We thank Kasey Chatterji-Len and Dan Garcia for excellent research assistance. The views expressed here are those of the authors and do not necessarily reflect the position of the Federal Reserve Bank of New York or the Federal Reserve System.
Equitable Growth, the Dual Mandate and Inflation

Motivating questions

- Large inflationary pressures in 2021-22 are well established in aggregate national data.
  - Were there differences in inflationary experiences across demographic groups?
  - How can we compare inflation between demographic groups?
    - Data on inflationary pressures by demographic groups are not produced directly.
- Equitable growth questions often focus on the labor market, but what about the other half of the dual mandate?
Findings

- Inflation gaps widened considerably during the 2021 inflationary episode.
- The groups experiencing higher inflation than the overall average were
  - Middle-income earners
  - Young people
  - People without a college degree
  - Residents of the South and the Midwest
  - Black and Hispanic Americans
Understanding Differences in Inflationary Pressures

- We compute measures of demographic inflation leveraging two key pieces of available data
  - National measures of inflation for various goods and services
  - Share of expenditures in these goods and service categories for demographic groups
- Dynamics of relative inflation gaps are driven by differences in transportation shares in consumption.
Inflation in Transportation Surpassed Inflation in other sectors

12-Month CPI Inflation (%), by Sector

Source: CPI via Haver Analytics; Author’s calculations.
Transportation Constitutes a Higher Share of Expenditure for Black and Hispanic Americans

Source: BLS Consumer Expenditure Survey, 2020; Author’s calculations.
How We Estimate Demographic Inflation Gaps

Source: CPI via Haver Analytics and BLS Consumer Expenditure Survey, 2018-2021; Author’s calculations.
Black and Hispanic Americans experience stronger inflationary pressures

Demographic Inflation Rates Relative to Average, for Racial & Ethnic Groups (POC only)

Source: BLS Consumer Expenditure Survey, 2019 - 2021; Author’s calculations.
Heterogeneity of transportation subcategory spending and inflation

Source: CPI via Haver Analytics and BLS Consumer Expenditure Survey, 2020; Author’s calculations.
Heterogeneity of inflation pressures by income quintile

**Share of Expenses on Food, Housing, and Transportation Among CEX Respondents by Income**

- **Food**: 1st/2nd Quintile, 3rd/4th Quintile, 5th Quintile
- **Housing**: 1st/2nd Quintile, 3rd/4th Quintile, 5th Quintile
- **Transportation**: 1st/2nd Quintile, 3rd/4th Quintile, 5th Quintile

**Demographic Inflation Rates Relative to Average, for Income Quintiles**

- **Gap in Demo-Specific Inflation (%) Relative to Average**
  - 1st/2nd Quintile
  - 3rd/4th Quintile
  - 5th Quintile

Source: CPI via Haver Analytics and BLS Consumer Expenditure Survey, 2018-2020; Author’s calculations.
Heterogeneity of inflation pressures by age

Share of Expenses on Food, Housing, and Transportation
Among CEX Respondents by Age

Demographic Inflation Rates Relative to Average, for Age Groups

Source: CPI via Haver Analytics and BLS Consumer Expenditure Survey, 2018-2020; Author’s calculations.
Heterogeneity of inflation pressures by education

Source: CPI via Haver Analytics and BLS Consumer Expenditure Survey, 2018-2020; Author’s calculations.
Heterogeneity of inflation pressures by region

Share of Expenses on Food, Housing, and Transportation
Among CEX Respondents by Region

Demographic Inflation Rates Relative to Average, for US Regions

Source: CPI via Haver Analytics and BLS Consumer Expenditure Survey, 2018-2020; Author’s calculations.
Conclusions

- Combine group-varying spending shares and inflation patterns across goods and services.
- Main conclusion: inflation inequality increased during the episode, by much more than was seen before the pandemic.
- Groups with relatively high transportation shares, such as Hispanic Americans and the young, experienced above average inflation.
- Inflation inequality now decreasing as transportation inflation declining.
Appendix
Heterogeneity in transportation spending by income

![Graph showing detailed shares of total expenditure by transportation spending categories (Fuel, Used Vehicles, New Vehicles, Leases/Rentals, Public Trans., Other Trans. Costs) for different income quintiles (Q1/2, Q3/4, Q5).]

Source: BLS Consumer Expenditure Survey, 2020; Author’s calculations.
Heterogeneity in transportation spending by age

Source: BLS Consumer Expenditure Survey, 2020; Author's calculations.
Heterogeneity in transportation spending by education

Source: BLS Consumer Expenditure Survey, 2021; Author's calculations.
Heterogeneity in transportation spending by region

Source: BLS Consumer Expenditure Survey, 2021; Author's calculations.

<table>
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<th>Region</th>
<th>Fuel</th>
<th>Used Vehicles</th>
<th>New Vehicles</th>
<th>Leases/Rentals</th>
<th>Public Trans.</th>
<th>Other Trans. Costs</th>
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