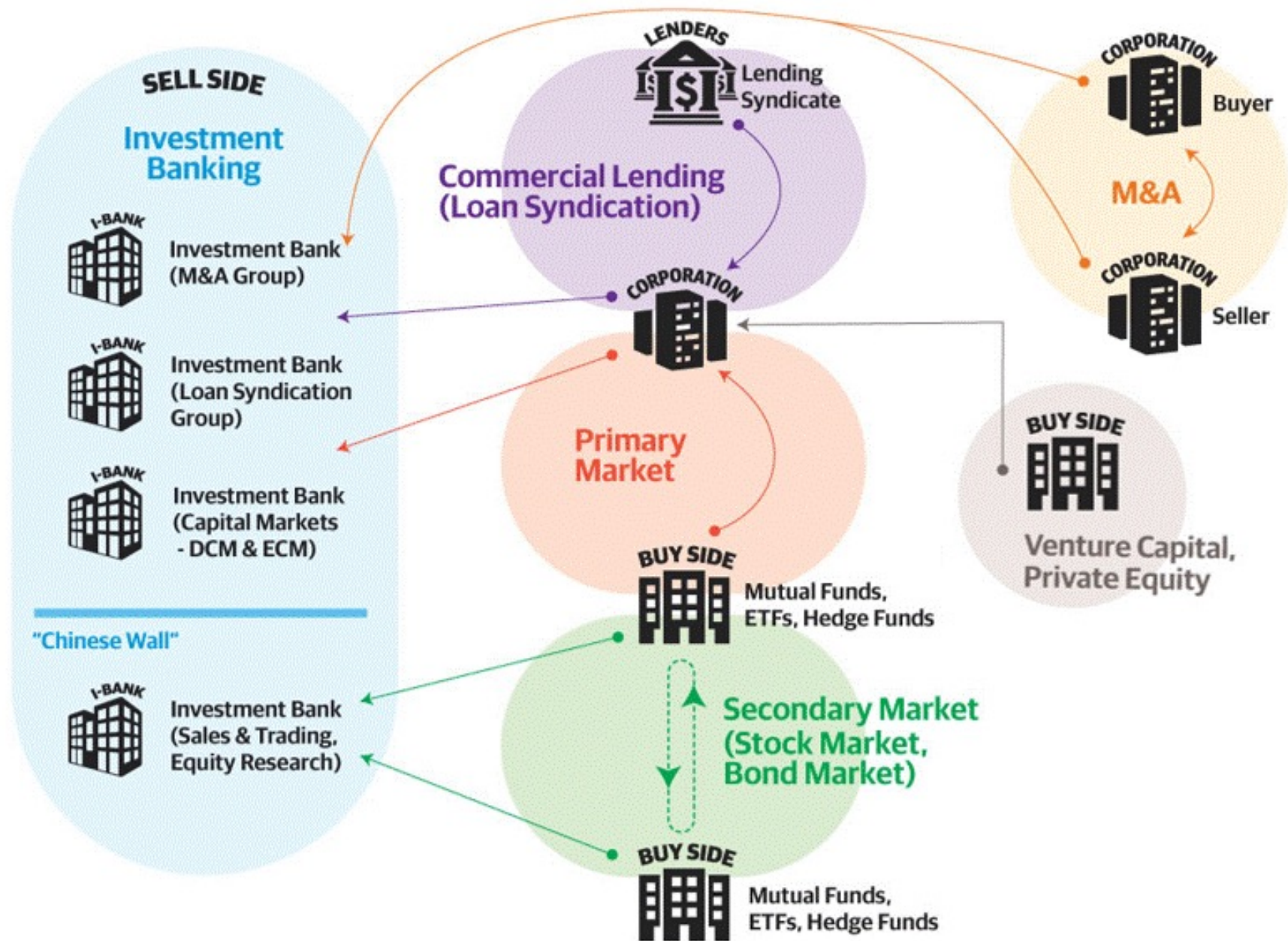


INTRO TO FINANCE



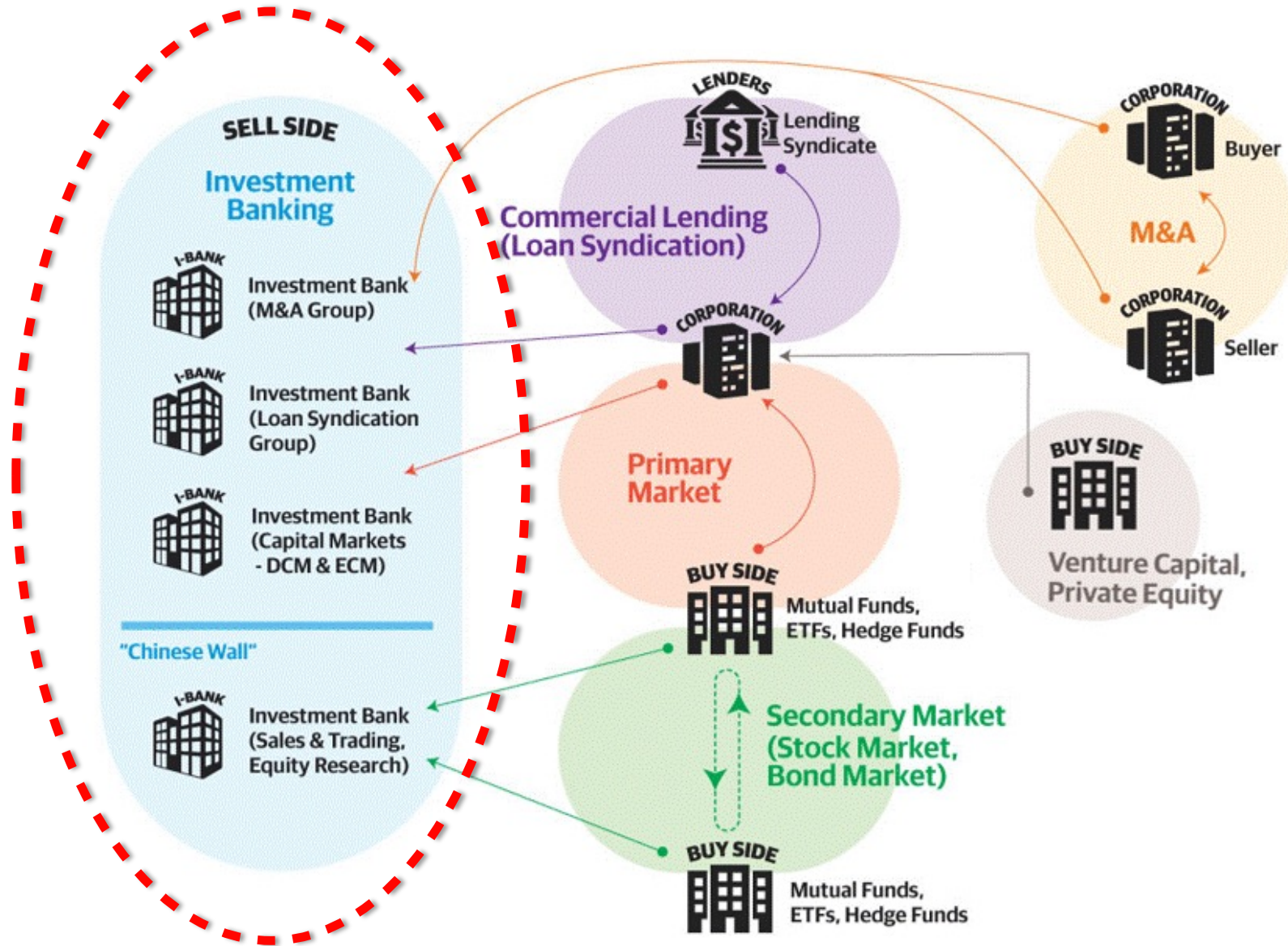


Source: Wall Street Prep

THE SELL SIDE



DRILLING DOWN – SELL SIDE SERVICES



Source for original material: Wall Street Prep

SELL SIDE SERVICES



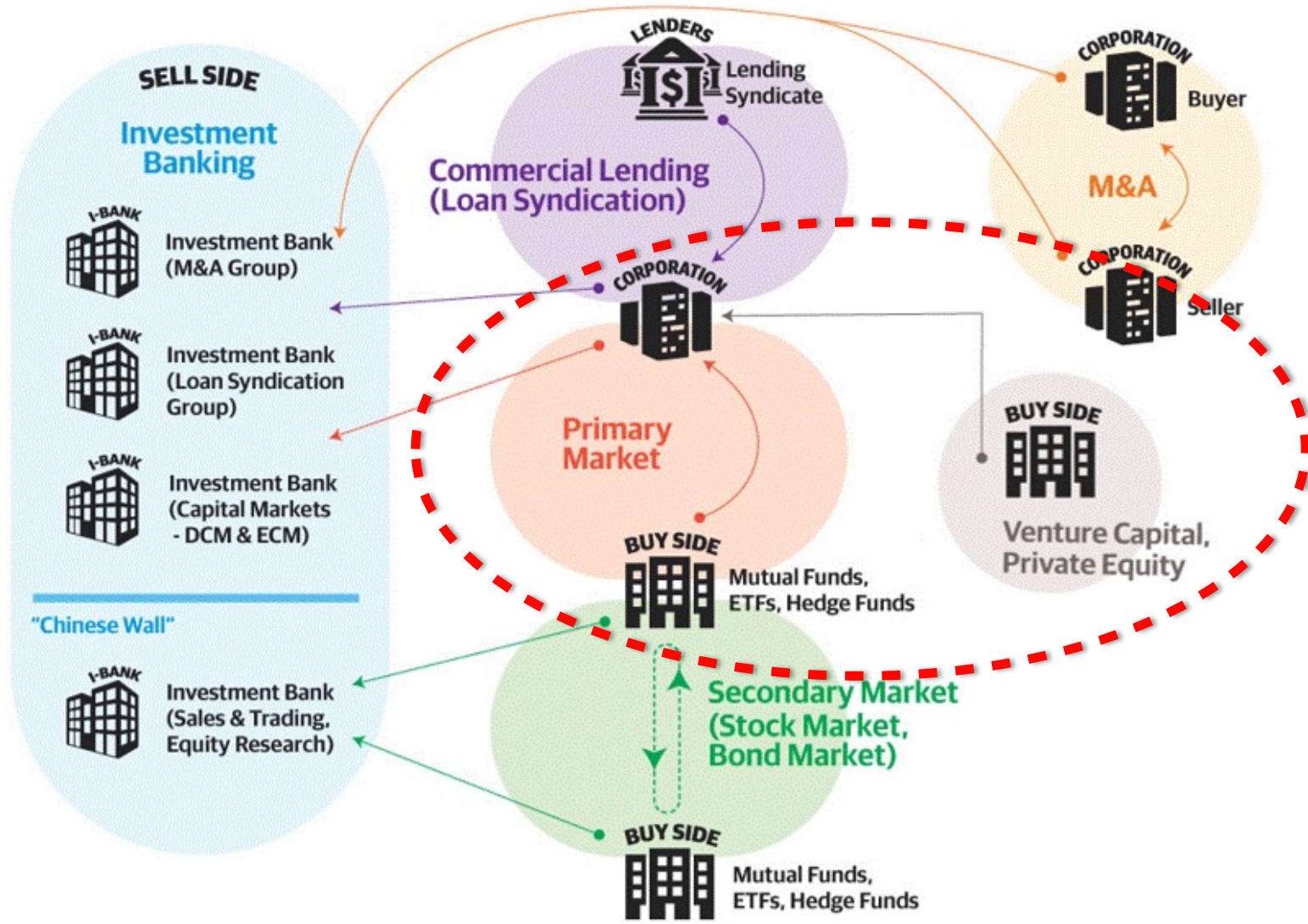
Investment Banks like Goldman Sachs and Morgan Stanley "sell" lots of services to corporations like Disney or Nike and also investors on the "buy side" like Fidelity

These services include IPO and M&A advisory, trading, research, lending, etc

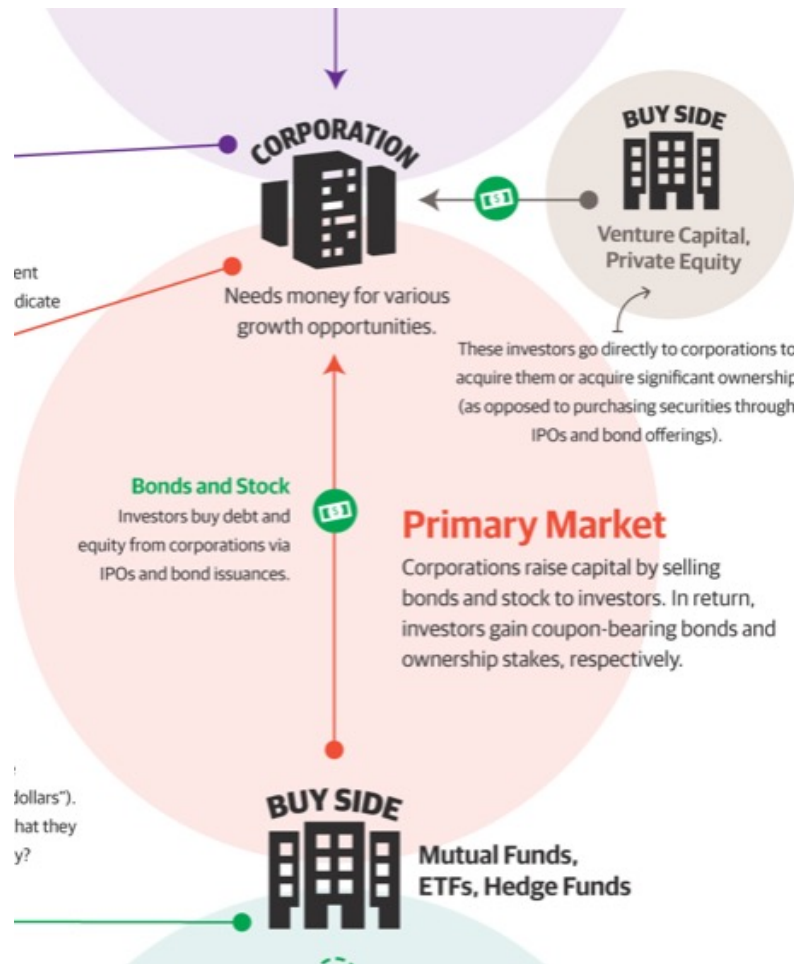
They make their money through deal/transaction fees and ongoing fees for services, research, advisory, etc

Both the buy side and the sell side have research recommending buy, sell, or hold certain stocks, bonds, commodities, etc

DRILLING DOWN – INITIAL PUBLIC OFFERING “IPO”



WHAT'S AN IPO?



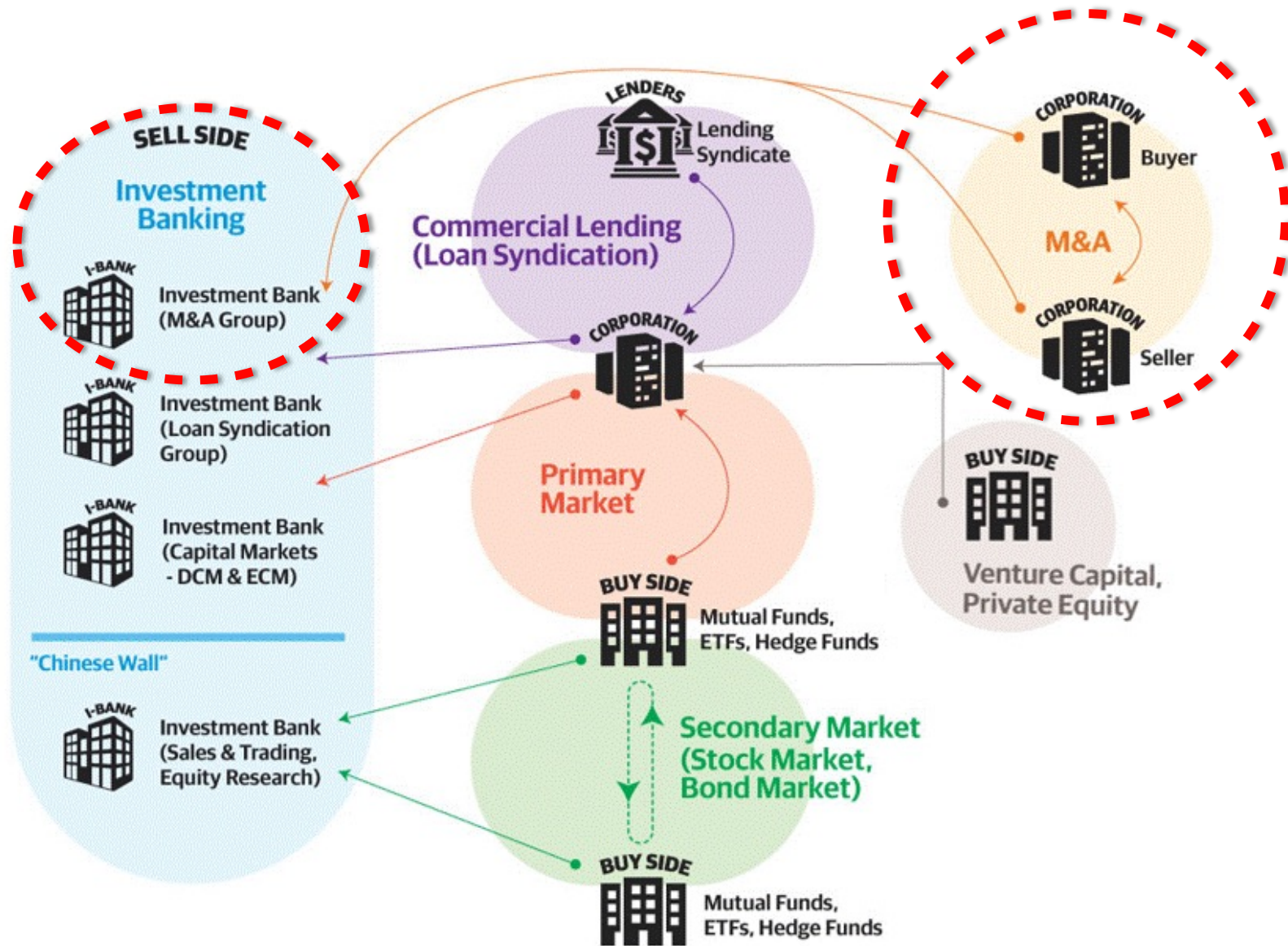
Companies sell shares to the public through their "buy side" managers – before they go public, they may get funding from private equity or venture capital firms

The money they raise from IPO goes to pay off earlier investors and back to the company to fund growth or expansion.

Companies sell different ownership %'s to the public – some founders maintain majority control or have special stock. Voting & ownership rights can be different

The primary market is where companies sell directly to investors with the help of underwriters (investment banks).

DRILLING DOWN – MERGERS AND ACQUISITIONS “M&A”



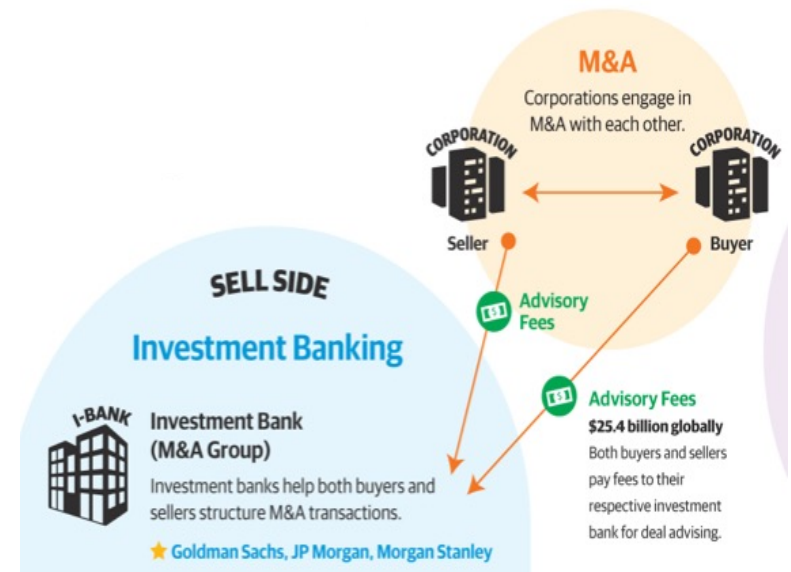
M&A ADVISORY

All the major mergers you have ever heard about involve M&A investment bankers

A merger involves all kinds of finance skills ranging from strategy, to negotiation, to complex accounting and modeling, to sales and marketing.

The fees on these transactions scale with the size of the merger (the same is true with IPO's and other financings).

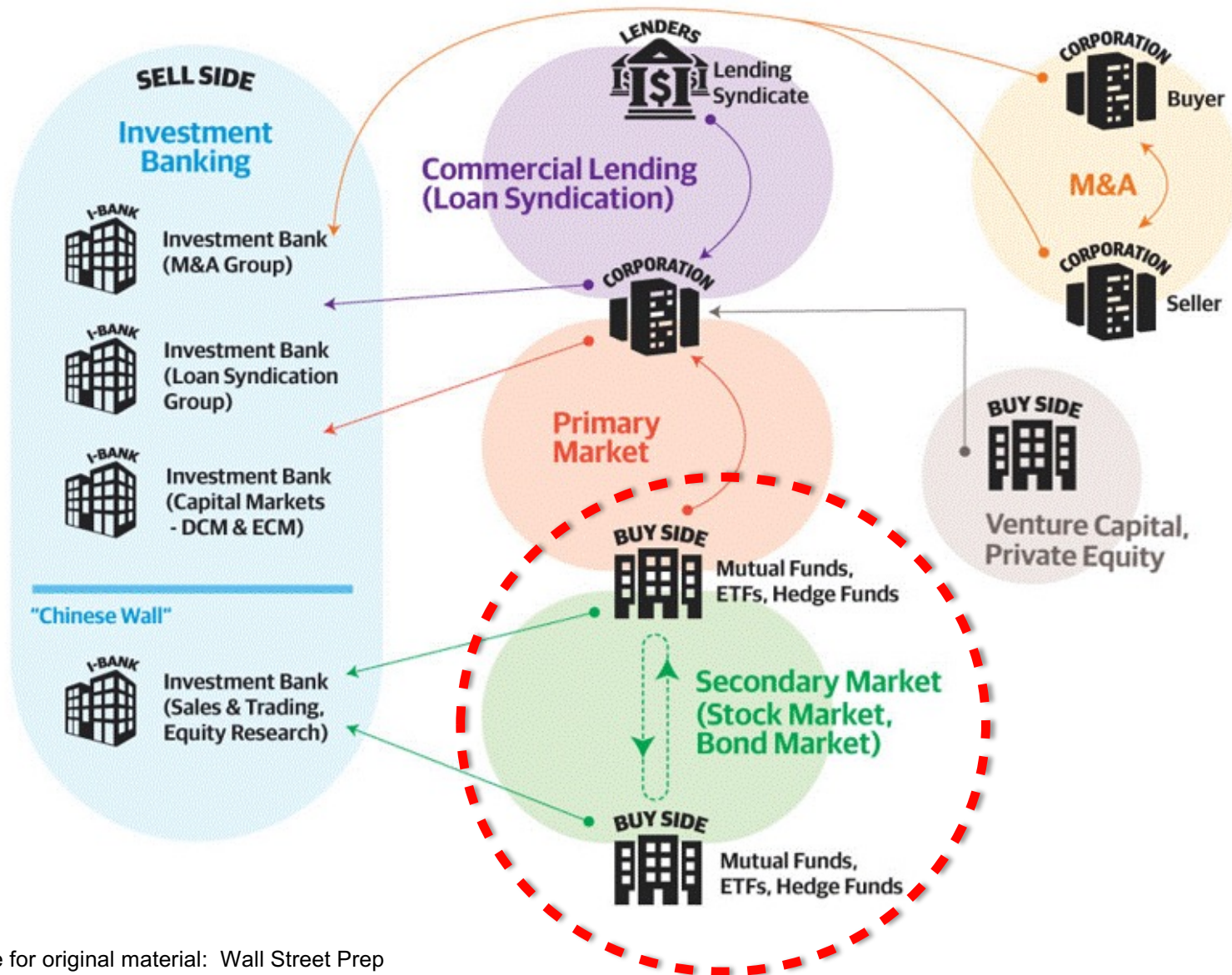
M&A has cyclical highs and lows and tends to be more common during strong market environments (opposite for restructuring)



THE BUY SIDE

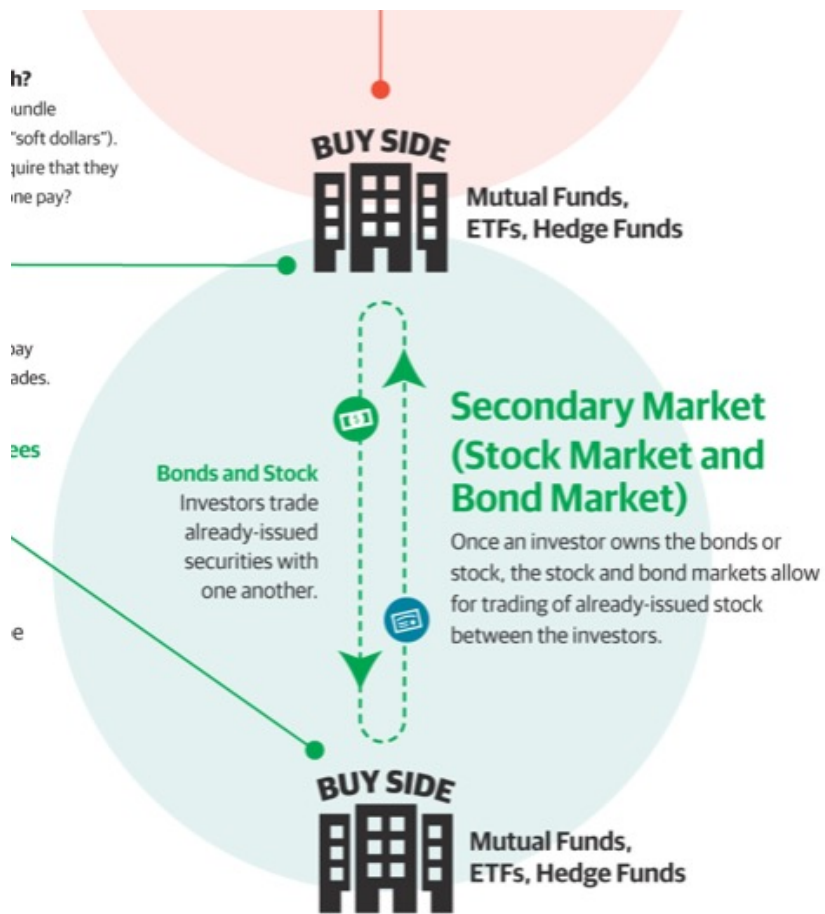


DRILLING DOWN



Source for original material: Wall Street Prep

WHAT'S A SECONDARY MARKET?



Once shares/bonds are issued, they trade in the secondary market

Popular secondary markets examples:

- Nikkei 225 Stock Average (Nikkei)
- New York Stock Exchange (NYSE)
- NASDAQ
- London Stock Exchange (LSE)

Individual and institutional investors trade with each other with the facilitation of market makers and brokers to provide and maintain liquidity – fees are paid for this

Benchmarks and indices exist to measure and compare the performance and relationships between individual stocks and groups of stocks over time (S&P500)

ASSET OWNERS & MANAGERS (CIRCA 2020)

~\$430T of “capital” in the world - ~\$100T is professionally managed

- Financial Holdings are Larger than Total Assets due to borrowing
- The “Buy Side” are the managers who collect fees for that service
- Managers are everything from index funds, mutual funds, hedge funds

BUY SIDE Who is the “Buy Side”?

The “Buy Side” refers to the following institutional investors – or asset managers.

Mutual Funds + ETF:	\$32T
Private Mkts:	\$8T
Hedge Funds	\$5T
Passive:	\$22T

Buy side invests the money – they buy things



Buy side gets paid a percentage of “AUM” or assets under management. Some funds get performance fees as well.

WHO FUNDS THE BUY SIDE?

Who funds the "Buy Side"?

The asset owners below outsource roughly 20-25% of their capital to be managed by "The Buy Side."

Individuals: \$160 trillion

Banks: \$70 trillion

Pension Funds: \$50 trillion

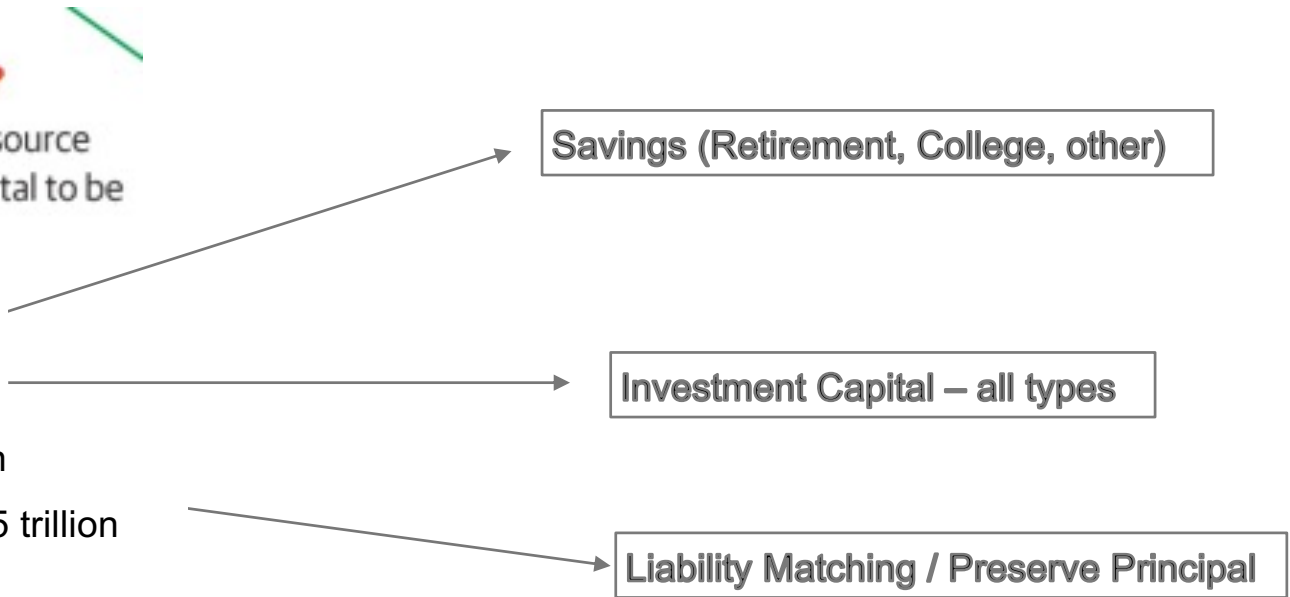
Insurance Companies: \$35 trillion

Endowments: \$2 trillion

Savings (Retirement, College, other)

Investment Capital – all types

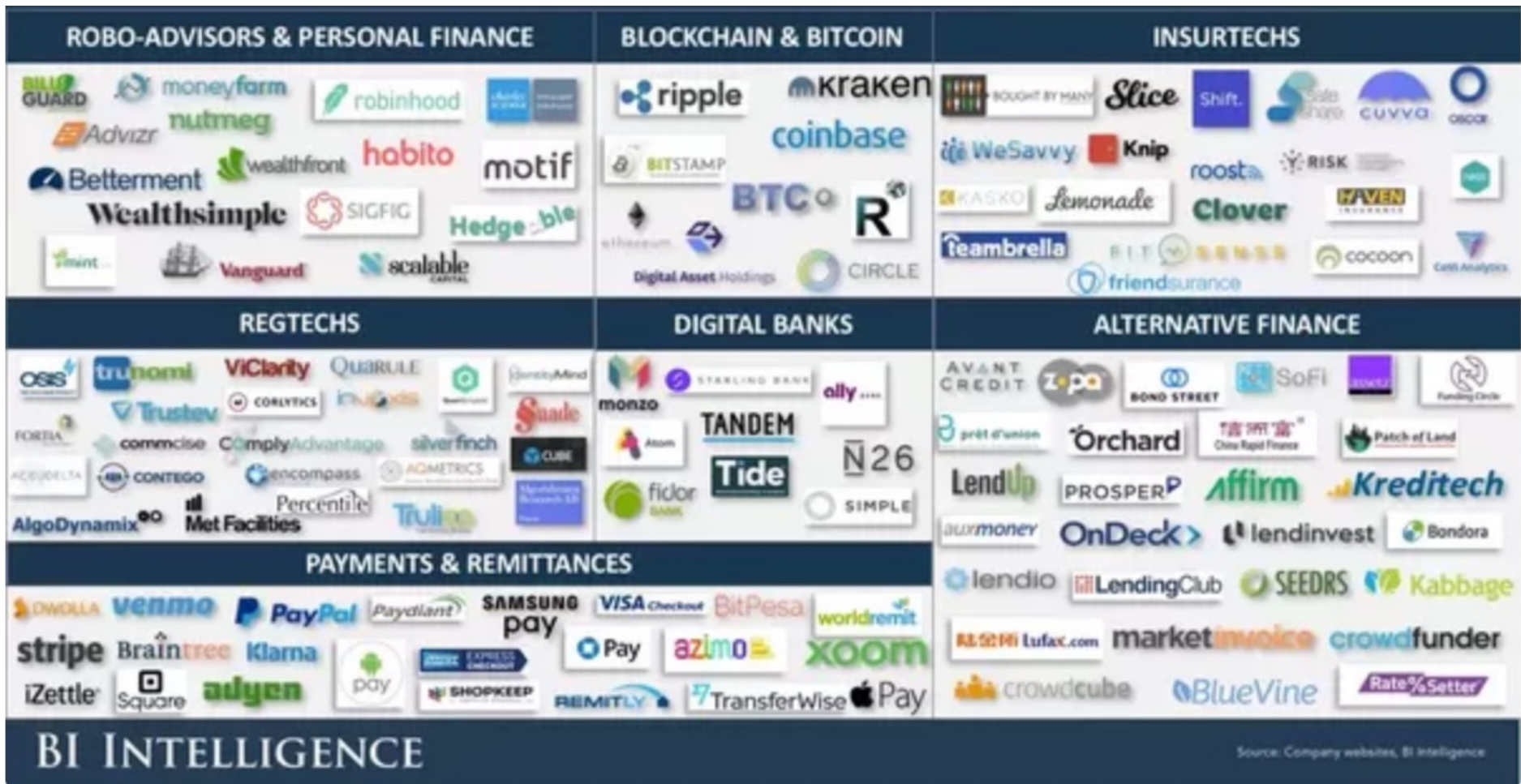
Liability Matching / Preserve Principal



FINTECH



FINTECH ECOSYSTEM



Fintech is a young industry with a lot of broad set of businesses under one label

Source for original material: BI Intelligence

CAREERS IN FINANCE



DIFFERENT ROLES

Roles on the Buy Side:

- Public Equity – Mutual funds, hedge funds – many hire out of undergrad
- Private Equity – Junior associate but most likely after other finance jobs
- Venture Capital – Similar to Private Equity
- Non-investing roles – sales, trading, marketing, risk management, etc

Roles on the Sell Side:

- Investment Banking – many jobs out of undergrad, great training program, hard work
- Research Analyst – junior analysts do modeling, analysis, marketing, etc
- Wealth Management – hard to be successful, must build a business, then lucrative
- Sales/Marketing

Quantitative Roles:

- Mutual Fund / Hedge Fund analyst – similar goal but using quantitative inputs
- Risk Management / Pricing / Trading – systematic solutions to classic problems
- Programming / Optimization / application of AI/ML

Outside of Finance Employers:

- Corporate Finance – accounting, budgeting for growth, etc, CFO/CEO
- Financial Planning – modeling, competitive analysis, strategy

The expectation out of undergrad is that you have limited domain expertise (except potentially in quant/CS areas where talent is scarce)

OTHER CAREER PATHS IN FINANCE

Commercial Banking: work for bank assessing credit, loans, mortgages, and other services to end customers and businesses.

Corporate Finance: working in finance department for a small or large company. Everything from accounting to treasury to strategy to M&A. Can transition to other finance careers from here.

Wealth Management: typically work for a finance or insurance company helping clients allocate assets, save money, and grow wealth tax efficiently. Get paid typically on AUM. Requires selling skills to be successful - paid on commission.

Real Estate: Development, Mortgage banking, Investing, Operations

Consulting: can work for a place like Bain and be somewhere in between a consultant and P/E investor

Impact: increasing interest. Overlay social objectives into the investment, lending, and fundraising functions – impact measurement is a key concept.

Insurance: Actuaries (risk calculators), Risk Managers (risk mitigators & optimizers), and many types of analysts.

WHERE TO START?

Can start in industry:

Provides domain expertise to get into investing or banking

Can start in Banking (sell side)

Provides training and domain expertise to get into investing or industry

Can start in Investing (buy side)

Provides training to get into CFO/IR or entrepreneurial role

Can start in Mathematics or Computer Science:

Algorithms are increasingly prevalent in investing strategy

Risk management is always needed in investing and banking

These careers can offer challenging problems and large \$\$\$

No matter what path you choose, if you are going to be an entrepreneur, a business leader/executive, or be responsible for projects, you will need at least some finance education/experience to be effective

HOW TO SET YOURSELF APART

Almost everyone in finance is a specialist – that specialty is your domain expertise

Sector Specialists:

Most investment bankers and investors specialize in an industry sector like Technology or Healthcare

Most buy side analysts and PM's work in one sector – their experience, knowledge, and connections make them increasingly valuable over time

Most investment bankers specialize in a sector as well

Asset Classes:

Certain areas like distressed debt, sophisticated derivatives, or complicated funding structures are better suited to dedicated specialists

Diversified (generalist) portfolio managers add value by allocating stocks/bonds/real estate in weightings to maximize risk adjusted returns

What about Quant – Quant is a domain expertise as well

Anything that can be optimized, rank ordered, or automated using a defined set of inputs and a rules engine is potentially valuable for quantitative investing

Data science, predictive analytics, and artificial intelligence are **VERY** in demand

WHAT DOES THE NEW HIRE DO - BANKING

What do investment banking roles entail?

	Sales	Trading	Investment Banking	Private Wealth
Typical Activities	<ul style="list-style-type: none"> • Client meetings, conferences, and social obligations • Coordination of IPO, new issue & new product sales • Partnership with clients to support and help tailor investment strategies • Generalist role covering range of industries / products 	<ul style="list-style-type: none"> • Transaction execution • Work closely with Sales and Sales / Trading to meet client needs • Increasingly, Trading is a role that involves mainly quantitative tasks 	<ul style="list-style-type: none"> • Prepare or review financial analysis • Gathering info from clients, lawyers, accountants • Preparing and communicating analyses to clients • Coordinating the "deal team" 	<ul style="list-style-type: none"> • Prospecting and acquiring clients through cold calls, networks, socializing, etc. • Advising clients on how to manage wealth • Following the market and performing analysis to find new investing opportunities for clients
Typical Lifestyle	<ul style="list-style-type: none"> • Early Mornings! • Typical hours: 6am-7pm 	<ul style="list-style-type: none"> • "Stock Market" Hours • Typical hours: 7am-5pm 	<ul style="list-style-type: none"> • Must be "on call" • Typical hrs 9am -10pm + a few hours on the weekends 	<ul style="list-style-type: none"> • More flexible hours • Not uncommon to leave the office early to entertain clients (golf, dinners, etc.)
Typical Personality	<ul style="list-style-type: none"> • Assertive & Outgoing 	<ul style="list-style-type: none"> • Quick-Thinking & Decisive 	<ul style="list-style-type: none"> • Driven & Analytical 	<ul style="list-style-type: none"> • Clear communicator & good at networking/socializing

WHAT DOES THE NEW HIRE DO – CORP FIN

What do corporate finance roles entail?

	Treasury	Financial Planning/ Corp. Development	FAP/FMA
Typical Activities	<ul style="list-style-type: none"> • Domestic and international funding • Foreign exchange and commodity risk management • Cash portfolio management and capital planning • Pension funding analysis • Audit and internal controls • Employment cost analysis • Pricing and market analysis • Product cost development 	<ul style="list-style-type: none"> • Business case development to support investment decisions • Investment governance and diversification • Communication of company and share price performance to employees, investors, and other key stakeholders • Decision coordination across operations and marketing • Mergers, acquisitions, and strategic alliances 	<ul style="list-style-type: none"> • Typical rotations: <ul style="list-style-type: none"> –Planning & Analysis –Strategy –CFO’s Office –Treasury –Investor Relations –Chief Investment Office –Internal M&A –Audit –Tax • High level critical financial issues... from grit to glamour
Typical Lifestyle	<ul style="list-style-type: none"> • Typical hours: 50-80 hours per week (Weekends common) 	<ul style="list-style-type: none"> • Typical hours: 40-60 hours per week (Weekends rarely) • Exceptions during: deal transactions, capital restructuring, and quarter/year-end budget closing processes 	<ul style="list-style-type: none"> • Typical hours: 50-55 hours per week (Weekends rarely)
Typical Personality	<ul style="list-style-type: none"> • High-energy and educational • “CFO School” • Recent MBA graduates 	<ul style="list-style-type: none"> • Family/lifestyle-oriented • Passion for industry and operations • Investment banking graduates 	<ul style="list-style-type: none"> • Intelligent, motivated financial managers who value their personal lives

Source for original material: Kellogg School of Management

WHAT DOES THE NEW HIRE DO – VC & PE

What do private equity and venture capital roles entail?

	Private Equity	Venture Capital
Typical Activities	<ul style="list-style-type: none"> • Development of industry investment theses • Financial modeling and portfolio company management • Review of new investment memorandums prepared and distributed by intermediaries (investment banks) • Attendance at board meetings for portfolio companies • Recruitment of new managers into portfolio companies • Fund administration 	<ul style="list-style-type: none"> • Development of industry investment theses • Review of trade rags and participation in industry trade shows to identify new investment opportunities • Meetings with entrepreneurs looking to raise venture financing • Networking with peer venture capitalists • Attendance at board meetings for portfolio companies • Financial modeling and portfolio management • Recruitment of new managers into portfolio companies • Fund administration
Typical Lifestyle	<ul style="list-style-type: none"> • Typical hours: 8am-8pm • Moderate weekend work • Late nights when pushing to close a deal 	<ul style="list-style-type: none"> • Typical hours: 9am-7pm • Regular “off-the-clock” networking activities • Weekend work is rare • Face time is not a concern
Typical Personality	<ul style="list-style-type: none"> • Assertive & Outgoing • Analytical • Work well with limited guidance and imperfect information 	<ul style="list-style-type: none"> • Entrepreneurial / Self-Starter • Analytical • Assertive and outgoing • Work well with limited guidance and imperfect information

WHAT DOES THE NEW HIRE DO - INVESTING

What do investment management roles entail?

	Mutual Funds	Hedge Funds	Sell-side Research
Typical Activities	<ul style="list-style-type: none"> • In depth company analysis • Financial modeling • Meetings with company management & sell-side • Recommendation of investments to portfolio managers • Preparation of detailed company & industry reports 	<ul style="list-style-type: none"> • In depth company analysis • Financial modeling • Meetings with company management & sell-side • Recommendation of investments to portfolio managers • Preparation of company reports • Screening for new ideas 	<ul style="list-style-type: none"> • In depth company analysis • Financial modeling • Meetings with company management & buy side • Recommendation of investments to portfolio managers • Preparation of detailed company reports • Specific industry expertise
Typical Lifestyle	<ul style="list-style-type: none"> • Flexible hours • Earnings season (increased hours) • Typical hours: 8am to 6pm 	<ul style="list-style-type: none"> • Flexible hours (but firm specific) • Earnings season (increased hours) • Typical hours: 8am to 6pm 	<ul style="list-style-type: none"> • Client driven (buy-side) • Dictated by earnings releases • Typical hours: 7am to 8pm • Traveling common as become more senior
Typical Personality	<ul style="list-style-type: none"> • Analytical, Skeptical, Ability to work in an independent fashion, Strong communicator 	<ul style="list-style-type: none"> • Analytical, Skeptical, Creative, Ability to work in an independent fashion, Strong communicator 	<ul style="list-style-type: none"> • Ability to communicate and sell your ideas (Salesman) • Comfortable in public forum

OTHER RESOURCES



RECOMMENDED SKILLS

Relatively Basic Math:

Applied to Microeconomics, Statistics, Econometrics, Corporate Finance, etc

Relatively Basic Computer Science:

Coding, optimization, data analytics to explain past or better predict/model future outcomes

Accounting:

A set of rules that can easily learned – like learning a language

Corporate Finance:

Everything from funding sources, to capital structure, to resource allocation, to value maximization

Strategy/Business Theory:

Useful for everyone from entrepreneurs to research analysts
Ranges from game theory to product marketing

FOR MORE INFORMATION

Investment Banking:

<https://www.edupristine.com/blog/types-investment-banking-jobs>

<https://corporatefinanceinstitute.com/resources/careers/jobs/investment-banking-overview/>

Investment Management:

<https://careers.cfainstitute.org/article/advice-on-how-to-become-a-research-analyst/>

<https://careers.cfainstitute.org/article/research-analysts-add-value-here-is-proof/>

<https://www.mastersindatascience.org/careers/quantitative-analyst/>

Fintech:

<https://ianmartin.com/understanding-fintech-categories/>

<https://www.mckinsey.com/business-functions/digital-mckinsey/our-insights/blockchain-beyond-the-hype-what-is-the-strategic-business-value>