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The sudden increase in the wealth effect and its impact on spending

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Wealth has a prominent influence on consumer spending, and its impact is only getting larger. According to new analysis from **Visa Business and Economic Insights**, the wealth effect has almost quadrupled in the last few years, positioning wealth as a crucial driver of consumer activity. There is a wide body of research on the wealth effect, with most studies concluding that consumers spend between 4 percent and 15 percent of newfound wealth.[1] According to our estimates, the wealth effect between 2002 and 2017 was 9 percent (Fig. 1). Said another way, for every $1 increase in household wealth, consumer spending increased by 9 cents. Over the last few years, however, something changed dramatically. **Using data through the third quarter of 2022, we find that the wealth effect has increased to 34 cents, almost quadruple the pre-pandemic average.** For wealth held in stocks, bonds, and pension entitlements, the spending responsiveness was 24 cents. For wealth held in owner-occupied housing, it was 20 cents.

Why did the wealth effect increase so quickly? Because household wealth has exploded, consumer responsiveness to wealth-based news has accelerated, and the number of retirees has expanded at the fastest rate on record. Changes in the wealth effect have significant implications for merchants. First, wealth effects can heavily influence certain spending categories, with some highly sensitive to changes in stock and bond wealth or housing wealth. Both play a big role in spending behavior. Second, who is acquiring wealth and how their consumption changes with wealth accumulation are additional factors. While baby boomers have the highest share of U.S. net worth today, that will begin to change over the next decade as more wealth is transferred to millennial and Gen X consumers, whose spending habits will mature as they enter their peak spending years—buying homes and spending more on their children, travel, dining out, and general entertainment. **For certain firms, wealth plays an exceptionally large role in business outcomes, with clear long-term repercussions through the end of the decade.**

Key Points:

- Changes in wealth now have a much larger impact on consumer spending
- Consumer spending responds more quickly to wealth fluctuations now due to increased access to real-time financial news
- Travel spending is particularly responsive to changes in wealth

Fig. 1: Wealth effects (cents per dollar change in household worth)

Wealth effect category	2017	2022
Overall wealth effect	9 cents	34 cents
Housing stock effect	4 cents	20 cents
Stock/bond wealth effect	9 cents	24 cents

Sources: Visa Business and Economic Insights and Federal Reserve Board

The wealth effect in a nutshell

When consumers gain wealth, their spending typically increases. They often feel more confident in their personal financial situation, leading them to spend more of their income and put less into savings. This can occur when the market has helped them achieve their savings goals – for example, because the value of their stock and bond holdings has increased – allowing them to purchase more goods and services today while maintaining confidence in their future financial situation.

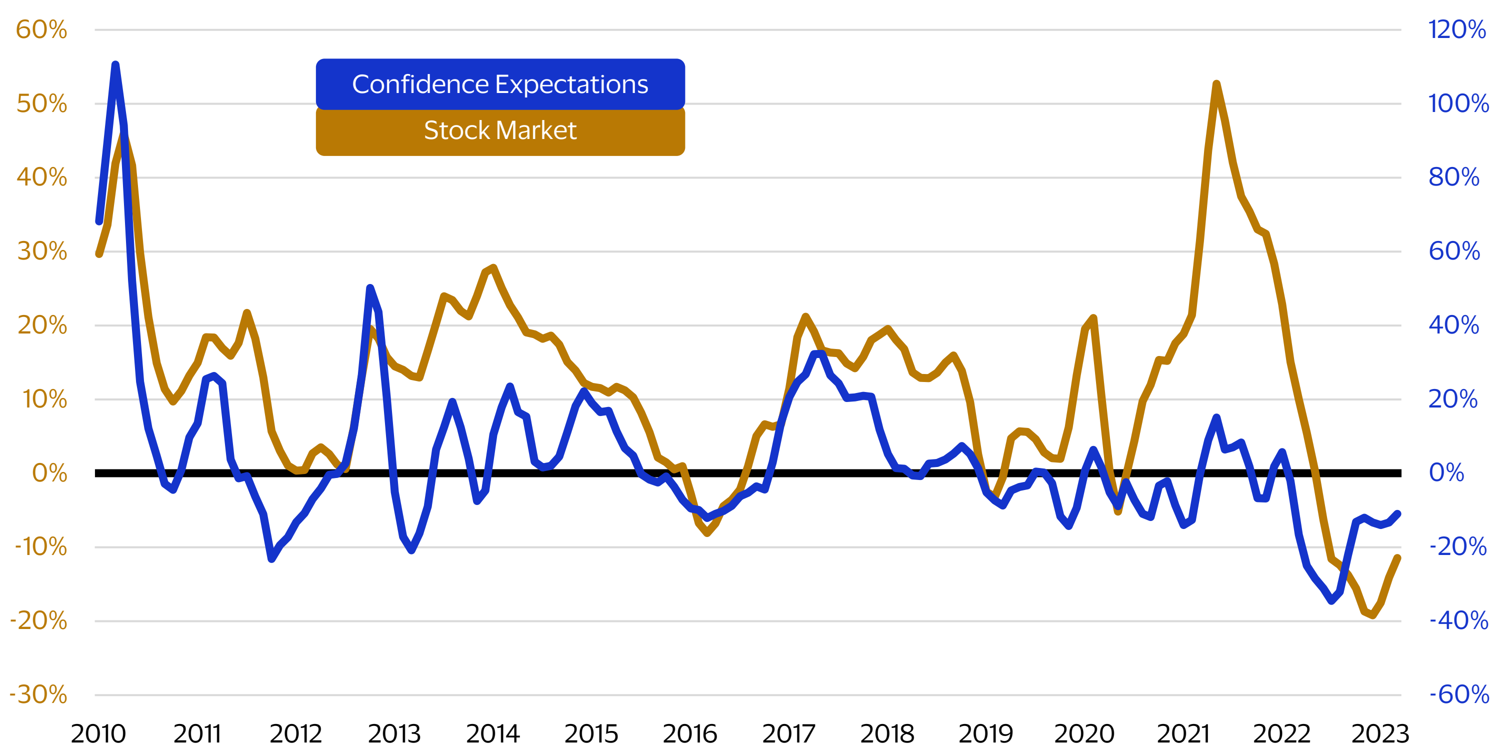
On other occasions, when wealth increases, consumers borrow against their assets to fund current consumption. When home prices go up, homeowners often tap home equity lines of credit (HELOCs) to take a vacation or remodel the kitchen. These purchases contribute towards broad-based consumer spending, resulting in added revenue for a variety of industries.

In yet another example of the wealth effect, individuals often liquidate assets to fund current consumption. This most commonly occurs among retirees, who typically sell stocks or downsize their homes, using the proceeds to supplement their reduced incomes. As the population has aged and the number of retirees has grown, this portion of the wealth effect has become increasingly impactful.

Lastly, the wealth effect influences virtually all consumers, even if they don't have substantial net worth valuations. News is available at almost all times of day. It comes from a variety of sources, and it reaches millions of consumers nationwide.[2] When the stock market has a good week, or when the housing market is in a slump, a surprisingly large share of the population becomes aware in short order. This phenomenon is often called the "Evening News Effect," but with the proliferation of news and finance apps giving most people an on-the-go stock ticker, a more appropriate moniker might be the "Smartphone Effect." As shown in Figure 2, stock market outcomes are highly correlated with consumer expectations for the economy.

Due to these factors, the wealth effect is a meaningful contributor to consumer spending, often accounting for a surprisingly large share.

Fig. 2: Wilshire 5000 performance is correlated with Conference Board Consumer Expectations
(YoY percent change, 3MMA*)



Sources: Visa Business and Economic Insights, Dow Jones and the Conference Board. 3MMA=3-month moving average.

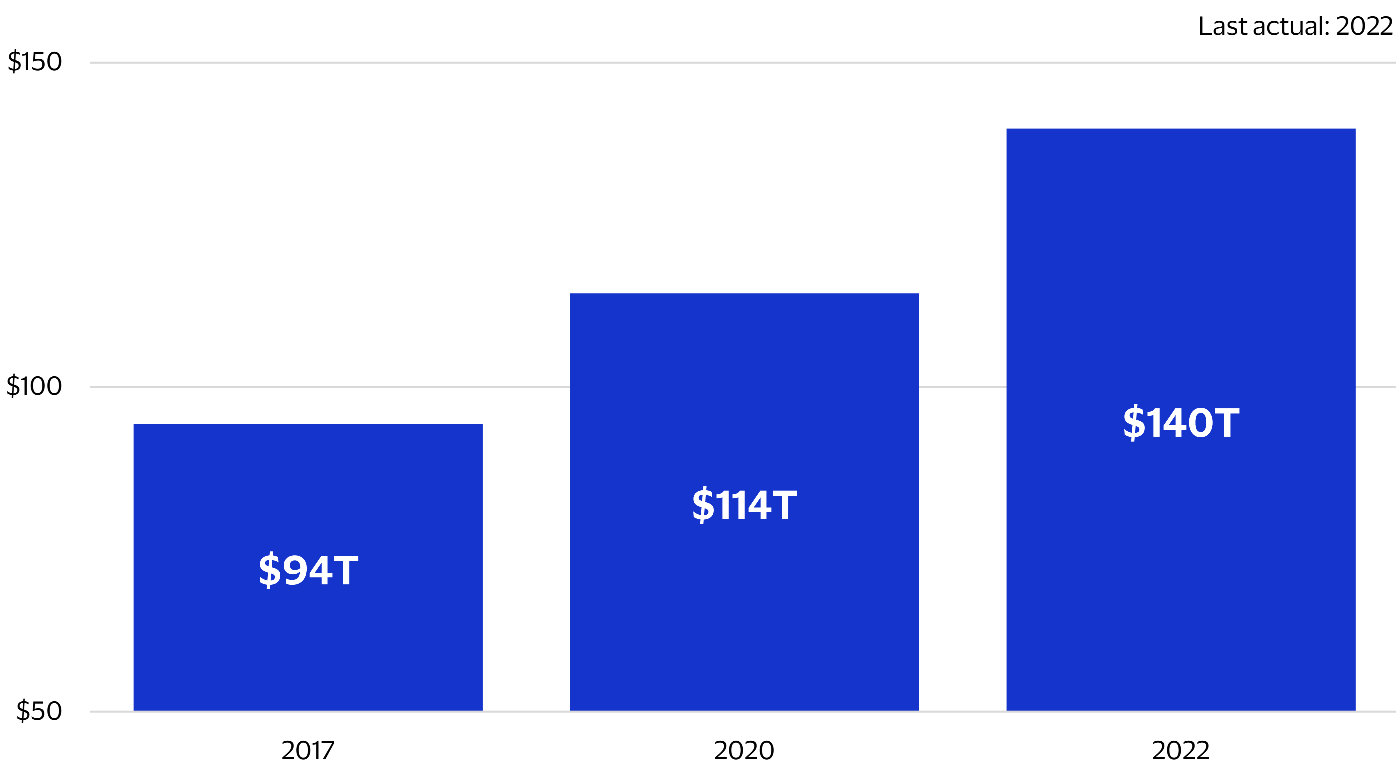
Wealth accumulation pre- vs. post-pandemic

Between 2002 and 2017, household net worth expanded at an annual average rate of 5.3 percent, approximately doubling during this interval and reaching the eye-popping figure of $94 trillion (Fig. 3).[3] Then the wealth accumulation process sped up. Between 2017 and 2022, household net worth grew at an annual average rate of 8.2 percent, reaching $140 trillion. This was an impressive run that was only rivaled by the 2004-2005 housing bubble and the 1998-2000 "dot com" bubble.

The implications of the 2017-2022 wealth building process are clear: the average household gained a lot of wealth over a short interval, planting the seeds for a new approach to spending.

Alongside the wealth accumulation process, the proliferation of financial news – and most news in general – has progressed in almost unrelenting fashion. Internet news has been around for more than two decades, but the smartphone era began in earnest in 2007, when smartphones started transitioning from work-focused productivity tools to unquestioned necessities of everyday life. As of 2011, when personal smartphone adoption was in its infancy, 35 percent of Americans owned a smartphone. By 2018, that share had more than doubled to 77 percent, and by 2021 (the most recent data available), 85 percent of the population owned a smartphone.[4]

Fig. 3: Wealth has increased dramatically in recent years
(Household net worth, $ trillions)



Sources: Visa Business and Economic Insights and Federal Reserve Board,

Wealth accumulation pre- vs. post-pandemic, cont.

The personal smartphone era, combined with the expansion of the 24-hour news cycle, has had a clear and distinct impact on the availability of information about wealth. In 2018, internet searches for "stock market" and "dow jones" increased markedly, reaching higher peaks – and higher troughs – than any preceding period (Fig. 4).[5] Similar trends can be seen with searches for "housing market" and "heloc," the common acronym for a home equity line of credit (Fig 5.). All of this suggests that consumers have faster access to information about their own financial situation, making their spending choices more sensitive to fluctuations in asset markets. Our calculations suggest that market fluctuations impact the consumer psyche 13 percentage points faster in the 2020s compared to the 2010s (Fig. 6).[6]

Over the last few years, the retiree population has expanded rapidly, likely contributing substantially to the wealth effect. Retired individuals represented 14 percent of the civilian non-institutional population in January 2002.[7] Over the subsequent 15 years, the number of retirees increased by 10 million, growing at an average rate of 2.0 percent per year. Over the last five years, this cohort has grown much more quickly, expanding by 2.8 percent per year and reaching 18 percent of the population (Fig. 7). Over this short, five-year interval, the number of retirees grew by a whopping 7.1 million people. When people retire, the composition of their income changes. They no longer receive income from work, instead relying on social security, income from their investments, support from relatives (often their children), and other sources. The net worth of the retirement cohort is also much larger than that of the pre-retirement groups,[8] making retirees more reliant on changes in wealth than their younger counterparts.

Fig. 4: Google searches related to stock and bond wealth
(Average annual index, 100 = peak search)

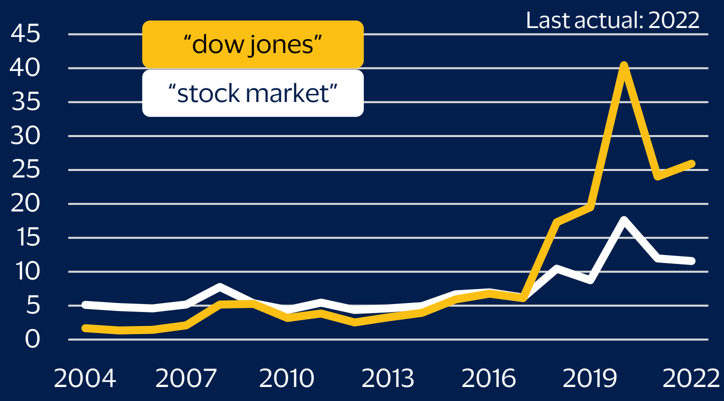


Fig. 5: Google searches related to housing wealth
(Average annual index, 100 = peak search)

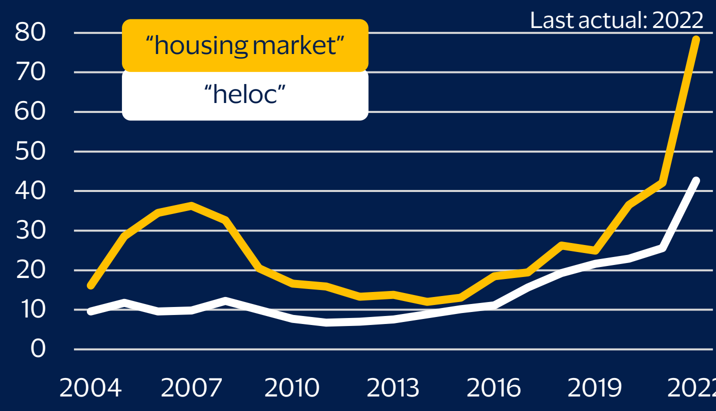


Fig. 6: Velocity of consumer sentiment sensitivity to stock market changes
(Percentage points)

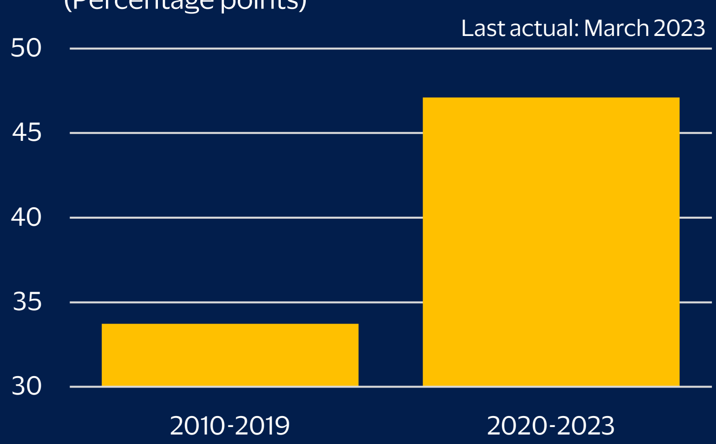
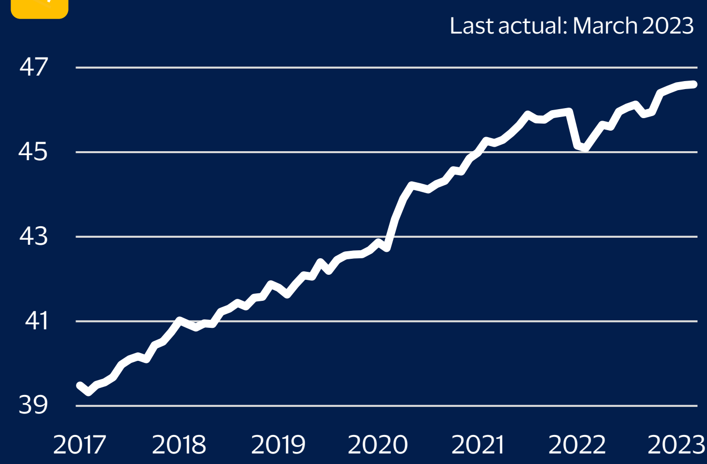


Fig. 7: Age 65+ not in the labor force
(Millions)



Sources Figures 4 & 5: Visa Business and Economic Insights and Google
Sources Figure 6: Visa Business and Economic Insights, Dow Jones, and University of Michigan
Sources Figure 7: Visa Business and Economic Insights and U.S. Department of Labor

How does wealth impact spending?

Rather than being stable over time, the wealth effect varies substantially. Asset valuations and household net worth also vary, and the changes in these metrics can be used to estimate the wealth effect's year-by-year contribution to consumer spending.

In the brief period before the 2007-2009 Global Financial Crisis, the housing wealth effect was responsible for approximately 1 percent of consumer spending (Fig. 8).[9] The housing bubble was inflating, consumers likely felt flush, and they probably spent more than they otherwise would have. After the bubble burst, home prices began to fall and aggregate housing wealth declined sharply. During this period, the housing wealth effect detracted from broad-based consumer spending by approximately 0.5 percent. This was followed by a long and stable stretch of moderately positive additions to spending. When the pandemic era arrived, home prices and housing wealth exploded, and the housing wealth effect accounted for upwards of 2 percent of consumer spending.

The stock/bond wealth effect typically adds to consumer spending, except during years when markets are flat or outright decline. This includes 2008, when the Wilshire 5000 index contracted by 15 percent and the stock/bond wealth effect led to 2.3 percent less consumer spending than would have otherwise occurred (Fig. 9).[10] Fast forward to 2020, when the wealth effect increased and aggregate stock/bond wealth expanded. During this year, stock/bond wealth contributed 2 percent to consumer spending. By 2022, when markets teetered under the weight of rising interest rates and lower corporate profit margins, the stock/bond wealth effect detracted from consumer spending by a whopping 7 percent.

In sum, the wealth effect varies over time. In some years it supports spending, while in others it detracts from spending. Companies can gain critical business intelligence by understanding how the markets impact consumer behavior.

Fig. 8: Housing wealth contribution to real personal consumption expenditure growth
(Percentage points)

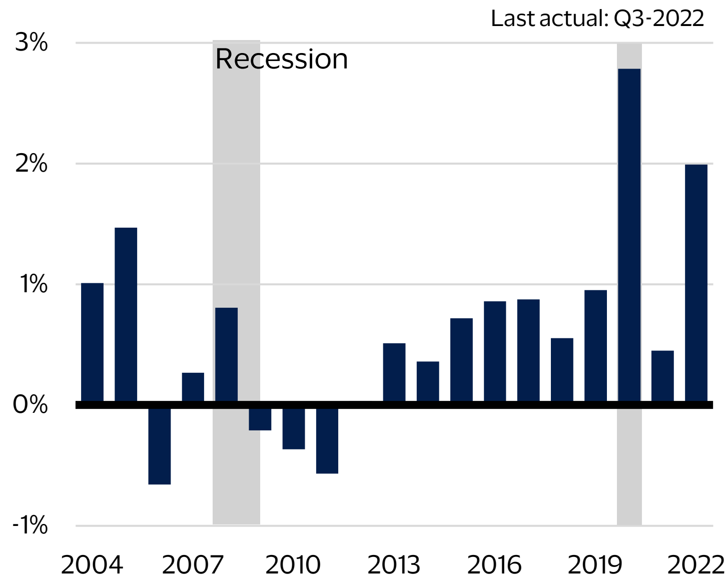
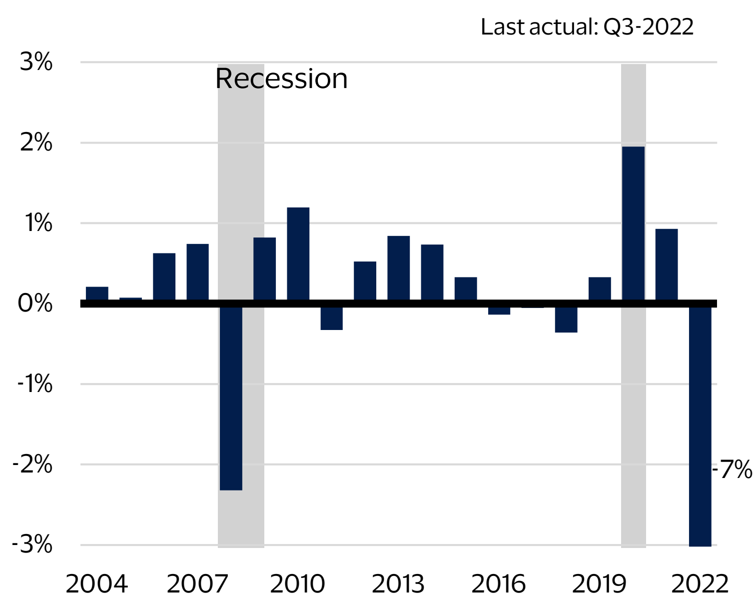


Fig. 9: Stock and bond wealth contribution to real personal consumption expenditure growth
(Percentage points)



Sources: Visa Business and Economic Insights, Federal Reserve Board and U.S. Department of Commerce.

Wealth effects vary by spending category

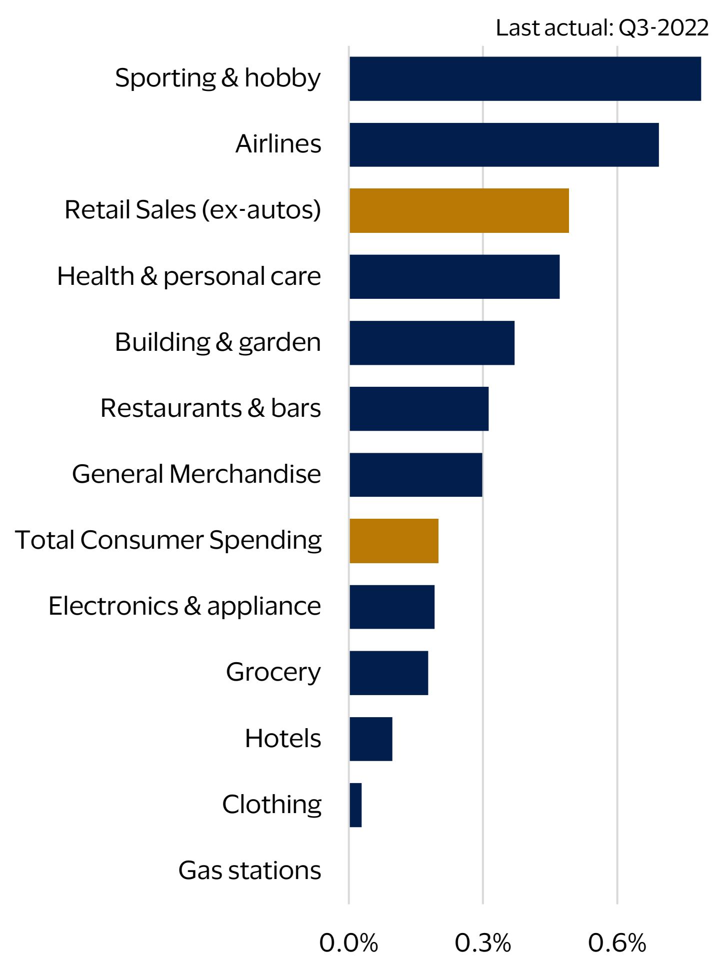
Just as wealth effects vary over time, their influences differ among spending categories. Changes in stock/bond wealth are particularly impactful for airlines and hotels.[11] During the COVID era, every 1 percent increase in stock/bond holdings lead to a 2.9 percent gain in spending at airlines and a 1.7 percent rise in spending at hotels (Fig. 10). Clothing stores, furniture and home furnishings stores, and electronics and appliance stores are also heavily impacted. In each of these categories, the recent wealth effects are exceptionally large. Grocery stores, building and garden equipment, and general merchandise stores are less sensitive to changes in stock and bond wealth.

Wealth effects are measured through regression analysis, and recent changes in wealth occurred alongside the COVID lockdowns and re-openings, which had a disproportionate impact on spending related to travel, clothing, furniture and furnishings, and household appliances. Therefore, it is likely that the unique COVID environment contributed to the estimation of these wealth effects.

Changes in housing wealth are most impactful for sporting goods stores, hobby stores, and airlines.[12] In each category, a 1 percent increase in housing wealth increases spending by approximately 0.7 percent to 0.8 percent (Fig. 11). With an elasticity of approximately 0.3 percent, restaurants, bars, and general merchandise stores are moderately responsive to housing wealth. Gas stations are unresponsive to the housing market, as gas consumption is fairly inelastic.

Fig. 10: Stock and bond wealth effect by category
(Change in spending per 1% change in wealth)

Fig. 11: Housing wealth effect by category
(Change in spending per 1% change in wealth)



Sources: Visa Business and Economic Insights, Federal Reserve Board and U.S. Department of Commerce

The future of wealth

It's a common misconception that the baby boomer generation acquired wealth easily, Generation X encountered difficulty but still gained a substantial amount of wealth, and the millennial generation has struggled mightily in its wealth accumulation journey. Taken at face value, the data seem to support this claim. When the median baby boomer was 35 years old, their generation held 21 percent of U.S. net worth (Fig. 12).[13] At the same age, Gen X held 11 percent and millennials held less than 8 percent. At virtually every age interval, boomers appear to hold more than their fair share, seemingly to the detriment of their younger counterparts.

These data – and other similar statistics – have led to misconceptions about the challenges of millennials and the favorable financial situation of the baby boomers. But there's a catch. When adjusted for inflation and population size, each generation has followed a surprisingly similar wealth accumulation path (Fig. 13). By this measure, Gen X is actually ahead of the boomers. Why is this important? **It shows the wealth effect is important for all generations, now and in the future.**

Fig. 12: Share of U.S. net worth by age
(Percent)

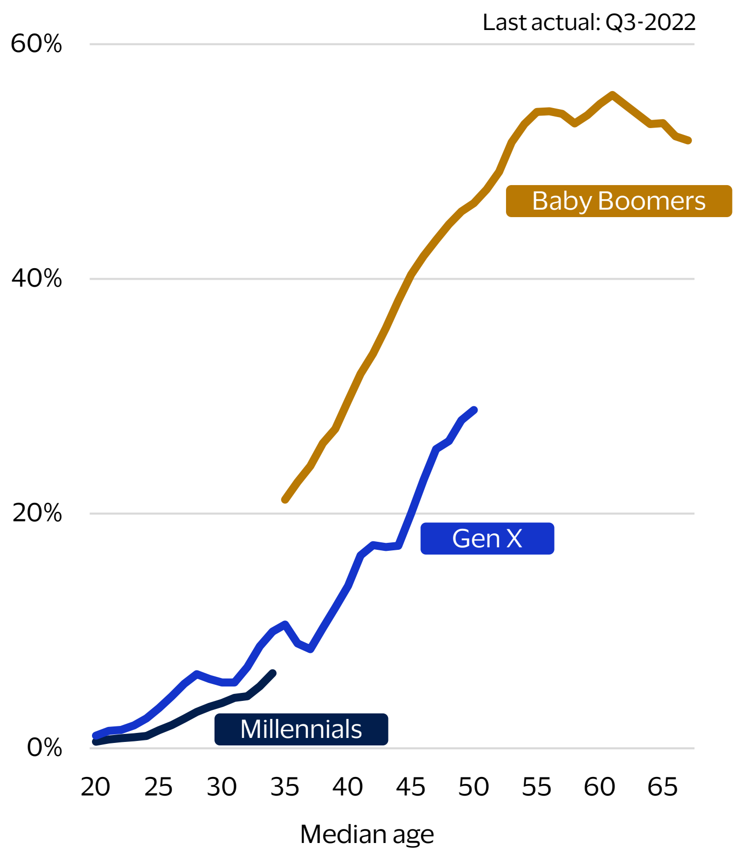
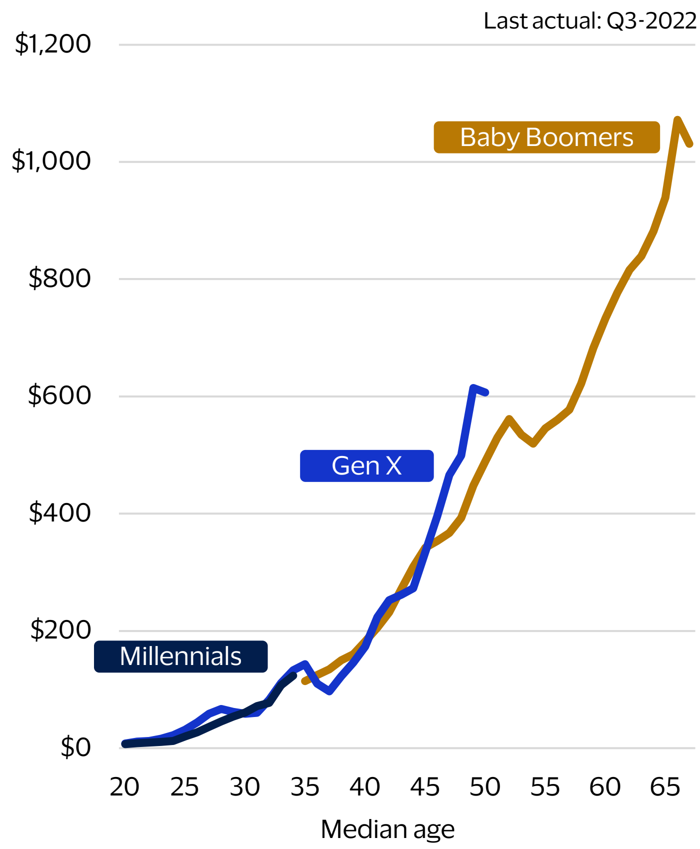


Fig. 13: Real net worth per capita by age
(Thousands of dollars)



Sources: Visa Business and Economic Insights, Federal Reserve Board, Pew Research Center and U.S. Department of Commerce.

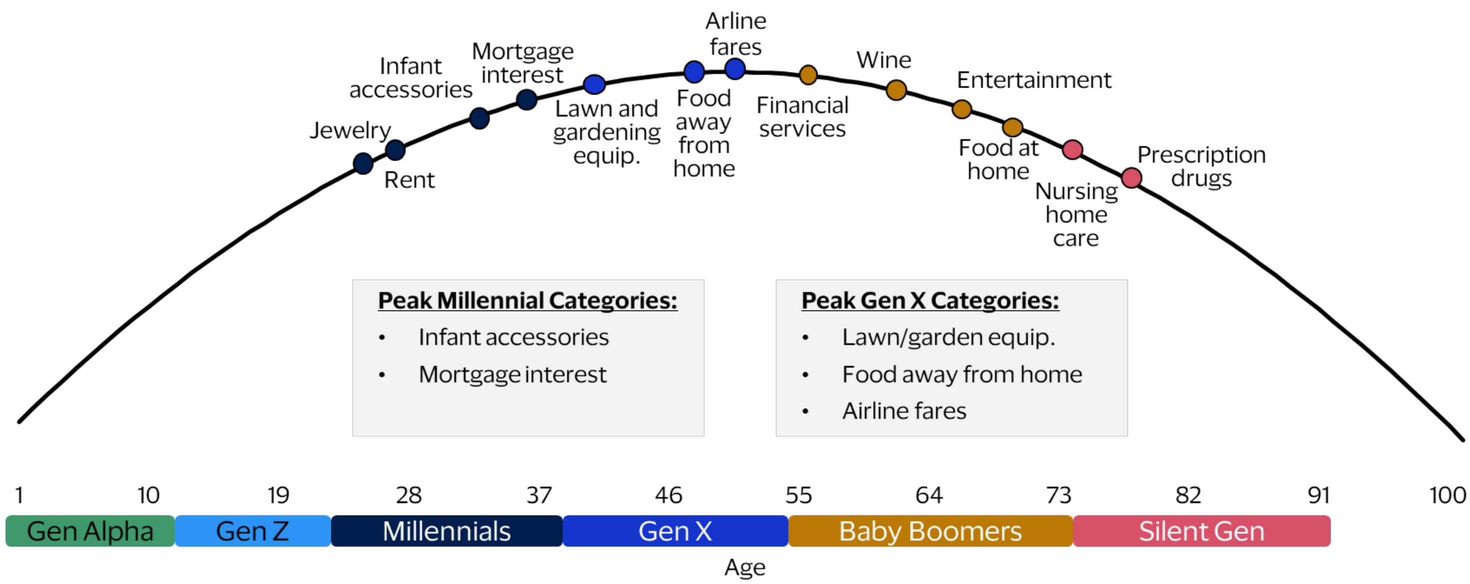
The future of wealth, cont.

Going forward, household net worth is expected to increase substantially, particularly for millennials and Gen X. In 2022, these groups had a combined net worth of $49 trillion.[14] If their wealth accumulation simply matches historical precedent, they would be expected to gain another $50 trillion in net worth by 2030. The "great wealth transfer," which is expected to pass wealth from the boomers to their Gen X and millennial heirs, could add another $20 trillion on top.[15] All told, millennials and Gen X could hold $119 trillion in net worth by 2030, more than double their current holdings.

The changing wealth position of millennials and Gen X has clear implications for merchants because spending habits are strongly influenced by age and life stage. In 2023, millennials are in the stage of life that is commonly associated with household formation. Many are buying homes and starting families, spending heavily on things like mortgage interest and infant accessories (Fig. 15). By 2030, they will have moved into the mid-to-late career phase, which is typically associated with spending on airline fares and restaurant meals. Their wealth gains may augment these outlays, along with other expenditure categories. Gen X, by contrast, will approach the late-career and retirement stages by 2030, which are associated with higher spending on financial services, wine, and entertainment.

Combined, the millennial and Gen X cohorts will encircle the peak spending years between now and 2030 – which occur when people are in their 40s and 50s – and their huge expected increase in net worth will likely have a substantial impact on their consumption habits.

Fig. 14: Peak spending categories by age



Sources: Visa Business and Economic Insights, Pew Research Center and U.S. Department of Labor

Footnotes

[1] For example, see "Weighing the Wealth Effect" by Mark Zandi, Brian Poi, Scott Hoyt, and Wayne Best. https://www.moodysanalytics.com/-/media/article/2018/Weighing-the-Wealth-Effect.pdf

[2] According to Pew Research Center, 86 percent of adults consume news on a computer, smartphone, or tablet, which allow for real-time consumption. https://www.pewresearch.org/short-reads/2021/01/12/more-than-eight-in-ten-americans-get-news-from-digital-devices/

[3] Visa Business and Economic Insights and Federal Reserve Board

[4] Pew Research Center, Washington D.C., Mobile Fact Sheet, April 2021,

https://www.pewresearch.org/internet/fact-sheet/mobile/#panel-7cfdecc4-bb29-4a14-96f5-5ba4acd5c1a9-data

[5] Visa Business and Economic Insights and Google

[6] Visa Business and Economic Insights, Wilshire, and University of Michigan

[7] Visa Business and Economic Insights and U.S. Department of Labor

[8] Visa Business and Economic Insights and Federal Reserve Board

[9] Visa Business and Economic Insights, Federal Reserve Board, and U.S. Department of Commerce

[10] Visa Business and Economic Insights, Federal Reserve Board, and U.S. Department of Commerce

[11] Visa Business and Economic Insights, Federal Reserve Board, and U.S. Department of Commerce

[12] Visa Business and Economic Insights, Federal Reserve Board, and U.S. Department of Commerce

[13] Visa Business and Economic Insights, Federal Reserve Board, Pew Research Center and U.S. Department of Commerce

[14] Visa Business and Economic Insights, Federal Reserve Board, and Pew Research Center

[15] Visa Business and Economic Insights and Cerulli Associates

Accessibility Notes

Fig. 2: Line chart showing the year -over-year change in the three-month moving average for the Wilshire 5000 stock market index and the consumer expectations component of the Conference Board's Consumer Confidence Index. The chart shows the high correlation between these two data series. The Wilshire 5000 Index begins in January 2010 at +30 percent, is within a range of -10 percent to +28 percent until May 2021 when it increases to +53 percent. It then falls to a low of -19 percent in December 2022 before rising to -11 percent by March 2023. The consumer expectations component of the Consumer Confidence Index starts in January 2010 at +68 percent, is within a range of -23 percent to +50 percent until reaching a low of -35 percent in July 2022. It the rises to -13 percent by March 2023.

Fig. 3: Bar chart showing household net worth. It has bars for net worth in 2017, 2020, and 2022. Household net worth begins in 2017 at $94 trillion, increases to $114 trillion in 2022, and increases again to $140 trillion in 2022.

Fig. 4: Line chart showing Google search trends for the terms "dow jones" and "stock market." The lines show annual average indexes of search frequency, with 100 representing peak daily search activity. The line for "dow jones" starts in 2004 at 1.7, rises slowly to 6.1 by 2017, then increases quickly to 40.4 by 2020. It then declines to 25.9 by 2022. The line for "stock market" starts in 2004 at 5.1 and stays in a range of 4.3 to 7.8 until 2017. It rises to 17.6 in 2020 before falling to 11.6 in 2022.

Fig. 5: Line chart showing Google search trends for the terms "housing market" and "heloc." The lines show annual average indexes of search frequency, with 100 representing peak daily search activity. The line for "housing market" starts in 2004 at 16.1, rises to 36.3 by 2007, then falls to 10.0 by 2014. It then increases quickly to 78.3 by 2022. The line for "heloc" starts in 2004 at 9.6 and stays in a range of 6.8 to 12.3 until 2016. It rises to 42.7 by 2022.

Fig. 6: Bar chart showing the speed that the Michigan Consumer Sentiment Index responds to changes in the stock market. The bar for the 2010-2019 decade shows a value of 33.7. The bar for the 2020-2023 period shows a value of 47.1. This indicates that Consumer Sentiment reacted 13 percentage points faster in the 2020s compared to the 2010s.

Fig. 7: Line chart showing the number of people aged 65 or older who are not in the labor force. It starts in January 2017 at 39.5 million and rises to 46.6 million by March 2023.

Fig. 8: Bar chart showing the housing wealth effect's annual contribution to consumer spending. It starts in 2004 at 1.0 percent, indicating that in 2004, the housing wealth effect added 1.0 percent to consumer spending. It rises to 1.5 percent in 2005, falls to -0.7 percent in 2006, and stays within a range of -0.6 percent to +1.0 percent through 2019. It rises to 2.8 percent in 2020, falls to 0.5 percent in 2021, and increases to 2.0 percent in 2022.

Fig. 9: Bar chart showing the stock and bond wealth effect's annual contribution to consumer spending. It starts in 2004 at 0.2 percent, rises to 0.7 percent by 2006, and falls to -2.3 percent in 2008. It stays within a range of -1.2 percent to +0.4 percent through 2019. It rises to 2.0 percent in 2020, falls to 0.9 percent in 2021, and falls again to -7.0 percent in 2022.

Fig. 10: Horizontal bar chart showing the stock and bond wealth effect by spending category. It describes the increase in spending for each category from a 1 percent increase in stock and bond wealth. The stock and bond wealth effect is 2.9 percent for airlines, 2.1 percent for clothing, 1.7 percent for hotels, 1.2 percent for furniture and furnishings, 1.2 percent for electronics and appliances, 0.8 percent for restaurants and bars, 0.8 percent for sporting goods and hobby stores, 0.4 percent for gas stations, 0.3 percent for all retail spending ex-autos, 0.3 percent for total consumer spending, 0.2 percent for health and personal care stores, 0.1 percent for general merchandise stores, 0.1 percent for building and garden stores, and 0.0 percent for grocery stores.

Accessibility Notes

Fig. 11: Horizontal bar chart showing the housing wealth effect by spending category. It describes the increase in spending for each category from a 1 percent increase in housing wealth. The housing wealth effect is 0.8 percent for sporting goods and hobby stores, 0.7 percent for airlines, 0.5 percent for all retail sales ex-autos, percent for building and garden stores, 0.3 percent for restaurants and bars, 0.3 percent for general merchandise stores, 0.2 percent for total consumer spending, 0.2 percent for electronics and appliance stores, 0.2 percent for grocery stores, 0.1 percent for hotels, 0.0 percent for clothing, and 0.0 percent for gas stations.

Fig. 12: Line chart showing the share of U.S. net worth held by the baby boomer generation, Generation X, and the millennial generation. It shows the share of net worth for each of these generations by median age year. The line for baby boomers starts at 21 percent for age 35. It rises to 56 percent by age 61 and falls to 52 percent by age 67. The line for Generation X starts at 1.5 percent for age 20 and rises to 29 percent by age 50 (the last point on the line). The line for millennials starts at 0.6 percent for millennials at age 20 and rises to 6.4 percent by age 34 (the last point on the line).

Fig. 13: Line chart showing real net worth per capita for the baby boomer generation, Generation X, and the millennial generation. It shows real net worth per capita for each of these generations by median age year. The line for baby boomers starts at $114,400 for age 35 and rises to 1.03 million by age 67. The line for Generation X starts at $8,000 for age 20 and rises to $606,000 by age 50 (the last point on the line). The line for the millennials starts at $7,000 for age 20 and rises to $123,000 by age 34 (the last point on the line).

Fig. 14: Scatter chart showing peak spending categories by age. For ages 20 to 37, the peak spending categories are jewelry, rent, infant accessories, and mortgage interest. For ages 38 to 55 the peak spending categories are lawn and garden equipment, food away from home, and airfare. Foe ages 55 to 73 the peak spending categories are financial services, wine, entertainment, and food at home. For ages 74 and up the peak spending categories are nursing home care and prescription drugs.

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