



Building Wealth: Purchasing a Home or Building an Equity Portfolio?

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The media and the political class have correctly focused on the widening wealth gap. The data is unambiguous. According to the Council on Foreign Relations¹

“The picture is much the same when looking at wealth—that is, total net worth rather than yearly income. In 2021, the top 10 percent of Americans held nearly 70 percent of U.S. wealth, up from about 61 percent at the end of 1989. The share held by the next 40 percent fell correspondingly over that period. The bottom 50 percent (roughly sixty-three million families) owned about 2.5 percent of wealth in 2021.”

There are several reasons for a widening wealth gap but one important reason, which is typically overlooked or underappreciated, is that lower income earners simply do not own either directly or indirectly a great deal of equity relative to higher income earners. By equity we mean ownership of private and public firms as well as indirect ownership through defined benefit and contribution pension plans. Rather, the largest percentage of their wealth, albeit small, is held in the form of owner-occupied real estate and other consumer durables. These assets yield a stream of services and in general not a stream of growing sustainable income like equity ownership does. Hence, their values may increase and contribute to increases in wealth but to monetize these wealth increases, the services they provide must be replaced. Therefore, as we show below, using funds available to purchase a home to live in and underinvesting in a diversified portfolio of equities necessarily results in less wealth creation. We start our analysis with the

¹ <https://www.cfr.org/backgrounder/us-inequality-debate>



table below which shows each wealth component as a percentage of each income class’s total wealth for two time periods- 1989 Q3 to 2023 Q1.

Wealth Component (Source: Federal Reserve Board, Survey of Consumer Finance, and Financial Accounts of United States)														
Income Percentile	Real Estate		Consumer Durables		Corporate equities and mutual fund shares		DB pension entitlements		DC pension entitlements		Private businesses		Other assets	
	1989 Q3	2023 Q1	1989 Q3	2023 Q1	1989 Q3	2023 Q1	1989 Q3	2023 Q1	1989 Q3	2023 Q1	1989 Q3	2023 Q1	1989 Q3	2023 Q1
99%-100%	15.2%	13.7%	7.6%	2.3%	21.0%	41.2%	2.5%	1.4%	2.9%	3.4%	23.7%	20.6%	27.1%	17.4%
80-99%	29.0%	25.5%	6.7%	3.7%	8.7%	21.5%	14.9%	12.5%	5.8%	10.3%	13.7%	9.8%	21.2%	16.5%
60-80%	33.2%	31.2%	10.1%	6.8%	5.2%	11.9%	20.7%	21.4%	3.6%	9.3%	6.5%	4.8%	20.6%	14.6%
40-60%	33.8%	37.5%	8.5%	9.7%	4.0%	6.6%	20.9%	19.7%	2.7%	7.5%	8.3%	3.2%	22.0%	15.7%
20-40%	39.0%	43.7%	10.0%	11.3%	2.4%	6.7%	13.2%	13.7%	3.2%	3.3%	7.4%	2.6%	24.7%	18.5%
0-20%	37.1%	44.5%	11.5%	10.0%	3.5%	9.4%	16.5%	6.4%	1.3%	1.1%	7.2%	7.3%	22.9%	21.3%

There are several notable takeaways.

- The percentage of equity- corporate equity and mutual fund shares- is 41.2% for the top income class while it amounts to less than 10% for the bottom 20% of income earners.
- Real estate for the bottom income class makes up the largest portion of its wealth, while the reverse is true for the top income class.
- While low-income earners have far less income to invest than high income earners, when they do invest, they invest a much smaller proportion in asset classes like equity that produce a sustainable income stream.

The implications for the widening wealth gap become more obvious when the dollar value of wealth by asset type and income class is considered. This is shown in the table below.



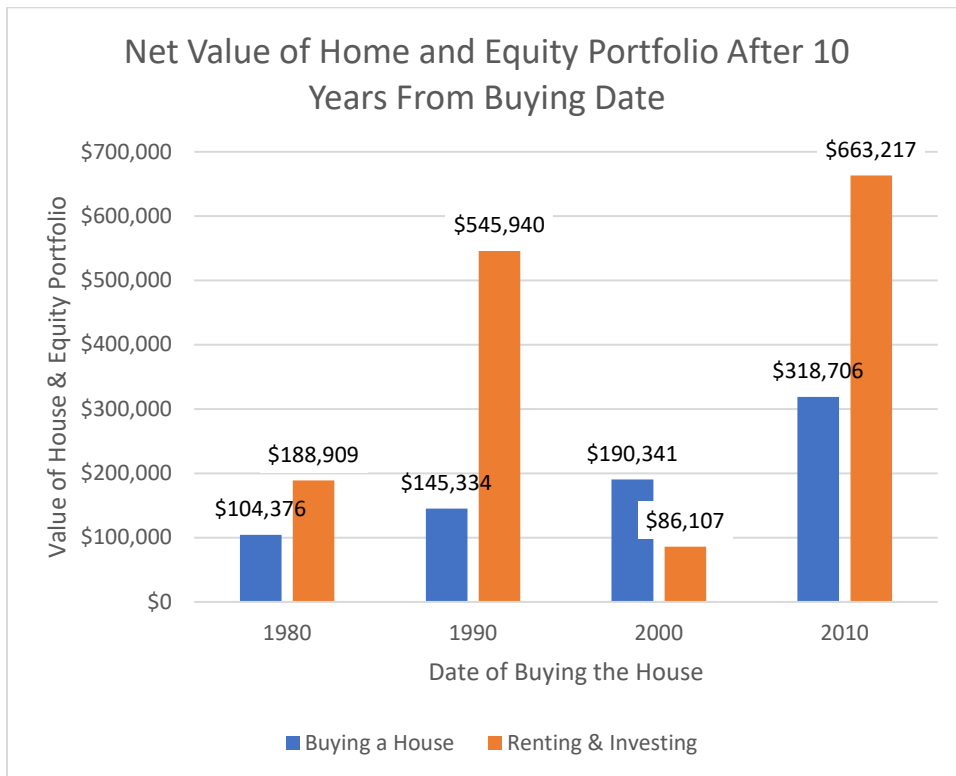
Amount of Wealth Allocated in Trillions of US Dollars												
	Real Estate			Consumer Durables			Corporate equities and mutual fund shares			DB pension entitlements		
Income Percentile	1989 Q3	2023 Q1	Growth in %	1989 Q3	2023 Q1	Growth in %	1989 Q3	2023 Q1	Growth in %	1989 Q3	2023 Q1	Growth in %
99%-100%	0.54	5.28	883.8%	0.27	0.89	232.6%	0.74	15.83	2042.6%	0.09	0.54	506.3%
80-99%	3.04	18.10	496.0%	0.70	2.64	275.5%	0.91	15.26	1571.2%	1.56	8.89	469.6%
60-80%	1.41	7.81	455.1%	0.43	1.71	297.6%	0.22	2.97	1241.8%	0.87	5.37	513.8%
40-60%	1.00	4.79	379.1%	0.25	1.24	395.3%	0.12	0.84	607.3%	0.62	2.51	306.0%
20-40%	0.67	3.03	351.9%	0.17	0.78	354.8%	0.04	0.47	1043.5%	0.23	0.95	318.7%
0-20%	0.24	2.18	795.3%	0.08	0.49	548.6%	0.02	0.46	1874.7%	0.11	0.31	187.9%
	DC pension entitlements			Private businesses			Other assets			(Source: Federal Reserve Board, Survey of Consumer Finance, and Financial Accounts of United States)		
Income Percentile	1989 Q3	2023 Q1	Growth in %	1989 Q3	2023 Q1	Growth in %	1989 Q3	2023 Q1	Growth in %			
99%-100%	0.10	1.29	1150.6%	0.84	7.94	850.0%	0.96	6.68	599.3%			
80-99%	0.61	7.31	1100.7%	1.44	6.98	385.2%	2.22	11.72	427.6%			
60-80%	0.15	2.32	1409.5%	0.28	1.20	336.4%	0.87	3.66	318.9%			
40-60%	0.08	0.96	1121.4%	0.25	0.41	67.7%	0.65	2.01	208.5%			
20-40%	0.06	0.23	311.6%	0.13	0.18	43.0%	0.42	1.28	203.3%			
0-20%	0.01	0.05	524.0%	0.05	0.36	654.5%	0.15	1.04	594.1%			

Growth in real estate wealth for the highest income class was 883.8% while for the lowest income class it was 795.3%. Growth in the corporate equity component was 2042.6% for the top income class and 1874.7% for the bottom income class. However, what is most interesting is that the growth rate for corporate equities for both the highest and lowest income classes were more than twice the growth of the real estate component for each income class. **However, despite the positive performance of both wealth components, the lowest income class lost out on a relative basis because it was over invested in real estate.**

Building wealth through purchasing a consumer durable like a home is not equivalent to making an investment that produces a stream of sustainable income. Although owner-occupied home values have increased over time, to access the wealth potentially created, one needs to sell the home and of course find another place to live. Certainly, one can monetize the value increase in the home by refinancing and taking out cash, but this means more debt to pay off. The alternative to buying a home is to rent and invest the money that would be used to buy a house in a diversified portfolio of equities. Below we present the results of

an analysis of two wealth alternatives- buying a home versus investing an equal amount in a diversified portfolio of equities. We describe methodology in the Appendix to this note.

The chart below compares the net value of the home at various dates to the alternative of renting and investing the same amount of money in the S&P 500 portfolio. The net value of the home is its market value based on the growth in median home price at the end of ten years less the cumulative sum of real estate taxes and home maintenance and repair costs. For example, the 1980 date shown on the chart below is the home purchase date and the value shown at that date is the home’s net value as of 1990. We then assume the house is sold and a new house is purchased. The equity investment alternative assumes investors rent a dwelling and this cost is subtracted from the portfolio equity value. In this exercise, we assume no mortgage debt and no real estate broker fees.





First, if one bought and held a diversified equity portfolio and then compared the wealth this portfolio would produce after 40 years, one would find that this strategy would have produced twice as much wealth as owning a home. This wealth increase does not reflect investing more with an increase in saving. If we included this, the advantage of building wealth through investing in a diversified equity portfolio would be even greater. The advantage for investing and renting would be even greater if we assumed that the proceeds of a home sale would be reduced by a broker fee.

Now our analysis assumes that the house and the equity portfolio were acquired with cash. We assumed that the home investment and the rent and invest alternative did not use debt to magnify their returns. But people typically finance a house purchase with a mortgage. When this is the case, the homeowners' profit comes in two forms. The first is related to increase in the home value. The second results from the fact that mortgage debt changes very little in the early years of a mortgage so home appreciation shows up as an increase in home equity. The example below provides a simple illustration.

		Home			Source of Home Equity Value Change
		Time 1	Time 2		
Row 1	Home Value	\$ 100.00	\$ 200.00	Total Home Value Change	\$100.00
Row 2	Home Equity	\$ 20.00	\$ 120.00	Total Home Equity Value Change	\$ 100.00
Row 3				Home Equity Value Change Due to Home Value Change: Home value doubled so home equity doubled	\$ 40.00
Row 4	Mortgage Debt	\$ 80.00	\$ 80.00	Mortgage Debt Increase	\$ -
Row 5				Home Equity Value Change Due to Leverage: Row 2-Row 3	\$ 60.00



In this example, 60% of the home equity change comes from the fact that the homeowner is leveraged. That is, a home purchase that uses mortgage debt is a leveraged purchase and the significant home equity wealth increase only occurs because no part of the increase in home value is allocated to the mortgage. Therefore, all of the value increase is allocated to home equity. That is, leverage magnifies the value increment on both the upside and the downside. In addition, the net profit made on a house sale is always biased upward because the seller typically pays a broker fee and because the house is an illiquid asset. This means that it takes time to sell a house and during the selling period market conditions can change in an adverse way, meaning that a sale can only happen immediately if the owner is willing to accept a lower price. In the invest and rent case, one can always liquidate some percentage of the equity portfolio at fair value without waiting because the equity market is so liquid. The ability to do this is a distinct advantage for the invest rent alternative.

It is also true that renting is generally not comparable to living in your own home. Typically, the home is larger than a rental and is more private. But the choice of owning underscores the point that one has decided to consume more housing services rather than use the funds more prudently. It is this lack of prudence that contributes to less wealth. Our point is not that people should not own homes. **Our point is that wealth building should not start with owning a home. It should start with owning assets that produce sustainable income because as this income grows the value of the owned assets will increase.** At some point, a percentage of the assets owned can be sold and the proceeds can then be used to purchase a home. **Purchasing a home before one has built some level of sustainable wealth is a mistake and many lower income families have fallen into this trap.**

Appendix

In analyzing the difference between buying a house and renting and investing, we needed to compare the differences on an apples-to-apples basis. We calculated the value of buying a house and then selling the house after 10 years versus the value of investing the money in the S&P 500 and the value of that investment after 10 years.

For the value of the house, we assumed that the entire cost of the house was paid in cash at the beginning of the initial year. Each year the value of the house was arrived at from the inputs below. Expenditures (Cost of Home Ownership, Insurance Costs, and Taxes) were deducted from the value of the house. The inputs were as follows:

- Home Prices – Federal Reserve of St. Louis – Median Sales Price of Houses Sold for the United States, Dollars, Not Seasonally Adjusted
- Cost of Home Ownership – Federal Reserve of St. Louis – Expenditures: Maintenance, Repairs, Insurance, Other Expenses for Owned Dwelling by Housing Tenure: Homeowner, Dollars, Annual, Not Seasonally Adjusted
- Insurance Costs – We used 0.6% of the value of the home based on analysis done by NerdWallet.
- Taxes – We used 0.84% of the value of the house based on property tax by state from www.bankrate.com.

For the value of investing, the initial investment (the cash paid for the house) was grown based on the change in returns of the S&P 500. Rent costs were deducted from the value. The inputs were:

- S&P 500 total returns based on www.officialdata.org/us/stocks/s-p-500
- Rent Growth – Federal Reserve of St. Louis – Consumer Price Index for all Urban Consumers: Rent of Primary Residence in U.S. City Average, Index 1982-1984=100, Monthly, Not Seasonally Adjusted



- Rent Level - <https://ipropertymanagement.com/research/average-rent-by-year#average-rent-by-year>

Below is an example of the calculation for a two-year time span starting in 2018:

	1/1/2018	1/1/2019
Buying a House		
Median Housing Price	\$331,800	\$313,000
Insurance Cost	\$2,013	\$1,899
Upkeep (Cost of home ownership - insurance)	\$650	\$1,014
Taxes	\$2,787	\$2,629
Total Expenses	\$5,450	\$5,542
Home Value - Cumulative Expenses	\$307,550	\$318,008
Investing & Renting		
S&P 500 Return	-4.4%	31.5%
Portfolio Value	\$331,800	\$436,284
Rent	\$15,867	\$16,555
Portfolio Value - Cumulative Expenses	\$315,933	\$403,862

The result of the table above is that at the end of two years the value of buying a home is \$318,008 and the value of investing and renting is \$403,862.