WINTHROP WEALTH

MAY 2021 CLIENT QUESTION OF THE MONTH: WHY DO INTEREST RATES IMPACT STOCK PRICES?

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The increase in long-term interest rates has received a lot of attention over the past several weeks. The 10-Year Treasury yield now sits at 1.70% after increasing from an all-time low of 0.51% in August 2020. The rise in long-term interest rates is driven by expectations that the amount of monetary and fiscal stimulus combined with the vaccine rollout will lead to higher levels of economic growth and inflation. Given that the Fed now projects Real GDP growth at +6.5% in 2021, it is no wonder that interest rates have increased. The backup in yields has disrupted companies whose stock price is based on meager current earnings but enormous potential, while boosting the share price of businesses who benefit from higher rates (i.e., banks). In our May Client Question of the Month, we thought it would be helpful to examine why interest rates impact stock prices.

When you buy a share of stock, you are purchasing an ownership stake in the underlying company. Your ownership stake represents a claim on the firm's cash flows, earnings (profits), and dividends. Stock prices reflect the present value of the company's expected future earnings. Interest rates effect both the present value calculation and the expected amount of future earnings of stocks by impacting the discount rate, the relative value tradeoff against other asset classes, and the amount at which corporations can borrow or refinance. Note that these influences are not mutually exclusive, they happen simultaneously but at different levels depending on company specific factors.

Discount Rate

The discount rate is the interest rate used to determine the present value of future cash flows. Consider the difference in present value based on the same cash flows but different discount rates:

Present Value	Discount Rate	Cash Flow 1	Cash Flow 2	Cash Flow 3	Cash Flow 4	Cash Flow 5
$471	2.00%	$100	$100	$100	$100	$100
$421	6.00%	$100	$100	$100	$100	$100

Note that present value is higher with a lower discount rate (these two variables move inversely to each other). Present value is essentially how much someone would need to invest today, at a certain interest rate, to receive specific future cash flows (i.e., someone would need to invest $471 today at a 2.00% interest rate to receive $100 in each of the next 5 years). To determine the current value of a stock price, an investor can calculate the present value based on an assumed discount rate and estimated cash flows. When the discount rate increases (decreases) the present value of future cash flows become less (more) valuable today.

Relative Value Tradeoff

Successful investing is about maximizing the risk and return tradeoff. Either maximizing return for a defined level of risk, or minimizing risk for a given return threshold. This applies both among and across asset classes. Asset allocation investing requires relative value analysis across asset classes to select the optimal mix of stocks, bonds, cash and/or alternatives in a portfolio. At Winthrop Wealth, our financial planning process determines the target asset allocation for each client by outlining goals and objectives, defining cash flows, and evaluating financial risks. Our investment management process will adjust portfolios by tilting within and across asset classes based on our analysis of the market environment.

Interest rates impact both the absolute and relative value of all asset classes. For example, an increase in interest rates will not only decrease the present value of stock prices, but it will increase the future expected returns of fixed income investments. Therefore, as rates rise, stocks become less attractive to individuals or institutional investors who require a return above a certain threshold and can then purchase "safer" investments to achieve those targets. The opposite is true when rates decrease. The investment phrase, there is no alternative (TINA) describes an environment where low interest rates effectively force investors into riskier assets to achieve certain returns. To summarize, as interest rates change, investors update their forecasted returns across asset classes and adjust their portfolios accordingly.

Corporate Cash Flow Expectations

As mentioned, stock prices represent the present value of a company's expected future earnings (all else equal, increased cash flows will lead to high earnings). A change in interest rates will impact cash flows as corporations manage their capital allocation through debt issuance or refinancing. For example, as rates decrease corporations can choose to add leverage by issuing debt to invest in new projects or refinance existing debt to lower their interest expense. Each of these actions will increase cash flows.

Interest rates impact stock prices by changing:
1. The discount rate used to calculate the present value of future cash flows.
2. The relative value tradeoff between stocks and other asset classes (i.e. bonds or cash).
3. The amount at which corporations can borrow or refinance.

Interest Rates ↓		Interest Rates ↑	
Lower Discount Rate	As the discount rate decreases, the present value of future cash flows becomes more valuable.	Higher Discount Rate	As the discount rate increases, the present value of future cash flows becomes less valuable.
Relative Value of Stocks Increase	As interest rates decrease, so do the expected returns of fixed income investments. Stocks become more attractive as individuals or institutional investors who require a return above a certain threshold are forced to buy riskier assets to achieve those targets.	Relative Value of Stocks Decrease	As interest rates increase, so do the expected returns of fixed income investments. Stocks become less attractive as individuals or institutional investors who require a return above a certain threshold can purchase "safer" investments to achieve those targets.
Corporate Cash Flows Increase	Corporations can take advantage of lower interest rates by adding leverage or refinancing existing debt, thereby increasing cash flows.	Corporate Cash Flows Decrease	As interest rates increase, corporations will hesitate to issue new debt due to higher interest expenses and/or they will pay more on any floating instruments, thereby decreasing cash flows.
Stock Prices ↑		Stock Prices ↓	

At Winthrop Wealth, we apply a total net worth approach to both comprehensive financial planning and investment management. Financial planning drives the investment strategy and provides a road-map to each client's unique goals and objectives. The comprehensive financial plan defines cash flow needs, is stress tested for various market environments, optimizes account structures, considers tax minimization strategies, and continuously evaluates financial risks as circumstances and/or goals change. The investment management process is designed to provide well-diversified portfolios constructed with a methodology based on prudent risk management, asset allocation, and security selection.

DISCLOSURES: