PacificCPE

COURSE

82153A

Alternative Hedge Fund Strategies: Risk, Return, and Arbitrage

Understanding how risk and return are calculated is central to evaluating any investment strategy, and hedge funds are no exception. This course walks through the key concepts behind investment risk measurement, touches on influential economic theories including George Soros's reflexivity framework, and explains how arbitrage works in practice. Whether you're reviewing client portfolios or assessing fund performance, the analytical skills covered here will sharpen your ability to evaluate hedge fund strategies with confidence.

CREDIT HOURS 2 | FIELD OF STUDY BUSINESS | EXAM QUESTIONS 10

Start Course ↓

Final Exam Copy ↓

LEARNING ASSIGNMENTS AND OBJECTIVES

Assignment

- Study the full course materials included here.
- Complete the review questions after each chapter.
- Answer 10 final exam questions.
- Final exam is scored immediately, 70% or better passes.
- Certificate of completion is available in your account.
- Failed exams can be retaken free of charge.

Course Objectives

- Recall the single most significant risk that most investors face.
- Identify the characteristics of various forms of arbitrage.

Copyright Notice

© 2026 Pacific CPE, LP. All rights reserved.

This course and test have been adapted from supplemental materials and uses the materials entitled Hedge Fund for Dummies, 2nd Edition © 2023 by Ann C. Logue. Displayed by permission of the publisher, John Wiley & Sons, Inc., Hoboken, New Jersey. All rights reserved.

The materials in this course — including the text, illustrations, exhibits, examples, exam questions, and review questions — are the copyrighted property of Pacific CPE, LP. No portion of this course may be reproduced, stored in a retrieval system, distributed, or transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise) without the prior written permission of Pacific CPE, LP, except for the personal, non-commercial use of the registered learner.

Pacific CPE, LP grants the registered learner a single-seat, non-transferable license to access this course for the purpose of completing the associated continuing professional education credit. Account credentials may not be shared.

This course is provided "as is" for educational purposes. While Pacific CPE, LP makes a reasonable effort to ensure the content is current and accurate, the materials should not be relied upon as a substitute for professional advice. Pacific CPE, LP disclaims all liability for any error, omission, or loss arising from the use of, or reliance on, the course content.

Publication Date: August 2026

TABLE OF CONTENTS

CHAPTER 01

Calculating Investment Risk And Return 4

1.01 Market Effi ciency And You, The Hedge Fund Investor 5

1.02 Using The Modern (Markowitz) Portfolio Theory (Mpt) 7

1.03 Discovering How Interest Rates Affect The Investment Climate 21

1.04 Investing Irrationally: Behavioral Finance 29

Test Your Knowledge 35

CHAPTER 02

Buying Low, Selling High: Using Arbitrage In Hedge Funds 40

2.01 Putting Arbitrage To Good Use 41

2.02 Cracking Open The Arbitrageur's Toolbox 45

2.03 Flipping Through The Rolodex Of Arbitrage Types 47

Test Your Knowledge 55

Glossary 59

Index 61

Final Exam Copy 73

Chapter 1: CALCULATING INVESTMENT RISK AND RETURN

Chapter Objective

After completing this chapter, you should be able to:

- Recall the single most significant risk that most investors face.

The goal of a hedge fund is to decrease investment risk and increase investment return. People who study finance in an academic setting tend to think about risk and return differently than other folk, so it helps to understand the dominant thinking. I'm not saying that all hedge funds follow the academic principles, but they may use the language.

Technical Stuff

Many hedge fund managers are smart people, and they often look the part — a bit nerdy. They may not be the slick folks who throw great parties and drive fancy cars. Instead, they often have finance PhDs and love nothing more than calculating market strategies to exploit investment opportunities that other investors haven't discovered. I'm sure they like fancy cars, too, though. Running a hedge fund is more interesting to a manager than teaching undergrads, and it increases the likelihood that the car in her garage will be a Porsche rather than an econobox. Understanding research that dives into the market's mechanics can help you make better decisions about where to place your hard-earned savings. And if you decide not to put your money into hedge funds, some knowledge of the theories behind risk, return, and diversification can make sure you avoid fads that don't help you meet your investment goals. Even if some of the theories in this chapter seem far-fetched to you, they'll help you understand what drives other investors who buy and sell securities.

This chapter gives you a quick summary of investment theory. I present it from an academic perspective, but don't let that scare you off. I have very good reasons for doing this! You'll run into this material when you talk to hedge fund managers and other investment professionals, so you may as well know what they're talking about, or at least where to look. After you read this chapter, you'll be prepared when investment discussions turn to alpha, beta, or standard deviation. Some of the material is technical, but hedge fund management and investment are technical businesses.

MARKET EFFICIENCY AND YOU, THE HEDGE FUND INVESTOR

When people try to describe the securities market, they start with one key assumption: The market is *efficient*. Efficiency means that a security's price reflects all information, good and bad, about the security. It doesn't mean that the price predicts the future. All kinds of surprises can and do happen.

However, if someone knows something, the knowledge shows up in the price. This definition leads to one of the many popular economics jokes:

Q. How many investors does it take to change a light bulb?

A. None — the market price already reflects the change.

Remember

If the market isn't efficient, the price of an asset will be very different from its actual value.

Hedge fund managers and their analysts spend their days looking for ways to make money in efficient markets. Their research also contributes to efficiency because they find information that investors can use to figure out where they want to buy and sell particular stocks or bonds. In the next few sections, I'll show why this process should matter to you.

Why efficiency matters

Why should you care about market efficiency? Well, a hedge fund manager's attitude toward efficiency determines how she goes about making money (making you money, in other words). If she believes in perfect efficiency, for example, she's likely to pursue a strategy that involves risk management through leverage instead of emphasizing securities selection (see Chapter 1 of course 82154B for more information on leverage). If she believes in total inefficiency, she's likely to spend much of her time doing research on specific securities and then committing a good portion of the fund's money to securities that she thinks will outperform the market. You should find a manager whose beliefs in efficiency and resulting strategies match up with your investment objectives.

Remember

When you evaluate performance claims (see Chapter 1 of course 82156B for more on evaluating performance), keep in mind that markets tend to be efficient over the long run. In investing, as in life, if it sounds too good to be true, it probably is. If a hedge fund manager tells you that her strategy will make huge profits by exploiting massive inefficiencies, you want to find out what she considers to be an inefficiency, why she thinks that the inefficiencies exist, and what will happen if another investor acts on the discovery. (See Chapter 3 of course 82157B for more on doing your due diligence.)

Perusing profitable inefficiencies

Sometimes, the research of a fund manager or an analyst uncovers inefficiencies where a fund can make a profit. Such inefficiencies aren't easy to find, but they do exist. Investors are most likely to find *profitable inefficiencies* in markets that aren't well researched, like some emerging markets (countries with newly developing economies and stock markets). They also exist where investor psychology seems out of step with the underlying value of the assets (witness the dot-com bubble). Some researchers have pinpointed common inefficiencies; for example, stocks with a low price-to-book value (that is, a low stock price relative to the balance sheet net worth) tend to outperform the stock market as a whole.

Efficiency and the random walk

When hedge fund managers talk about securities prices, they sometimes use the term *random walk*. What they mean is that without new information, a security's price moves randomly. Some days the price is up a little, and some days it moves down a little, but you can't predict the price. Only new information changes the magnitude and direction of a price change, and those changes also come in a random and unpredictable fashion; after the market (that is, everyone trading all the stocks and bonds on the exchanges) assimilates the news, the price goes back to changing randomly.

Technical Stuff

Eugene Fama of the University of Chicago developed the random walk theory in the mid-1960s; Burton Malkiel, a professor at Princeton, later wrote a popular book based on Fama's work titled *A Random Walk Down Wall Street* (W.W. Norton & Company).

Fund managers who believe in the random walk believe in the strongest possible market efficiency. They often invest only in index funds — mutual funds that invest in the stock market in the same proportion as a major market index, such as the S&P 500 (an index prepared by the Standard & Poor's corporation that includes the stock of 500 large U.S. companies and that's designed to

measure the overall performance of the stock market). They also claim that throwing darts at the quotes page of the *Wall Street Journal* is as likely to generate a top-performing stock portfolio as any intensive research. Indexing has taken over much of the general investment market because it works well, especially after considering costs.

Keep in mind that if the markets are mostly efficient and if stock prices are mostly random, it's very difficult for hedge fund managers and other investors to outperform the market. It's possible, and it happens, but it isn't easy.

Remember

One reason that academic theory about market behavior may seem so unrealistic is that almost all the research assumes that markets are efficient. In the real world, markets have pockets of inefficiency — sometimes they last ten minutes, and sometimes they last for years (think of the real estate bubble that created the 2008 financial crisis). But keep in mind that scholars are working on models of what could happen in ideal conditions. Without models, researchers and analysts can't perform the tests that improve our understanding of why things work the way they do. If you can keep this in mind, market theories will make a lot more sense.

USING THE MODERN (MARKOWITZ) PORTFOLIO THEORY (MPT)

Harry Markowitz, as a graduate student at the University of Chicago in 1946, wrote his doctoral dissertation on how investors balance risk and return. His dissertation was the first step in what's now known as the *Modern Portfolio Theory* (MPT). Markowitz believed that investors are rewarded for taking risk. Investors who buy many different securities will find that the risk of each offsets the risk of the others, leaving the investor with only the risk in the market. In other words, the only risk that pays off is market risk. Investors who want more risk than the market should borrow securities (use leverage; see Chapter 1 of course 82154B) to increase their exposure to market risk. Likewise, investors who want less risk than the market should mix up their market investments with low-risk assets like treasury bonds.

The MPT is the way that almost all professional investors think about the world. It's a basis for structuring portfolios, evaluating trades, and explaining performance. Even when investors have disagreements with the theory, they use its language to describe what they're doing. If you plan to invest in hedge funds, you need to have an understanding of how fund managers think about investing.

Technical Stuff

As time went on, the theory seemed to outgrow the label "modern," and Markowitz's work seemed deserving of even more honors than his 1990 Nobel Prize for the revolutionary approach to finance. Nowadays, many people honor the good professor by having the "M" in MPT stand for "Markowitz." If you do more financial reading or talk to people in the financial field, you'll hear "Markowitz Portfolio Theory," "Modern Portfolio Theory," and "MPT" used interchangeably. To make it easy, I'll just refer to it as the MPT because everyone in the business understands that.

So what's risky?

Markowitz defined *risk* as a function of standard deviation — a statistic that shows how much your return may vary from the return that you expect to get. Say, for example, that a fund manager expects a security to have an average return of 10 percent over two years. If it returns 10 percent the first year and 10 percent the second year, the manager sees no deviation between any one return and the average return. But if the security returns 20 percent one period and 0 percent the next, it still returns an average of 10 percent, but it has big deviations from the 10 percent mean. The more a security swings around the expected return, the riskier it is.

NO NOBEL PRIZE IN ECONOMICS?

Here's some trivia about the Nobel Prize in Economics: Alfred Nobel's 1895 will, which created the other Nobel Prizes, didn't mention it, and the Nobel Foundation, which awards the physics, chemistry, medicine, literature, and peace prizes, doesn't give it. The economics prize is affiliated, however. The Prize in Economic Sciences in Memory of Alfred Nobel was created in 1968 by the Bank of Sweden, which awards the prize.

Table 6-1 shows the math that goes into a standard-deviation calculation. (Nope, you don't need to know this for a final; I just include it to show you where the magic numbers come from.) It takes the closing prices for Johnson & Johnson and Roku in May 2022, calculates the percent changes each day, and then finds that each of the daily percent changes varies from the average of all the month's daily percent changes. The table shows a measure of how much each return can vary from the mean.

TABLE 6-1 CALCULATING STANDARD DEVIATION

		Change			Change	
	J&J closing	from Previous	**Standard**	Roku Closing	from Previous	**Standard**
Date	**Price**	**Day**	**Deviation**	**Price**	**Day**	**Deviation**
5/31/2022	179.53	-0.86%	1.82940045	94.9	–1.63%	7.914407
5/27/2022	181.09	0.91%		96.47	8.96%	
5/26/2022	179.46	–0.09%		88.54	4.42%	
5/25/2022	179.62	–0.98%		84.79	7.11%	
5/24/2022	181.4	1.09%		79.16	–13.74%	
5/23/2022	179.44	1.39%		91.77	–2.58%	
5/20/2022	176.98	1.75%		94.2	–2.76%	
5/19/2022	173.94	–0.89%		96.87	2.14%	
5/18/2022	175.5	–1.86%		94.84	–2.89%	
5/17/2022	178.82	0.42%		97.66	4.72%	
5/16/2022	178.08	0.70%		93.26	–4.68%	
5/13/2022	176.85	–0.57%		97.84	11.82%	
5/12/2022	177.87	0.99%		87.5	11.15%	
5/11/2022	176.13	–0.54%		78.72	–6.14%	
5/10/2022	177.09	–0.14%		83.87	–4.44%	
5/9/2022	177.33	0.54%		87.77	–.36%	
5/6/2022	176.37	–0.22%		96.83	–5.49%	
5/5/2022	176.76	–1.91%		102.45	–6.87%	
5/4/2022	180.2	1.07%		110.01	5.83%	
5/3/2022	178.29	–0.20%		103.95	0.80%	