

## Required, Historical and Expected Market Risk Premium: not to be mistaken

The market risk premium, also called "equity premium," "market premium" or "risk premium," is one of the most important but elusive parameters in finance. In his research paper "Market Risk Premium: Required, Historical and Expected," IESE Professor Pablo Fernandez shows how they are different.



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Despite its popularity, the term "market risk premium" is difficult to understand because it is

used to designate three different concepts: *required* market risk premium, *historical* market risk premium, and *expected* market risk premium. Many authors and finance practitioners assume that expected market risk premium is equal to the *historical* market risk premium and the *required* market risk premium. Also, the widely used Capital Asset Pricing Model assumes that the *required* market risk premium is equal to the expected market risk premium.

In his research paper "[Market Risk Premium: Required, Historical and Expected](#)," Professor [Pablo Fernández](#) of IESE Business School claims that the three concepts are different and that it is a common error to confuse them.

According to his work, the *required* market risk premium is the incremental return of a diversified portfolio (the market) over the risk-free rate (return of treasury bonds) required by an investor. In other words, it is the answer to the question: "What incremental return do I require from a diversified portfolio of shares (a stock index, for example) over the risk-free rate?" Thus, it is a crucial parameter for any company, because the answer to the above question is the key to determining the company's required return on equity and indeed on any investment project. There are two difficulties in determining the *required* market risk premium: it is not the same for all investors and it is not an observable quantity.

The second concept related to market risk premium is the historical market risk premium, which corresponds to the historical differential return of the stock market over treasury bonds.

And thirdly, the expected market risk premium is the expected differential return of the stock market compared to treasury bonds. Maybe the most important parameter in finance, is the answer to the question: "What incremental return do I expect from the market portfolio compared to the risk-free rate over the next few years?"

To prove these differences between the three concepts, Fernández reviews the most important theories on market risk premium and the methods of calculating it. He also analyzes the evolution of the stock market and inflation in Spain since 1940.

Next, he studies the behavior of the equity and bond markets in the United States from 1926. After having a close look at the data obtained from the US, Fernández notices that the historical equity premium varies so much that it is impossible to use historical data to assess the magnitude of the required market risk premium.

Fernández also compares the evolution of the stock markets, inflation and volatility in Spain

and the US. He observes that the correlation between the two countries' stock markets has gradually increased, from a negative one in the 1950s to a very high correlation in the recent past.

The author also presents the *historical* market risk premium in different countries from 1970 to 1996 and a comparison of stock market trends in Spain, Germany, Japan, and the U.S.A. Fernández concludes that the *historical* market risk premium is equal for all investors but the *required* and the *expected* market risk premium are different for different investors. The paper also shows that there is no *required* market risk premium for the market as a whole, as different investors use different *required* market risk premiums.

The author refers to a method called "HMDYWD" (an abbreviation for "How much do you want, Dad?"), a joke by Professor Guillermo Fraile at IAE in Buenos Aires that is meant to illustrate the meaninglessness of talking about a market risk premium shared by all investors.

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