

Special Commentary — December 3, 2024

Inflation: Universally Hated, but Unevenly Shouldered

Summary

Prices are still rising faster than the pace consistent with the Fed's inflation target, making it difficult for consumers to feel like they are getting any meaningful relief. What's more, inflation continues to affect some consumer groups disproportionately. The Consumer Price Index (CPI) calculates the *average* change in prices across the *average* consumption basket. Yet, spending patterns vary widely, leading to significantly different inflation experiences. To determine which groups inflation is weighing on the most, we dust off our [earlier work](#) constructing unique CPIs based on the Consumer Expenditure Survey (CES). Across three demographic groupings, we find:

- **Income:** Lower-income households have faced the strongest inflation not just over the past year, but over the past four years following outsized increases in the cost of essentials like housing, electricity and food at home. Because lower-income consumers devote a larger share of their spend to necessities, the continued elevated rate of inflation in essentials has weighed most on them.
- **Race/Ethnicity:** Asian households have faced the highest rate of inflation over the past year, although on a cumulative basis have seen the least-egregious rise in living costs this cycle. In contrast, inflation has been lowest for Hispanic & Latino households the past year, even as it has been—along with Black households—the steepest over the entire past four-year period.
- **Age:** Rising healthcare costs have led to seniors facing the highest rate of inflation this past year. Meanwhile, Gen-X households have experienced some of the least-severe inflation over the past year and over the cycle as a whole as they tend to devote a relatively high portion of outlays to items that have seen a less-dizzying rate of price increases.

Of course, the difference in the recent rate of inflation and the cumulative rise in living costs across consumer groups does not fully capture the different experiences with price increases. Consumers with less take-home pay—who are more likely to be Hispanic or Latino, Black and/or young—are more constrained in their ability to adjust to higher prices. Real income is also an important factor. The lowest-income households have seen the largest gain in inflation-adjusted incomes over the past four years, but the improvement in real income came in the first two years of the pandemic. Gains have eroded more recently due to not only weaker growth in nominal income, but the stronger rate of inflation lower-income households are facing than those higher up the income spectrum.

CPI by Consumer Group

Annual Growth Rates, October 2024, Average CPI based on CES = 2.0%

	Income		Race/Ethnicity		Age	
Lowest	2.3%	White & Other	2.0%	<25	1.8%	
Second	2.1%	Asian	2.3%	25 - 34	2.0%	
Middle	2.0%	Black	2.2%	35 - 44	2.0%	
Fourth	1.9%	Hispanic & Latino	1.8%	45 - 54	1.8%	
Highest	2.0%			55 - 64	1.9%	
				65+	2.3%	

Source: U.S. Department of Labor and Wells Fargo Economics

Economist(s)

Sarah House

Senior Economist | Wells Fargo Economics
Sarah.House@wellsfargo.com | 704-410-3282

Aubrey Woessner

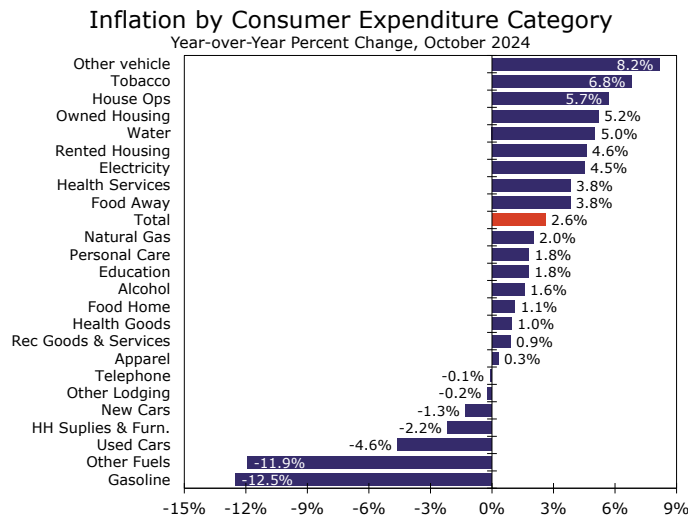
Economic Analyst | Wells Fargo Economics
Aubrey.B.Woessner@wellsfargo.com | 704-410-2911

Uneven Respite

The inflation picture has brightened since the intense storm that followed the first few years of the pandemic. After peaking at an annual rate of more than 9% in June 2022, the Consumer Price Index is up 2.6% over the past year. Yet that still leaves prices rising faster than during the past cycle (and the pace consistent with the Fed's target), making it difficult for consumers to feel like they are getting any meaningful relief. What's more, inflation continues to impact some consumer groups disproportionately.

In this note, we dust off our [earlier work](#) looking at the inflation experience of different groups of consumers. The CPI calculates the *average* change in prices across the *average* consumption basket. Yet, spending patterns vary widely, leading to varied inflation experiences. Not everyone owns a car, goes to concerts or needs to cough up for daycare. Different mixes of goods and services consumption can lead to distinct inflation experiences. The past year has seen price growth settle down for purchases like vehicles, food and gasoline while some areas of inflation like shelter and healthcare remain sticky ([Figure 1](#)). Who is inflation still weighing on the most?

Figure 1



Source: U.S. Department of Labor and Wells Fargo Economics

To determine who has faced the steepest rise in living costs, we construct inflation indices unique to different consumer groups. We already have detailed price change data for everything from tires to baby food to college textbooks from the monthly CPI releases. To get at the divergence in consumption baskets between different types of consumers, we utilize detailed spending data from the U.S. Department of Labor's Annual Consumer Expenditure Survey (CES), from which we can calculate the percentage of spending that different demographic groups tend to allocate to various types of goods and services. In particular, we use the CES weightings to create inflation indices for consumers by income, race and age groupings.

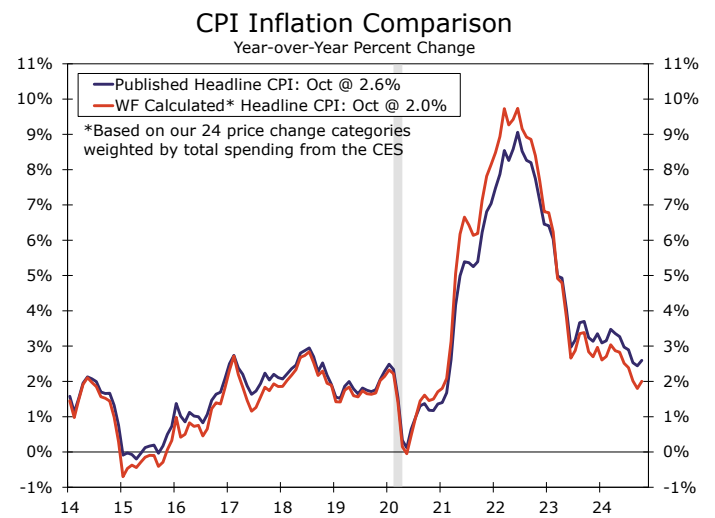
For a fuller explanation of our methodology, please see the [Appendix](#) below. While our methodology results in a slightly more volatile measure of inflation, it still closely tracks the ups and downs of the published headline ([Figure 2](#)). Our calculation shows CPI for all consumers up 2.0% over the past 12 months, which is leaps and bounds lower than the recent peak in price growth in June 2022 and roughly in line with price growth pre-pandemic.

How Does the Cookie Crumble?

Income: Inflation Most Severe for Lower-Income Households

Looking at inflation by income shows that lower-income households have faced the steepest price growth over the past year ([Figure 3](#)). Households at the bottom-end of the income spectrum devote a greater share of spending toward necessities like housing, utilities and medical services—all of which have grown at an above-average pace this past year ([Figure 4](#)). Meantime, lower-income households

Figure 2

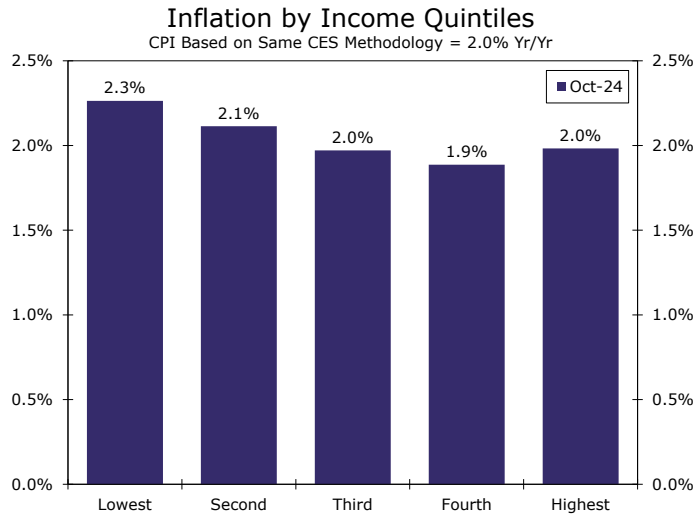


Source: U.S. Department of Labor and Wells Fargo Economics

rely disproportionately on public transportation, and so they have not benefited as much from the recent drop in gasoline and vehicle prices as middle-income households have.

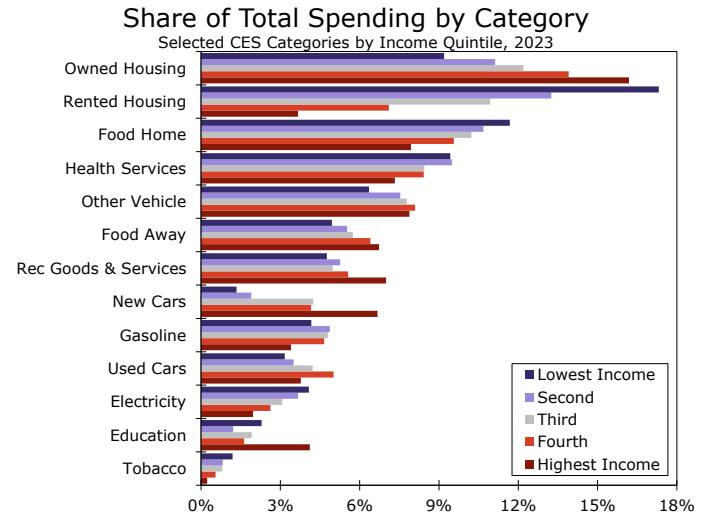
The faster pace of inflation experienced by lower-income households over the past year piles on to what has already been a more exasperating period of price hikes. On a cumulative basis this cycle, households in the second-lowest income quintile have seen their cost of living rise the most since the start of 2020 (+23.7%), followed closely by households in the bottom and middle quintile (+23.2% each). The more daunting rise in prices follows outsized increases in essentials like housing, electricity and food at home not just over the past year, but over the past four years.

Figure 3



Source: U.S. Department of Labor and Wells Fargo Economics

Figure 4



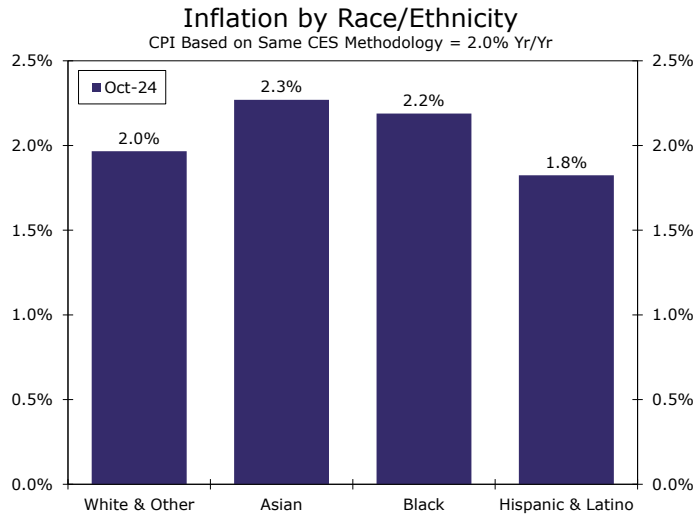
Source: U.S. Department of Labor and Wells Fargo Economics

Race/Ethnicity: Recent Inflation Reprieve for Hispanics & Latinos

A more mixed picture of the inflation experience emerges when looking across different racial/ethnic groups. Asian households have faced the highest rate of inflation over the past year, although on a cumulative basis have seen the least-egregious rise in living costs this cycle (Figures 5 & 6). Categories like food away from home and household operations make up a larger share of Asian households' spending basket, both of which have outpaced headline inflation this past year. At the same time, Asian households have benefited less from relatively benign inflation, or outright deflation, in areas like food at home, recreation, gasoline, used autos and household furnishings/supplies.

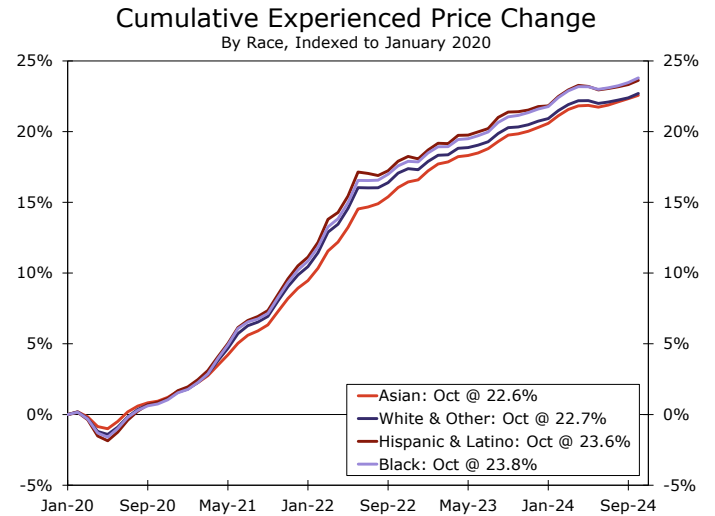
In contrast, inflation has been lowest for Hispanic & Latino households the past year, even as it has been, along with Black households, the steepest for the cycle. We see this as being related to the group's outsized share of spending on recently deflationary categories like gasoline and used cars. Hispanic & Latino households also devote a relatively large share of income toward goods and services where inflation has been relatively tepid in recent months, such as food at home, household furnishings and apparel. Furthermore, the younger age profile of Hispanic & Latino households also means they have been shielded from the above-average inflation in medical care this past year.

Figure 5



Source: U.S. Department of Labor and Wells Fargo Economics

Figure 6



Source: U.S. Department of Labor and Wells Fargo Economics

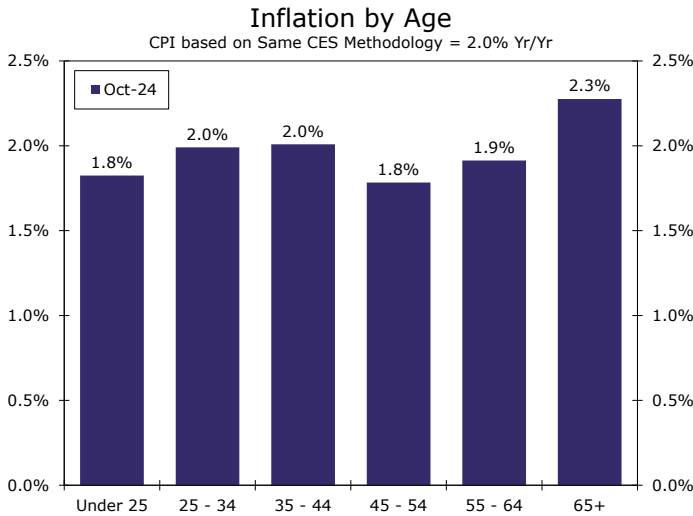
Age: Healthcare Inflation Catching Up to Seniors

With spending patterns varying across the consumer life cycle, inflation this year has also been felt unequally across age groups. After experiencing lower inflation through most of the cycle, seniors (ages 65+) have faced the biggest increase in prices over the past year (Figure 7). Healthcare costs have been a key driver. After trailing overall inflation for most of the past four years, cost growth for medical care, which accounts for 15% of seniors' spending, has more recently outpaced overall inflation (Figure 8). Meantime, seniors direct a lower share of spending toward major categories like autos and gasoline that have experienced deflation over the past year.

While inflation for households ages 65+ has led the pack over the past year, households ages 25-44, which encapsulates the Millennial generation, have faced the sharpest rise in living costs since 2020 (+24.0% for 25-34 year olds and +23.6% for 35-44 year olds). Consumers of this age tend to devote a greater share of spending to necessities that have seen large price increases this cycle, like housing and food, and lower share on items that have seen more modest increases, such as education and healthcare.

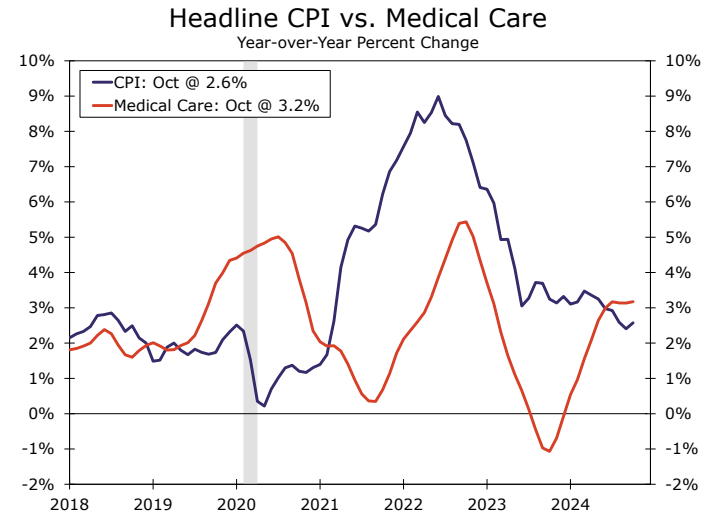
Often overlooked, Gen-X households have seen some of the least-severe inflation over the past year and over the cycle as a whole. This comes as households in their mid-40s to late-50s direct the smallest share of spending toward housing, are not quite at the age when spending on healthcare jumps and direct a relatively large portion of outlays to items that have seen a less-dizzying rate of inflation, such as education, recreation and hotel travel.

Figure 7



Source: U.S. Department of Labor and Wells Fargo Economics

Figure 8



Source: U.S. Department of Labor and Wells Fargo Economics

Variance in Inflation: More than Meets the Eye

The difference in the recent rate of inflation and the cumulative rise in living costs across consumer groups does not fully capture the different experiences with price increases. Consumers with less take-home pay—who are more likely to be Hispanic or Latino, Black and/or young—are more constrained in their ability to adjust to higher prices. For one thing, lower-income households have less accumulated savings to draw on, or have more limited room to reduce current saving rates, to smooth consumption. In addition, with a greater share of spending devoted to essentials, lower-income households have less scope to adjust to a broadly higher price environment by forgoing more discretionary purchases or trading down to less-expensive product versions.

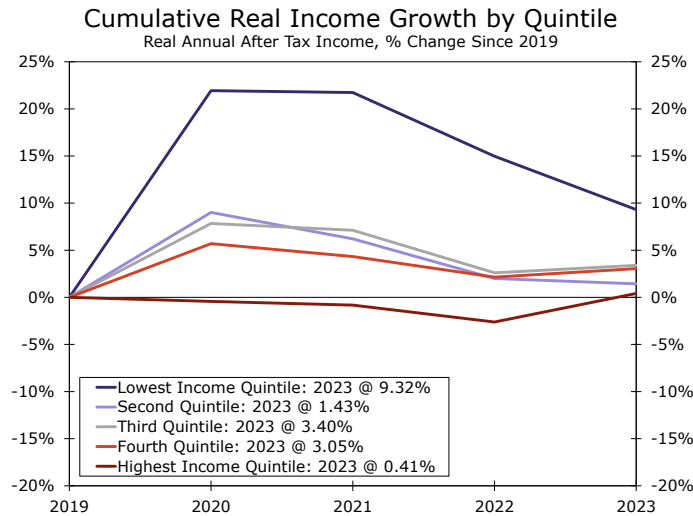
The gap in *measured* inflation also likely understates the gap in *experienced* inflation between higher- and lower-income households due to the treatment of owner-occupied housing costs in the CPI. Owners' equivalent rent (OER), which estimates the rental value of owned housing, makes up a larger share of upper-income households' inflation basket due to higher homeownership rates. Yet, despite cumulative OER inflation of 26% over the cycle, the actual payments for homeowners have not risen nearly as much thanks to fixed rate mortgages. What's more, homeowners have been able to build equity in this environment of fast-rising home prices. Renters, on the other hand, face more frequent adjustments, with prices typically changing with each new lease, and have not had the financial benefit of increased real estate equity.

Yet, when considering the overall toll of higher prices on the financial well-being of different consumer groups, income should also be taken into account. We calculate real incomes for the demographic groups analyzed above based on each group's estimated inflation rates and their after-tax income from the CES. Even with decades' high inflation, all income quintiles saw real income climb between 2019 and 2023, the latest year income data are available. The lowest-income quintile has actually seen income best keep pace with measured inflation since the pandemic struck. Amid substantial fiscal policy support early on in the pandemic (e.g., multiple stimulus checks), *real* income for the bottom 20% of households rose 9% from 2019–2023, which was roughly three-times more than the next-strongest group's gain (Figure 9). That said, the increase in real-income came early on in the pandemic, and gains have eroded more recently for these households, with after-tax income little changed the past two years and still-elevated inflation. This contrasts with upper-income households, who saw after-tax income outpace inflation in 2023.

Meantime, a more mixed picture has played out by age. The very youngest households (under age 25) have seen income best keep pace with inflation thanks to the aforementioned fiscal policy support and white-hot jobs market for lower-skilled positions in recent years. But real income has gone nowhere for the oldest groups of households (Figure 10). Although households ages 55+ have faced a less

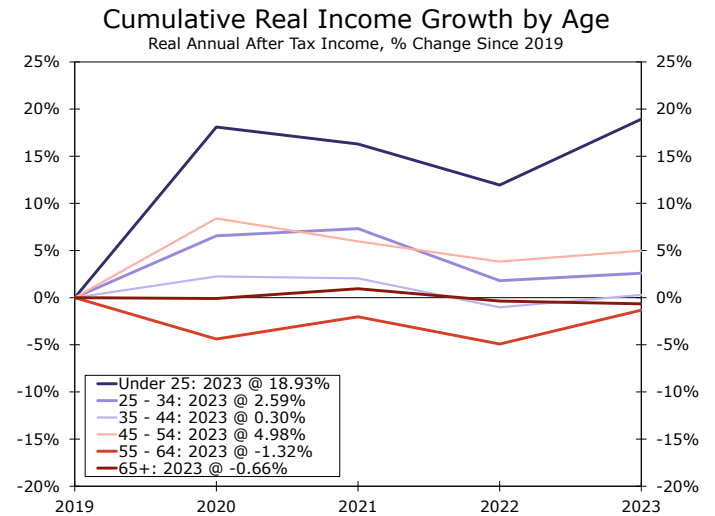
severe rise in the cost of living this cycle, they have also benefited less on the income-front from the exceptionally tight jobs market of recent years.

Figure 9



Source: U.S. Department of Labor and Wells Fargo Economics

Figure 10



Source: U.S. Department of Labor and Wells Fargo Economics

Conclusion: Acutely Aware of Inflation's Uneven Toll

For more than two years, Chair Powell's post-FOMC meeting press conference speeches included a line similar to: "We are acutely aware that high inflation imposes significant hardship, as it erodes purchasing power, especially for those least able to meet the higher costs of essentials like food, housing, and transportation." The reality is, even if the inflation rates *were* the same across all demographic groups, there are disproportionate effects from rising costs. Lower-income consumers, who are also more likely to be Hispanic or Latino, Black and/or young, are more constrained in their ability to adjust to higher prices. These households have fewer accumulated savings to draw on and often less room to reduce current saving rates to smooth consumption. Further, with a greater share of spending devoted to basics like housing, groceries and utilities, lower-income households have less scope to adjust to broadly rising prices by forgoing more discretionary purchases or trading down in price. While early on in the pandemic, income among lower-income households did well in keeping up with inflation, fortunes have withered more recently. Slower nominal income gains and above-average inflation have led to declines in real income at the same time lower-income households already have less room to maneuver to deal with higher living costs.

Appendix

Methodology

For each demographic group of interest, we pull spending categories from the CES and match them to pricing categories from the CPI. Our analysis covers 24 categories of spending, which equates to about 83% of total spending as measured by the CES. Our analysis does not include some areas of "spending" like *cash contributions* and *personal insurance & pensions*, since these outlays are not captured in the CPI basket. Accordingly, we reweight the consumption baskets across the various groups based on the 24 categories of consumption in our analysis to come up with each categories' percentage of total spend.

We then develop inflation indices across income cohorts, race/ethnicities and age groups by utilizing annual weights from the CES. That is, CPI price change data are weighted by spending shares for each demographic group in each year to reflect buying patterns over that year. Using our weights and more condensed category groupings leads to a more volatile measure of the CPI that still closely tracks the ups and downs of the published headline annual inflation.

Contribution to Consumer Group CPI by Spending Component																	
Higher (Lower) Contributions Across Groups Reflect Higher (Lower) Shares of Spending; Percentage Point Contribution to Yr/Yr % Change in October 2024																	
Spending Category	Total	Income					Race/Ethnicity				Age						
		Lowest	Second	Middle	Fourth	Highest	White	Asian	Black	Hispanic	<25	25 - 34	35 - 44	45 - 54	55 - 64	65+	
Alcohol	0.02	0.01	0.01	0.01	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.02	0.02	0.01
Apparel	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Education	0.05	0.04	0.02	0.03	0.03	0.07	0.05	0.09	0.03	0.03	0.13	0.03	0.04	0.07	0.05	0.02	
Electricity	0.12	0.18	0.17	0.14	0.12	0.09	0.12	0.09	0.17	0.14	0.12	0.12	0.12	0.12	0.13	0.14	
Food At Home	0.11	0.13	0.12	0.11	0.11	0.09	0.11	0.10	0.12	0.12	0.08	0.10	0.11	0.11	0.11	0.11	
Food Away	0.23	0.19	0.21	0.22	0.24	0.26	0.23	0.26	0.22	0.24	0.25	0.27	0.24	0.26	0.21	0.20	
Other Fuels	-0.03	-0.03	-0.04	-0.03	-0.03	-0.02	-0.03	-0.01	-0.01	-0.01	-0.01	-0.01	-0.02	-0.02	-0.03	-0.05	
Gasoline	-0.52	-0.52	-0.61	-0.60	-0.58	-0.42	-0.53	-0.40	-0.56	-0.71	-0.63	-0.54	-0.54	-0.57	-0.54	-0.43	
Health Goods	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	
Health Services	0.32	0.36	0.36	0.32	0.32	0.28	0.33	0.25	0.28	0.23	0.13	0.20	0.25	0.27	0.34	0.50	
Household Ops.	0.18	0.14	0.16	0.15	0.18	0.20	0.17	0.20	0.17	0.14	0.12	0.19	0.23	0.14	0.14	0.19	
Housekeeping	-0.11	-0.10	-0.11	-0.11	-0.12	-0.12	-0.12	-0.09	-0.10	-0.11	-0.09	-0.11	-0.11	-0.11	-0.12	-0.12	
Natural Gas	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.02	
New Cars	-0.06	-0.02	-0.02	-0.05	-0.05	-0.08	-0.05	-0.09	-0.04	-0.05	-0.05	-0.05	-0.05	-0.06	-0.07	-0.06	
Hotel/Motel	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	-0.01	-0.01	
Other Transport	0.63	0.52	0.62	0.64	0.66	0.64	0.62	0.65	0.72	0.67	0.66	0.62	0.63	0.64	0.67	0.59	
Owned Housing	0.70	0.48	0.58	0.63	0.72	0.84	0.71	0.77	0.59	0.53	0.21	0.56	0.74	0.71	0.76	0.78	
Personal Care	0.03	0.02	0.03	0.03	0.03	0.03	0.03	0.02	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	
Rec Goods & Services	0.05	0.04	0.05	0.05	0.05	0.06	0.06	0.03	0.04	0.04	0.03	0.04	0.05	0.05	0.05	0.05	
Rented Housing	0.39	0.80	0.61	0.50	0.33	0.17	0.35	0.44	0.63	0.70	1.05	0.72	0.40	0.29	0.23	0.29	
Telephone Svcs.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tobacco	0.04	0.08	0.06	0.05	0.04	0.02	0.04	0.02	0.03	0.02	0.04	0.04	0.03	0.04	0.05	0.04	
Used Cars	-0.19	-0.15	-0.16	-0.19	-0.23	-0.17	-0.19	-0.12	-0.20	-0.22	-0.27	-0.26	-0.19	-0.23	-0.17	-0.09	
Water/Trash Svcs.	0.06	0.08	0.08	0.07	0.06	0.05	0.06	0.06	0.07	0.06	0.05	0.05	0.06	0.06	0.07	0.07	
Total*	2.0%	2.3%	2.1%	2.0%	1.9%	2.0%	2.0%	2.3%	2.2%	1.8%	1.8%	2.0%	2.0%	1.8%	1.9%	2.3%	

*Note: Sum of contributions does not exactly equal the total due to rounding

Source: U.S. Department of Labor and Wells Fargo Economics

Subscription Information

To subscribe please visit: www.wellsfargo.com/economicsemail

Via The Bloomberg Professional Services at WFRE

Economics Group

Jay H. Bryson, Ph.D.	Chief Economist	704-410-3274	Jay.Bryson@wellsfargo.com
Sam Bullard	Senior Economist	704-410-3280	Sam.Bullard@wellsfargo.com
Nick Bennenbroek	International Economist	212-214-5636	Nicholas.Bennenbroek@wellsfargo.com
Tim Quinlan	Senior Economist	704-410-3283	Tim.Quinlan@wellsfargo.com
Sarah House	Senior Economist	704-410-3282	Sarah.House@wellsfargo.com
Azhar Iqbal	Econometrician	212-214-2029	Azhar.Iqbal@wellsfargo.com
Charlie Dougherty	Senior Economist	212-214-8984	Charles.Dougherty@wellsfargo.com
Michael Pugliese	Senior Economist	212-214-5058	Michael.D.Pugliese@wellsfargo.com
Brendan McKenna	International Economist	212-214-5637	Brendan.Mckenna@wellsfargo.com
Jackie Benson	Economist	704-410-4468	Jackie.Benson@wellsfargo.com
Shannon Grein	Economist	704-410-0369	Shannon.Grein@wellsfargo.com
Nicole Cervi	Economist	704-410-3059	Nicole.Cervi@wellsfargo.com
Jeremiah Kohl	Economic Analyst	212-214-1164	Jeremiah.J.Kohl@wellsfargo.com
Aubrey Woessner	Economic Analyst	704-410-2911	Aubrey.B.Woessner@wellsfargo.com
Delaney Conner	Economic Analyst	704-374-2150	Delaney.Conner@wellsfargo.com
Anna Stein	Economic Analyst	212-214-1063	Anna.H.Stein@wellsfargo.com
Ali Hajibeigi	Economic Analyst	212-214-8253	Ali.Hajibeigi@wellsfargo.com
Coren Miller	Administrative Assistant	704-410-6010	Coren.Miller@wellsfargo.com

Required Disclosures

This report is produced by the Economics Group of Wells Fargo Bank, N.A. ("WFBNA"). This report is not a product of Wells Fargo Global Research and the information contained in this report is not financial research. This report should not be copied, distributed, published or reproduced, in whole or in part. WFBNA distributes this report directly and through affiliates including, but not limited to, Wells Fargo Securities, LLC, Wells Fargo & Company, Wells Fargo Clearing Services, LLC, Wells Fargo Securities International Limited, Wells Fargo Securities Europe S.A., and Wells Fargo Securities Canada, Ltd. Wells Fargo Securities, LLC is registered with the Commodity Futures Trading Commission as a futures commission merchant and is a member in good standing of the National Futures Association. WFBNA is registered with the Commodity Futures Trading Commission as a swap dealer and is a member in good standing of the National Futures Association. Wells Fargo Securities, LLC and WFBNA are generally engaged in the trading of futures and derivative products, any of which may be discussed within this report.

This publication has been prepared for informational purposes only and is not intended as a recommendation, offer or solicitation with respect to the purchase or sale of any security or other financial product, nor does it constitute professional advice. The information in this report has been obtained or derived from sources believed by WFBNA to be reliable, but has not been independently verified by WFBNA, may not be current, and WFBNA has no obligation to provide any updates or changes. All price references and market forecasts are as of the date of the report or such earlier date as may be indicated for a particular price or forecast. The views and opinions expressed in this report are those of its named author(s) or, where no author is indicated, the Economics Group; such views and opinions are not necessarily those of WFBNA and may differ from the views and opinions of other departments or divisions of WFBNA and its affiliates. WFBNA is not providing any financial, economic, legal, accounting, or tax advice or recommendations in this report, neither WFBNA nor any of its affiliates makes any representation or warranty, express or implied, as to the accuracy or completeness of the statements or any information contained in this report, and any liability therefore (including in respect of direct, indirect or consequential loss or damage) is expressly disclaimed. WFBNA is a separate legal entity and distinct from affiliated banks, and is a wholly-owned subsidiary of Wells Fargo & Company. © 2024 Wells Fargo Bank, N.A.

Important Information for Non-U.S. Recipients

For recipients in the United Kingdom, this report is distributed by Wells Fargo Securities International Limited ("WFSIL"). WFSIL is a U.K. incorporated investment firm authorized and regulated by the Financial Conduct Authority ("FCA"). For the purposes of Section 21 of the UK Financial Services and Markets Act 2000 (the "Act"), the content of this report has been approved by WFSIL, an authorized person under the Act. WFSIL does not deal with retail clients as defined in the Directive 2014/65/EU ("MiFID2"). The FCA rules made under the Act for the protection of retail clients will therefore not apply, nor will the Financial Services Compensation Scheme be available. For recipients in the EFTA, this report is distributed by WFSIL. For recipients in the EU, it is distributed by Wells Fargo Securities Europe S.A. ("WFSE"). WFSE is a French incorporated investment firm authorized and regulated by the Autorité de contrôle prudentiel et de résolution and the Autorité des marchés financiers. WFSE does not deal with retail clients as defined in MiFID2. This report is not intended for, and should not be relied upon by, retail clients.

SECURITIES: NOT FDIC-INSURED - MAY LOSE VALUE - NO BANK GUARANTEE