Financial Risk Management

Asset Allocation

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Asset Classes

- Asset Classes
  - Fixed Income
  - Equity
  - Derivatives
  - Alternative Investments

Stock Market Indices

- Dow Jones Industrial Average
  - 30 large blue-chip corporations
  - Computed since 1896
  - About 1/5 of total market cap
- S&P 500
  - 500 "larger" capitalization firms
  - The S&P 1500 combines the S&P 500, the S&P MidCap 400, and the S&P SmallCap 600 to cover approximately 90% of the U.S. market capitalization.

Company Name	Ticker	Exchange
The 3M Company	MMM	NYSE
The American Express Company	AXP	NYSE
Apple Inc.	AAPL	NASDAQ
The Boeing Company	BA	NYSE
Caterpillar Inc.	CAT	NYSE
Chevron Corporation	CVX	NYSE
Cisco Systems, Inc.	CSCO	NASDAQ
The Coca-Cola Company	KO	NYSE
The Walt Disney Company	DIS	NYSE
E. I. du Pont de Nemours and Company	DD	NYSE
Exxon Mobil Corporation	XOM	NYSE
General Electric Company	GE	NYSE
The Goldman Sachs Group, Inc.	GS	NYSE
The Home Depot, Inc.	HD	NYSE
IBM Corporation	IBM	NYSE
Intel Corporation	INTC	NASDAQ
Johnson & Johnson	JNJ	NYSE
JPMorgan Chase & Co.	JPM	NYSE
McDonald's Corporation	MCD	NYSE
Merck & Co., Inc.	MRK	NYSE
Microsoft Corporation	MSFT	NASDAQ
Nike, Inc.	NKE	NYSE
Pfizer Inc.	PFE	NYSE
Procter & Gamble Co.	PG	NYSE
Travelers Companies Inc	TRV	NYSE
United Technologies Corporation	UTX	NYSE
UnitedHealth Group Inc.	UNH	NYSE
Verizon Communications, Inc.	VZ	NYSE
Visa Inc.	V	NYSE
Wal-Mart Stores, Inc.	WMT	NYSE

Other Indices

U.S. Indexes

- NYSE Composite
- NASDAQ Composite
- Russell 3000
- Wilshire 5000
- The CNBC IQ 100 (an index tracking big-cap companies that get most of their revenue from their intellectual property)

Foreign Indexes

- Nikkei (Japan)
- FTSE (U.K.; pronounced "footsie")
- DAX (Germany),
- Hang Seng (Hong Kong)
- TSX (Canada)

MSCI Index

MSCI ACWI INDEX					
MSCI WORLD INDEX			MSCI EMERGING MARKETS INDEX		
DEVELOPED MARKETS			EMERGING MARKETS		
Americas	Europe & Middle East	Pacific	Americas	Europe, Middle East & Africa	Asia
Canada	Austria	Australia	Brazil	Czech Republic	China
United States	Belgium	Hong Kong	Chile	Egypt	India
	Denmark	Japan	Colombia	Greece	Indonesia
	Finland	New Zealand	Mexico	Hungary	Korea
	France	Singapore	Peru	Poland	Malaysia
	Germany			Qatar	Pakistan
	Ireland			Russia	Philippines
	Israel			South Africa	Taiwan
	Italy			Turkey	Thailand
	Netherlands			United Arab Emirates	
	Norway				
	Portugal				
	Spain				
	Sweden				
	Switzerland				
	United Kingdom				

https://www.msci.com/acwi

G-7 (1975), G-8 (1997), G-20 (1999)

Argentina

Australia

Brazil

Canada

China

France

Germany

India

Indonesia

Italy

Japan

Mexico

Russia

Saudi Arabia

South Africa

South Korea

Turkey

United Kingdom

United States

European Union

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The Nicknames

MIKT (MIST)

Mexico, Indonesia, South Korea, and Turkey

11 Next

Bangladesh, Egypt, Indonesia, Iran, Mexico, Nigeria, Pakistan, the Philippines, Turkey, South Korea, and Vietnam

Stock Market Indexes

- Investors can base their portfolios on an index
  - Buy exchange-traded funds (ETFs)
  - Buy an index mutual fund
  - Buy Sector SPDRs

Sector Reports

- Basic Materials
- Communication Services
- Consumer Defensive
- Consumer Cyclical
- Energy
- Financial Services
- Healthcare
- Industrials
- Real Estate
- Technology
- Utilities

SELECT SECTOR SPDR ETFS

XLY Consumer Discretionary	XLP Consumer Staples
XLE Energy	XLF Financials
XLV Health Care	XLI Industrials
XLB Materials	XLRE Real Estate
XLK Technology	XLU Utilities

The 10 Sectors of the Stock Market

- The stock market is often divided into 10 major sectors representing key areas of the economy. Within each sector, there are a number of different publicly traded companies that share the same broad focus.

http://www.sectorspdr.com/sectorspdr/
http://www.sectorspdr.com/sectorspdr/tools/sector-tracker
https://eresearch.fidelity.com/eresearch/markets_sectors/sectors/sectors_in_market.jhtml

1. Financials

- The financial sector consists of banks, investment funds, insurance companies and real estate firms, among others. In general, the majority of the revenue generated by the sector comes from mortgages and loans that gain value as interest rates rise.
- The most popular financial ETFs include:

-Financial Select Sector SPDR Fund (XLF A)

-Vanguard Financials ETF (VFH A+)

-SPDR S&P Bank ETF (KBE A)

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Financials Sector of the S&P 500

- The financial sector consists of banks, insurance companies, real estate investment trusts, credit card issuers, and a host of other money-centric enterprises that keep the debits and credits of the economy flowing. At present, the financial sector contains eight industries.

1. Banking Industry
2. Capital Markets Industry
3. Consumer Finance Industry
4. Diversified Financial Services Industry
5. Insurance Industry
6. Real Estate Investment Trusts (REITs) Industry
7. Real Estate Management & Development Industry
8. Thrifts & Mortgage Finance Industry

2. Utilities

- The utilities sector consists of electric, gas and water companies as well as integrated providers. In general, the sector generates consistent recurring income by charging consumers and businesses that provide higher-than-average dividend yields.
- The most popular utilities ETFs include:

-Utilities Select Sector SPDR (XLU A)

-Vanguard Utilities ETF (VPU A+)

-iShares Global Infrastructure ETF (IGF A-)

Utilities Sector of the S&P 500

- The utilities sector of the economy is home to the firms that make our lights work when we flip the switch, let our stoves erupt in flame when we want to cook food, make water come out of the tap when we are thirsty, and more. At present, the utilities sector is made up of five industries.

1. Electric Utilities Industry
2. Gas Utilities Industry
3. Independent Power and Renewable Electricity Producers Industry
4. Multi-Utilities Industry
5. Water Utilities Industry

3. Consumer Discretionary

- The consumer discretionary sector consists of retailers, media companies, consumer service providers, apparel companies and consumer durables. In general, these companies benefit from an improving economy when consumer spending accelerates.
- The most popular consumer discretionary ETFs include:

-Consumer Discretionary Select Sector SPDR (XLY A)

-Consumer Discretionary AlphaDEX Fund (FDX)

-Vanguard Consumer Discretion ETF (VCR A+)

Consumer Discretionary Sector of the S&P 500

- The consumer discretionary sector consists of businesses that have demand which rises and falls based on general economic conditions such as washers and dryers, sporting goods, new cars, and diamond engagement rings. At present, the consumer discretionary sector contains twelve industries. Examples of consumer discretionary stocks include Apple, Disney, and Starbucks.

1. Automobile Components Industry
2. Automobiles Industry
3. Distributors Industry
4. Diversified Consumer Services Industry
5. Hotels, Restaurants & Leisure Industry
6. Household Durables Industry
7. Internet & Catalog Retail Industry
8. Leisure Products Industry
9. Media Industry
10. Multiline Retail Industry
11. Specialty Retail Industry
12. Textile, Apparel & Luxury Goods Industry

4. Consumer Staples

- The consumer staples sector consists of food and beverage companies as well as companies that create products consumers are unwilling to cut from their budgets. In general, these companies are defensive plays capable of withstanding an economic downturn.
- The most popular consumer staples ETFs include:

-Consumer Staples Select Sector SPDR (XLP A)

-Consumer Staples AlphaDEX Fund (FXG B+)

-Vanguard Consumer Staples ETF (VDC A+)

Consumer Staples Sector of the S&P 500

- The consumer staples sector consists of businesses that sell the necessities of life, ranging from bleach and laundry detergent to toothpaste and packaged food. At present, the consumer staples sector contains six industries and includes companies such as Procter & Gamble, Kroger, and Anheuser Busch InBev.

1. Beverages Industry
2. Food & Staples Retailing Industry
3. Food Products Industry
4. Household Products Industry
5. Personal Products Industry
6. Tobacco Industry

5. Energy

- The energy sector consists of oil and gas exploration and production companies, as well as integrated power firms, refineries and other operations. In general, these companies generate revenue that's tied to the price of crude oil, natural gas and other commodities.
- The most popular energy ETFs include:

-Energy Select Sector SPDR (XLE A)

-Alerian MLP ETF (AMLP A)

-Vanguard Energy ETF (VDE A)

Energy Sector of the S&P 500

- The energy sector consists of businesses that source, drill, extract, and refine the raw commodities we need to keep the country going, such as oil and gas. At present, the energy sector contains two industries.

1. Energy Equipment & Services Industry
2. Oil, Gas & Consumable Fuels Industry

6. Health Care

- The health care sector consists of biotechnology companies, hospital management firms, medical device manufacturers and many others. In general, the sector is considered to be both a growth opportunity and defensive play since people will always require medical aid.
- The most popular health care ETFs include:

-Health Care Select Sector SPDR (XLV A)

-Nasdaq Biotechnology ETF (IBB B+)

-Vanguard Health Care ETF (VHT A+)

Health Care Sector of the S&P 500

- The health care sector consists of drug companies, medical supply companies, and other scientific-based operations that are concerned with improving and healing human life. At present, the health care sector contains six industries.

1. Biotechnology Industry
2. Health Care Equipment & Supplies Industry
3. Health Care Providers & Services Industry
4. Health Care Technology Industry
5. Life Sciences Tools & Services Industry
6. Pharmaceuticals Industry

7. Industrials

- The industrial sector consists of aerospace, defense, machinery, construction, fabrication and manufacturing companies. In general, the industry's growth is driven by demand for building construction and manufactured products like agricultural equipment.
- The most popular industrial ETFs include:

-Industrial Select Sector SPDR (XLI A)

-Vanguard Industrials ETF (VIS A+)

-iShares Transportation Average ETF (IYT A)

Industrials Sector of the S&P 500

- From railroads and airlines to military weapons and industrial conglomerates, the industrial sector makes it possible for modern civilization to exist. At present, the industrial sector contains fourteen industries.

1. Aerospace & Defense Industry
2. Air Freight & Logistics Industry
3. Airlines Industry
4. Building Products Industry
5. Commercial Services & Supplies Industry
6. Construction & Engineering Industry
7. Electrical Equipment Industry
8. Industrial Conglomerates Industry
9. Machinery Industry
10. Marine Industry
11. Professional Services Industry
12. Road & Rail Industry
13. Trading Companies & Distributors Industry
14. Transportation Infrastructure Industry

8. Technology

- The technology sector consists of electronics manufacturers, software developers and information technology firms. In general, these businesses are driven by upgrade cycles and the general health of the economy, although growth has been robust over the years.
- The most popular technology ETFs include:

-Technology Select Sector SPDR (XLK A)

-Vanguard Information Tech ETF (VGT A+)

-DJ Internet Index Fund (FDN B+)

Information Technology Sector of the S&P 500

- The Information Technology, or IT, sector is home to the hardware, software, computer equipment, and IT services operations that make it possible for you to be reading this right now. From microprocessors to printers, operating systems to cell phone handsets, recent advances in technology have turned IT into a giant part of the domestic and global economies. At present, the information technology sector contains eight industries.

1. Communications Equipment Industry
2. Electronic Equipment, Instruments & Components Industry
3. IT Services Industry
4. Internet Software & Services Industry
5. Semiconductors & Semiconductor Equipment Industry
6. Software Industry
7. Technology Hardware, Storage & Peripherals Industry

9. Telecom

- The telecom sector consists of wireless providers, cable companies, internet service providers and satellite companies, among others. In general, these companies generate recurring revenue from consumers, but some subsets of the industry are facing rapid change.
- The most popular telecom ETFs include:

-Vanguard Telecom ETF (VOX A+)

-iShares US Telecommunications ETF (IYZ B+)

-iShares Global Telecom ETF (IXP A-)

Telecommunication Services Sector of the S&P 500

- From telephone access to high-speed internet, the telecommunication services sector of the economy keeps us all connected. At present, the telecommunication services sector is made up of two industries:

1. Diversified Telecommunication Services
2. Wireless Telecommunication Services

10. Materials

- The materials sector consists of mining, refining, chemical, forestry and related companies that are focused on discovering and developing raw materials. Since these companies are at the beginning of the supply chain, they are vulnerable to changes in the business cycle.
- The most popular materials ETFs include:

-Market Vectors TR Gold Miners (GDX B+)

-Materials Select Sector SPDR (XLB A)

-iShares U.S. Home Construction ETF (ITB A-)

Materials Sector of the S&P 500

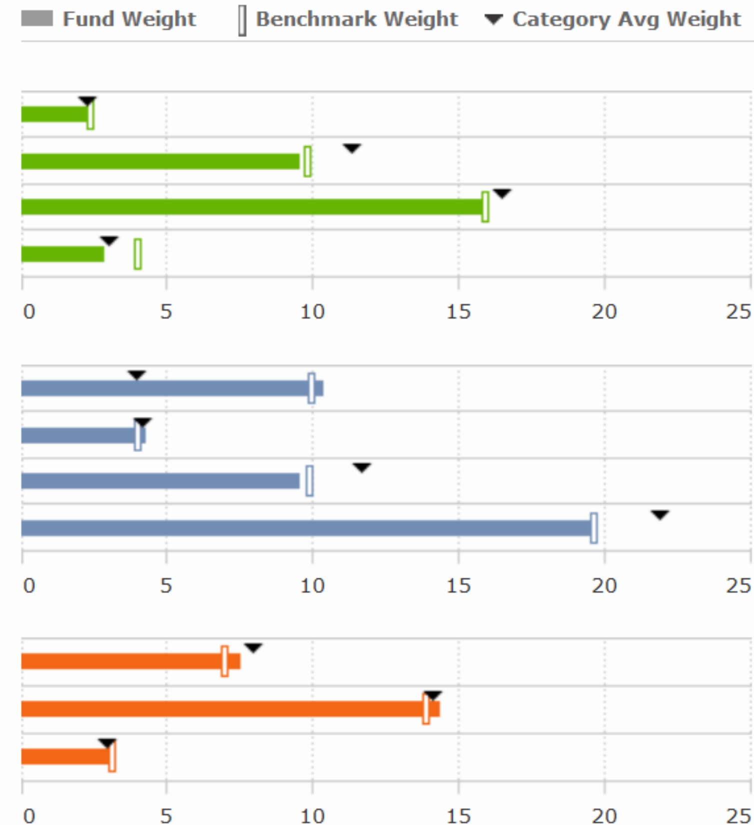
- The building blocks that supply the other sectors with the raw materials it needs to conduct business, the material sector manufacturers, logs, and mines everything from precious metals, paper, and chemicals to shipping containers, wood pulp, and industrial ore. At present, the material sector contains five industries.

1. Chemicals Industry
2. Construction Materials Industry
3. Containers & Packaging Industry
4. Metals & Mining Industry
5. Paper & Forest Products Industry

Sector Weighting

Sector Weightings SPY

	% Stocks	Benchmark	Category Avg
Cyclical			
Basic Materials	2.29	2.41	2.29
Consumer Cyclical	9.59	9.87	11.33
Financial Services	15.94	15.94	16.53
Real Estate	2.91	4.02	3.02
Sensitive			
Communication Services	10.40	10.01	3.94
Energy	4.33	4.00	4.18
Industrials	9.56	9.94	11.72
Technology	19.76	19.70	21.95
Defensive			
Consumer Defensive	7.56	7.03	7.99
Healthcare	14.37	13.95	14.11
Utilities	3.31	3.13	2.93



As of 12/30/2019

Sector data is calculated only using the long position holdings of the portfolio.

http://portfolios.morningstar.com/fund/summary?t=spy®ion=USA&culture=en-US

Defensive Sectors

- Defensive sectors earned the name because they tend to do better than certain other sectors when the economy is slowing. The name can refer to the consumer staples, energy, health care, telecommunications and utilities sectors—all areas of the economy where spending tends to hold up even when things aren't going well because they deal in necessities, like food and medicine, that consumers can't do without.

Cyclical Sectors

- You can contrast the defensive sectors with the more cyclical sectors such as consumer discretionary, financials, industrials and information technology.
- These sectors tend to do well when the economy is growing because consumers and businesses may be able to spend more on a new car, travel or productivity-enhancing investments.

Diversification

- The gyrations in the stock market often serves as a reminder that the stock market and the economy aren't the same thing. But they are obviously linked.
- It's important for investors to have some exposure to all sectors as part of an appropriately diversified portfolio.
- That includes an allocation to defensive sectors—even when the economy is still growing, and cyclical sectors when the economy is declining.

Keep It Simple: The Million-Dollar Bet

- At end of 2007, Buffett made a $1 million bet with Protege Partners that an S&P 500 index fund would outperform a group of five fund-of-hedge funds. Buffett handily won the bet with the index fund gaining 8.5% a year and the hedge funds returning between 0.3% and 6.5% annually.
- It's a good reminder that there "is simply no telling how far stocks can fall in a short period" and that "the light can at any time go from green to red without pausing at yellow."
- Buffett also says this is a strong argument against leverage, writing, "even if your borrowings are small and your positions aren't immediately threatened by the plunging market, your mind may well become rattled by scary headlines and breathless commentary. And an unsettled mind will not make good decisions."

Keep It Simple

- Buffett has written and spoken about the bet extensively but he shared three more takeaways in 2018 year's letter.
- The first is to always keep an eye on costs. Even as the hedge funds posted middling returns, the managers earned "staggering sums" from their fixed fees. Buffett reminds us that, "Performance comes, performance goes. Fees never falter.“
- The second was that the market can sometimes present unusual opportunities, and that you don't have to be a genius or have an insider knowledge of Wall Street to seize them. He writes that, "What investors then need instead is an ability to both disregard mob fears or enthusiasms and to focus on a few simple fundamentals. A willingness to look unimaginative for a sustained period--or even to look foolish--is also essential.“"In any upcoming day, week or even year, stocks will be riskier--far riskier--than short-term U.S. bonds," but that over a long-term horizon, common stock investments are the safer choice. He says that "often, high-grade bonds in an investment portfolio *increase* its risk."
- The final lesson is that investors should "stick with big, 'easy' decisions and eschew activity." Buffett contrasts his "kindergarten-like" analysis to the amount research and trading that the hedge fund managers did. Doing more doesn't mean getting more.

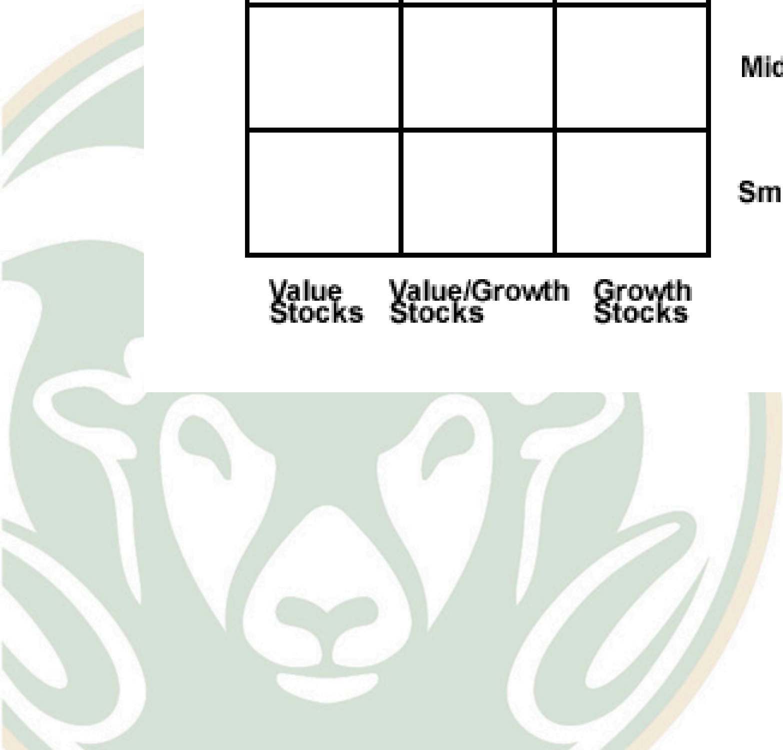
Mutual Fund

- Mutual funds are professionally managed portfolios that pool money from multiple investors to buy shares of stocks, bonds, or other securities. The minimum initial investment for most mutual funds ranges from $1,000 to $10,000 but there are no investment minimums for additional purchases.
- When you buy or redeem a mutual fund, you are transacting directly with the fund, whereas with ETFs and stocks, you are trading on the secondary market.

Mutual Fund Type

- Open-end mutual fund shares are bought and sold on demand at their net asset value, or NAV, which is based on the value of the fund's underlying securities and is generally calculated at the close of every trading day. Investors buy shares directly from a fund.
  - Unlike stocks and ETFs, mutual funds trade only once per day, after the markets close at 4 p.m. ET. If you enter a trade to buy or sell shares of a mutual fund, your trade will be executed at the next available net asset value, which is calculated after the market closes and typically posted by 6 p.m. ET. This price may be higher or lower than the previous day's closing NAV.
- Closed-end funds have a fixed number of shares and are traded among investors on an exchange. Like stocks, their share prices are determined according to supply and demand, and they often trade at a wide discount or premium to their net asset value.
- Unit Investment Trusts (UITs) —which make a one- time public offering of only a specific, fixed number of redeemable securities called units and which will terminate and dissolve on a date that is specified at the time the UIT is created.

Style Box



Style Box for Stock Mutual Funds

			Large Cap
			Mid Cap
			Small Cap
Value Stocks	Value/Growth Stocks	Growth Stocks	

Style Box for Bond Mutual Funds

			High-Credit Quality (AAA-AA)
			Mid-Credit Quality (A-BBB)
			Low-Credit Quality
Short Term	Intermediate Term	Long Term	

Style Box

- Morningstar's Don Phillips invented the so-called "style box," which is now widely used as a reference tool for determining the investment objective, or style, followed by a fund's investment managers. The details of these broad category investing strategies were covered in the previous section.
- In summary, an equity style box is divided up into nine, equal-sized boxes in tic-tac-toe fashion. In the nine categories used to classify a fund's investment style, this graphic presentation shows where a stock fund's risk-return characteristics place it compared to other funds. The vertical axis classifies risk by three company sizes and the horizontal axis has three investment strategies.
- In similar fashion, a bond style box reflects a bond mutual fund's risk-return characteristics by using credit quality (vertical axis) and maturity periods (horizontal axis) to indicate a bond fund's investment style.

Mutual Fund Type

- **Money market funds.** These are high-quality, short-term (less than one year) investments in securities issued by the government (who issue US Treasury securities like CDs), or corporations (who issue commercial papers). They have the lowest returns because they have the lowest risk.
- **Bond funds.** Otherwise known as fixed income funds. As the name implies, these funds invest and trade different kinds of bonds (investments in the form of debt a company owes to an investor with a fixed interest rate). They typically have higher returns than money market funds but come with more risks since all bond funds are affected by interest rate risks (if rates go up, bond fund value drops).
- **Equity funds.** Also known as "stock funds" because they invest in…well, stocks of many different companies. They come in three different ways: Large-cap (big blue-chip companies like Apple or Google), mid-cap (companies that aren't behemoths but aren't start-ups either), and small-cap (smaller companies).
- **Balanced/Hybrid funds.** These are a mix of stocks, bonds, and other investments. Many of these funds can even invest in other mutual funds. That's right. It's mutual funds in mutual funds.

Mutual Fund Type

- **Target Date Funds**. Also called target date retirement funds or lifecycle funds, these funds also invest in stocks, bonds, and other investments. Target date funds are designed to be long-term investments for individuals with particular retirement dates in mind.
- **Alternative Funds.** Alternative funds are funds that invest in alternative investments such as non-traditional asset classes (e.g., global real estate or currencies) and illiquid assets (e.g., private debt) and/or employ non-traditional trading strategies (e.g., selling short).
- **Smart-Beta Funds.** These funds are index funds (discussed below) with a twist. They compose their index by ranking stock using preset factors relating to risk and return, such as growth or value, and not simply by market capitalization as most traditional index funds do.

Mutual Fund

- **Target Date Funds.** Also called target date retirement funds or lifecycle funds, these funds also invest in stocks, bonds, and other investments. Target date funds are designed to be long-term investments for individuals with particular retirement dates in mind.
- The name of the fund often refers to its target retirement date or target date. For example, there are funds with names such as “Portfolio 2050,” “Retirement Fund 2050,” or “Target 2050” that are designed for individuals who intend to retire in or near the year 2050. Most target date funds are designed so that the fund’s allocation of investments will automatically change over time in a way that is intended to become more conservative as the target date approaches.
- That means that funds typically shift over time from a mix with a lot of stock investments in the beginning to a mix weighted more toward bonds.

Mutual Fund

- **Alternative Funds**. Alternative funds are funds that invest in alternative investments such as non-traditional asset classes (e.g., global real estate or currencies) and illiquid assets (e.g., private debt) and/or employ non-traditional trading strategies (e.g., selling short).
- They are sometimes called "hedge funds for the masses" because they are a way to get hedge fund-like exposure in a registered fund. These funds generally seek to produce positive returns that are not closely correlated to traditional investments or benchmarks.

Mutual Fund

- **Smart-Beta Funds.** These funds are index funds (discussed below) with a twist. They compose their index by ranking stock using preset factors relating to risk and return, such as growth or value, and not simply by market capitalization as most traditional index funds do.
- They aim to achieve better returns than traditional index funds, but at a lower cost than active funds. These funds can be more complicated and have higher expenses than traditional index funds, and the factors are sometimes based on hypothetical, backward-looking returns. In addition, these types of funds generally have limited performance histories, and it is unclear how they will perform in periods of market stress.

Vanguard Factor ETFs

Fund Name	Ticker	Fee (%)
Vanguard US Value Factor ETF	VFVA	0.13
Vanguard US Momentum Factor ETF	VFMO	0.13
Vanguard US Quality Factor ETF	VFQY	0.13
Vanguard US Liquidity Factor ETF	VFLQ	0.13
Vanguard US Multifactor ETF	VFMF	0.18
Vanguard US Minimum Volatility ETF	VFMV	0.13

Source: Morningstar.

Active Mutual Fund

- Mutual funds are typically managed by a fund manager who picks all the investments in the portfolio. This is often a big selling point for beginner investors who don't have much experience and would rather place their faith in an "expert" in the mutual fund world. Because these fund managers actively manage your money, you'll sometimes hear mutual funds referred to as "actively managed funds."
- For actively managed mutual funds, the fund manager is basically in charge of what stocks, bonds or other assets the fund will buy with investors' money. Essentially, the fund manager will function as a stock-picker. Focusing on price-to-earnings ratios, price momentum, sales, earnings, dividends and other various metrics, the fund manager will build a portfolio of assets to accomplish the aims of the mutual fund. Those aims (growth, value, income etc.) are spelled out within the mutual fund's prospectus.

Index funds

- **Index funds.** These are a special type of mutual fund that, instead of being actively managed by an “expert,” is tracked using software that matches the stocks in the market.
- In a full-replication index, a fund manager’s job is buy all the stocks within that respective index. A full-replication S&P 500 index fund will own all 500 stocks in the index. The fund manager’s job is to manage inflows and outflows of the fund and buy/sell stocks accordingly to continue matching the index.
- However, not all index funds use a full-replication strategy. Some will only buy most—but not necessarily all—of the stocks within the benchmark index. The idea is that the fund will attempt to closely match the overall investment attributes of the index. The fund manager’s job here is to buy/sell stocks within the index to closely match the sector weightings and provide a large spread of firms to cover the underlying index. This sort of indexing strategy is most likely found in international and emerging market funds, where buying all the stocks within an index could prove difficult.

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Picking Fund

- Morningstar and Kiplinger are two notable resources that carry a wide range of up-to-date information, pricing, and research. The Mutual Fund Education Alliance (MFEA) is the not-for-profit trade association of the no-load mutual fund industry, which has an easy to use tool for searching for no-load funds. In addition to these comprehensive sources, there are some niche sites to help find the right funds for you.
- LipperLeaders is a Thomson Reuters company that evaluate funds based on five metrics, called "Leaders:" total historical return; consistency of returns; preservation of capital; expenses; and tax efficiency.
- MAXFunds has a trademarked "Fund-O-Matic Fund Screener" which makes finding funds easy for people "without an advanced finance degree."
- FundReveal use past returns but just not total returns; they use "average daily returns" to help determine the fund management's capability or skill. This may help an investor dig deeper to help predict future returns that can be impacted by the daily decisions made by fund managers.
- Many brokerages also offer mutual fund guides and research to their clients.

Watch Out for High Yield

- Whether you are doing it on a stock, bond, or fund basis, the highest-yielding securities in a peer group are usually the highest risk. The market is awfully efficient at finding values in yield, so if something has a big yield, watch out.
- For mutual funds, we worry when we see a fund with a yield that's, say, 200 basis points or more above peers and benchmark. Of course, it varies from category to category, but big yields are a big red flag. The best way to view yield when you are looking for warning signs is to add the expense ratio back to the yield so that you have the portfolio yield. Expenses are subtracted from portfolio income before anything is paid out, so they detract from yield by their full amount. Thus, high-cost funds with big yields are often taking on even more risk than their yield might suggest, while low-cost funds might be taking less risk.
- What makes the big-yielding funds particularly tricky is that they can have years of fairly steady returns that mask their underlying risks.

Ways To Boost A Fund's Yield

- There are a few ways to boost a fund's yield. Most of them are legitimate tactics when used wisely by skilled managers, but others are way too much risk for the average investor. A big yield is a sign that it has crossed the line.
- **Leverage**
  On its face, this is straightforward. Funds can borrow up to 30% of assets, and of course that boosts yield (and fee income) by 30%, too. Closed-end funds are much more likely to use leverage, because they can issue preferred shares to fund their borrowing. But even open-end funds can go beyond that limit because some financial instruments have built-in leverage.
- Leverage can also be a warning sign about liquidity problems, as funds under the gun sometimes borrow in order to meet redemptions. Occasional use in bank-loan funds isn't such a bad idea because bank loans are slow to settle, but it is still a sign that things are being run without much slack. More-conservative bank-loan funds make sure to hold enough in cash and cashlike instruments so that they don't have to borrow.

Ways To Boost A Fund's Yield

- **Liquidity**
  Mutual funds require daily liquidity: Investors can buy or sell any day that markets are open and are entitled to a fair price reflecting the portfolio's value at end of day.
- That's a piece of cake for large-cap equities and Treasuries, which trade in such volumes that it's quite easy for a fund to buy or sell all it needs in a day or two. But some bonds rarely trade because they are fairly small issues and may not have much published research on them. When credit markets turn stormy, these bonds can be hard to sell without taking sharp losses.

Ways To Boost A Fund's Yield

- **Return of Capital**
This is an old-school way to boost income. You take an investor's money, and you give it back to them so that they think it is yield when it isn't.
- A checking account would be better because you wouldn't be paying someone 90 basis points to do it. For the most part, this practice has gone away, but it still pops up, mainly in closed-end funds and Gabelli funds. While this practice doesn't increase the risk of a loss, it does erode principal so that, in dollar terms, your income will not keep pace with that of a fund actually generating an equal yield.

Ways To Boost A Fund's Yield

- **Interest-Rate Risk**
  This one is pretty simple. A fund buys longer-dated bonds, and it can get a little more yield.
- Duration provides a good measure of a fund's interest-rate risk. I would caution, though, that interest rates have declined for so long that it's easy to miss the fact that a fund is packing a lot of interest-rate risk.

Ways To Boost A Fund's Yield

- **Issue Risk**
  Most bond funds are very diversified by issuer because most bond-fund investors want steady performance as well as daily liquidity.
- When funds do allow big weightings of 4% or more, especially in bonds with more credit risk, their returns can be lumpier and an individual default can result in considerable pain.
- You can check a fund's issue risk level by looking at the largest bond positions and the total number of holdings. It's not a perfect system, though, because a fund will often own more than one bond from some issuers.

Ways To Boost A Fund's Yield

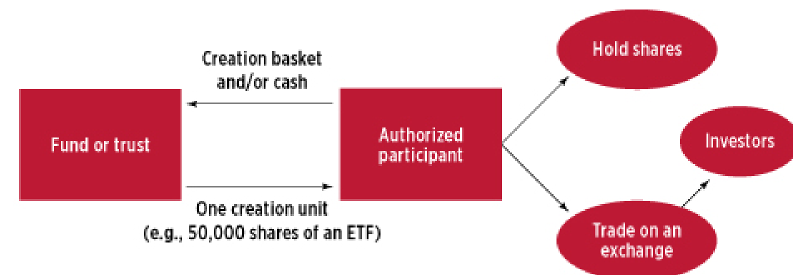
- **Credit Risk**
  This is by far the most common way to boost yield, but it isn't as easy to spot as interest-rate risk.
- Big doses of credit risk, which also often come hand in hand with less liquidity, can actually mute volatility, and there isn't one simple measure like duration that captures how much credit risk a fund is taking.
- However, yield is a pretty clear indicator here. The median high-yield fund has a 30-day (SEC) yield of 4.5%, but some funds have yields well north of 6%.

ETF

- Exchange-traded funds (ETFs) and stocks may be more suitable for investors who plan to trade more actively, rather than buying and holding for the long term. ETFs are structured like mutual funds, in that they hold a basket of individual securities. Like index funds, passively managed ETFs seek to track the performance of a benchmark index, while actively managed ETFs seek to outperform a benchmark index.
- There are no restrictions on how often you can buy and sell ETFs. You can trade any number of shares, there is no investment minimum, and you can execute trades throughout the day, rather than waiting for the NAV to be calculated at the end of the trading day.
- Unlike mutual funds, prices for ETFs and stocks fluctuate continuously throughout the day. These prices are displayed as the bid (the price someone is willing to pay for your shares) and the ask (the price at which someone is willing to sell you shares). So while ETFs and stocks have bid-ask spreads, mutual funds do not. It's also important to note that ETFs may trade at a premium or discount to the net asset value of the underlying assets.

How an ETF is Created

- An ETF has many advantages over a mutual fund, including costs and taxes.
- The creation and redemption process for ETF shares is almost the exact opposite of that for mutual fund shares. When investing in mutual funds, investors send cash to the fund company, which then uses that cash to purchase securities and, in turn, issues additional shares of the fund. When investors wish to redeem their mutual fund shares, they are returned to the mutual fund company in exchange for cash.
- Creating an ETF, however, does not involve cash. The process begins when a prospective ETF manager (known as a sponsor) files a plan with the U.S. Securities and Exchange Commission to create an ETF. Once the plan is approved, the sponsor forms an agreement with an authorized participant, generally a market maker, specialist or large institutional investor, who is empowered to create or redeem ETF shares. (In some cases, the authorized participant and the sponsor are the same.)



ETF creation and redemption

- The authorized participant borrows stock shares, often from a pension fund, places those shares in a trust and uses them to form ETF creation units.
- These are bundles of stock varying from 10,000 to 600,000 shares, but 50,000 shares is what's commonly designated as one creation unit of a given ETF. Then, the trust provides shares of the ETF, which are legal claims on the shares held in the trust (the ETFs represent tiny slivers of the creation units), to the authorized participant. Because this transaction is an in-kind trade — that is, securities are traded for securities—there are no tax implications. Once the authorized participant receives the ETF shares, they are sold to the public on the open market just like stock shares.
- When ETF shares are bought and sold on the open market, the underlying securities that were borrowed to form the creation units remain in the trust account. The trust generally has little activity beyond paying dividends from the stock, held in the trust, to the ETF owners, and providing administrative oversight. This is because the creation units are not impacted by the transactions that take place on the market when ETF shares are bought and sold.

Redeeming an ETF

- When investors want to sell their ETF holdings, they can do so by one of two methods. The first is to sell the shares on the open market. This is generally the option chosen by most individual investors. The second option is to gather enough shares of the ETF to form a creation unit, and then exchange the creation unit for the underlying securities. This option is generally only available to institutional investors due to the large number of shares required to form a creation unit. When these investors redeem their shares, the creation unit is destroyed and the securities are turned over to the redeemer. The beauty of this option is in its tax implications for the portfolio.
- We can see these tax implications best by comparing the ETF redemption to that of a mutual fund redemption. When mutual fund investors redeem shares from a fund, all shareholders in the fund are affected by the tax burden. This is because to redeem the shares, the mutual fund may have to sell the securities it holds, realizing the capital gain, which is subject to tax. Also, all mutual funds are required to pay out all dividends and capital gains on a yearly basis. Therefore, even if the portfolio has lost value that is unrealized, there is still a tax liability on the capital gains that had to be realized because of the requirement to pay out dividends and capital gains.

Redeeming an ETF

- ETFs minimize this scenario by paying large redemptions with stock shares. When such redemptions are made, the shares with the lowest cost basis in the trust are given to the redeemer. This increases the cost basis of the ETF's overall holdings, minimizing its capital gains. It doesn't matter to the redeemer that the shares it receives have the lowest cost basis, because the redeemer's tax liability is based on the purchase price it paid for the ETF shares, not the fund's cost basis. When the redeemer sells the stock shares on the open market, any gain or loss incurred has no impact on the ETF. In this manner, investors with smaller portfolios are protected from the tax implications of trades made by investors with large portfolios.

ETF vs Mutual Fund

- In a sense, ETF are similar to mutual funds. However, ETFs offer benefits that mutual funds don't.
- With ETFs, investors can enjoy the benefits associated with this unique and attractive investment product without being aware of the complicated series of events that make it work.
- But, of course, knowing how those events work makes you a more educated investor, which is the key to being a better investor.

ETF vs Mutual Fund

- When investors pour new money into mutual funds, the fund company must take that money and go into the market to buy securities. Along the way, they pay trading spreads and commissions, which ultimately harm returns of the fund. The same thing happens when investors remove money from the fund.
- The AP pays all the trading costs and fees, and even pays an additional fee to the ETF provider to cover the paperwork involved in processing all the creation/redemption activity. The beauty of the system is that the fund is shielded from these costs.
- The system is inherently more fair than the way mutual funds operate. In mutual funds, existing shareholders pay the price when new investors put money to work in a fund, because the fund bears the trading expense. In ETFs, those costs are borne by the AP (and later by the individual investor looking to enter or exit the fund).

Esoteric ETFs

- Esoteric or exotic funds are ETFs that focus on niche investments or narrowly focused strategies. They may be complicated investments and may have higher expenses. In addition, these ETFs are often thinly traded, which means they can be harder to sell and may have larger bid-ask spreads (discussed on page 28-29) than ETFs that aren't as thinly traded

Leveraged, inverse and inverse leveraged ETFs

- Leveraged, inverse, and inverse leveraged ETFs seek to achieve a daily return that is a multiple or inverse multiple of the daily return of a securities index. These ETFs are a subset of index-based ETFs because they track a securities index.
- They seek to achieve their stated objectives on a daily basis. Investors should be aware that the performance of these ETFs over a period longer than one day will probably differ significantly from their stated daily performance objectives. These ETFs often employ techniques such as engaging in short sales and using swaps, futures contracts and other derivatives that can expose the ETF, and by extension the ETF investors, to a host of risks.
- As such, these are specialized products that typically are not suitable for buy-and-hold investors

Exchange-Traded Managed Funds (ETMF)

- An exchange-traded managed fund (ETMF) is a new kind of registered investment company that is a hybrid between traditional mutual funds and exchange-traded funds.
- Like ETFs, ETMFs list and trade on a national exchange, directly issue and redeem shares only in creation units, and primarily use in-kind transfers of the basket of portfolio securities in issuing and redeeming creation units.
- Like mutual funds, ETMFs are bought and sold at prices linked to NAV and disclose their portfolio holdings quarterly with a 60-day delay.
- This structure may allow the product to provide certain cost and tax efficiencies of ETFs while maintaining the confidentiality of the current holdings similar to mutual funds.
- By not having to disclose their holdings on a daily basis as ETFs do, ETMFs may have an advantage in trying to outperform their benchmarks over time because they are less susceptible to front running by other investors who would be able to trade on the holdings' disclosures.

Mutual funds/ETFs/stocks

	Mutual Funds	ETFs	Stocks
Investment Minimum:	$1,000 to $10,000	1 share	1 share
Trades executed:	Once per day, after market close	Throughout the trading day and during extended hours trading	Throughout the trading day and during extended hours trading
Settlement period:	From 1 to 2 business days	2 business days (trade date + 2)	2 business days (trade date + 2)
Short sales allowed?	No	Yes	Yes
Limit and stop orders allowed?	No	Yes	Yes
Trading fees?	Funds may charge sales loads, as well as short-term redemption fees and other transaction fees	Commission charges may apply	Commissions charged on all trades

Exchange-Traded Products (ETPs)

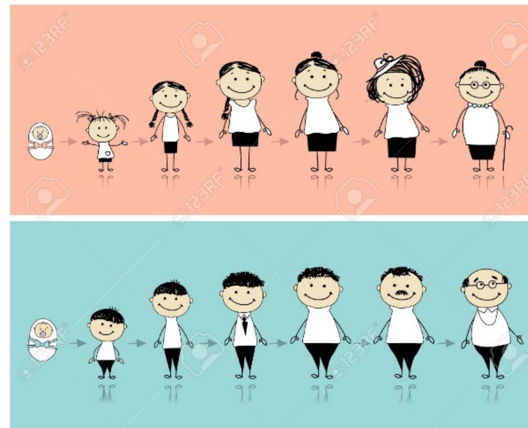
- ETFs are just one type of investment within a broader category of financial products called exchange-traded products (ETPs).
- ETPs constitute a diverse class of financial products that seek to provide investors with exposure to financial instruments, financial benchmarks, or investment strategies across a wide range of asset classes.
- ETP trading occurs on national securities exchanges and other secondary markets, making ETPs widely available to market participants including individual investors.

ETN

- Other types of ETPs include exchange-traded commodity funds and exchange-traded notes (ETNs).
- Exchange-traded commodity funds are structured as trusts or partnerships that physically hold a precious metal or that hold a portfolio of futures or other derivatives contracts on certain commodities or currencies. ETNs are secured debt obligations of financial institutions that trade on a securities exchange.
- ETN payment terms are linked to the performance of a reference index or benchmark, representing the ETN's investment objective. ETNs are complex, involve many risks for interested investors, and can result in the loss of the entire investment.

Fixed Income

- High correlation within class
- Low correlation with other assets improves diversification
- Particularly suitable for managing liabilities that are also affected by inflation with inflation protected bond



Alternative Investments

- Label of convenience for a diverse set of assets including real estate, hedge funds and private equity
- Resources necessary to research such investments not available to all investors
- Correlations between various alternative assets and traditional assets require separate consideration

Alternative Investments

- Real Estate
  - Returns affected by growth in consumption, real interest rates, the term structure of interest rates and unexpected inflation
  - Economic cycles can also affect cost of building materials and construction labor
  - Lower interest rates are net positive for real estate valuations

Alternative Investments

- Currencies
  - Exchange rate reflects balance between supply and demand
  - Imports increase supply of currency, typically reducing relative currency value
  - Capital flows may overwhelm trade impact
  - Differences between local interest rates can make foreign currencies more attractive, though if they reflect a slowing economy this benefit may be outweighed by the risks

Commodities

- Commodities are raw materials that are sold in bulk, such as oil, wheat, silver, gold, pork bellies, oranges and cocoa. They are generally raw materials that are eventually used to produce other goods such as oil for gasoline, cocoa for chocolate, wheat for bread, etc. As such, they give an investor the opportunity to invest in the materials that a country (or corporation) produces as well as those that it consumes.

Types of Commodity Investments

- A commodity-linked security refers to a security whose return is dependent to a certain extent on the price level of a commodity, such as crude oil, gold, or silver, at maturity. For example, the principal of a commodity-linked bond is indexed to movements of a commodity index such as precious metal or oil.
- Commodity derivatives include both exchange-traded and over-the-counter commodity derivatives such as swaps, futures and forwards. They are used to hedge risk and to take advantage of arbitrage opportunities.
- Collateralized Commodity Futures positions involve taking a long position in the futures contract of your choice and then purchasing the amount equal to your futures position in T-bills. The source of return comes from the interest you earn on your T-bill position and the movement of the futures price.

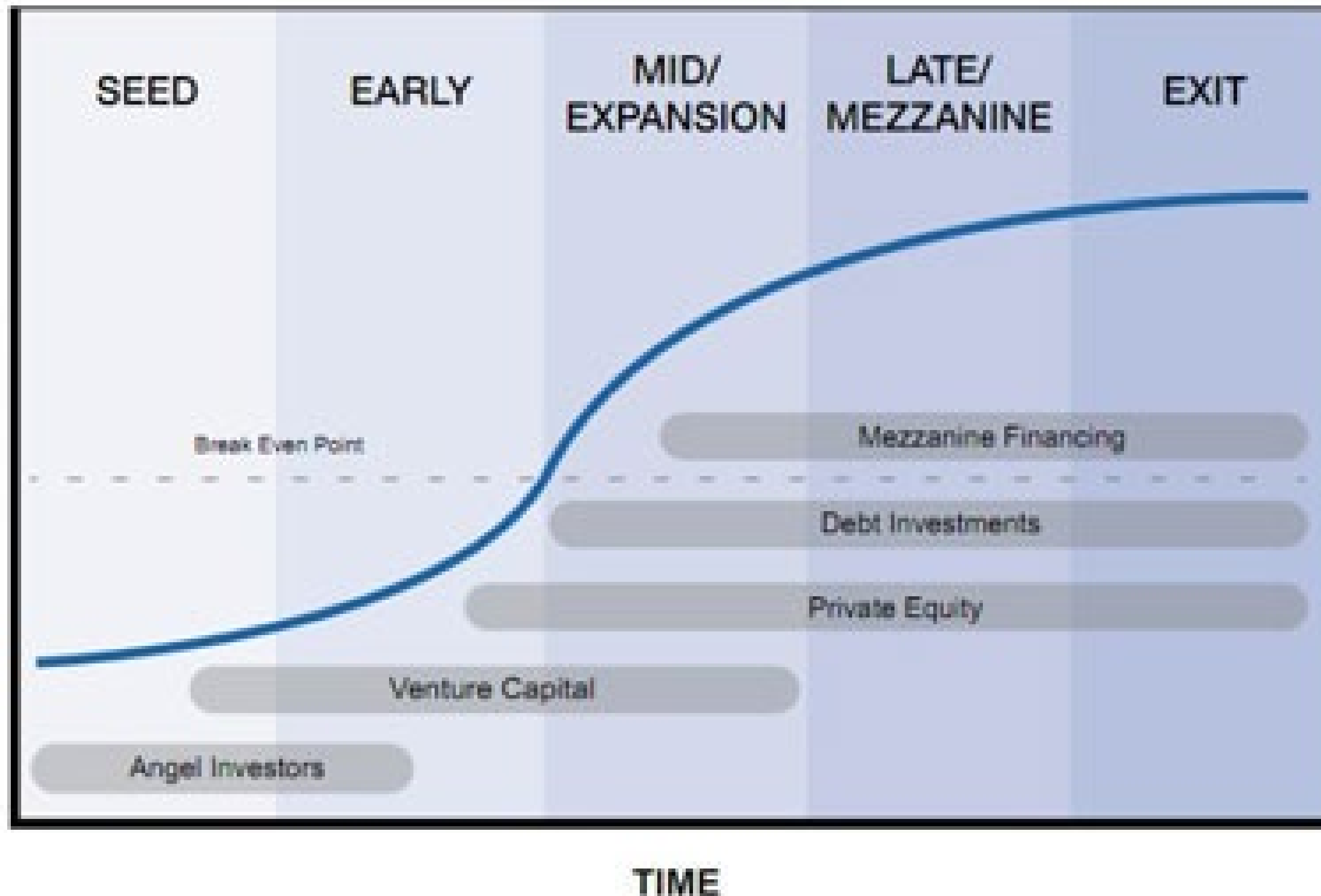
International Assets

- When investing in international assets, investors should consider the following special issues:
  - Currency risk affects both return and volatility and investors must decide whether to hedge
  - Increased correlations in times of stress
  - Emerging markets are less liquid, less transparent and exhibit non-normal return distributions

PE and VC

- Both "private equity firms" and "venture capital firms" raise capital from outside investors, called Limited Partners (LPs) – pension funds, endowments, insurance firms, and high-net-worth individuals.
- Then, both firms invest that capital in private companies or companies that become private and attempt to sell those investments at higher prices in the future.
- Both firms charge their LPs a management fee of 1.5 – 2.0% of assets under management (the fee often scales down in later years) and "carried interest" of ~20% on profits from investments, assuming that the firm achieves a minimum return, called the "hurdle rate."
- But beyond these high-level similarities, almost everything else is different, at least in "the classical view" of these industries

PE and VC



PE and VC

- **Company Types**: PE firms invest in companies across all industries, while VCs focus on technology, biotech, and cleantech.
- **Percentage Acquired:** Private equity firms do control investing, where they acquire a majority stake or 100% of companies, while VCs only acquire minority stakes.
- **Size:** PE firms tend to do larger deals than VC firms because they acquire higher percentages of companies and focus on bigger, more mature companies.
- **Structure:** VC firms use equity (i.e., the cash they've raised from outside investors) to make their investments, while PE firms use a combination of equity and debt.

PE and VC

- **Stage:** PE firms acquire mature companies, while VCs invest in earlier-stage companies that are growing quickly or have the potential to grow quickly.
- **Risk:** VCs expect that most of their portfolio companies will fail, but that if one company becomes the next Facebook, they can still earn great returns. PE firms can't afford to take such risks because a single failed company could doom the fund.
- **Value Creation / Sources of Returns:** Both firm types aim to earn returns above those of the public markets, but they do so differently: VC firms rely on growth and companies' valuations increasing, while PE firms can use growth, multiple expansion, and debt pay-down and cash generation (i.e., "financial engineering").

PE and VC

- **Operational Focus:** PE firms may become more involved with companies' operations because they have greater ownership, and it's "on them" if something goes wrong.
- **People:** Private equity tends to attract former investment bankers, while venture capital gets a more diverse mix: Product managers, business development professionals, consultants, bankers, and former entrepreneurs.
- **The Recruiting Process:** Large PE firms follow a quick and highly structured "on-cycle" process, while smaller PE firms and most VC firms use "off-cycle" recruiting, which starts later and takes longer.

PE and VC

- **Work and Culture:** Private equity is closer to the work and culture of investment banking, with long hours, a lot of coordination to get deals done, and significant technical analysis in Excel. Venture capital is more qualitative and involves more meetings/networking, and the hours and work environment are more relaxed.
- **Compensation:** You'll earn significantly more in private equity at all levels because fund sizes are bigger, meaning the management fees are higher. The Founders of huge PE firms like Blackstone and KKR might earn in the hundreds of millions USD each year, but that would be unheard of at any venture capital firm.
- **Exit Opportunities:** Working in VC prepares you for other VC firms, startups, and operational roles; if you work in PE, you tend to continue in PE or move into other roles that involve working on deals.

Hedge Fund

- Hedge funds are similar to mutual funds in that they both are pooled investment vehicles that accept investors' money and invest it on a collective basis. Hedge funds differ significantly from mutual funds, however, because hedge funds are not required to register under the federal securities laws. That's because they generally only accept financially sophisticated, high-net-worth investors. Some funds are limited to no more than 100 investors.
- Freed from regulation, hedge funds engage in leverage and other sophisticated investment techniques to a much greater extent than mutual funds (although they are subject to the antifraud provisions of the federal securities laws).

Hedge Fund

- Fee Structure of a Hedge Fund
- Fees are the lifeblood of a hedge fund. The manager usually gets a base management fee based on the value of the assets in the fund, such as 2% of the fund's assets.
- Managers also receive an incentive fee based on their performance that typically ranges between 15-30%. This fee typically occurs after the fund has reached the target return for investors. For any profit generated after that mark, the fund would receive the 15-30%.

Hedge Fund Strategies

- **Long/Short -** This is the traditional type of hedge fund. Its strategy involves buying certain stocks long and selling others short. There usually isn't a restriction on the country in which the stocks must be traded. Long/short funds use leverage and adjust "net" long or short positions based on economic forecasting.
- **Market-neutral funds -** A hedge fund strategy that seeks to exploit differences in stock prices by being long and short in stocks within the same sector, industry, market capitalization, country, etc. This strategy creates a hedge against market factors. Long positions are viewed as undervalued while short are overvalued. These funds tend to use leverage.
- This is the ultimate strategy for stock pickers because stock picking is all that counts. For example, a hedge fund manager will go long in the 10 biotech stocks that should outperform and short the 10 biotech stocks that will underperform. Therefore, what the actual market does won't matter (much) because the gains and losses will offset each other. If the sector moves in one direction or the other, a gain on the long stock is offset by a loss on the short.

Hedge Fund Strategies

- **Global macro fund -** A hedge fund strategy that bases its holdings - such as long and short positions in various equity, fixed income, currency and futures markets - primarily on overall economic and political views of various countries (macroeconomic principles). For example, if a manager believes that the U.S. is headed into recession, he or she might short sell stocks and futures contracts on major U.S. indexes or the U.S. dollar. Or, a manager who sees a big opportunity for growth in Singapore might take long positions in Singapore's assets.
- **Futures fund (managed future fund) -** Commodity pools that include commodity trading advisor funds (CTA). These funds take direction bets in the positions they hold in a single asset class such as currencies and interest rates or commodities.
- **Emerging-market fund -** A mutual fund that invests a majority of its assets in the financial markets of a developing country, typically a small market with a short operating history. These markets tend to be less liquid and efficient than developed markets. They are fairly volatile and are influenced by economic and political factors.

Hedge Fund Strategies

- **Event Driven -** A hedge fund strategy in which the manager takes significant positions in a certain number of companies in "special situations." This includes:
- **Distressed securities funds -** Invest in debt or equity of companies with severe problems and that are in or close to bankruptcy. The fund manager takes a long position in such companies when he believes that the company can turn around its situation and achieve profitability. He takes a short position if he believes the company will ultimately fail.
- **Risk arbitrage in mergers and acquisitions -** The technique takes advantage of price differences that usually exist between the current market price of the shares of a company that is being acquired and the stock price of the acquiring company. The company being taken over will tend to trade up in price while the company acquiring the other firm will tend to decrease in value. The risk is that the merger will fail and each stock will revert back it its original level.

Commodity Trading Advisor

- A commodity trading advisor (CTA) is an individual or firm who provides individualized advice regarding the buying and selling of futures contracts, options on futures or certain foreign exchange contracts. Commodity trading advisors require a Commodity Trading Advisor (CTA) registration, as mandated by the National Futures Association, the self-regulatory organization for the industry.
- Generally, a CTA fund is a hedge fund that uses futures contracts to achieve its investment objective. CTA funds use a variety of trading strategies to meet their investment objectives, including systematic trading and trend following. However, good fund managers actively manage investments, using discretionary strategies, such as fundamental analysis, in conjunction with the systematic trading and trend following.

Portfolio Manager

- A portfolio manager is like a detective. You examine individual companies, dig into the details, put together pieces of information, and create an informed decision to either buy or sell. Something new and exciting is always happening.
- On top of this excitement is the awesome responsibility of managing people's money. People trust you with their money and that feels great. You are making a positive impact on the lives of your shareholders

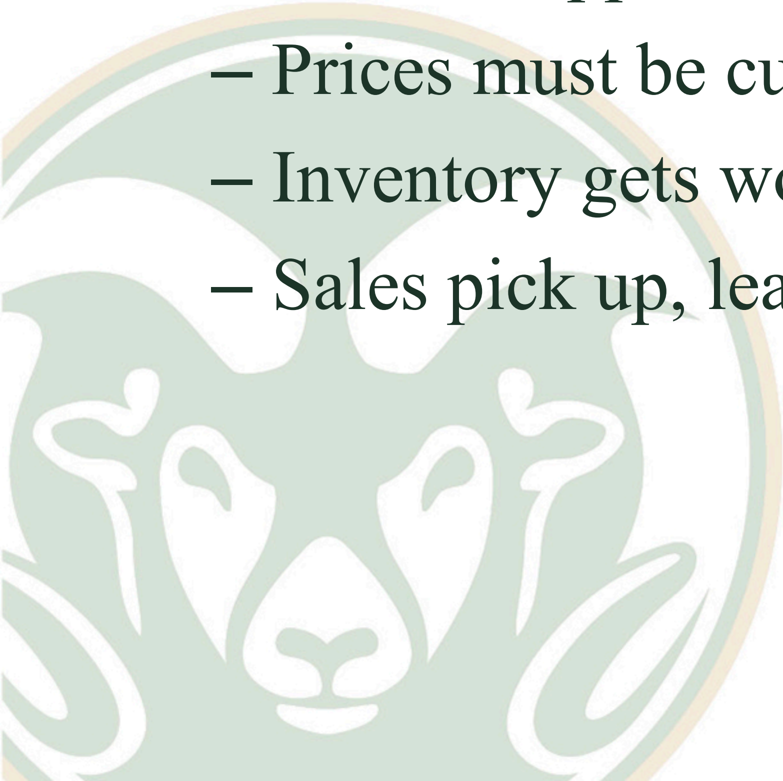
Asset Allocation

Sector Rotation

- Portfolios as a whole, by definition, antifragile.
- Sector rotation is the action of shifting investment assets from one sector of the economy to another. Sector rotation involves using the proceeds from the sale of securities related to a particular investment sector for the purchase of securities in another sector. This strategy is used as a method for capturing returns from market cycles and diversifying holdings over a specified holding period.

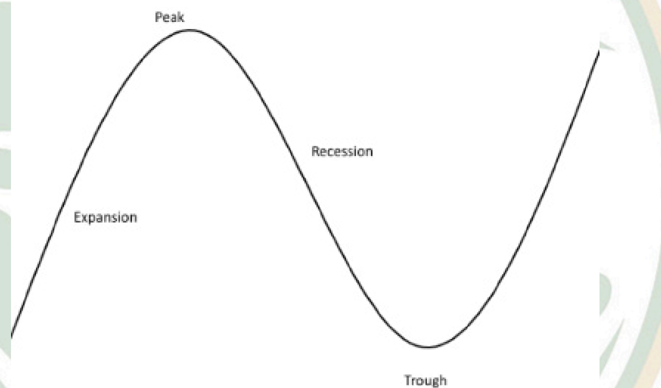
Inventory Cycles

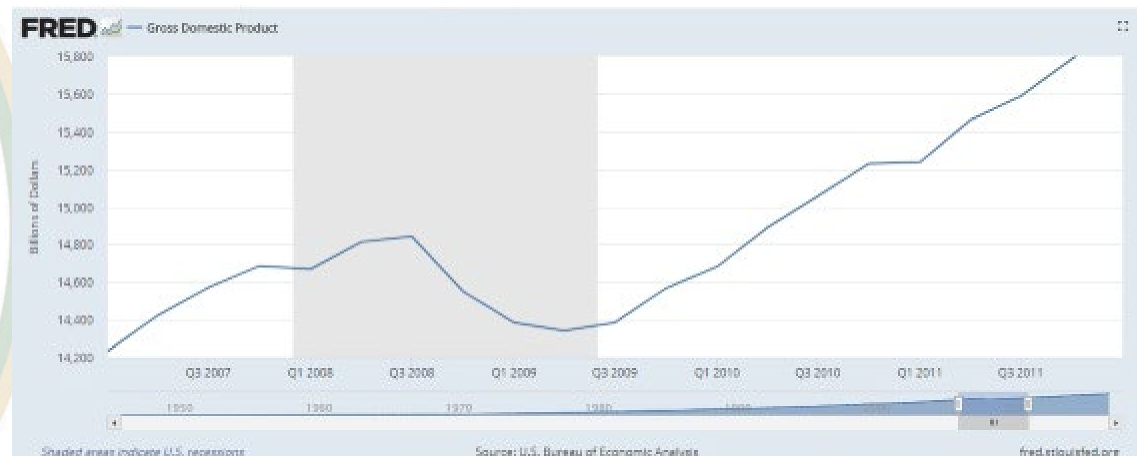
- Inventory cycle (2-4 years)
  - Inventories rise with confidence of sales
  - Sales disappointment leads to excess inventory
  - Prices must be cut
  - Inventory gets worked down
  - Sales pick up, leading to shortages



Business Cycles

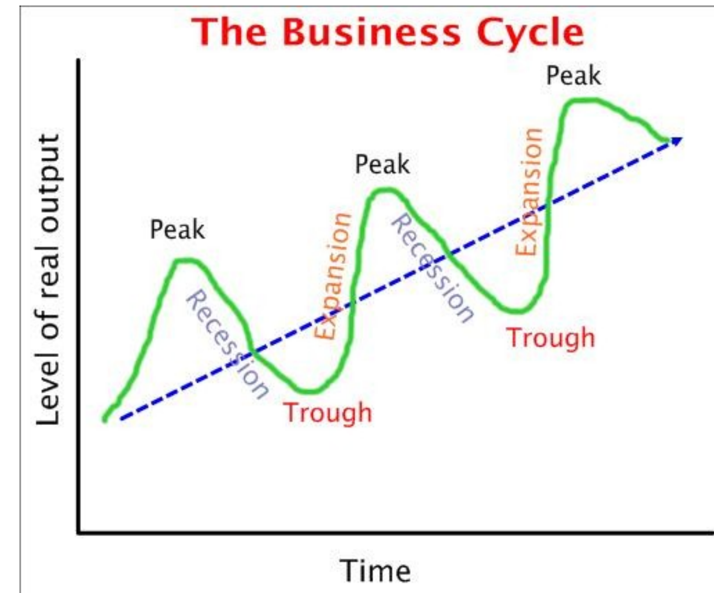
- The business cycle measures gross domestic product, or economic activity, over time. In reality, the cycle rarely looks this neat, but this simplified graph shows its four phases: expansion, peak, recession, and trough.





Business Cycles

- Business cycle (9-11 years)
  - Recovery
    - still large output gap
    - bond yields bottoming, stocks often surge
    - risk pays.
  - Early upswing
    - robust growth without inflation
    - Rising capacity utilization and profits
    - Short rates start rising, long rates stable
  - Late upswing
    - Output gap closed, danger of overheating
    - Inflation starts to pick up
    - Rising interest rates, stock markets rising but volatile
  - Slowdown
    - Slowing economy, sensitive to shocks
    - Peaking interest rates
    - Interest sensitive stocks perform best
  - Recession
    - Declining GDP
    - Falling short-term interest rates and bond yields
    - Stock market bottoms early and begins to rise ahead of business cycle recovery



Business Cycles

Efficient market hypothesis (EMH) investment advisers, whose basic thesis is that you can't beat the market, are all about how to allocate capital.

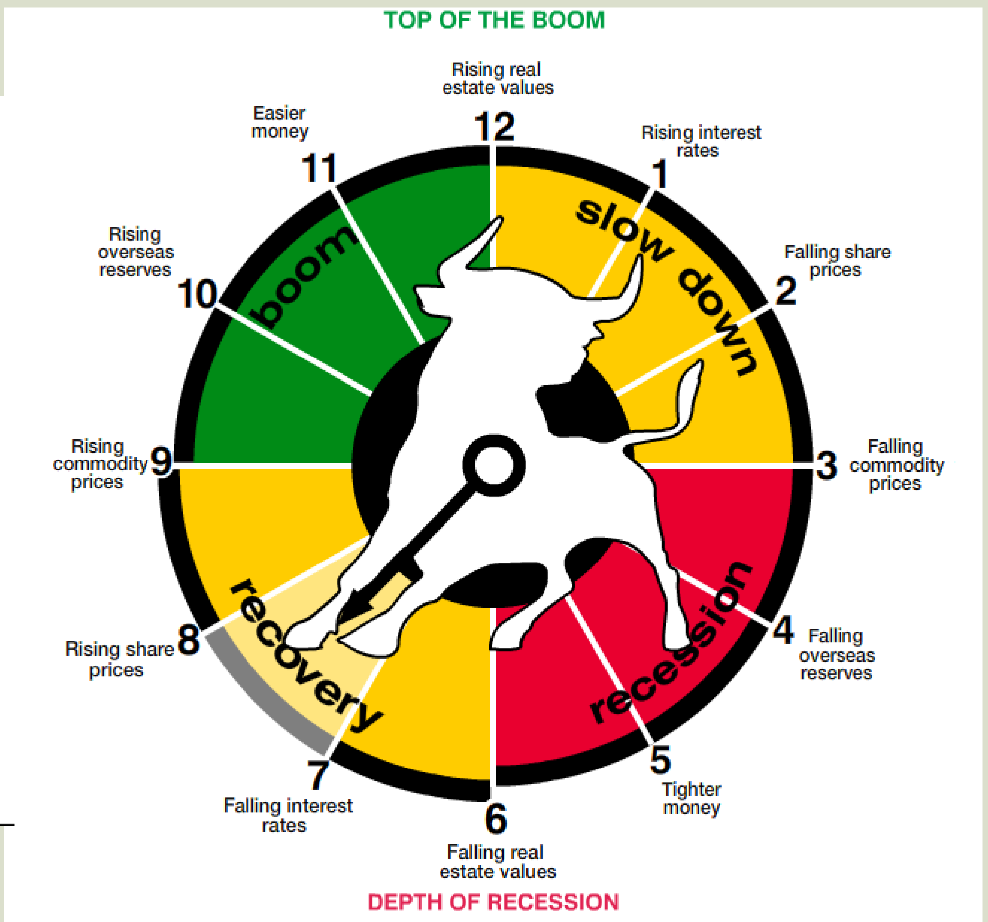
Great businesses emerge from recessions and chaos stronger and with more control of their market niche.

Sectors And The Business Cycle

- Investment clocks and asset allocation

Sector ▲	Early	Mid	Late	Recession
Consumer Discretionary	++		−−	
Consumer Staples	−		+	++
Energy	−−		++	
Financials	+			
Health Care	−		++	++
Industrials	++	+		−−
Info Technology	++	+	−−	−−
Materials		−−	++	−
Real Estate*	++			−−
Telecom	−−			++
Utilities	−−	−	+	++

++ Consistently Overperform   −− Consistently Underperform   No Clear Pattern
+ Overperform   − Underperform



Colorado State University

Sectors And The Business Cycle

ECONOMIC GROWTH	EARLY: Rebounds	MID: Peaks	LATE: Moderates	RECESSION: Contracts
OUTPERFORM THE U.S. EQUITY MARKET	CONSUMER DISCRETIONARY FINANCIALS INDUSTRIALS INFORMATION TECHNOLOGY	INDUSTRIALS INFORMATION TECHNOLOGY	CONSUMER STAPLES ENERGY HEALTH CARE MATERIALS UTILITIES	CONSUMER STAPLES HEALTH CARE TELECOMMUNICATIONS UTILITIES
UNDERPERFORM THE U.S. EQUITY MARKET	ENERGY TELECOMMUNICATIONS UTILITIES HEALTH CARE CONSUMER STAPLES	MATERIALS UTILITIES	CONSUMER DISCRETIONARY INFORMATION TECHNOLOGY	INDUSTRIALS INFORMATION TECHNOLOGY FINANCIALS MATERIALS

Early Cycle

Economically sensitive sectors may tend to outperform, while more defensive sectors have tended to underperform.

Mid Cycle

Making marginal portfolio allocation changes to manage drawdown risk with sectors may enhance risk-adjusted returns during this cycle.

Late Cycle

Defensive and inflation-resistant sectors tend to perform better, while more cyclical sectors underperform.

Recession

Since performance is generally negative in recessions, investors should focus on the most defensive, historically stable sectors.

Factors Affecting Business Cycle

- Consumers
  - 60-70% of GDP so typically the most important factor
  - Monitor retail sales and personal income
- Business
  - Smaller but more volatile
  - Monitor surveys such as ISM, PMI
- Monetary policy
  - Mechanism for intervening in cycle
  - Watch inflation, pace of growth, unemployment and capacity utilization

Cartoon