

So, How Did She Do?

Understanding Investment Returns

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While there are many potential reasons to invest in a security, many investors take the leap because they are hoping to grow their assets. Once an investor has jumped through the hurdle of considering the wide array of investments available to her, she is eventually going to wonder how she is faring. Did she make the right calls, or should she adjust? Instead of being met with a straightforward number or percentage, our investor will be forced to wade through a slew of acronyms and jargon.

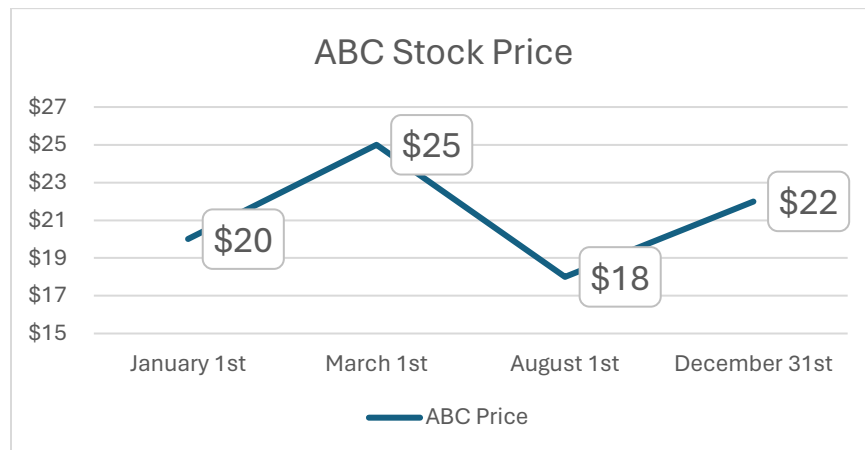
As it turns out, there are many ways to measure returns on an investment. These data points are only useful as points of comparison if you know how to use them properly.

Time-Weighted vs Dollar-Weighted

Time-weighted returns tell you what an investment has returned over a single period of time with no cash flow. Dollar-weighted returns tell you what an investment has returned over a period of time based on an individual investor's pattern of investing.

Take this example of ABC stock from SmartAsset.¹

The price of ABC stock fluctuated throughout the year, as shown by the graph below.



Now, let's consider two investors.

Richard invested \$500 on Jan. 1 and another \$500 on March 1 and Julia invested \$500 on Jan. 1 and another \$504 on Aug. 1 into ABC Company.

¹ [Dollar Weighted vs. Time Weighted: Investments | SmartAsset](#)

	January 1 st	March 1st	August 1st
Richard's Investment	\$500	\$500	
Julia's Investment	\$500		\$504

Richard invested \$500 at \$20 per share on Jan. 1, buying 25 shares of stock. On March 1, seeing the price go up, he invested another \$500 at \$25 per share, buying 20 shares of stock. On Dec. 31 he owned 45 shares of stock worth \$990 (45 shares * \$22 per share).

Julia invested \$500 on Jan. 1 at \$20 per share, buying 25 shares of stock. Then, on Aug. 1, she invested another \$504 at \$18 per share, buying 28 shares of stock. On Dec. 31 her shares are worth \$1,166 (53 shares * \$22 per share).

Richard's Returns: His Time-Weighted Return: 10% (\$20 per share on Jan. 1 / \$22 per share on Dec. 31) and his Dollar-Weighted Return: -0.01% (\$1,000 overall investment over time / \$990 investment value by the end of the period). Any money that Richard invested on Jan. 1 grew by 10% at the end of the year, but his specific pattern of investments led to an overall loss of 0.01%, his dollar-weighted return.

Julia's Returns: Her Time-Weighted Return: 10% (\$20 per share on Jan. 1 / \$22 per share on Dec. 31), and her Dollar-Weighted Return: 15% (\$1,000 total investment over time / \$1,166 overall investment value by the end of the period). Julia has the same time-weighted value as Richard does. Any money that she invested on Jan. 1 grew by 10% at the end of the year. But her specific pattern of investments led to a positive return of 15%, her dollar-weighted return.

	Total Investment Over Time	Overall Investment Value (Dec 31 st)	Time Weighted Return	Dollar-Weighted Return
Richard	\$1,000	\$990	10%	-0.01%
Julia	\$1,004	\$1,166	10%	15%

They had a different dollar-weighted return because they had a different pattern of investment.

For investors, a time-weighted return will tell you the objective value of a given investment over time and how that investment compares with the rest of the market. A dollar-weighted return will tell you the subjective value of a given investment, what you personally would receive based on how you manage your money.

Annualized vs Total Return

An annualized total return is the return earned on an investment each year. It is computed as a geometric average of the returns of each year earned over a period. The annualized rate of return is useful when comparing investments with different time lengths. It's

important to remember that the annualized total return does not suggest anything about the price fluctuations or unpredictability of the investments.

An absolute return or total return shows how the investment performed with no regard for the period of investment. It tells an investor the amount of funds earned by the investment and measures the percentage gain or loss with respect to the initial investment value.

For example, if an investor invested \$20,000 and receives \$25,000 at the end of three years, the investment provided a total return of $(25,000 - 20,000) / 20,000 = 0.25$ (i.e., 25%). However, it does not consider the period of three years that the investor dedicated to the security.

While calculating an absolute return is simple, it cannot be used to compare investments with different time periods. On the contrary, an annualized total return expresses the return on investment in terms of one year. Hence, investments with different time frames can be easily compared.

For example, between two investments with annualized total returns of 8.5% and 9.8%, respectively, it would be reasonable to choose the latter. The annualized total return considers the effect of compounding and either projects or decreases the time period of absolute return to one year.

Considering Market Returns for Your Individual Situation

It seems as if – over the last couple months at least – there is a new headline almost every day about the S&P 500 index hitting record highs. The incredible returns of this particular index might have investors wondering why they might not be seeing the same numbers in their own respective portfolios.

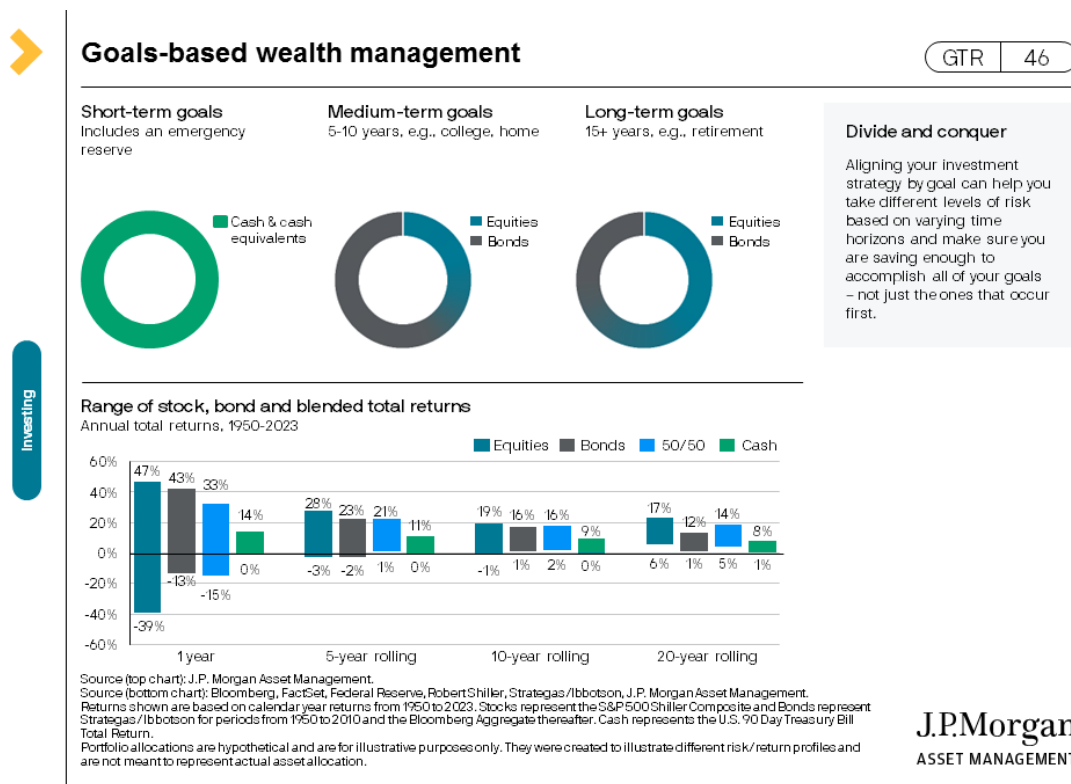
Diversification and risk tolerance are likely the answer. Diversification itself has a few different forms, but for our purposes we can consider diversifying within the equity sector as well as between different asset classes.

According to prolific investment writer Nick Murray, “diversifying away from mainstream equities—into small-cap and international/emerging markets, to cite two obvious examples—you would historically be able to mute the volatility of your overall portfolio in both directions while ultimately capturing the historically superior long-term returns of those other sectors.” Owning anything other than the S&P 500 may make you envious *at the current moment*, but as part of an overall strategy, it’s wise.

Diversifying between asset classes also affects returns and can moderate risk.

The chart below shows the range of returns for various portfolio allocations over different time periods from 1950 – 2023. If an investor’s time horizon for needing the invested funds is about a year, she could experience a wide range of returns, from a 47% gain to a 39% loss. When you read that sentence, which result did you focus on more? Were you enticed by the potential of a gain of almost 1.5x or were you concerned about losing more than a

third of your money? This might tell you something about your tolerance for experiencing losses.



Especially if you are in retirement or nearing retirement, the Pine Haven team has talked to you about adjusting your investment allocation to reflect that. Each situation is unique, but often we reduce the equity allocation and increase bonds and cash to create a retirement “income” stream. While investing in bonds and cash can lessen the potential upside return of a portfolio, it can also provide a cushion on the downside. In this environment of relatively high interest rates, investors are seeing good returns on their cash-adjacent, liquid investments (primarily Money Market, CDs, and Bonds).

One last note: while it may seem obvious, it’s quite easy to manipulate and finesse data to encourage it to show what the author is hoping to illustrate. When dissecting return information, be sure to ensure that time frames given are similar (or ideally exactly the same) and take note of the format of any graphs shown. A quick edit on the maximum and minimum values on an axis can make data points appear more or less dramatic, depending on the author’s bias.

Having familiarity with the terminology discussed here will also ensure that you are comparing like metrics when determining the investments that are the most appropriate for your portfolio. Of course, it is important to review the returns in the context of you reaching **your** financial goals, and not what the “market” has done.

² JP Morgan 2024 Guide to Retirement, <https://am.jpmorgan.com/us/en/asset-management/adv/insights/retirement-insights/guide-to-retirement/>