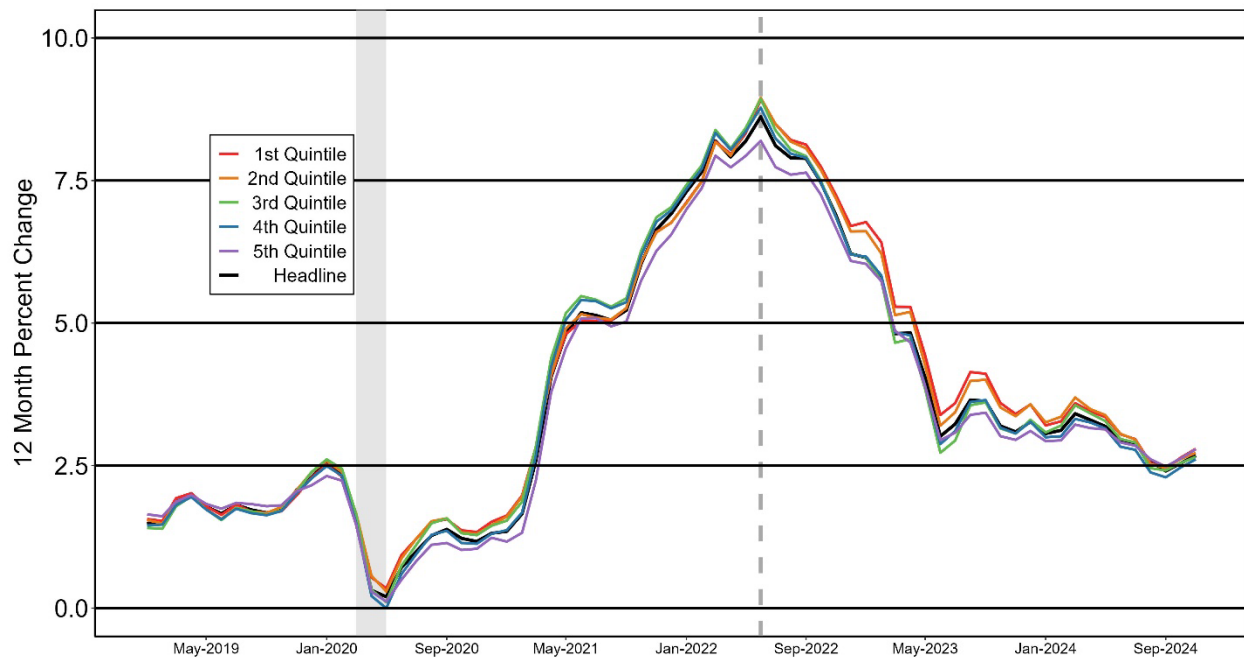


Appendices to
“Did Inflation Affect Households Differently? A Look at the Postpandemic Inflation and Wage Growth Dynamics”

by André Victor D. Luduvicé, Anaya Truss-Williams, and Christopher J. Walker

Appendix 1: Extra Graphs with Grouping by Quintiles

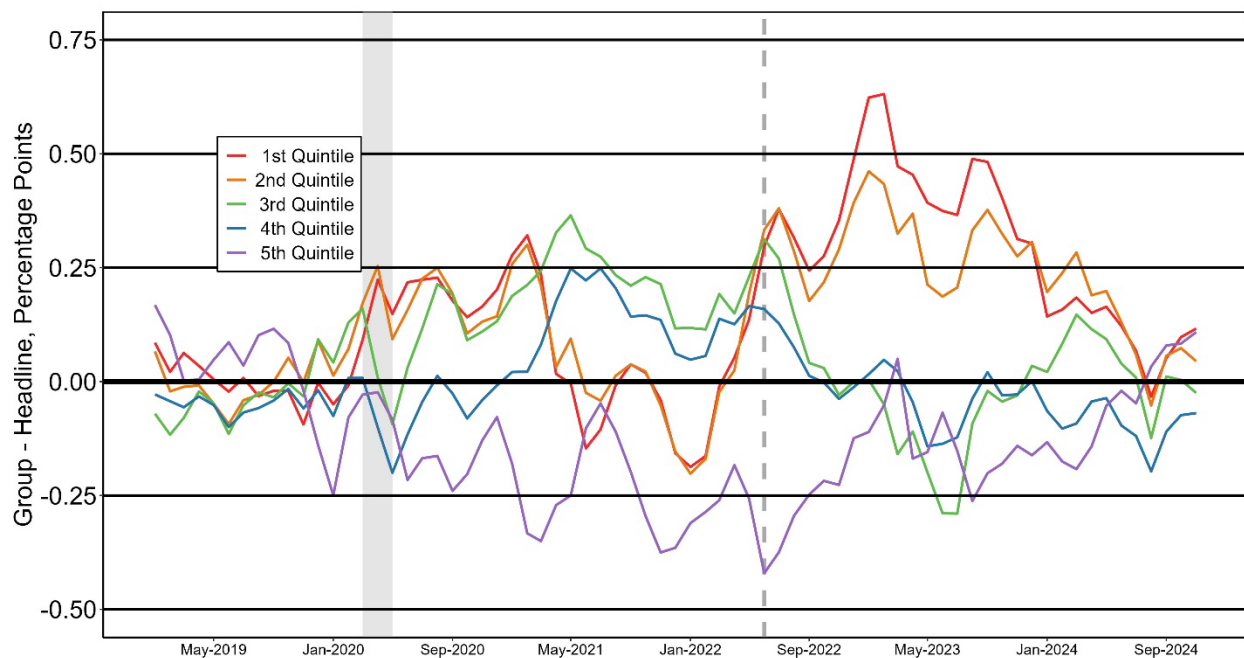
Figure A.1: Annual Inflation Rates by Income Quintiles (2019–2024).



Sources: Bureau of Labor Statistics R-CPI-I and CPI-U and authors' calculations

Notes: The graph shows inflation rates by income quintiles in year-over-year percent change. “Headline” represents the headline or overall CPI inflation. The vertical shaded region represents the 2020 COVID recession, and the vertical dashed line marks June 2022.

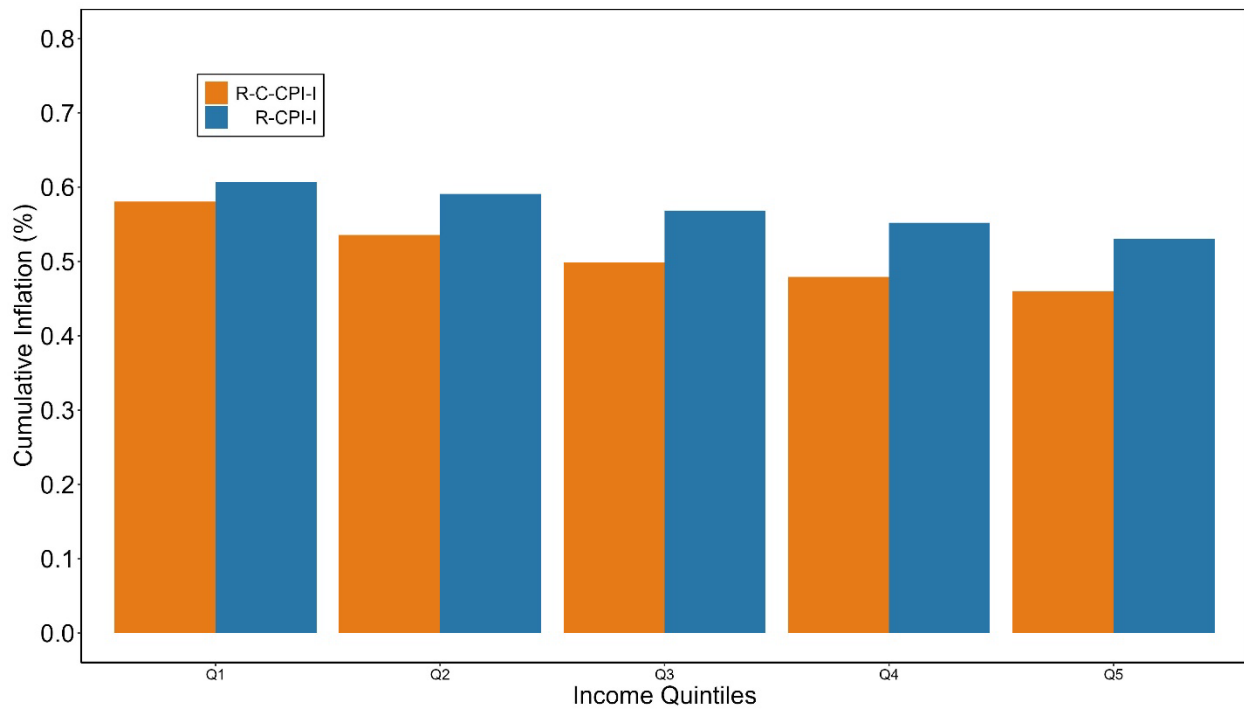
Figure A.2: Annual Inflation Rate Gaps by Income Quintiles (2019–2024).



Sources: Bureau of Labor Statistics R-CPI-I and CPI-U and authors' calculations

Notes: The graph shows the inflation rate gap between each income quintile and the headline CPI inflation. The gap is measured in percentage points. The vertical shaded region represents the 2020 COVID recession, and the vertical dashed line marks June 2022.

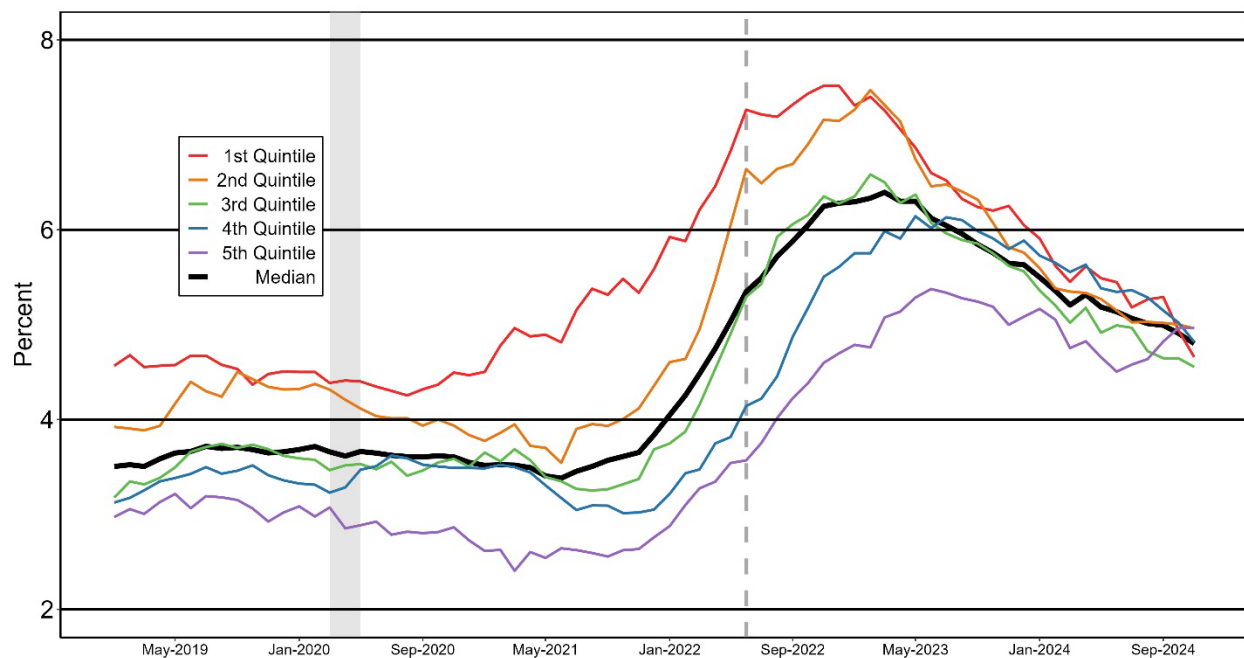
Figure A.3: Cumulated Inflation Measured by the R-CPI-I and R-C-CPI-I by Income Quintiles (2005:M12–2023:M12).



Sources: Bureau of Labor Statistics R-CPI-I and authors' calculations

Notes: The graph shows the cumulated inflation between December of 2005 and December of 2023 for each income quintile as measured by the R-CPI-I and the R-C-CPI-I. This graph is based on the graphs for cumulated inflation shown in Horwich (2024).

Figure A.4: Annual Nominal Wage Growth by Wage Distribution (2019–2024).

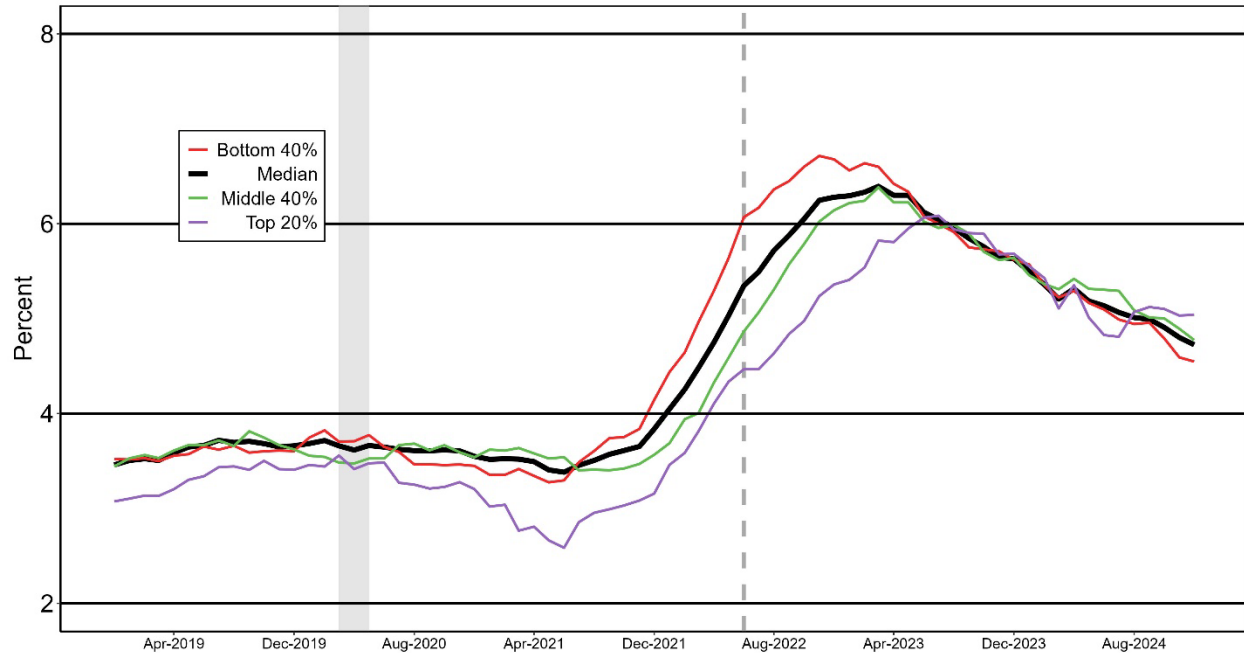


Sources: Current Population Survey (CPS), harmonized and longitudinally matched as the Federal Reserve Bank of Atlanta Wage Growth Tracker via CADRE of the Federal Reserve Bank of Kansas City; authors' calculations

Notes: The graph shows the median 12-month percent change in nominal wages by wage quintiles. "Median" represents the median or overall wage growth. The vertical shaded region represents the 2020 COVID recession, and the vertical dashed line marks June 2022.

Appendix 2: Approximate Purchasing Power Heterogeneity – Graphs by Quintiles and Formula

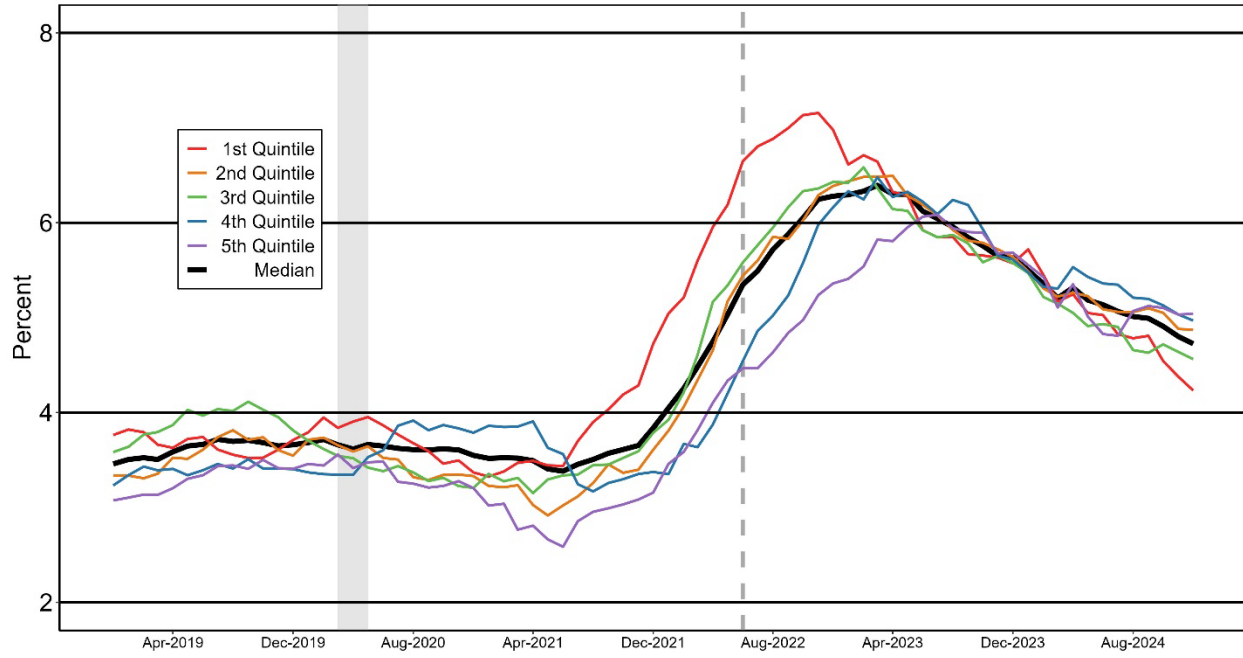
Figure A.5: Annual Nominal Wage Growth Across Different Equivalized Household Earnings Groups (2019–2024)



Sources: Current Population Survey (CPS), harmonized and longitudinally matched as the Federal Reserve Bank of Atlanta Wage Growth Tracker via CADRE of the Federal Reserve Bank of Kansas City; authors' calculations

Notes: The graph shows, for different equivalized household earnings' groups, the 12-month moving average of the median% change in nominal hourly wages of individuals observed 12 months apart. "Median" represents the median or overall wage growth. "Bottom 40%" represents the median wage growth for the bottom two quintiles of the equivalized household earnings' distribution, "middle 40%" represents the median wage growth for the middle two quintiles, and "top 20%" represents the median wage growth for the top quintile of the equivalized household earnings' distribution.

Figure A.6: Annual Nominal Wage Growth by Equivalized Household Earnings Quintiles (2019–2024)



Sources: Current Population Survey (CPS), harmonized and longitudinally matched as the Federal Reserve Bank of Atlanta Wage Growth Tracker via CADRE of the Federal Reserve Bank of Kansas City; authors' calculations

Notes: The graph shows the median 12-month percent change in nominal wages by equivalized household earnings' quintiles. "Median" represents the median or overall wage growth. The vertical shaded region represents the 2020 COVID recession, and the vertical dashed line marks June 2022.

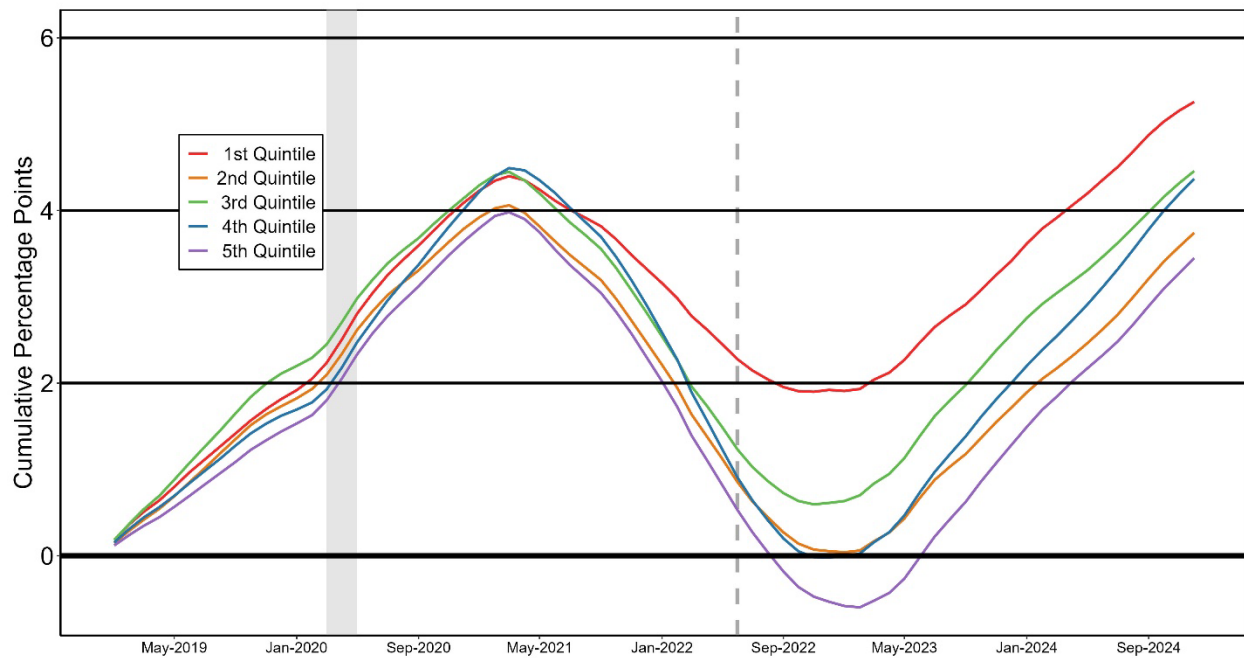
Calculation of the Approximate Measure of Cumulated Purchasing Power

The approximation formula used is as follows:

$$PP_{Cumulative,T} \approx \left\{ \sum_t^T \left[\left(\sqrt[12]{1 + \frac{\widehat{w}_t}{100}} \right) / \left(\sqrt[12]{1 + \frac{\widehat{\pi}_t}{100}} \right) - 1 \right] \right\} \times 100$$

Where \widehat{w}_t is the 12-month nominal wage growth rate and $\widehat{\pi}_t$ is the 12-month inflation rate, both observed monthly. The approximation considers that \widehat{w}_t and $\widehat{\pi}_t$ are both measured in percentages instead of rates, meaning they read as 3 percent, rather than 1.03. Given that we consider both measures at an annual basis, we obtain an average monthly change by taking the 12th root of the 12-month growth factors. Lastly, t is set to January 2019, while T denotes the running months from February 2019 through December 2024.

Figure A.7: Cumulated Purchasing Power by Income Quintiles (2019–2024).



Source: Bureau of Labor Statistics R-CPI-I and CPI-U, Current Population Survey (CPS) via Federal Reserve Bank of Kansas City harmonized and longitudinally matched as the Federal Reserve Bank of Atlanta Wage Tracker, and authors' calculations

Notes: The graph shows cumulated difference between wage growth and inflation by earnings/income quintiles. The cumulated difference is measured in percentage points. The vertical shaded region represents the 2020 COVID recession and the vertical dashed line marks June 2022.

Reference

Horwich, Jeff. 2024. "Lower Income, Higher Inflation? New Data Bring Answers at Last." Federal Reserve Bank of Minneapolis (blog). minneapolisfed.org/article/2024/lower-income-higher-inflation-new-data-bring-answers-at-last.