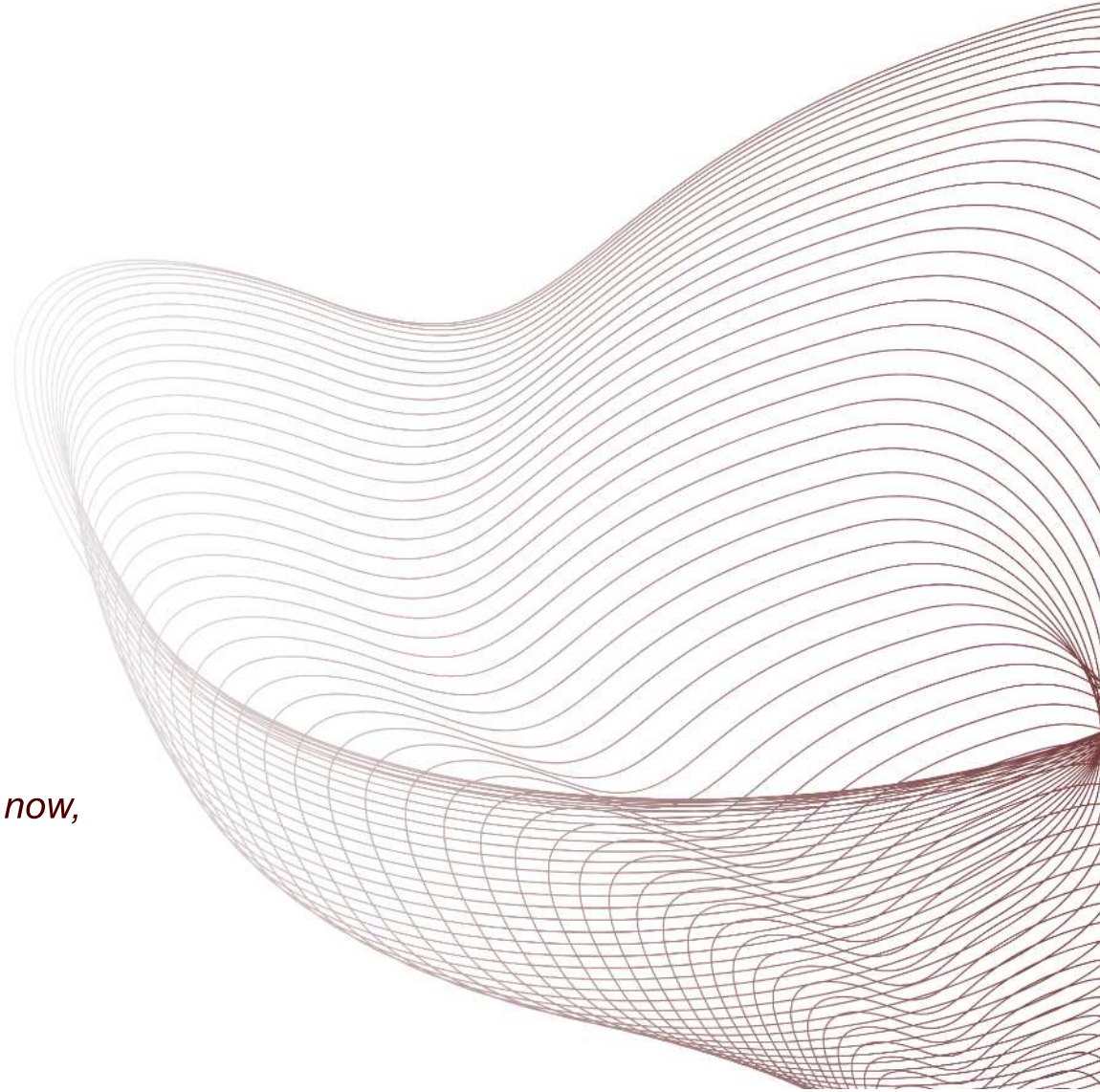


Introduction to Finance

September 25th, 2023

*Talk to your neighbor: If Logan gave you \$100 right now,
what would you do with it?*



Curriculum

1. **Introduction to Finance**
2. Investment Analysis (10/2)
3. How Businesses Work (10/16)
4. Income Statement (10/23)
5. Balance Sheet (10/30)
6. Cash Flow Statement (11/6)
7. Valuation Pt. I (11/13)
8. Valuation Pt. II (11/20)
9. How to Analyze a Stock (11/27)
10. How to Pitch a Stock (12/4)

What Can You Do With Money?

Spend It!



Invest/Save



What do we
end up doing
with money that
we save/invest?

What Can You Do With Money?

SPEND IT!!!

Today Or Next Year?

Would you rather go to NG this Friday, or next year?

How much would you pay TODAY, for a drink on Friday vs. a drink a year from now?

Would you rather have a new car today, or next year?

How much would you pay TODAY, for a car today vs. the same car a year from now?

Would you rather have new shoes today, or next year?

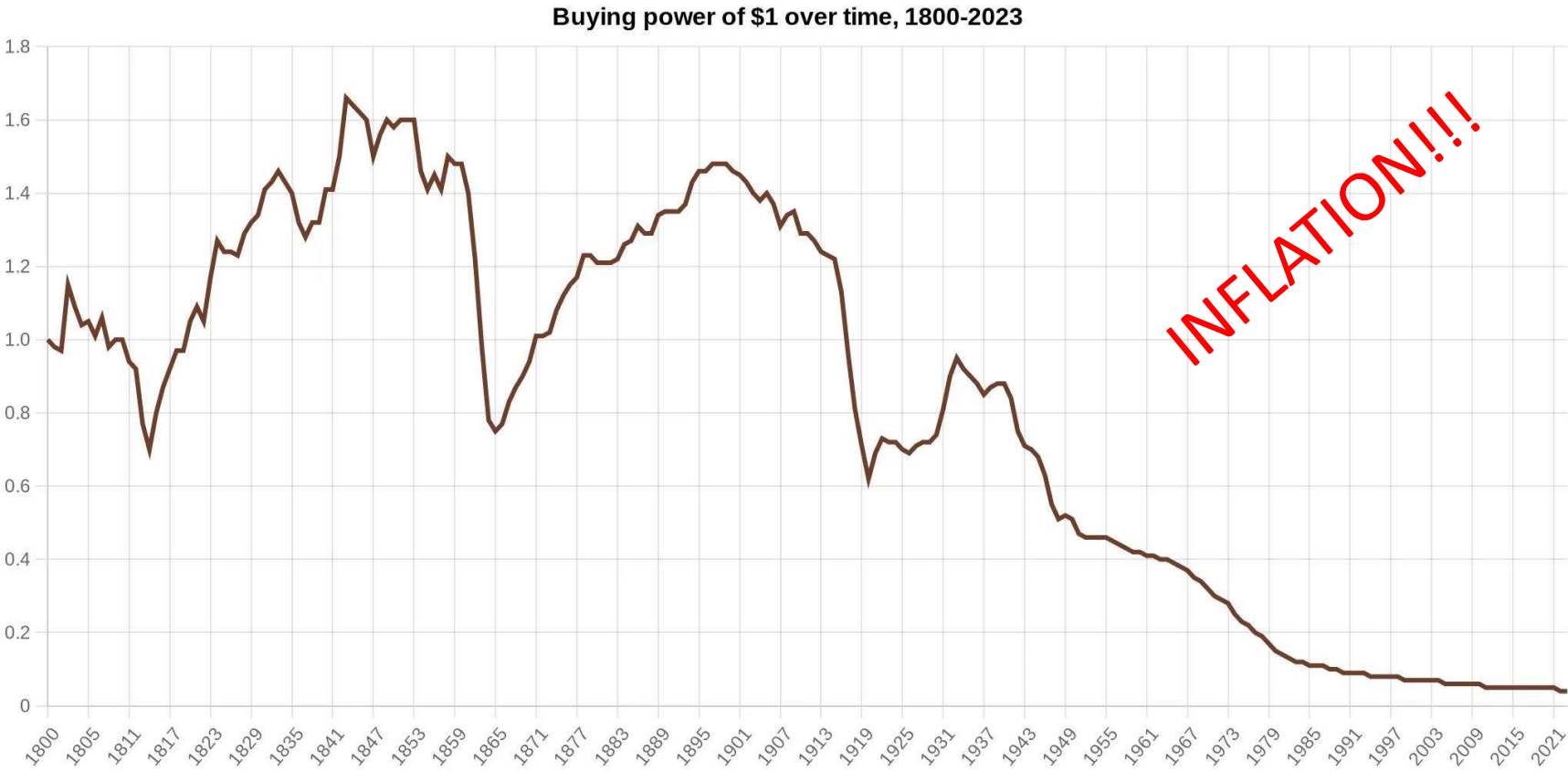
How much would you pay TODAY, for a pair of shoes today vs. the same pair of shoes a year from now?

Today Or Next Year?

The bottom line:

We all agree having stuff today is worth more than having it later. Therefore, money is worth more today than it is later.

Why Else Is A Dollar Today Worth More Than A Dollar Tomorrow?



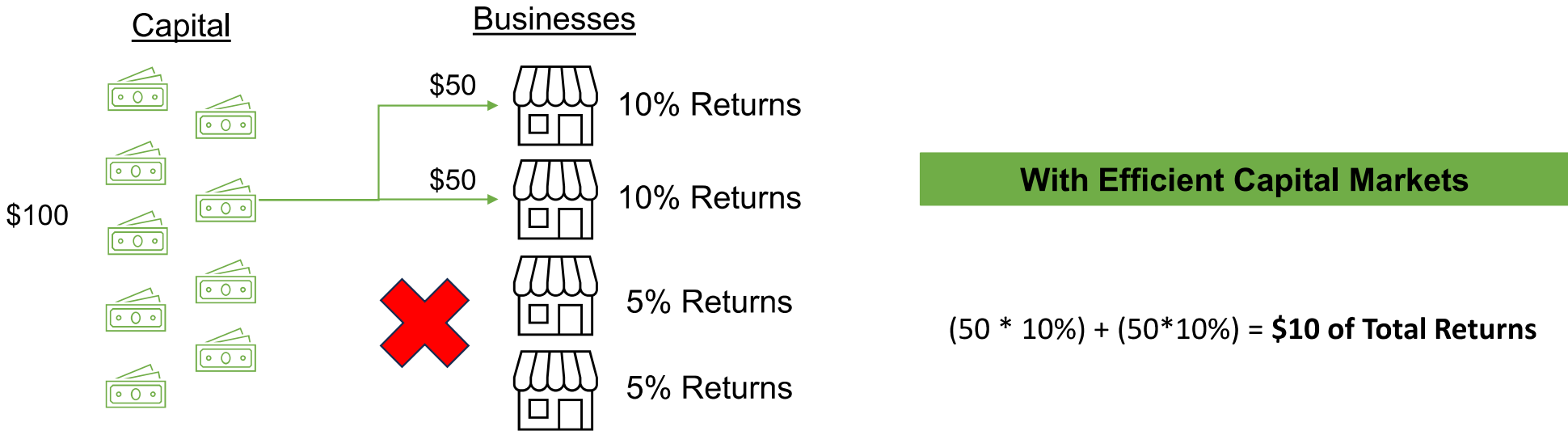
Introducing the Time Value of Money

1. We would rather spend money on things today than in the future.
2. Inflation slowly eats away at the purchasing power of each dollar, making \$1 today only ~\$0.98 next year, assuming 2% inflation.
 $(1/(1+.02)) = .9803$
3. Risk and uncertainty: How likely am I to receive the money in the future? (Investing & Lending)

So... What Is Finance?

Finance is defined as the **management of capital**; this includes money (cash), loans, stocks, bonds, land, equipment, buildings, and even human capital (people).

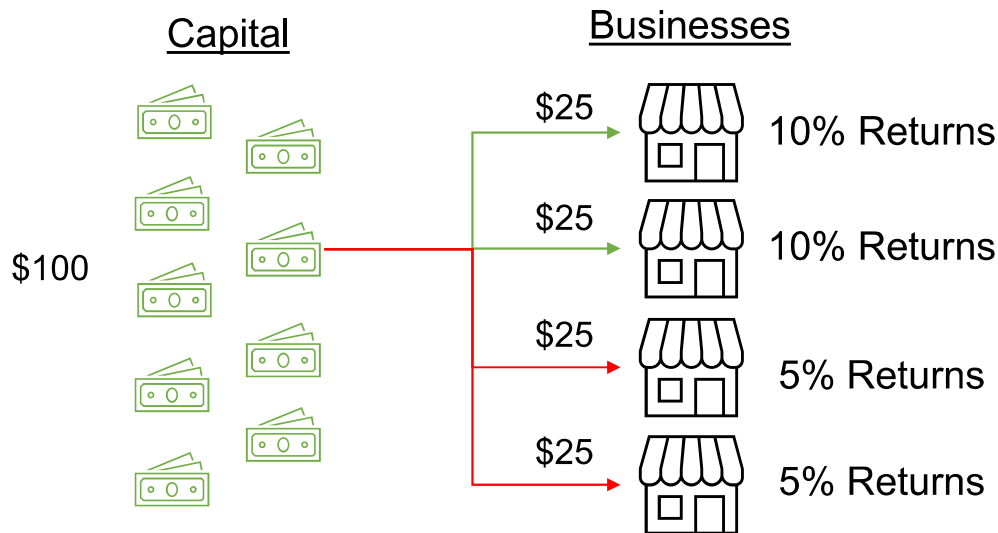
Efficiently allocating capital to its best uses (highest returns) generates the greatest value for society.



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Without Efficient Capital Markets

$$(25 * 10\%) + (25 * 10\%) + (25 * 5\%) + (25 * 5\%) = \mathbf{\$7.50 \text{ of Total Returns}}$$

A Look Into Capital Markets

(Ownership)



Stock Markets (Public Equities)

- Businesses need cash to operate
- Can issue shares on public markets in return for cash

(Lending)



Public Debt Markets

- Businesses need cash to operate
- Can issue bonds on public markets in return for cash



Sovereign Debt Markets

- Governments borrow money to fund operations
- Can issue debt on public markets in return for cash



Real Estate Markets (Commercial & Residential)

- Businesses and governments need buildings and land to operate
- Consumers need buildings and land to live



Private Debt/Equity Markets

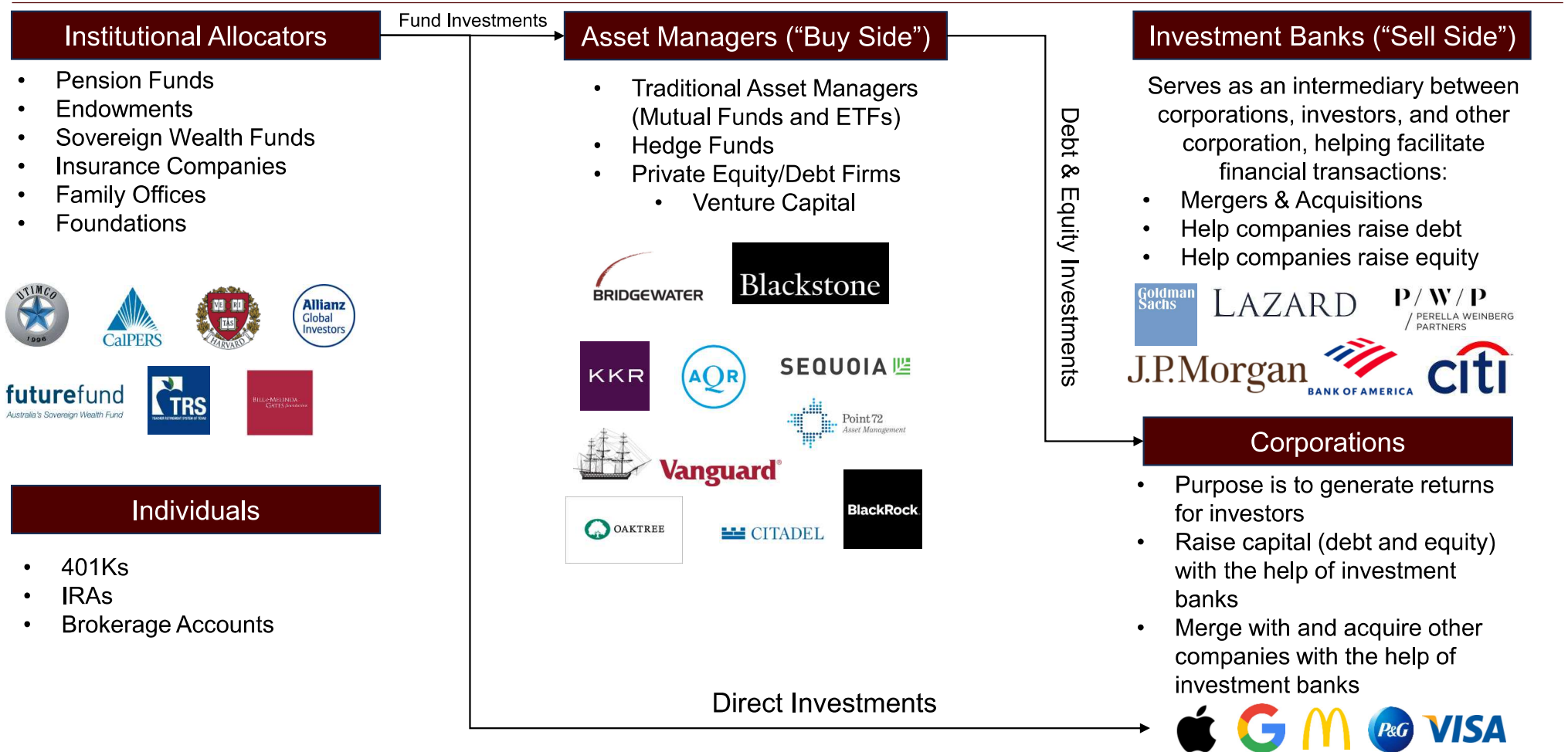
- If businesses are not large enough to go public, they can raise capital through private markets



Commodities Markets

- Provides producers and consumers of commodities a standardized market for hedging, and a place for investors to speculate

A highly simplified map of the world of finance



Starting with corporate finance

Corporate finance answers the questions of:

- How a company raises capital
- How much capital and what kinds of capital should be raised (debt or equity)
- What investments should be made
- How much capital, if any, should be returned to shareholders

1940



1965

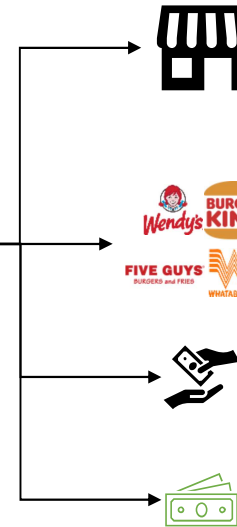


- Everyone loves McDonalds burgers, and stores are highly efficient, generating economic profits.
- **What should McDonalds do?**
- EXPAND! But with what capital?

- In 1965, McDonalds raised ~\$6M from its IPO.
- In an IPO, companies sell shares (ownership) of the business in exchange for cash.

Today

McDonald's generates cash...
what should they do with it?



Capital Expenditures

Open New Stores
Remodel Existing Stores
Build New Distribution Centers

Acquire Existing Businesses

Pay Down Debt (high rates)

Pay Dividends
Buy Back Stock

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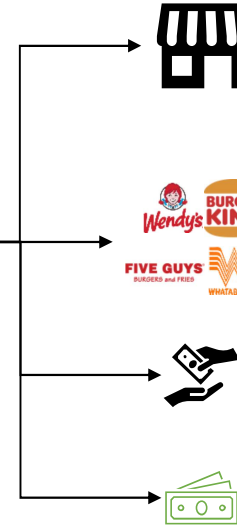


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Organic Growth

Inorganic Growth

Pay Down Debt (high rates)

Returning Capital To Shareholders

Moving on to investment banks (“Sell-side”)

Investment banks are financial intermediaries (middlemen) between corporations, investors, and other corporations, helping facilitate complex financial transactions:

- Mergers & Acquisitions (Buying and selling of companies and other financial assets)
- Debt Capital Markets (Help companies raise debt)
- Equity Capital Markets (Help companies raise equity)
- Restructuring (Help companies with capital structure changes to help them survive, also bankruptcies and liquidations)
- Sales & Trading, Asset Management, Equity Research, etc. (Not core IB products)

Mergers & Acquisitions

McDonalds has extra cash, but nowhere to invest it. They're looking to acquire a company, because they think they can cut costs at that business.

Acquirer



Target



J.P.Morgan

Role of Goldman

- Start a conversation with Whataburger
- Conduct due diligence
- Value the business (what price should MCD pay?)
- Negotiate terms and price
- Help raise capital for the purchase (if they don't use only cash on their balance sheet)

Equity Capital Markets

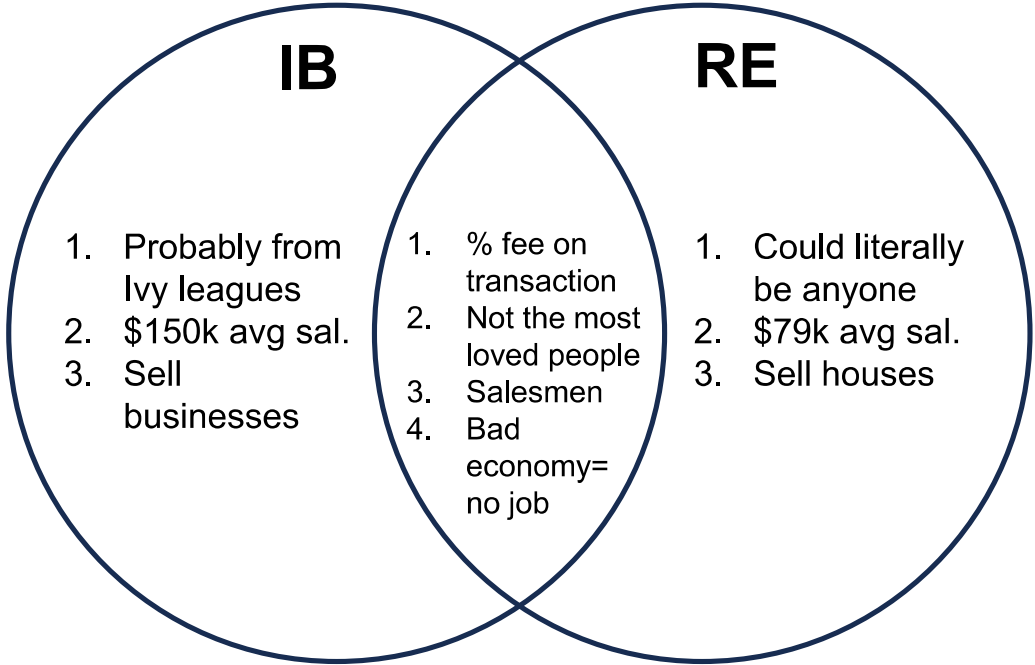
McDonalds is going public (let's pretend it's 1965), because they need cash to grow. But... how do you go public?



Role of Goldman

- Underwrite the IPO; process of valuing the shares, purchasing them, and selling them to the public
- Generate interest for the shares via a roadshow
- Invite institutional investors to submit bids for how many shares they would be willing to buy and at what price (called book-building)

How I think of Investment Bankers

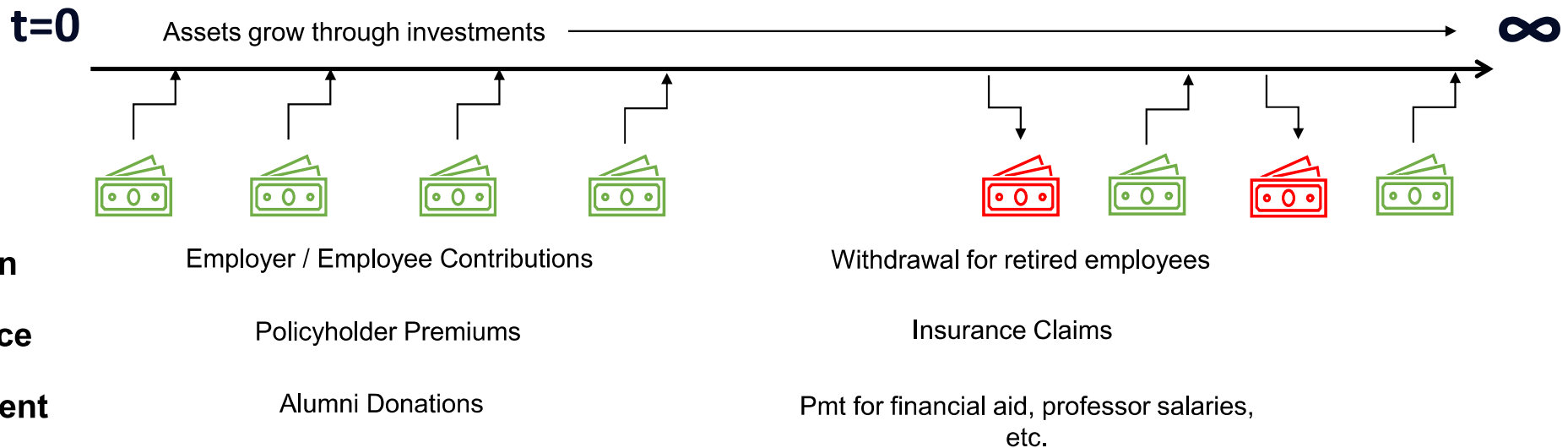


Investment Bankers are essentially fancy real estate agents that sell businesses instead of houses

Who are institutional allocators?

Institutional Allocators include:

- Pension Funds – Pay for employees' retirement.
- Insurance Companies – Pay for policyholder insurance claims.
- Endowments – Pay for future needs of a University.
- Sovereign Wealth Funds – Pay for future needs of a country.
- Family Offices – Preserve/grow the wealth of a family for current and future generations.
- Foundations – Fund whatever cause the foundation is there to support.



Biggest institutional allocators

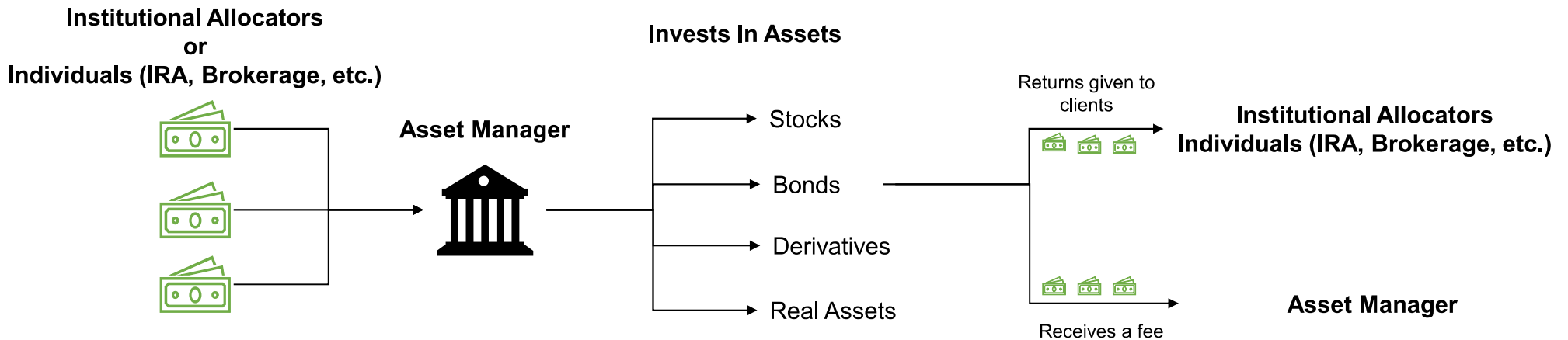
Asset Owner	Country	Type of Fund	\$ Assets Owned
Government Pension Investment Fund	Japan	Pension Fund	\$1.731T
Norges Bank Investment Management	Norway	Pension Fund	\$1.402T
China Investment Corporation	China	Sovereign Wealth Fund	\$1.222T
SAFE Investment Company	China	Sovereign Wealth Fund	\$980B
National Pension	South Korea	Pension Fund	\$798B
Federal Retirement Thrift	United States	Pension Fund	\$774B
GIC Private Limited	Singapore	Sovereign Wealth Fund	\$744B
Kuwait Investment Authority	Kuwait	Sovereign Wealth Fund	\$738B

Who are asset managers?

Asset managers manage funds on behalf of clients

There are many different types of asset management firms, including:

- Traditional Asset Managers (Mutual Funds & Separately Managed Accounts)
- Hedge Funds
- Private Equity/Debt Firms
 - Venture Capital (a subtype of private equity)
- Wealth Management Firms (Managing money for individuals)



Who are asset managers?

Traditional Asset Managers

Traditional asset managers offer **mutual funds**, **ETFs**, and **institutional accounts** (separately managed accounts).

Includes a variety of asset classes, including stocks, bonds, commodities, and real estate.

GENERALLY SPEAKING:

Mutual funds are **long-only**, do **not use leverage (debt)**, and performance is measured in **relative terms**, not absolute.

BlackRock

\$9.425T AUM



Vanguard

\$7.25T AUM



\$3.88T AUM



CAPITAL GROUP

\$2.30T AUM

Hedge Funds

Unlike mutual funds, hedge funds are generally in the game of **absolute** returns, and often **use leverage** (debt).

Strategies Include:

- Long/Short Equity
- Short Only
- Global Macro
- Event Driven (Special Situations)
- Fixed-Income Arbitrage (Debt)
- Futures/ Commodity Trading Advisors



B.A.M.
BALYASNY ASSET MANAGEMENT L.P.



DE Shaw & Co



THE BAUPOST GROUP

Private Equity/Debt

Private Equity/Debt Funds invest in private companies, ranging from early-stage startups to leveraged buyouts of multi-billion-dollar corporations.

Strategies Include:

- Venture Capital
- Growth Equity
- Leveraged Buyouts
- Real Estate Debt
- Distressed Debt
- Infrastructure
- Litigation Finance, etc.

Blackstone

Advent International
GLOBAL PRIVATE EQUITY



ARES

SEQUOIA

THE CARLYLE GROUP
GLOBAL ALTERNATIVE ASSET MANAGEMENT

APOLLO

There are a multitude of career paths within these industries

Investment Banking

Need to be/have:

- Competitive and willing to work long hours
- Attention to detail
- Interested in deals rather than just following markets / investing

Analyst: \$150K - \$200K

Associate: \$250K - \$400K

Vice President: \$500K - \$700K

Director / SVP: \$600K - \$800K

Managing Director (MD): \$700K - \$1.5M+

Private Equity

Need to be/have:

- Competitive and willing to work long hours
- Interested in investing AND deals, as PE involves both
- Interested in long-term projects, building portfolio companies over several years

Analyst: \$100K - \$150K

Associate: \$150K - \$300K

Vice President: \$350K - \$500K

Director / Principal: \$500K - \$800K

Managing Director (MD): \$700K - \$2M+

Hedge Fund

Need to be/have:

- Passionate about markets and investing
- Intellectually curious and willingness to learn
- Critical and creative thinking ability

Analyst: \$250K - \$300K

Senior Analyst / Sector Head: \$500K - \$1M

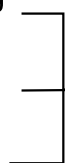
Portfolio Manager: \$500K - \$3M+

Corporate Finance

Financial Planning & Analysis

Controller

Treasurer



CFO
>\$300K

60% stay in corporate finance

10% move to IB/VC

20% move to consulting

10% move to sales/marketing/risk

Wealth Management

- Better work/life balance than most other finance roles
- Develop long-dated relationships with clients
- Can apply strategies to your own personal finances

Analyst: \$80K - \$100K

Associate: \$90K - \$120K

Relationship Manager: \$150K - \$500K

Senior Manager: \$250K - \$1M

Partner: \$500K+

What you should takeaway from today

- A dollar today is worth more than a dollar tomorrow (Time Value of Money)
- Finance relates to the management and allocation of capital
- Capital markets help efficiently allocate assets across different uses, maximizing economic growth and productivity
- Institutional allocators, individuals, asset managers, investment banks, and corporations all play a unique role in the allocation of capital across the economy
- There are an unlimited number of high-paying career paths you can pursue within the world of finance and investing