Commentary

Title:

"The Economics of Retirement: A Primer (Part 2)"

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August 2021

In Part 2 of this three part series on the economics of getting ready for retirement we will examine what kinds of investments will generate the necessary returns to accomplish the goal of retiring well. In particular, we will examine stocks and bonds as the best alternative for most people.[1] In Part 1 of this series we examined the benefits of saving and investing over a long period of time, and in Part 3 we will examine how to determine the amount of wealth that must be accumulated to retire comfortably, as well as choosing the optimal retirement date.

Why Stocks and Bonds?

Some people prepare for retirement by owning their own business. They can grow it during their working years and then sell it at retirement and put the proceeds in an investment account to live off of. If you are in this situation it would be a good idea to get a valuation of your business from a business appraiser who deals with your industry. For some, investing in real estate that will provide substantial rents in retirement could be the answer. Both of these methods have proved successful for many investors over time, but for most people these methods are both too time consuming and require a substantial amount of specialized knowledge. For most professional people with a full-time job, investing in stocks and bonds are the most suitable way to build their wealth.

Investing in the stock market and bond market may conjure up images of slick hucksters fleecing the naïve investor. However, it is important to remember that a share of stock is similar to the deed on your house: it represents ownership. A bond is a debt owed by a corporation or government and is similar to a mortgage on a property. An investor buys a share of stock in a company because he or she believes that the company will be profitable, and as an owner, the stockholder will participate in those profits. If you invest in substantial companies making valuable products you will be in a similar situation to a person who owns a rental house in a good neighborhood. In both cases the owner will collect profit by providing consumers with a valuable good or service. Investing in a bond is similar to making a mortgage loan to a homeowner and then collecting the interest over time.

This is not to say that there is no risk in stock and bond investing. But, there is also risk in owning a rental house or making mortgage loans to homeowners. For instance, the neighborhood could go bad and rents decline. You can have a bad tenant who does substantial damage to your property. The economy could decline and you can't rent out the house consistently. A homeowner can default on the mortgage. The point is, all investments, including real estate, have risk. That is why they pay a reward! We will discuss the benefits and costs, or risks, of investing in stocks and bonds below.

The benefits of stock and bond investing are many. They include: (i) professional management, (ii) diversification, (iii) liquidity, and (iv) long-term growth of assets. These benefits will be further explained in detail below.

- **Professional Management**: Investing in a business that you own and manage directly only makes sense if it is your full-time occupation. Otherwise, the time and specialized knowledge necessary to manage the firm well would prevent you from working in your main occupation. Investing in a quality company through the stock market, however, gives you access to professional full-time management

[1] This series of articles are for educational purposes only, and do not serve as a solicitation for making any investment. For advice on particular investment vehicles please see a Registered Investment Advisor or a Certified Financial Planner.

of your asset with little to no need for your time, and no need to acquire specialized skills. This becomes especially important if you choose to invest in companies in different industries.

- **Diversification:** Investing in several different companies in different industries reduces the overall risk of your investment portfolio. If one company declines in value you only lose that portion of your total portfolio while the rest maintains, or even increases, in value. This can be done as a business owner by owning several different companies in different industries, but the difficulty of doing this successfully is apparent. You can diversify in real estate by owning several different rental properties in several different cities so that if one area declines only a portion of your wealth is diminished. This requires an inordinate amount of investment capital to accomplish, but for some it could be worthwhile. For most professionals, owning shares in several different companies provides this diversification without a huge up-front expenditure since you can buy the shares of most companies for under $100 each. You can put together a widely diversified portfolio for only a few thousand dollars.[2]
- **Liquidity:** Stocks and bonds are particularly useful for generating liquidity, which is the ability to turn an asset into cash quickly. At retirement you need to be able to sell some of your assets or businesses to get the cash needed to spend in retirement. With stocks and bonds this can be accomplished within a day or two. Selling a business or rental house, however, could take months with an uncertain payout. In addition, you can sell just a few shares of stock at a time as needed, but you have to sell all of a house or business to get cash. You may not want your cash in such "lumpy" amounts.
- **Growth:** Many assets have shown growth over long periods of time, but the stock market in particular has had a long-term history of delivering high levels of growth. Other assets, such as bank deposits, bank C.D.'s, or U.S. Treasury Bills have not. While the stock market has famously had "crashes" and severe declines, the average growth rate over the long-run has been substantial at around 10%. Corporate bonds have also delivered long-term growth, but not as dramatically as stocks have. They have averaged around 5.6%.[3] Bonds, however, do not suffer from the precipitous drops in value that stocks do during bad economic times, and therefore should be considered as part of a well-diversified portfolio. As we discussed in Part 1 of this series, substantial growth over a long-run time period is, for practical purposes, the only way to save enough for a comfortable retirement.

All these reasons lead most middle class professionals to the stock and bond markets for their long-term investment needs.

Which Investment is Better: Stocks or Bonds?

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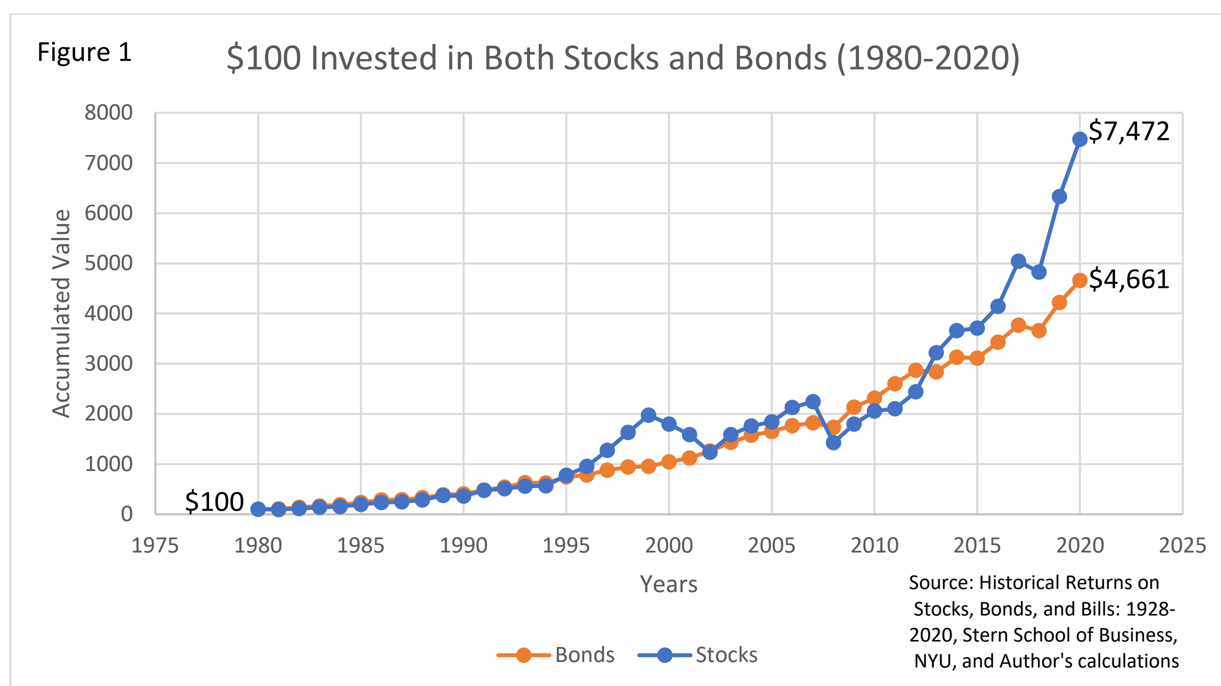
[2] Diversification can most easily be accomplished by investing in mutual funds, which are pools of stock, selected by a mutual fund company. Many of these companies will let you start investing with as little as $1,000.

[3] Data from SBBI Yearbook, by Ibbotson and Stone, as calculated by Dr. Bill Conerly. He predicts that these rates will be lower I the future. See *https://www.forbes.com/sites/billconerly/2017/08/04/the-long-term-rate-of-return-on-investments-looks-lower/?sh=1539a672693c* for details.

Once you are convinced that stocks and bonds are the practical investment for most people, the question naturally arises, "which one is better?" Unfortunately, there is no easy answer. Stocks have had a historically much higher rate of return (10% compared to 5.6%), but bonds have less variability, or risk.[4] One of the fundamental insights of financial economics is that higher returns come with higher risk, and conversely, if you want lower risk you have to accept lower returns.

In Figure 1, below, we see the dramatic difference the higher rate of return on stocks makes compared to bonds. In this example, if you invested $100 in both an S&P500 stock fund and in a corporate Baa rated bond fund over the past 40 years, you would end up with substantially more wealth from stocks.[5] Notice, however, the severe downturns in the stock market in the early 2,000s and during the "Great Recession" of 2007-2009. From 2000 to 2003 the S&P500 declined a cumulative 40%, and in 2008 alone declined 35%! The stock market, as measured by the S&P500, has had 14 annual declines since the end of WW2, with 6 of those years declining by 10% or more.



Conversely, as you can see from Figure 1, the bond market had only minor declines from trend. In the early 2000s the bond market did not decline at all and in 2008 only fell 5%. Bonds are not perfectly safe, however. They have shown yearly losses in 10 years out of the 75 years since the end of WW2, but none greater than the 5% of 2008.

Luckily, the good years outweigh the bad years, leading to long-term growth in the value of both stock and bond portfolios. The stock portfolios have historically generated both more

[4] For an in-depth, but readable, discussion of the benefits of stocks see: Stocks for the Long Run (5th edition) by Jeremy J. Siegel, McGraw-Hill Education, 2014

[5] The S&P500 is a list of the top 500 corporations in the U.S. and is widely used as a benchmark of how well (or poorly) the stock market is performing. Many mutual fund companies build portfolios around the list. Baa is a good quality rating of investment grade bonds. Investment companies build portfolios of many different grades of bonds. The time period chosen was used to fit our example, but the results are consistent with other time periods.

return and more risk than the bond portfolios in the long-run.[6] This leads many to a balanced approach to investing by allocating some of their savings to stocks and some to bonds. The younger you are the more short-term risk you can tolerate since you have many years for the stock market to bounce back from severe declines. Remember, the good years have historically outpaced the bad years leading to superior long-term growth. Building a portfolio weighted towards stocks makes sense in this case.

The older you are the more bonds you want in your portfolio since you may need to liquidate some of your assets during retirement just when the stock market is experiencing a downturn. Selling stocks when they have lost a good bit in order to pay bills could be very painful. Since bonds generally fall less in value during bad times, they make a safer choice when you can no longer plan on waiting out a down-market. As one ages, his or her portfolio should be rebalanced towards more bonds. Just remember, even when you reach 65 years of age, you might still have decades of life left. Don't build too conservative a portfolio that does not generate sufficient growth.

"Beating" the Stock Market: Can it be Done?

If the Rate of Return, or the interest rate earned on our investments, is such an important variable in determining the size of our nest egg, why not just ramp up the rate of return to 15% or 20%? Then we could retire in real style! This attempt to "beat the market," or earn substantially higher rates of return than the long-run historical average, has lured many investors to their financial ruin. Many investors have been seduced by the siren song of investment advisors who promise high returns, but can't deliver long-term.

One reason the sale pitch of these hucksters is so alluring is that certain portfolios of stocks managed by an advisor do "catch fire" and grow dramatically faster than the overall market for a period of time. The advisor shows new investors his track record over the last 3 to 5 years and proclaims himself a stock market genius. Unfortunately, no one has a permanently "hot hand" when it comes to picking stocks. This year's winning advisor becomes next year's loser as the market rebalances. Academic studies of financial advisors have shown that none outperform the market averages over any reasonably long time period.[7]

Since "beating the market" has proved to be so difficult, many financial experts recommend investing in stocks and bonds through the purchase of mutual funds. While you can build your own portfolio of stocks and bonds by choosing the individual companies that you want to invest in, you run into the same problem that you would have with owning and running a company: time and knowledge commitments. Building a well-diversified portfolio with desirable risk characteristics requires specialized knowledge and skills. For those with a large enough portfolio one can turn to an investment or wealth advisor and have a custom portfolio constructed for them. For most of us a mutual fund company is the better solution.

As we discussed earlier, a mutual fund company builds portfolios measured in the hundreds of millions, or even billions, of dollars and then sells "participation shares" in the portfolio to the investing public. As a share owner in the portfolio, the investor gains or loses as the shares in the portfolio rise or fall in the stock or bond market. The mutual fund company earns a small percentage fee based on the assets under management. There are thousands of mutual fund

[6] Disclaimer: There is no guarantee that future returns will mirror historical returns. Speak with your investment advisor to discuss the benefits and risks of investing in stocks or bonds.

[7] For further detail on how and why this happens, see: "A Random Walk Down Wall Street," by Burton G. Malkiel, W.W. Norton & Co., 2020.

companies providing these services and most stock brokerage firms do as well. A quick internet search will provide a list.

For those who have access to a company 401K or other retirement plan the mutual fund companies will have already been chosen for you. All you need to do is make the allocation of your contributions to the plan among the various options. One of the biggest financial mistakes a person can make is not taking advantage of company sponsored retirement plans. The money invested is tax-deferred until retirement, and most companies will contribute a matching amount to your account (but nothing if *you* don't contribute). This matching contribution is free money, so it's almost always best to take it! Over many years these individually small contributions add up to a significant sum and, if built into your monthly budget, will be relatively unnoticeable.

The mutual fund companies usually provide a family of funds, where each fund specializes in a particular niche in the stock market. You can invest in growth funds, income funds, balanced funds, small firm funds (called small cap funds), large firm funds (called large cap funds), international funds, S&P funds, etc. It can all seem a bit bewildering, but with a little effort going through the materials provided by the mutual fund company, you can choose the fund that is right for you. Those who are uncomfortable with this process can turn to a financial planner or investment advisor for help.

Conclusion

For most investors stocks and bonds are a superior investment vehicle compared to real estate or purchasing a business. This is due to many factors including a long-run history of growth, reduced time commitment, superior liquidity, the ease of diversification, and the ease of making incremental investments in small amounts. Successful investing requires a long-run approach since the stock market is quite variable in the short-run. Get started when you are young and see your wealth grow over time. If your company provides a retirement plan take full advantage of it. If not, you need to start investing on your own initiative. Build mixed portfolios of both stocks and bonds to get the benefits of each. Mutual funds can help. Lastly, if you are young, do not be too conservative. In order to accumulate a significant nest egg at retirement you have to take some risk. However, do not get seduced into schemes that promise to "beat the market." The record shows that the slow and steady tortoise beats the hyper hare in this particular race.