Purpose:

My recent research and broad takeaways on the current state of the economy have centered on recent data releases and the increasingly blurred line between politics and the decision-making processes of federally independent economic departments. This overlap has created an environment where asset bubbles in equity markets form more rapidly, and the range of efficient assets for capital appreciation narrows. The disconnect between data used for valuation and the actual outcomes realized in the economy contributes to this distortion. Historically, periods of heightened market volatility and broader economic weakness have coincided with the most significant widening of the U.S. wealth gap. The purpose of the following analysis is to highlight how asset volatility has contributed to this growing divide and to demonstrate how disciplined ownership remains the most effective means of preventing further inequality.

Three Historical Examples of How Equity Ownership Contributes to Wealth Gap Expansion During Times of High Volatility:

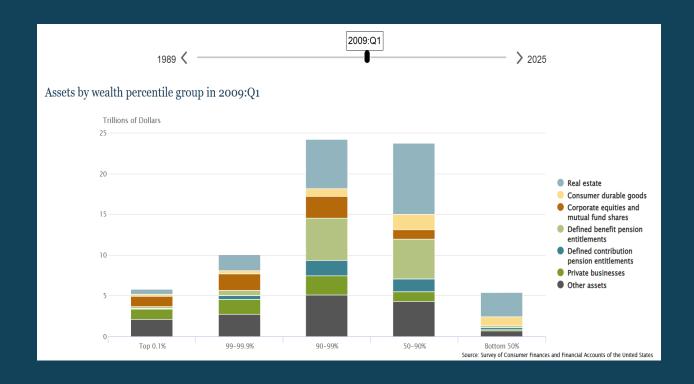
Comparing the Top 10% of Wealthy Individuals in the United States to the Bottom 50%.

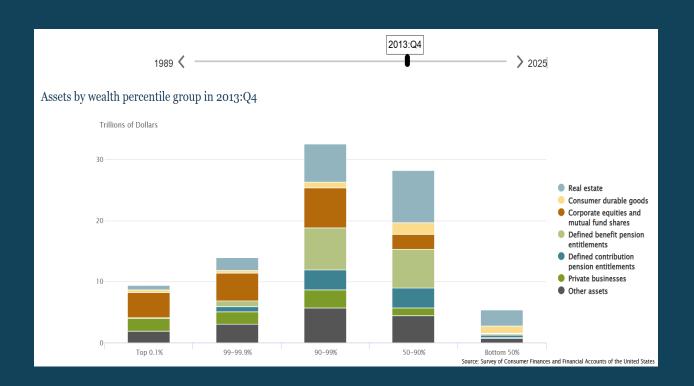
2008 US-Housing Market Crash/ Global Financial Crisis.

From the trough of the 2008 financial crisis in equity markets, the top 10% of wealthy individuals in the United States held a collective \$40.08 trillion, with \$6.02 trillion attributed to corporate equity and mutual fund ownership. The bottom 50% of wealthy individuals held a total of \$5.46 trillion, of which only \$0.05 trillion came from corporate equity and mutual funds.

By the time equity markets recovered in Q4 2013—returning to their pre-crisis highs from 2007—the top 10% held \$55.89 trillion in total wealth, including \$15.22 trillion in corporate equity and mutual fund ownership. In contrast, the bottom 50% held \$5.35 trillion in total wealth, with \$0.14 trillion in corporate equity and mutual funds.

In total, from the trough of the 2008 global financial crisis to the market's recovery in 2013, the top 10% increased their total wealth by 39.44% and experienced a 152.82% rise in corporate equity and mutual fund holdings. During the same period, the bottom 50%, despite a 180% increase in equity and mutual fund wealth, saw a 2% decline in total wealth. This was due to the much smaller share of their wealth represented by equities and mutual funds, coupled with a ~14% decline in wealth of real estate — an asset class that had lagged equity market returns during that time.





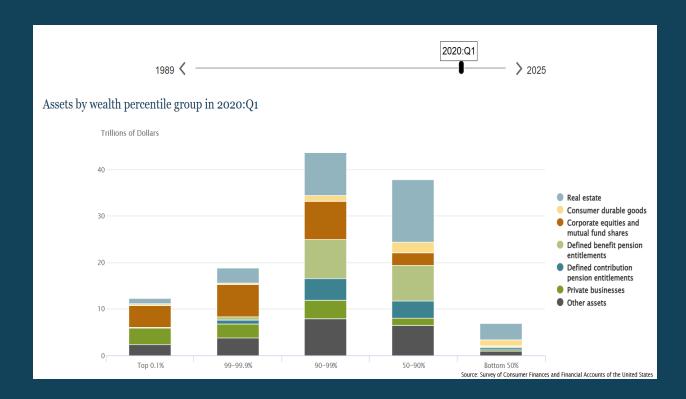
2020 Covid-19 Global Pandemic.

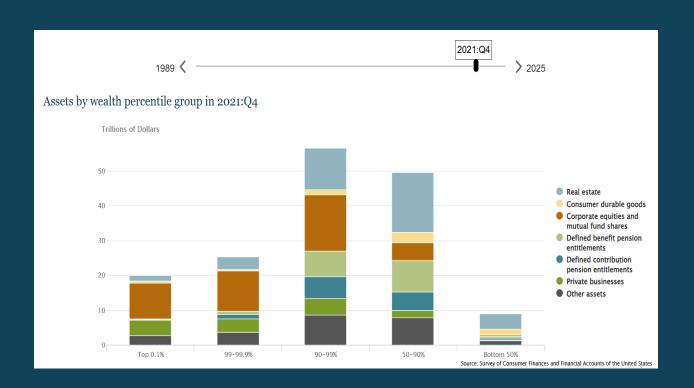
From the trough of the COVID-19 pandemic in equity markets, the top 10% of wealthy individuals in the United States held a collective \$74.77 trillion, with \$19.81 trillion attributed to corporate equity and mutual fund ownership. The bottom 50% held a total of \$6.94 trillion, of which \$0.12 trillion came from corporate equity and mutual funds.

From Q4 2013 to Q1 2020, the value of corporate equity and mutual fund ownership for the top 10% increased by 30.15%, while that of the bottom 50% decreased by 14.28%.

By the time equity markets recovered in Q4 2021, the top 10% of wealthy individuals in the United States held \$122.18 trillion in total wealth, including \$37.89 trillion in corporate equity and mutual funds. The bottom 50% held \$8.89 trillion in total wealth, with \$0.43 trillion in corporate equity and mutual funds.

In total, from the trough of the 2020 COVID-19 global pandemic to the market recovery in Q4 2021, the top 10% increased their total wealth by 63.41% and saw a 91.26% rise in corporate equity and mutual fund holdings. During the same period, the bottom 50%, although experiencing a 258% increase in equity and mutual fund wealth, increased their total wealth by only 28%, as these assets represented a much smaller share of their total wealth compared with the top 10%.



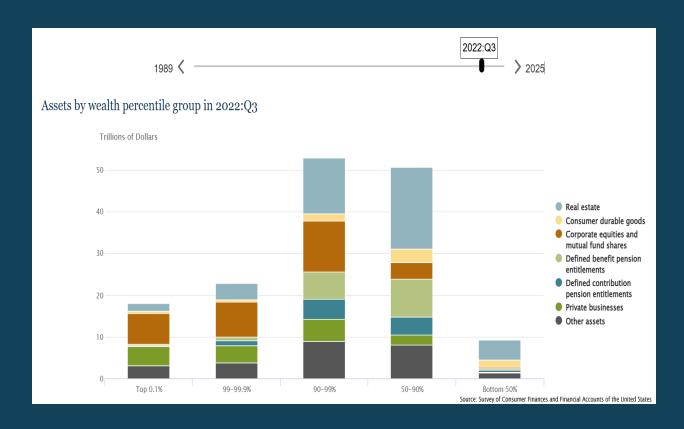


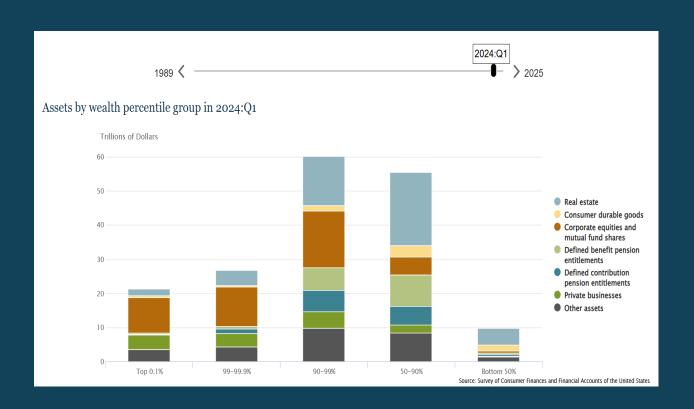
2022 Interest Rate Fears and Liquidity Vacuum

From the trough of the 2022 pullback in equity markets, the top 10% of wealthy individuals in the United States held a collective \$93.23 trillion, with \$28.33 trillion attributed to corporate equity and mutual fund ownership. The bottom 50% held a total of \$9.36 trillion, of which \$0.32 trillion came from corporate equity and mutual funds.

By the time equity markets recovered in Q1 2024, the top 10% of wealthy individuals in the United States held \$108.21 trillion in total wealth, including \$38.55 trillion in corporate equity and mutual funds. The bottom 50% held \$9.75 trillion in total wealth, with \$0.46 trillion in corporate equity and mutual funds.

In total, from the trough of the 2022 pullback in equity markets to the recovery in Q1 2024, the top 10% of wealthy individuals in the United States increased their total wealth by 16.07% and experienced a 36.07% rise in corporate equity and mutual fund holdings. During the same period, the bottom 50%, although experiencing a 43.75% increase in equity and mutual fund wealth, increased their total wealth by only 4.16%, as these assets represented a much smaller share of their total wealth compared with the top 10%.





Takeaway:

Across all three vastly different time periods, the top 10% of wealthy individuals in the United States have been able to increase their total wealth upon economic recovery by significantly more than the bottom 50%. A large portion of this change is directly attributable to increases in the value of corporate equities and mutual fund holdings. However, in all three cases, the bottom 50% actually increased their equity and mutual fund wealth by a higher percentage than the top 10%. There are two main reasons why this did not translate into a larger overall wealth gain for the bottom 50%:

- 1. Measurement Period: All three comparisons are measured from trough to peak. The top 10% are generally better positioned to hedge losses on corporate equities and mutual fund holdings due to superior financial planning and portfolio diversification.
- 2. Base Effect: Corporate equities and mutual funds represent only a minuscule share of total wealth for the bottom 50%, while they consistently make up the largest portion of total wealth for the top 10%.

The bottom 50% are more heavily allocated toward real estate (home equity), durable goods, pensions, and small cash balances, all of which are assets that tend to lag equities during recoveries and often fail to fully rebound at the same pace as the broader economy. Even if the bottom 50% 's equity holdings were to double, that doubling would affect only a small slice of their total wealth composition. Meanwhile, for the top 10%, whose portfolios are 60–70% concentrated in equities, such recoveries result in a far greater total impact on overall wealth.

How is Proportionately Less Equity Exposure Impacting the Bottom 50% Compared to the Top 10%:

Base Effect Impact on Wealth Variance.

Data and Output:

Using numeric data figures from each quarter from Q3 of 1989 to Q2 of 2025 for the total wealth for the top 10% and the bottom 50% of wealthy individuals in the United States, the total asset ownership as a percentage of total wealth for the top 10% and the bottom 50% of wealthy individuals in the United States, and the year over year price by corresponding quarter of the S&P 500 index over the same points in time, regression analysis unveils the following.

Asset Ownership:

For the top 10% of wealthy individuals in the United States, 84.90% of variance in total wealth is attributable to variance in wealth of asset ownership (after R2 adjustment and high statistical significance confirmed). Over the total time period measured, on average, when the top 10% 's collective assets (not just equity) appreciate by 1%, their total wealth rises by 0.87%.

For the bottom 50% of wealthy individuals in the United States, virtually no variance in total wealth is attributable to variance in wealth of asset ownership. Regression shows that less than 1% of variance in total wealth for the bottom 50% is explained by asset ownership. Even when the bottom 50% increase their ownership share of total assets, it does not translate reliably into higher total wealth as their asset ownership is miniscule in the total diversification of their wealth. Over the total time period measures, on average, when the bottom 50% 's collective assets (not just equity) appreciate by 1%, their total wealth rises by only 0.07%.

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TOP 10% PERCENTIL	E CHANGE IN W	VEALTH ATTRIBU	TABLE TO CHAN	IGE IN TOTAL A	SSELOWNERSH	IP%		
SUMMARY OUTPUT								
Regression St	atistics							
Multiple R	0.921734772							
R Square	0.84959499							
Adjusted R Square	0.848505099							
Standard Error	0.003228608							
Observations	140							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	1	0.008125672	0.008125672	779.5226292	1.25072E-58			
Residual	138	0.001438499	1.04239E-05					
Total	139	0.009564171						
				•				
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-2.17556E-05	0.00028129	-0.077342291	0.938463272	-0.000577951	0.00053444	-0.000577951	0.00053444
X Variable 1	0.872698643	0.03125719	27.91993247	1.25072E-58	0.81089369	0.934503596	0.81089369	0.934503596

TOP 50% PERCENTII	LE CHANGE IN V	/EALTH ATTRIBU	TABLE TO CHA	NGE IN TOTAL A	ASSET OWNERS	HP %		
SUMMARY OUTPUT								
Regression S	tatistics							
Multiple R	0.076124204							
R Square	0.005794894							
Adjusted R Square	-0.00140949							
Standard Error	0.002537411							
Observations	140							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	1	5.17881E-06	5.17881E-06	0.804356595	0.371355912			
Residual	138	0.000888507	6.43846E-06					
Total	139	0.000893686						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-0.000235957	0.000218067	-1.08204006	0.281121863	-0.000667142	0.000195227	-0.000667142	0.000195227
X Variable 1	0.070942663	0.079101218	0.896859295	0.371355912	-0.085464456	0.227349782	-0.085464456	0.227349782

The Price of the S&P 500:

For the top 10% of wealthy individuals in the United States, 28.40% of variance in total wealth is attributable to variance in the price of the S&P 500 Index (after R2 adjustment and high statistical significance confirmed). Over the total time period measured, on average, when the S&P 500 index experiences a 1% rise, the top 10% 's total wealth appreciates by 0.03%. When considering the Base Effect, the elasticity is economically massive, even if the coefficient looks small numerically.

For the bottom 50% of wealthy individuals in the United States, 10.00% of variance in total wealth is attributable to variance in the price of the S&P 500 Index (after R2 adjustment and high statistical significance confirmed). Over the total time period measured, on average, when the S&P 500 index experiences a 1% rise, the bottom 50% 's total wealth appreciates by only 0.005%.

TOP 10% PERCENTII	TOP 10% PERCENTILE CHANGE IN WEALTH ATTRIBUTABLE TO CHANGE IN PRICE OF S&P500 Y/Y								
SUMMARY OUTPUT									
Regression S	tatistics								
Multiple R	0.537687574								
R Square	0.289107927								
Adjusted R Square	0.283956535								
Standard Error	0.007019173								
Observations	140								
ANOVA									
	df	SS	MS	F	Significance F				
Regression	1	0.002765078	0.002765078	56.12229398	7.37588E-12				
Residual	138	0.006799094	4.92688E-05						
Total	139	0.009564171							
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%	
Intercept	-0.000665973	0.000684059	-0.973560647	0.331978156	-0.002018564	0.000686619	-0.002018564	0.000686619	
X Variable 1	0.026934955	0.003595411	7.491481427	7.37588E-12	0.019825736	0.034044174	0.019825736	0.034044174	

BOTTOM 50% PERCE	ENTILE CHANGE	IN WEALTH ATTI	BUTABLE TO CH	ANGE IN PRIC	E OF S&P500 Y/\	1		
SUMMARY OUTPUT								
Regression St	tatistics							
Multiple R	0.326093557							
R Square	0.106337008							
Adjusted R Square	0.099861189							
Standard Error	0.00240569							
Observations	140							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	1	9.50319E-05	9.50319E-05	16.42062752	8.43021E-05			
Residual	138	0.000798654	5.78735E-06					
Total	139	0.000893686						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-0.00074448	0.000234448	-3.175454161	0.00184555	-0.001208056	-0.000280904	-0.001208056	-0.000280904
X Variable 1	0.00499341	0.00123226	4.052237348	8.43021E-05	0.002556858	0.007429962	0.002556858	0.007429962

Both Asset Ownership and Price of the S&P 500:

For the top 10% of wealthy individuals in the United States, 89.21% of variance in total wealth is attributable to variance in both wealth of collective asset ownership and the price of the S&P 500 Index (after R2 adjustment and high statistical significance confirmed).

For the bottom 50% of wealthy individuals in the United States, 17.68% of variance in total wealth is attributable to variance in both wealth of collective asset ownership and the price of the S&P 500 Index (after R2 adjustment and high statistical significance confirmed).

TOP 10% PERCENTIL	E CHANGE IN W	/EALTH ATTRIBU	TABLE TO BOTH	CHANGE IN AS	SSET OWNERSHI	P % AND CHAN	GE IN PRICE OF	S&P500 Y/Y
SUMMARY OUTPUT								
Regression S	tatistics							
Multiple R	0.945346352							
R Square	0.893679725							
Adjusted R Square	0.892127604							
Standard Error	0.002724404							
Observations	140							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	2	0.008547306	0.004273653	575.7797491	2.10476E-67			
Residual	137	0.001016865	7.42237E-06					
Total	139	0.009564171						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.000978918	0.000271971	3.599350772	0.000444762	0.000441115	0.001516721	0.000441115	0.001516721
X Variable 1	-0.015567696	0.002065513	-7.536962512	5.92613E-12	-0.019652107	-0.011483286	-0.019652107	-0.011483286
X Variable 2	1.089622977	0.039039125	27.91105038	2.1982E-58	1.012425793	1.16682016	1.012425793	1.16682016

BOTTOM 50% PERC	ENTILE CHANGE	IN WEALTH ATT	RIBLITABLE TO E	ROTH CHANGE	IN ASSET OWNE	RSHIP % AND C	HANGE IN PRIC	F OF \$&P500 Y/\
BOTTOTTOO / CT ENO	EITHEE OF MITOE	THE TYPE A CENTRAL PROPERTY OF THE PERTY OF	THE TABLE TO E	011101111102	III TOOLI OTTIL	7071110	11/11/02 11/11/11/0	2 01 001 000 17
SUMMARY OUTPUT								
Regression S	tatistics							
Multiple R	0.434346182							
R Square	0.188656606							
Adjusted R Square	0.176812176							
Standard Error	0.002300565							
Observations	140							
ANOVA								
	df	SS	MS	F	Significance F			
Regression	2	0.0001686	8.42999E-05	15.92787661	6.03285E-07			
Residual	137	0.000725086	5.2926E-06					
Total	139	0.000893686						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-0.000840657	0.000225682	-3.724954075	0.00028462	-0.001286928	-0.000394385	-0.001286928	-0.000394385
X Variable 1	0.007659332	0.001378388	5.55673033	1.38347E-07	0.004933664	0.010385	0.004933664	0.010385
X Variable 2	0.312759752	0.083888284	3.728288833	0.000281225	0.146876441	0.478643062	0.146876441	0.478643062

Impact:

The base effect has been a major contributor to the widening wealth gap in the United States over time. Even in direct relation to the S&P 500 itself, from 1989 to 2025, a 1% increase in the index has, on average, increased the wealth of the top 10% of Americans by six times more than any increase experienced by the bottom 50%.

During periods of significant market volatility and recovery, the bottom 50% often experience a higher percentage increase in their asset values, yet see a smaller or even negative change in their total wealth. Poor equity exposure relative to total asset allocation has left the bottom 50% unable to fully participate in, and benefit from, an equity market that has consistently outpaced global economic growth since the onset of globalization.

Structure vs Quantity:

Vast amounts of research on the wealth gap in the United States point to fundamental financial behaviors during times of financial strain as a significant driving force behind its persistence. The general notion is that, in times of economic hardship, the wealthy are able to accumulate more equity and asset exposure at a discount, while the other side of the gap becomes constrained by cash-flow needs and often feels forced to liquidate assets to cover short-term expenses, essentially realizing losses at their largest and missing out on the recovery and subsequent rally. This is true and remains one of the biggest drivers of the gap's exacerbation during periods of significant market volatility. However, much of the existing research overlooks the fact that these financial behaviors are rooted in the structure of wealth itself and in the fact that opportunities available to the top 10% are often not accessible to the bottom 50%. In other words, the divide begins with structure, not merely quantity.

The bottom 50% of Americans' total wealth has consistently been derived primarily from real estate and consumer durable goods. Corporate equity, mutual fund ownership, defined-contribution plans, and defined-benefit plans have together accounted for less than 20% of their total wealth allocation —only about 16% as of 2025. Such heavy exposure to real estate subjects individuals to significant downside risk during economic downturns, as cash-flow demands do not adjust proportionately. Moreover, real estate markets lag equity markets in post economic distress recoveries, while mortgage and loan payments remain elevated, often moving more methodically compared to adjustments to the federal funds rate. Value declines rapidly while payments stay high.

Banks and creditors are not concerned with narrowing the wealth gap, they profit from it year after year. Their business depends on advising individuals on what they *can* afford, not what they *should* afford. This dynamic creates a structural trap: the bottom 50% are often left with illiquid assets they do

not meaningfully own for years due to loan structure (interest vs capital). Bank incentives and misguidance frequently lead to high loan-to-value (LTV) ratios, limiting borrowers' ability to leverage home equity to build additional wealth.

In contrast, the top 10% routinely access lines of credit against their assets like equities to reinvest into higher-yielding opportunities such as the stock market, compounding their wealth through leverage. While home equity credit lines can theoretically serve a similar purpose for the bottom 50%, over-allocation to real estate, high LTV ratios, and poor debt-to-income positioning often make this strategy inaccessible in practice for the bottom 50%. A majority of the payments they make don't translate to capital payments (mostly interest), even if they could access a line of credit there is not much to work with for a vast majority of the payment lifetime.

Poor structuring of wealth is why the middle 40% are excluded from this analysis. Structurally and quantitatively, this group has the tools to produce wealth accumulation outcomes comparable to those of the top 10%. The difference often lies in personal preference and lifestyle choices, whereas for the bottom 50%, meaningful change would require discipline and sacrifice at a foundational level.

In the financial-services industry, every client's goals and objectives differ, and so do their corresponding financial plans, advice, portfolios, and allocations. Yet for clients with objectives of being able to reach that next level of wealth and comfortability for themselves or future generations, one overarching piece of advice is unanimous; aggressively own, own aggressively.

History Will Repeat Itself:

Right or wrong, a rate cutting cycle is materializing. The Federal Reserve resumed a rate cutting cycle by making their first cut of 2025 on September 17th by reducing the federal funds rate by 25 basis points to a range of 4-4.25%. As Chairman Powell explained during the subsequent press conference, the move was a response to deterioration in the labor market as opposed to progress on the inflation front. In Powell's own words "no risk free path" going forward to avoid a stagflationary period in the U.S. economy. The Federal Reserve has voiced that they expect to cut rates two more times across the three remaining policy meetings before next year, effectively targeting a range of 3.5% to 3.75%.

Most likely due to what the public reads and hears in the media, the public seems to have a general preconceived notion that the federal funds rate will directly determine the rates that they pay; mortgage rates, credit cards, loans, etc. This is not the case in an environment where the federal funds rate is a response to deterioration in the labor market as opposed to an improved outlook on inflation and the macro-economic environment in the United States going forward. Capitalism persists: banks, bond investors, and other creditors will look to fundamental factors such as credit spreads, credit ratings, consumer debt, corporate debt, fiscal deficits, inflation expectations, economic growth outlooks, and sector-specific expansion or contraction, to determine their demand for risk. It is this demand that ultimately drives yield, not the federal funds rate. The current interest rate environment has also created conditions where efficient asset classes are limited. Investment today is far more complex than simply allocating to the S&P 500 or following a traditional 60/40 equity to bond mix.

In hindsight, nothing about the current rate environment has been restrictive for domestic equities (which, in modern economics, essentially represent the U.S. economy). Every S&P 500 sector over the past three years is up more than 30%, with the exception of Health Care and Energy, which have risen 23.9% and 18.5%, respectively. Both Healthcare and

Energy have been closing that gap recently. Equity performance drives the majority of wealth accumulation for the top 10% of Americans, who also account for over half of all domestic spending. As the federal funds rate declines, as long as there is even a sliver of justification for current P/E ratios and growth expectations, domestic equities are likely to continue rallying higher. The reality is that while the federal funds rate should eventually influence the actual cost of debt for consumers and corporations, which directly affects equity valuation methods, markets tend to price in expectations before that occurs. Given this dynamic, history is set to repeat itself.

The base effect is as strong as ever in 2025. Once again, the bottom 50% of Americans are poorly positioned to leverage increases in equity valuations to expand their total wealth. As equities rally, the rates that consumers pay move more gradually. While many households wait for lower borrowing costs and refinancing opportunities, those already positioned to capitalize on rising equity valuations continue to grow their wealth. The equity market is a valuation model for what we perceive to materialize in the future, the rates we pay on debt today is an assessment of the risks we face in the present.

As the top 10% leverage corporate equity and mutual fund wealth to expand their total wealth, that very growth fuels spending and productivity in the economy for which they already account for more than 50% of total consumption. As the economy grows, so do equity valuations and the cost of living, perpetuating the cycle. Meanwhile, the bottom 50%, lacking the efficient wealth positioning needed to participate in this compounding process, remain focused on managing debt obligations as cash flow stagnates and living costs rise. They also lack access to the same opportunities to leverage existing wealth into higher-yielding asset classes. As a result, their financial cycle moves increasingly out of sync with that of the top 10%.

Therein lies the wealth gap in the United States.