

Portfolio Management

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Summer 2026

Why This Lecture Matters

Whatever your major or profession, two things shape your life: health and wealth.



Health

Without health,
everything becomes
harder.



Wealth

Understanding money
helps you protect your
future and improve your
standard of living.



Finance is not only for finance students. It is for everyone.

Overview of the FX & International Operations Department



The FX Department handles Lebanon's foreign currency operations and international payments.

Core Functions



1. Managing FX Liquidity & Reserves

Oversees the Central Bank's foreign currency holdings and ensures market liquidity.



2. Currency Market Operations

Intervenes in the FX market when necessary to stabilize the USD/LBP exchange rate.



3. Cross-Border Payments & Transfers

Handles international payments for the government, banks, and other institutions.



4. SWIFT Messaging

Sends and receives payment instructions and confirmations via the SWIFT network.

Divided into 3 Key Sections



A. Public Sector Operations Section

(LC & Transfer Division)

- ✓ Letters of Credit
- ✓ Government Transfers
- ✓ Public Sector Payments



B. Dealing Room & Back Office Section

- ✓ FX Trading
- ✓ Liquidity Management
- ✓ Trade Settlement



C. SWIFT Section

- ✓ Secure Messaging
- ✓ Payment Instructions
- ✓ Confirmations



Mission: Manage Lebanon's **foreign reserves**, execute **international payments**, and support **secure** financial market operations.





Public Sector Operations Section

Supporting the Lebanese public sector through international trade and cross-border payments.



LC Division (Letters of Credit)

- ✓ Issues Letters of Credit on behalf of the public sector (mainly EDL)
- ✓ Supports essential imports such as fuel, energy, medicine, and strategic goods
- ✓ Processes and verifies trade documents



Application



Issuance



Documents



Shipment



Transfer Division

- ✓ Government payments
- ✓ Payments for Lebanese diplomatic missions abroad
- ✓ International transfers to institutions and suppliers
- ✓ Eurobond payments (historically)



Government /
Public Entities



International
Counterparties



Payment
Execution



Confirmation



Key Message: This section ensures that **essential imports** and **international government payments** are processed securely and efficiently.





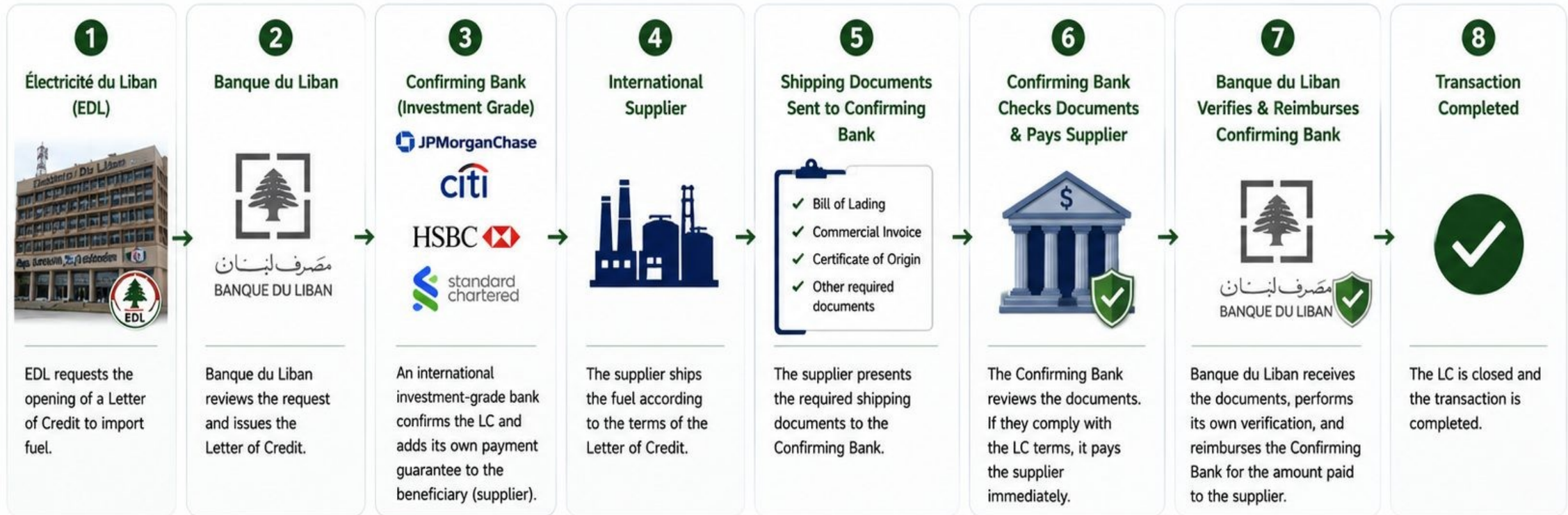
How a Public Sector Letter of Credit (LC) Works

Example: Fuel imports for Électricité du Liban (EDL)

A Letter of Credit is a payment guarantee issued by Banque du Liban to support imports for public sector entities.



مصرف لبنان
BANQUE DU LIBAN



Key Message: The supplier is **paid by the Confirming Bank** after compliant documents are presented. Banque du Liban then verifies the documents and **reimburses the Confirming Bank**.



Dealing Room & Back Office

From trade execution to final settlement.

Every financial transaction follows a clear process to ensure accuracy, security, and proper control.



مصرف لبنان
BANQUE DU LIBAN



Key Message:

A trade is not finished when the dealer clicks “Buy” or “Sell”.
It is only complete when the funds are successfully settled and received.



Accuracy



Security



Control

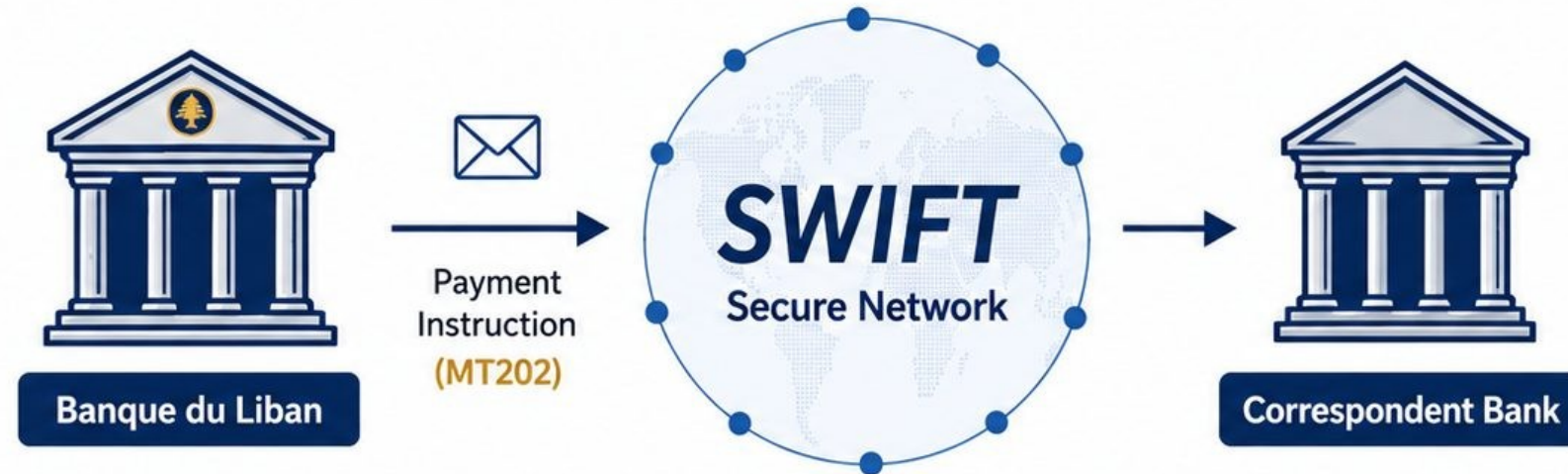


Timeliness

SWIFT: The Global Banking Messaging Network

SWIFT sends messages. It does not move money.

SWIFT is the secure communication network used by banks worldwide to send financial messages and confirmations.



Common SWIFT Messages



MT103 Customer Payment
(Single Customer Credit Transfer)



MT202 Bank-to-Bank Payment
Instruction



MT910 Confirmation of Credit
(Payment Received)



MT940 Account Statement



MT199 Free Format Message

... and many more



Key Message:

SWIFT is like the banking industry's secure email system.
It sends messages, instructions, confirmations, and statements. It does not move money.



Secure



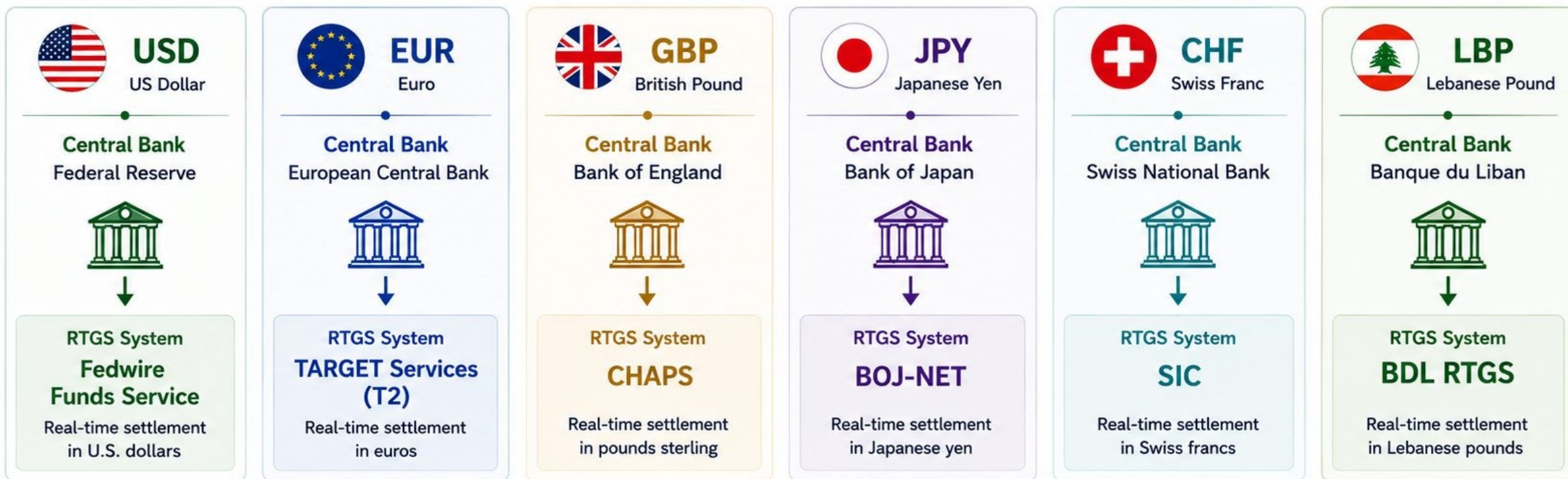
Reliable



Efficient

How Money Moves Between Banks

Funds move through central bank payment systems and correspondent accounts.



Key Message:



SWIFT sends the payment instruction.



The RTGS system **settles the funds** in central bank money.

Think of it this way:



SWIFT =
Secure email



RTGS =
Fund settlement



Both systems are essential
for international payments.

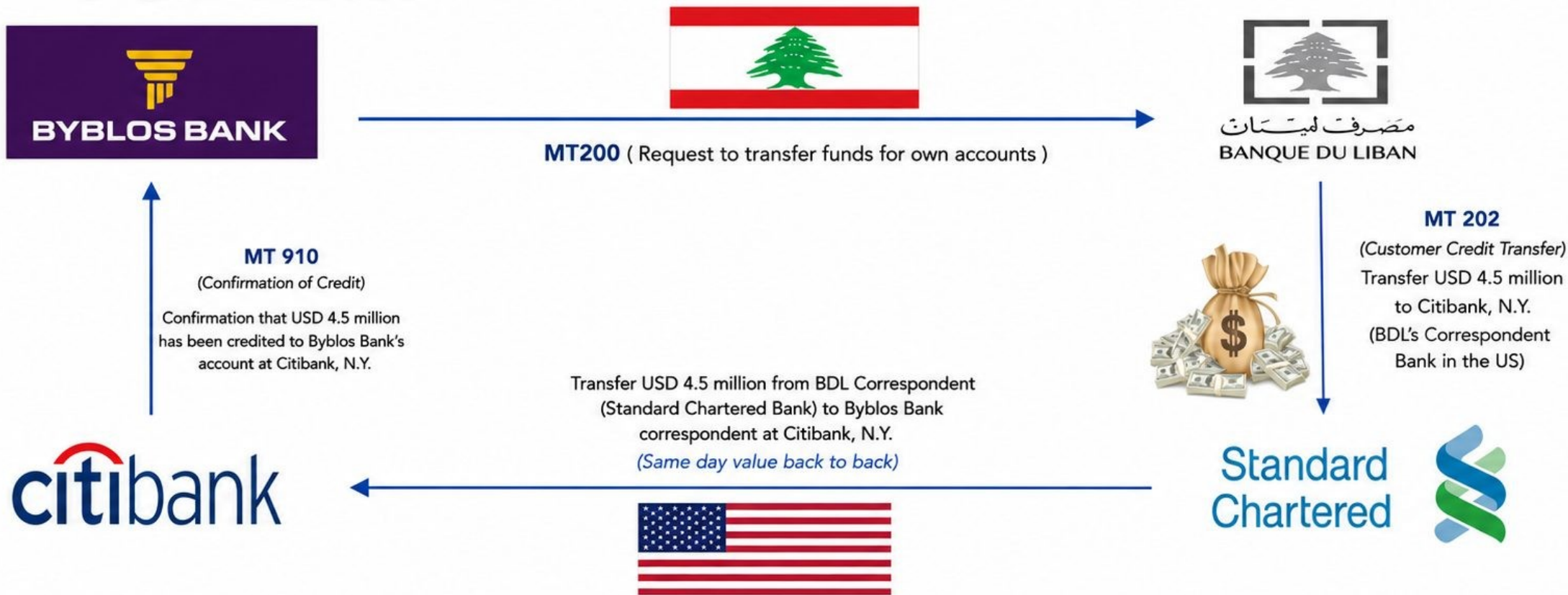
Note: RTGS = Real-Time Gross Settlement System

Example of a Cross Border Transfer Executed by the Back Office - Outflows

✓ Byblos Bank sends a request to BDL to transfer USD 4.5 million from its account at BDL to its account at Citibank, New York.

✓ Byblos Bank's account at BDL is debited by USD 4.5 million.

- Balance before = USD 100 million
- Balance after = USD 95.5 million



Key Takeaway: The Back Office ensures that payments are executed securely through the SWIFT network, with proper confirmations and settlement through correspondent banks.



THE DEALING ROOM

Where market decisions are made, local FX operations are handled, and reserves are managed.

THE DEALING ROOM IS DIVIDED INTO TWO MAIN DIVISIONS



1. LOCAL BANKS & FX OPERATIONS DIVISION

Focused on the local market and banking system.



Deals with local banks



Handles term deposits linked to reserve requirements



Supports USD/LBP FX operations



Monitors local market liquidity



2. INVESTMENT DIVISION

Responsible for managing the Central Bank's foreign reserves.



Manages the Central Bank's foreign reserves



Invests in money market instruments



Executes fixed income transactions



Operates in the FX market



The Dealing Room connects **local market operations** with **international reserve management**.





What Are FX Reserves?



FX reserves are external assets held by a central bank in foreign currencies.



1. What They Include

- ✓ Foreign banknotes
- ✓ Deposits
- ✓ Government bonds & T-bills
- ✓ Gold



2. Why Countries Hold Reserves

- ✓ Support the currency
- ✓ Pay for imports and external debt
- ✓ Respond to shocks and capital outflows
- ✓ Act as a financial buffer



3. How Reserves Accumulate

- ✓ Trade surpluses
- ✓ Capital inflows
- ✓ Foreign borrowing
- ✓ Remittances and tourism
- ✓ FX market operations



4. Banque du Liban Snapshot

- 💰 **FX reserves:** foreign currency assets
- 🌐 **Main currencies:** USD and EUR
- 🏆 **Gold reserves:** 9.22 million troy ounces



FX reserves help a country stay **liquid**, **stable**, and **resilient**.



BDL Approved Asset Classes



Sovereign
Bonds



Treasury
Bills



Supranational
Bonds



Repurchase
Agreements



Deposits with
Central Banks



Deposits with
Commercial Banks



Commercial Bank
Papers & Bonds



Supranational &
Agency Commercial
Papers



Executed through **major treasury dealing and information platforms.**



Investing vs Trading

☐ **Trading** is about making money in the short term, buying and selling quickly to earn a profit.

 Short-term focus

☐ **Investing** is about growing your savings over the long term, building wealth patiently over time.

 Long-term growth

 Many try to trade like investors, or invest like traders, and end up losing money.
Knowing the difference is extremely important.

TRADER



 Short-term focus

 Buys and sells frequently

 High risk, high stress

INVESTOR



 Long-term growth

 Builds wealth patiently

 Lower risk, more discipline

In Investing.

Always remember
that **Rome**
was not built
in a Day.



In Trading.

Always remember
that **Hiroshima** and
Nagasaki was
destroyed in a Day.



Different goals. Different mindset. Different results. **Know your path, stay disciplined.**

Mya

The Historical Probability of Making Money in the US Market

- ✓ Over 1 day periods **50%**
- ✓ Over 1 year periods **68%**
- ✓ Over 10 year periods **88%**
- ✓ Over 20 year periods **100%**

- ✓ A study by the Brazilian stock exchange found that **95%** of day traders lose money over a 12-month period.

INVESTING



TRADING

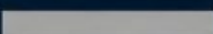


**The longer the time horizon, the higher the chance of making money.
Patience and discipline are the key.**



The Impact of Investment Choices (2009–2025)

Comparing **\$10K** Investment in Different Assets Over 16 Years

#	Asset	Yearly Return (%)	\$10K Final Value
1	 Bitcoin	215% 	\$170 billion 
2	 NVIDIA	48% 	\$5,333,001
3	 Netflix	38% 	\$1,769,150
4	 Domino's Pizza	34% 	\$1,009,837
5	 Apple	31% 	\$787,651
6	 Amazon	27% 	\$570,705
7	 Microsoft	25% 	\$328,370
8	 Starbucks	23% 	\$258,567
9	 Google	21% 	\$216,980
10	 Vanguard 500 Index (VFIAX)	16% 	\$105,843
11	 McDonald's	15% 	\$92,873
12	 VNQ - Vanguard Real Estate ETF	14% 	\$77,292
13	 Cisco	12% 	\$62,173
14	 Gold	8% 	\$35,175
15	 Vanguard Long-Term Investment-Grade (VWESX)	6% 	\$25,643

WHAT THIS SHOWS



Big differences over time

Small return gaps create huge differences.



Time is your greatest asset

Compound returns reward patience.



Quality and growth drive results

High-growth assets outperformed over the long run.



Your choices shape your future

The asset you choose today can change your tomorrow.



Key Takeaway: Compound returns over time can lead to dramatically different outcomes, **especially in high-growth tech.**





How Starting Early in the S&P 500 Can Build Long-Term Wealth

 Assumes monthly contributions continue until age 60, then the balance keeps compounding untouched through age 70, at a 10% average annual return.

Monthly Investment: \$200

Starting Age	Value at Age 40	Value at Age 50	Value at Age 60	Value at Age 70
30 years	\$41,310	\$153,139	\$455,865	\$1,182,397
25 years	\$83,585	\$267,578	\$765,655	\$1,985,913
20 years	\$153,139	\$455,865	\$1,275,356	\$3,307,945

Monthly Investment: \$300

Starting Age	Value at Age 40	Value at Age 50	Value at Age 60	Value at Age 70
30 years	\$61,966	\$229,709	\$683,798	\$1,773,595
25 years	\$125,377	\$401,367	\$1,148,483	\$2,978,869
20 years	\$229,709	\$683,798	\$1,913,034	\$4,961,918



Takeaway: The earlier you start, the greater your wealth — **even with small monthly contributions.**



What is portfolio management?



Portfolio management is the process of selecting and managing a mix of assets, such as stocks, bonds, and real estate, to achieve your financial goals while keeping risk within a level you can handle.

Warren Buffett categorizes investments into three types:

1



Those denominated in a currency

Cash, time deposits, bonds, Treasury bills

2



Those that don't generate any revenue

Gold, silver, Bitcoin, art, collectibles

3



Those that generate revenue

Stocks, businesses, real estate, farms



Takeaway: A well-managed portfolio balances growth, risk, and diversification to help you reach your financial goals.



The Portfolio Management Process

 Whether you're investing for a nation or for yourself, **the process is the same.**

1



Set Your Objectives/Goals

Define what you are investing for and your time horizon.

2



Assess Your Risk Profile

Understand how much risk you can take and how you react to market ups and downs.

3



Understand the Environment

Analyze the macro environment and economic indicators.

4



Decide Your Asset Allocation

Choose the right mix of asset classes based on your goals and risk profile.

5



Choose Your Investments

Select the best instruments to implement your allocation.

6



Implement the Strategy

Execute trades and deploy capital according to your plan.

7



Monitor, Measure, and Rebalance

Review performance regularly and rebalance to stay on track.



Key Takeaway:

A disciplined process helps you balance return, risk, and diversification to achieve your financial goals.



Return

+



Risk

+



Diversification

START WITH GOALS AND RISK

Before building a portfolio, define what you want and what you can handle.

✓ 1. SET YOUR OBJECTIVES / GOALS



Why are you investing?

- Retirement, buying a home, preserving capital, growing wealth?



What's your time horizon?

- Short-term or long-term?
- When will you need the money?



Clarity leads to better strategy

- The more specific your goals, the easier it is to build the right plan.



"Whether managing a country's reserves or your savings, it starts with knowing what you're aiming for."

✓ 2. ASSESS YOUR RISK PROFILE



How much risk can you truly handle?

- Are you comfortable with short-term losses?
- Can you stay calm during market drops?



Risk tolerance isn't theoretical—it's emotional

- People react differently to volatility.
- One may panic at a -20% drop, another sees a buying opportunity.



Ask yourself:

- How much liquidity do I need?
- How do I behave in stressful times?



"There's no one-size-fits-all in investing—only what fits you."



Your goals and risk profile are the foundation of every good investment decision.
Get these right first.

WHY THE MACRO ENVIRONMENT MATTERS

Different asset classes behave differently depending on where we are in the economic cycle.



The big picture drives investment results.

Understanding the macro environment helps investors make informed decisions and position their portfolios for different economic conditions.



What to look at:

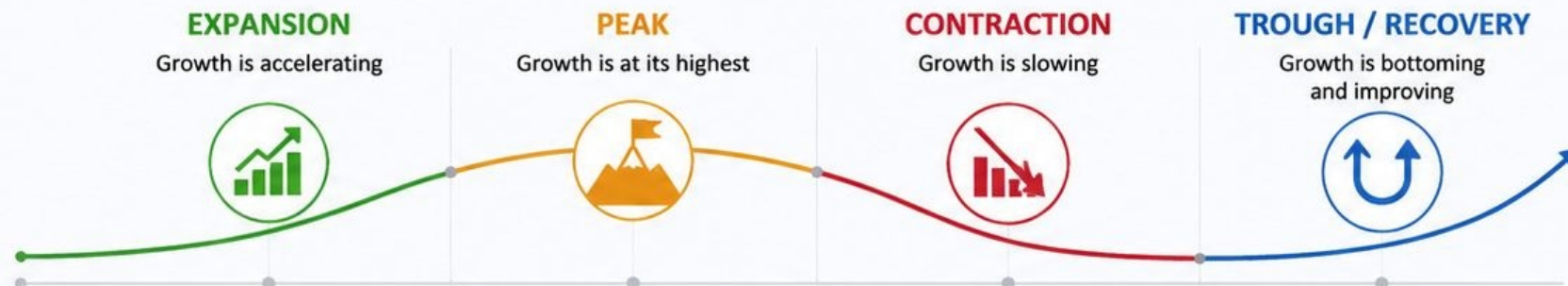
- Economic growth
- Inflation
- Interest rates
- Employment
- Business and consumer confidence
- Global events



The macro environment sets the stage. Asset allocation and security selection play the role.

THE ECONOMIC CYCLE

Economies move in cycles. Recognizing the phase helps you position your portfolio wisely.



HOW ASSET CLASSES TEND TO BEHAVE

 Stocks	Tend to perform well	Returns may slow	Tend to decline	Start to recover
 Bonds	Moderate returns	More attractive	Tend to perform well	Returns moderate
 Gold / Commodities	Mixed	Can hedge inflation late in cycle	Often provides protection	Still useful in early recovery
 Cash	Low returns	Lower opportunity cost	Provides flexibility and safety	Stay liquid, be ready to deploy



Key Takeaway:

Know where we are in the cycle, monitor key indicators, and align your portfolio with the environment.

Macro Environment

Better Decisions

Better Outcomes



KEY ECONOMIC INDICATORS TO WATCH

These indicators help us understand the economy and anticipate market moves.

WHY IT MATTERS



Economic indicators give us clues about where the economy is heading. They influence interest rates, inflation, corporate earnings, and investor sentiment.

WHAT TO REMEMBER



No single indicator tells the whole story.
Look at the big picture.



Watch trends, not just one report.
Consistent moves matter more.



Indicators affect expectations,
and expectations move markets.

MAJOR ECONOMIC INDICATORS

INDICATOR	WHAT IT MEASURES	WHY IT MATTERS	POSITIVE SIGNAL	NEGATIVE SIGNAL
 Economic Growth (GDP)	The rate at which the economy is expanding.	Stronger growth supports corporate earnings and risk assets.	Rising GDP growth	Falling GDP growth
 Inflation (CPI, PCE)	The rate at which prices for goods and services are rising.	High inflation reduces purchasing power and impacts central bank policy.	Stable, moderate inflation	Rising, high inflation
 Interest Rates (Central Bank Policy Rate)	The cost of borrowing money in the economy.	Affects borrowing costs, investment, and asset valuations.	Rates stable or falling (when needed)	Rates rising too fast
 Employment (Jobs Data, Unemployment Rate)	The health of the labor market.	Strong jobs support spending and economic growth.	Job growth, lower unemployment	Job losses, higher unemployment
 Consumer Confidence (Surveys)	How optimistic or pessimistic consumers feel about the future.	Confident consumers spend more; weak confidence reduces spending.	Rising confidence	Falling confidence
 Global Events (Geopolitics, Trade, Commodity Prices)	Major events that impact global economies and financial markets.	Can create volatility, opportunities, and risk changes.	Reduced risks, policy clarity	Escalating risks, uncertainty



Key Takeaway:

Stay informed, connect the dots, and understand the impact on your portfolio.
Information + Analysis = Better Decisions.



ECONOMIC INDICATORS: WHAT INVESTORS WATCH

Key indicators help us understand the economy and anticipate market moves.



1. GROWTH

- GDP growth
- Business activity
- Corporate earnings



Is the economy expanding or slowing?



2. INFLATION & INTEREST RATES

- Inflation (CPI)
- Central bank rates
- Borrowing costs



Will interest rates go up or down?



3. JOBS & CONFIDENCE

- Employment / Jobs data
- Consumer confidence
- Consumer spending



Are people and businesses strong?



Key Takeaway:

Indicators do not give perfect answers.

They help investors read the direction of the economy.

CENTRAL BANKS & INTEREST RATES

Central banks guide the economy by setting interest rates.

WHAT DO CENTRAL BANKS DO?



- ✓ Set short-term interest rates
- ✓ Control money supply and liquidity
- ✓ Keep inflation low and support economic growth

Their goal: Price stability + Sustainable growth + Financial stability

WHEN CENTRAL BANKS CHANGE RATES



RATE HIKE (Tightening)

- Borrowing becomes more expensive
- Spending and investment slow down
- Inflation comes down
- Economic growth may slow



RATE CUT (Easing)

- Borrowing becomes cheaper
- Spending and investment increase
- Inflation may rise
- Economic growth may speed up

THE TRANSMISSION MECHANISM



Central Bank changes policy rate



Market interest rates adjust



Borrowing costs for banks, businesses, and households change



Spending, investment, and demand change



Economic activity and inflation are affected



The economy responds



Key Takeaway:

Central banks don't control the economy directly, but their interest rate decisions **influence almost everything.**

HOW RATE CHANGES AFFECT THE ECONOMY

From central bank decisions to real-world impact.

RATE HIKE (TIGHTENING)



- ↓ Borrowing costs go up
- ↓ Spending and investment slow down
- ↓ Inflation comes down over time
- ↓ Economic growth may slow



Goal: Control inflation and prevent the economy from overheating.

RATE CUT (EASING)



- ↑ Borrowing costs go down
- ↑ Spending and investment increase
- ↑ Inflation may go up over time
- ↑ Economic growth may improve



Goal: Support growth and jobs when the economy is weak.

THE TRANSMISSION CHANNEL



1. Central Bank changes policy rate



2. Market interest rates adjust



3. Borrowing costs for banks, businesses, and households change



4. Spending, investment, and demand change



5. Economic activity and inflation are affected



6. The economy responds



KEY TAKEAWAY:

Rate changes do not work overnight.
They move through the economy step by step and take time to show results.

MAIN INVESTMENT ASSET CLASSES

Different assets behave differently. Diversification helps manage risk.

STOCKS (EQUITIES)



Ownership in companies.

Potential for higher returns over the long term.

- ✓ Benefits from economic growth
- ✓ Pays dividends (in some cases)
- ✓ Higher risk and price volatility
- ✓ Best for long-term investors



Higher return potential, higher risk.

BONDS (FIXED INCOME)



Loans to governments or companies.

Provide regular income and return of principal.

- ✓ Pay interest (coupon)
- ✓ Generally less volatile than stocks
- ✓ Interest rate risk exists
- ✓ Good for income and capital preservation



Lower risk than stocks, lower return.

FOREIGN EXCHANGE (FX)



Trading one currency for another.

Driven by interest rates, growth, and market sentiment.

- ✓ Very liquid and global market
- ✓ High leverage and fast moves
- ✓ Opportunities in rising or falling markets
- ✓ Higher risk, needs tight risk management



High opportunity, high risk.



KEY TAKEAWAY:

No single asset is perfect. A well-diversified portfolio balances risk and return across different asset classes.

The right mix depends on your goals, time horizon, and risk tolerance.

WHAT CAN YOU INVEST IN?

The main types of asset classes.



REAL ASSETS



Real Estate
Property and land



Commodities
Gold, oil, raw materials



Infrastructure
Roads, bridges, utilities



FINANCIAL ASSETS



Equities (Stocks)
Ownership in companies



Fixed Income (Bonds)
Lending for regular income



Cash & Cash Equivalents
Liquidity and stability



ALTERNATIVE ASSETS



Private Equity
Investments in private companies



Hedge Funds
Active strategies



Key Takeaway: Different asset classes have different characteristics.
The right mix depends on your goals, time horizon, and risk tolerance.

WHAT WE WILL COVER NEXT

The three core asset classes we will focus on.



STOCKS

- Ownership in companies
- Capital gains and dividends
- Risk and return vary by company and sector
- Examples: Apple, Microsoft, Nestlé



BONDS

- Lending to governments or companies
- Earn fixed interest over time
- Types: government, corporate, supranational
- Key risk: interest rate changes



FOREIGN EXCHANGE (FX)

- Currency trading (e.g. EUR/USD, USD/JPY)
- Driven by rates, inflation, growth, and sentiment
- Used for trade, investment, and reserve management



Key Takeaway: These three asset classes are the foundation of most investment portfolios. Understanding them helps you build stronger investment decisions.

DIVERSIFICATION: DON'T PUT ALL YOUR EGGS IN ONE BASKET

Diversification spreads risk across different assets so one weak area doesn't hurt your whole portfolio.

WHY DIVERSIFY?



Reduces Risk

Different assets react differently to the same events.



Smoother Returns

Helps reduce big ups and downs in your portfolio.



Improves Consistency

Increases the chance of reaching your financial goals.

HOW IT WORKS

NOT DIVERSIFIED

High Risk



All your money in one asset.
If it falls, your portfolio falls.



DIVERSIFIED

Lower Risk



Your money spread across
different assets.
If one falls, others may hold up.

ASSETS DON'T MOVE TOGETHER



Stocks may go up
when the economy
grows.



Bonds may hold steady
or go up when rates
fall or markets get risky.



Currencies may rise
or fall due to rates,
inflation, and events.



Commodities may move
based on supply, demand,
and global shocks.



KEY TAKEAWAY:

Diversification does not guarantee profits or eliminate losses.

But it helps manage risk and improves the chances of long-term success.

BOND MARKET

Where Governments and Companies Borrow Money



Governments and companies issue bonds to raise money.



Investors lend money in exchange for regular interest payments.



Bonds have a maturity date when the principal is repaid.



Generally considered lower risk than stocks.



You lend money today, you receive interest, and get your money back at maturity.





The 4 Common Ways Companies Raise Capital

Public companies create financial instruments to raise funds.



1 BANK LOANS

Companies can borrow from banks or financial institutions, often using their assets as collateral.



3 ISSUING STOCKS (EQUITY SECURITIES)

Companies can raise capital by selling shares of ownership — either common or preferred stock — to investors.



2 ISSUING BONDS (DEBT SECURITIES)

Companies can raise money by issuing fixed income securities (like bonds), promising to repay investors with interest.



4 RETAINED EARNINGS (INTERNAL FINANCING)

Companies can reinvest their own profits to fund growth and expansion, instead of relying on external sources.



Companies use a mix of these methods depending on their needs, **cost, risk,** and **long-term strategy.**

WHAT IS A BOND?

A simple loan that pays you income.



A bond is a **loan** you give to a government or a company.
In return, you receive **interest payments** and your money back at **maturity**.

1 YOU LEND MONEY

You buy a bond.
You are lending money to
a government or a company.



YOU



ISSUER

(Government / Company)

2 THEY PAY YOU

You receive regular interest
payments (coupon).



COUPON
(Interest Payment)



3 THEY REPAY YOU

At maturity, you get your
original money back.



MATURITY
(Principal Repayment)



KEY RULE:

Bond price 
Yield 

Bond price 
Yield 

They move in
opposite directions.



KEY TAKEAWAY:

A bond is a loan that **pays income** and returns your money **at maturity**.

MAIN TYPES OF BONDS

Different bonds offer different levels of **safety**, **income**, and **risk**.

1



GOVERNMENT BONDS

Issued by national governments.

Considered the safest bonds.



RISK LEVEL

LOW



RETURN

LOWER

2



CORPORATE BONDS

Issued by companies to raise money.

More risk than government bonds.



RISK LEVEL

MEDIUM



RETURN

MEDIUM

3



MONEY MARKET / SHORT-TERM INSTRUMENTS

Examples: T-Bills, CDs.

Short maturities (up to 1 year).

Used for cash management and liquidity.



RISK LEVEL

LOW



RETURN

LOWER

4



STRUCTURED / RISKIER DEBT

Examples: MBS, ABS, High-Yield Bonds.

Higher risk, higher potential return.



RISK LEVEL

HIGH



RETURN

HIGHER



KEY TAKEAWAY:

Different bonds offer different levels of **safety**, **income**, and **risk**.

WHAT MOVES BOND PRICES?

Bond prices change based on key economic and market factors.

1



INTEREST RATES

When interest rates rise,
bond prices fall.

When interest rates fall,
bond prices rise.

2



INFLATION

Higher inflation reduces
the real value of future
payments, leading to
lower bond prices.

3



CREDIT RISK

Higher risk of default
means lower bond prices
and higher yields.

4



SUPPLY & DEMAND

More demand for bonds
pushes prices up.

More supply pushes
prices down.



KEY RULE:

Bond price  → Yield 

Bond price  → Yield 

Prices and yields
move in **opposite**
directions.



SIMPLE STRATEGY IDEA



If rates may rise

Prefer shorter duration
bonds.



If rates may fall

Prefer longer duration
bonds.



If credit risk rises

Reduce exposure to
riskier bonds.



KEY TAKEAWAY:

Bond prices move because of **rates**, **inflation**, **risk**, and **market demand**.

STOCK MARKET

Where Investors Buy Ownership in Companies



Investors buy shares representing **ownership** in a company.



Returns come from **price appreciation** and **dividends**.



Stock prices **fluctuate** based on company performance and investor expectations.



Generally offers higher return potential but with **higher risk**.



You buy ownership today, your return depends on the company's success.



What Is a Stock?

A stock means ownership in a company.

When you buy a stock, you own a small part of that business.

1 Ownership



A stock is a share in a company.

As a **shareholder**, you own a small part of the business and share in its results.

2 How You Earn

Investors earn from:



Dividends

Payments from the company's profits to shareholders.



Capital Gains

Profit from selling a stock at a higher price than you paid.

3 Three Different Measures

Three ways to think about worth:



Market Price

The price investors are paying in the market today.



Intrinsic Value

An estimated fair value based on valuation, earnings, cash flows, growth, and discounting.



Book Value

The accounting value of the company, equal to assets minus liabilities.

These three are not the same.



KEY TAKEAWAY

A stock gives ownership. Investors can earn returns, but **market price**, **intrinsic value**, and **book value** are three different things.

What Is Volatility?

Volatility is a measure of how much the return of an asset varies over time. It is calculated as the standard deviation of those returns.



In simple terms, volatility is a measure of how much the price of an investment (like a stock, bond, or cryptocurrency) **goes up and down over time**.

- If prices move **a lot**, it's **highly volatile**.
- If prices move **a little**, it's **less volatile**.



Think of investing like riding a roller coaster:

- ✓ If the ride is **smooth**, the ups and downs are small → That's **low volatility**.
- ! If the ride is wild, with big drops and high climbs → That's **high volatility**.



For example:



A savings account is like a **flat** train ride.

 **Very Low Volatility**



Bitcoin or tech stocks are like **extreme** roller coasters.

 **High Volatility**



Imagine a Roller Coaster

LOW VOLATILITY

Smooth ride,
small ups and downs



HIGH VOLATILITY

Wild ride,
big drops and high climbs



Low Volatility

Small price changes
over time.
More predictable,
lower risk.



High Volatility

Large price changes
over time.
Less predictable,
higher risk.



Why It Matters

Affects the level of
risk and return of
an investment.



Key Takeaway

Higher volatility can
mean higher returns—
but also higher risk.



Understanding volatility helps investors
manage risk, set expectations, and
make informed decisions.

LOW VOLATILITY EXAMPLE

Coca-Cola (KO) – Defensive Stock

Daily Price Chart (2010 – 2026)



Characteristics

- ✓ Stable long-term growth
- ✓ Smaller price swings
- ✓ Lower volatility
- ✓ Preferred during uncertain markets



Performance (2010 – 2026)

Total Return **+221%**

Annualized Return **+7.58%**

HIGH VOLATILITY EXAMPLE

Tesla (TSLA) – Growth Stock

Daily Price Chart (2010 – 2026)



Characteristics

- ✓ Large price swings
- ✓ Higher uncertainty
- ✓ Higher risk
- ✓ Higher return potential



Performance (2010 – 2026)

Total Return **+30,689%**

Annualized Return **+43.26%**



Higher returns often come with higher volatility and larger price swings.



How to Get Exposure to the Stock Market

✓ Three main ways to invest in the stock market, each with different tradeoffs:

 Method	 Diversification	 Cost	 Suitable For	 Example
 Individual Stocks	Low 	Low 	Active investors	Buy individual shares like Apple, Tesla, or Microsoft
 ETFs	High 	Low 	Passive & tactical investors	SPY, IVV, VOO, ETFs that track the S&P 500
 Index Funds	High 	Very Low 	Passive investors	Vanguard 500 Index Fund (VFIAX), Schwab S&P 500 Index (SWPPX)

Picking Stocks vs. Investing in the Whole Market:



- When you buy **individual stocks**, you're choosing **specific companies** you think will do well, like Apple or Tesla. **This takes time, research, and carries more risk.**



- But when you invest in something like the **S&P 500 index**, you're buying a **small piece of many top companies** at once. It's **easier, more diversified**, and helps **reduce risk** over the long run.



There is no one-size-fits-all approach. Your choice depends on your goals, time, knowledge, and how much risk you're comfortable with.



Stock Indices in the USA



S&P 500

Tracks the performance of 500 of the largest companies in the U.S.



Dow Jones Industrial Average (DJIA)

Tracks 30 large, well-known U.S. companies across major industries.



Nasdaq Composite Index

Tracks over 2,500 companies, often associated with technology (e.g., Apple, Microsoft, NVIDIA). Most investors focus on the Nasdaq-100.



What Stock Indices Are Used For



Benchmark: Compare your portfolio to the broader market.



Measure Market Performance: See how a group of stocks is performing.



Economic Health: Indexes signal the state of the economy.



Investment Products: Indices are used to build ETFs and mutual funds.



Why the S&P 500 Matters



Covers **~80%** of the U.S. stock market by market cap



Includes **leading companies** across all major sectors



Broad, **diversified**, and market-cap weighted



The S&P 500 is widely considered the **backbone of a long-term portfolio**

It offers diversified exposure to the U.S. economy and is often used as the **core holding** in many investment strategies.



Stock indices help investors understand the market, measure performance, and build stronger portfolios.

What Affects Stock Prices?



Stock prices reflect **expectations**, not just today's reality, but tomorrow's possibilities.



1. Company Performance

- **Earnings results, forecasts, product launches, or bad news** (e.g., scandals or lawsuits)



2. Economic Indicators

- **Interest rates, inflation, GDP, unemployment;**
markets react to changes and expectations



3. Market Sentiment

- **Driven by fear, greed, and crowd psychology;**
not always rational



4. Global Events

- **Wars, pandemics, elections, and crises** can
move markets across the globe



"In the short term, sentiment drives stock prices. In the long term, it is always earnings."



A. Stocks Classified by Market Cap

SPX 6170.46 +32.65
 At 16600 d 0 6157.87 H 6174.33 L 6142.99 Prev 6137.81

SPX Index 94) Suggested Charts 96) Actions 97) Edit

Group By None

Security Name	%Chg 1D	%Chg MTD	%Chg YTD	Market Cap (USD)	Weight (%)
1) Mega Cap	+0.34	+6.18	+16.72	14.339T	33.91
1) Apple Inc	+0.32	+4.72	+12.81	3.041T	7.12
2) Microsoft Corp	+0.15	+6.15	+10.49	2.821T	6.60
3) NVIDIA Corp	+1.10	+10.93	+150.50	2.275T	5.31
4) Alphabet Inc A	+0.23	+7.66	+18.35	1.781T	4.16
5) Amazon.com Inc	+0.62	+5.19	+20.01	1.577T	3.68
6) Meta Platforms Inc	-0.12	+4.23	+31.23	1.231T	2.87
7) Berkshire Hathaway Inc	+0.08	+1.12	+9.84	1.002T	2.34
8) Tesla Inc	+1.24	+14.21	-5.80	612.4B	1.43
2) Large Cap	+0.21	+4.23	+10.24	23.206T	54.86
3) Mid Cap	+0.17	+2.88	+6.48	4.210T	9.95
4) Small Cap	-0.03	+1.36	+3.12	1.791T	4.23
5) Micro Cap	-0.42	+0.62	+1.05	0.771T	1.82

SPX Index (S&P 500 INDEX) GI Market Cap Daily 19MAY2024 Source: Bloomberg

Category	Market Cap Range (USD)	Example Companies
 Mega Cap	Over \$200 billion	Apple, MSFT, NVDA
 Large Cap	\$10 to \$200 billion	Coca-Cola, McDonald's
 Mid Cap	\$2 to \$10 billion	DaVita, Block, Airbnb
 Small Cap	\$300 million to \$2 billion	Crocs, Cencora
 Micro Cap	Below \$300 million	Teralytix, Ideanomics

 Generally, the smaller the market cap, the higher the **volatility** and the **greater the risk**.

Example: Calculating Market Cap







Price per Share
\$200

Shares Outstanding
200 million

Market Cap
\$40 billion

 Market cap represents the total value of a company's equity. It reflects how big the company is in terms of stock market value.



Market cap helps investors understand company size, compare stocks, and manage risk in their portfolios.

Largest Companies in the S&P 500 (July 2026)

Top 22 companies by market capitalization in the S&P 500 Index

Export ▾ Settings ▾

Bloomberg Market Map: Security View

SPX Index

Group by

Region

Sector

 Market Cap (USD)

All

 Historical Performance

SPX > GICS > Security View

Show Names

Show Top News

Refresh News

Name		Net Chg	%Chg	Last Px	52Wk Low-High	Volume	Mkt Cap
1) NVIDIA Corp	d	-2.75	-1.39%	194.83	157.35 - 236.54	41.08M	4.71T
2) Apple Inc	d	+14.25	+4.84%	308.63	201.51 - 317.38	25.12M	4.53T
3) Microsoft Corp	d	+6.21	+1.62%	390.49	349.20 - 555.00	12.29M	2.90T
4) Amazon.com Inc	d	+0.97	+0.40%	242.67	196.13 - 278.54	14.04M	2.61T
5) Alphabet Inc	d	-1.30	-0.36%	359.91	172.78 - 408.60	8.85M	2.11T
6) Alphabet Inc	d	-1.71	-0.48%	356.18	173.90 - 404.43	5.25M	1.95T
7) Broadcom Inc	d	-8.89	-2.41%	360.45	269.58 - 495.00	10.12M	1.71T
8) Tesla Inc	d	-31.85	-7.49%	393.45	288.80 - 498.82	18.54M	1.48T
9) Meta Platforms Inc	d	-30.01	-4.90%	582.90	520.26 - 796.21	5.67M	1.28T
10) Eli Lilly & Co	d	+22.17	+1.86%	1213.91	624.00 - 1238.00	1.07M	1.14T
11) Micron Technology Inc	d	-56.72	-5.49%	975.56	103.39 - 1255.00	15.8M	1.10T
12) JPMorgan Chase & Co	d	+0.40	+0.12%	334.47	279.10 - 343.34	4.08M	896.22B
13) Walmart Inc	d	+3.02	+2.78%	111.84	107.25 - 135.15	9.55M	890.03B
14) Advanced Micro Devices Inc	d	-23.06	-4.26%	517.82	133.50 - 584.70	8.39M	844.36B
15) Berkshire Hathaway Inc	d	+8.04	+1.61%	507.78	455.25 - 516.82	1.89M	710.03B
16) Johnson & Johnson	d	+9.06	+3.57%	263.04	154.26 - 263.10	2.54M	633.19B
17) Intel Corp	d	-6.67	-5.25%	120.35	18.97 - 142.34	35.23M	604.88B
18) Visa Inc	d	+11.05	+3.15%	362.13	293.90 - 362.13	3.52M	601.03B
19) ExxonMobil Holdings Corp	d	+0.00	+0.00%	136.28	- 105.525 - 176.41	3.36M	564.81B
20) Applied Materials Inc	d	-47.87	-7.35%	603.04	154.48 - 739.67	5.32M	478.79B
21) Mastercard Inc	d	+16.95	+3.24%	539.39	464.58 - 601.50	1.06M	473.06B
22) AbbVie Inc	d	+10.01	+3.99%	261.07	184.65 - 261.60	1.88M	461.26B

KEY OBSERVATIONS



NVIDIA is currently the largest company in the S&P 500.



Technology companies dominate the top positions.



The S&P 500 is **market-cap weighted**, so larger companies have a greater impact on the index.



The top companies represent a **substantial share** of the U.S. equity market.

WHY IT MATTERS

- ✓ Investors often use the S&P 500 as a benchmark.
- ✓ A few **mega-cap companies** can significantly influence the index's daily performance.
- ✓ Understanding **market capitalization** helps explain why some stocks move the entire market.

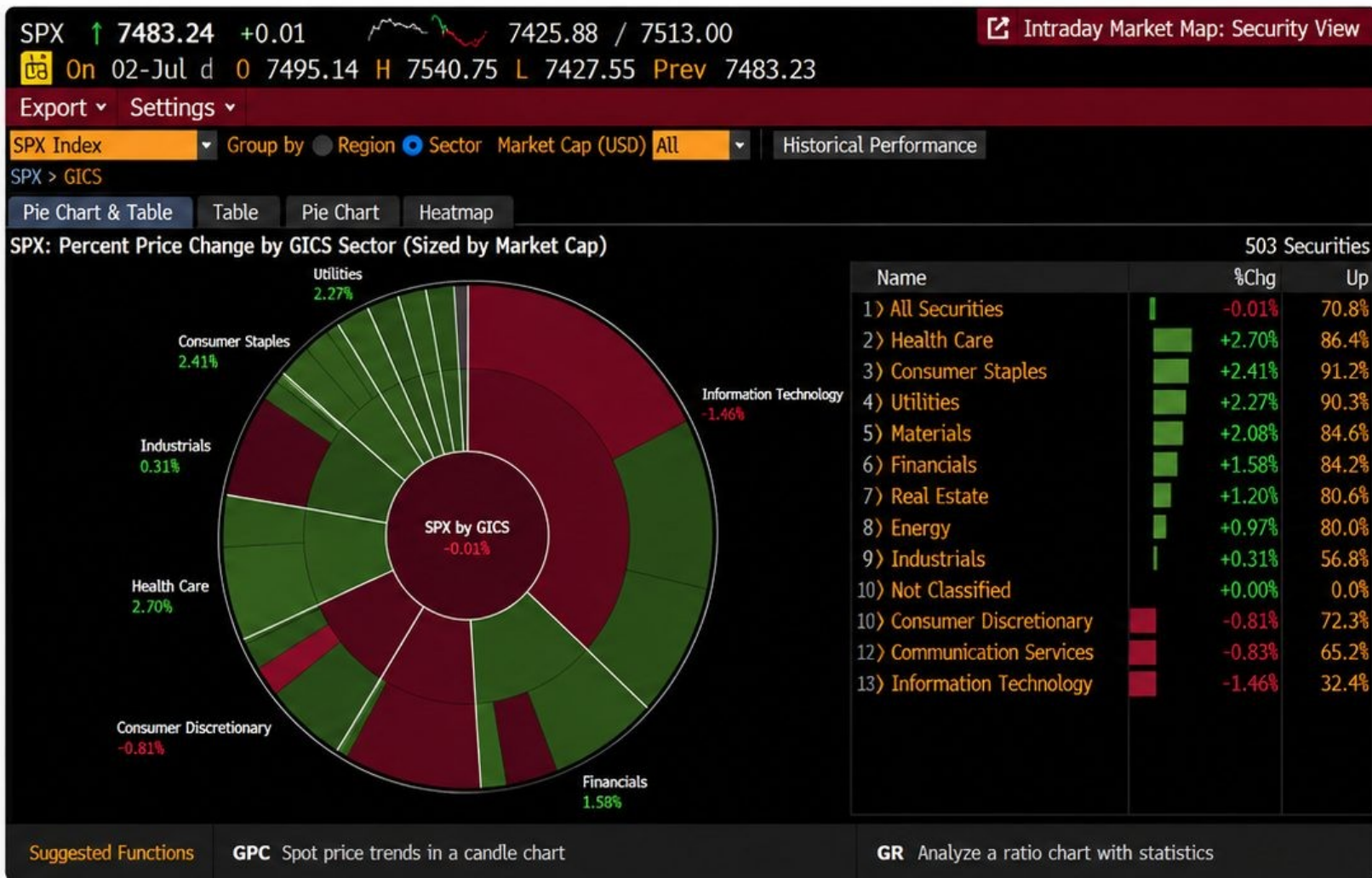


The larger the company, the greater its influence on the S&P 500 Index.



B. Stocks Classified by Sector

The S&P 500 Is Grouped by GICS Sectors



KEY TAKEAWAYS



The S&P 500 is organized using the **GICS (Global Industry Classification Standard)** sectors.



Different sectors contribute differently to the index based on their **market capitalization**.



Each sector's performance **impacts the overall movement** of the S&P 500.



Sector analysis helps investors understand **market trends, risks, and opportunities**.



WHAT THIS MEANS

- ✓ Strong sectors can **lift the market** even if weak sectors decline.
- ✓ Weak sectors can **drag the market lower** even if some sectors perform well.
- ✓ Diversification across sectors helps **manage risk** and **improve returns**.



Understanding sector performance is key to understanding the movement of the entire market.



Understanding the Main Sectors

Each sector represents a different part of the economy and includes companies with similar business activities.



Consumer Staples

Examples



What they do

Sell everyday essential products such as food, beverages, and household goods.



Consumer Discretionary

Examples



What they do

Sell non-essential products and services that consumers purchase when they have extra income.



Technology

Examples



What they do

Develop software, hardware, semiconductors, artificial intelligence, and cloud technologies.



Healthcare

Examples



What they do

Produce medicines, medical devices, and healthcare services.



Energy

Examples



What they do

Explore, produce, refine, and distribute oil and natural gas.



Financials

Examples



What they do

Provide banking, lending, investment, insurance, and payment services.



Companies in the same sector often respond similarly to changes in the economy and financial markets.



C. Value Stocks vs. Growth Stocks

Two different investment styles, each with its own characteristics.



VALUE STOCKS

What they are



Stocks that appear undervalued based on fundamentals such as earnings or book value.
Often pay dividends.

Key Characteristics



Lower price-to-earnings (P/E) ratios



Stable earnings and cash flows



Often mature, well-established companies



Typically more stable and less volatile

How they perform



Do well during: Recession or downturn



Suffer less during: Economic contractions

Examples

Johnson
Johnson

Johnson & Johnson
(Pharmaceuticals)

P&G

Procter & Gamble
(Household Products)

Coca-Cola

Coca-Cola
(Beverages)

Walmart

Walmart
(Retail)



GROWTH STOCKS

What they are



Stocks of companies expected to grow earnings faster than the market average.
Often reinvest profits instead of paying dividends.

Key Characteristics



Higher price-to-earnings (P/E) ratios



Strong revenue and earnings growth



Often younger companies in growth stages



Typically more volatile

How they perform



Do well during: Economic expansion



Suffer more during: Recession or slowdown

Examples

Tesla

Tesla
(Automobile)

NVIDIA

NVIDIA
(Semiconductors)

amazon

Amazon
(E-commerce)

Meta

Meta
(Social Media)



Neither style is "better." A **diversified portfolio** often contains a mix of both value and growth stocks.



D. Stock Classification: Defensive vs. Cyclical

Some stocks hold up better in tough times, while others perform best when the economy is strong.



DEFENSIVE STOCKS

Resilient in any economy



What they are

Companies that provide essential goods and services. Demand remains stable regardless of economic conditions.



How they perform

✓ **Do well during:** Recession or downturn

✗ **Suffer less during:** Economic contractions



Examples

**Johnson
Johnson**

Johnson & Johnson
(Pharmaceuticals)

P&G

Procter & Gamble
(Household Products)

Coca-Cola

Coca-Cola
(Beverages)

Walmart

Walmart
(Retail)



People always need these products and services, no matter what the economy is doing.

VS.



CYCLICAL STOCKS

Thrive when the economy grows



What they are

Companies that provide non-essential goods and services, such as luxury items, leisure, travel, and lifestyle products.



How they perform

✓ **Do well during:** Economic expansion

✗ **Suffer more during:** Recession or slowdown



Examples

T

Tesla
(Automobile)

DELTA

Delta Air Lines
(Travel & Leisure)

CATERPILLAR

Caterpillar
(Construction
Equipment)

**JPMORGAN
CHASE & CO.**

JPMorgan Chase
(Banking)



Their performance rises and falls with the business cycle and overall economic activity.

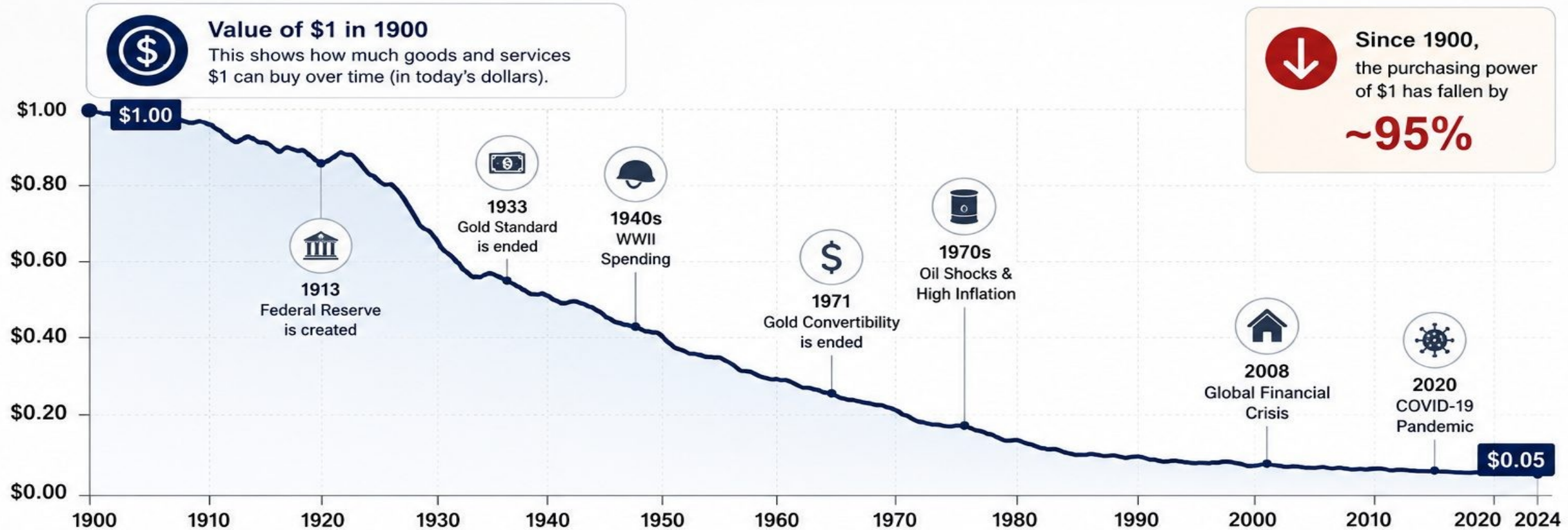


Understanding whether a stock is defensive or cyclical helps investors **manage risk** and **position portfolios** based on **economic conditions**.



The U.S. Dollar Has Lost Value Over Time

Purchasing Power of \$1 Since 1900



In 1900:

\$1 could buy about

\$26

worth of goods and services today.



In 2024:

\$1 can buy about

\$0.05

worth of goods and services today.



Key Takeaway

Inflation reduces the purchasing power of money. Investing helps your money grow and stay ahead of inflation.

The Long-Term Power of Investing

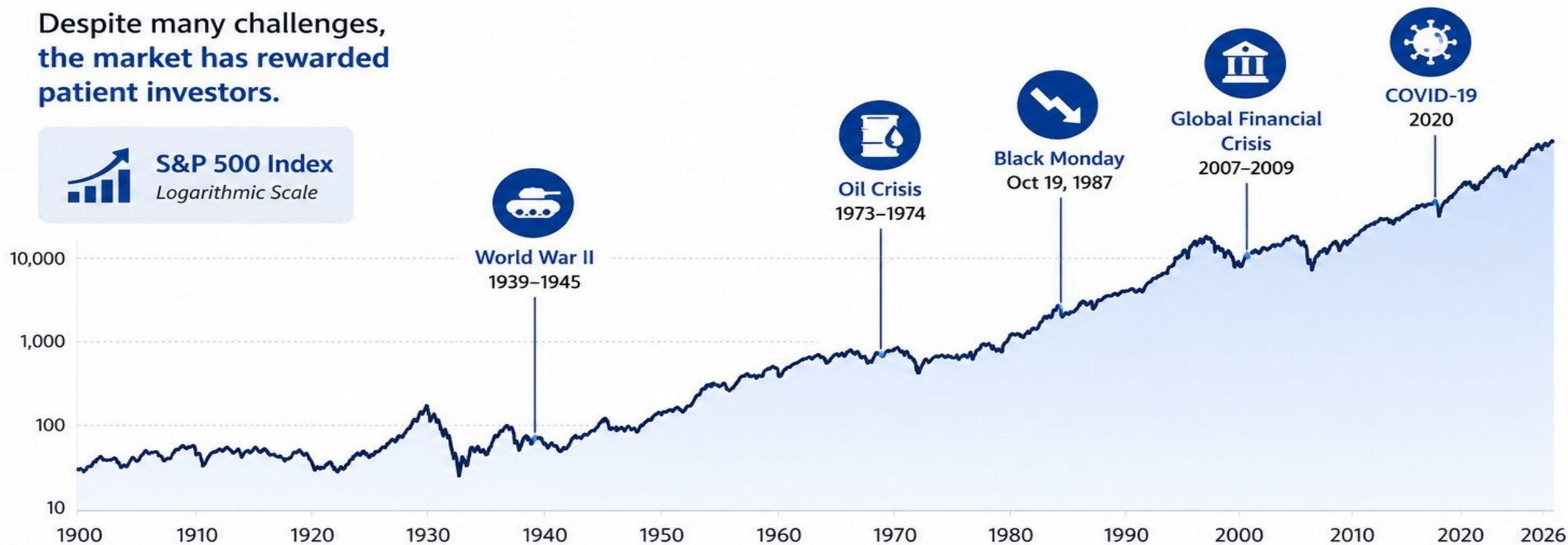
The S&P 500 Since 1900

Despite many challenges,
the market has rewarded
patient investors.



S&P 500 Index

Logarithmic Scale



Despite wars, recessions, financial crises, and pandemics,
the market continued to grow over the long term.



Market Corrections Are Normal

Historical S&P 500 Trends: What You Need to Know to Stay Calm

The S&P 500 Over the Past 100 Years



10% Corrections

- Common, about every 1–2 years



20% Bear Markets

- Happen about every 3–5 years



Average Correction

- Around 54 days



Remember

- Markets often recover after periods of panic.

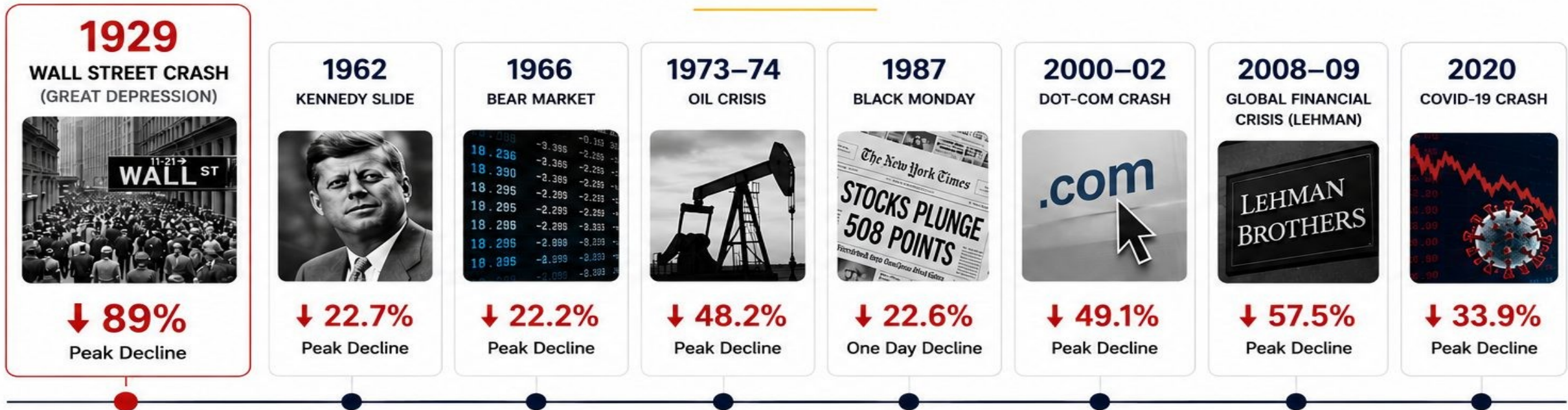


History shows that market declines are temporary, but long-term investing has rewarded patient investors.



MAJOR MARKET CRASHES IN MODERN HISTORY

Every crisis was different. **Every recovery followed.**



How Often Do Market Declines Happen?

History shows that market declines are a normal part of long-term investing.



5% Pullback

About 3 times per year



10% Correction

About every 18 months



20% Bear Market

About every 3–5 years



30%+ Major Crash

About every 10–20 years



Key Takeaway: Market declines are temporary.
Disciplined investors stay focused on the long term and have historically been rewarded.



Past performance is not indicative of future results. Declines shown are approximate peak-to-trough moves.

Why Do Most Investors Fail?

— The biggest risk is often not the market... it's our emotions. —



EMOTIONAL INVESTOR



Buys after
prices rise



Panics during
market crashes



Tries to **predict**
the market



Follows
headlines



Sells at the
worst time

VS.



DISCIPLINED INVESTOR



Invests
regularly



Thinks
long term



Ignores short-term
noise



Stays invested
during **corrections**



Lets **compounding**
work



Successful investing is less about **predicting the market...**
and more about **controlling your emotions.**



Remember: It's not about timing the market. It's about **time in the market.**

Asset Allocation Changes with Age

Your Goals, Time Horizon, and Risk Tolerance Guide Your Portfolio



Young Investor (Age 22)



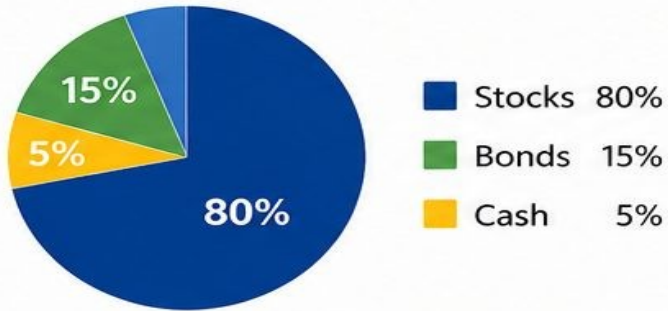
Goal
Growth



Time Horizon
40+ years



Portfolio Allocation



Focus on growth.
More risk, more potential.



Mid-Career Investor (Age 40)



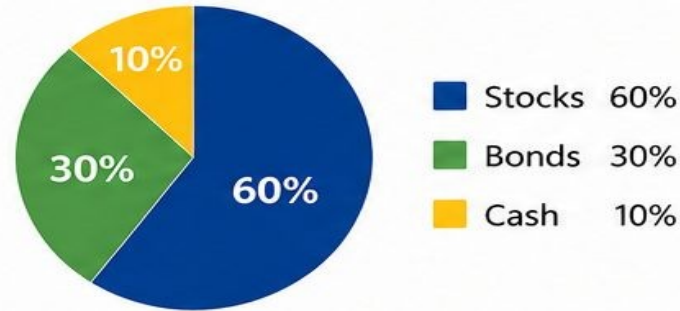
Goal
Growth + Stability



Time Horizon
15 years



Portfolio Allocation



Balance growth and safety.
Some risk is acceptable.



Retired Investor (Age 60)



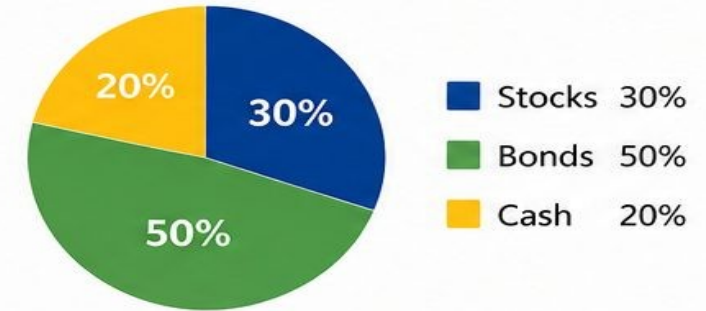
Goal
Capital Preservation



Time Horizon
Retired / Now



Portfolio Allocation



Protect your capital.
Lower risk is the priority.



As retirement gets closer, investors usually reduce risk by increasing **bonds and cash**.

Young
More Growth



Mid-Career
Balanced



Retirement
More Safety

The allocations above are examples only and not a guarantee of future results.

The Foreign Exchange Market

The world's largest financial market, operating 24 hours a day, 5 days a week.



Global & Decentralized
Traded in financial centers around the world.



High Liquidity
Daily trading volume exceeds \$7.5 trillion.



24/5 Market
Always open across major time zones.



Key Takeaway
Currencies are constantly exchanged to support global trade, investment, and travel.

USD Trade-Weighted Index

May 2025



Foreign Exchange Rates

Rates	Bid
EUR/USD	1.1345
GBP/USD	1.3552
USD/JPY	143.68
AUD/USD	0.6508
USD/CHF	0.8303



Daily Volume
\$7.5+ Trillion
(April 2025)



Major Participants
Central Banks, Commercial Banks,
Hedge Funds, Corporations,
Investors, Retail Traders



Why It Matters
FX markets keep the global economy moving by enabling international transactions.



Market Hours
Open 24 hours a day,
5 days a week



The Foreign Exchange (FX) Market

The world's largest financial market



Largest Market

The FX market is the most liquid financial market in the world, with over **\$6.6 trillion** traded daily.



No Central Exchange

Unlike stock exchanges (NYSE, Nasdaq), forex is OTC (over-the-counter). Trades occur electronically between banks, brokers, and institutions, without a centralized location.



24-Hour Market

Operates **24 hours a day, 5 days a week**, across major global financial centers.

Sydney → Tokyo → London → New York → back to Sydney



Types of FX Transactions



Spot Transactions

Immediate exchange of currencies.



Forward Contracts

Lock in exchange rate for a future date.



FX Swaps

Combine spot & forward to manage timing.



Options Contracts

Right (not obligation) to exchange at a set rate in the future.



Use in Practice

Investors and companies use forwards, options, and futures to **hedge** currency risk or **speculate** on exchange rate movements based on their time horizon.



Key Takeaway

The FX market connects the world. It is global, decentralized, and always open. It plays a key role in international trade, travel, investment, and managing currency risk.



Base Currency vs Quoted Currency



Exchange Rate = Price of 1 unit of the base currency in terms of the quoted currency.



Currency Pairs are Quoted as:

X / Y

- **X = Base Currency**
(the currency being valued)
- **Y = Quoted Currency**
(the currency used to value X)



Examples:



EUR/USD

1.1345



€1 = \$1.1345

(1 Euro costs 1.1345 US Dollars)



USD/JPY

143.68



\$1 = ¥143.68

(1 US Dollar costs 143.68 Japanese Yen)



The first currency is always the **base currency**, and the second is the **quoted (or variable) currency**.



Key Takeaway

The exchange rate tells us how much of the quoted currency is needed to buy one unit of the base currency.



Exceptions to USD as Base Currency



In most FX quotes, **USD is the base currency**, but not always.



Major Exceptions (USD is the quoted currency)

- EUR/USD
- GBP/USD
- AUD/USD
- NZD/USD
- USD/JPY
- USD/CHF



Cross Currency Pairs (USD not involved)

- EUR/GBP
- EUR/JPY
- GBP/JPY
- EUR/CHF



Currency Codes

EUR	=	Euro
GBP	=	British Pound
JPY	=	Japanese Yen
AUD	=	Australian Dollar
CHF	=	Swiss Franc
USD	=	US Dollar



Key Takeaway

The USD is one side of most currency pairs, but there are important exceptions. It is essential to know which currency is the base and which is the quoted currency.



“ Quoting Conventions



Quoting Conventions

Like all financial products, Forex quotes include “**Bid**” and “**Ask**”.



Bid: Offer to buy the base currency



Ask: Offer to sell the base currency



Ask price is always **higher** than the Bid price



Market makers buy at the **Bid** and sell at the **Ask**



Traders buy at the higher **Ask** and sell at the lower **Bid**



Example: EUR/USD

Bid
1.1345

Ask
1.1348



3 pip spread
defines trader cost
and market maker profit

Source: Bloomberg – ALLQ



What Happens When the Exchange Rate Moves?

Understanding base vs. quoted currency helps interpret market movements.



Moves Up

- The base currency is getting **stronger**
- The quoted currency is getting **weaker**



Moves Down

- The base currency is getting **weaker**
- The quoted currency is getting **stronger**

Source: Bloomberg – GP, WCRS, RFQ



Key Takeaway

Every FX quote has two prices: the Bid and the Ask.
You buy at the Ask and sell at the Bid.
The difference between them is called the spread.
This spread is the cost for traders and the profit for market makers.





What Happens When the Exchange Rate Moves?

Understanding base vs. quoted currency helps interpret market movements.



GBP/USD (British Pound / US Dollar)

Example Move:

1.3000 → 1.3552 ↑



Moves Up

- The base currency (GBP) is getting **stronger**
- The quoted currency (USD) is getting **weaker**



If the rate goes up, the base currency **strengthens** and the quoted currency **weakens**.



USD/JPY (US Dollar / Japanese Yen)

Example Move:

150.00 → 143.68 ↓



Moves Down

- The base currency (USD) is getting **weaker**
- The quoted currency (JPY) is getting **stronger**



If the rate goes down, the base currency **weakens** and the quoted currency **strengthens**.



Key Takeaway

Always look at the currency pair as X / Y.

If the rate goes **up** → X (base) gets **stronger**, Y (quoted) gets **weaker**.

If the rate goes **down** → X (base) gets **weaker**, Y (quoted) gets **stronger**.





Foreign Exchange Rates – Live Quotes

These are current market quotes for major currency pairs.



The **exchange rate** shows how much of the **quoted currency** is needed to buy 1 unit of the base currency.



How to Read

- **First currency = Base Currency**
(the currency being valued)
- **Second currency = Quoted Currency**
(the currency used to value the base)



Example

EUR/USD 1.1345 → 1 Euro costs 1.1345 US Dollars



Quotes change continuously as the market moves.



Live FX Rates

As of today

Currency Pair		Bid
	EUR/USD	1.1345
	GBP/USD	1.3552
	USD/JPY	143.68
	AUD/USD	0.6508
	USD/CHF	0.8303



Key Takeaway

Always check both the currency pair and the rate carefully.
Small changes in the rate can have a big impact.



1

The Spot Market

The simplest way to buy or sell a currency at today's price.



Buy or sell today

You exchange one currency for another at the current market price.



Settlement usually T+2

The exchange rate is agreed today, but the actual exchange of money happens in two business days.



Used by many

Banks, central banks, companies, importers, exporters, investors and travelers.

EXAMPLE

Today: **EUR/USD = 1.1700**

A company wants to buy EUR 1,000,000.



They pay:

EUR 1,000,000 × 1.1700

= USD 1,170,000



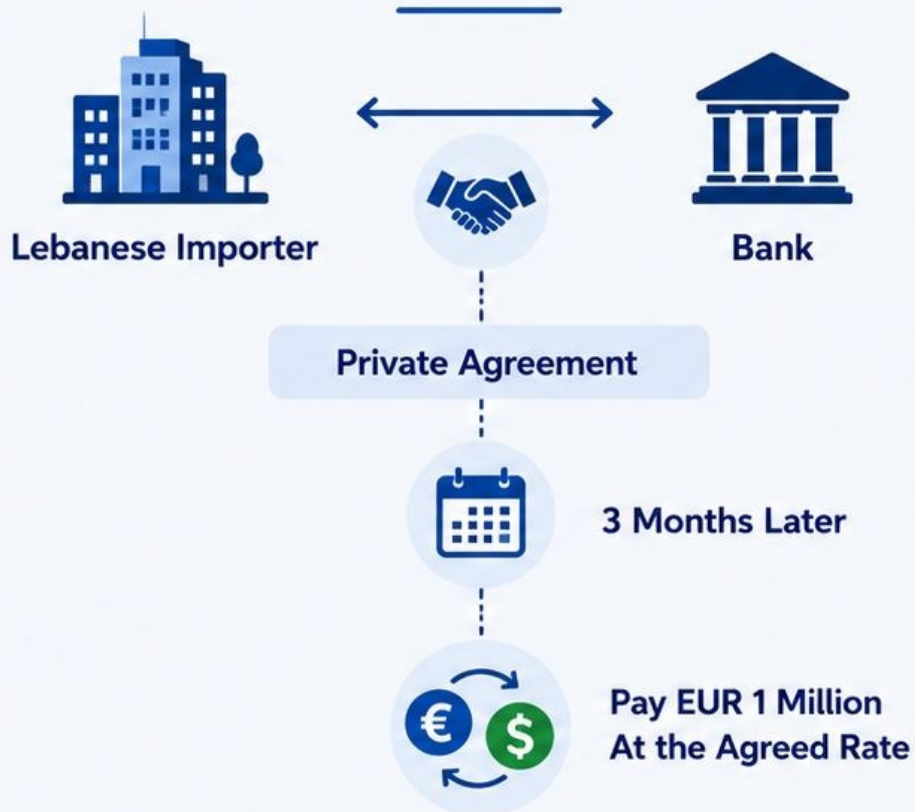
The exchange rate is fixed today.
Settlement is usually in two business days (T+2).

2

The Foreign Exchange Forward Market

An FX forward is a private agreement to exchange currencies at a fixed rate on a future date.

How an FX Forward Works



What is a Forward Contract?

- ✓ Agreement made today
- ✓ Exchange currencies later
- ✓ Exchange rate fixed today
- ✓ Private agreement (OTC)



Why Use FX Forwards?



Hedge
exchange-rate risk



Plan future
cash flows



Protect import and
export payments

Key Features



Flexible
contract



Any maturity
date



OTC
transaction



No daily
settlement



A forward contract is like making a private agreement with your bank.



3

The Foreign Exchange Futures Market

FX futures are standardized contracts traded on an exchange to buy or sell a currency in the future.

How an FX Future Works



What is an FX Future?



- ✓ Similar purpose as forwards
- ✓ Traded on an organized exchange
- ✓ Standardized contracts
- ✓ Fixed contract size
- ✓ Fixed expiry dates
- ✓ Margin required
- ✓ Daily mark-to-market



Why Use FX Futures?



Hedge
currency risk



Speculate on
exchange rate moves



Arbitrage price
differences

Key Features



Standardized
contract



Fixed expiry
dates



Margin
required



Daily
mark-to-market



Traded on an
exchange



A futures contract is like buying a standard contract on an exchange.



Example: Buying an FX Futures Contract

See how an FX futures contract works in practice.

TRADE DETAILS (TODAY)



Today
May 30, 2025



EUR/USD Futures Price
1.1700



Contract Size
EUR 125,000



Initial Margin
USD 5,000



Expiry
3 Months (August 30, 2025)



WHAT HAPPENS AT EXPIRY?

1

SCENARIO 1 – PRICE GOES UP



At expiry:
EUR/USD = **1.1900**

Gain = $(1.1900 - 1.1700)$
× EUR 125,000
= **USD 2,500 Profit**



2

SCENARIO 2 – PRICE GOES DOWN



At expiry:
EUR/USD = **1.1600**

Loss = $(1.1600 - 1.1700)$
× EUR 125,000
= **USD 1,250 Loss**



Futures contracts are marked-to-market every day.
Profits are added to your account and losses are deducted.



Only a margin is deposited, but profits and losses are settled every day (mark-to-market).



Understanding Initial Margin and Daily Mark-to-Market

Futures allow you to control a large position by depositing only a small margin.



What is Initial Margin?

Initial margin is a **SECURITY DEPOSIT**, not the cost of the contract.

Example



Contract Size
EUR 125,000



Futures Price
1.1700 (EUR/USD)



Contract Value
 $\text{EUR } 125,000 \times 1.1700$
= USD 146,250



Initial Margin
USD 5,000



You control a contract worth
USD 146,250
by depositing only **USD 5,000**.

Daily Mark-to-Market: How It Works

Futures are **marked-to-market every day**.
Profits and losses are credited or debited from your account.

DAY 1
Price goes up



Futures price moves
from 1.1700 to **1.1750**
Change = +0.0050
 $0.0050 \times \text{EUR } 125,000$
= USD 625

USD 625
credited to
your account

DAY 2
Price goes down



Futures price moves
from 1.1750 to **1.1680**
Change = -0.0070
 $-0.0070 \times \text{EUR } 125,000$
= USD -875

USD 875
deducted from
your account

DAY 3
Small move



Futures price moves
from 1.1680 to **1.1690**
Change = +0.0010
 $0.0010 \times \text{EUR } 125,000$
= USD 125

USD 125
credited to
your account

Key Points



You deposit only a small margin, not the full contract value.



Positions are marked-to-market every day.



Profits are added to your account. Losses are deducted.



If your account balance falls below the maintenance margin, you will receive a margin call.



This system ensures that both sides of the contract are protected.



Margin allows investors to control large positions with a relatively small cash deposit, while profits and losses are settled every day.



FROM THEORY TO PRACTICE

Today you've learned the foundations of portfolio management.
In our next session, you'll apply them in a real market environment.

TODAY YOU LEARNED

-  Portfolio Management 
-  Bonds 
-  Stocks 
-  Commodities 
-  Foreign Exchange 



LEARN

Build knowledge



ANALYZE

Understand the market



INVEST

Make decisions



EVALUATE RESULTS

Measure performance

IN OUR NEXT SESSION YOU WILL

-  Build a Portfolio
-  Analyze Markets
-  Manage Risk
-  Make Investment Decisions
-  Compete with Other Teams



Knowledge is important. **Applying it** is what makes a great investor.



BANQUE DU LIBAN
مصرف لبنان

The BDL Trading Simulation

In our next session, you'll experience six years of financial markets in a single simulation.



DURING THE SIMULATION YOU WILL

- Work as a Team
- Build a Portfolio
- Submit Your Trades
- Track Your Performance
- Climb the Leaderboard



Every investment decision is based on **real historical market events.**

THE CHALLENGE

In our next session...

You are no longer just students.
You become portfolio managers.



Represent one of history's **legendary** investors.



Analyze the markets.



Build your portfolio.



Compete against other teams.



CAN YOU BEAT DUSTY?

- He **doesn't** read research reports.
- He **doesn't follow** the news.
- He **doesn't** understand economics.

He trades completely at random... and sometimes still wins.



The market doesn't reward opinions. It rewards **good decisions**.



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Access today's lecture and prepare for Friday

Scan the QR code or visit the website. You will find today's presentation and the preparation material for Friday's trading simulation.

- 1 Go to financialmarketsmadesimple.com
- 2 Open "Portfolio Management — Lecture Slides" for today's presentation
- 3 Open "Banque du Liban — ESA Trading Simulation"
- 4 Complete Step 1 and Step 2 before Friday



PLEASE COMPLETE STEPS 1 AND 2 BEFORE FRIDAY'S SIMULATION

Today's presentation is available on the website. For Friday: watch the pre-reading videos and read the guide.

financialmarketsmadesimple.com

THE END

Congratulations on completing
Foreign Exchange Fundamentals.



You've built a strong foundation
in financial markets.



Keep learning, keep practicing,
and stay curious.



Work together, challenge
ideas, and grow as a team.



The best investors never stop
learning.

“ The goal of investing is not to
beat others at their game.
The goal is to control yourself
at your own game. ”

– Benjamin Graham



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Thank you for your participation.
We look forward to seeing you in action!

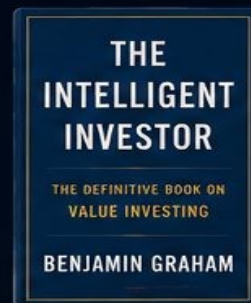


Markets change every day.
Principles last forever.

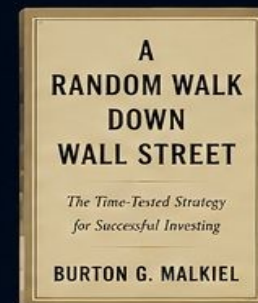


RECOMMENDED RESOURCES

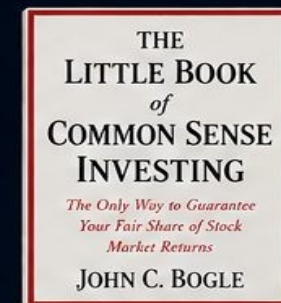
If you want to go deeper, these books are
excellent next steps.



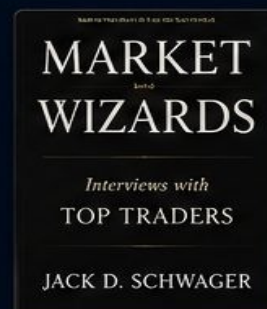
The Intelligent Investor
Benjamin Graham



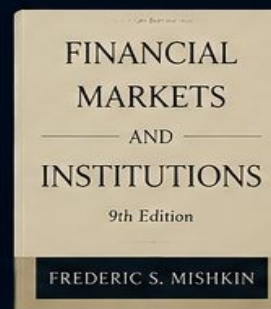
**A Random Walk
Down Wall Street**
Burton G. Malkiel



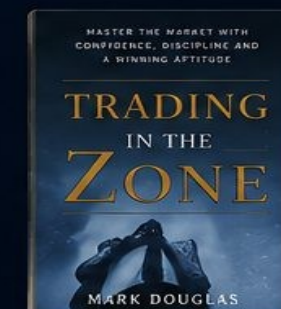
**The Little Book of
Common Sense Investing**
John C. Bogle



Market Wizards
Jack D. Schwager



**Financial Markets
and Institutions**
Frederic S. Mishkin



Trading in the Zone
Mark Douglas