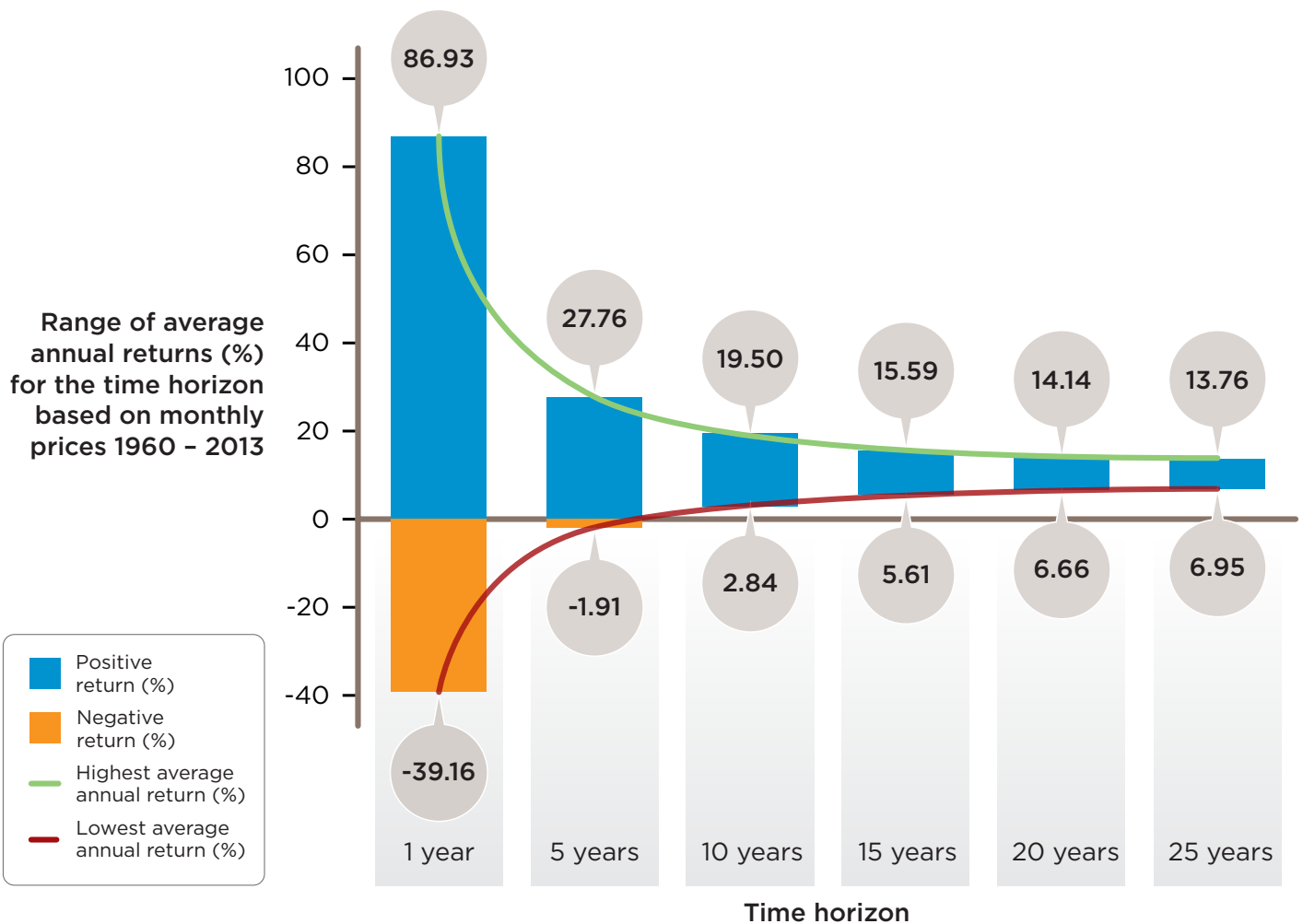


# How time horizon affects risk and return

A longer time horizon is associated with lower **volatility**. Over shorter periods of time, stocks are exposed to higher risks. But over longer periods of time, stocks have historically produced positive returns that can offset short-term risks. This doesn't mean that stocks are not risky over the long term, but for long-term investors, stocks are more likely to provide higher returns.

## How the average annual return of a diversified stock portfolio changes with the time horizon



Calculations developed by Investor Economics, based on Bloomberg data, April 2014.

This graph shows how highest and lowest average annual returns of a diversified stock portfolio for different time horizons varied between 1960 and 2013. The annual return becomes less variable as the time horizon becomes longer.

Learn more about the [relationship between time horizon and risk](#).

Notes: The graph simulates a diversified Canadian stock portfolio using the TSX Total Return Index, which captures the effect of reinvested dividends. It does not capture costs, such as brokerage commissions and management fees, that would reduce your returns in actual investing. The graph shows the variability of annual returns from investing at the end of any month of the year over the time horizon for the period from 1960 to 2013. Monthly data (rather than annual data) offers a more realistic look at return variations an investor will typically experience.

Alternative text version

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For more information on volatility, visit <https://www.getsmarteraboutmoney.ca/invest/investment-products/stocks/risks-of-stocks/>

The diversified portfolio graph compares the relationship between time horizon, which is on the x-axis, and range of average annual returns in percent on the y-axis. The highest average annual return percentage is a negative sloping line, and the lowest average annual return percentage is a positive sloping line. Both lines are located in the graph plane.

The following calculations were developed by Investor Economics, based on Bloomberg data, April 2014.

After one year, the highest average annual return is 86.93 percent and the lowest average annual return is negative 39.16 percent.

After five years, the highest average annual return is 27.76 percent and the lowest average annual return is negative 1.91 percent.

After ten years, the difference between the highest average annual return and the lowest average annual return narrows and begins to flatten out, offering steady positive returns. The highest average annual return is 19.50 percent and the lowest average annual return is 2.84 percent.

After fifteen years, the highest average annual return is 15.59 percent and the lowest average annual return is 5.61 percent.

After twenty years, the highest average annual return is 14.14 percent and the lowest average annual return is 6.66 percent.

After twenty-five years, the highest average annual return is 13.76 percent and the lowest average annual return is 6.95 percent.

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To learn more about the relationship between time horizon and risk, visit <https://www.getsmarteraboutmoney.ca/invest/investing-basics/understanding-risk/time-horizon/>

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