The Stock Market and the Macro Economy

Some factors that affect a company's stock price are out of their control, but we still need to be aware of them. For example, there's a fairly consistent relationship between economic recessions and declines in stock prices. That makes sense when we consider that a recession is defined as two consecutive quarters of declining GDP: If a nation produces less, then people earn less and buy less. Companies sell less and earn less. Given that stocks are claims on company earnings, it's not surprising that investors won't pay as much for those claims during bad times. In this lecture, we'll see how we can use information about the macro economy to make investment decisions.

Predicting Economic Activity

- In order to take advantage of a recession, we would need to be able to forecast turnings of the economy. Then, we'd need to sell before other investors recognize the coming of the recession and start buying again before other investors see the end of the recession.
- There are some reasonably good predictors of economic activity. The Conference Board Leading Economic Index®, more commonly called the Index of Leading Economic Indicators, is the best known. This index is a composite of about 10 factors, such as consumer expectations, initial unemployment claims, and new orders for consumer goods.
    - The problem with using this index to call market trends is that the information it uses is available to all market participants, who can make their own guesses and act at least as quickly as we can.

    - This means that any decline in stock prices as we head into a recession should begin before the recession, and in fact, that's what tends to happen. Investors see the economic contraction coming.
- Why, then, don't we just wait for stocks to signal a recession, then sell before the onset of the recession itself?
    - History shows us three problems with this plan. First, since at least 1950, stocks have always declined during recessions, but every decline hasn't signaled an imminent recession. Cynical analysts often say that the stock market has successfully predicted 6 of the last 9 recessions.
    - Second, we don't have a good way to tell how long the stock market downturn will last. John P. Hussman, the president of Hussman Investment Trust, has found that serious market declines (bear markets) that occur during recessions last longer than what he calls standalone bear markets. But we still don't know how long a downturn will last, which means that we can't tell when to get back in the stock market.
    - Third, we haven't specified what we mean by a decline in stock prices: Do we mean a 5% drop or a 10% drop and over what time period?
- The bottom line is that it's almost impossible to call stock market turning points at the right time, even if you can call recessions and recoveries with reasonable accuracy.

Business Cycles and Risk Premiums

- We know that business cycle changes affect risk premiums on stocks. Donald Keim and Robert Stambaugh, writing in the *Journal of Financial Economics*, found that the difference between the yield on risky bonds and safe bonds signals higher expected stock returns. The idea here is that a large spread between the two bonds suggests that times are risky, and we've already seen that stocks tend to return more during risky times.
- But once investors are aware of the risky situation—stock prices have fallen and risk premiums have increased—from that point on, we expect higher returns during the risky period itself. That might seem counterintuitive, but it

makes sense. Stocks fall on the bad news that increases risk, but after prices have fallen, the expected returns from then on are higher.

- **High-Risk Periods: Why Higher Returns Are Expected**
- When bad news increases risk (e.g., an economic crisis or geopolitical instability), stock prices often fall sharply due to investor fear and pessimism. This decline in prices makes stocks cheaper relative to their potential future earnings. The increase in **risk premiums**—the additional return investors demand for taking on higher risk—means that, from the lower price levels, stocks are expected to provide higher returns in the future.
- **Rationale**:
    - Stock prices fall as investors react to the bad news (e.g., recession fears).
    - After the drop, the stocks are undervalued or "discounted," so any recovery in confidence or economic stability can drive prices back up.
    - Investors who buy at the low point are rewarded with higher returns as the market stabilizes or rebounds.)

- Let's reverse the situation. If investors see more normal times ahead, they are willing to bid more for stocks. Stock prices increase, a reaction that is reflected in more normal dividend yields, and risk premiums decline. From then on, during the safe period, we expect normal stock returns during the period of normal risk.
    - **Normal (Low-Risk) Periods: Lower Returns Expected**
        - In more stable economic times, when investors feel confident about the future, stock prices tend to rise as demand for stocks increases. Higher stock prices mean lower dividend yields (dividends as a percentage of the stock price) and narrower risk premiums. This translates into lower expected returns, as stocks are no longer undervalued.

        - **Rationale**:
            - Investors are willing to pay a premium for stocks because they expect stability, which lowers the potential upside of future returns.
            - The reduced perception of risk leads to a "normal" return on stocks, which is typically lower than the returns seen during recovery from high-risk situations.
- **Why This Seems Counterintuitive**
    - At first glance, it may seem strange that **riskier periods lead to higher returns**, but this makes sense because:
        - During risky times, stock prices are depressed due to uncertainty and fear.
        - As conditions improve, those who took on the higher risk are rewarded with outsized returns.
    - Conversely, in safer periods, stocks are more expensive, and the returns are more "normal" because the level of risk has decreased.

Key Takeaways:

- **High-Risk Periods**: Stocks are undervalued due to fear; risk premiums are high, leading to potentially higher returns for brave investors.
    - Example: Buying stocks during a recession or financial crisis.
- **Normal Periods**: Stocks are overvalued due to confidence; risk premiums are low, leading to modest returns.
    - Example: Buying stocks during an economic boom when markets are stable.

This cyclical behavior is a core concept in understanding market dynamics and the trade-off between risk and return in investing

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Text based Activities

Exercise 01: Comprehension Questions

- Define the term "recession" as mentioned in the text.
- Why do stock prices tend to decline during a recession?
- What is the purpose of the Index of Leading Economic Indicators?
- Why is it difficult to use stock prices to predict recessions?
- Why is it difficult to predict when to buy back into the stock market after a downturn?.

Exercise 02: True/False Questions

a. Stock prices always increase during recessions**.**

b. Serious market declines during recessions last longer than standalone bear markets.

c. The Index of Leading Economic Indicators is only available to a select group of investors.

d. During risky periods, stocks tend to offer higher expected returns after an initial decline.

Exercise 03: Fill-in-the-Blanks

1. A recession is defined as two consecutive quarters of declining _______.
2. The Index of Leading Economic Indicators uses factors such as consumer _______, initial unemployment claims, and new orders for consumer goods**.**
3. During normal periods, stock prices increase, risk premiums _______, and normal stock returns are expected.
4. Investors often pay less for stocks during bad times because stocks are claims on _________, which tend to decline during a recession.
5. In order to profit from a recession, investors need to _________ before other investors recognize the recession and start buying again.

6. A __________ in stock prices during a recession should begin before the actual recession starts, as investors anticipate the economic contraction.
7. When investors see more normal times ahead, they are willing to bid _________ for stocks, which causes stock prices to increase.

Exercise 04: Multiple-Choice Questions

1. **What does a large spread between risky and safe bonds indicate?**

- A) The market is safe.
- B) Times are risky, and stocks tend to return more.
- C) A recession has ended.
- D) Stock prices are stable.

2. **What is the main problem with using the Index of Leading Economic Indicators to predict market trends?**

- A) It is outdated.
- B) Its information is available to all market participants.
- C) It is too complicated to use.
- D) It predicts inaccurately.

3. **What happens to stock prices during the onset of increased risk?**

- A) They rise sharply.
- B) They remain unchanged.
- C) They fall and reflect higher dividend yields.
- D) They double in value.

4. **What happens to expected returns during risky periods after prices have fallen?**

- A) They remain the same.
- B) They decrease further.

- C) They are higher.
- D) They disappear.