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Supply Based Explanation of the Equity Premium Puzzle

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By Richard Serlin

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As we know from basic economics, *all other things equal*, when demand increases, price *usually* increases. But all other things may not be equal, especially over the long run. For example, when demand for VCRs increased in the 1980s, it allowed for greater scale in manufacturing and a *decrease* in price over the long run.

All of the explanations for the equity premium puzzle I have seen in the literature are based on the demand side; trying to find utility functions for a representative investor and ex-ante probability distributions for returns that would explain investors demanding such high average returns for stocks relative to bonds, rather than bidding those returns down. But I suggest a supply based explanation: The long run supply curve for corporate stock may simply be extremely long and flat, and consistently about 5 ½ percentage points in return higher than the premium bonds supply curve, even at stock quantities as high as the entire national savings rate.

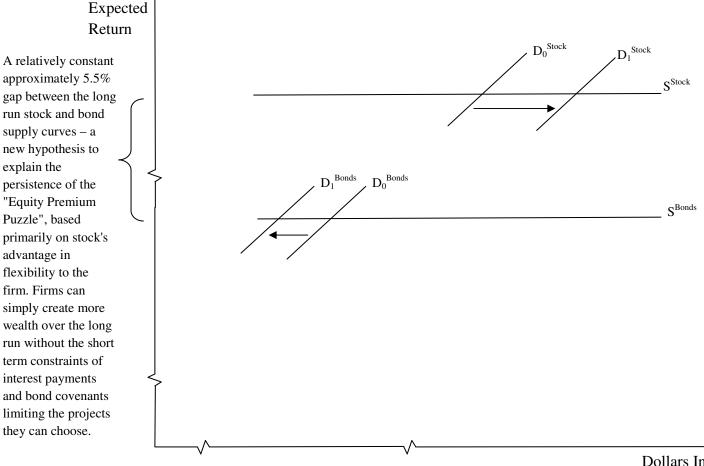
Why would this be? I posit that stock might simply allow a firm to create more wealth with an investment dollar than bonds, and this is because of the flexibility of stock. Firms are able to invest in high return long run projects when they raise money with stock that they sometimes cannot when money is raised from bonds due to the short run constraints of having to make interest payments and satisfy bond covenants.

With stock the firm has greater flexibility to take large projects which may make little or no money for years, which may even lose money for years, but which *overall* will be very high return due to long run profits. There are many areas where short run constraints (often undue ones) greatly decrease optimization. Such areas include business, politics, and academia.

Warren Buffet, arguably the most successful investor in history, constantly attributes his success to unusual efforts and willingness to avoid short term constraints so that he can choose the projects, within companies he controls and in buying stock, that offer the highest NPV. For example, in discussing his use of insurance company funds rather than debt to finance projects, he writes in his Berkshire Hathaway statement of business principles , "...they are liabilities without covenants or due dates attached to them. In effect, they give us the benefit of debt — an ability to have more assets working for us — but saddle us with none of its drawbacks."¹

¹ Berkshire Hathaway Owner Related Business Principles, #7, page 3, at <u>http://www.berkshirehathaway.com/ownman.pdf</u>.

If my supply side hypothesis is true, or true to a large enough extent, then we could expect to continue to see stock returns outperform bond returns by large margins over the long run.



Long Run Supply and Demand for Stocks and Bonds

Dollars Invested

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