

Corporate Finance, Module 12: Corporate Financing and Market Efficiency (Chapter 13)

Price Elasticity of Demand for Common Stocks

(The attached PDF file has better formatting.)

Question: The textbook says that price elasticity of demand for common stocks is high, because all stocks are similar (except for general differences like betas and industry). But this can't be true. Suppose two stock insurers sell auto insurance, each of whom has \$100 million of statutory surplus.

- Insurer YY underwrites well and earns \$20 million a year.
- Insurer ZZ underwrites poorly and earns \$10 million a year.

How can it be that investors are indifferent between these two stocks?

Answer: The two insurers have the same statutory surplus, but they have different market values, since one does better than the other. Insurer ZZ may have a market value of \$100 million and Insurer YY has a market value of \$200 million; both insurers may earn a 10% return on market value, and investors are indifferent between them.

Question: Suppose Insurer ZZ invests aggressively, and its expected earnings increase to \$15 million a year. Will you tell me that its market value increases to \$150 million? If this were true, all insurers would switch to aggressive investment strategies.

Answer: In an efficient market, investors are indifferent among investment strategies. The market value doesn't change when the investment strategy changes; the β changes.

Question: Suppose three identical firms compete in a market. Each firm market value is \$100 million and each firm earns \$15 million a year.

Suppose unexpected fires destroy two of the three firms. Because of the long lead time to build factories, it will take at least five years for new competitors to enter the market. In the meantime, the third firm has a monopoly. It raises prices and earns \$30 million a year.

The risk of this firm has not changed, but its β remains the same. Yet its market return rises from 15% to 30%. Surely this stock is a better buy than other stocks, so how can we say that the market is efficient and all stocks are the same?

Answer: The fires are a change in the environment. The day after the fire, investors bid up the stock price of the remaining (third) firm, so that its long-term expected return is 15%.