CFA Institute®
Investment Foundations

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Module 5: INDUSTRY STRUCTURE

Chapter 14: Investment Vehicles

Ted Stephenson, CFA, CPA, CMA, CFP, MBA
Professor, George Brown College
St. James Campus
290 Adelaide St. E.,
Toronto, Ontario, M5T 2T9
Canada
Faculty Bio

Module	Topic	Weight	LOS	Exam Qs	Hours to Study	Module Practice Qs	Chapter Practice Qs
Module 1	**Industry overview**	5%	7	6	5	28	28
Chapter 1	The Investment Industry: A Top-Down View						
Module 2	**Ethics and regulation**	10%	14	12	10	91	
Chapter 2	Ethics and Investment Professionalism						49
Chapter 3	Regulation						42
Module 3	**Inputs and tools**	20%	50	24	20	291	
Chapter 4	Microeconomics						53
Chapter 5	Macroeconomics						57
Chapter 6	Economics of International Trade						47
Chapter 7	Financial Statements						70
Chapter 8	Quantitative Concepts						64
Module 4	**Investment instruments**	20%	29	24	20	213	
Chapter 9	Debt Securities						69
Chapter 10	Equity Securities						72
Chapter 11	Derivatives						42
Chapter 12	Alternative Investments						30
Module 5	**Industry structure**	20%	27	24	20	96	
Chapter 13	Structure of the Investment Industry						28
Chapter 14	Investment Vehicles						29
Chapter 15	The Functioning of Financial Markets						39
Module 6	**Serving client needs**	5%	12	6	5	76	
Chapter 16	Investors and Their Needs						35
Chapter 17	Investment Management						41
Module 7	**Industry controls**	20%	24	24	20	154	
Chapter 18	Risk Management						51
Chapter 19	Performance Evaluation						53
Chapter 20	Investment Industry Documentation						50
	Total	**100%**	**163**	**120**	**100**	**949**	**949**

AFTER COMPLETING THIS CHAPTER, YOU SHOULD BE ABLE TO DO THE FOLLOWING:

a) Compare direct and indirect investing in securities and assets;
b) Distinguish between pooled investments, including open-end mutual funds, closed-end funds, and exchange-traded funds;
c) Describe security market indices, including their construction and valuation, and identify types of indices;
d) Describe index funds, including their purposes and construction;
e) Describe hedge funds;
f) Describe funds of funds;
g) Describe managed accounts;
h) Describe tax-advantaged accounts and describe the use of taxable accounts to manage tax liabilities.

DIRECT VS. INDIRECT INVESTING

LOS a: Compare direct and indirect investing in securities and assets.

INDIRECT INVESTMENT VEHICLES PROVIDE MANY ADVANTAGES

They are professionally managed.
They **allow small investors to use the services** of professional managers.
They allow investors to **share in the purchase and ownership of large assets**, such as skyscrapers.
They allow investors **to own diversified pools of risks** and thereby obtain more predictable, although not necessarily better, returns.
They often **are substantially less expensive to trade** than the underlying assets.

LOS a: Compare direct and indirect investing in securities and assets.

ADVANTAGES OF DIRECT INVESTING

Investors can exercise more control over their investments than investors who hold indirect investments.
Investors can choose when to buy or sell their investments to **minimise their tax liabilities.**
Investors can choose not to invest in certain securities, such as companies that sell tobacco or alcohol.
Investors who are wealthy can often obtain high-quality investment advice at a lower cost when investing directly rather than indirectly.

LOS a: Compare direct and indirect investing in securities and assets.

POOLED INVESTMENTS

Most retail investors choose to save through pooled investment vehicles managed by investment firms.

- The sole purpose of these investment vehicles is to own securities and other assets.
- The investment vehicles, in turn, are owned by their investors, who share in the profits and losses in proportion to their ownership

It is important to note that investors in an investment vehicle do not share ownership of the investment securities and assets held by the investment vehicle.

- Instead, they share in the ownership of the investment vehicle itself.
- That is, they are the beneficial owners of the investment vehicle's securities and assets, but not their legal owners

LOS b: Distinguish between pooled investments, including open-end mutual funds, closed-end funds, and exchange-traded funds.

INVESTMENT COMPANIES

Pooled Investments
Banks, insurance companies, and investment management firms organise most investment companies; they are often called the **sponsor**.
• **A board of directors, a board of trustees, a general partner, or a single trustee** oversees every investment company.
• The directors appoint **a professional investment manager**, who is almost always an affiliate of the sponsor.
• All pooled investment vehicles disclose their investment policies, deposit and redemption procedures, fees and expenses, and past performance statistics in an official offering document called a **prospectus**.

LOS b: Distinguish between pooled investments, including open-end mutual funds, closed-end funds, and exchange-traded funds.

Open-End Funds

Shares issued and redeemed as necessary

May be no-load or investors may pay sales-loads

- No load: no deposit or redemption fees
- Sales load: may have to pay sales load at the time of purchase, at the time of redemption, or over time, usually 3% to 9%

Price equals net asset value (NAV) at close of trading

- NAV = Total net value of fund ÷ Number of shares outstanding

LOS b: Distinguish between pooled investments, including open-end mutual funds, closed-end funds, and exchange-traded funds.

Money Market Funds

A special class of open-end mutual funds that investors view as uninsured interest-paying bank accounts

- Regulators permit money market funds to accept deposits and satisfy redemptions at a constant price per share
- They may only hold money market securities
    - Generally, very short-term, low-risk debt securities issued by entities with very high-quality credit
- Vulnerable to a run on assets

LOS b: Distinguish between pooled investments, including open-end mutual funds, closed-end funds, and exchange-traded funds.

Closed-End Funds

Unlike open-end funds, closed-end funds do not issue or redeem shares on demand.

They sell shares to the public in initial public offerings (IPOs) and then use the proceeds to purchase investment securities or other assets.

- After the IPO, investors who want to buy or sell a closed-end fund do so through exchanges and dealers.
- Closed-end funds are actively managed and generally trade at values different from their NAV.
- Discounts are more common than premiums.

LOS b: Distinguish between pooled investments, including open-end mutual funds, closed-end funds, and exchange-traded funds.

Exchange-Traded Funds

Exchange-traded funds (ETFs) are pooled investment vehicles that are typically passively managed to track a particular index or sector, although an increasing number of ETFs are actively managed.

- ETFs are generally managed by investment professionals who provide investment, managerial, and administrative services.
- The fees for these services and trading costs are low, particularly for ETFs that are passively managed.

LOS b: Distinguish between pooled investments, including open-end mutual funds, closed-end funds, and exchange-traded funds.

ETFS VS ACTIVE MUTUAL FUNDS

iShares Index Funds & Active Mutual Funds: Key Differences

Criteria	iShares Index ETFs	Active Mutual Funds
Performance goal	Track a benchmark	Outperform a benchmark
Management	Passive	Active
Performance risks	▸ Performance may differ from benchmark. ▸ Holdings not altered during rising / falling markets.	▸ May not meet performance goal. ▸ May underperform due to manager's holdings selection.
Buying / selling shares	Intraday on exchanges	Once per day via fund company
Price to buy / sell	Current market price, which may differ from NAV, brokerage commissions	End-of-day NAV, less fees
Fees	Expense ratio	Expense ratio
Tax impact[1] of buyers / sellers	Shareholders only impacted by their own action	Shareholders may be impacted by all other shareholders' actions
Holdings disclosure	Daily	Typically quarterly

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EQUITIES – GLOBAL FRAMEWORK

MSCI ACWI & FRONTIER MARKETS INDEX										
MSCI ACWI INDEX						MSCI EMERGING & FRONTIER MARKETS INDEX				
MSCI WORLD INDEX			MSCI EMERGING MARKETS INDEX			MSCI FRONTIER MARKETS INDEX				
DEVELOPED MARKETS			EMERGING MARKETS			FRONTIER MARKETS				
Americas	Europe & Middle East	Pacific	Americas	Europe, Middle East & Africa	Asia	Americas	Europe & CIS	Africa	Middle East	Asia
Canada	Austria	Australia	Brazil	Czech Republic	China	Argentina	Croatia	Kenya	Bahrain	Bangladesh
United States	Belgium	Hong Kong	Chile	Egypt	India		Estonia	Mauritius	Jordan	Pakistan[3]
	Denmark	Japan	Colombia	Greece	Indonesia		Lithuania	Morocco	Kuwait	Sri Lanka
	Finland	New Zealand	Mexico	Hungary	Korea		Kazakhstan	Nigeria	Lebanon	Vietnam
	France	Singapore	Peru	Poland	Malaysia		Romania	Tunisia	Oman	
	Germany			Qatar	Philippines		Serbia	WAEMU[2]		
	Ireland			Russia	Taiwan		Slovenia			
	Israel			South Africa	Thailand					
	Italy			Turkey						
	Netherlands			United Arab Emirates						
	Norway									
	Portugal			MSCI STANDALONE MARKET INDEXES[1]						
	Spain			Saudi Arabia		Jamaica	Bosnia Herzegovina	Botswana	Palestine	
	Sweden					Trinidad & Tobago	Bulgaria	Ghana		
	Switzerland						Ukraine	Zimbabwe		
	United Kingdom									

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COMPARISON OF OPEN-END FUNDS, CLOSED-END FUNDS, AND EXCHANGE-TRADED FUNDS

[1]Including Money Market Funds

	Open-End Mutual Funds[1]	Closed-End Funds	Exchange-Traded Funds
Managed	Yes, actively or passively	Yes, primarily actively	Yes, primarily passively
Exchange-traded	No	Yes, but not traded continuously	Yes, traded continuously
If exchange-traded, size of the gap between the price and the NAV	N/A	Can be large, usually trade at a discount to the NAV	Small, usually trade at close to the NAV
Redeemable	Yes	No	Yes

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COMPARISON OF OPEN-END FUNDS, CLOSED-END FUNDS, AND EXCHANGE-TRADED FUNDS

[1]Including Money Market Funds

	Open-End Mutual Funds[1]	Closed-End Funds	Exchange-Traded Funds
Risky	Yes	Yes	Yes
Management accountability	Few issues, particularly if funds are passively managed	Management not particularly responsive to shareholders' concerns	Few issues, particularly if funds are passively managed
Management fees	High if actively managed, low if passively managed	High because actively managed	Low if passively managed

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SECURITY MARKET INDICES

A security market index is a group of securities representing a given security market, market segment, or asset class.

The following are some well known indices, by country:

- United States: S&P 500 Index
- United Kingdom: FTSE 100
  (practitioners commonly pronounce FTSE as “footsie”)
- France: CAC 40
- South Korea: Korea Stock Price Index (KOSPI)

LOS c: Describe security market indices including their construction and valuation, and identify types of indices.

THE INDEX UNIVERSE

Broad Market indices cover an entire asset class

Multi-Market indices cover an asset class across many countries or regions

Industry indices cover single industries

Sector indices cover broad economic sectors

Style indices provide benchmarks for common styles of investment management

Fixed-Income indices cover debt securities

Other indices track the performance of alternative investments

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INDEX WEIGHTINGS

Two important elements affect the value of an index: • the securities included in the index and • the weight assigned to each security in the index.		
Weighting Factor	**Largest Impact**	**Examples**
Price-weighted	High-price stocks	DJIA, Nikkei 225
Capitalisation-weighted (value-weighted or market-weighted)	Stocks with high total market values (price × shares outstanding)	Hang Seng, FTSE 100, S&P 500 Market Weight
Equal-weighted	All stocks have the same impact	S&P 500 Equal Weight

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VARIATIONS IN INDICES

As of August 2018, Apple was the largest company by market capitalisation.
• Apple stock is included in both the S&P 500 Equal Weighted and Market Weighted Indices.
• Because the S&P 500 Equal Weighted Index assigns the same weights to all the stocks it includes, Apple represents only 0.2% (1/500th) of the S&P 500 Equal Weighted Index.
• Because the S&P 500 Market Weighted Index assigns to each stock a weight that reflects the company's market capitalisation, Apple represents about 4.5% of the S&P 500 Market Weighted Index.
• A change in the price of Apple's stock will have a small effect on the S&P 500 Equal Weighted Index, but will have a much larger effect on the S&P 500 Market Weighted Index.

LOS c: Describe security market indices including their construction and valuation, and identify types of indices.

PRACTICE Q: EXPERT

As a result of continuously changing security market prices, index rebalancing is necessary for a(n):

A. price-weighted index.
B. equal-weighted index.
C. capitalisation-weighted index.

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B. equal-weighted index.

C. capitalisation-weighted index.

B is correct. An equal-weighted index shows what returns would have been if an equal value were invested in each security in the index. The prices of these securities change continuously. Thus, to maintain the equal weights among securities, regular index rebalancing is necessary.

A is incorrect. A price weighed index is an index in which the weight assigned to each security is determined by dividing the price of the security by the sum of all the prices of the securities. (NO rebalancing!)

C is incorrect. A capitalisation weighted index is an index in which the weight assigned to each security depends on the security’s market capitalisation. (NO rebalancing!)

INDEX FUNDS

Security Indices

Products created by the investment industry

Index Funds

- Popular because they generally are broadly diversified and highly transparent, with very low management and trading costs.
- Funds may invest in every security in the index, a strategy known as **full replication**.
- Or they may invest in only a representative sample of the index securities, a strategy called **sampling replication**.

LOS d: Describe index funds, including their purposes and construction.

PRACTICE Q: EXPERT

An index fund will sell securities if:

A. the value of the benchmark index falls.
B. withdrawal requests are greater than new receipts from investors.
C. dividends, interest, and investor contributions are greater than withdrawals.

PRACTICE Q: EXPERT

An index fund will sell securities if:

A. the value of the benchmark index falls.

B. withdrawal requests are greater than new receipts from investors.

C. dividends, interest, and investor contributions are greater than withdrawals = buy.

B is correct. Index funds may have to sell securities if withdrawal requests from investors exceed additional investment from investors.

A is incorrect because an index fund uses a passive investment strategy.

C is incorrect because an index fund will purchase securities if net cash inflows (Dividends + Interest + Investor contributions) are greater than withdrawal requests.

CHARACTERISTICS OF HEDGE FUNDS

Private Investment Pool: Distinguished by availability to only a limited number of select investors, lock-up agreements, and managers' performance-based compensation

Non-Traditional Investment Strategies

Available only to some investors who usually meet various wealth, income, and investment knowledge criteria that regulators set

LOS e: Describe hedge funds.

CHARACTERISTICS OF HEDGE FUNDS

Most are open-end investment vehicles subject to **lock-up provisions**.

Management and performance fees:

Hedge fund managers generally receive an annual management fee plus a performance fee that is a specified percentage of the returns that they produce in excess of a hurdle rate.

Fund has to be above its **high-water mark**; also called loss-carryback provisions.

LOS e: Describe hedge funds.

HURDLE RATE

For example, assume that the assets under management are £1 million, that the hurdle rate is 5%, and that the return on the fund assets for the year is 17%. As illustrated in the figure, the excess return—that is, the return in excess of the hurdle rate—is 12%. Based on a "2 and 20" compensation, the hedge fund manager will receive an annual management fee of £20,000 and a performance fee of £24,000 for a total compensation of £44,000.

Assets under management: £1 million

Compensation: 2 and 20

Annual management fee: £1,000,000 × 2% = £20,000

Performance fee:

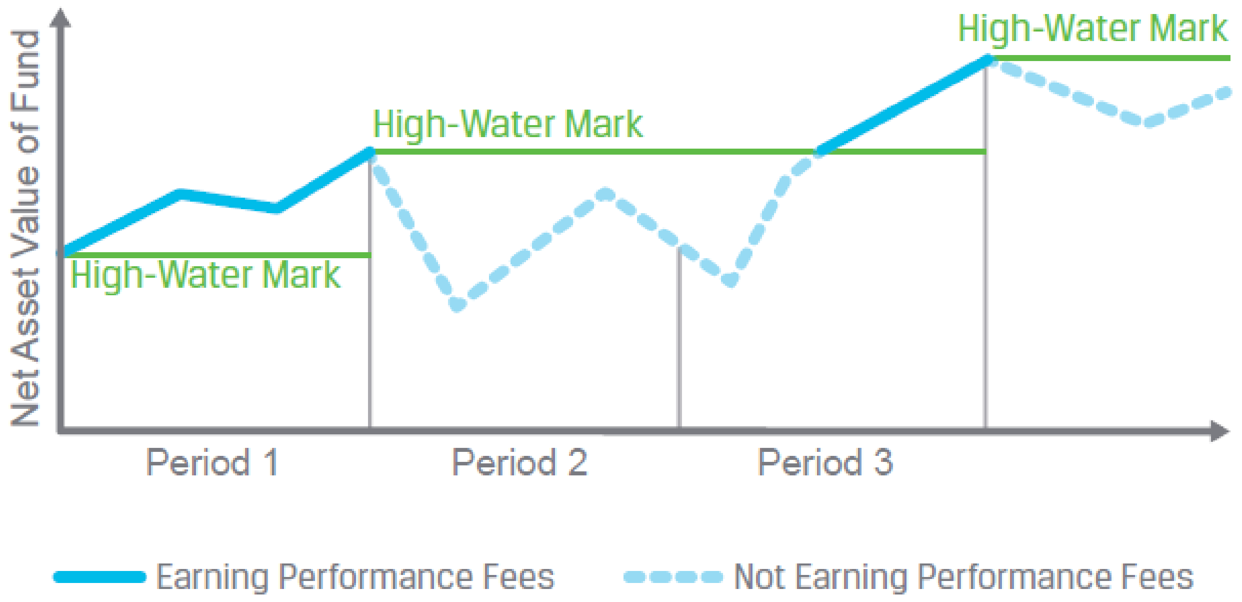
Total compensation = £44,000

The investors' return net of fees is £126,000 [= (17% × £1,000,000) – £44,000] or 12.6%.

The high-water mark reflects the highest value, **net of fees**, that the fund has reached at any time in the past.

The high-water mark provision ensures that investors pay the managers only for net returns calculated from the initial investment and not for returns that recoup previous losses. This provision is also called the loss-carryback provision.

Exhibit 2 High-Water Mark



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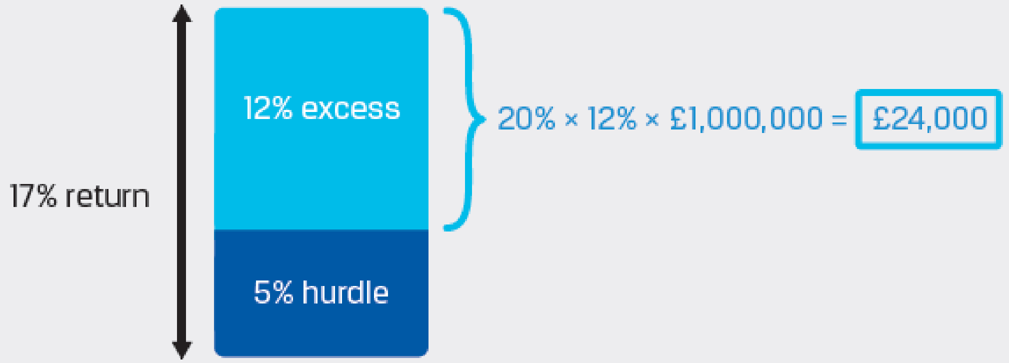

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PRACTICE Q: EXPERT

Increasing the hurdle rate for a hedge fund manager will usually lead to total fees that are:

A. lower.
B. unchanged.
C. higher.

PRACTICE Q: EXPERT

Increasing the hurdle rate for a hedge fund manager will usually lead to total fees that are:

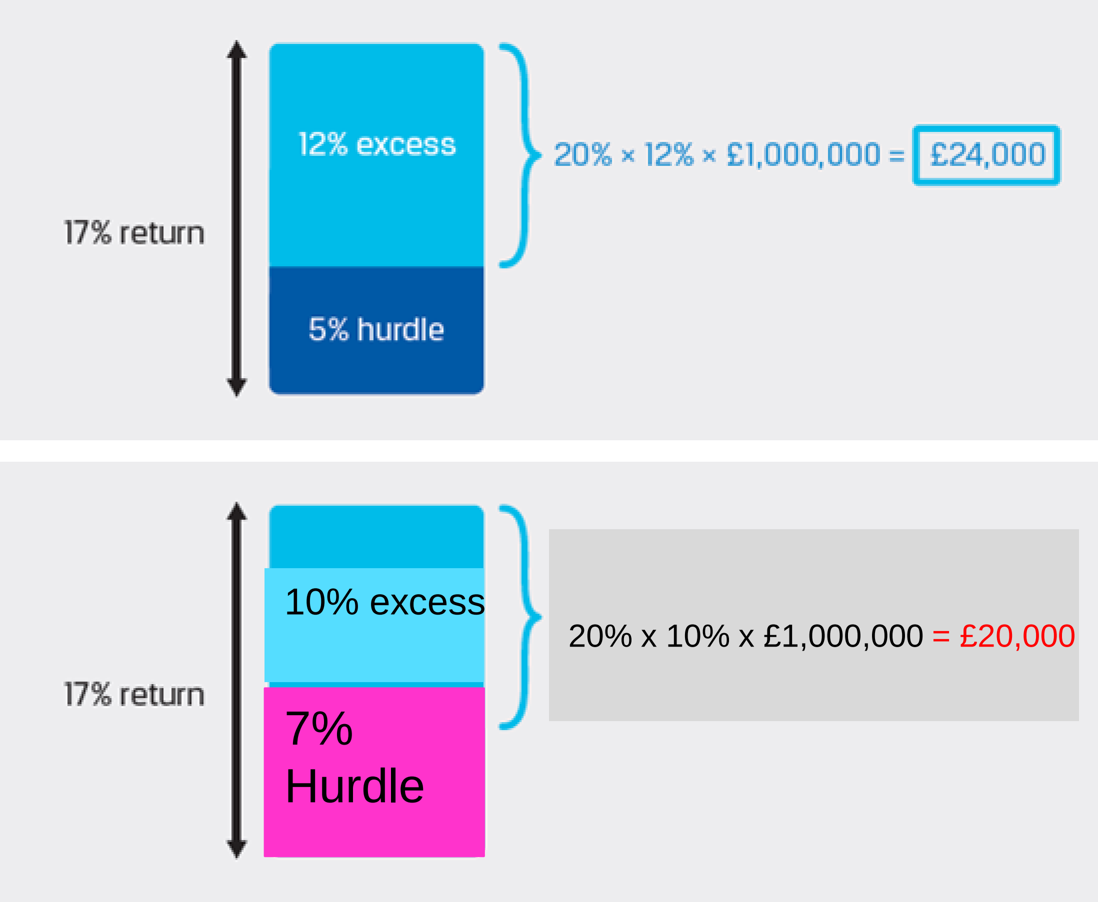
A. **lower.**

B. unchanged.

C. higher.

A is correct. Hedge fund managers generally receive an annual management fee plus a performance fee that is often specified as a percentage of the returns that they produce in excess of a hurdle rate.

Therefore, if the hurdle rate is increased, the performance fee is decreased (lower) and total fees are decreased.



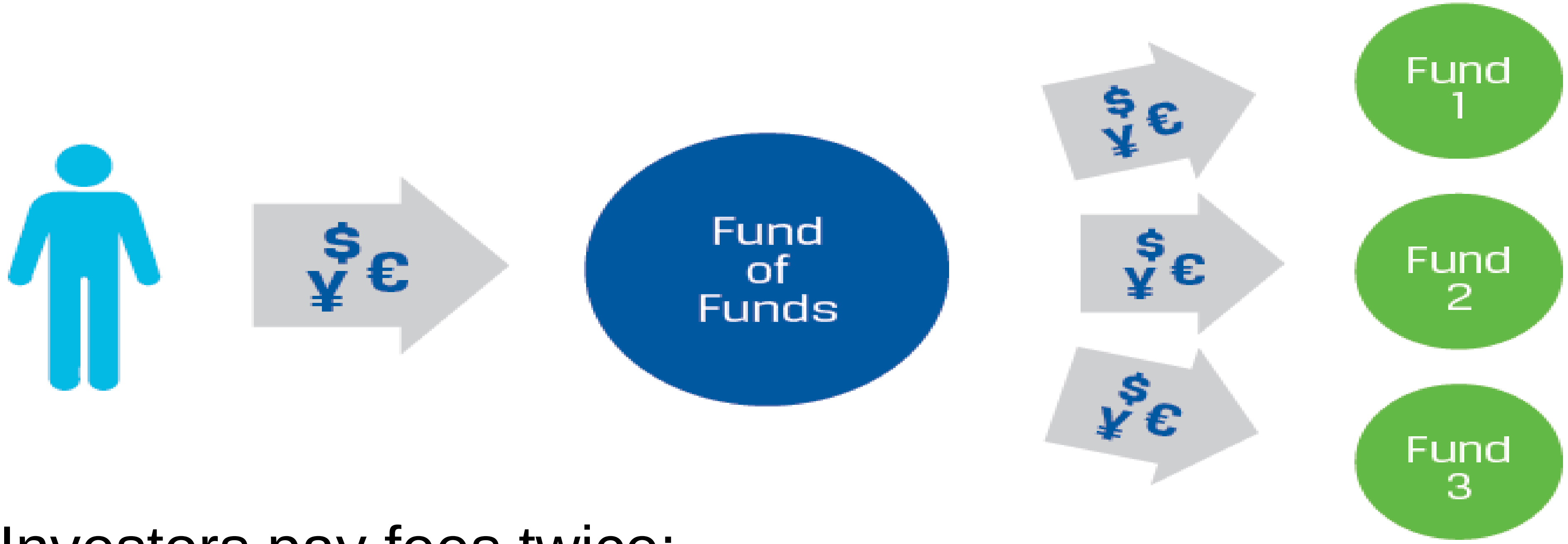
CHARACTERISTICS OF HEDGE FUNDS

Risks: Although many are not particularly risky, the asymmetry in management compensation encourages some managers to take substantial risk.

The legal structure and legal domicile of hedge funds generally depend on their managers' and investors' tax situations.

LOS e: Describe hedge funds.

FUNDS OF FUNDS



Investors pay fees twice:

- To each fund
- To the fund-of-funds manager

LOS f: Describe funds of funds.

MANAGED ACCOUNTS

Many investors contract with investment professionals to help manage their investments for an advisory fee or for commissions on the trades that they recommend.

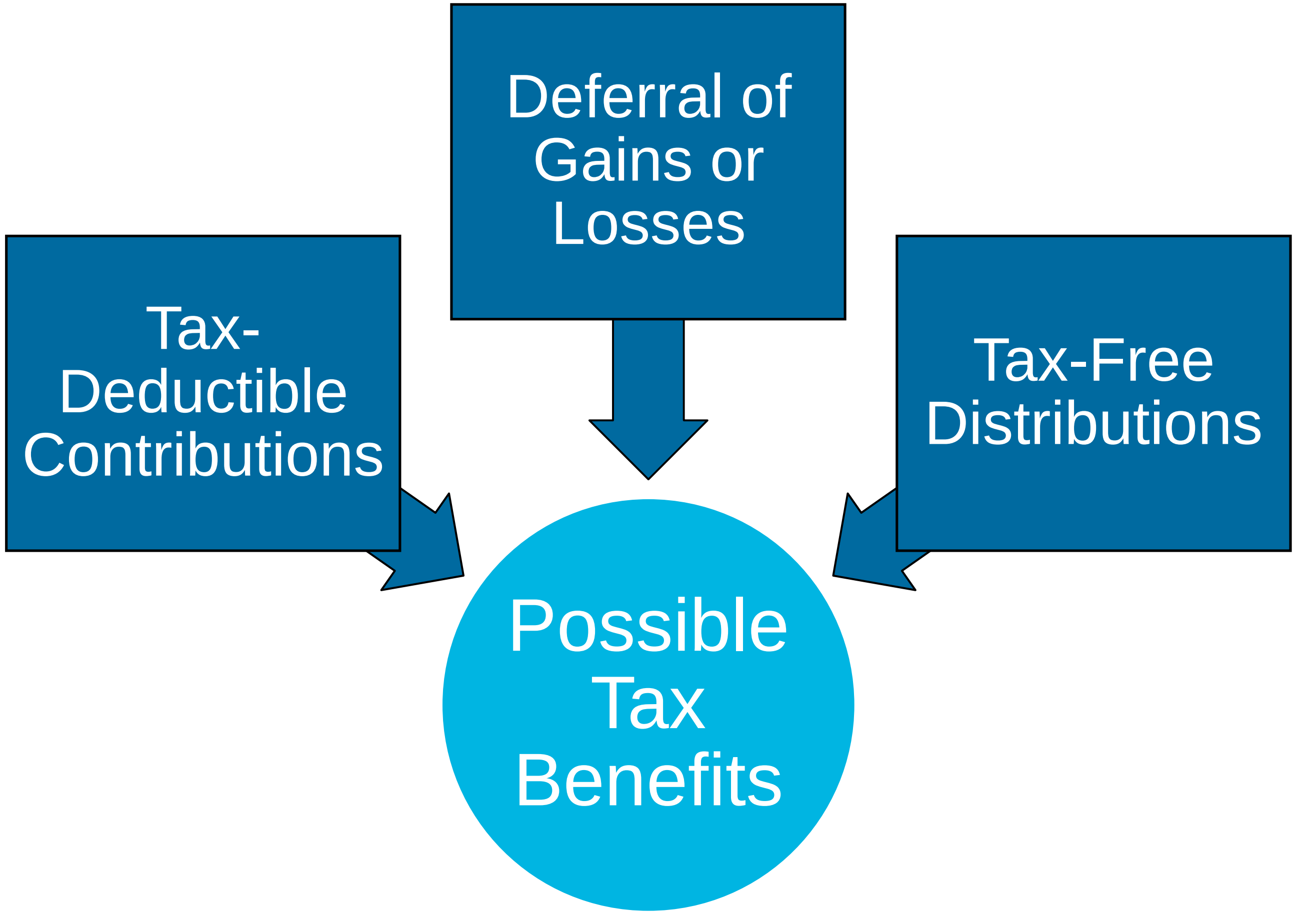
Institutional investors that do not manage investments in-house use fee-based investment professionals.

Retail investors often use **wrap accounts** in which the charges for investment services, such as brokerage, investment advice, financial planning, and investment accounting, are all wrapped into a single flat fee.

Investment managers can hold their institutional clients’ investments in **separate accounts** or in **commingled accounts**.

LOS g: Describe managed accounts.

TAX-ADVANTAGED ACCOUNTS



LOS h: Describe tax-advantaged accounts and describe the use of taxable accounts to manage tax liabilities.

MANAGING TAX LIABILITIES

Capital Gains:
• Usually deferred until realised and often at a lower rate
• Often can be offset by capital losses
Whether investors should **defer taxable income** depends on
• the tax regime,
• their expectations of future tax rates (including estate tax rates, which are imposed on the transfer of properties from the deceased to his or her heirs), and
• the probability that they will need money that they cannot access if placed in a tax-advantaged account.

LOS h: Describe tax-advantaged accounts and describe the use of taxable accounts to manage tax liabilities.