


The Stock Market: *Its Function, Performance, and Potential as an Investment Opportunity*

Full Length Text — Part: 6 Chapter: 4
Micro Only Text — Part: 4 Chapter: 4
Macro Only Text — Part: 5 Chapter: 4

To Accompany "Economics: Private and Public Choice 11th ed."
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The Economic Functions of the Stock Market

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The Economic Functions of the Stock Market

- The stock market provides investors, including those who are not interested in participating directly in the operation of the firm, with an opportunity to own a fractional share of the firm's future profits.
- New stock issues are often an excellent way for firms to obtain funds for growth and product development.
- Stock prices provide information about the quality of business decisions.

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Stock Market Performance: The Historical Record

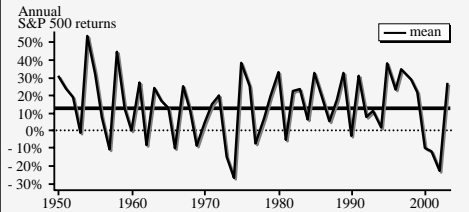
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The Economics of the Stock Market


- The stock market allows every investor to participate in the risks and opportunities of corporate America. Real returns for the past two centuries have averaged 7 percent per year.
- During the last 50 years, the broad S&P 500 stock index indicates that stock investors earned a 12 percent average annual rate of return.
- Double-digit returns were earned during 32 of the 50 years, while the returns were negative during only 11 of the years.



Source: Global Financial Data, <http://www.globfin.com>

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The Interest Rate, the Value of Future Income, and Stock Prices

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Stock Prices

- Underlying the price of a firm’s stock is the **present value** of the firm’s expected future net earnings, or profit.
- The value of a share depends on:
 - the expected size of future net earnings,
 - when these earnings will be achieved, and,
 - the interest rate by which the investor discounts the future income.

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Stock Prices

- The **present value of a future income stream** is dependent upon:
 - D – dividends (and gains from higher stock prices) earned during various future years (indicated by the subscripts).
 - i – the discount or interest rate
- It is calculated as:

$$\frac{D_1}{(1+i)} + \frac{D_2}{(1+i)^2} + \dots + \frac{D_n}{(1+i)^n}$$
- Higher interest rates reduce the present value of future returns.


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The Price to Earnings Ratio

Source: Global Financial Data. <http://www.globalfin.com>

- The price-earnings ratio for the S&P 500 index has averaged 16 over the past 50 years.
- The price-earnings ratio has risen over the past two decades and reached 31 in 2001. Lower costs of achieving a diverse portfolio (reducing the risk of investing stocks) may have contributed to the rise in the price-earnings ratio.


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The Random Walk Theory of the Stock Market

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Random Walk Theory

- When considering the future of stock prices, many economists stress the implications of the random walk theory.
- Investor expectations about an uncertain future determine current prices, and no one can forecast future stock prices with precision or certainty.

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How the Ordinary Investor Can Beat the Experts

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How the Ordinary Investor Can Beat the Experts

- Savers invest in the stock market as a strategy to build wealth.
- Investors that buy a diverse portfolio of shares and hold them over long periods of time, substantially reduce their risks.
- Small investors can purchase stock in an equity mutual fund, a corporation that buys and holds shares of stock in many firms.
- Equity mutual funds have reduced the risk of stock ownership and attracted large amounts of funds into the market.

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The Value of Equity Mutual Funds

Value of Stocks Owned Through Equity Mutual Funds (billions of dollars)

Year	Value (billions of dollars)
1980	44
1982	83
1984	117
1986	162
1988	195
1990	246
1992	523
1994	867
1996	1,751
1998	2,978
1999	4,042
2000	3,963
2001	3,418
2002	2,663
2003	3,685

Source: Investor Company Institute <http://www.ici.org>

- The money that people put into U.S. equity *mutual funds* in order to hold shares in the ownership of stocks, rose dramatically in the 1990s.
- Purchasing shares in a mutual fund is a simple way for an individual to buy and hold interest in a large variety of stocks with one purchase.

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Stocks are Less Risky When Held for a Lengthy Time Period


Highest and Lowest Period Annualized Total Real Return (%) S&P 500 Index

Period	Highest Return (%)	Lowest Return (%)
1-year periods	47%	-36%
5-year periods	30%	-17%
20-year periods	14%	-1%
35-year periods	10%	3%

Source: Lipan Liu, Andrew J. Rettenmaier, and Zijun Wang, “Social Security and Market Risk,” National Center for Policy Analysis working paper # 244, July 2001. Returns are based on the assumption that an individual invests a fixed amount for each year in the investment period.

- This graphic highlights the best and worst annualized performance for each holding period from 1871 – 2000.
- There is *less risk* of a low or negative return when a portfolio of S&P 500 stocks is *held for a longer period of time*.


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The Advantages of Indexed Mutual Funds

- A *managed equity mutual fund* is a fund with a portfolio manager who tries to pick stocks that will maximize the fund's rate of return.
- An *indexed equity mutual fund* is a fund that holds a portfolio of stocks that matches their share in a broad stock index like the S&P 500.
 - Indexed mutual funds have substantially lower operating costs than managed funds as they engage in less trading and have no need for either a market expert or research staff.


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Should You Invest in a Fund Because of its Past Performance?

- No, past performance is not a reliable indicator of future performance.
 - Why?
 - Some of the mutual funds with above-average returns during a period were merely lucky.
 - A strategy that works well in one environment (inflationary conditions, for example) is often disastrous when conditions change.


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Questions for Thought:

1. A friend just inherited \$50,000. She informs you of her investment plans and asks for your advice. "I want to put it into the stock market and use it for my retirement in 30 years. What do you think is the best plan that will provide high returns at a relatively low risk?" What answer would you give? Explain.
2. The stocks of some corporations that have never made a profit, especially those in high-technology industries, have risen in price. What causes investors to be willing to buy these stocks?


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Questions for Thought:

3. "Stock prices are way too high. The stock market must fall."
-- Analyze this view.
4. Many personal finance magazines such as *Money* and *Smart Money* routinely give advice as to which stocks to buy.
-- Should you take their advice?

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**End
Special Topic 4**

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