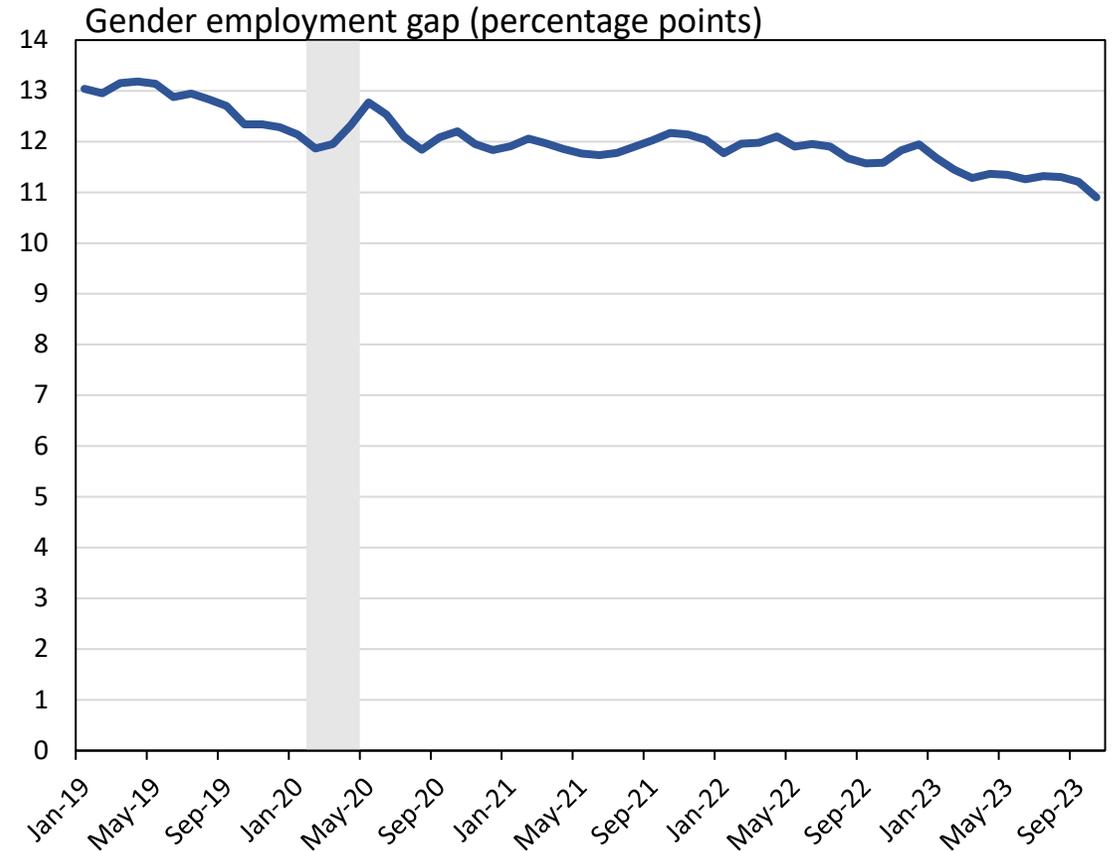
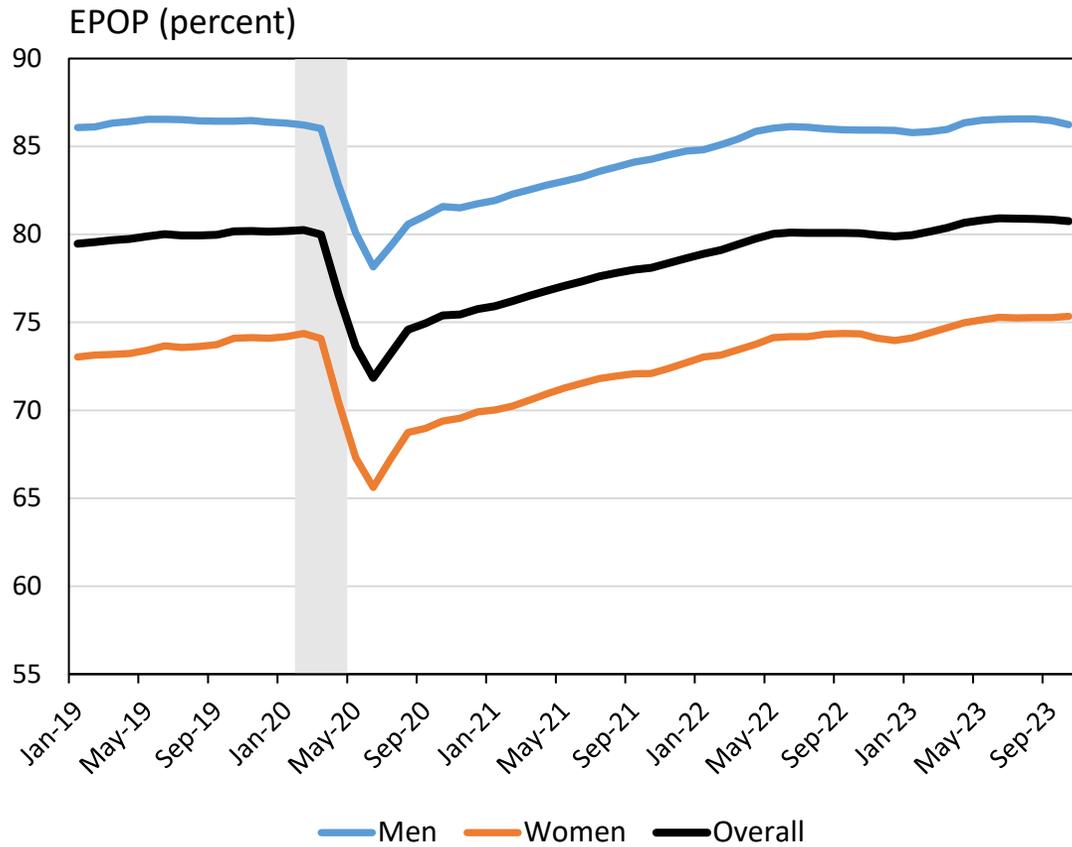


Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Restricted to prime-age individuals (25-54). Shaded region indicates the COVID-19 recession.

College employment gap defined as employment of college graduates relative to non-graduates.

EPOP by Gender

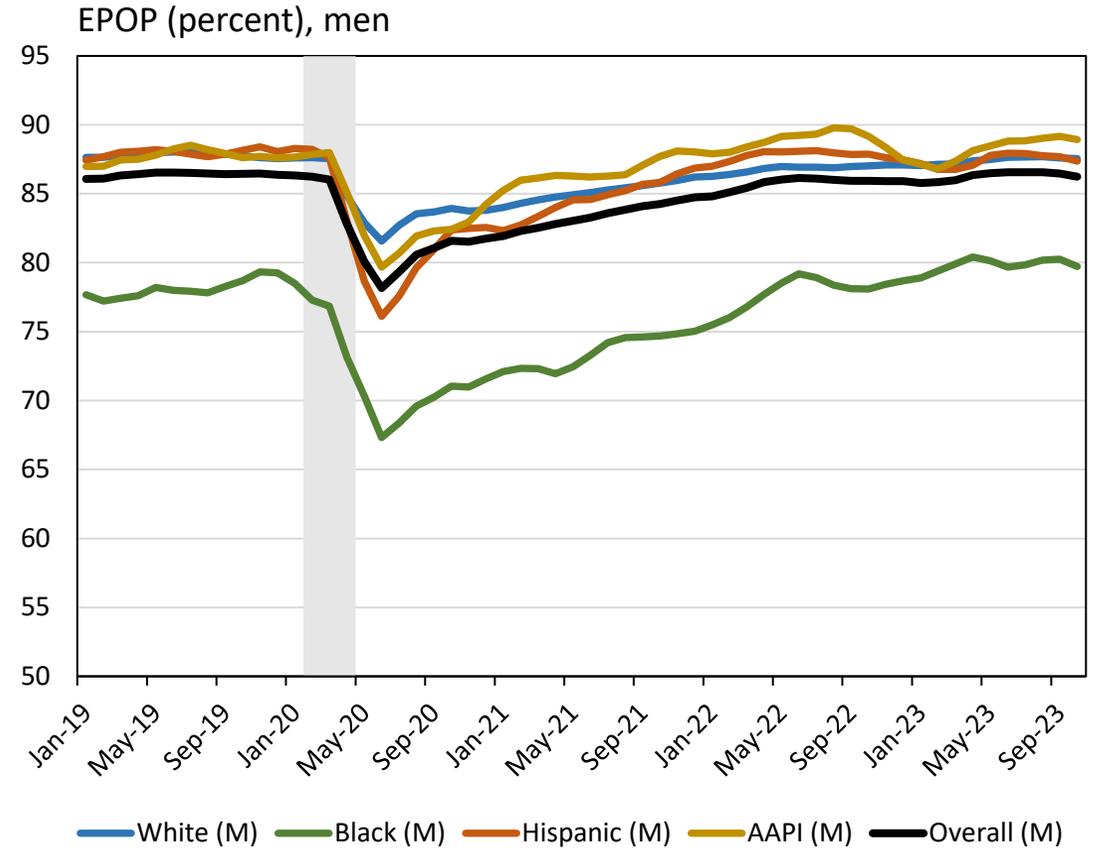
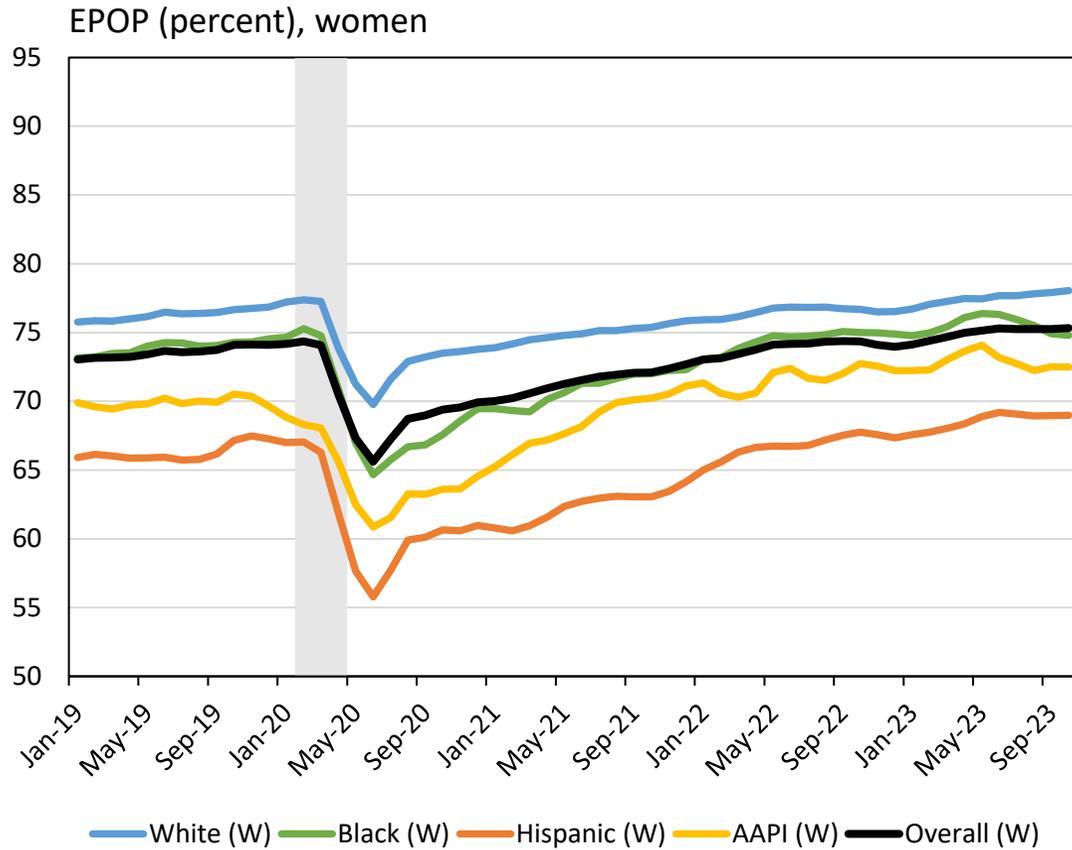


Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Restricted to prime-age individuals (25-54). Shaded region indicates the COVID-19 recession.

Gender employment gap defined as employment of men relative to women.

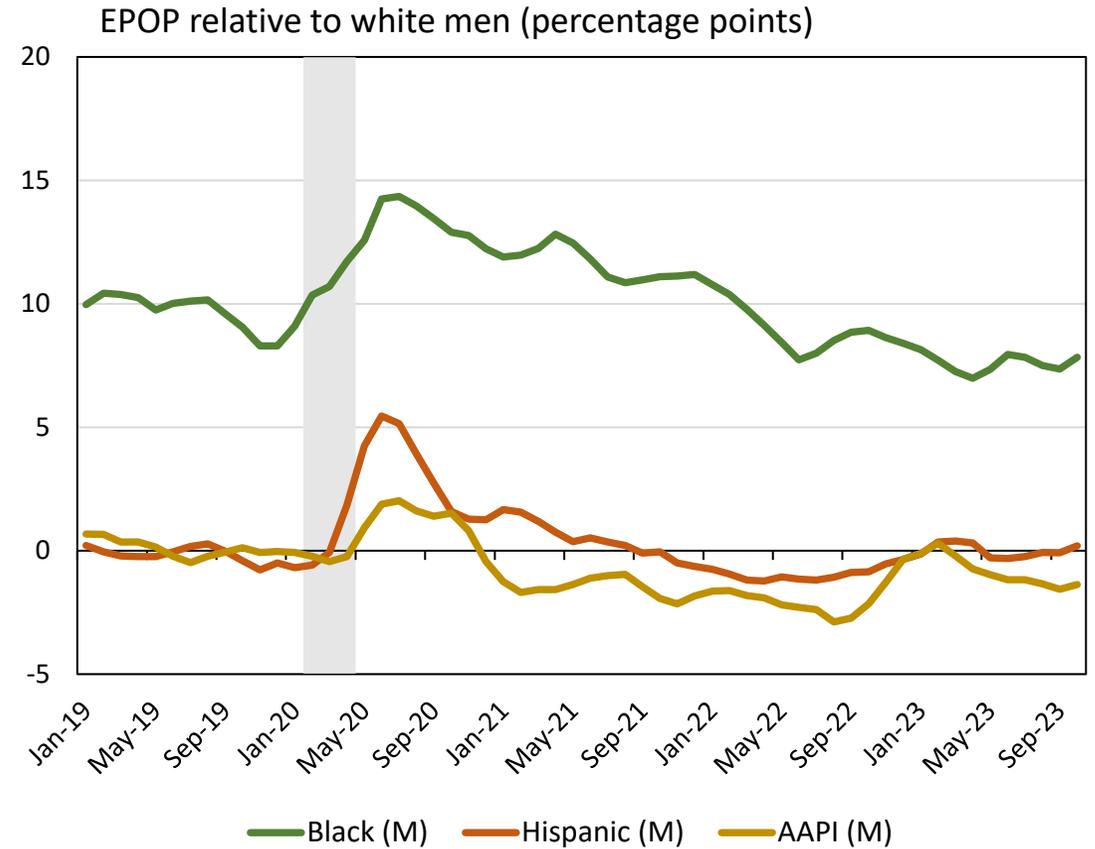
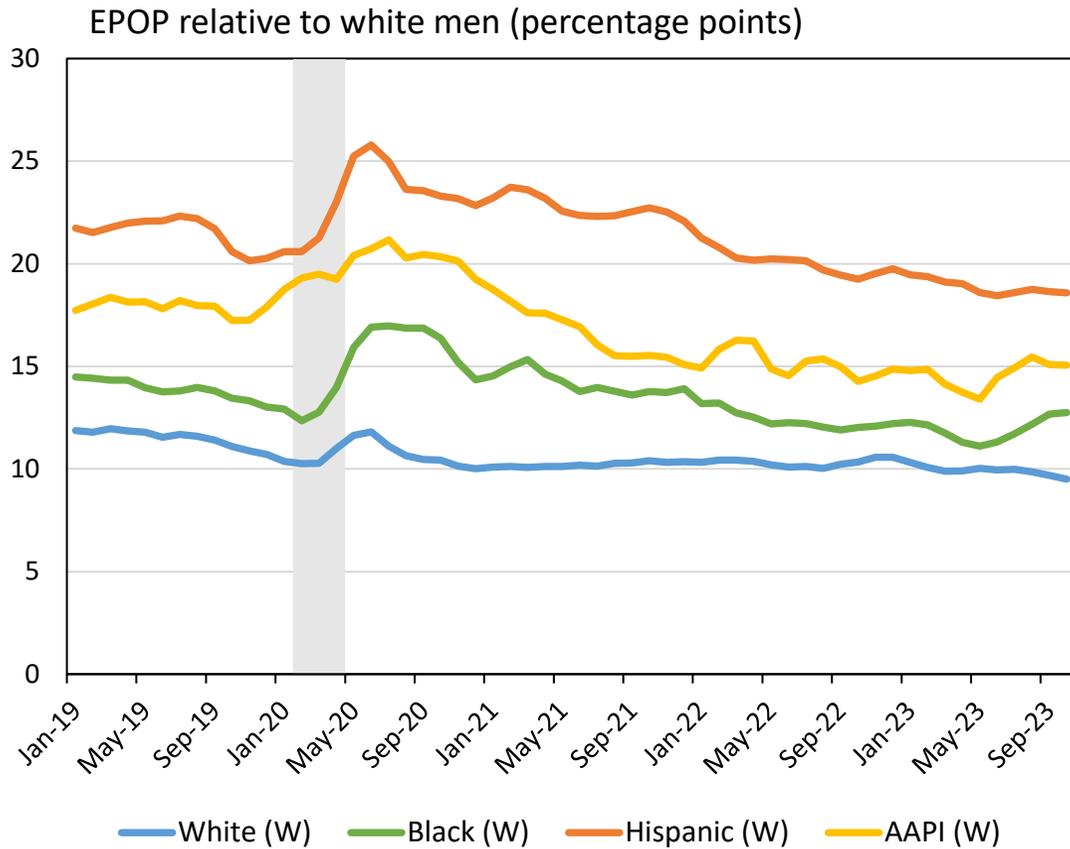
EPOP by Race x Gender



Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Restricted to prime-age individuals (25-54). Shaded region indicates the COVID-19 recession.

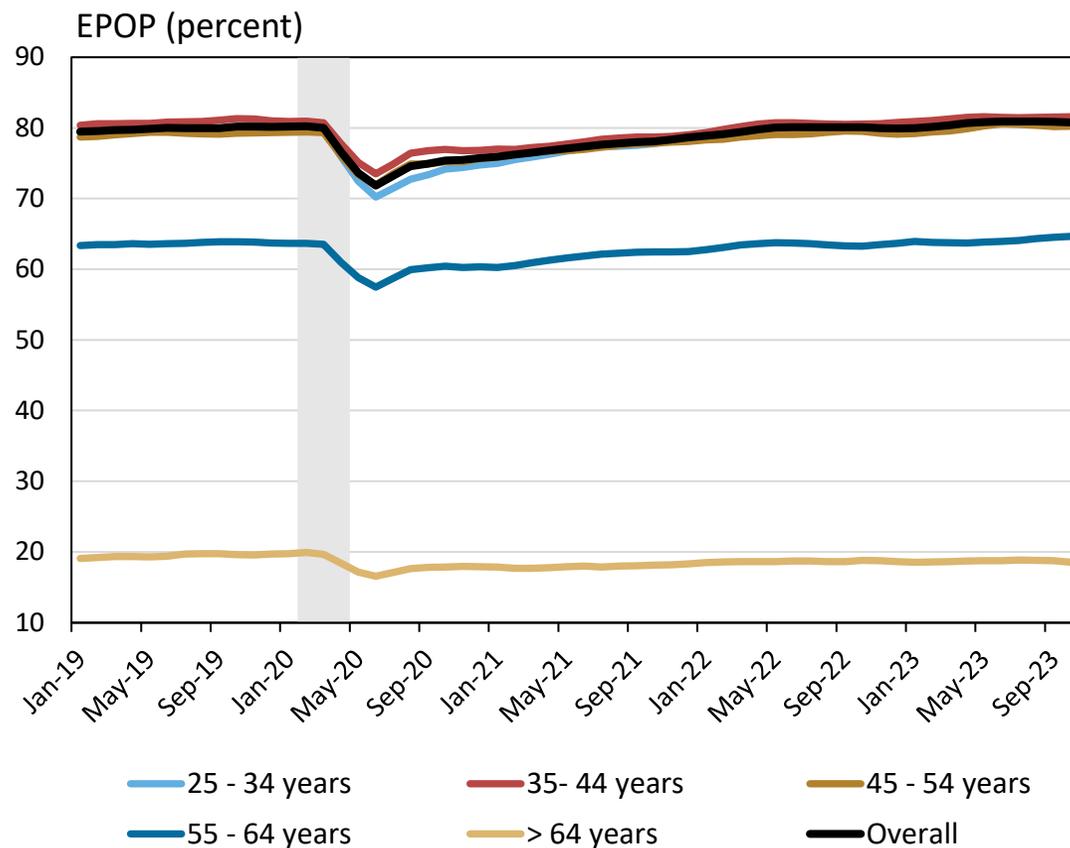
EPOP Gaps by Race x Gender



Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Restricted to prime-age individuals (25-54). Shaded region indicates the COVID-19 recession.

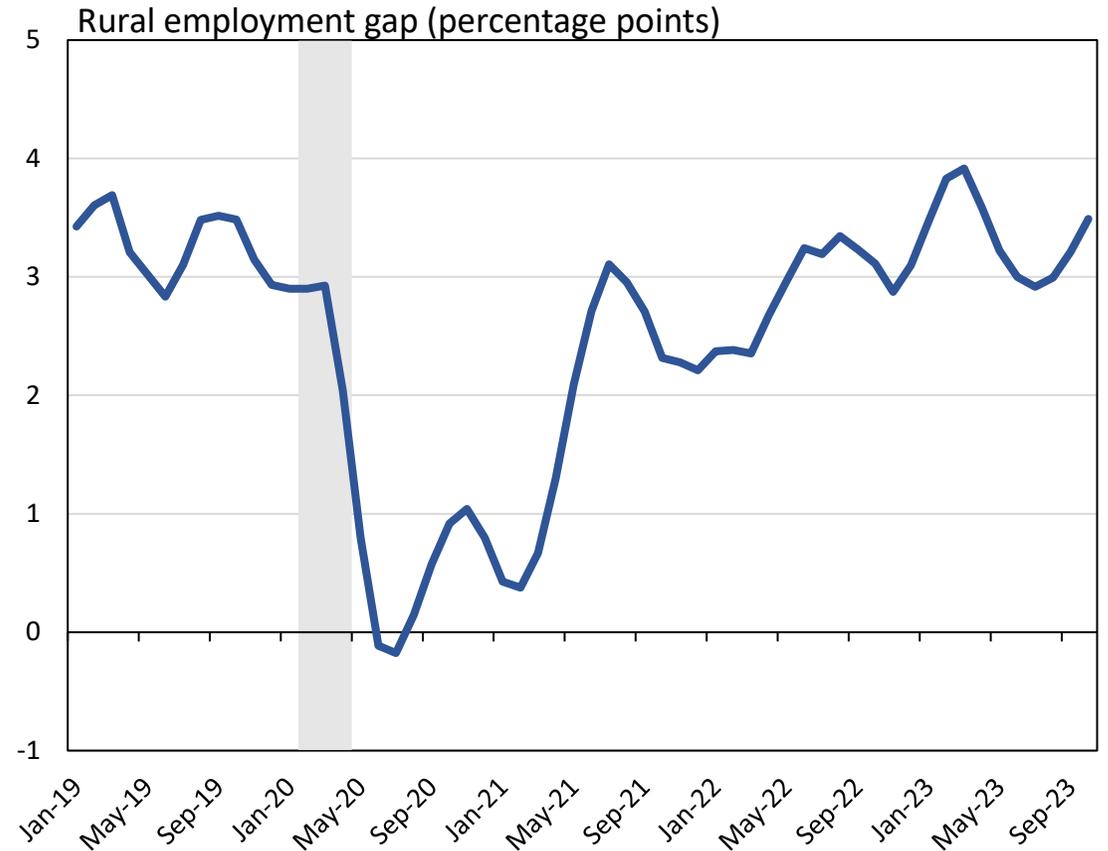
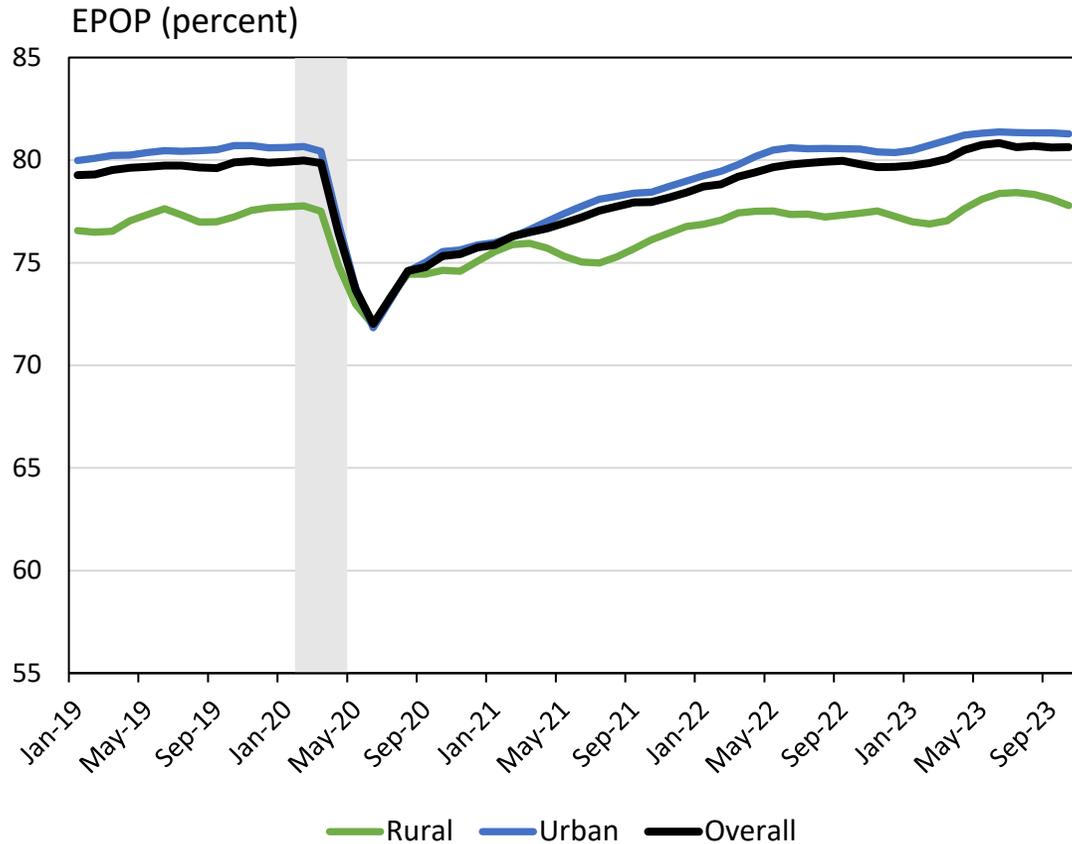
EPOP by Age



Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations; three-month moving averages.

Notes: Overall line uses prime-age (25-54) sample. Shaded region indicates the COVID-19 recession.

EPOP by Urban Status

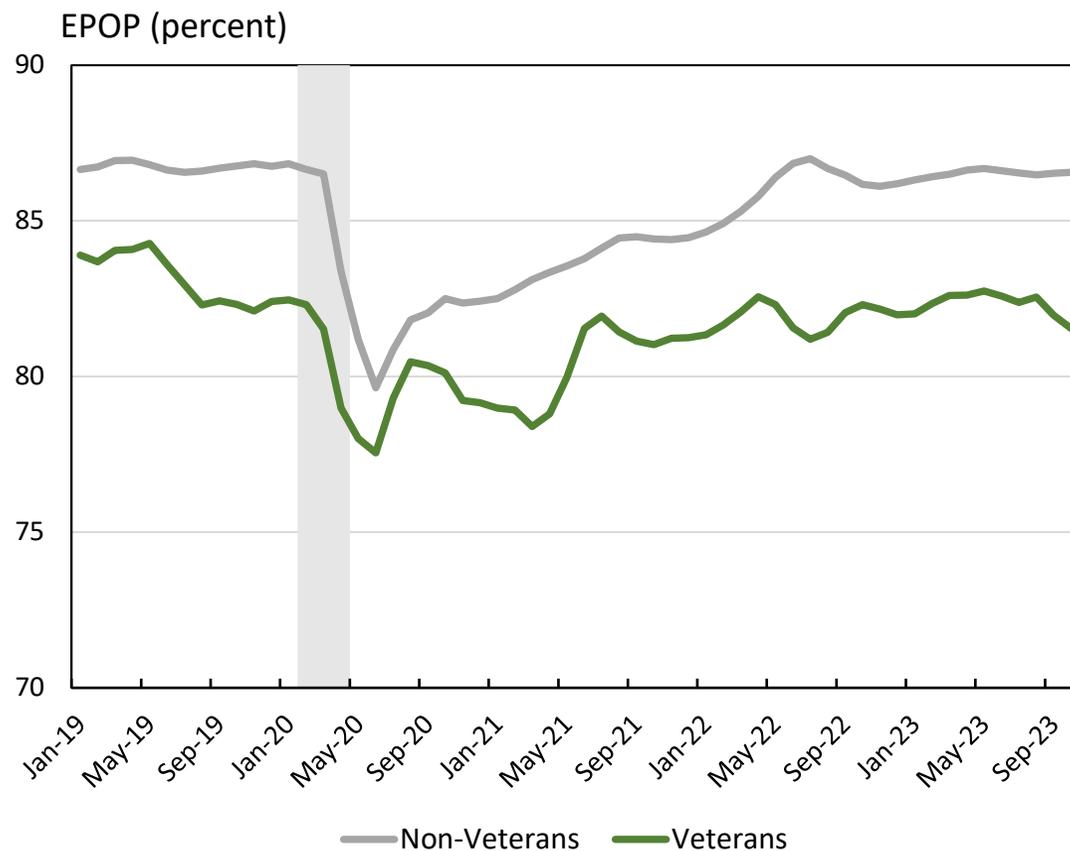


Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Restricted to prime-age individuals (25-54). Shaded region indicates the COVID-19 recession.

Rural employment gap defined as employment of urban workers relative to rural workers.

EPOP by Veteran Status



Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Restricted to men, 25-55, with at least a high school diploma. Shaded region indicates the COVID-19 recession.

EMPLOYMENT

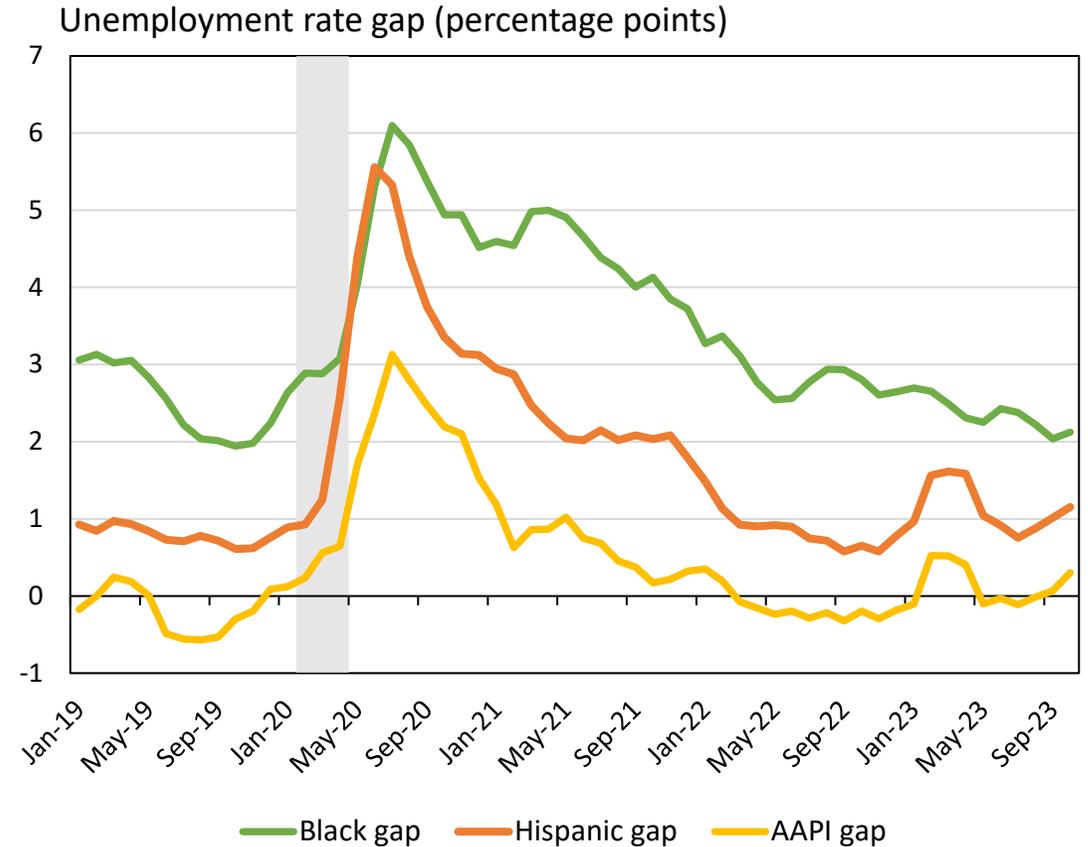
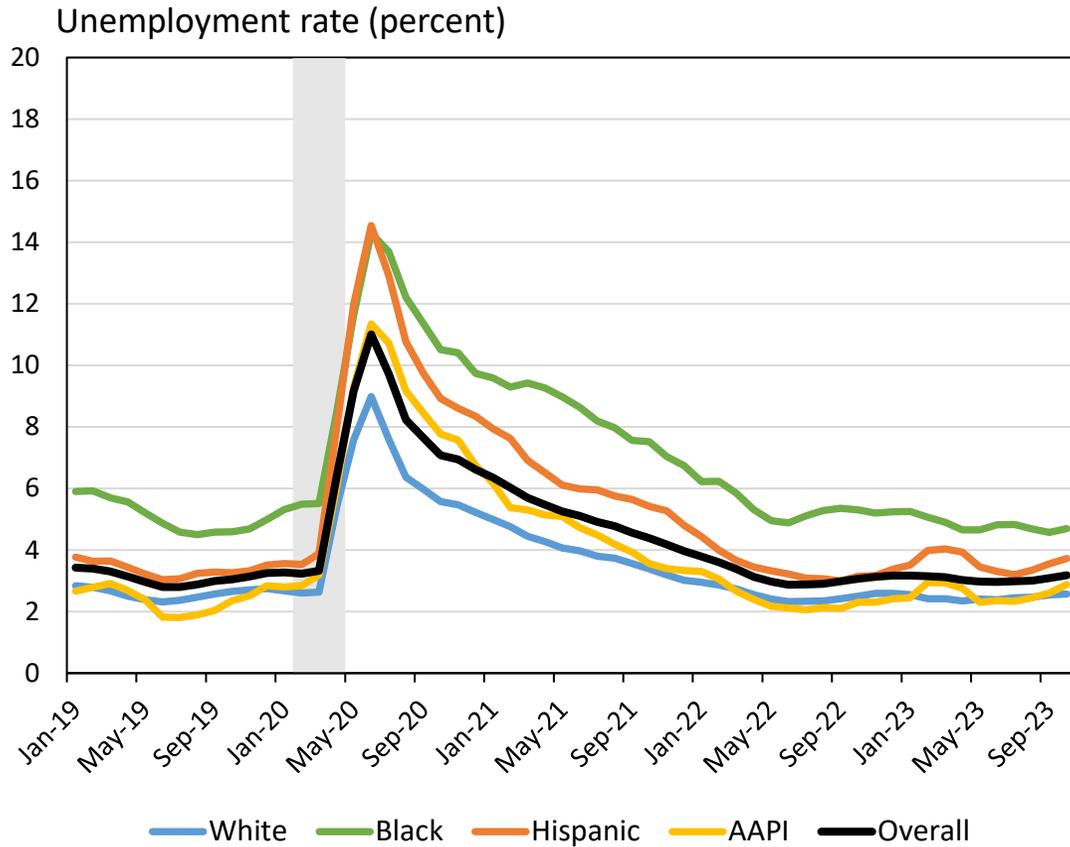
UNEMPLOYMENT | NATIONAL
UPDATED THROUGH OCT. 2023



Takeaways | Unemployment Rate

- Overall unemployment rose slightly in October 2023 to 3.18% after being on a gradual declining trend over the last three years.
- Demographic gaps in unemployment are close to their pre-pandemic levels, though the rate of their decline has slowed considerably. Black workers have an unemployment rate that is 2 percentage points higher than the national average, while Hispanic workers have an unemployment rate that is 1 percentage point higher than the national average.
- The college unemployment rate gap stabilized around two percentage points, down from a peak of over seven percentage points during the summer of 2020, and close to its pre-pandemic level.
- The gender unemployment gap has turned negative, as does the urban-rural employment gap (women and rural workers have lower unemployment than men and urban workers, respectively).

Unemployment Rate by Race/Ethnicity

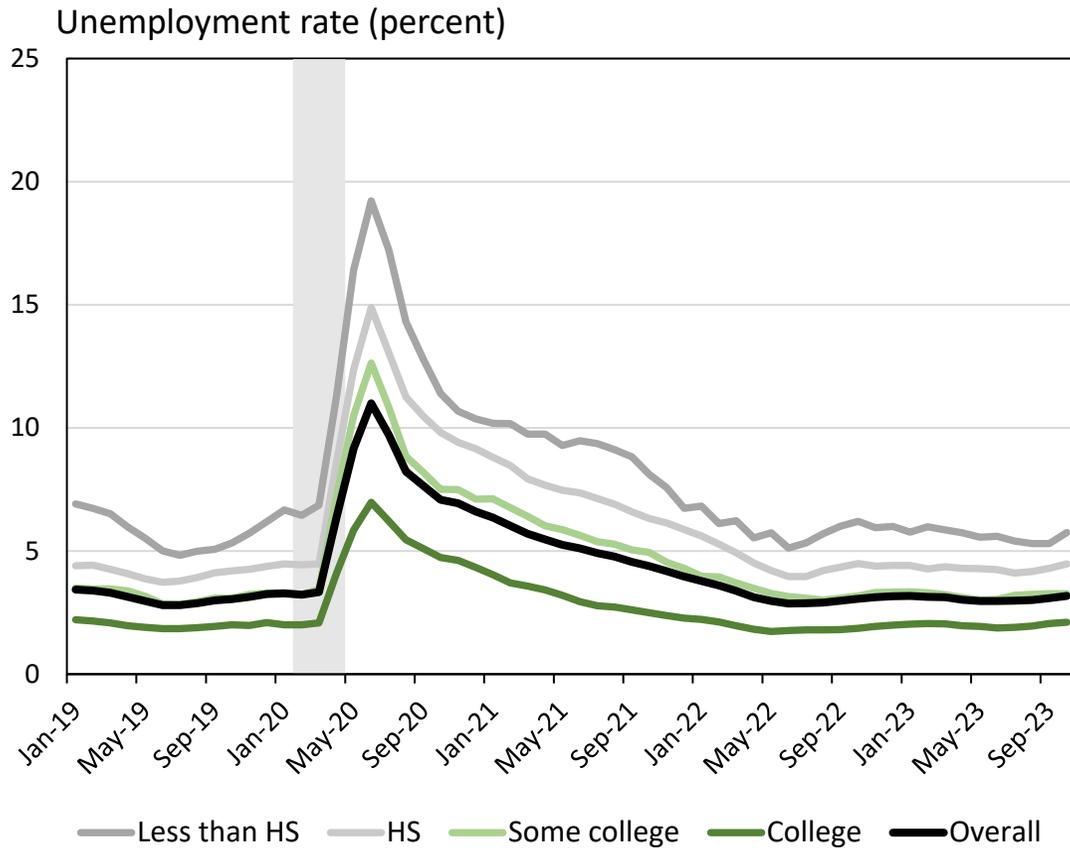


Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Restricted to prime-age individuals (25-54). Shaded region indicates the COVID-19 recession.

Unemployment gap defined relative to white unemployment.

Unemployment Rate by Education

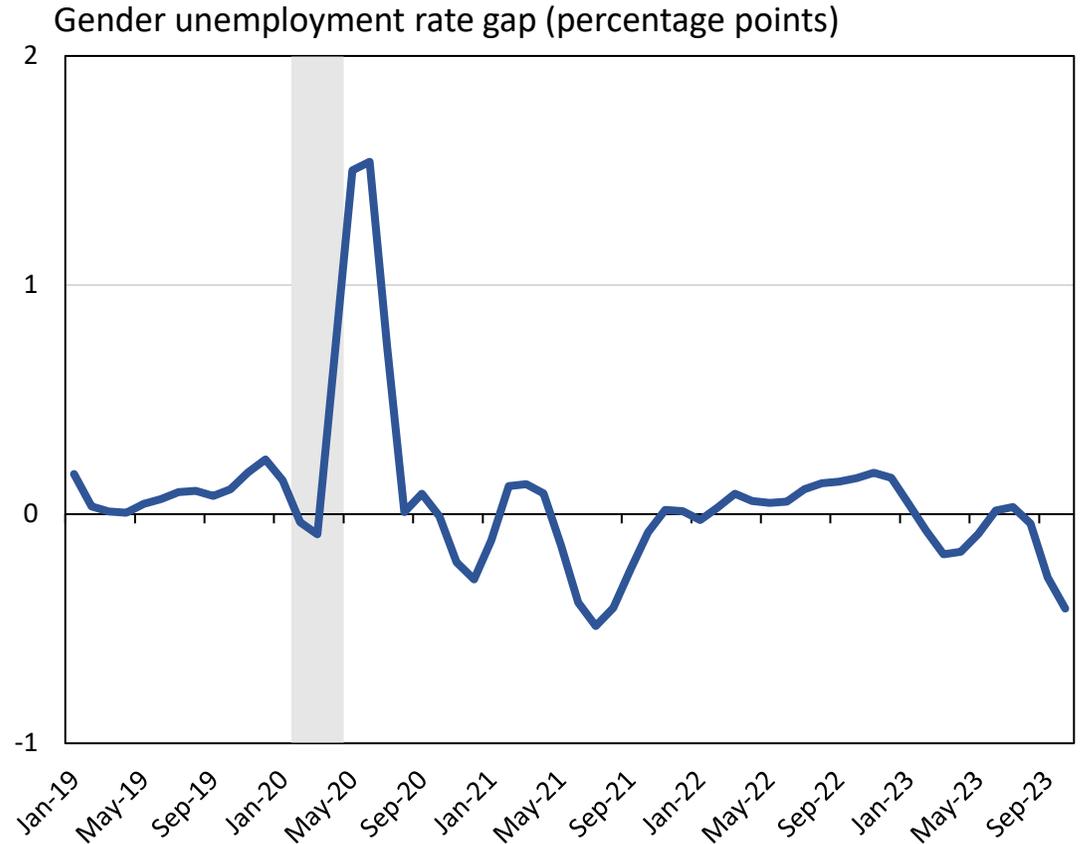
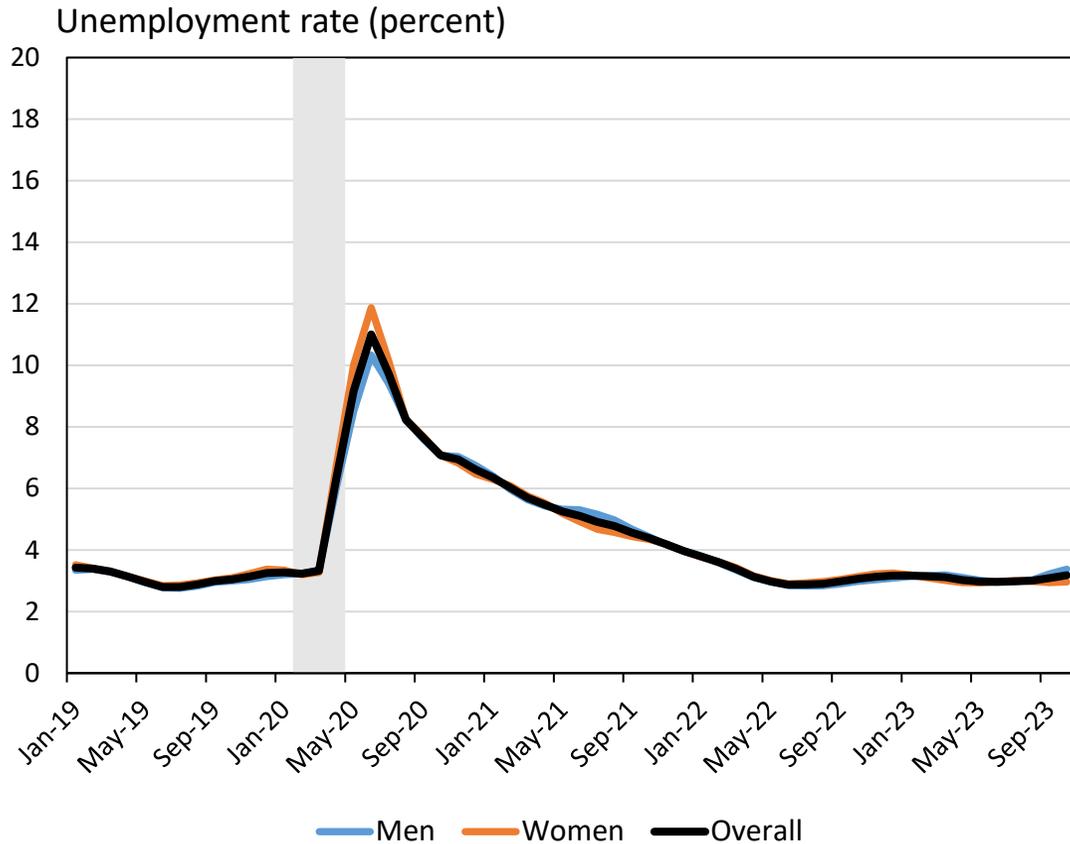


Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Restricted to prime-age individuals (25-54). Shaded region indicates the COVID-19 recession.

College unemployment gap defined as unemployment of non-college graduates relative to graduates.

Unemployment Rate by Gender

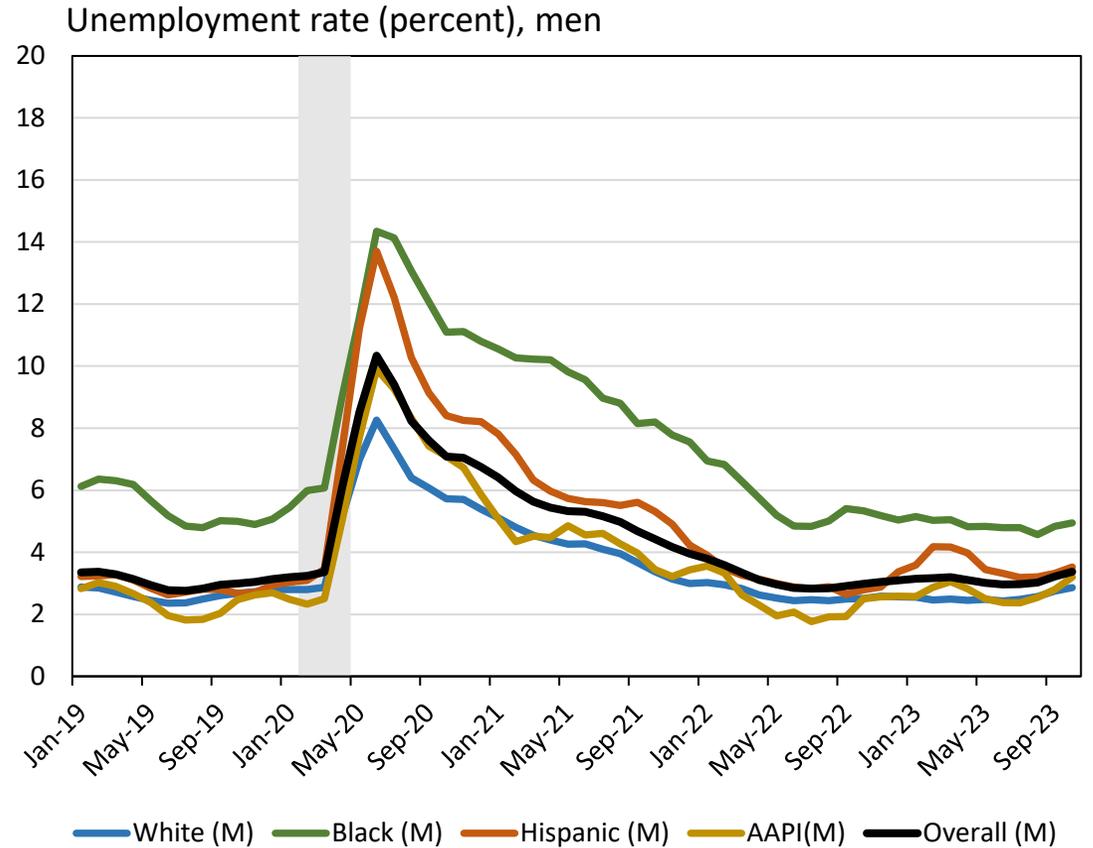
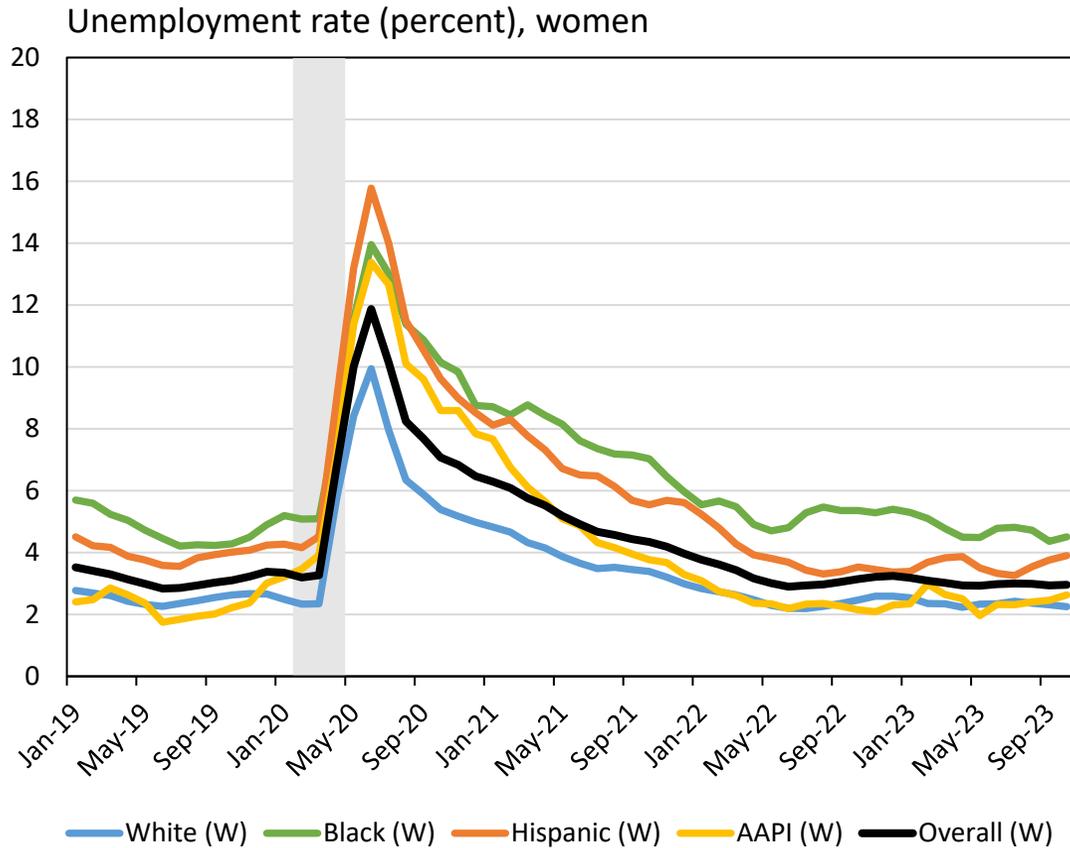


Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Restricted to prime-age individuals (25-54). Shaded region indicates the COVID-19 recession.

Gender employment gap defined as unemployment of women relative to men.

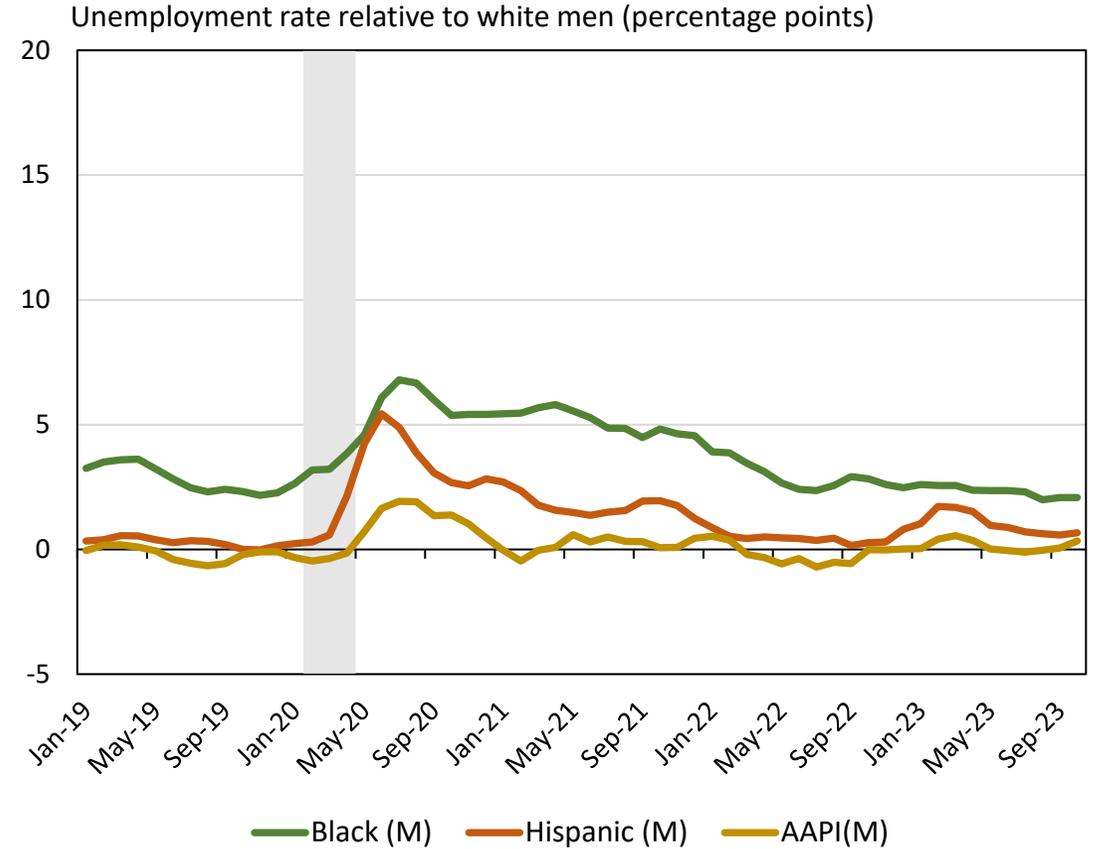
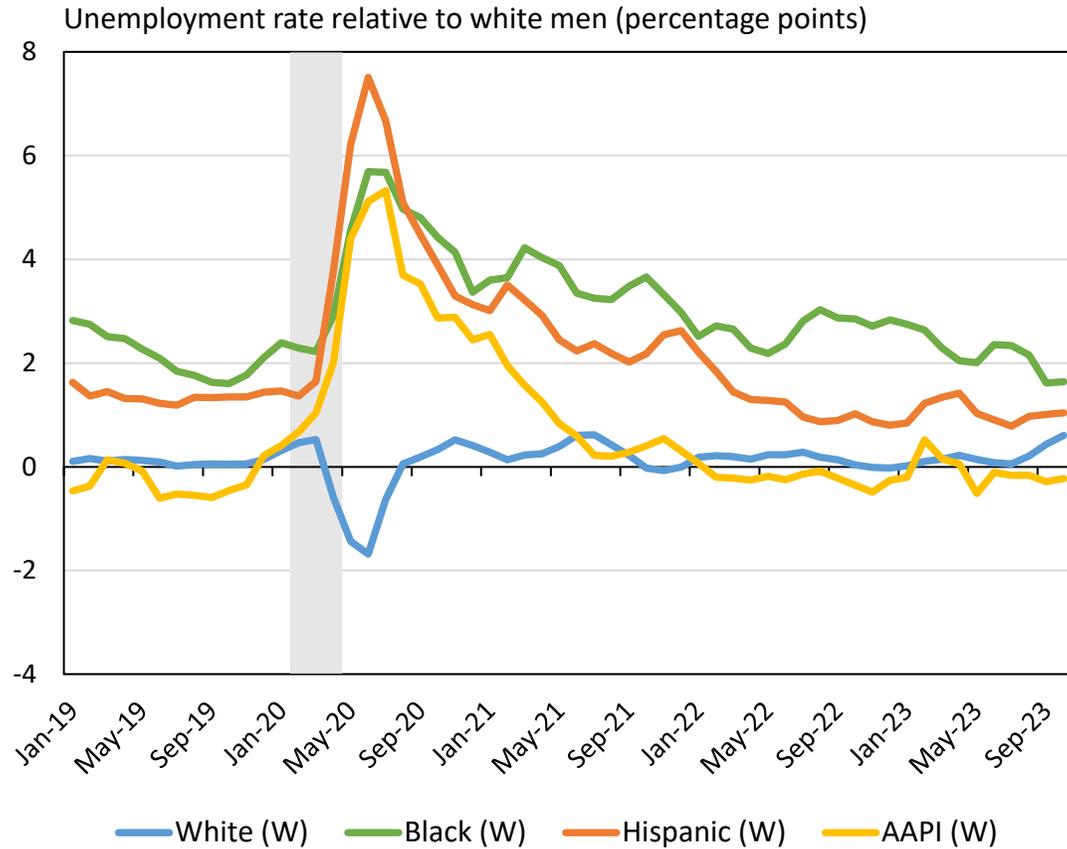
Unemployment Rate by Race x Gender



Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Restricted to prime-age individuals (25-54). Shaded region indicates the COVID-19 recession.

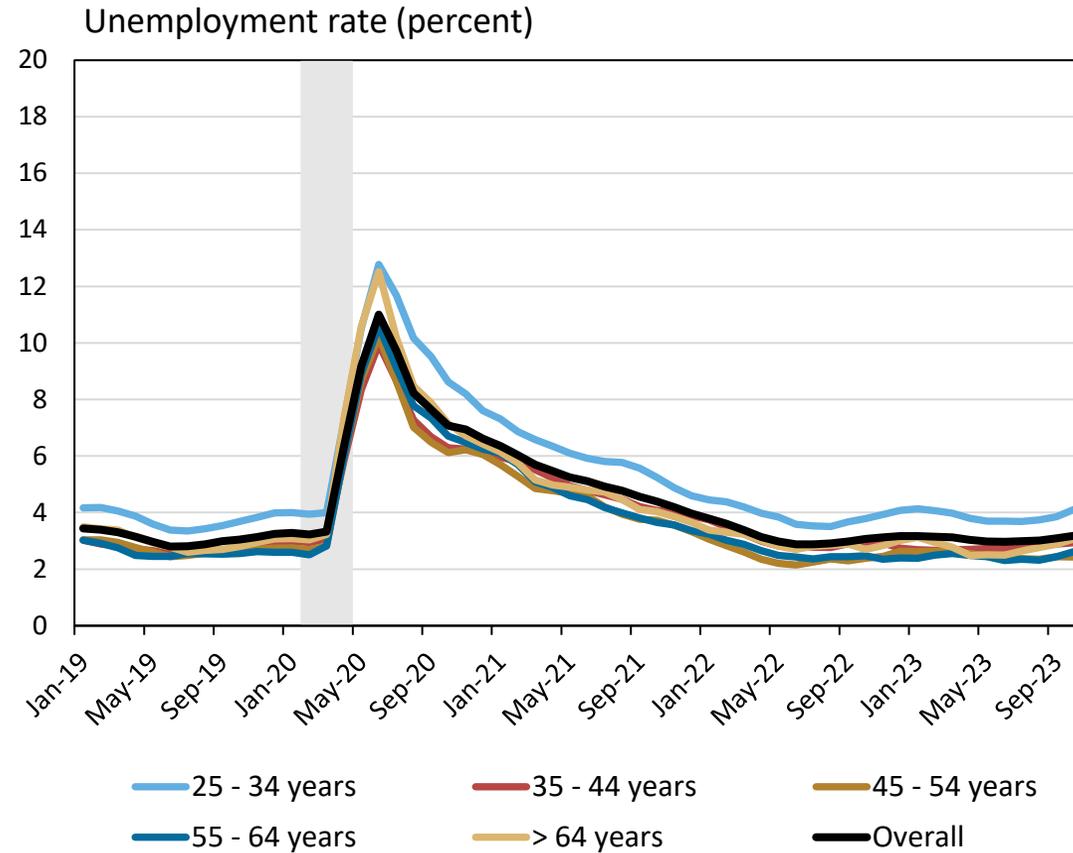
Unemployment Rate Gaps by Race x Gender



Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Restricted to prime-age individuals (25-54). Shaded region indicates the COVID-19 recession.

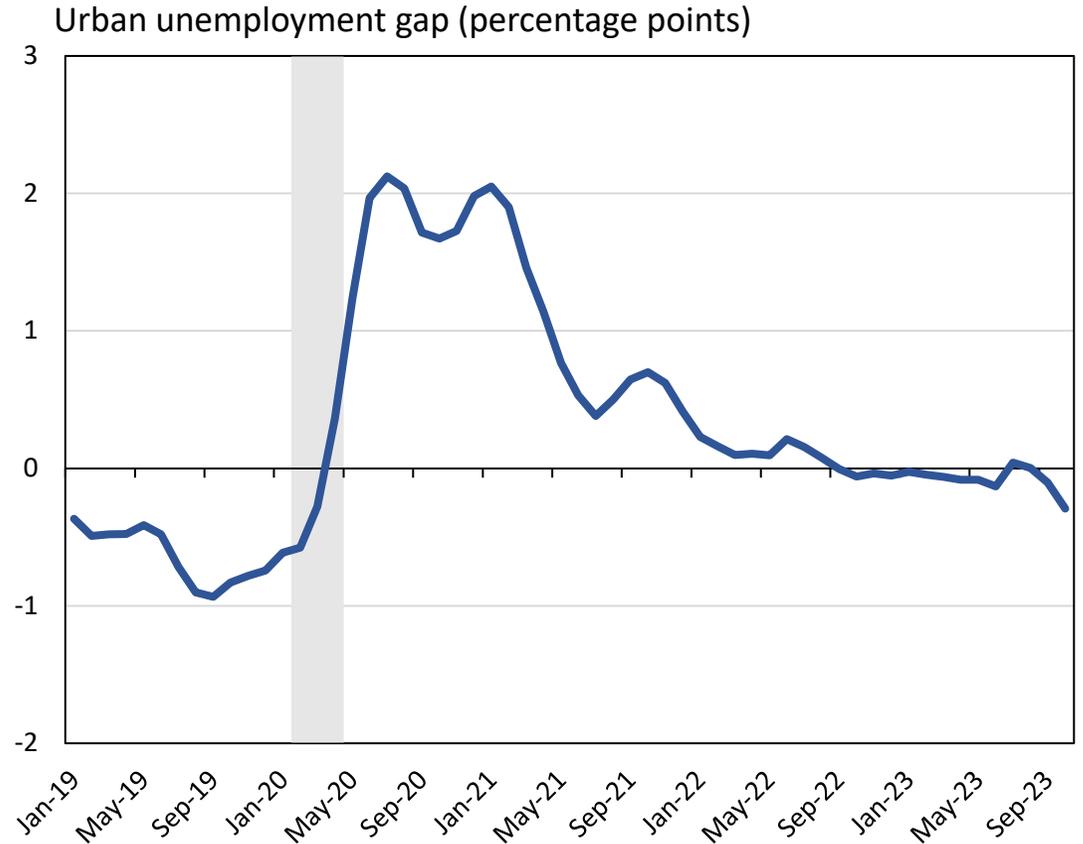
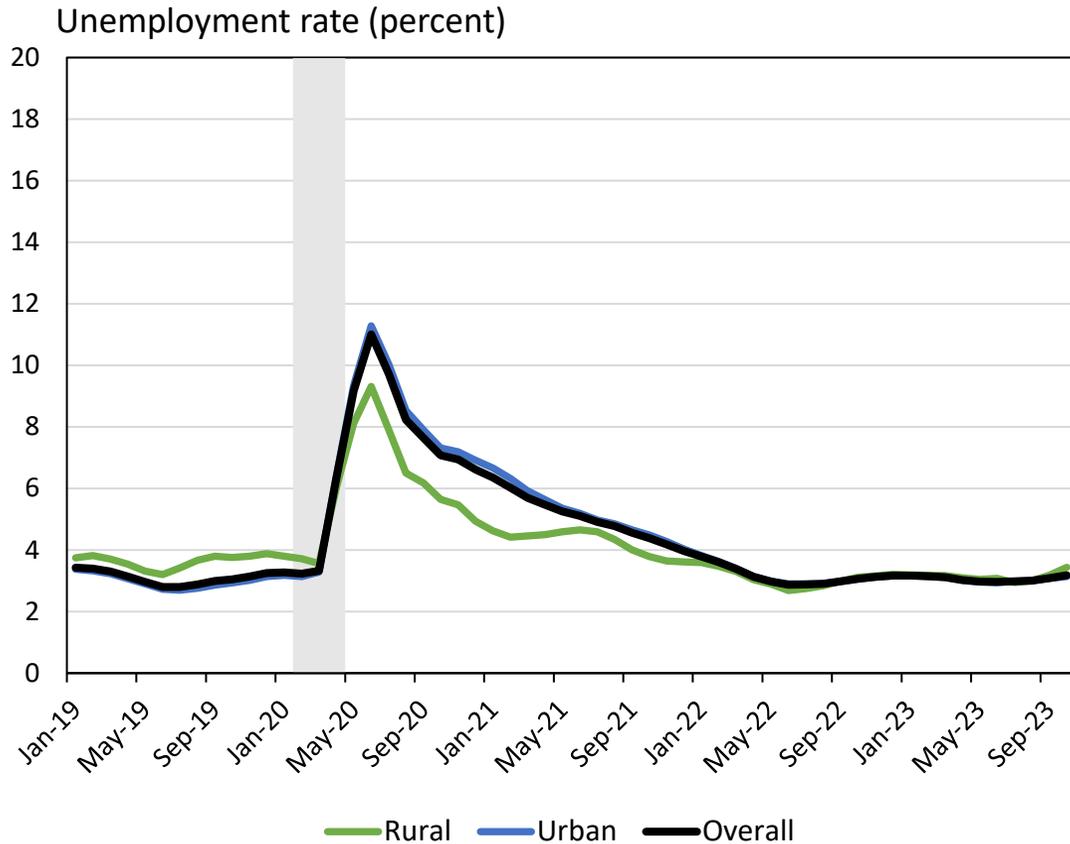
Unemployment Rate by Age



Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Overall line uses prime-age (25-54) sample. Shaded region indicates the COVID-19 recession.

Unemployment Rate by Urban Status

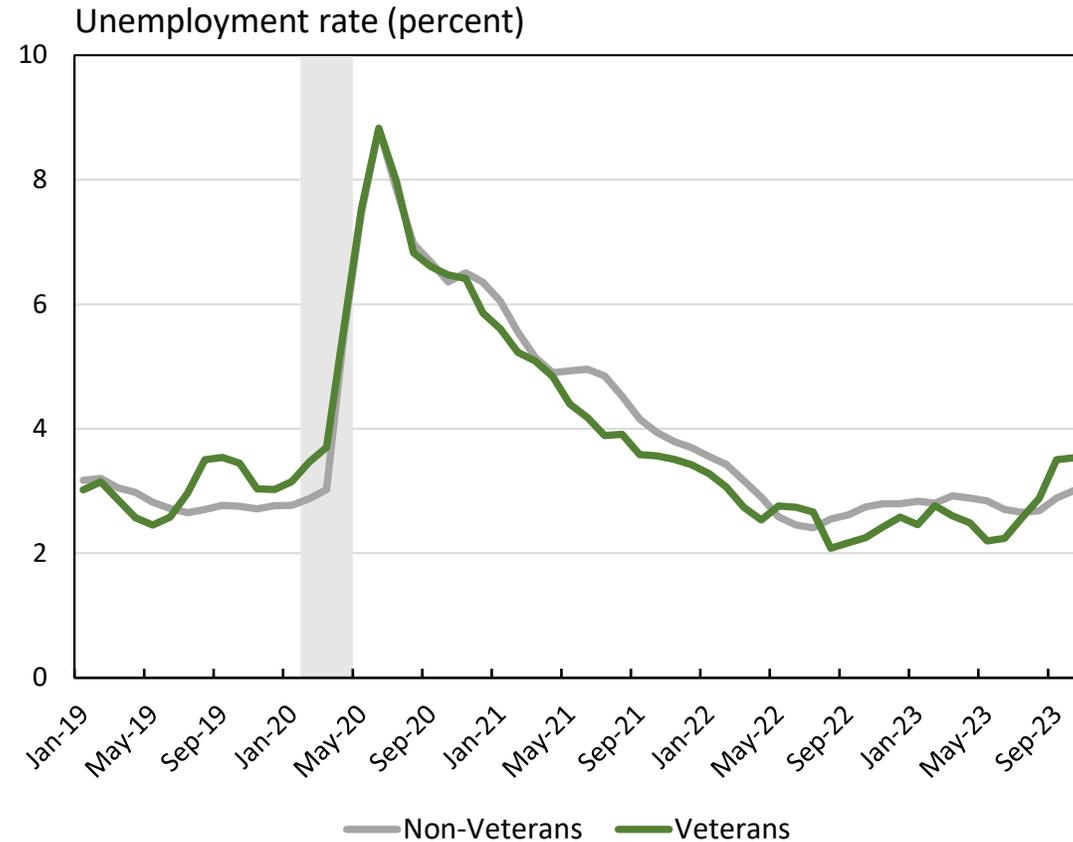


Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Restricted to prime-age individuals (25-54). Shaded region indicates the COVID-19 recession.

Urban unemployment gap defined as unemployment of urban workers relative to rural workers.

Unemployment Rate by Veteran Status



Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Restricted to men, 25-55, with at least a high school diploma. Shaded region indicates the COVID-19 recession.

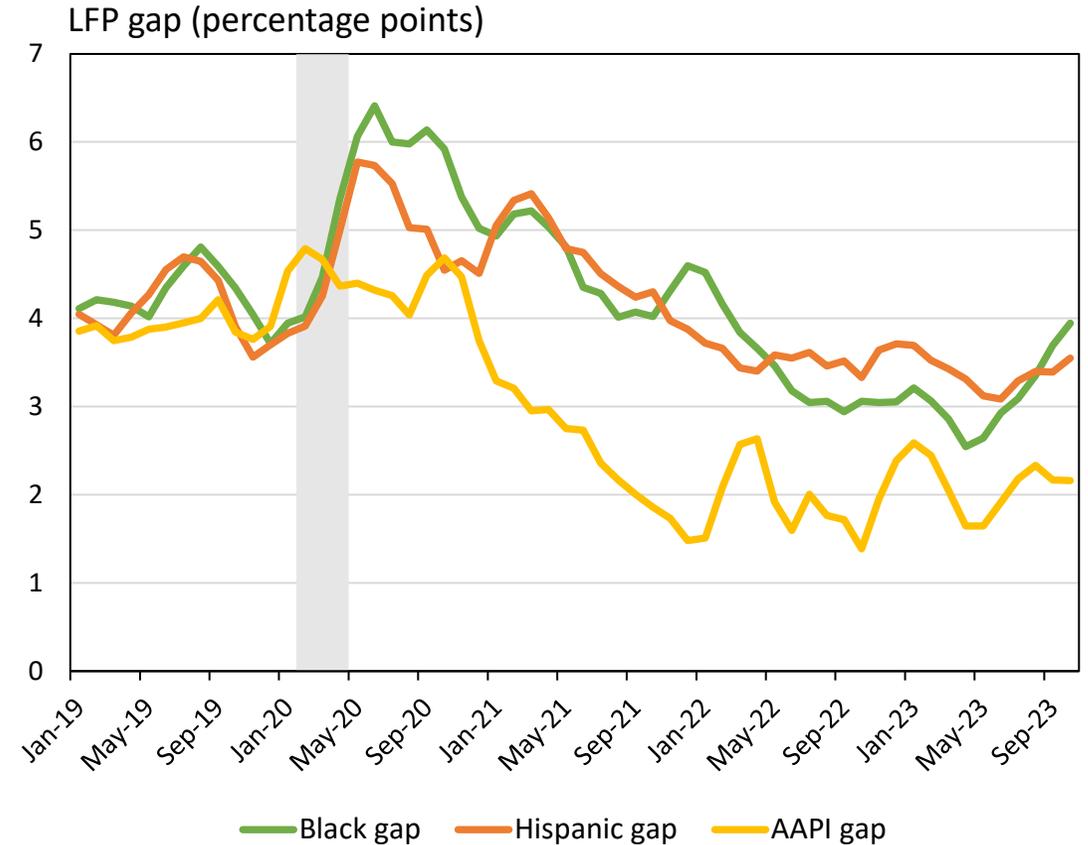
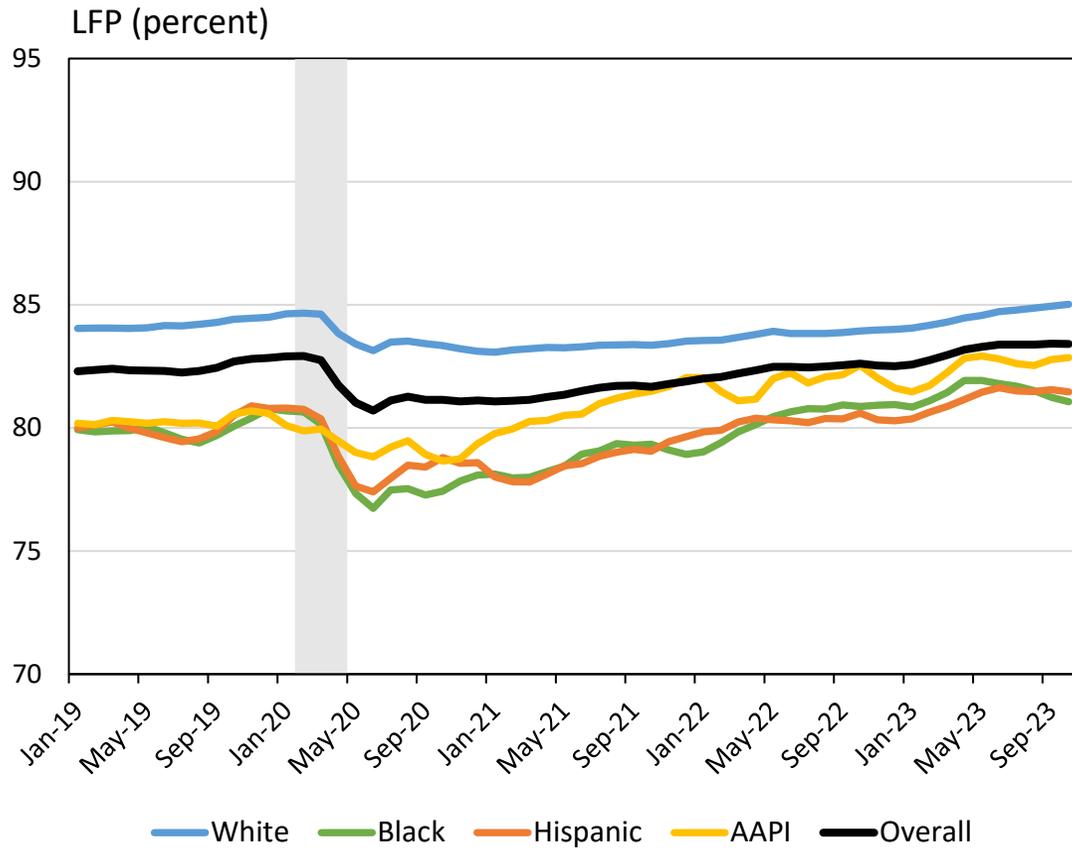
EMPLOYMENT

LABOR FORCE PARTICIPATION | NATIONAL
UPDATED THROUGH OCT. 2023

Takeaways | Labor Force Participation

- Overall LFP is higher in October 2023 (83.4%) than in October 2019 (82.6%) but has essentially stopped increasing.
- The LFP gap for Black workers has fallen substantially from its heights during the pandemic but has recently risen from 2.5 percentage points in July 2023 to 4 percentage points in October 2023. The LFP gap for Hispanic workers has experienced a similar but smaller increase.
- The college LFP gap continues to hover around 10-12%, although participation for those who did not complete high school has fallen slightly from June.
- The gender LFP gap continues to fall, remaining below 12 percentage points since January. However, the urban-rural gap has been generally increasing over the same time span.
- Similar to employment trends, both AAPI and Hispanic men have had higher LFP than white men over the last few months. The LFP gap for Black men continues to stay above 5 percentage points.

Labor Force Participation by Race/Ethnicity

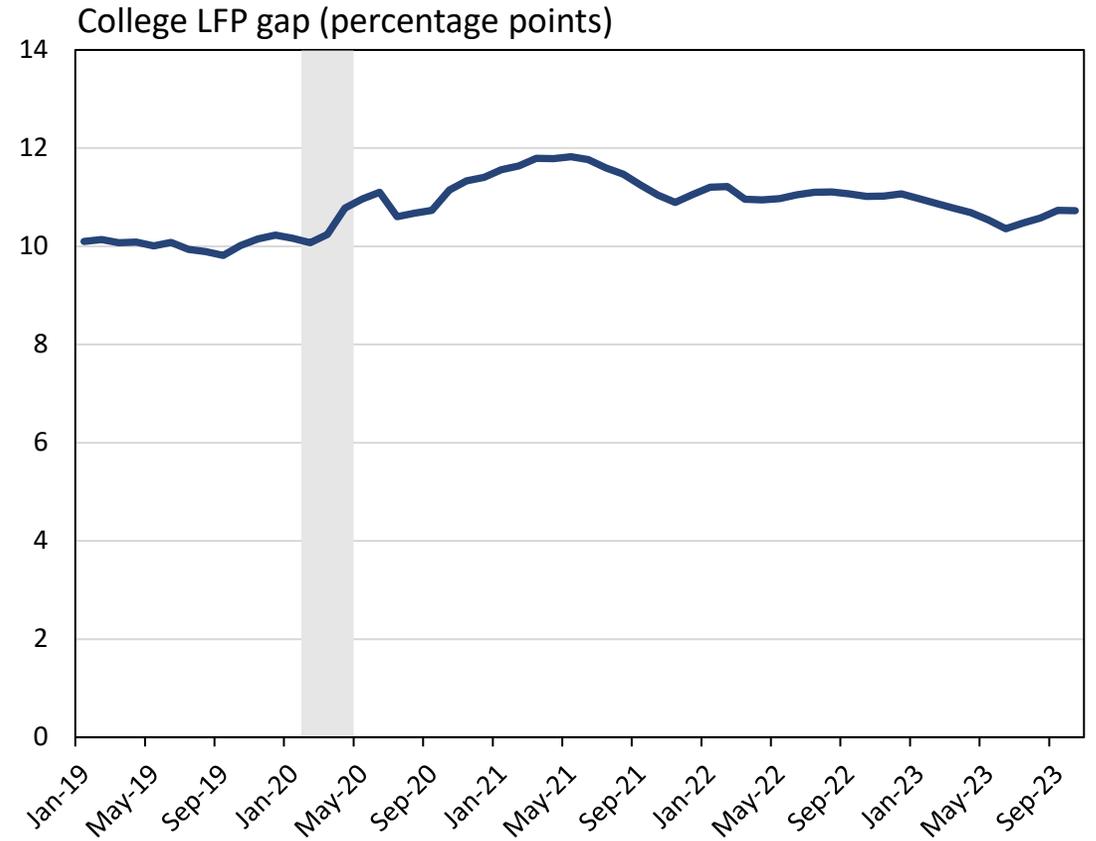
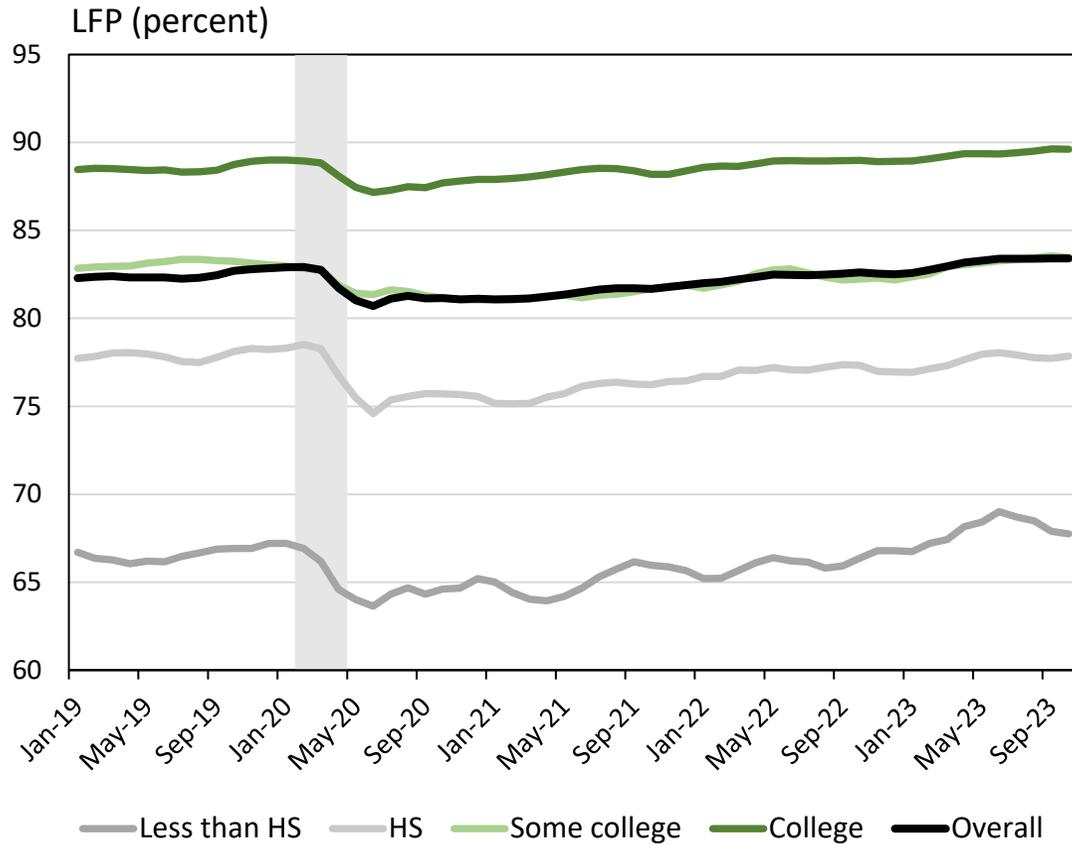


Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Restricted to prime-age individuals (25-54). Shaded region indicates the COVID-19 recession.

LFP gap defined relative to white LFP.

Labor Force Participation by Education

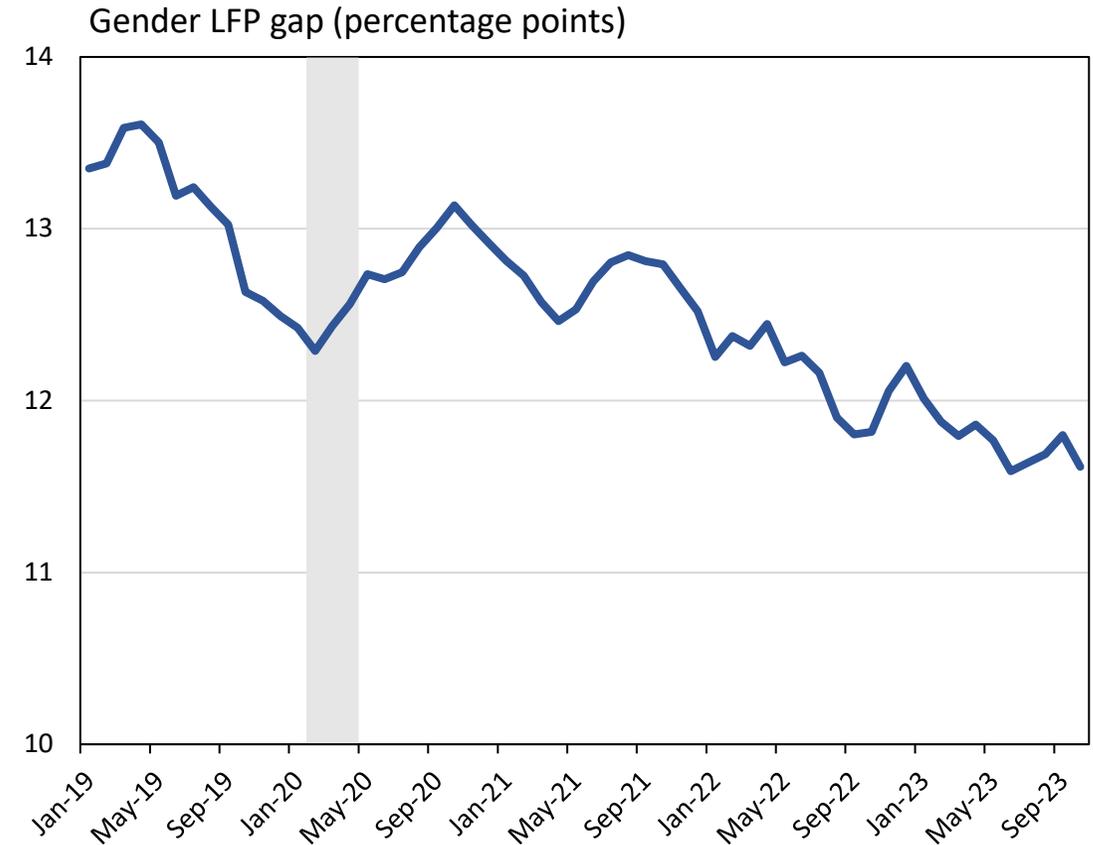
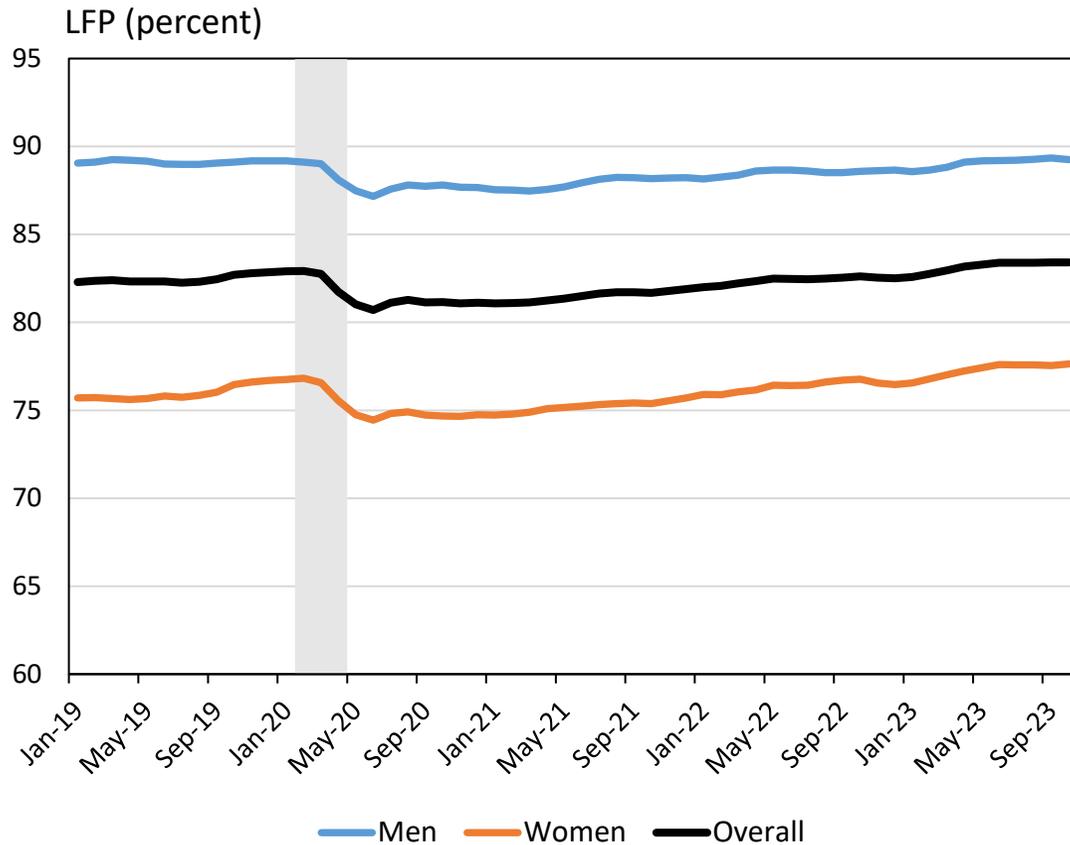


Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Restricted to prime-age individuals (25-54). Shaded region indicates the COVID-19 recession.

College LFP gap defined as LFP of college graduates relative to non-graduates.

Labor Force Participation by Gender

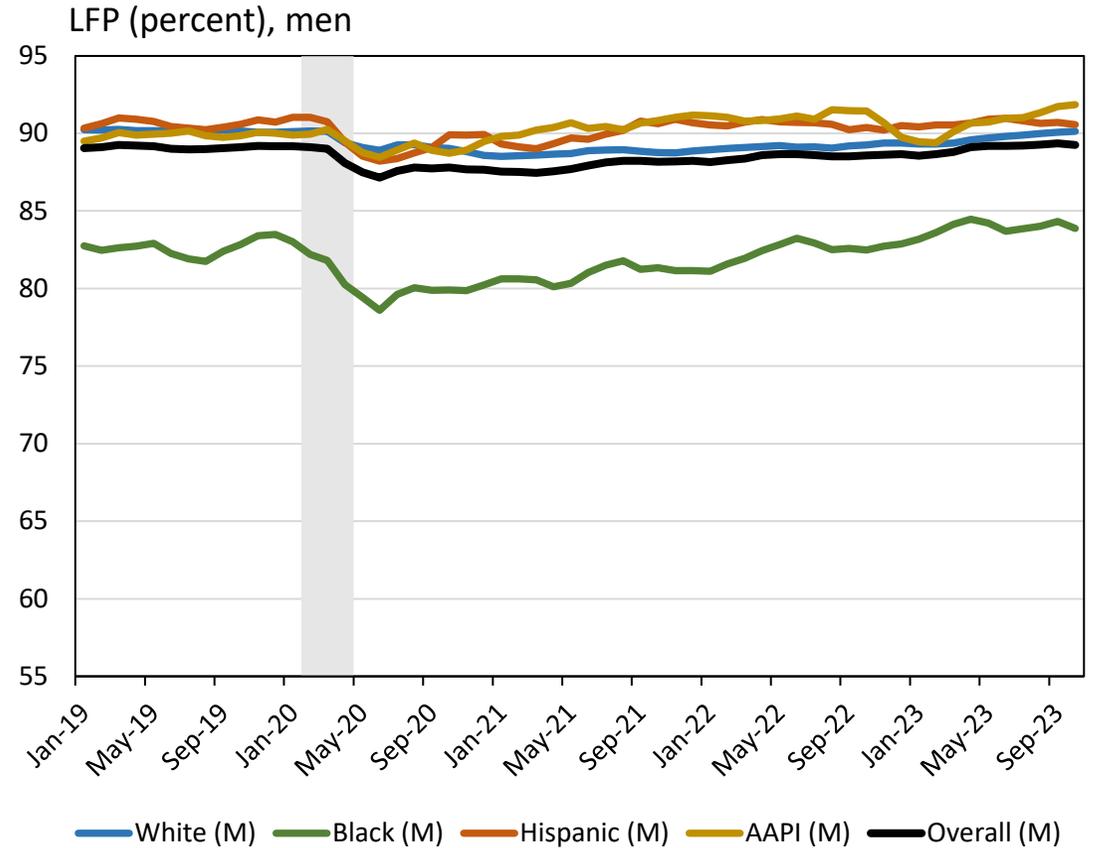
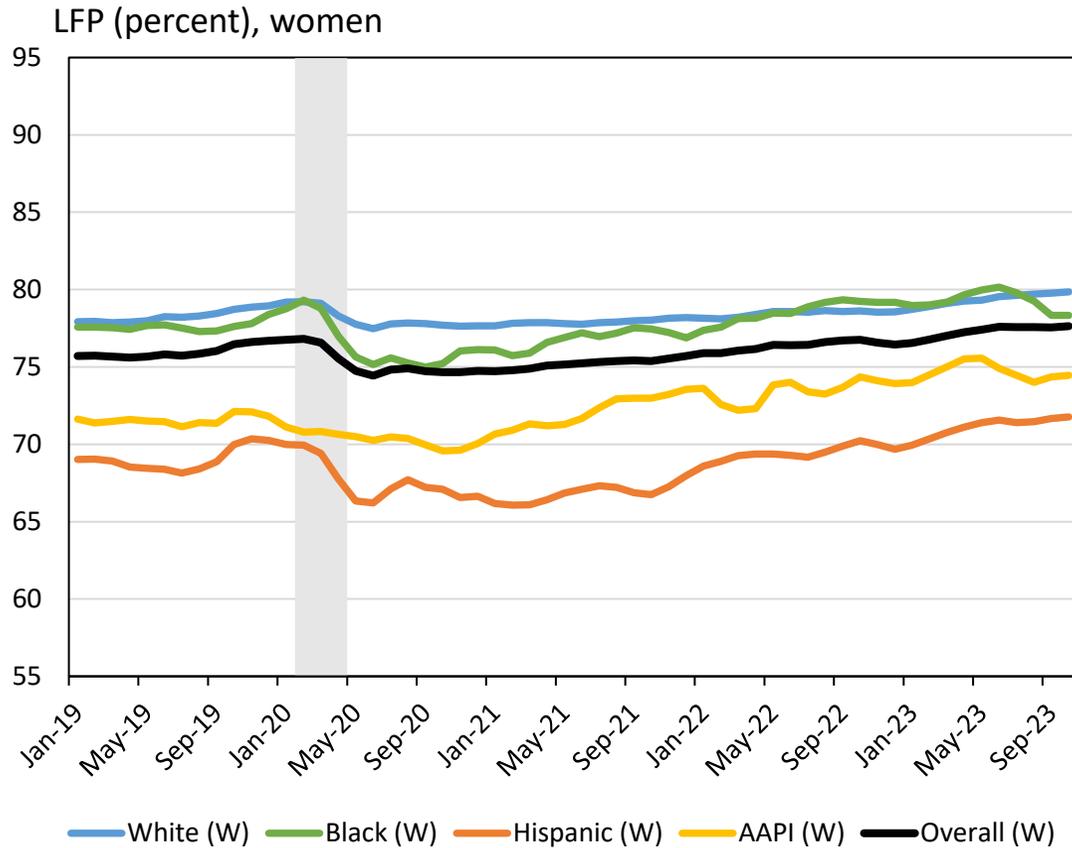


Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Restricted to prime-age individuals (25-54). Shaded region indicates the COVID-19 recession.

Gender LFP gap defined as LFP of men relative to women.

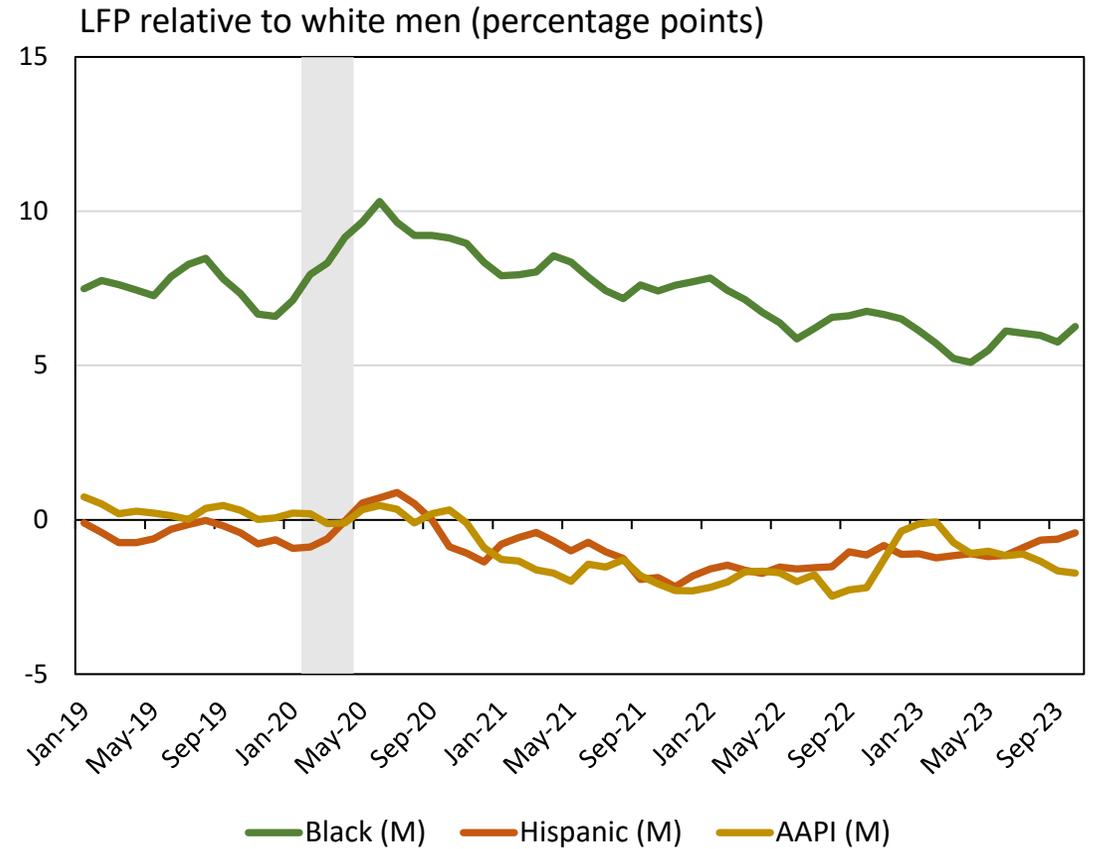
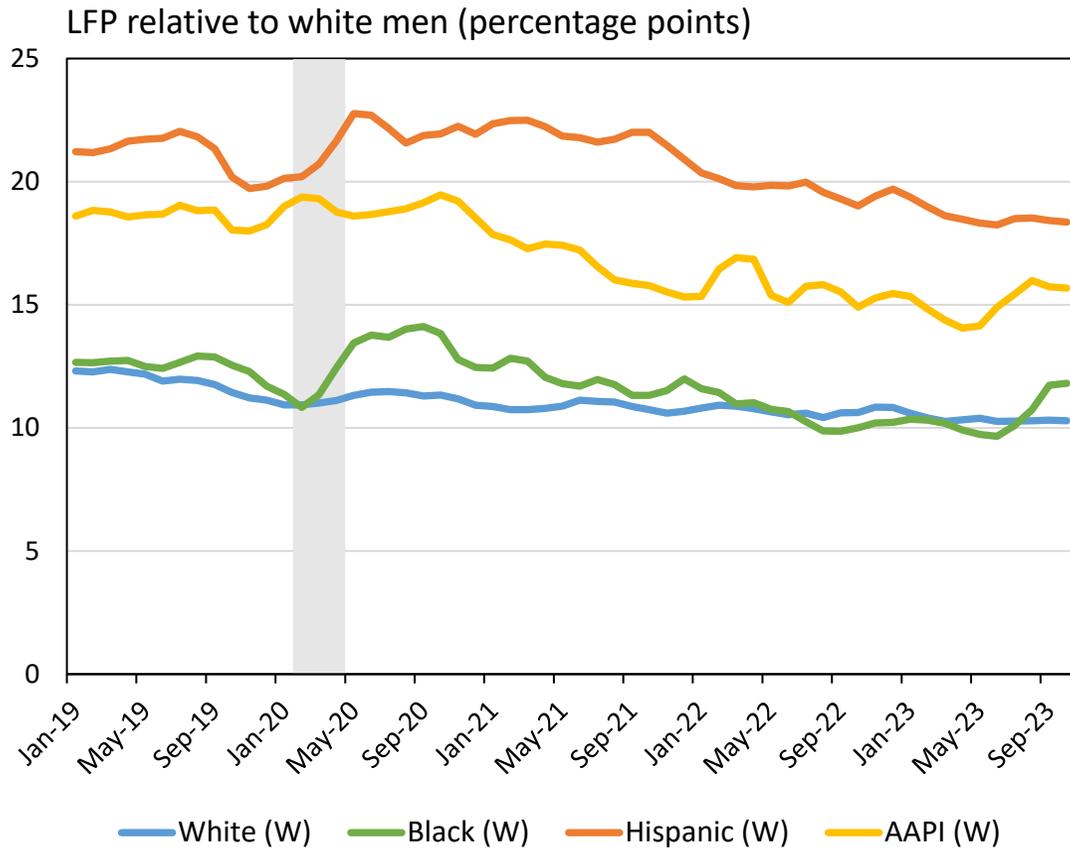
Labor Force Participation by Race x Gender



Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Restricted to prime-age individuals (25-54). Shaded region indicates the COVID-19 recession.

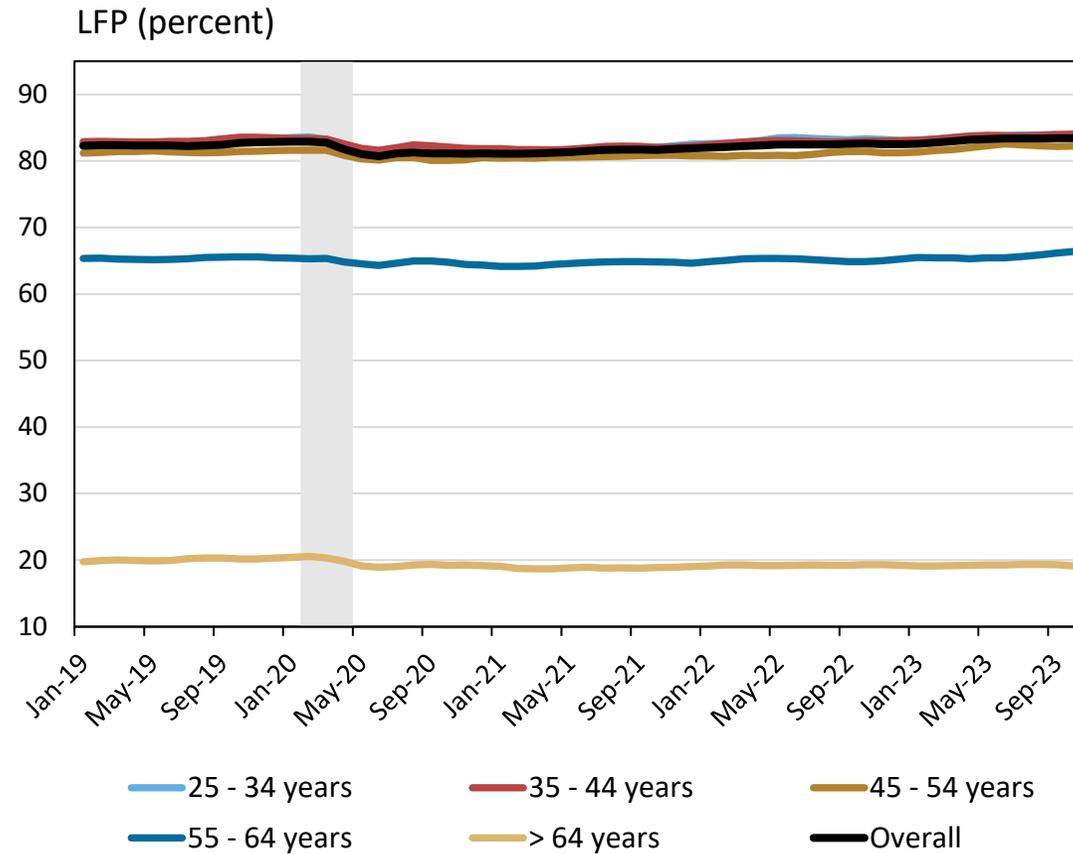
Labor Force Participation Gaps by Race x Gender



Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Restricted to prime-age individuals (25-54). Shaded region indicates the COVID-19 recession.

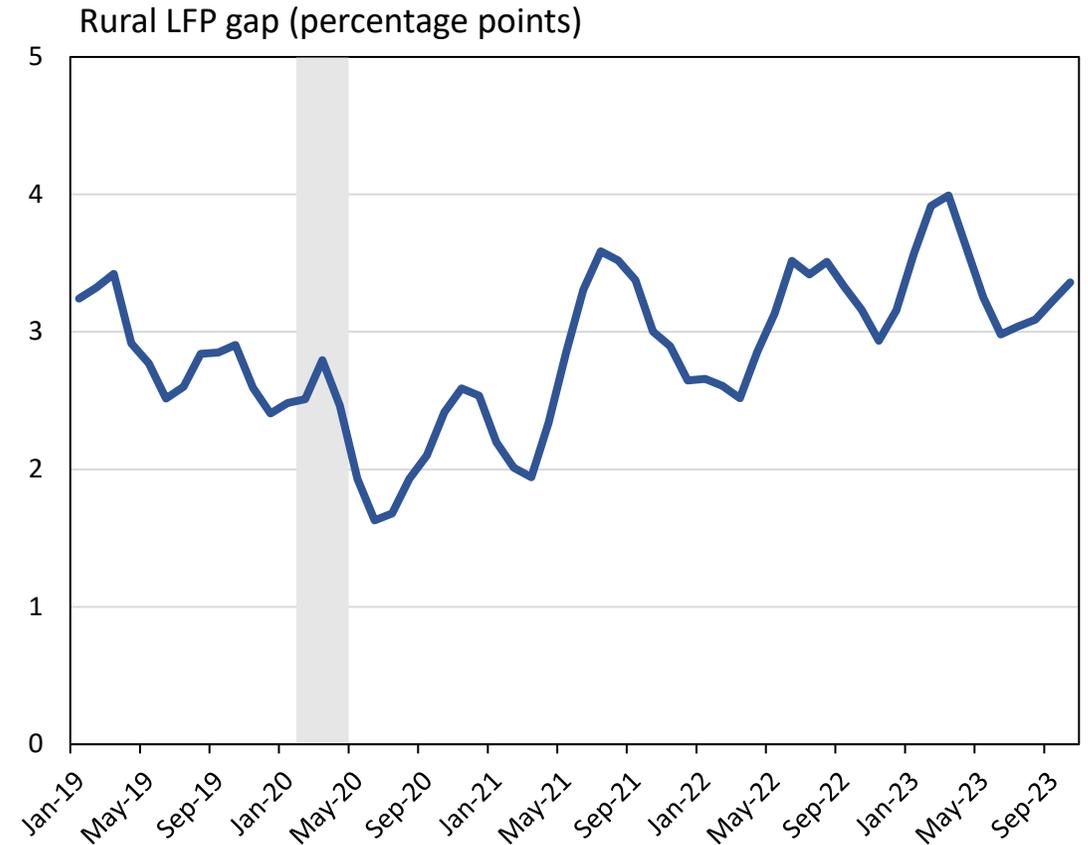
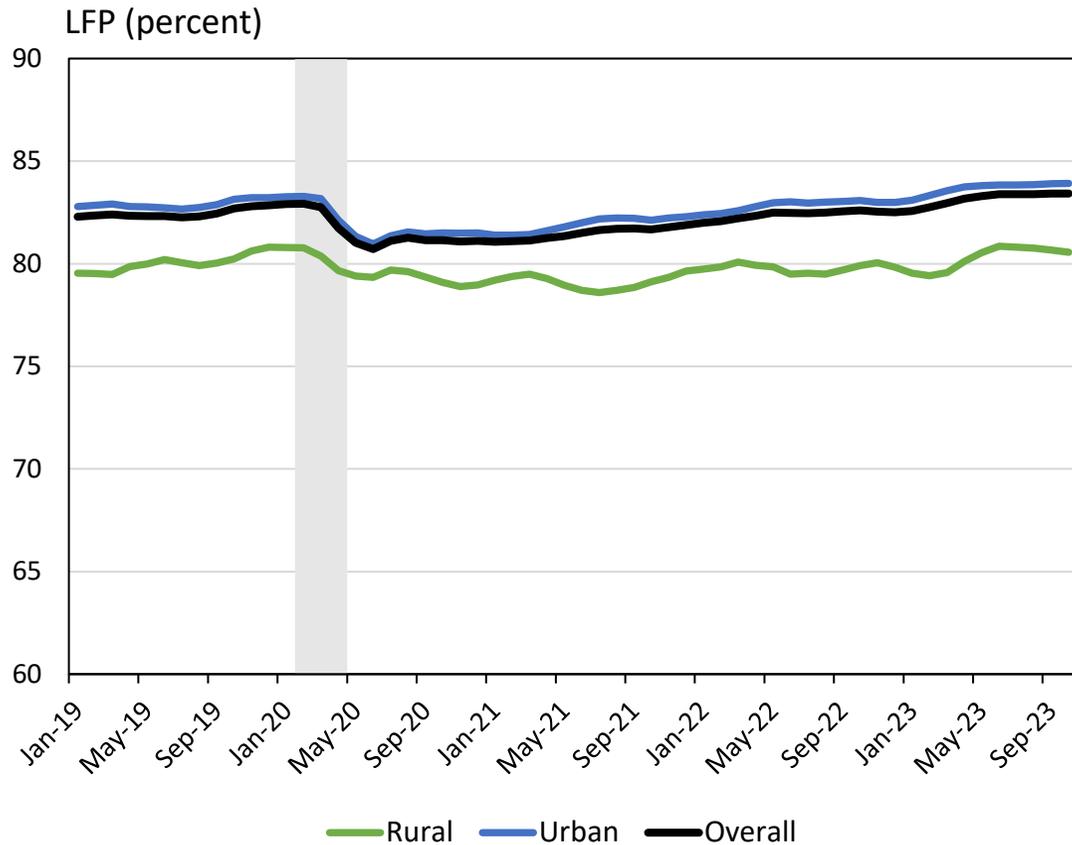
Labor Force Participation by Age



Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Overall line uses prime-age (25-54) sample. Shaded region indicates the COVID-19 recession.

Labor Force Participation by Urban Status

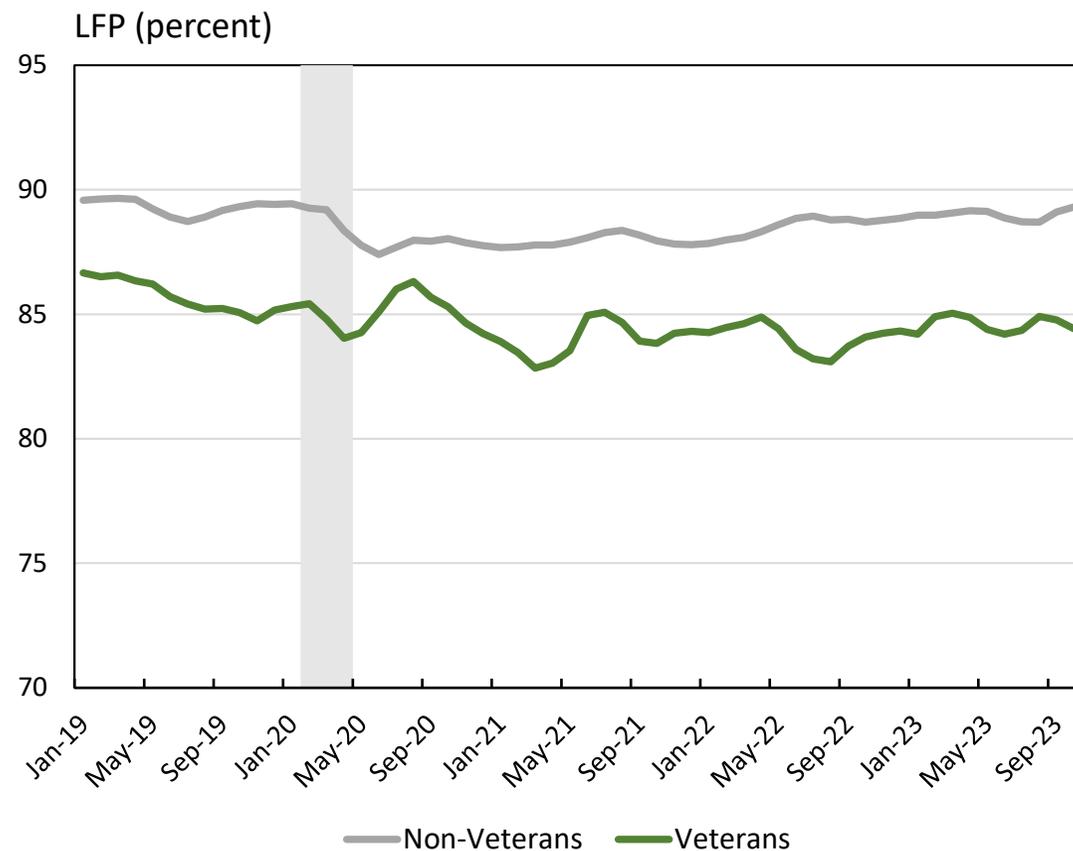


Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Restricted to prime-age individuals (25-54). Shaded region indicates the COVID-19 recession.

Rural LFP gap defined as LFP of urban workers relative to rural workers.

Labor Force Participation by Veteran Status



Sources: U.S. Census Bureau/BLS - Current Population Survey microdata; authors' calculations, three-month moving averages.

Notes: Restricted to men, 25-55, with at least a high school diploma. Shaded region indicates the COVID-19 recession.

CONSUMER SPENDING

UPDATED THROUGH OCT. 2023 | NATIONAL

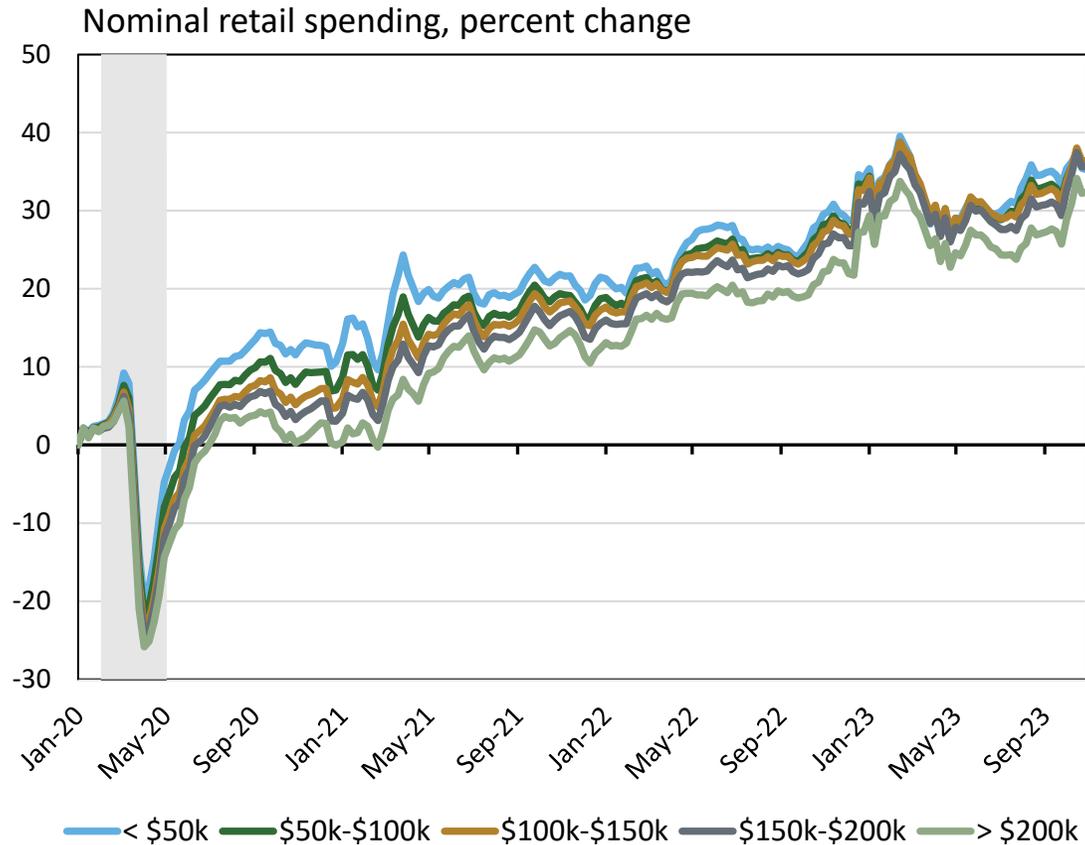
Takeaways | Consumer Spending

- Overall retail spending has risen sharply in the last few months, despite declining in the last week of October, and is currently more than 15% above its level in January 2020 in real terms.
- The lower income, the less educated, and the young (25-34) experienced a significantly faster recovery in spending since the pandemic. Spending recovery among the young and less educated is weakening, with the middle-aged (ages 35-44) having higher cumulative spending growth than the young in October 2023 for retail, gas, and restaurants.
- Consumer spending trends have appeared to converge across income groups, maintained previous gaps across educational attainment, and have diverged between consumers aged 55+ and all others.
- Spending of the young (25-34 years) has flatlined or faltered since late July.
- Retail spending between majority-Black or Hispanic and other counties has begun to diverge during summer 2023, with majority-Black or Hispanic counties increasing their spending faster.

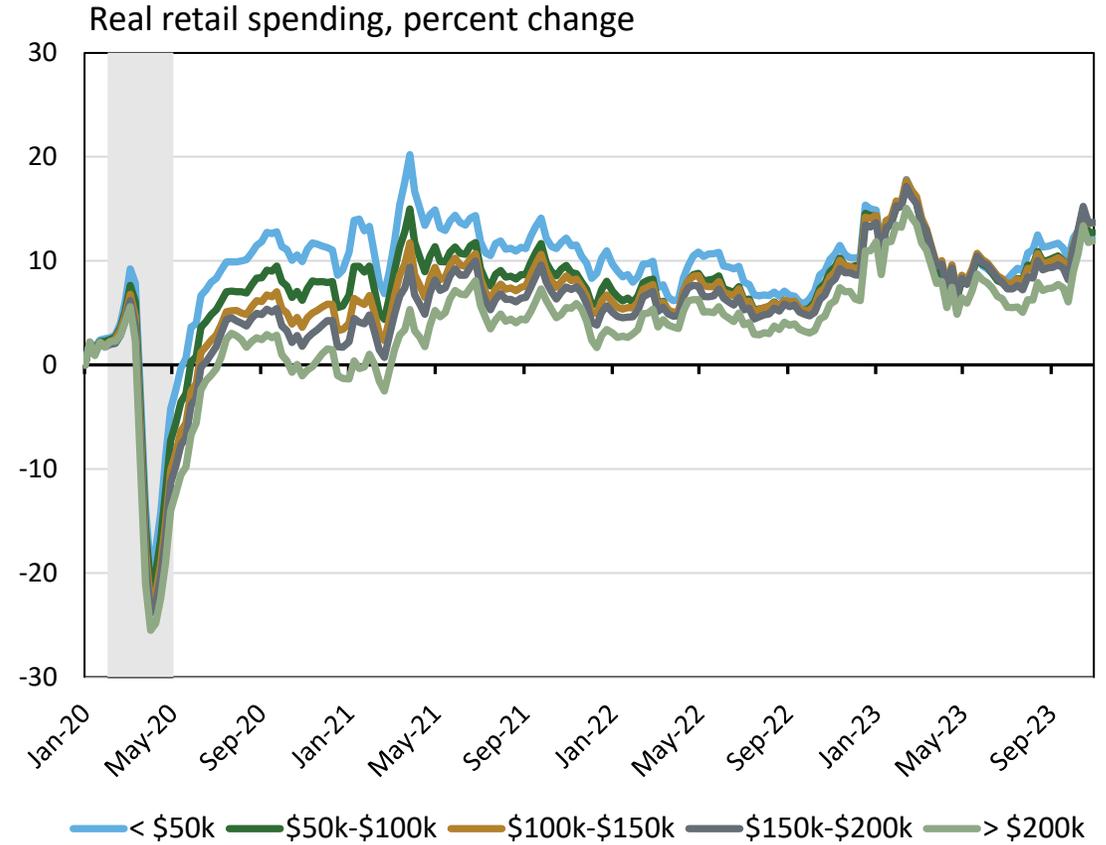
Data & Methods

- We leverage a permissioned panel of around 40 million U.S. households' debit and credit card spending from Commerce Signals, a TransUnion company.
- Commerce Signals data correlate well with U.S. Census Bureau data in measuring aggregate trends in retail, restaurants, and gas station spending, but is released at high frequency (weekly).
- Data are seasonally adjusted by first considering a week in the year and dividing over the 52-week moving average centered at that week. The mean of these ratios across years is used as that week's denominator for seasonal adjustment.
- Real consumer spending trends use the demographic inflation price indexes from the Inflation section when possible. For county demographic spending (besides urban vs. rural), regional price indexes are used.

Retail Spending by Income

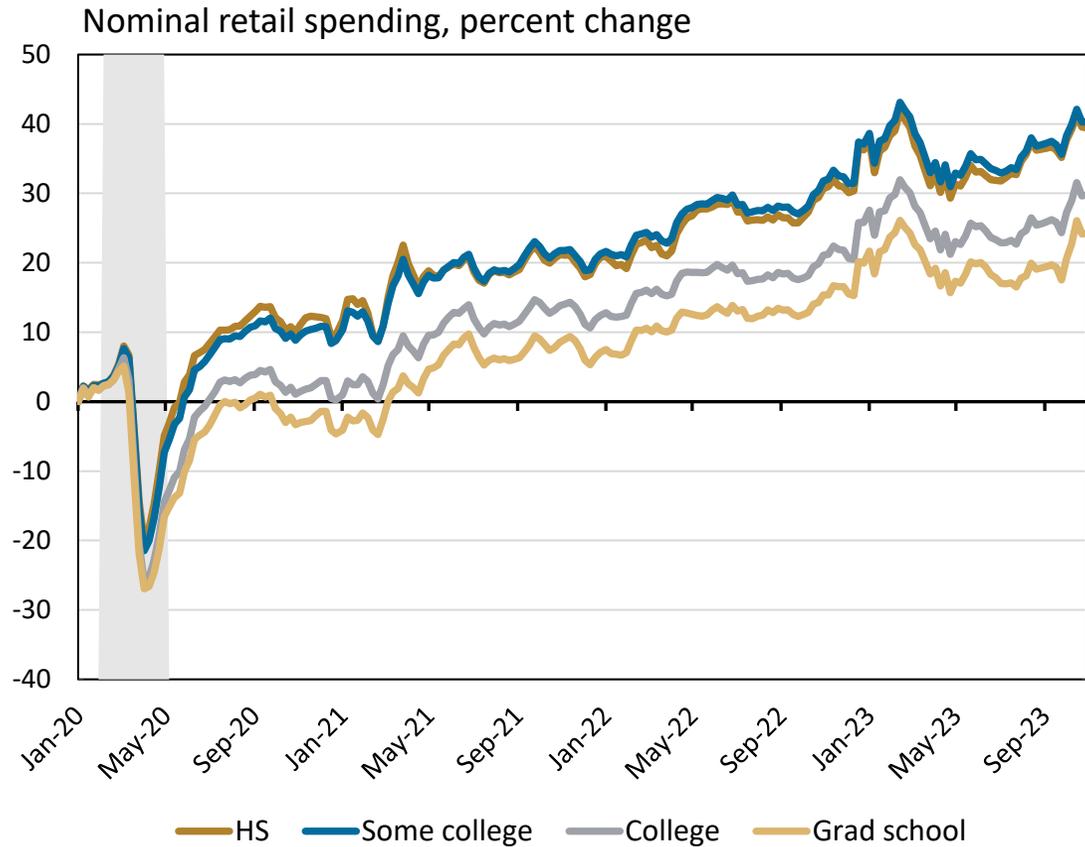


Source: Commerce Signals – Three-week moving averages.
 Notes: Real spending uses corresponding demographic prices, indexed to January 2020. Shaded region indicates the COVID-19 recession.

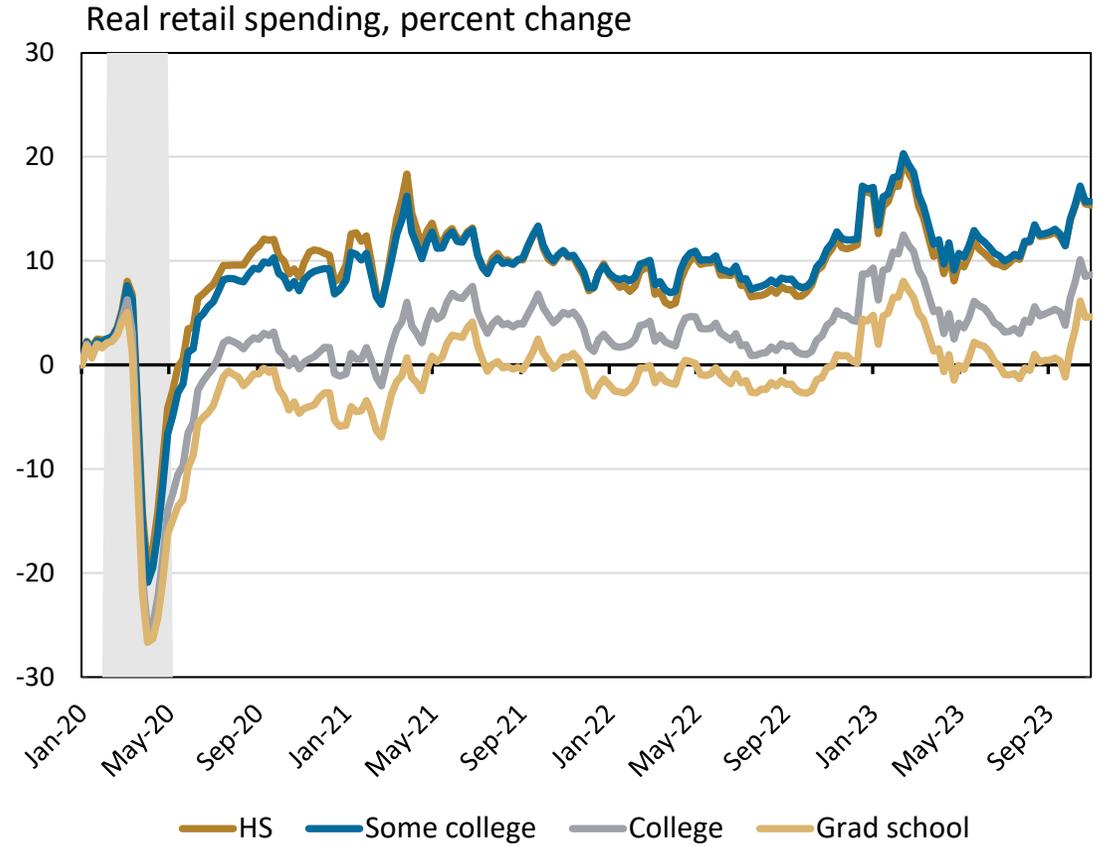


Nominal spending ranges from January 1, 2020, to November 4, 2023. Real spending ranges from January 1, 2020, to November 4, 2023.

Retail Spending by Education

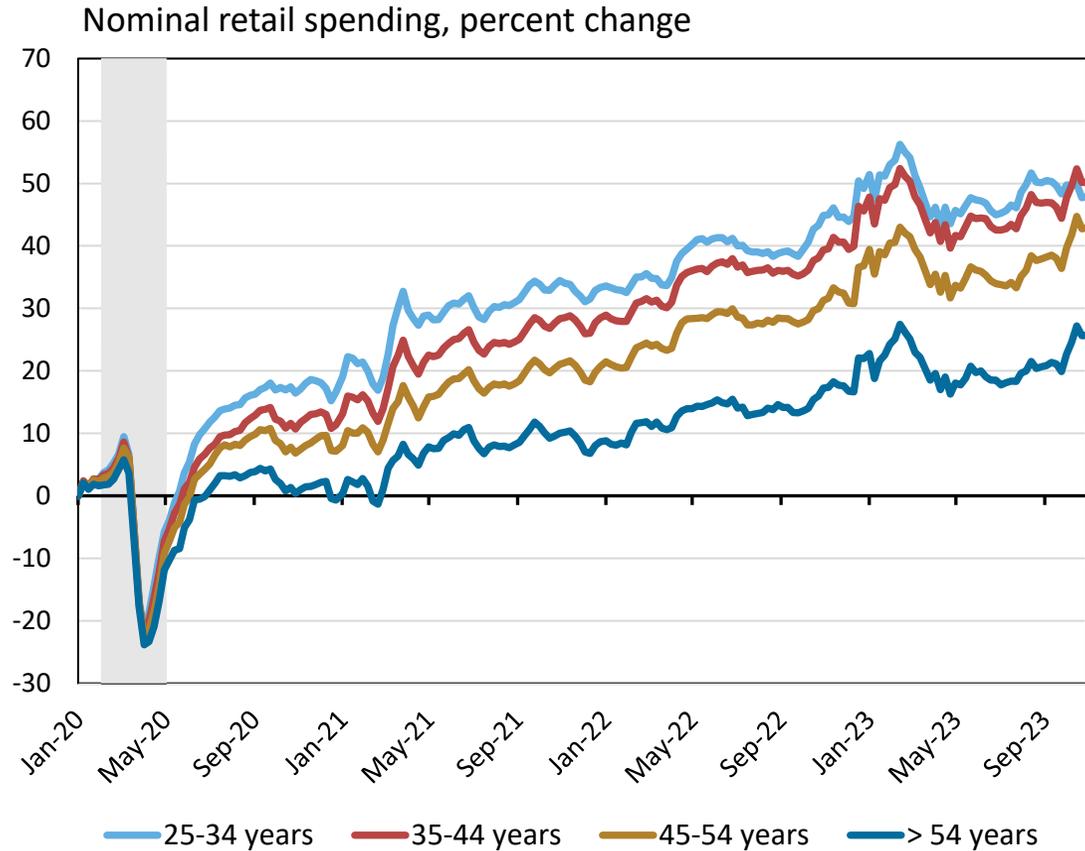


Source: Commerce Signals – Three-week moving averages.
 Notes: Real spending uses corresponding demographic prices, indexed to January 2020. Shaded region indicates the COVID-19 recession.

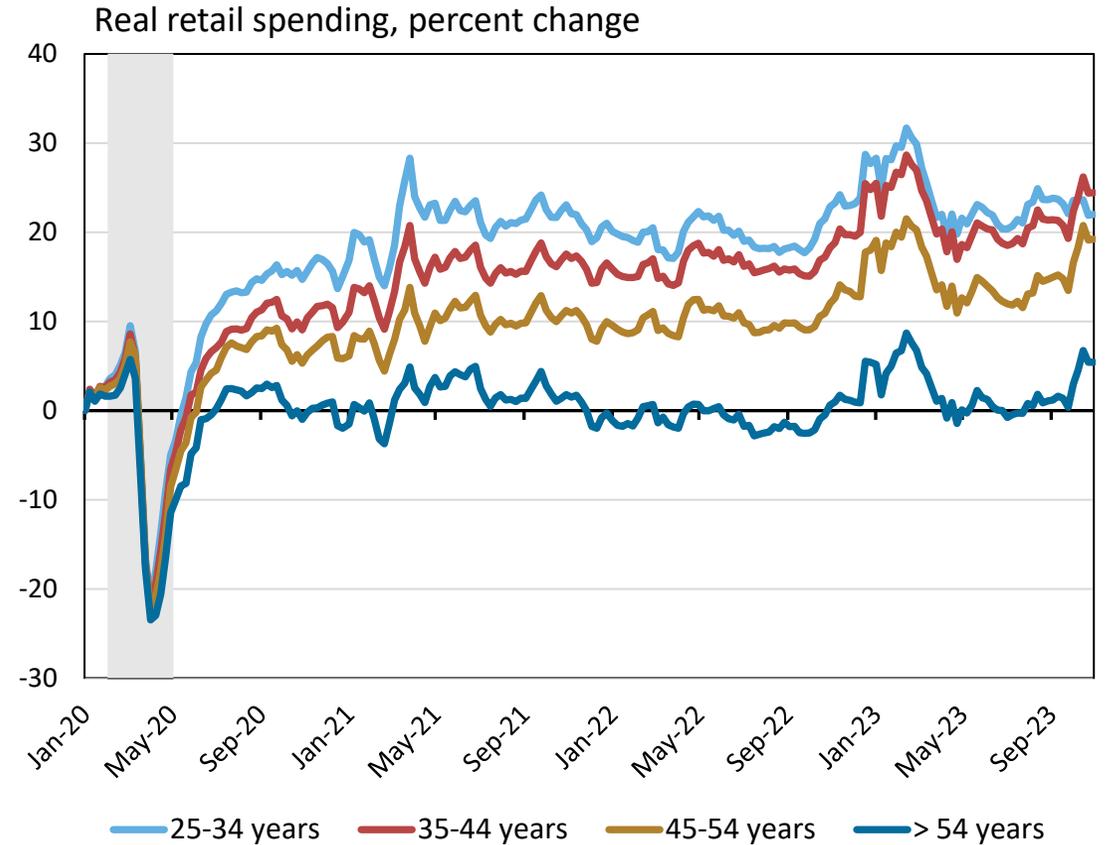


Nominal spending ranges from January 1, 2020, to November 4, 2023. Real spending ranges from January 1, 2020, to November 4, 2023.

Retail Spending by Age

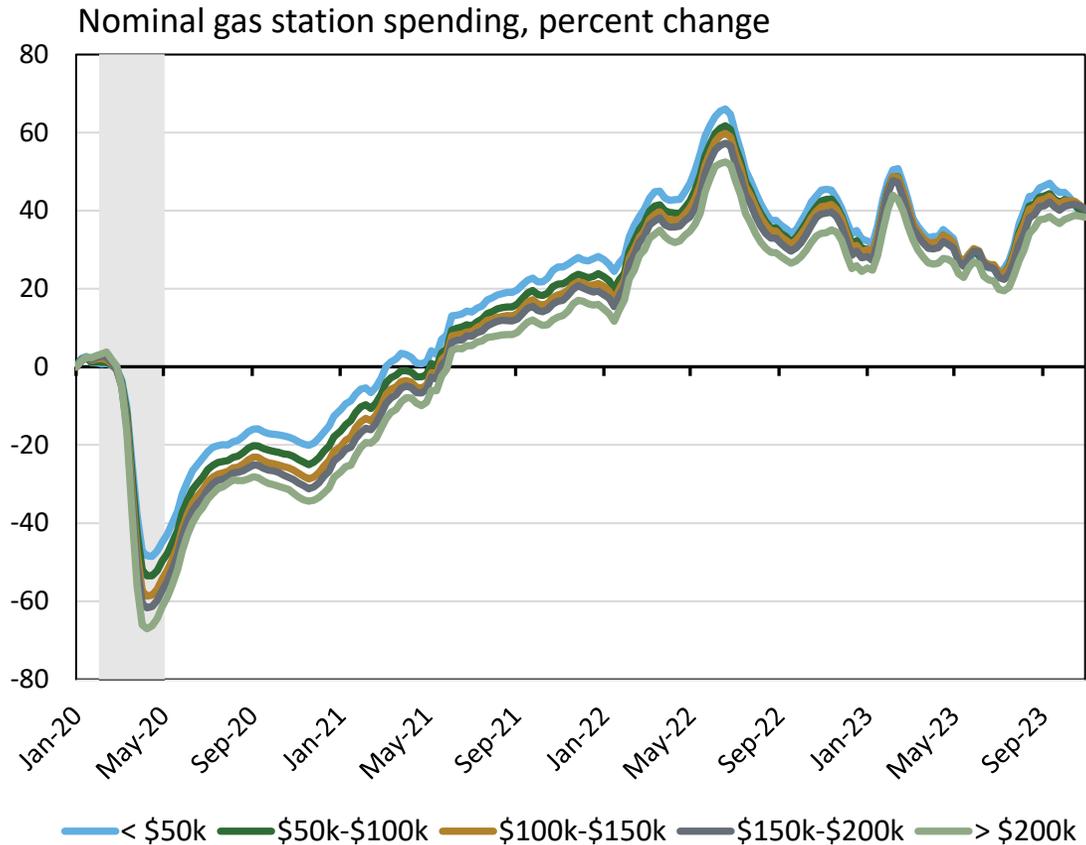


Source: Commerce Signals – Three-week moving averages.
 Notes: Real spending uses corresponding demographic prices, indexed to January 2020. Shaded region indicates the COVID-19 recession.

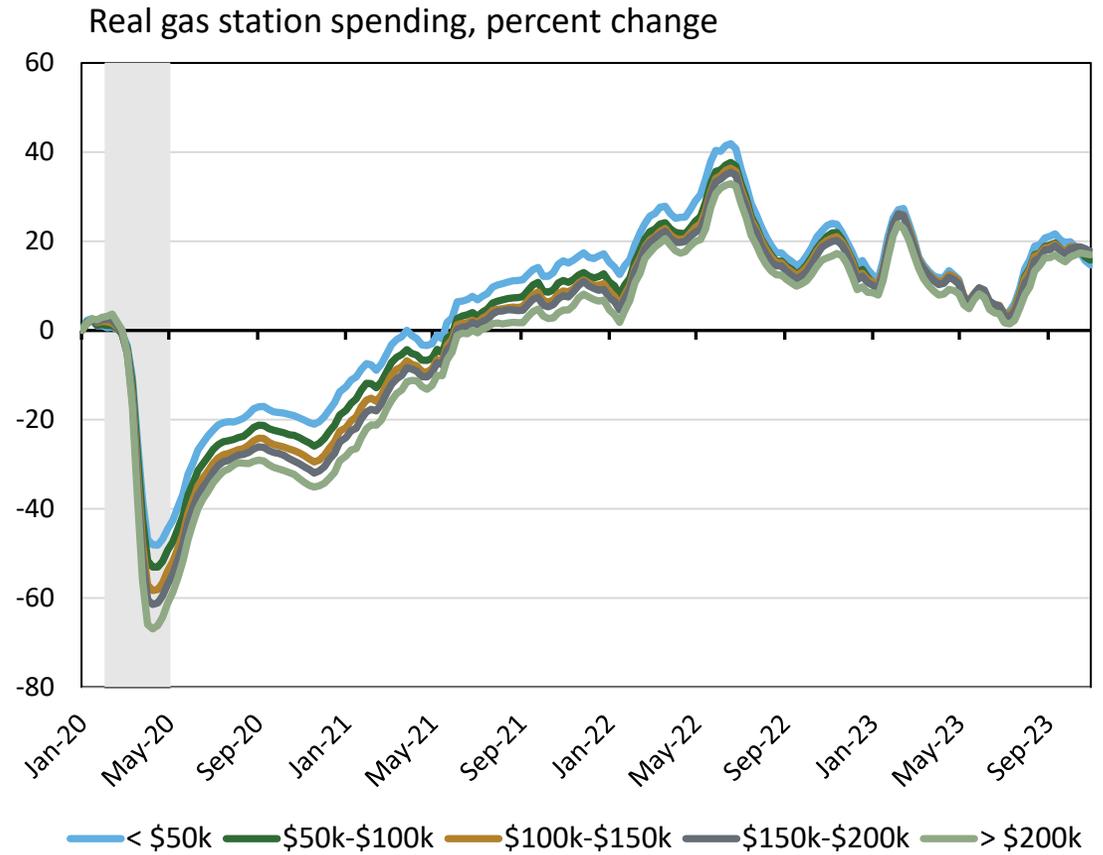


Nominal spending ranges from January 1, 2020, to November 4, 2023. Real spending ranges from January 1, 2020, to November 4, 2023.

Gas Station Spending by Income

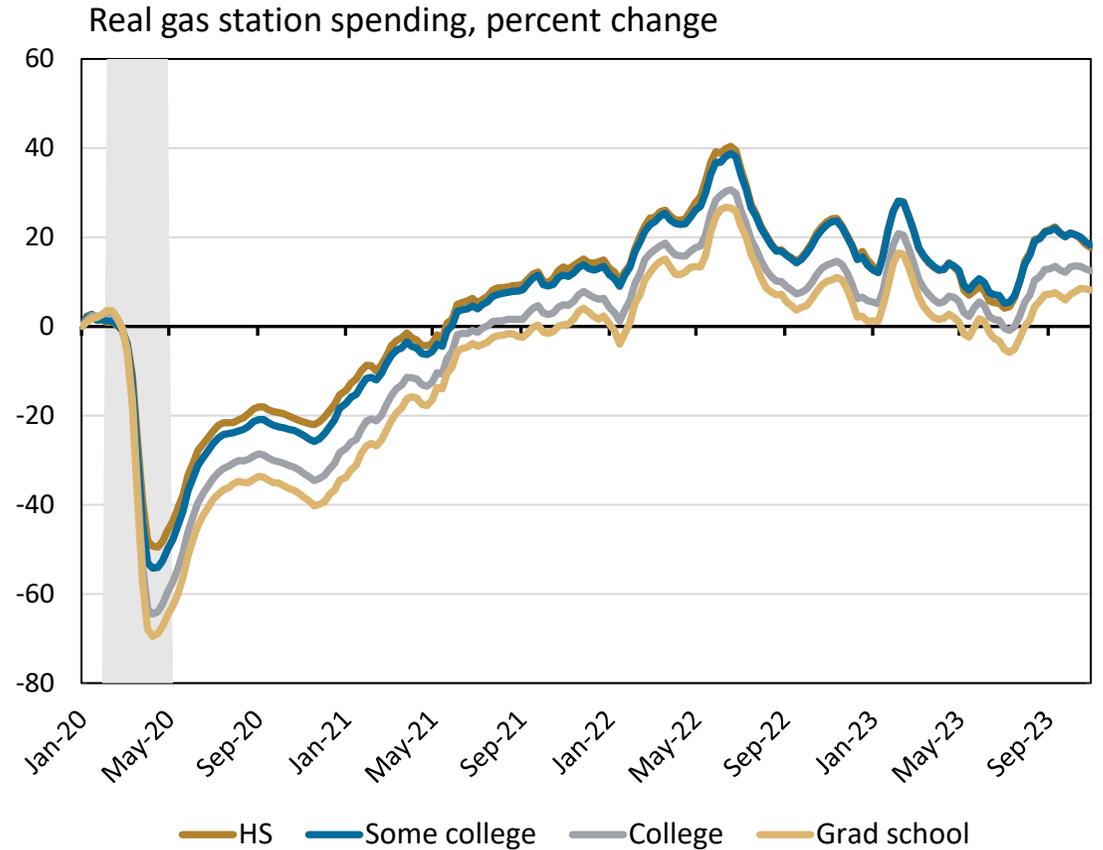
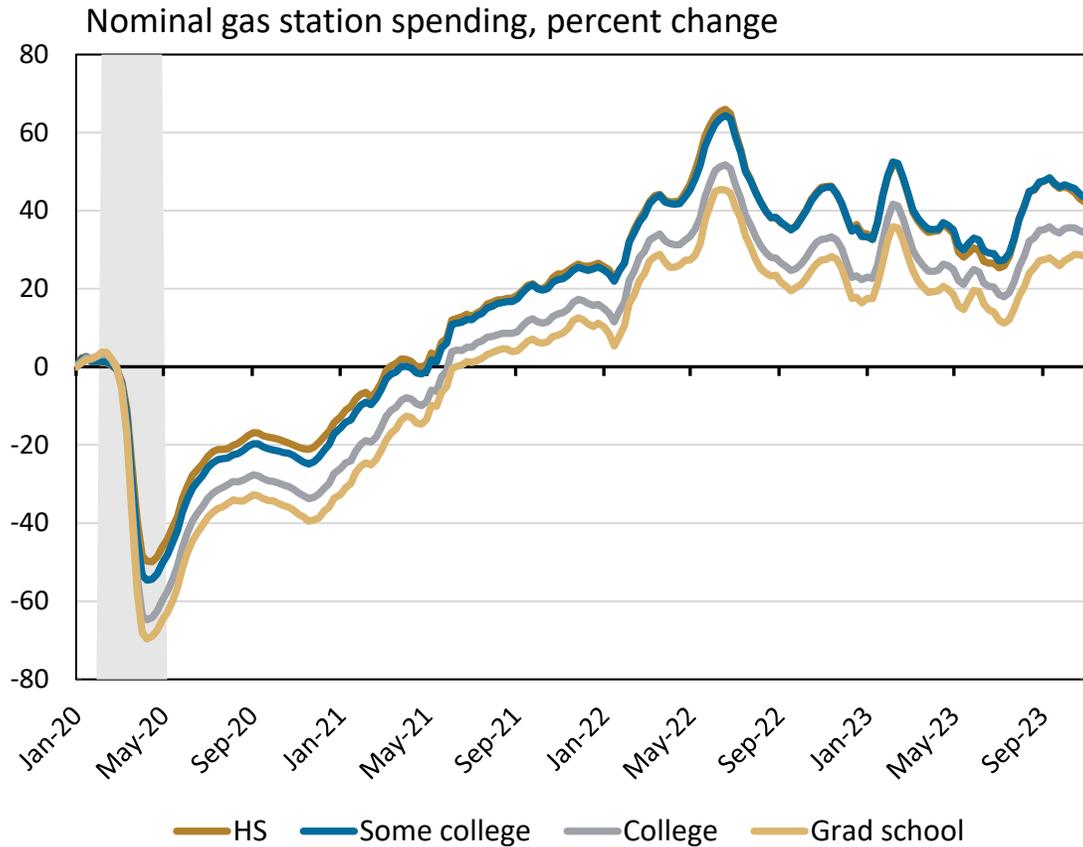


Source: Commerce Signals – Three-week moving averages.
 Notes: Real spending uses corresponding demographic prices, indexed to January 2020. Shaded region indicates the COVID-19 recession.



Nominal spending ranges from January 1, 2020, to November 4, 2023. Real spending ranges from January 1, 2020, to November 4, 2023.

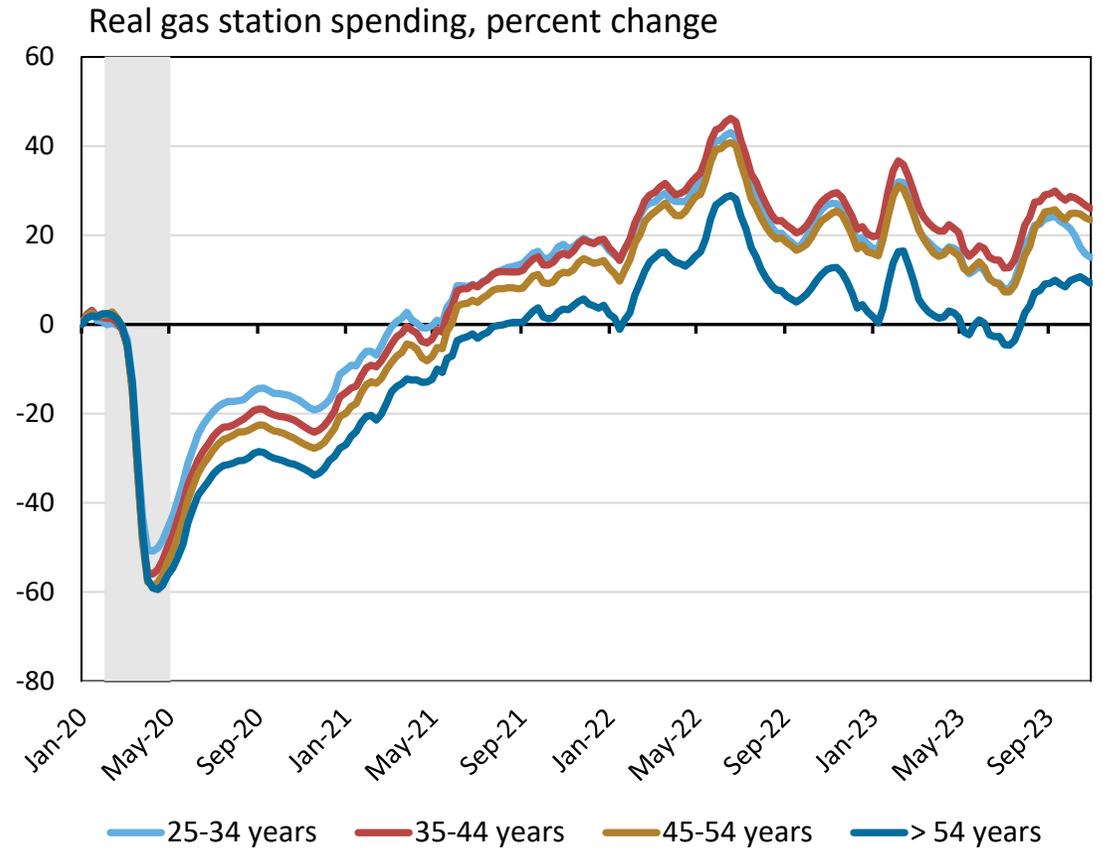
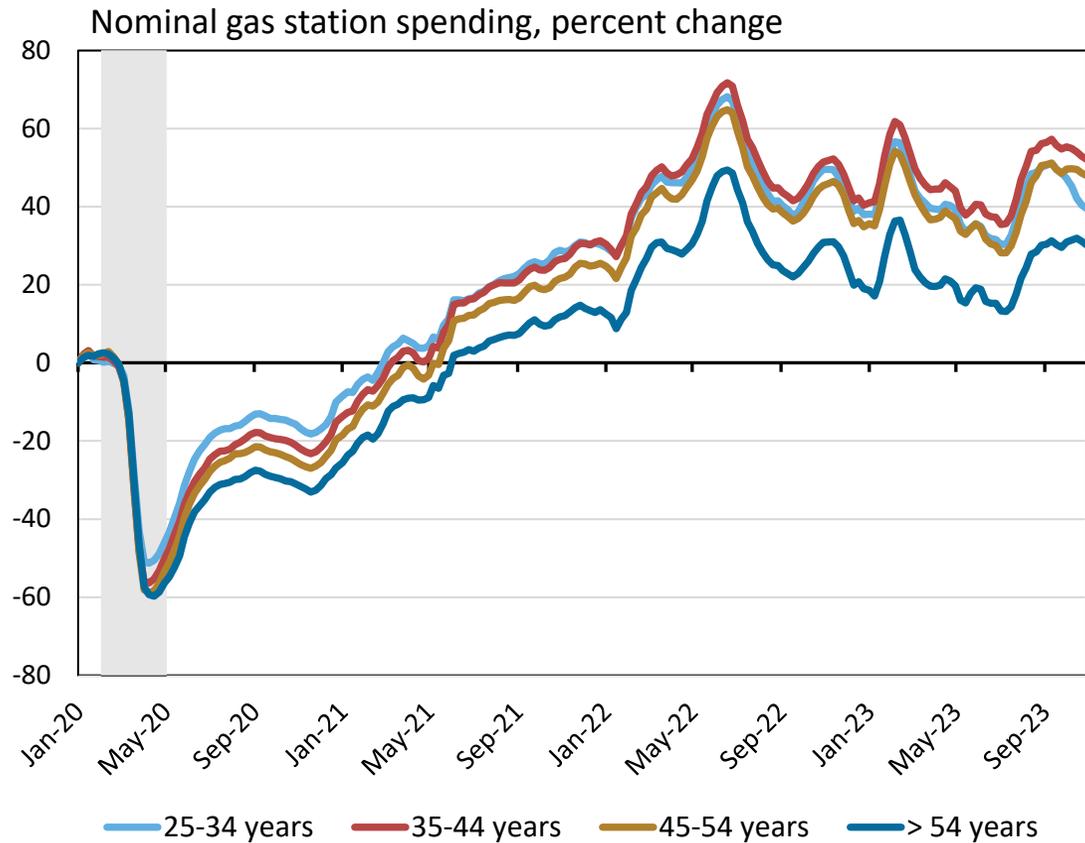
Gas Station Spending by Education



Source: Commerce Signals – Three-week moving averages.
 Notes: Real spending uses corresponding demographic prices, indexed to January 2020. Shaded region indicates the COVID-19 recession.

Nominal spending ranges from January 1, 2020, to November 4, 2023. Real spending ranges from January 1, 2020, to November 4, 2023.

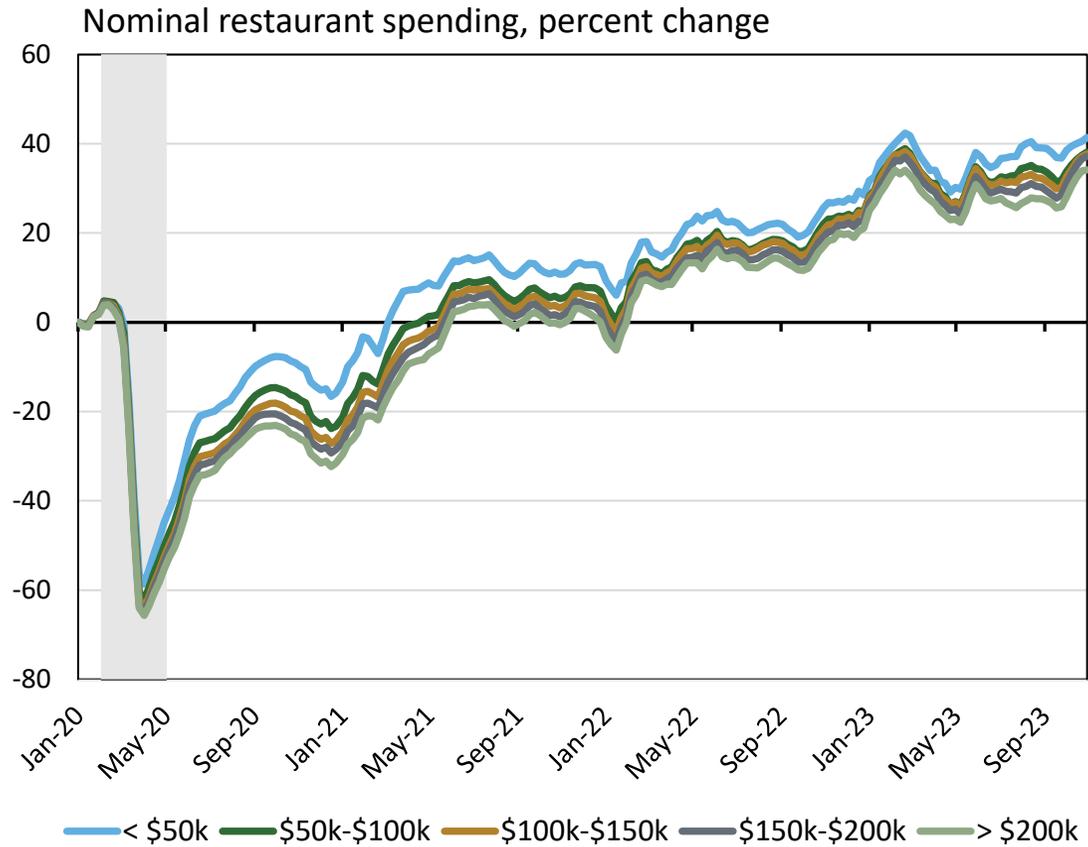
Gas Station Spending by Age



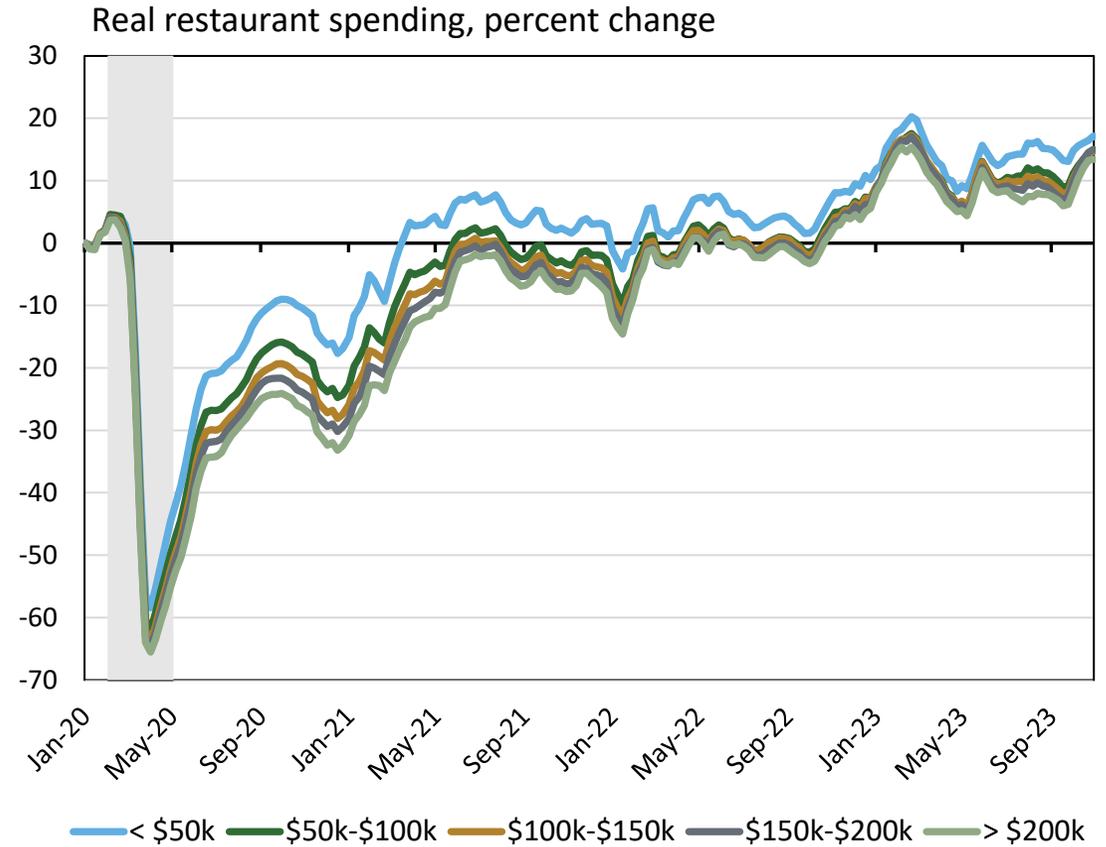
Source: Commerce Signals – Three-week moving averages.
 Notes: Real spending uses corresponding demographic prices, indexed to January 2020. Shaded region indicates the COVID-19 recession.

Nominal spending ranges from January 1, 2020, to November 4, 2023. Real spending ranges from January 1, 2020, to November 4, 2023.

Restaurant Spending by Income

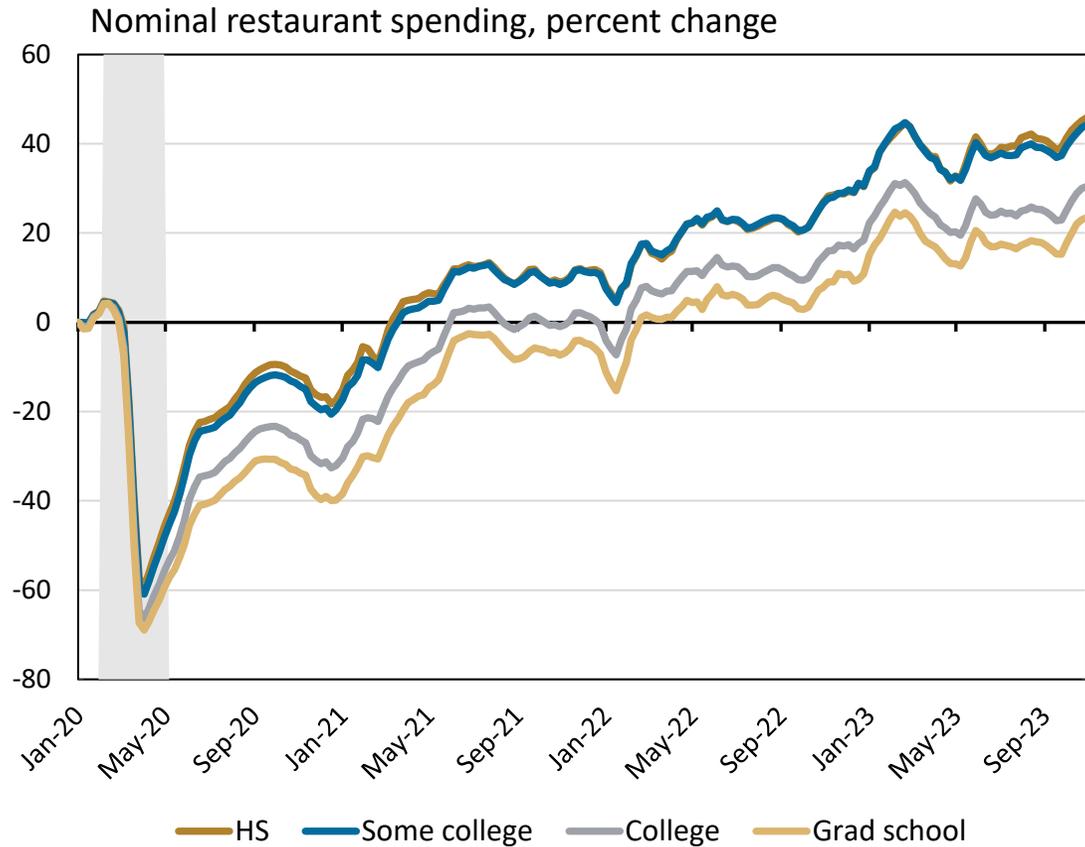


Source: Commerce Signals – Three-week moving averages.
 Notes: Real spending uses corresponding demographic prices, indexed to January 2020. Shaded region indicates the COVID-19 recession.

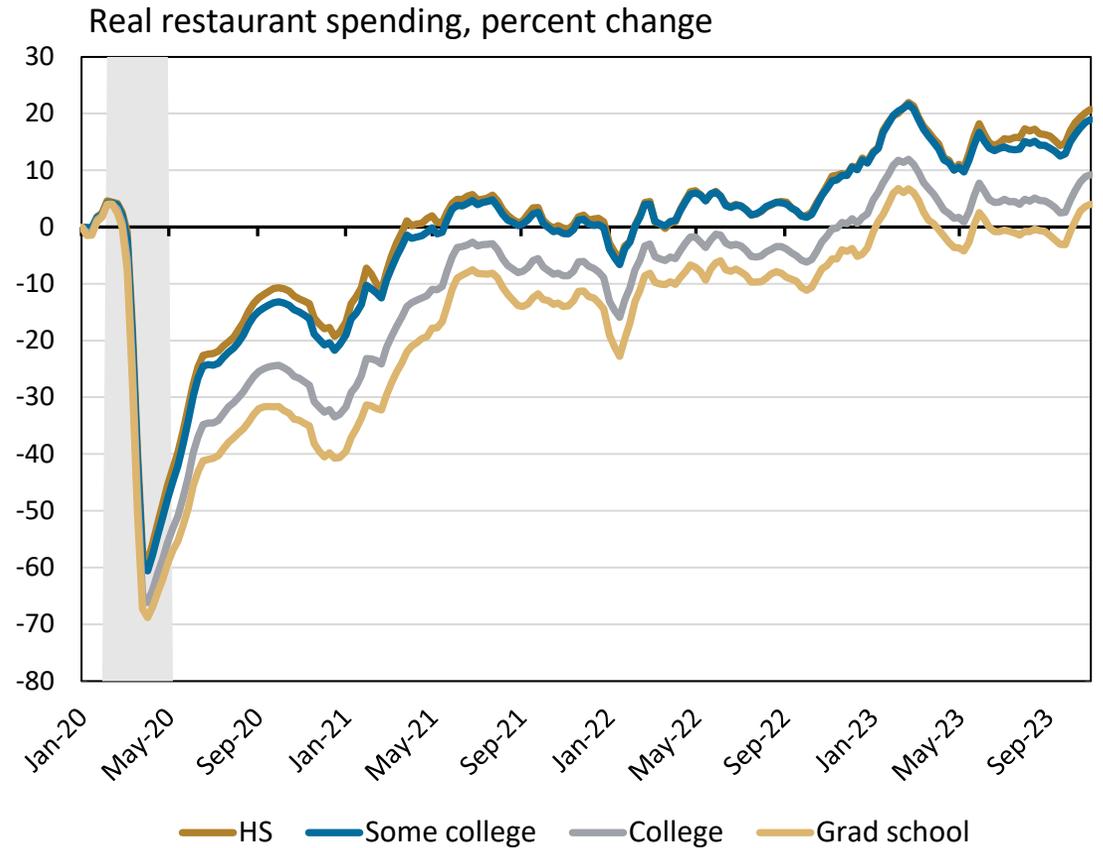


Nominal spending ranges from January 1, 2020, to November 4, 2023. Real spending ranges from January 1, 2020, to November 4, 2023.

Restaurant Spending by Education

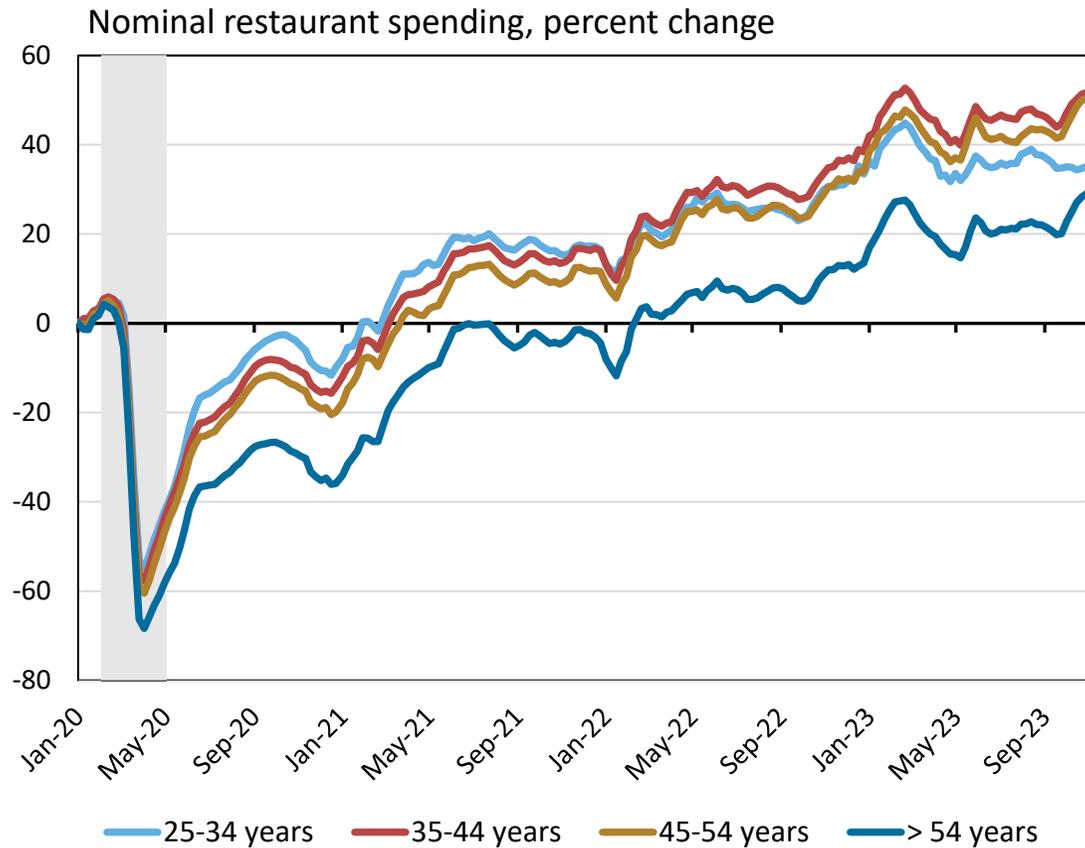


Source: Commerce Signals – Three-week moving averages.
 Notes: Real spending uses corresponding demographic prices, indexed to January 2020. Shaded region indicates the COVID-19 recession.

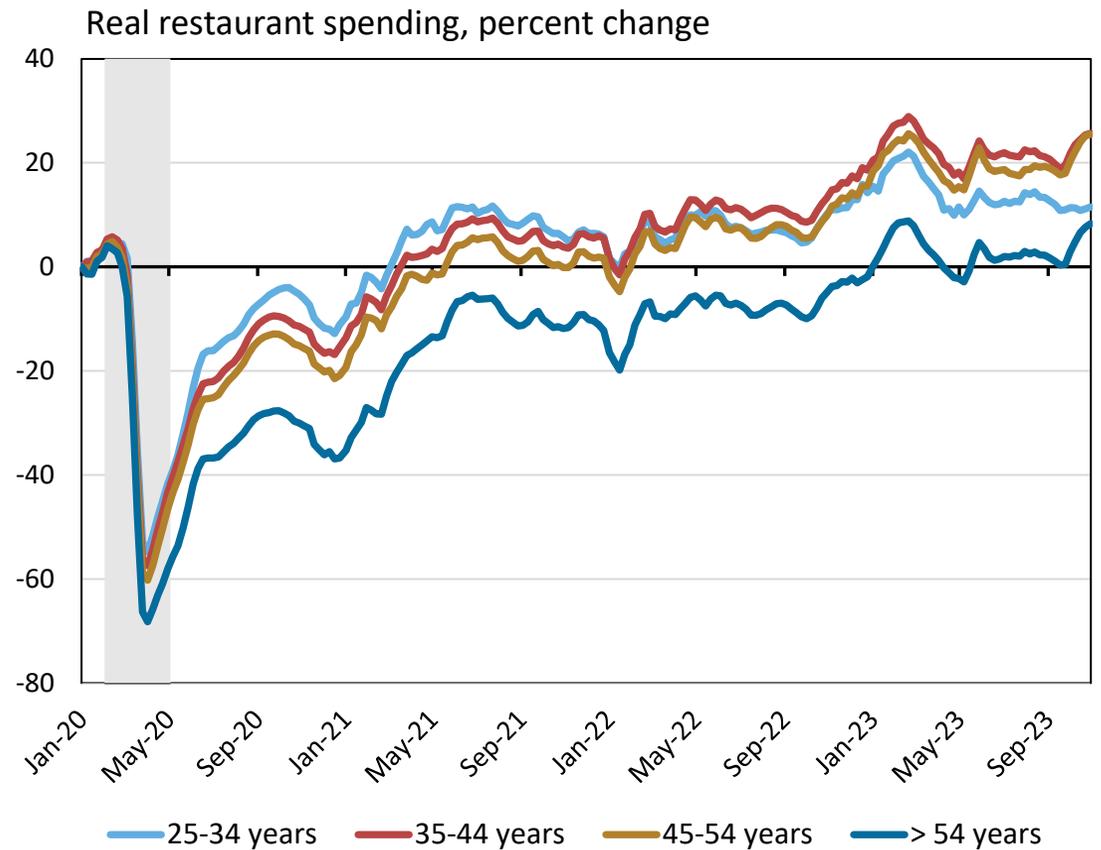


Nominal spending ranges from January 1, 2020, to November 4, 2023. Real spending ranges from January 1, 2020, to November 4, 2023.

Restaurant Spending by Age



Source: Commerce Signals – Three-week moving averages.
 Notes: Real spending uses corresponding demographic prices, indexed to January 2020. Shaded region indicates the COVID-19 recession.



Nominal spending ranges from January 1, 2020, to November 4, 2023. Real spending ranges from January 1, 2020, to November 4, 2023.

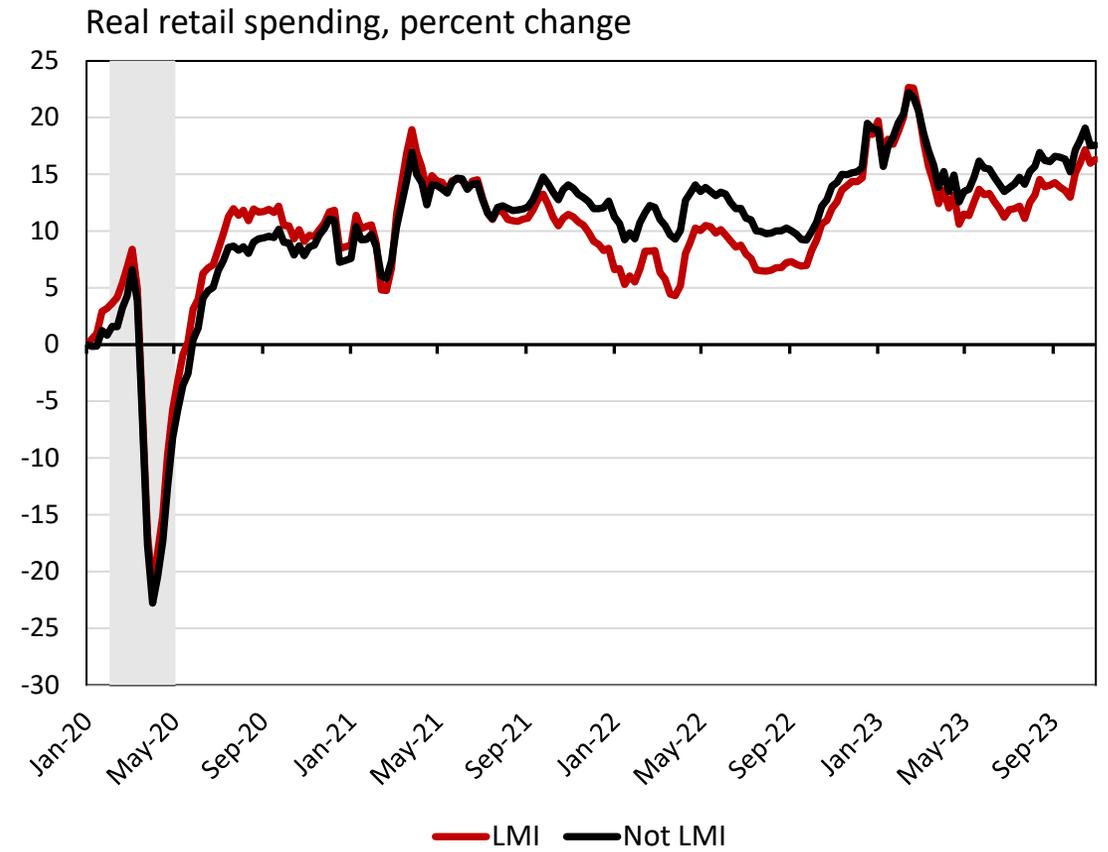
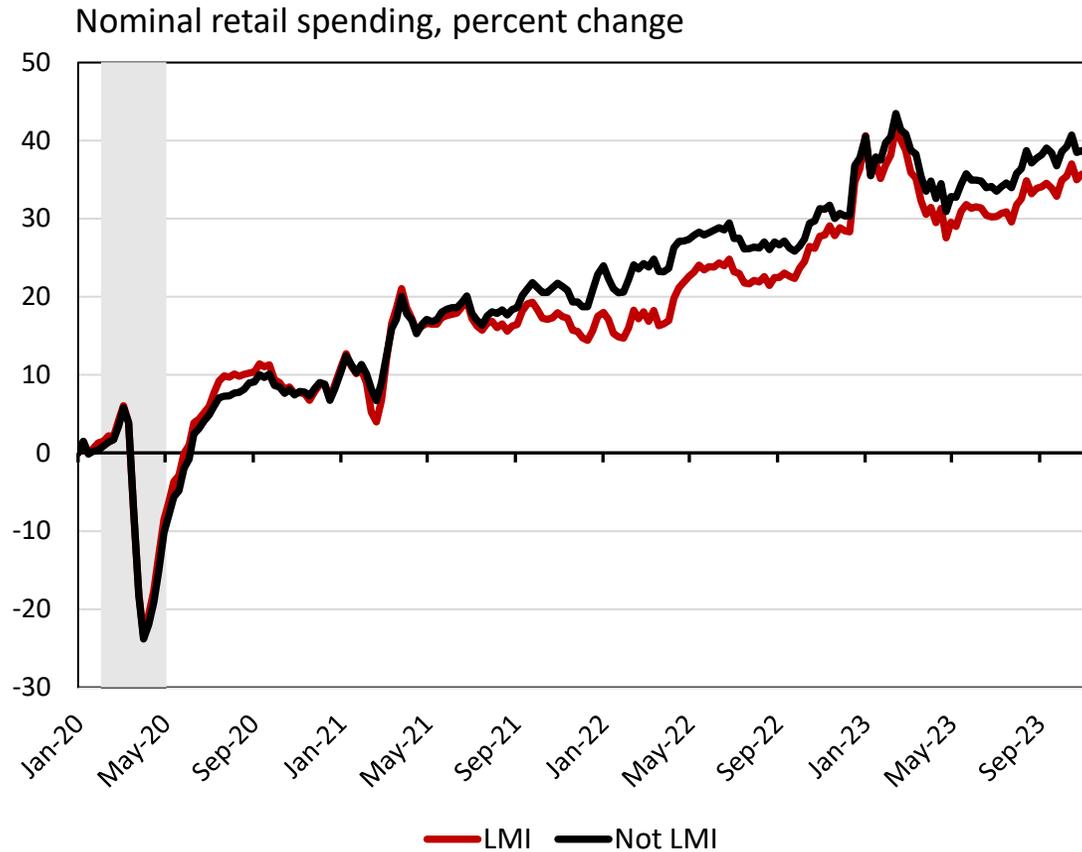
Retail Spending by County Household Income



Source: Commerce Signals – Three-week moving averages.
 Notes: Low-income counties are defined as those with household incomes below the 25th percentile of national household income. Real spending uses corresponding regional prices, indexed to January 2020. Shaded region indicates the COVID-19 recession.

Nominal spending ranges from January 1, 2020, to November 11, 2023. Real spending ranges from January 1, 2020, to November 4, 2023.

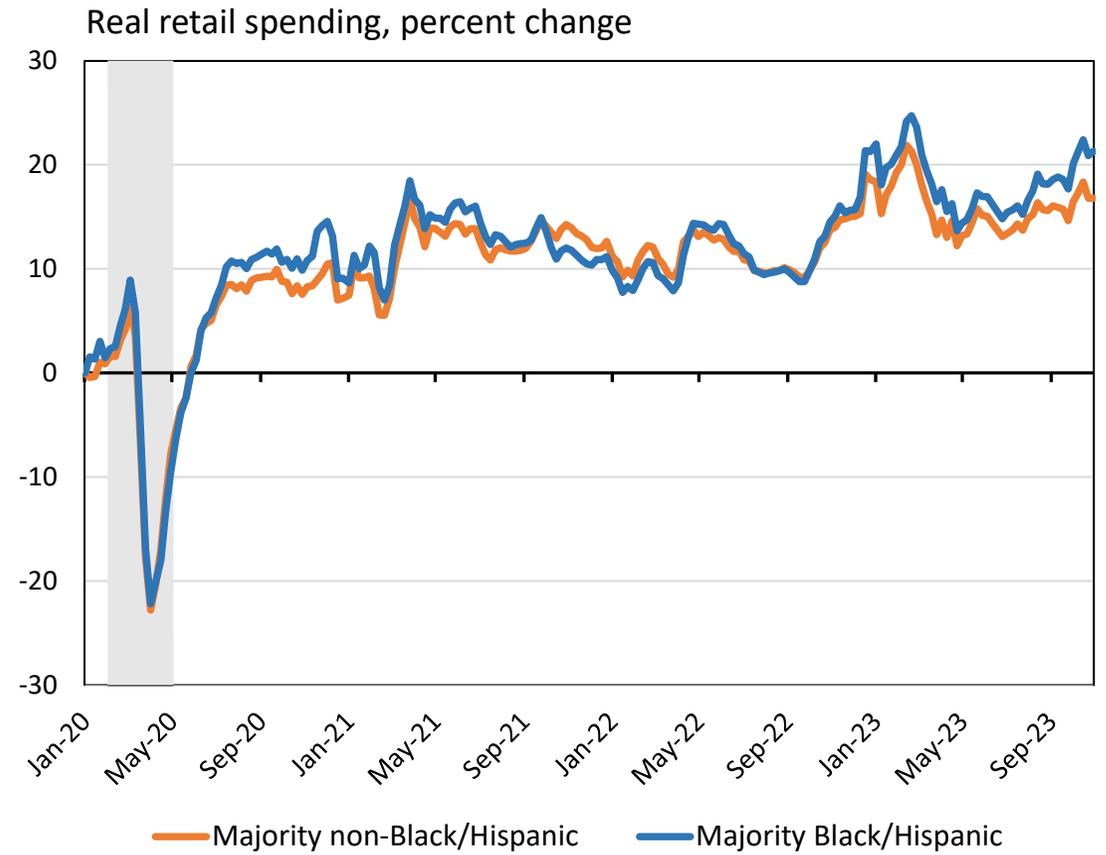
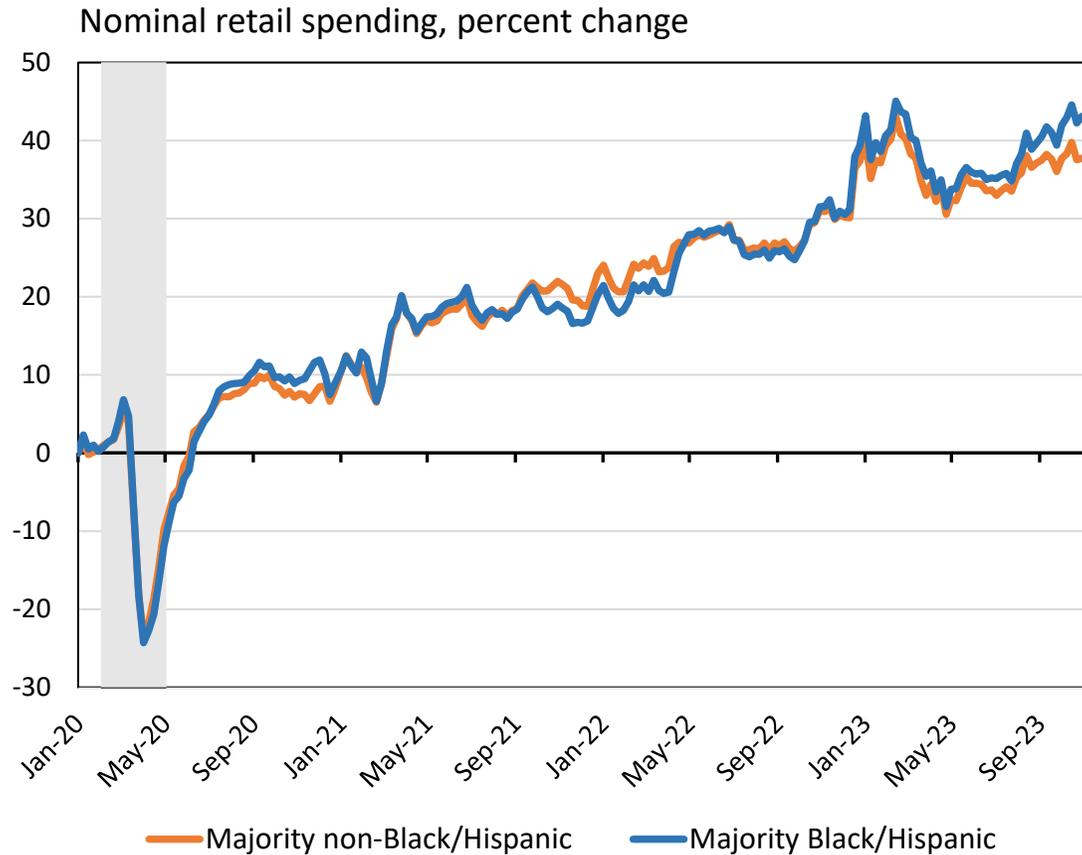
Retail Spending by Low to Moderate Income (LMI) Status



Source: Commerce Signals – Three-week moving averages.
 Notes: Low-to-moderate income (LMI) counties are defined as those where the majority of households earn below 80% of the metro area median. Real spending uses corresponding urban/rural prices, indexed to January 2020. Shaded region indicates the COVID-19 recession.

Nominal spending ranges from January 1, 2020, to November 11, 2023. Real spending ranges from January 1, 2020, to November 4, 2023.

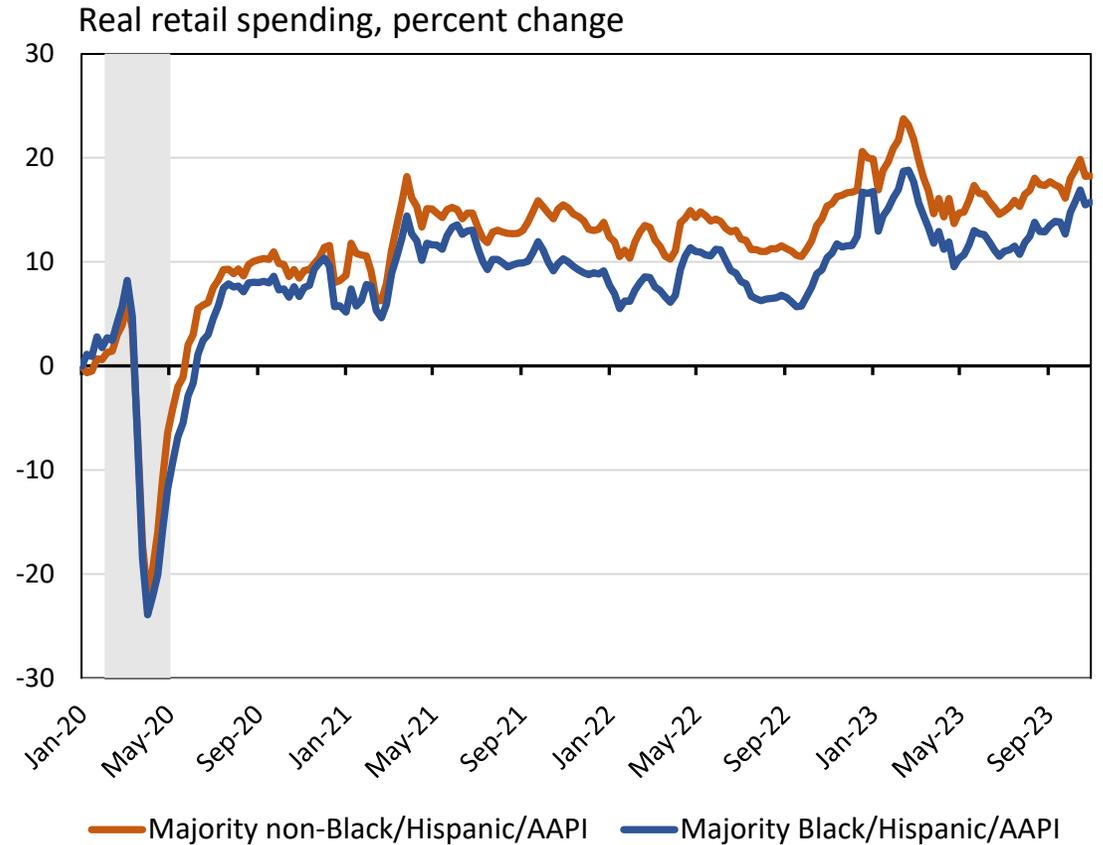
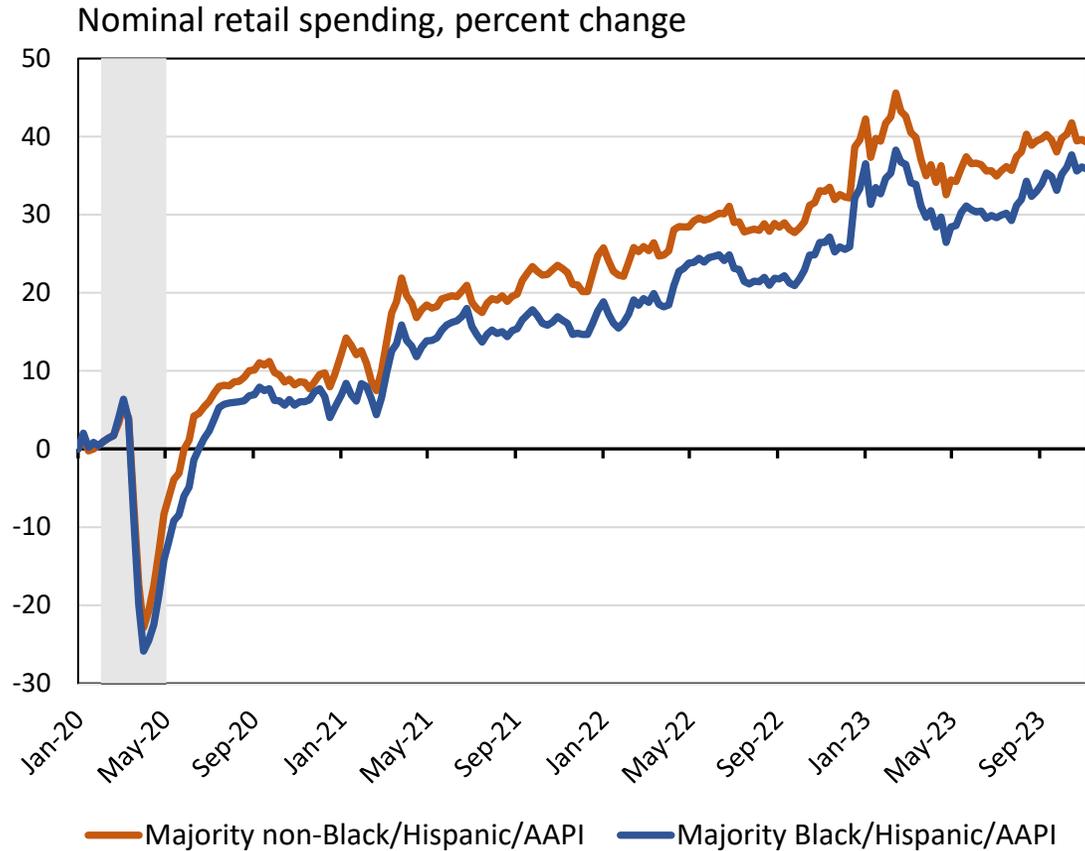
Retail Spending by County Demographics



Source: Commerce Signals – Three-week moving averages.
 Notes: Majority Black/Hispanic counties are defined as those where greater than 50% of the county's population is Black or Hispanic. Real spending uses corresponding regional prices, indexed to January 2020. Shaded region indicates the COVID-19 recession.

Nominal spending ranges from January 1, 2020, to November 11, 2023. Real spending ranges from January 1, 2020, to November 4, 2023.

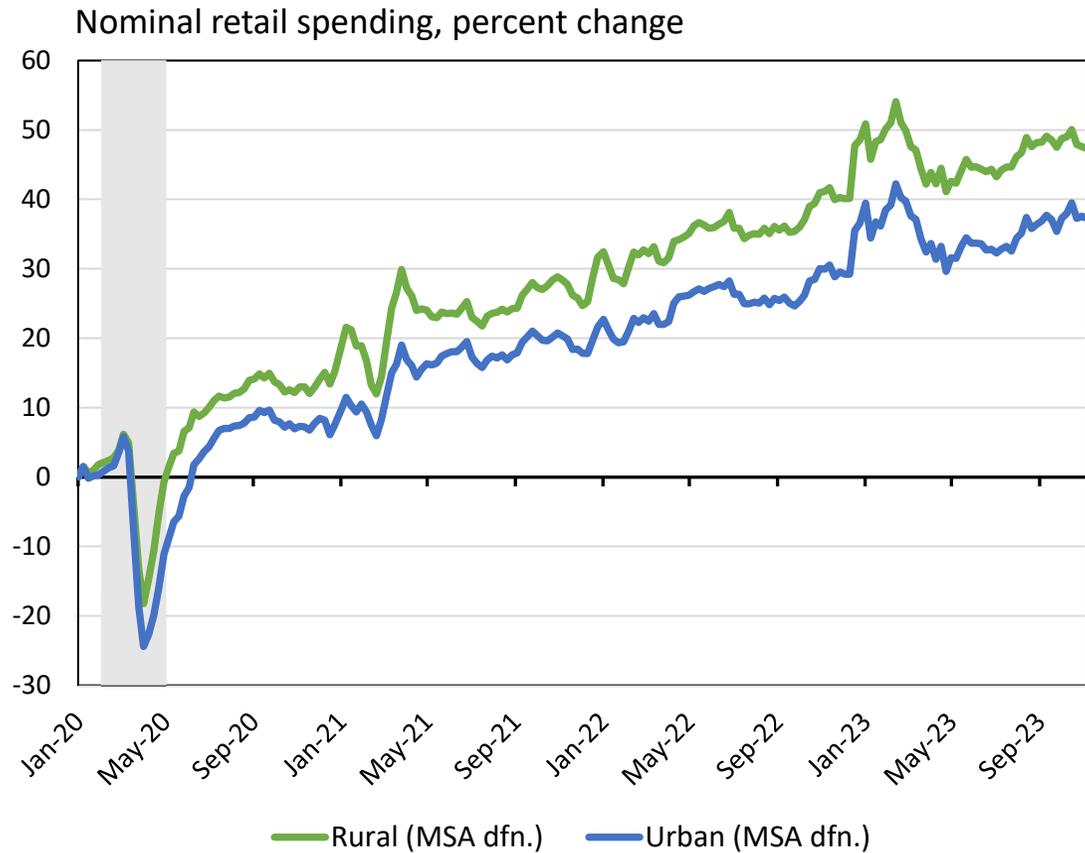
Retail Spending by County Demographics



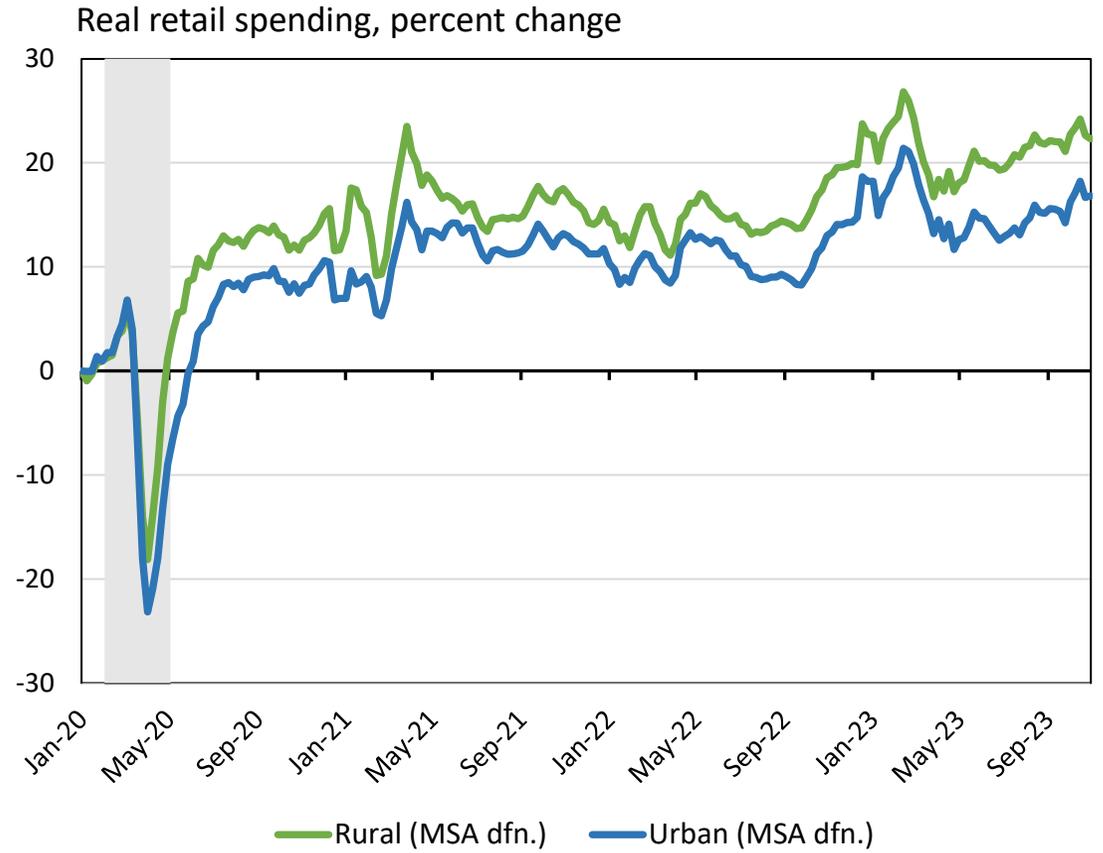
Source: Commerce Signals – Three-week moving averages.
 Notes: Majority Black/Hispanic/AAPI counties are defined as those where greater than 50% of the county's population is Black, Hispanic, or AAPI. Real spending uses corresponding regional prices, indexed to January 2020. Shaded region indicates the COVID-19 recession.

Nominal spending ranges from January 1, 2020, to November 11, 2023. Real spending ranges from January 1, 2020, to November 4, 2023.

Retail Spending by County Urban/Rural Status

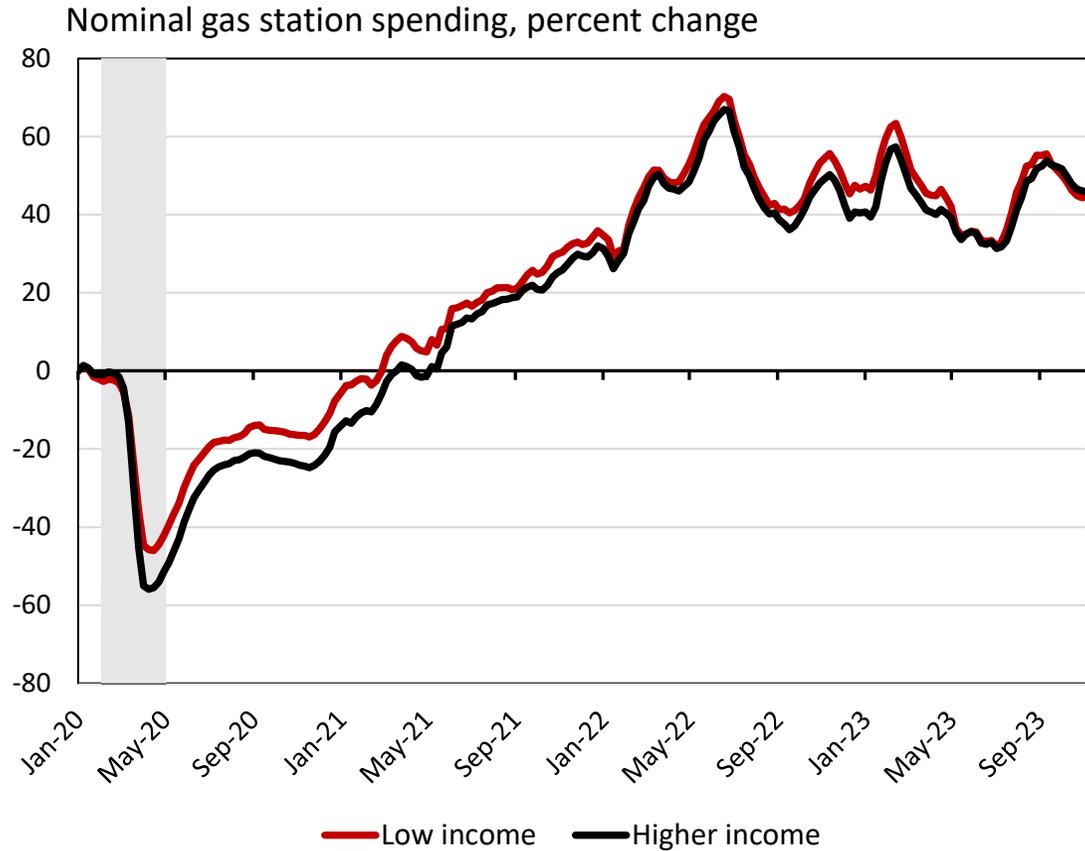


Source: Commerce Signals – Three-week moving averages.
 Notes: Urban counties are defined as those located in a Metropolitan Statistical Area (MSA). Real spending uses corresponding urban prices, indexed to January 2020. Shaded region indicates the COVID-19 recession.

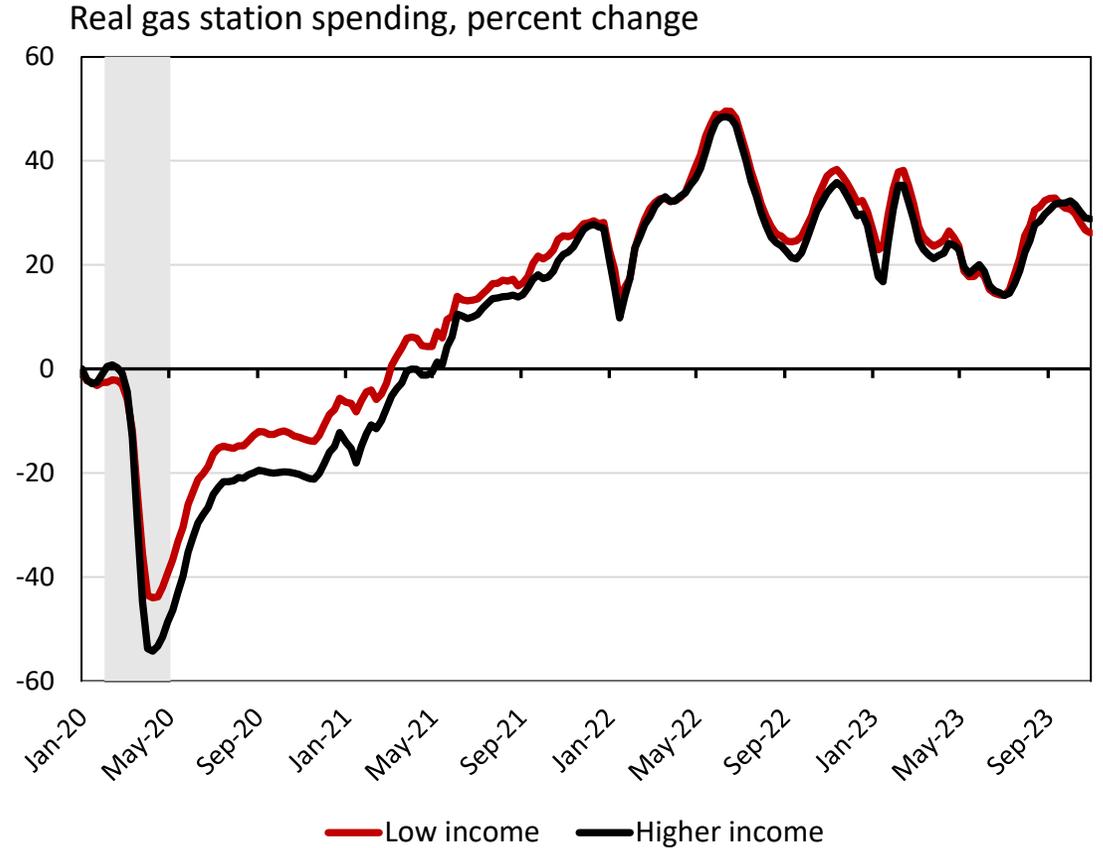


Nominal spending ranges from January 1, 2020, to November 11, 2023. Real spending ranges from January 1, 2020, to November 4, 2023.

Gas Station Spending by County Household Income

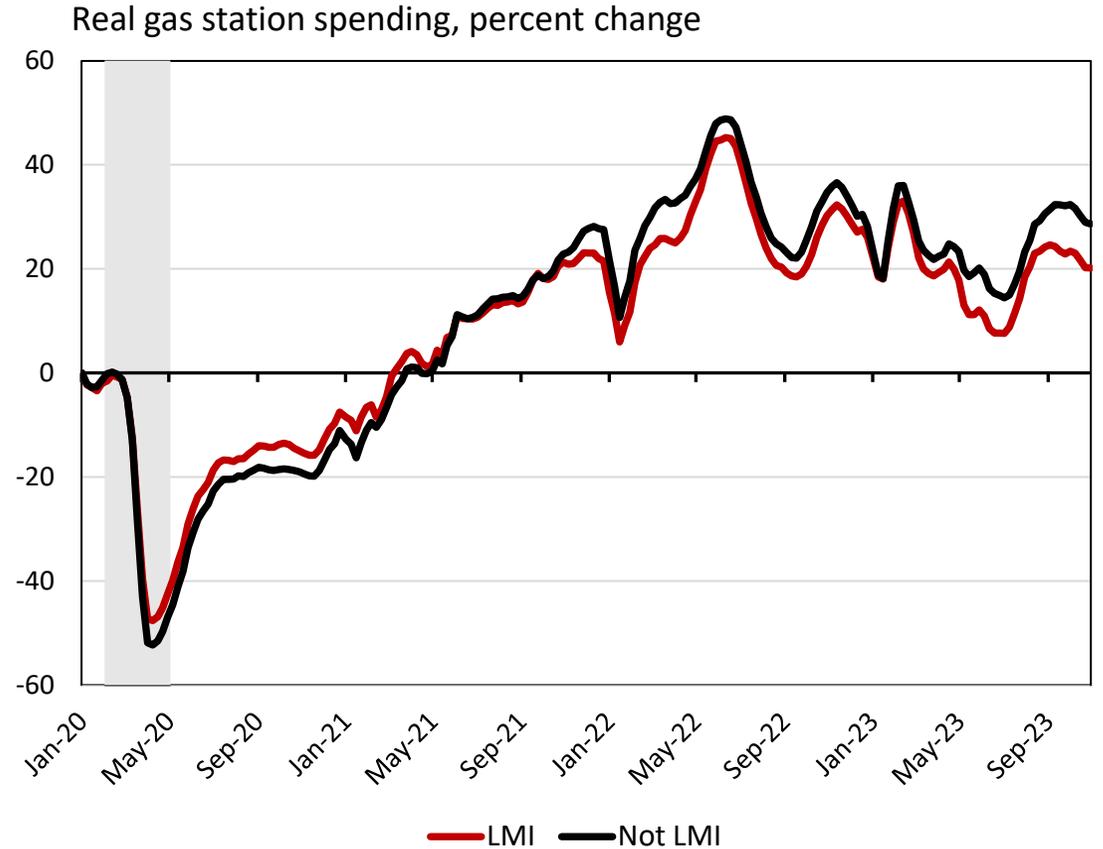
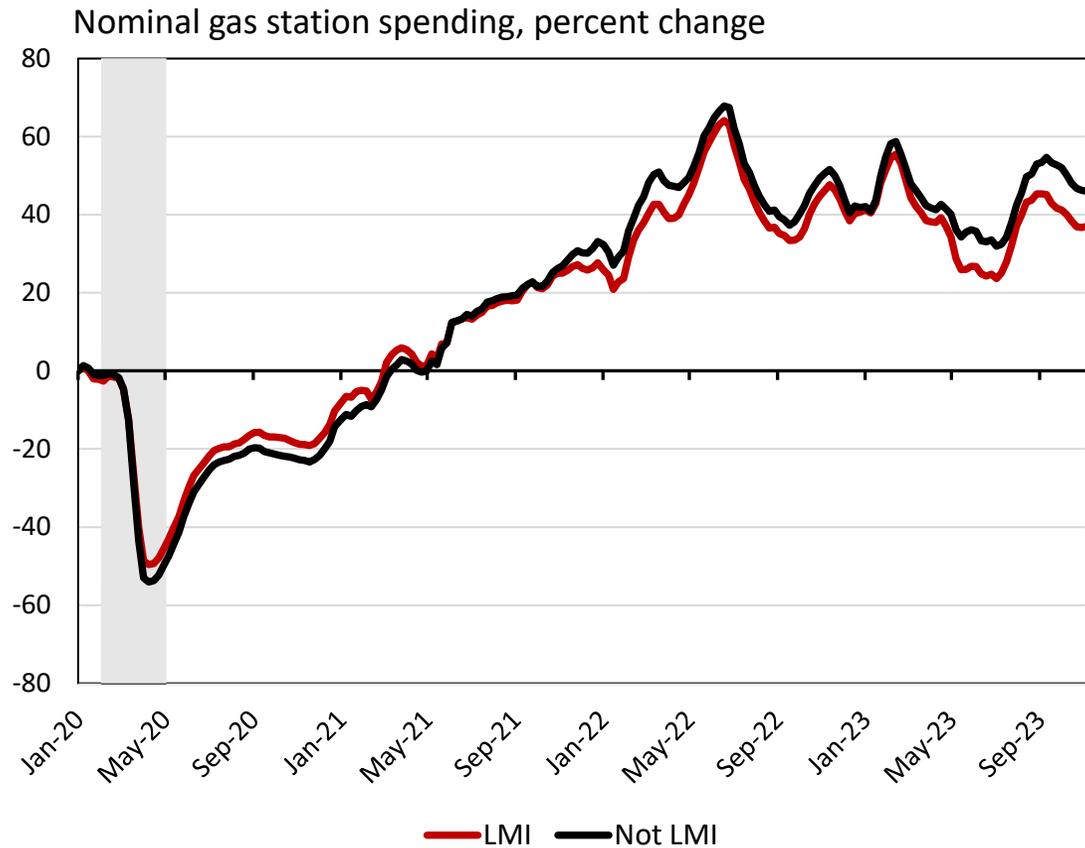


Source: Commerce Signals – Three-week moving averages.
 Notes: Low-income counties are defined as those with household incomes below the 25th percentile of national household income. Real spending uses corresponding regional prices, indexed to January 2020. Shaded region indicates the COVID-19 recession.



Nominal spending ranges from January 1, 2020, to November 11, 2023. Real spending ranges from January 1, 2020, to November 4, 2023.

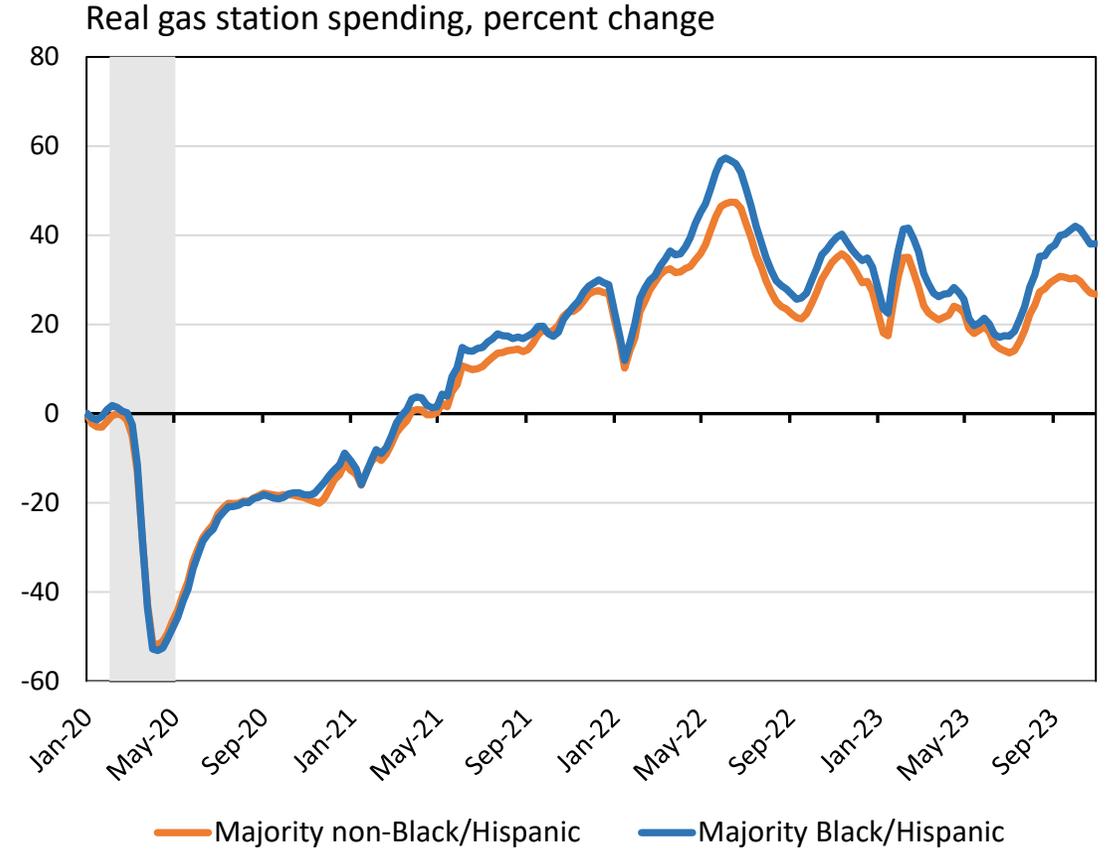
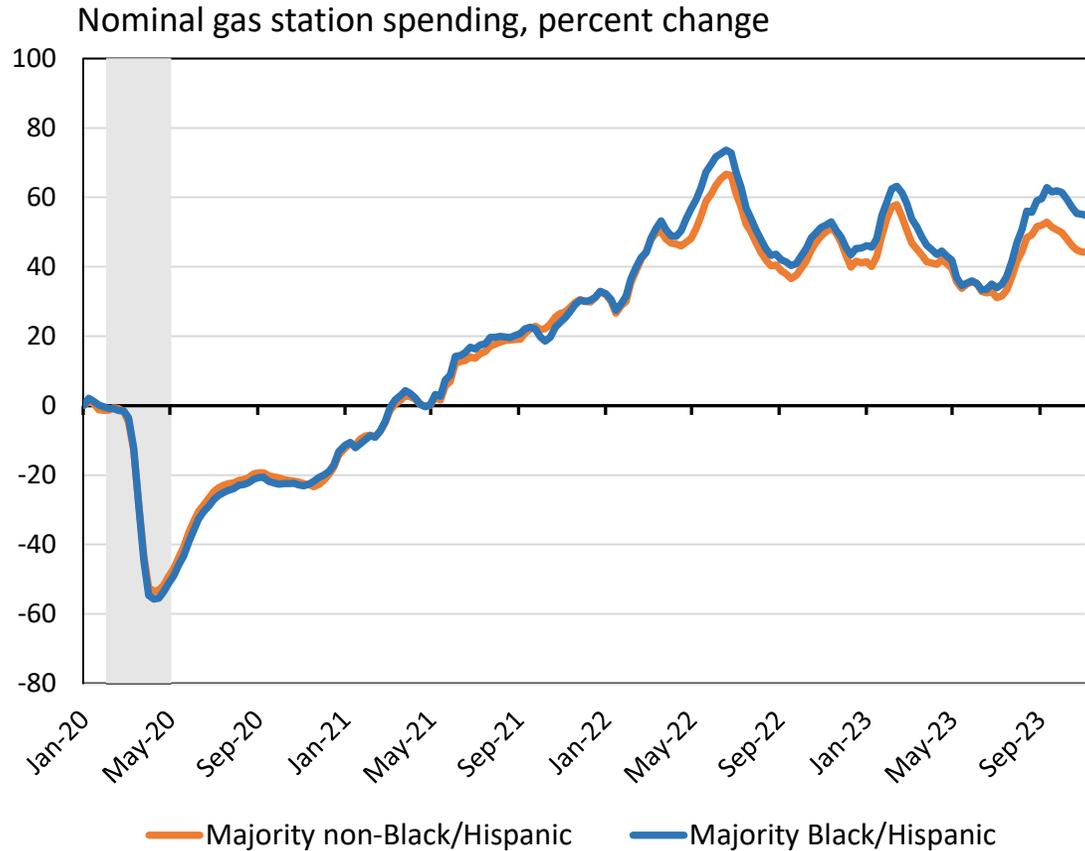
Gas Station Spending by Low to Moderate Income (LMI) Status



Source: Commerce Signals – Three-week moving averages.
 Notes: Low-to-moderate income (LMI) counties are defined as those where the majority of households earn below 80% of the metro area median. Real spending uses corresponding urban/rural prices, indexed to January 2020. Shaded region indicates the COVID-19 recession.

Nominal spending ranges from January 1, 2020, to November 11, 2023. Real spending ranges from January 1, 2020, to November 4, 2023.

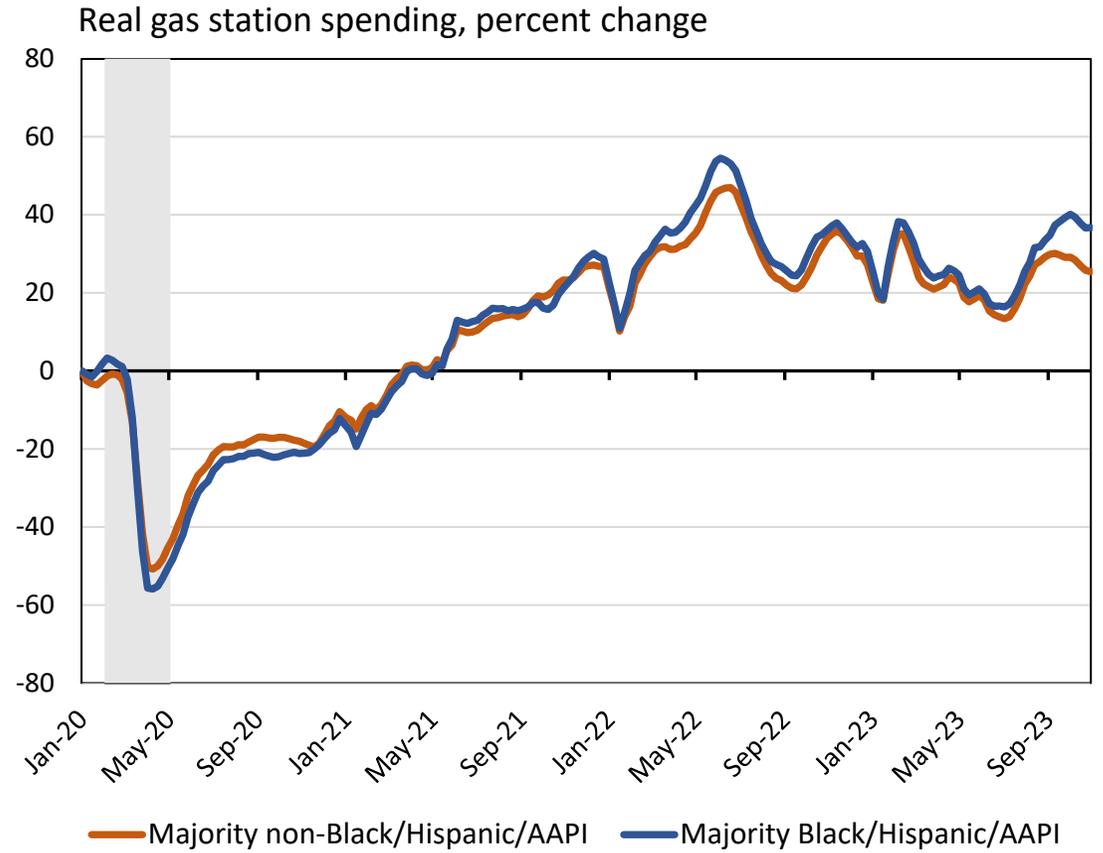
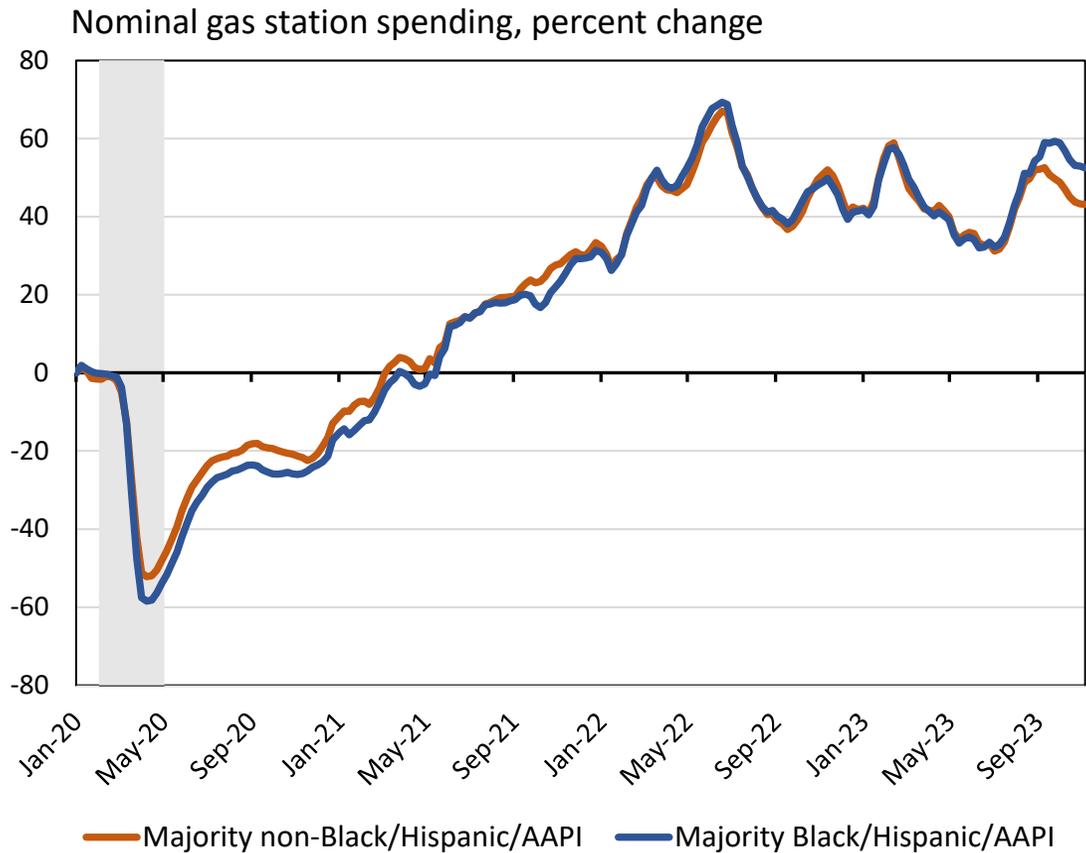
Gas Station Spending by County Demographics



Source: Commerce Signals – Three-week moving averages,
 Notes: Majority Black/Hispanic counties are defined as those where greater than 50% of the county's population is Black or Hispanic. Real spending uses corresponding regional prices, indexed to January 2020. Shaded region indicates the COVID-19 recession.

Nominal spending ranges from January 1, 2020, to November 11, 2023. Real spending ranges from January 1, 2020, to November 4, 2023.

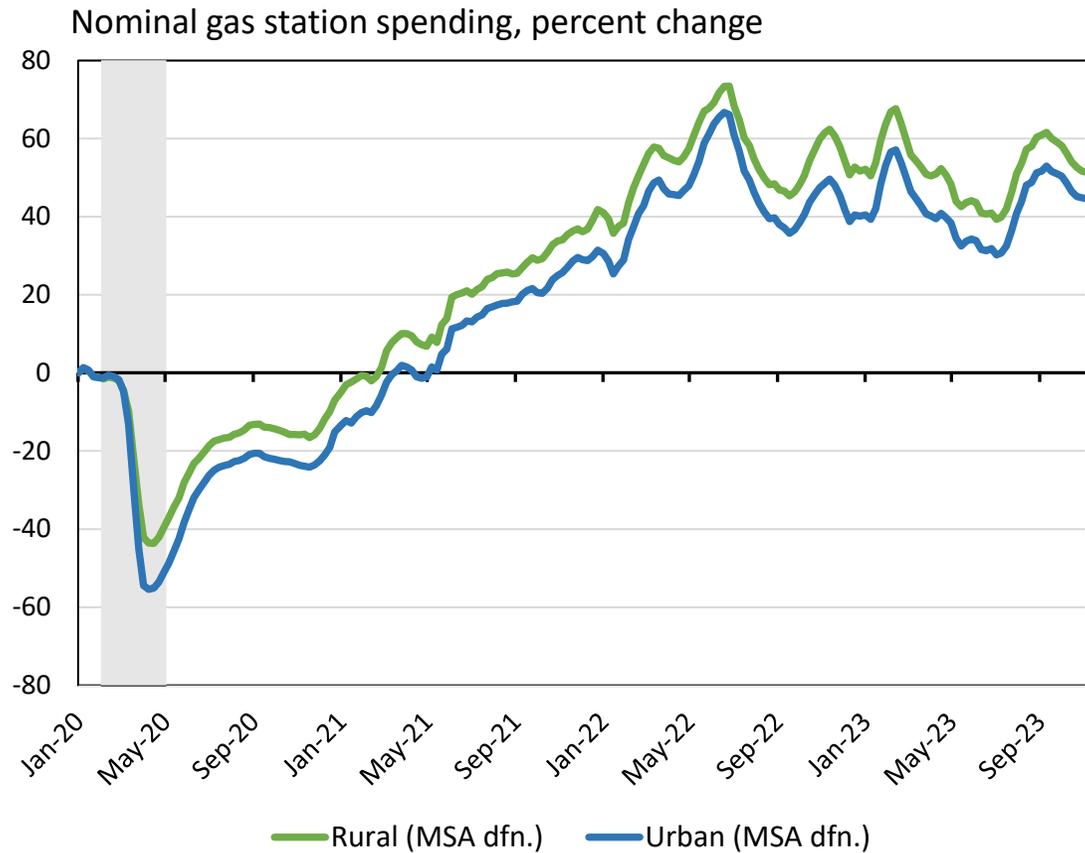
Gas Station Spending by County Demographics



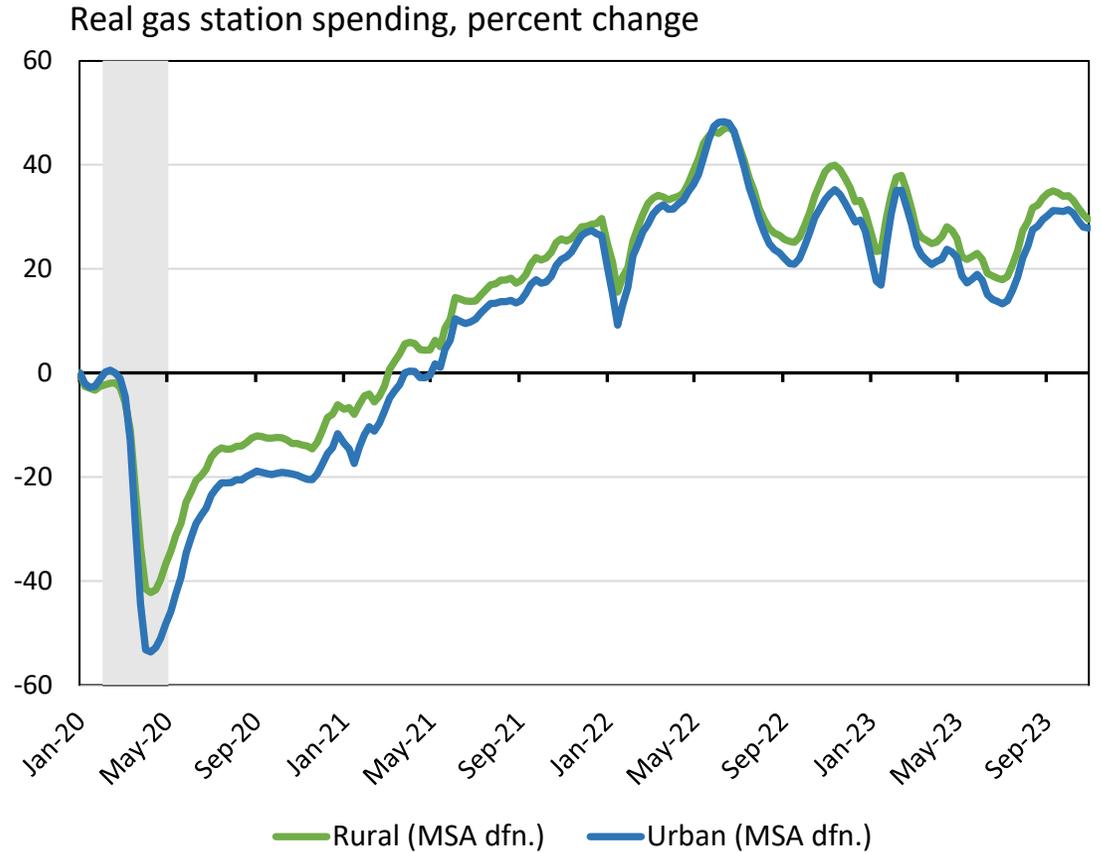
Source: Commerce Signals – Three-week moving averages.
 Notes: Majority Black/Hispanic/AAPI counties are defined as those where greater than 50% of the county's population is Black, Hispanic, or AAPI. Real spending uses corresponding regional prices, indexed to January 2020. Shaded region indicates the COVID-19 recession.

Nominal spending ranges from January 1, 2020, to November 11, 2023. Real spending ranges from January 1, 2020, to November 4, 2023.

Gas Station Spending by County Urban/Rural Status

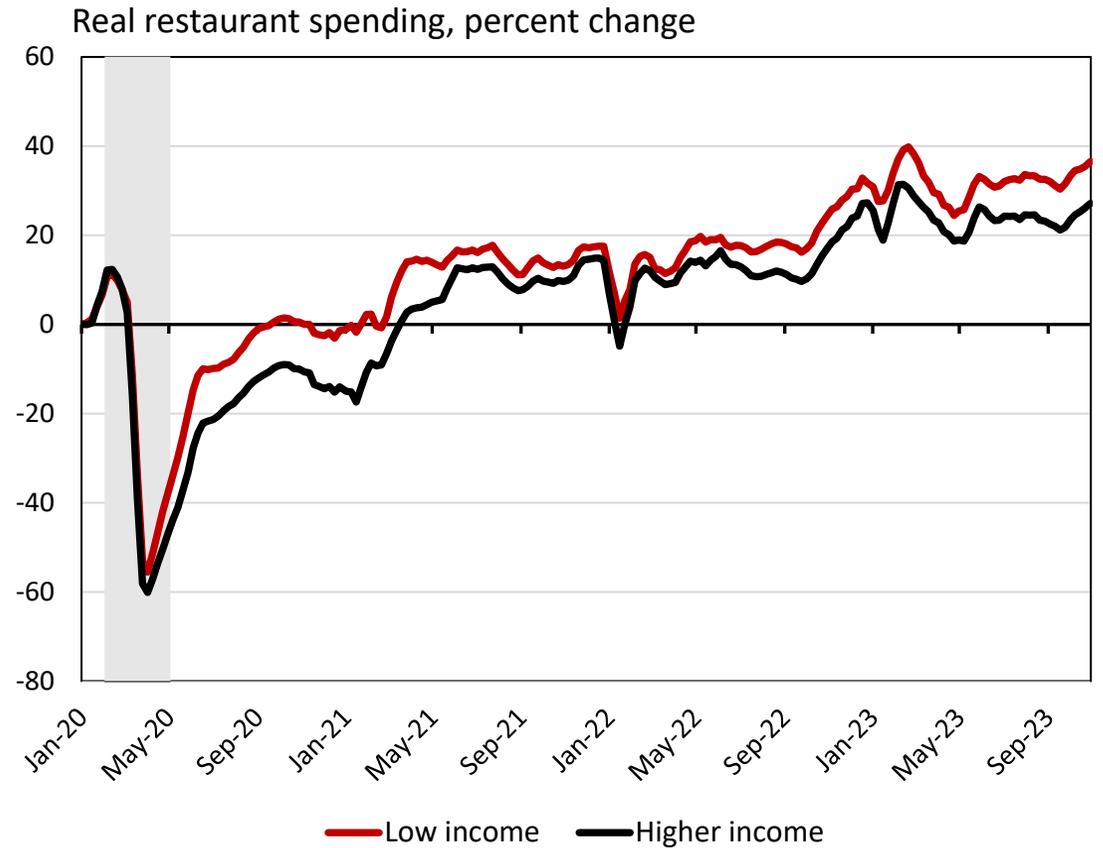
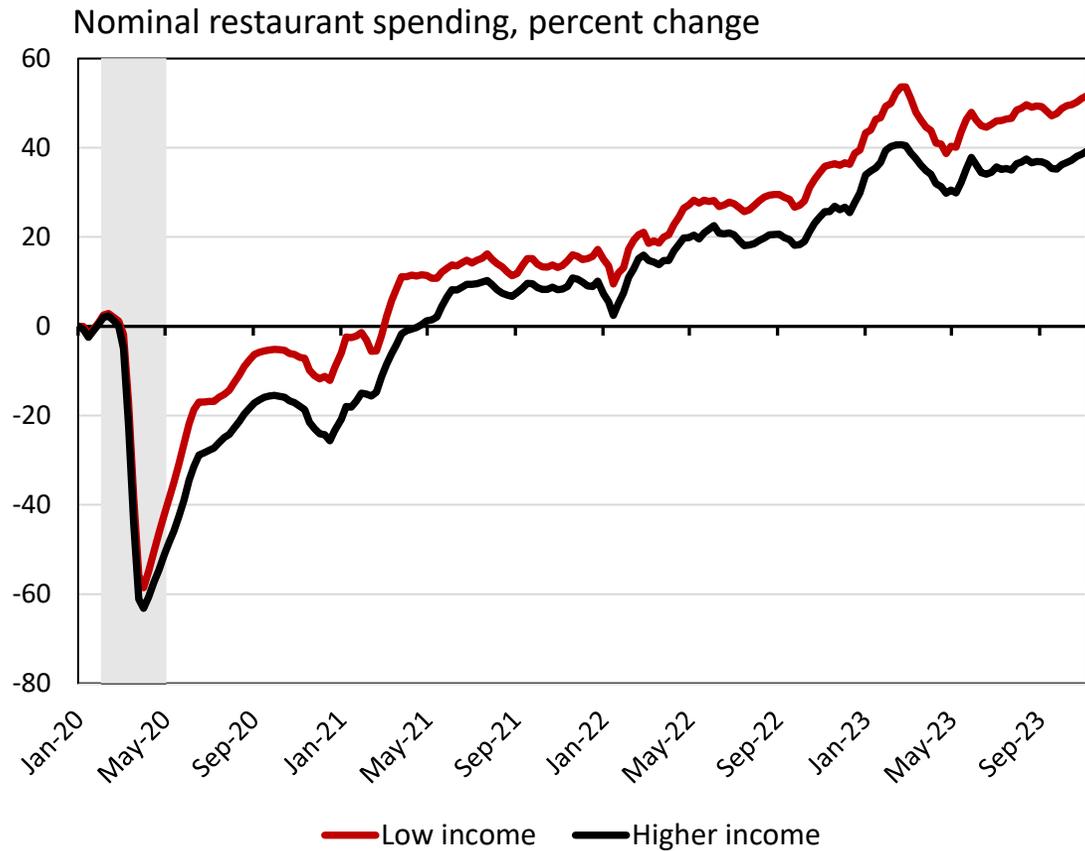


Source: Commerce Signals – Three-week moving averages.
 Notes: Urban counties are defined as those located in a Metropolitan Statistical Area (MSA). Real spending uses corresponding urban prices, indexed to January 2020. Shaded region indicates the COVID-19 recession.



Nominal spending ranges from January 1, 2020, to November 11, 2023. Real spending ranges from January 1, 2020, to November 4, 2023.

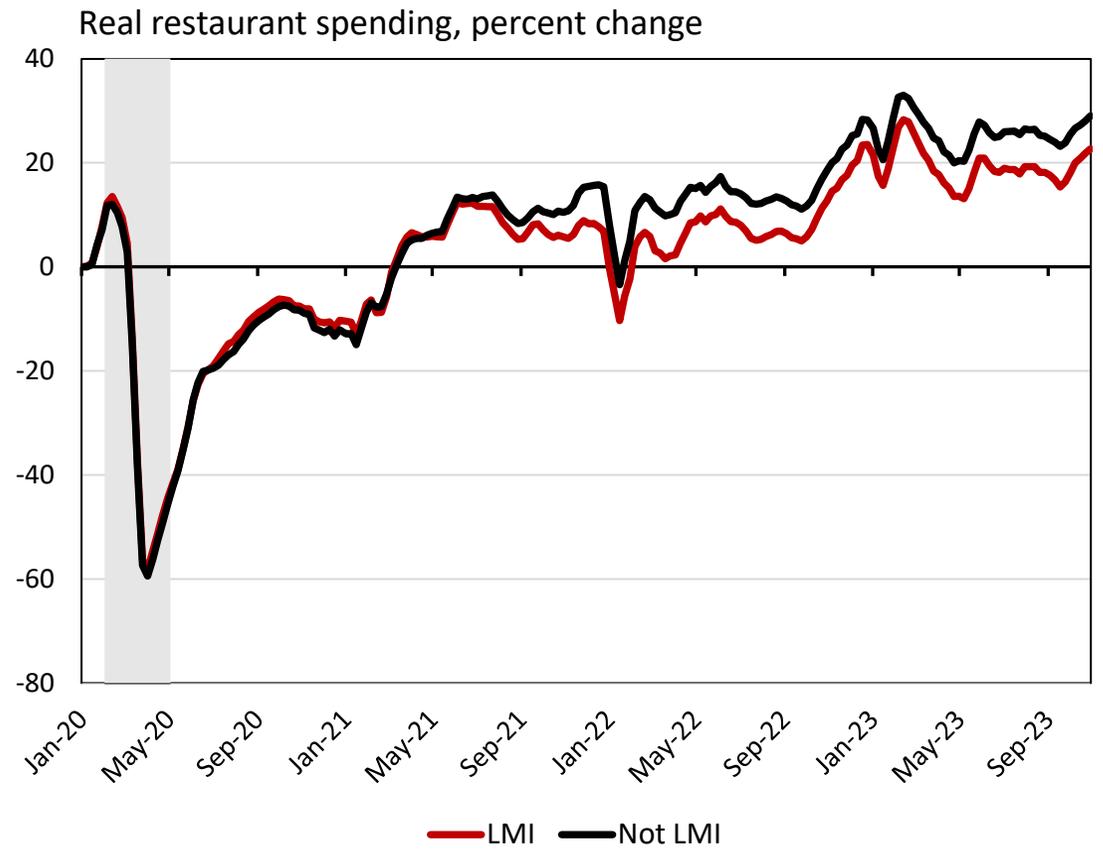
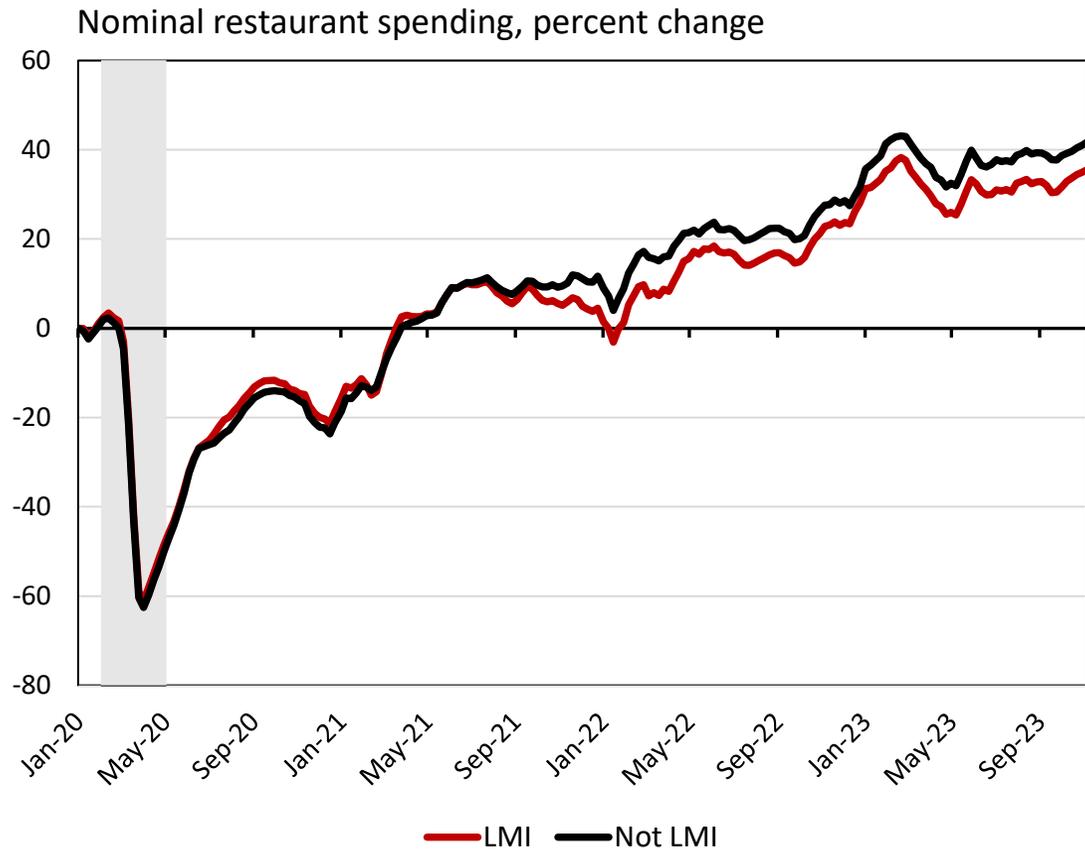
Restaurant Spending by County Household Income



Source: Commerce Signals – Three-week moving averages.
 Notes: Low-income counties are defined as those with household incomes below the 25th percentile of national household income. Real spending uses corresponding regional prices, indexed to January 2020. Shaded region indicates the COVID-19 recession.

Nominal spending ranges from January 1, 2020, to November 11, 2023. Real spending ranges from January 1, 2020, to November 4, 2023.

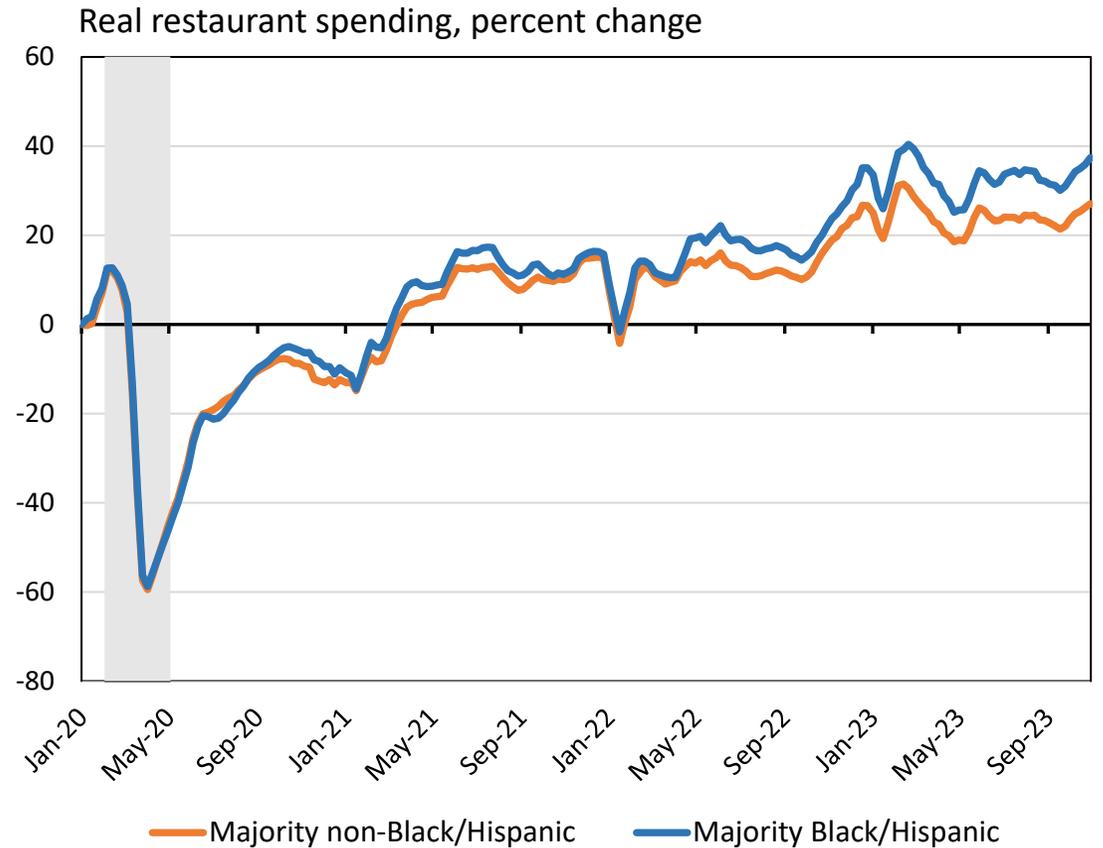
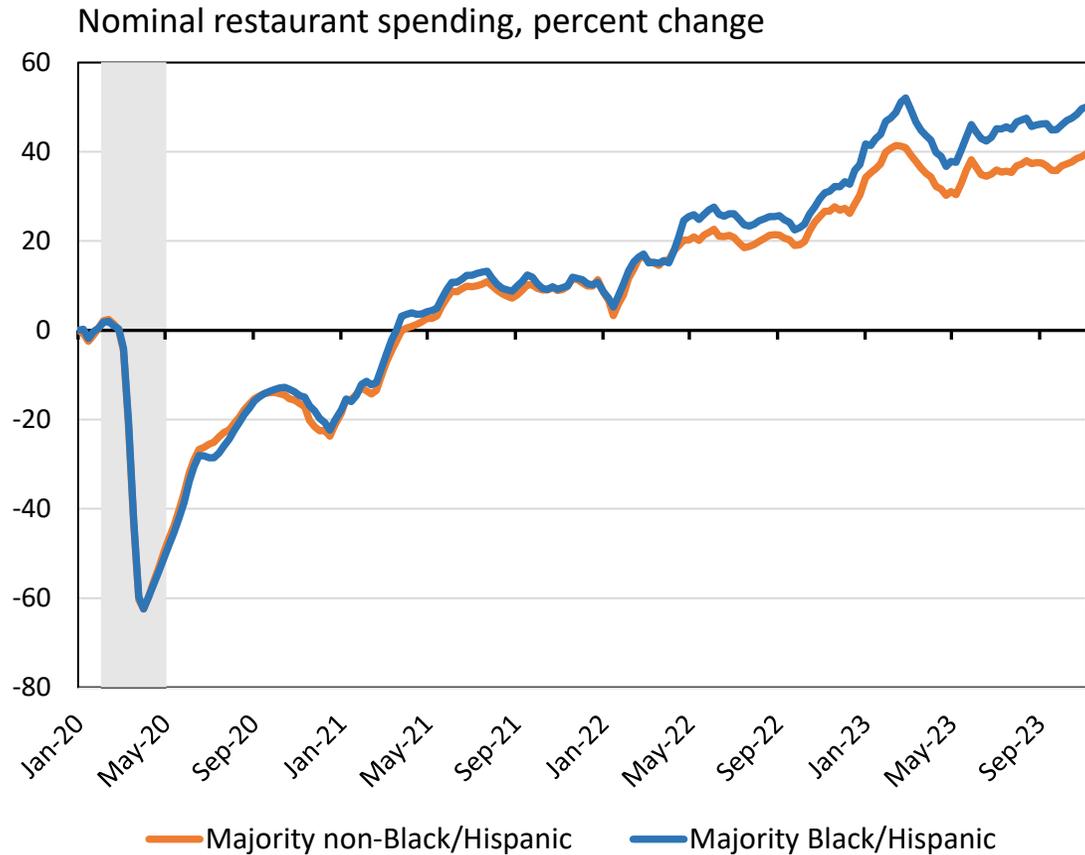
Restaurant Spending by Low to Moderate Income (LMI) Status



Source: Commerce Signals – Three-week moving averages.
 Notes: Low-to-moderate income (LMI) counties are defined as those where the majority of households earn below 80% of the metro area median. Real spending uses corresponding urban/rural prices, indexed to January 2020. Shaded region indicates the COVID-19 recession.

Nominal spending ranges from January 1, 2020, to November 11, 2023. Real spending ranges from January 1, 2020, to November 4, 2023.

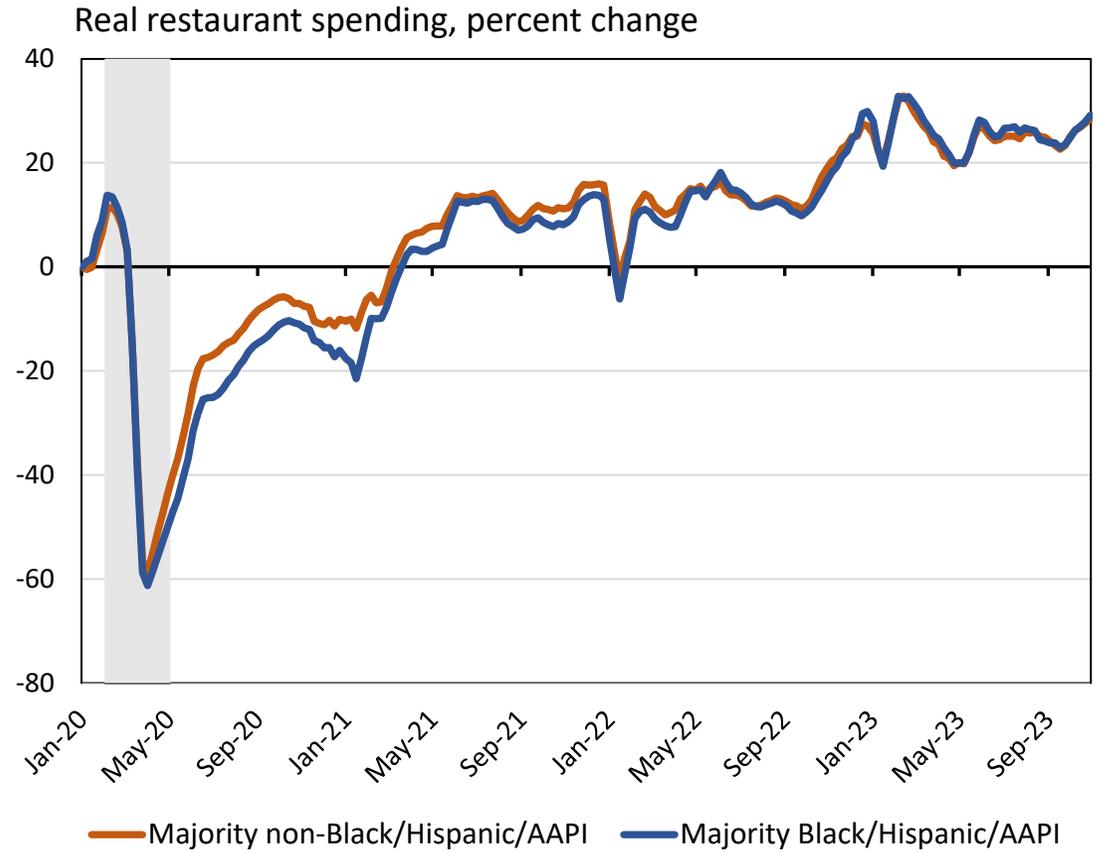
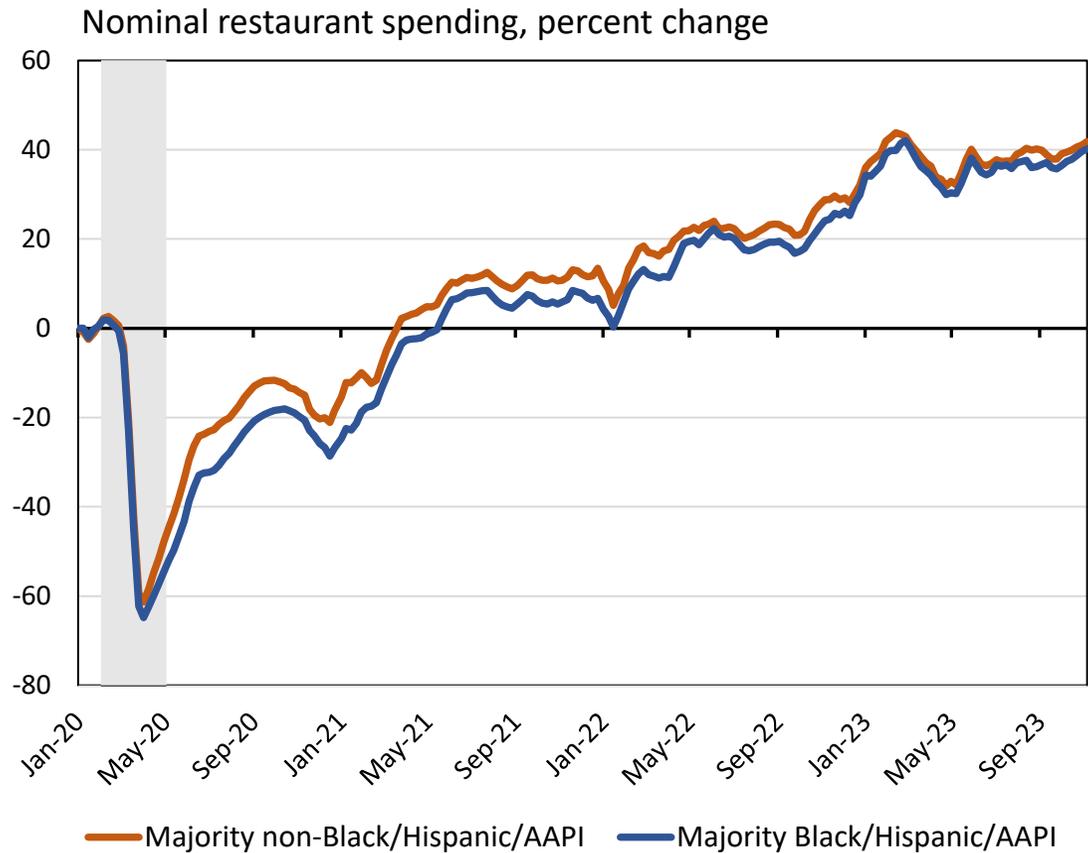
Restaurant Spending by County Demographics



Source: Commerce Signals – Three-week moving averages.
 Notes: Majority Black/Hispanic counties are defined as those where greater than 50% of the county's population is Black or Hispanic. Real spending uses corresponding regional prices, indexed to January 2020. Shaded region indicates the COVID-19 recession

Nominal spending ranges from January 1, 2020, to November 11, 2023. Real spending ranges from January 1, 2020, to November 4, 2023.

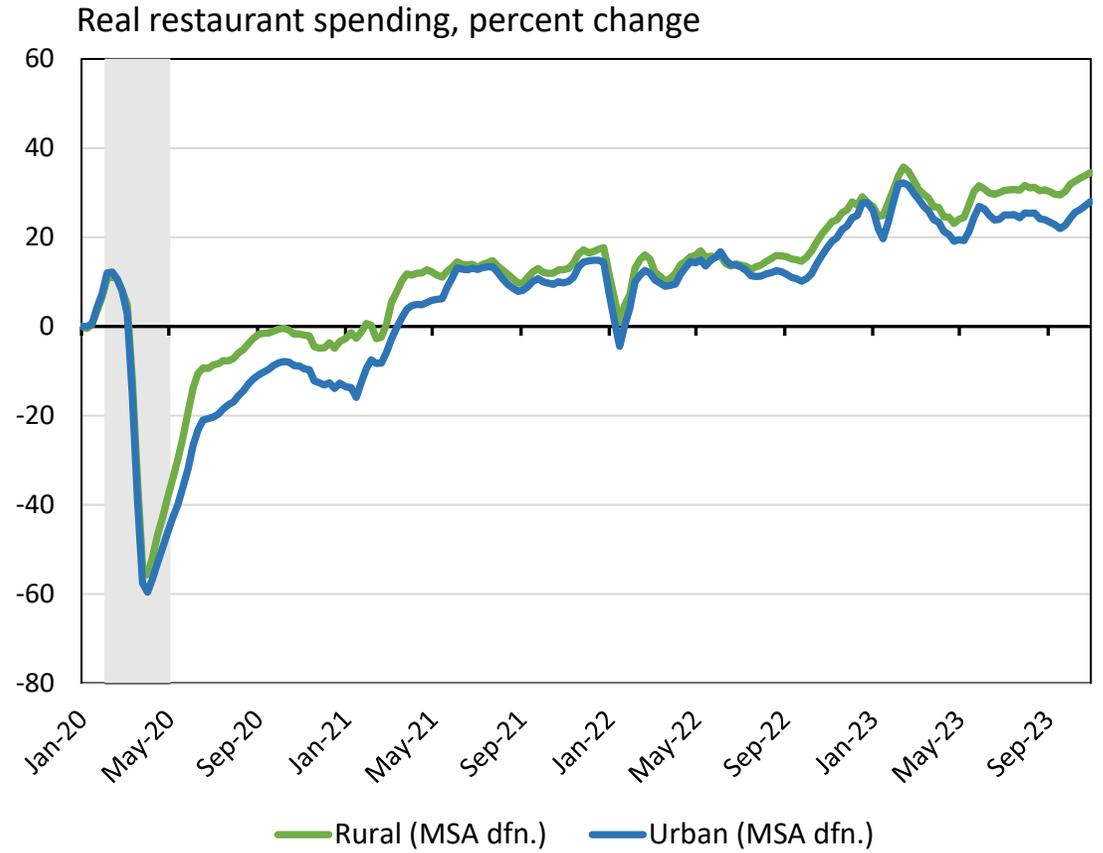
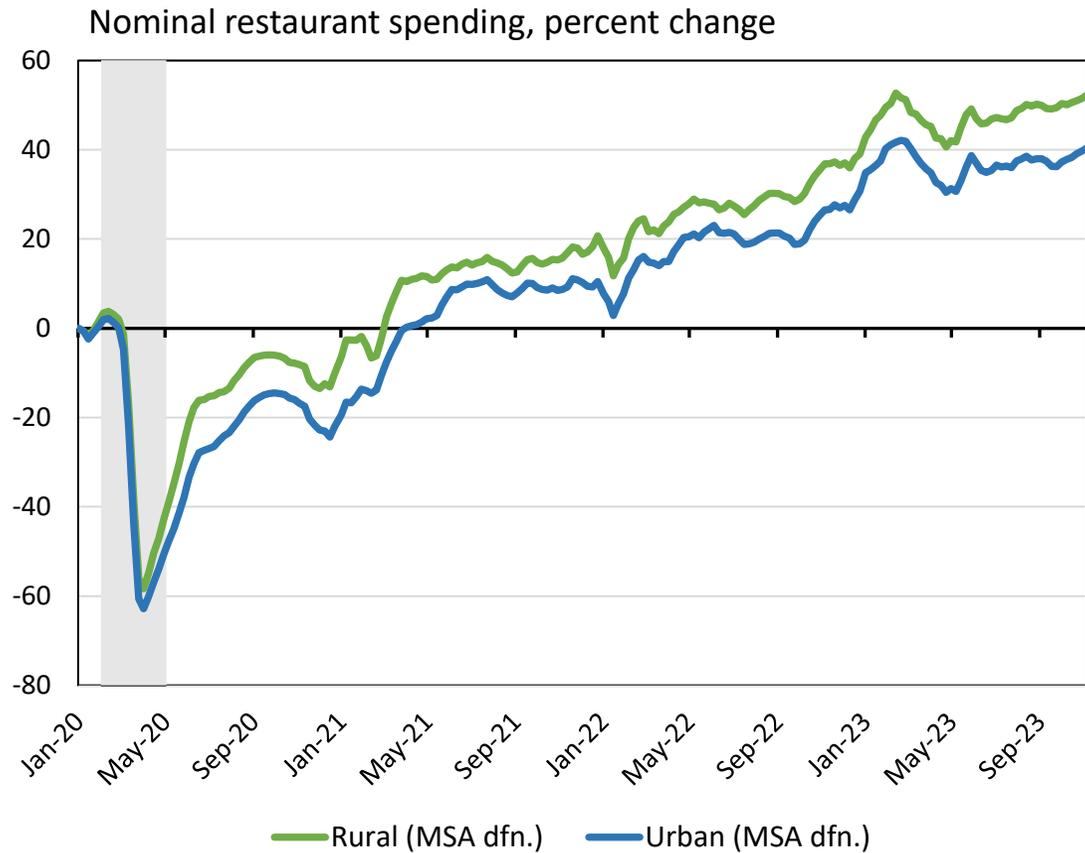
Restaurant Spending by County Demographics



Source: Commerce Signals – Three-week moving averages.
 Notes: Majority Black/Hispanic/AAPI counties are defined as those where greater than 50% of the county's population is Black, Hispanic, or AAPI. Real spending uses corresponding regional prices, indexed to January 2020. Shaded region indicates the COVID-19 recession

Nominal spending ranges from January 1, 2020, to November 11, 2023. Real spending ranges from January 1, 2020, to November 4, 2023.

Restaurant Spending by County Urban/Rural Status



Source: Commerce Signals – Three-week moving averages.
 Notes: Urban counties are defined as those located in a Metropolitan Statistical Area (MSA). Real spending uses corresponding urban prices, indexed to January 2020. Shaded region indicates the COVID-19 recession.

Nominal spending ranges from January 1, 2020, to November 11, 2023. Real spending ranges from January 1, 2020, to November 4, 2023.