SEWANEE
THE UNIVERSITY OF THE SOUTH

SMITH CAREER CONVERSATIONS: TECHNICAL INTERVIEW TRAINING

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AGENDA

I. INTRODUCTION

- Introductions by Trey & Franklin and overviews of our career paths after Sewanee
- Overview of different opportunities within finance
- How you can prepare yourself while at Sewanee for a job in finance and how Sewanee compares to the "target schools" for many firms — what they do well and what Sewanee does well

II. WHAT YOU NEED TO DO AT THE INTERVIEW

- Make an immediate positive connection with the interviewer(s)
- Convince them that you:
  - want to work in the industry and specific sub-industry
  - have adequately prepared for the interview
  - understand what the company does and want to work for the company
  - are curious and therefore able to learn quickly, will work hard, and are sincere

AGENDA

III. HOW TO PREPARE FOR THE INTERVIEW

- Who to talk to before the interview and how to connect with them
  - how to use LinkedIn to search for Sewanee alumni who you should try talking to
  - and how to use Sewanee resources (TigerNet, Career Services, Events)
- How to use LinkedIn to do research on the company
  - interviewers' bios, career path of current and former employees, map out the company's org. structure
- How to use Google and the company's website to do research on the company
- How to create the "2 minute story"
- How to create the "30 second story"

IV. TECHNICAL TRAINING

- Banking and consulting/asset management

V. GENERAL RESOUCES

- For industry and sub-industry knowledge

VI. Q & A

- Feel free to stop us at anytime to ask questions

I. INTRODUCTION

FRANKLIN'S EXPERIENCE

STEPHENS

- Company overview and role
- How and who Stephens recruited
- Interview process
- Competitors (who offer similar analyst opportunities as Stephens)

SILVERMARK PARTNERS

- Company overview and role
- How and who Silvermark recruited
- Interview process

TREY'S EXPERIENCE

CAMBRIDGE ASSOCIATES

- What Cambridge Associates does
- Company structure (below):

Research				Client-Facing		
Market Research	Manager Research	Quant Research	Data Collection	Practice Groups (Pensions, Non-Profit, Families, OCIO)	Performance Reporting	Trading Implementation
1 team (~12 people)	~20 teams (~4 people/ team; by asset class)	1 team (~5 people)	1 team (~60 people)	~100 teams (~4-6 people/ team); teams for each client used to be a mix of people; now each team covers same clients (~12-16)	1 team (~80 people)	1 team (~40 people)

- Role at Cambridge
- Example days:
  - Day 1: Prepare materials for client meetings (create draft materials, then solicit feedback from directors), read news/research
  - Day 2: Meet with three managers (hedge fund, credit fund, venture fund), clean up notes before uploading to C|A system
  - Day 3: Prepare materials for client meetings, attend client meeting, check performance reports, mail materials to clients
- How and who Cambridge recruited
- Interview process for Trey
- Analyst career-path post-Cambridge

TREY'S EXPERIENCE

PARTNERS HEALTHCARE

- What Partners Healthcare does
- Company structure
- Role at Partners
- Example days
  - Day 1: Prepare for four upcoming manager meetings (read about manager, read managers' prior letters, prepare prep materials for meeting—performance analysis, questions for manager, highlights and considerations, bios of managers that other Partner's attendees can reference)
  - Day 2: Travel to Dallas for due diligence day with private equity manager
  - Day 3: Prepare investment committee materials, make reference calls on managers
  - Day 4: Meet with the four managers, take notes at each meeting, clean up notes, post notes to Partners manager-tracking system
- How and who Partners recruited
- Interview process for Trey
- Career path at or post-Partners

DIFFERENT OPPORTUNITIES WITHIN FINANCIAL SERVICES

INVESTMENT BANKING:
Goldman Sachs, JPMorgan, SunTrust, Stephens

- Investment Bank
- Sales & Trading
- Research

Green = more likely for undergrads

INVESTMENT MANAGEMENT:
PIMCO, Edgehill, Cambridge Associates

- Asset / Portfolio Management
  - Business Development Companies
  - Institutional Credit and Equity Funds
  - Private Equity and Hedge Funds
- Investment Consultants
- Research
- Risk Analytics, Quants, Programmers

FINANCIAL CONULTING WITHIN GENERAL CONSULTING:
"Big Four," NTT, Carlisle, Big Corporations

WEALTH MANAGEMENT:
Merrill Lynch, Edward Jones, Every Bank

- Financial Advisor

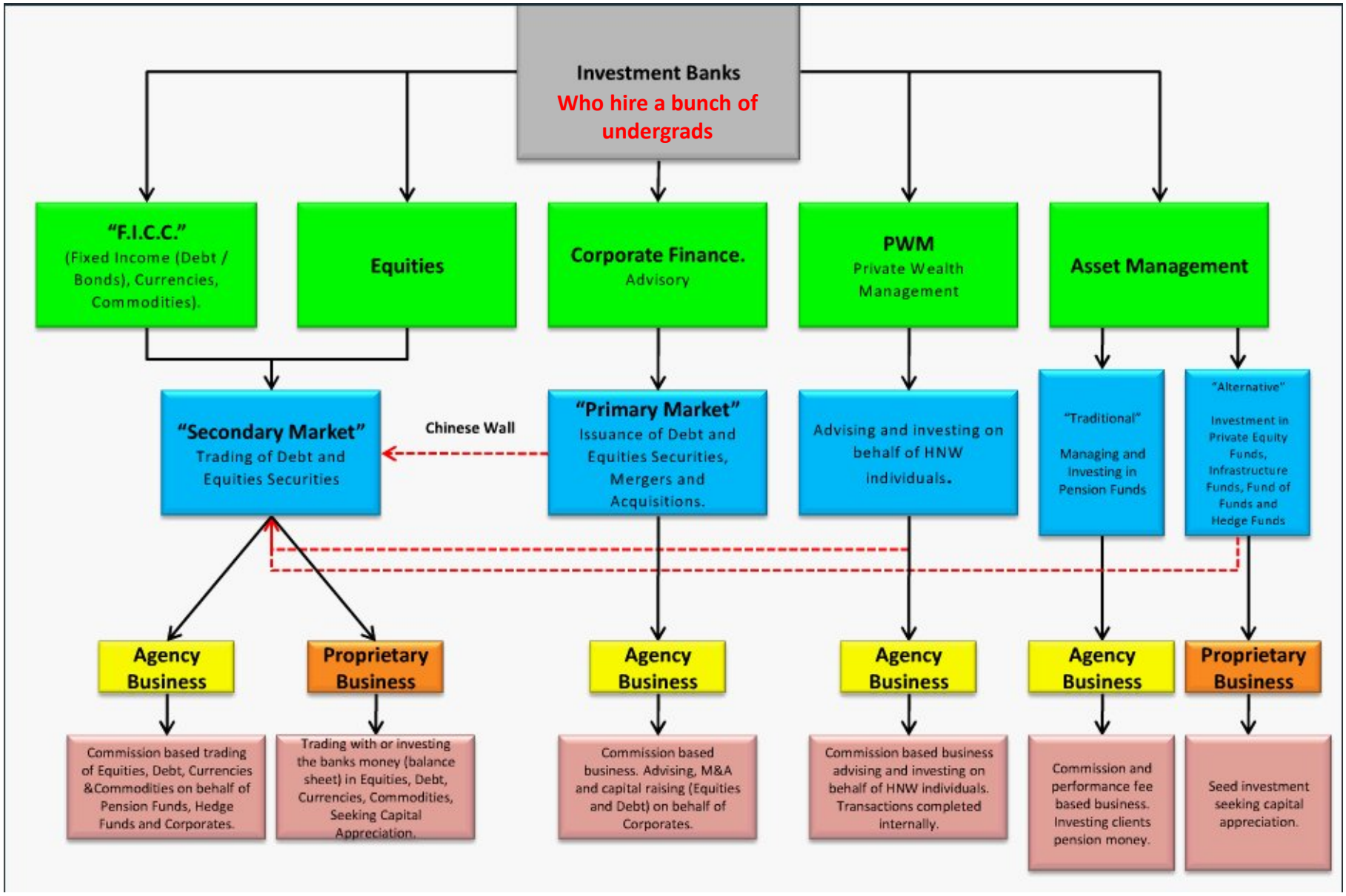
INSURANCE and REINSURANCE:
AIG, New York Life, SwissRe, MunichRe

- Investment Analyst
- Insurance Agent
- Actuary

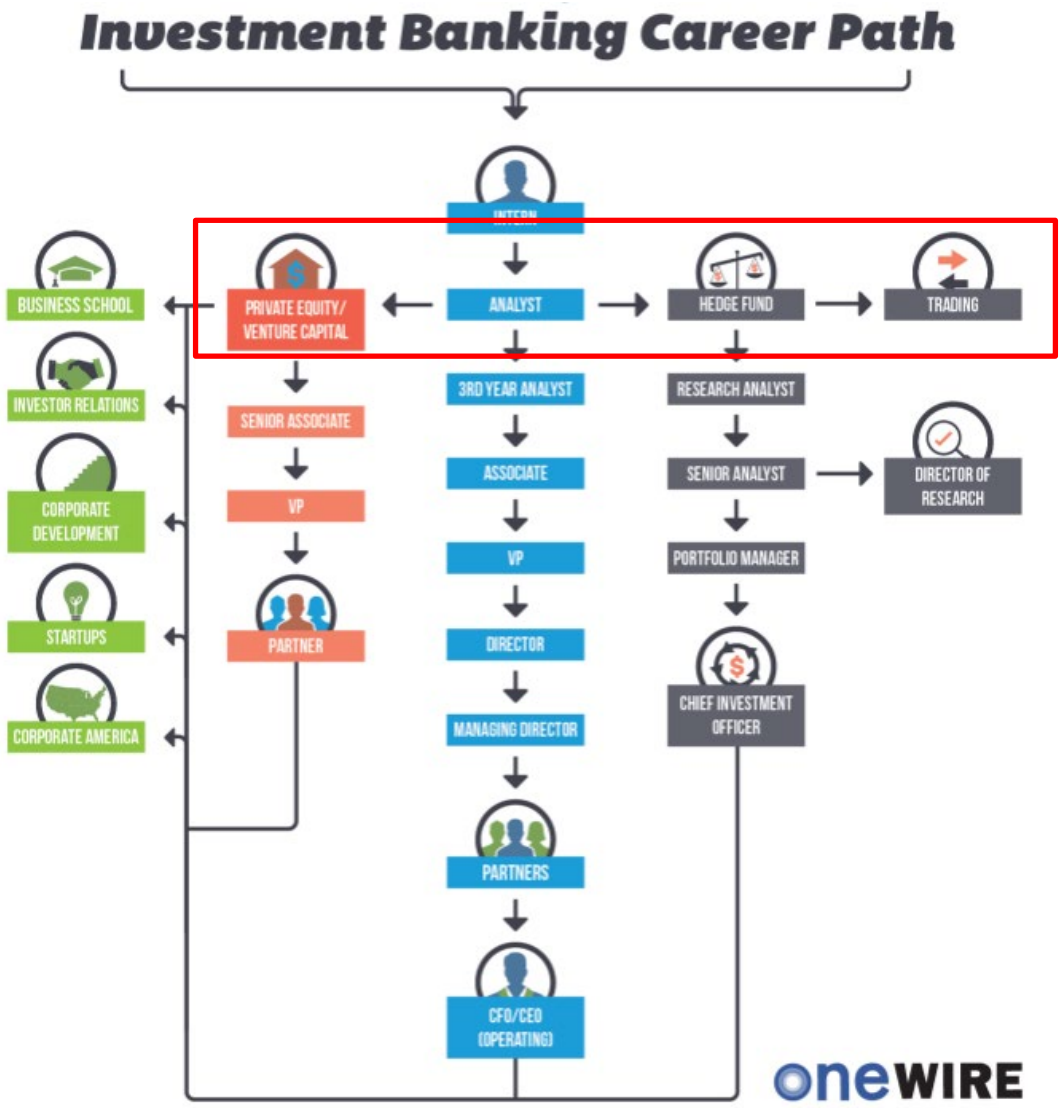
CORPORATE BANKING:
Bank of America, Regions, SunTrust, Santander

- Commercial Lending
- Mortgage Lending
- Personal Banking
- Risk Management

CORPORATE DEVELOPMENT:
Robinhood, Equinix, Uber, Home Depot


Investment Banks
Who hire a bunch of undergrads
"F.I.C.C."
(Fixed Income (Debt / Bonds), Currencies, Commodities).
Equities
Corporate Finance.
Advisory
PWM
Private Wealth Management
Asset Management
"Secondary Market"
Trading of Debt and Equities Securities
Chinese Wall
"Primary Market"
Issuance of Debt and Equities Securities, Mergers and Acquisitions.
Advising and investing on behalf of HNW individuals.
"Traditional"
Managing and Investing in Pension Funds
"Alternative"
Investment in Private Equity Funds, Infrastructure Funds, Fund of Funds and Hedge Funds
Agency Business
Proprietary Business
Agency Business
Agency Business
Agency Business
Proprietary Business
Commission based trading of Equities, Debt, Currencies &Commodities on behalf of Pension Funds, Hedge Funds and Corporates.
Trading with or investing the banks money (balance sheet) in Equities, Debt, Currencies, Commodities, Seeking Capital Appreciation.
Commission based business. Advising, M&A and capital raising (Equities and Debt) on behalf of Corporates.
Commission based business advising and investing on behalf of HNW individuals. Transactions completed internally.
Commission and performance fee based business. Investing clients pension money.
Seed investment seeking capital appreciation.

Website Resources:
Wall Street Prep
Wall Street Oasis
Mergers and Inquisitions



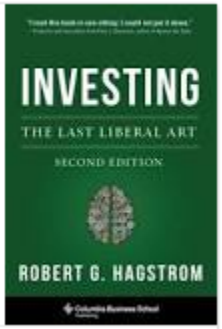
THE VALUE OF A LIBERAL ARTS EDUCATION

In Today's Quickly Changing World

- The world's changing quickly—many technical skills are quickly becoming obsolete; so knowing how to learn, communicate, and having broad knowledge is important. Even in fiiiinnnnaaaance.
- Two books that I (Trey) wish I had read prior to graduating:

Investing : The Last Liberal Art

Book by Robert G. Hagstrom



Highlights the importance of a liberal arts education--how having a basic knowledge of the key ideas in multiple fields of study leads to both a more interesting life as well as the ability to solve problems creatively.

The Second Machine Age: Work, Progress, and Prosperity in a Time of ...

Book by Andrew McAfee and Erik Brynjolfsson



Overview of how technological is changing industries and affecting society (economically, socially, and politically).

Provocative thesis: technology is improving exponentially which is causing massive deflation (which is good for consumers), but is also causing a divide between workers who can work with machines and those who will be replaced by machines.

Other people who agree on the value of a liberal arts education:

https://blogs.wsj.com/cio/2016/03/04/whats-the-value-of-a-liberal-arts-education-in-our-21st-century-digital-economy/
https://blogs.wsj.com/experts/2016/06/01/why-i-was-wrong-about-liberal-arts-majors/
https://www.theatlantic.com/business/archive/2016/06/why-americas-business-majors-are-in-desperate-need-of-a-liberal-arts-education/489209/
https://www.youtube.com/watch?v=jVc7b_dWYOw

WHAT TO DO AT SEWANEE

HOW YOU CAN PREPARE YOURSELF WHILE AT SEWANEE FOR A JOB IN FINANCE

- Go to class (duh…); take classes in multiple fields of study (which you have to do while at Sewanee)
  - Math and statistics classes are especially important
- Go to events and talk to people (professors, alumni, fellow classmates, coaches, community members)
  - Sewanee is a small school and people are willing to have impromptu conversations; and outside of Sewanee, people with a Sewanee-connection (alumni, parents of alumni or current students, people who are fascinated by Sewanee) are willing to meet
- Read books
- Watch YouTube interviews
- Read the news—actually news (newspapers, long-form magazines)
- Participate in extracurricular activities (sports, clubs, school-sponsored trips)
  - Employers value students who can manage stress
- Ask coaches to introduce you to alumni they formerly coached
- Talk to fellow students parents
- If you travel, reach out to alumni to set up coffees/beers/lunch/whatever
- Be curious, which should be easy since Sewanee and liberal arts schools attract curious people

CHALLENGES AT SEWANEE

VERSUS “TARGET SCHOOLS”

- Isolated geographically
- Smaller alumni network and not a lot of alumni that work in finance relative to “target schools”
  - Improving; however, this takes decades to develop
- Fairly recent focus on business and finance
  - Historically, did more students go to grad school immediately after Sewanee where they then developed hard skills? We think probably so.
- How is Sewanee mitigating these challenges? How are you?
  - Investing in Career and Leadership Development
  - Business Minor creation
  - Babson Center creation
  - Beecken Scholars
  - Carey Fellows
  - Finance classes
  - Accounting classes
  - Guest speakers
  - School-sponsored trips
  - Travel to interview (something you can do)

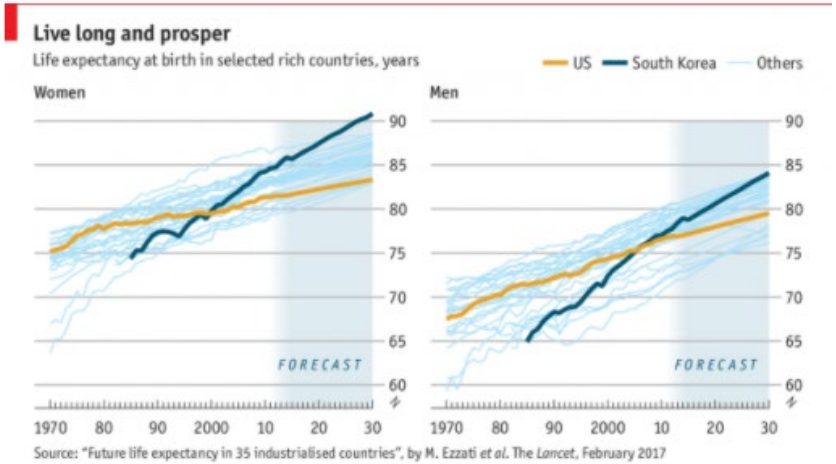
- **Realize that your career will <u>likely</u> be 45-70 years; so it's crucial that you learn during those years. Don't be a pessimist; don't panic; and once you start working, don't burn out!**

Pre-services world





Services world





II. WHAT YOU NEED TO DO AT THE INTERVIEW

WHAT YOU NEED TO DO AT THE INTERVIEW

YOU MUST CONVINVCE THE INTERVIEWER:

- **Want to work in the industry (finance)**
  - Why is finance interesting to a curious person? Why is the industry's dynamism fascinating?
- **Want to work within the sub-industry (what the company does within finance—banking, consulting, trading, wealth mgmt., etc…)**
  - You don't have much experience yet, but have you had internships that were relevant and interesting? How has what you've studied (in class and outside) useful and relevant within the sub- industry? Why is the sub-industry interesting for a liberal arts student?
- **Have made an effort before the interview to understand 1) what the company does, and 2) what your job responsibilities would be**
  - This will come through in your questions
- **Want to work for the company**
  - You need to have spoken to people who have worked for the company; you can also cite specific things the company has accomplished
- **Know why you <u>don't</u> want to work in other industries or sub-industries (but not necessarily other companies)**
  - This proves that you've really thought about why you want to work in the sub-industry and for the company (and aren't just spamming and then prepping after getting an invite)
  - **<u>This is super important! You don't have to have as much conviction as an undergrad though</u>**

WHAT YOU NEED TO DO AT THE INTERVIEW

YOU MUST CONVINVCE THE INTERVIEWER:

- **Will enjoy the job (the actual work of the job)**
  - If the job requires excel/powerpoint, you must enjoy learning and working in excel/powerpoint
  - If the job requires interacting with people, you must enjoy interacting with people
  - If the job requires project management, you must enjoy project management
  - If the job requires digging through financial statements, you must enjoy digging through financial statements
  - **Even if your background and skill-set don't make you super qualified for a job, reiterate that you enjoy learning, know how to use available resources to learn independently (so you aren't a resource hog on the company), realize that you're young (and therefore have time and energy to learn), and are curious**
  - **One of the biggest mistakes undergrads make is applying for a job with responsibilities that aren't aligned with their interests**
    - Example: "The main reason why I want to work at Cambridge Associates is because you work for non-profits."
      - Yes…but 1) a lot of companies work for non-profits, and 2) you may not work with non-profits once you end up at the company
      - And are you really going to be thinking about that when it's 3am and you're in excel???

WHAT YOU NEED TO DO AT THE INTERVIEW

YOU MUST CONVINVCE THE INTERVIEWER:

- **Are curious and therefore able to learn quickly, will work hard, and are sincere**
  - This is more of an art and should come through naturally during an interview. You can, however, cite your experience and transcript. You can also re-iterate in a thank-you letter and follow-up interviews (be sure to cite things prior interviewers said—**this proves that you were listening**)
- **Can work effectively with others / won't drive future co-workers crazy**
  - An interviewer can't determine that they will like you; only that they won't
  - Be confident, but not arrogant
  - Arrogance examples:
    - "I applied to College X for undergrad, but *surprisingly* didn't get in."
      - Maybe it was surprising just to you?
    - "I work harder than anyone"
      - Really? How do you know? Instead, say "I work hard."
    - Directly say anything bad about a prior experience
      - How to spin it: I learned this ____, but _____
      - You can't convey that you are pessimistic or dwelling on something
    - Judge the morality of anyone or another institution

III. HOW TO PREPARE FOR THE INTERVIEW

PREPARING FOR THE INTERVIEW – KNOW THE COMPANY

BEFORE THE INTERVIEW, YOU MUST…

- Understand the Company's thesis, operations, and growth prospects
  - Including firm history, backgrounds of executive leadership and key financial data
- Learn about your interviewer – title / function, education, duties, etc.
- Research the industry and understand the firm's competitive advantages

HELPFUL RESOURCES

- LinkedIn and Sewanee resources (TigerNet, Career Services)
  - Interviewers' bios, career path of current and former employees, map out the company's organizational structure
- Company website
  - Investor Relations page (if applicable) houses all pertinent financial detail
- Annual / Quarterly financial reports (10-K/Q), any public material
  - SEC.gov – EDGAR Company Search
- Industry reports

PREPARING FOR THE INTERVIEW – KNOW THE COMPANY

HOW TO COLD E-MAIL

- Not just, "Coffee?" You must put some effort into the e-mail.
- Don't be too formal
- Be concise
- Make a connection
  - Sewanee connection; mutual interests; sports/club connection; people you both may know; the name of the person who recommended that you reach out to the person

Hi _____,

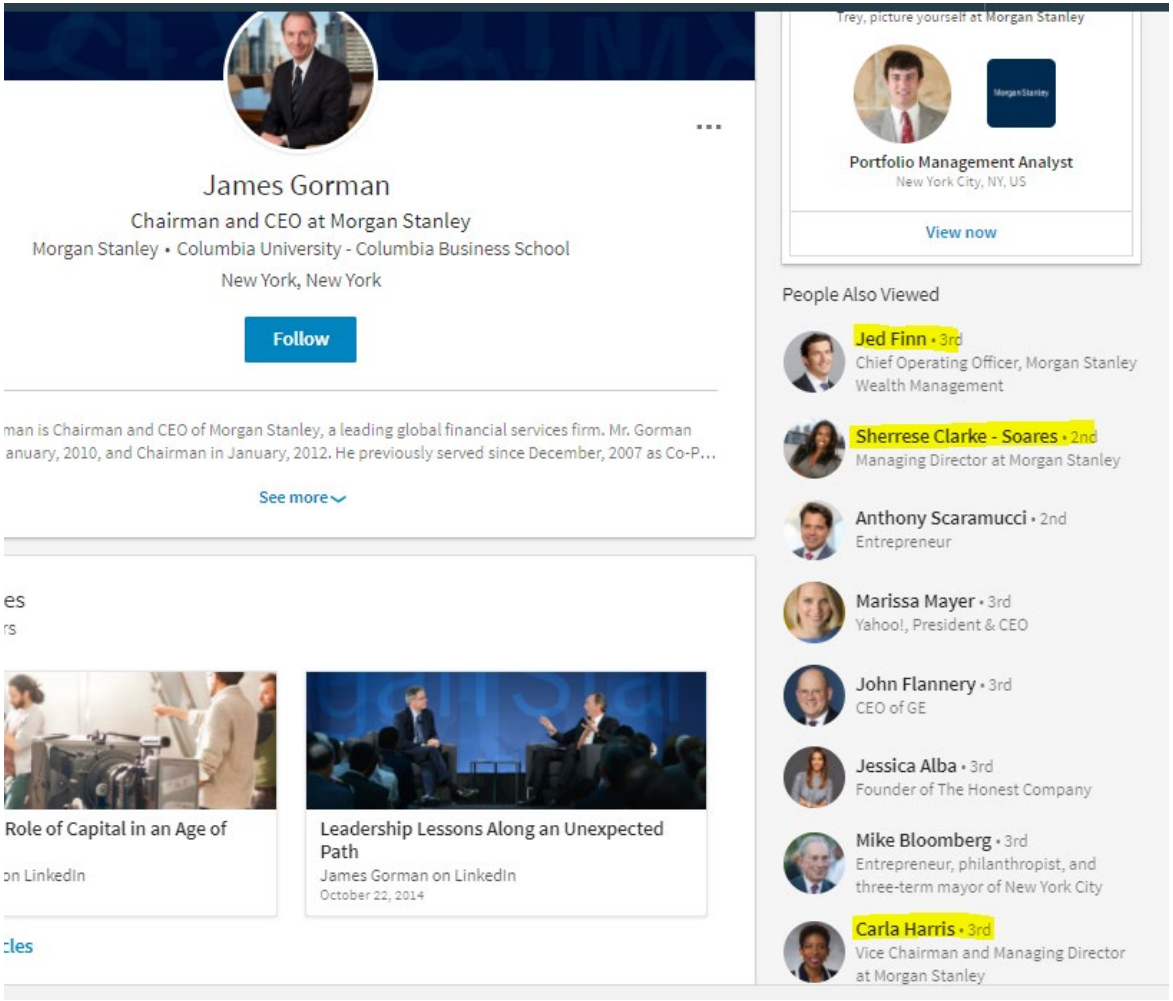
I'm a CA Boston alumn who's trying to move into an EorF, and I'm going to be in NYC tomorrow and Thursday for a college fundraising event (I went to Sewanee, which is where _____ went).

I know this is sort of out of the blue, but was wondering if you'd be free to grab coffee Wednesday afternoon or Thursday? I'm interviewing at a couple endowments here in Boston, and am trying to talk to as many ex-CA, but now at endowment, alumns as possible to get a better idea of the industry. May try to meet up with Mutual co-worker and Mutual co-worker too (" " and " " trained me in Boston for a week when I first joined Cambridge).

Best,
Trey

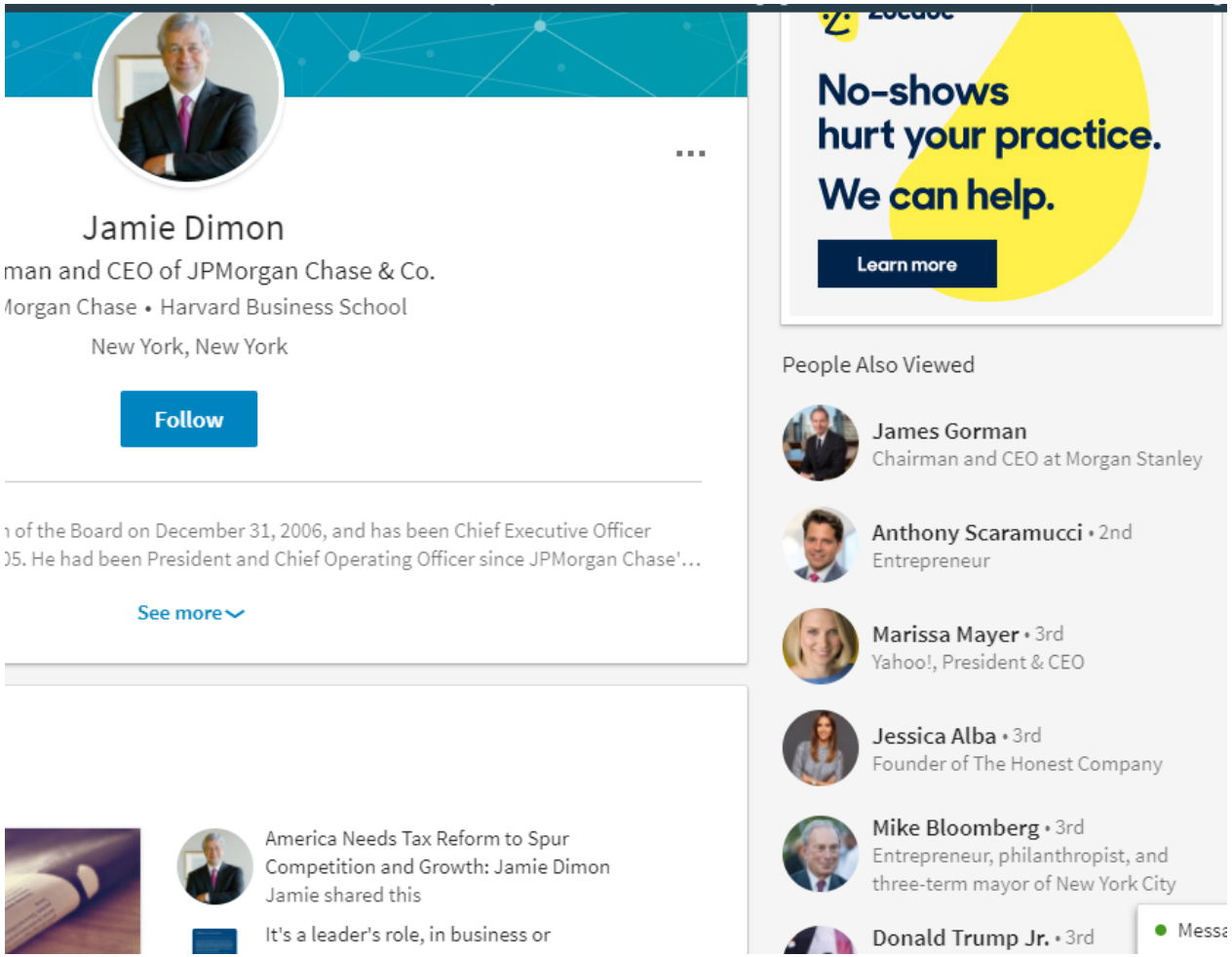
PREPARING FOR THE INTERVIEW – KNOW THE COMPANY

HOW TO MAP THE ORGANIZATION



PREPARING FOR THE INTERVIEW – KNOW THE COMPANY

HOW TO MAP THE ORGANIZATION



Literally no JPM employees listed to the right

PREPARING FOR THE INTERVIEW – KNOW THE COMPANY

PREPARE QUESTIONS FOR YOUR INTERVIEWER BASED ON YOUR RESEARCH

- Industry and Company specific (3 – 5)
- Interviewer's personal experience
- Business strategy
- Product offering and client composition
- **However, you don't need to force questions that you prepared; it should happen naturally**
- Thoughtful follow-up questions on information prior interviewers have shared, which also proves you were listening

PREPARING FOR THE INTERVIEW – KNOW THE ROLE

LEARNING ABOUT THE ROLE BEFORE THE INTERVIEW AND DURING THE INTERVIEW

- You must be familiar with the job you are applying for – don't just show up
  - Since you've researched what the Company does, dive deeper to understand where this group fits within the Company and its specific function
  - What will your role be on the team?
  - What qualities make up a good candidate?
- After understanding the role and its requirements, you can meaningfully connect the company's needs to your skill set / value proposition when you delve into your story and background

PREPARING FOR THE INTERVIEW – KNOW YOURSELF

DEVELOP YOUR STORY AND BE PREPARED FOR QUESTIONS

- Exercise in selling yourself and your potential ability: ultimately, you need to convince the interviewer you will help him or her achieve the team's goals
- You should be able to comfortably talk about your strengths and weaknesses
- Your story should describe how your past decisions and experiences have led you to this job opportunity
- Convince your interviewer(s) that you want to work for this Company
  - ***"I want to be an investment banker and this was the Company that wanted to interview me"…is not an acceptable answer***
- You create your story, so be concise and let it reveal a somewhat coordinated path
  - **Because the story is so important, write it down!**
- Your story should be consistent with your resume and highlight your strengths
- Make sure to explain unusual gaps or experiences: don't allow someone to assume the worst
- Don't overshare; and keep the scope to recent events
- **And remember—you have to convey why you want to work in the industry and sub-industry, why you want to work at the company, and why you'd enjoy the job**
  - The interviewer should be able to ascertain that you are intelligent and can communicate effectively without you directly telling them

PREPARING FOR THE INTERVIEW – KNOW YOURSELF

TWO MINUTE STORY

- Interests you developed in high school
- Personality formation/realization—ex: you realized you were curious, enjoyed studying many subjects, appreciated being able to develop relationships with classmates and teachers
- Why Sewanee
- Why your major at Sewanee
- Most interesting classes
- Most interesting interactions
- Why extracurricular activities
- Most important things you've learned
- What you are passionate about
- **Internship experience – you have to be able to speak intelligently about your prior experience, internship(s) or otherwise**

PREPARING FOR THE INTERVIEW – KNOW YOURSELF

30 SECOND STORY / ELEVATOR PITCH

- 1. You are a _____ major at Sewanee: The University of the South where you have a particular interest in _____
  - Qualifying statement for why you have that interest
- 2a. (If applicable) You recently interned at _____ where you learned _____
  - 2b. (If less experienced) After taking _____ (interesting classes), I realized I was interested in _____
- 3. What you are passionate about
- 4. What you want to do
- **Example Story:**
  - "Hi—My name is _____. I am a senior economics major at Sewanee: The University of the South and have a particular interest in macroeconomics and total portfolio management--I really enjoy thinking about how events in the world affect different asset classes.
  - I recently interned at NEPC where I was able to work with non-profit and pension clients on total portfolio management. I really enjoyed the work, learned a lot while interning, and would like to continue working in the industry.

PREPARING FOR THE INTERVIEW – KNOW YOURSELF

FAIR WARNING…

- If you mention it or say you did it, it's fair game—be prepared to elaborate
- If it's on your resume, it's gotta be true
- Do not read off your resume
- Do not memorize your answers
- Avoid comments, such as, "I really want to make a lot of money"
- Do not lose sight of the big picture – all answers and comments should underscore the qualities that will make you a valuable part of any team:
  - Optimistic
  - Willing to do what is asked
  - Thoughtful
  - Able to work well under pressure
  - Humble
  - Trustworthy

PREPARING FOR THE INTERVIEW

KNOW WHAT'S GOING ON IN THE WORLD/MARKETS

- If you read, this is easy
- If you don't, this is difficult
- Essential for proving that you are curious, work hard, and are interesting

IV. TECHNICAL QUESTION PREP

HOW TO APPROACH THE TECHNICAL ASPECT

YOUR MINDSET

- You should expect an entry level interview to include questions on basic financial / accounting concepts, company valuation methodologies and market analysis
- **Do not memorize anything** – you must be prepared to think creatively on your feet and convey thoughtful conclusions quickly; this is exactly what Sewanee has prepared you to do
- **Dictate your thought process from question to final answer** – the interviewer expects a few of his / her questions to catch you by surprise so that he / she can see you think when stressed
- **No matter what happens, stay within boundaries of your knowledge / experiences**
  - There is a fine line between refreshing your memory and teaching yourself chapters in an accounting textbook / financial modeling handbook
  - Your interviewer will know the subject matter far better than you – bad things happen if a candidate tries to act as though they know something that they don't
  - Don't be scared to admit you don't know the answer

FINANCIAL STATEMENTS

FINANCIAL STATEMENTS OVERVIEW

OVERVIEW

- Every business has three financial statements:
  - **Income Statement (Profit & Loss Statement)** – presents the Revenues and Expenses of a Company *over a period of time*
  - **Balance Sheet** – presents the 'financial position' of the business at *a point in time*
    - Assets = Liabilities + Stockholders' Equity
    - Provides insight into what the business owns (cash, inventory, fixed assets, etc.) and how it paid for it (debt vs. equity, aka did it borrow money or use existing equity in the business)
  - **Cash Flow Statement** – tracks the 'period-over-period' changes in each balance sheet item
    - Begins with Net Income
- A **fiscal year** is the period used for accounting purposes to track the natural cyclicality of a business
    - Many school districts and retailers use fiscal year ends of July 1 and January 30, respectively

WHY ARE THESE IMPORTANT?

- Together, the financial statements provide a holistic view of a Company's financial health
- It is customary to project these statements five years into the future using a combination of historical trends and management's expectations

INCOME STATEMENT DETAIL

Source: Target Corp., Fiscal Year 2015 10-K, page 34.

(millions, except per share data)	2015	2014	2013
Sales	$ 73,785	$ 72,618	$ 71,279
Cost of sales	51,997	51,278	50,039
Gross margin	21,788	21,340	21,240
Selling, general and administrative expenses	14,665	14,676	14,465
Depreciation and amortization	2,213	2,129	1,996
Gain on sale	(620)	—	(391)
Earnings from continuing operations before interest expense and income taxes	5,530	4,535	5,170
Net interest expense	607	882	1,049
Earnings from continuing operations before income taxes	4,923	3,653	4,121
Provision for income taxes	1,602	1,204	1,427
Net earnings from continuing operations	3,321	2,449	2,694
Discontinued operations, net of tax	42	(4,085)	(723)
Net earnings/(loss)	$ 3,363	$ (1,636)	$ 1,971
Basic earnings/(loss) per share			
Continuing operations	$ 5.29	$ 3.86	$ 4.24
Discontinued operations	0.07	(6.44)	(1.14)
Net earnings/(loss) per share	$ 5.35	$ (2.58)	$ 3.10
Diluted earnings/(loss) per share			
Continuing operations	$ 5.25	$ 3.83	$ 4.20
Discontinued operations	0.07	(6.38)	(1.13)
Net earnings/(loss) per share	$ 5.31	$ (2.56)	$ 3.07
Weighted average common shares outstanding			
Basic	627.7	634.7	635.1
Dilutive effect of share-based awards	5.2	5.4	6.7
Diluted	632.9	640.1	641.8

INCOME STATEMENT DETAIL – KEY LINE ITEMS

ITEM	DESCRIPTION (SOURCE: INVESTOPEDIA.COM)
SALES (REVENUE)	Money brought into TGT via business activities
COST OF SALES / COST OF GOODS SOLD (COGS)	Direct costs attributable to the production of the goods sold ▪ Includes the cost of the materials used in creating the good along with the direct labor costs used to produce the good
GROSS PROFIT	Profit made after deducting the costs associated with making and selling its products
SELLING, GENERAL & ADMINISTRATIVE EXPENSES (SG&A)	Costs attributed to normal operations and not directly related to the manufacturing of the product (i.e. selling, promoting and delivering of a product, as well as managing the Company) ▪ Not included in COGS ▪ Pertains to all expenses associated with creating a product
DEPRECIATION & AMORTIZATION	Non-cash expense associated with the allocation of the cost of an asset (tangible & intangible) over its useful life ▪ Useful life is an estimate of the number of years an asset is likely to remain in service for the purpose of cost-effective revenue generation
INTEREST EXPENSE	Non-operating expense paid on borrowed funds

INCOME STATEMENT DETAIL – KEY LINE ITEMS *(Cont'd)*

ITEM	AS IT RELATES TO TARGET
SALES (REVENUE)	Money paid by the customer at the point-of-sale ("POS") at the store/online
COST OF SALES / COST OF GOODS SOLD (COGS)	▪ Total cost of products sold including: – Freight expenses associated with moving merchandise from vendors to distribution centers and retail stores – Vendor income ▪ Sales / mark-downs ▪ Outbound shipping and handling expenses associated with sales to customers ▪ Distribution center costs, including compensation and benefits costs ▪ Import costs
GROSS PROFIT	Illustrates TGT's efficiency at using labor and supplies
SELLING, GENERAL & ADMINISTRATIVE EXPENSES (SG&A)	▪ Compensation and benefit costs including stores & headquarters ▪ Occupancy and operating costs of retail and headquarters facilities ▪ Advertising ▪ Pre-opening costs of stores and other facilities ▪ U.S. credit cards servicing expenses and profit sharing ▪ Litigation and defense costs and related insurance recovery ▪ Other administrative costs
DEPRECIATION & AMORTIZATION	▪ Includes buildings, equipment and software

BALANCE SHEET DETAIL

Source: Target Corp., Fiscal Year 2015 10-K, page 36.

(millions, except footnotes)	January 30, 2016	January 31, 2015
Assets		
Cash and cash equivalents, including short-term investments of $3,008 and $1,520	$ 4,046	$ 2,210
Inventory	8,601	8,282
Assets of discontinued operations	322	1,058
Other current assets	1,161	2,074
Total current assets	14,130	13,624
Property and equipment		
Land	6,125	6,127
Buildings and improvements	27,059	26,613
Fixtures and equipment	5,347	5,329
Computer hardware and software	2,617	2,552
Construction-in-progress	315	424
Accumulated depreciation	(16,246)	(15,093)
Property and equipment, net	25,217	25,952
Noncurrent assets of discontinued operations	75	717
Other noncurrent assets	840	879
Total assets	$ 40,262	$ 41,172
Liabilities and shareholders' investment		
Accounts payable	$ 7,418	$ 7,759
Accrued and other current liabilities	4,236	3,783
Current portion of long-term debt and other borrowings	815	91
Liabilities of discontinued operations	153	103
Total current liabilities	12,622	11,736
Long-term debt and other borrowings	11,945	12,634
Deferred income taxes	823	1,160
Noncurrent liabilities of discontinued operations	18	193
Other noncurrent liabilities	1,897	1,452
Total noncurrent liabilities	14,683	15,439
Shareholders' investment		
Common stock	50	53
Additional paid-in capital	5,348	4,899
Retained earnings	8,188	9,644
Accumulated other comprehensive loss		
Pension and other benefit liabilities	(588)	(561)
Currency translation adjustment and cash flow hedges	(41)	(38)
Total shareholders' investment	12,957	13,997
Total liabilities and shareholders' investment	$ 40,262	$ 41,172

BALANCE SHEET DETAIL – KEY LINE ITEMS

ITEM	DESCRIPTION (SOURCE: INVESTOPEDIA.COM)
CASH	Cash (as stated in the Current Assets section of the Balance Sheet) plus any Short-Term Investments or Marketable Securities that may be converted easily into cash
CURRENT ASSETS	Assets that can be converted into cash within one year (can be used to fund operations) ▪ ***Accounts Receivable***: Bills to customers that have yet to be paid ▪ ***Prepaid Expenses***: Expenses that have been paid in cash but not expensed
INVENTORY	Assets purchased with the intent to resell for revenue
FIXED ASSETS	Tangible: asset purchased for its productive use within the business' operations Intangible: indefinite assets without any tangible value ▪ ***Capital Expenditures***: Funds used to acquire or upgrade fixed assets; an expense can be capitalized (allocated over the useful life of the asset) when the useful life of the good purchased is greater than the given accounting period
CURRENT LIABILITIES	Accounts that will become due within one year
LONG-TERM DEBT	All funds that the Company has borrowed to fund operations
SHAREHOLDERS' EQUITY	Represents the net (book) value of the Company, or the amount that would be returned to shareholders if all assets were liquidated and all debt repaid

VALUATION

VALUATION INTRODUCTION

OVERVIEW

- Valuation principles are the foundation of any transfer of ownership / equity position
- Valuation analysis is utilized in any M&A or equity transfer scenario
- The most relevant valuation methodology (or combination) is dependent on numerous variables including the business type, industry, etc.

ENTERPRISE VS. EQUITY VALUE

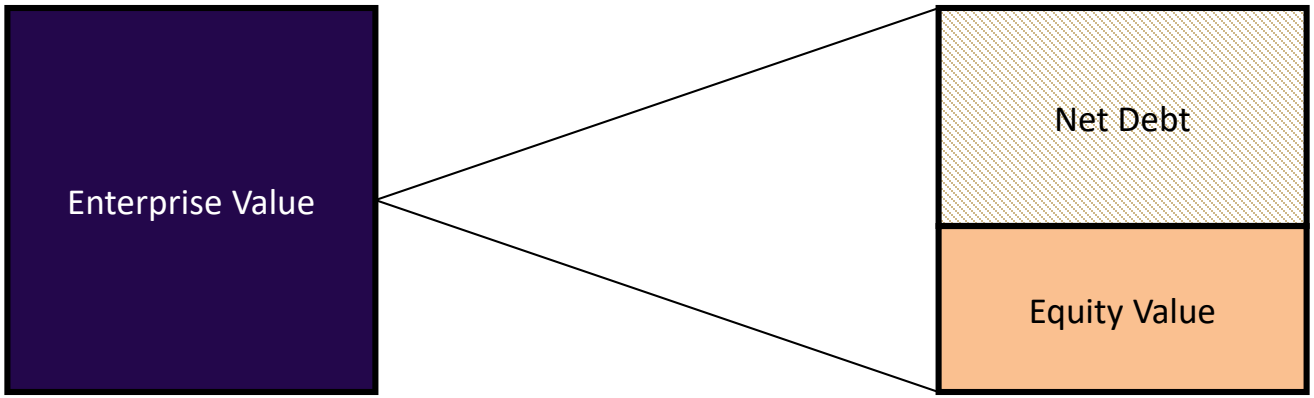
ENTERPRISE VALUE

- Also known as Firm Value
- Value of the operating assets of the business
  - Represents claims of all stakeholders (debt, preferred, minority, common)

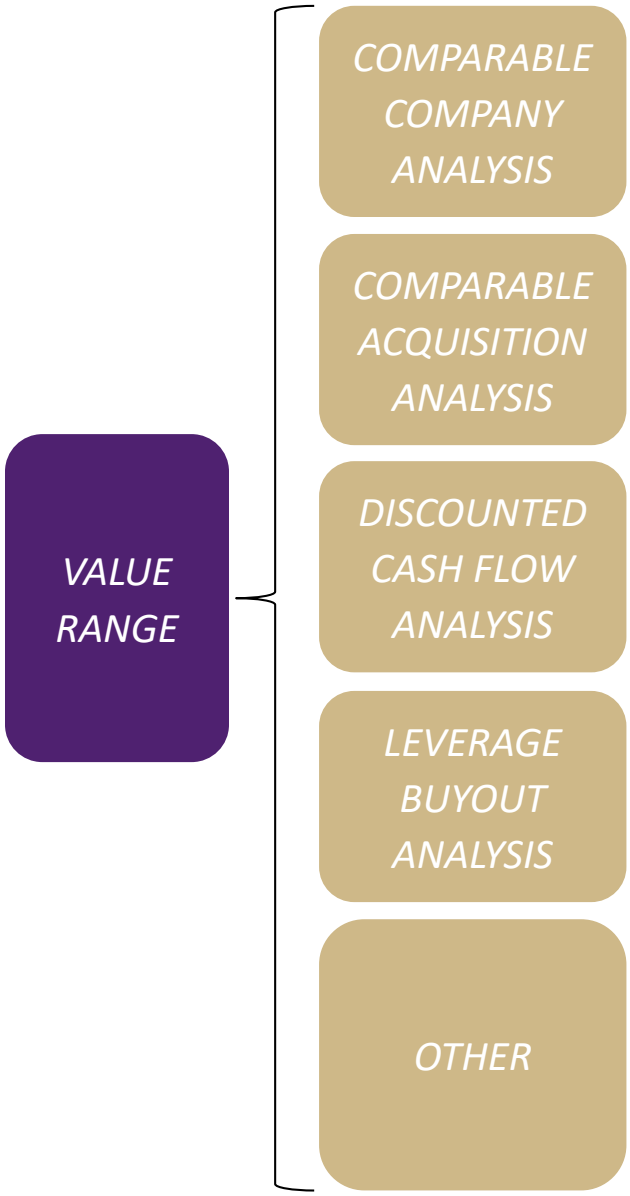
EQUITY VALUE

- Also known as Market Value or Market Capitalization
- Equity = Assets – Liabilities

ENTERPRISE VALUE *= EQUITY VALUE + NET DEBT*



VALUATION METHODOLOGIES OVERVIEW



- "Public Market Valuation"
- Value based on market trading multiples of similar companies

- "Transaction Market Valuation"
- Value based on multiples paid for comparable companies in precedent sale transactions

- Present value of projected unlevered free cash flow

- Value to a financial / LBO buyer
- Value based on debt repayment and return on investment

- Break-Even Analysis
- Sum of the Parts Analysis
- Liquidation Analysis

COMPARABLE COMPANY ANALYSIS OVERVIEW

OVERVIEW

- A valuation technique that is based on the idea that companies with similar characteristics should have similar valuation multiples
- A group of comparable companies includes companies from the same industry as the company that is being valued with similar products / strategy, profitability, customers, geography, and distribution channels
- Comps are relatively easy to perform, and the data for them is usually relatively widely available

Comparable Company Analysis - Fast Food Restaurants

Company	Capitalization		Valuation Metrics								Margin Analysis			
NAME	EV	MktCap	P/E	FY1 P/E	5Y P/E	EV/ EBITDA	FY1 EV/ EBITDA	5Y EV/ EBITDA	EV/ Sales	FY1 EV/ Sales	Gross	EBITDA	Oper.	Profit
Wendy's Co/The	$ 4,886	$ 2,643	18.4x	23.0x	39.9x	11.1x	12.6x	12.3x	2.8x	4.2x	37%	26%	15%	9%
Yum! Brands Inc	$ 40,332	$ 35,706	25.9x	21.9x	21.4x	14.2x	12.5x	15.2x	2.9x	3.0x	27%	22%	15%	10%
Jack in the Box Inc	$ 4,179	$ 3,290	27.7x	21.2x	22.0x	13.7x	11.6x	12.1x	2.4x	2.7x	28%	20%	13%	7%
McDonald's Corp	$ 121,663	$ 98,781	21.3x	18.8x	19.2x	13.4x	12.5x	13.3x	5.0x	5.3x	39%	36%	28%	18%
Popeyes Louisiana Kitchen Inc	$ 1,301	$ 1,162	28.3x	22.1x	25.4x	15.7x	13.5x	16.6x	5.0x	4.4x	65%	31%	29%	17%
Sonic Corp	$ 1,823	$ 1,320	21.2x	18.2x	20.7x	10.6x	10.3x	11.6x	3.1x	3.2x	40%	28%	19%	11%
Average	$ 29,031	$ 23,817	23.8x	20.9x	24.8x	13.1x	12.2x	13.5x	3.5x	3.8x	39%	27%	20%	12%
Median	$ 4,532	$ 2,966	23.6x	21.5x	21.7x	13.6x	12.5x	12.8x	3.0x	3.7x	38%	27%	17%	10%

COMPARABLE ACQUISITION ANALYSIS OVERVIEW

OVERVIEW

- Acquisition market values will usually exceed trading multiples given targets are purchased at a premium to market value for the following reasons:
  - ***Potential Cost Savings***: Elimination of duplicate corporate staff and headquarters, purchasing power savings and economies of scale savings
  - ***Revenue Enhancement***: Additional target sales unlocked via the acquiror's existing channels and product offering
  - ***Strategic Benefits***: Expansion into new markets
  - ***Management Benefits***: Continue to build the collective expertise of the management team
- This analysis considers the multiples paid in prior transactions in the industry across the same financial metrics as the comparable company analysis

CRITERIA FOR SELECTING COMPARABLE TRANSACTIONS

- In addition to the criteria mentioned on the previous page, consider the following criteria:
  - Size and industry of the target
  - Date of transaction as well as transaction structure
  - Growth characteristics of the target

DISCOUNTED CASH FLOW ANALYSIS OVERVIEW

OVERVIEW

- Determine the inherent value of a Company based on the cash the business generates
- The DCF yields the Enterprise Value of the business, before the effects of the company's capital structure
- There are two components of the DCF valuation:
  1. Interim cash flows: cash flows during the assumed holding period (usually 5 years)
  2. Exit value: the amount received in year 5
- Analysis is predicated on unlevered free cash flow
  - Generated by all the assets utilized by the business
  - Generated without regard to the capital structure of the business

LEVERAGED BUY OUT ANALYSIS OVERVIEW

OVERVIEW

- Generally, private equity firms use LBO analyses to value acquisition targets
- Private equity firms utilize this methodology to determine how much they can pay for an acquisition to get the return they need and to analyze the business' ability to service debt
  - How much can I pay and still get the required return of my investors?
- Three drivers of value creation in an LBO analysis for a private equity buyer
  1. EBITDA growth
  2. Multiple expansion
  3. Debt pay down

ACCOUNTING QUESTIONS

FINANCIAL STATEMENTS

- How do the 3 statements link together?
- Talk through the differences between a company with high Gross Profit margins and a company with low Gross Profit margins.
- How would a $10 increase in Depreciation affect the statements?
- How would a $10 increase in Inventory affect the statements?
  - Why is the Income Statement not affected by changes in Inventory?

VALUATION

- What are the three primary valuation methodologies?
- Which will usually generate the highest expected value?
  - Comparable Companies vs. Precedent Transactions
  - DCF vs. LBO
- When would a DCF not be appropriate?
- Why would a company with similar growth and profitability to its Comparable Companies be valued at a premium?

NOTABLE HISTORICAL LEVERAGED BUY OUT'S

NOTABLE TRANSACTIONS				
YEAR	VALUE	TARGET	ACQUIROR	DESCRIPTION
2016	$13.9BN	KEURIG GREEN MOUNTAIN	JAB Hold Co. with industry backers	Keurig, perhaps best known for its single-serve coffee dispensing technology, operates independently as part of JAB's global coffee platform, which includes Peet's Coffee & Tea and Caribou Coffee Company, among others
2007	$26BN	HILTON WORLDWIDE	Blackstone	At time, largest LBO ever. After 2013 IPO, Hilton had an equity value of around $20BN and Blackstone and its clients had a gain of almost $9BN
1988	$24BN	RJR NABISCO	KKR	It was the biggest deal of its time. Ushered in the modern LBO era. The deal was also eventually immortalized in a book and a movie, both of them called *Barbarians at the Gate*. Big news but underwhelming results.

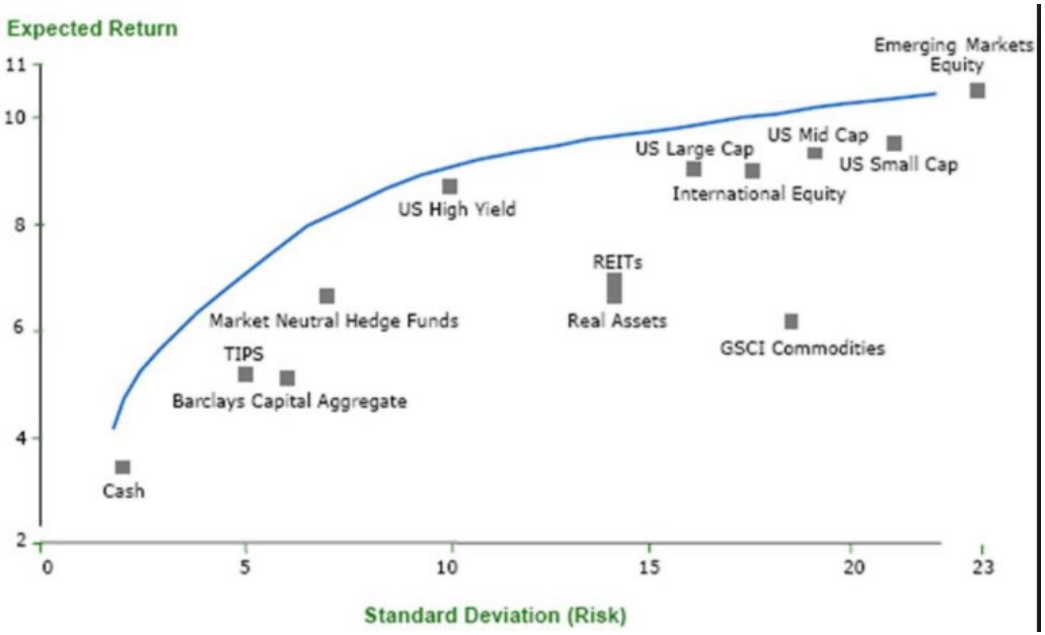
INVESTMENT CONSULTING/ASSET MGMT INTERVIEW

OVERVIEW

- Risk/return trade-off
  - CAPM Model
- Power of diversification
- Importance of valuations
- Understanding of factor analysis
- Understanding of the evolution within the industry: David Swensen and Yale's "endowment model"
- Organizational issues to look for in asset managers
- Style box understanding (large cap vs small cap, growth vs value)
- Role of equity and fixed income in a portfolio
- Role of hedge funds
- Role of private equity
- Role of inflation hedges
- Illiquidity premium understanding
- Passive vs active understanding

INVESTMENT CONSULTING/ASSET MGMT INTERVIEW

CAPM



V. GENERAL RESOURCES

GENERAL RESOURCES

UPDATED APRIL 2020

READING RESOURCES

- **General:**
- Economist, WSJ, Financial Times, NYT Opinions
- Investopedia
- Books: *The Ascent of Money, The Big Short, Crisis Economics: A Crash Course in the Future of Finance, The Wisdom of Finance, Too Big to Save, Range: Why Generalists Triumph in a Specialized World*

- **Banking:**
- Wall Street Prep, Wall Street Oasis, Mergers & Inquisitions, Training the Street
- NYT DealBook – brings transactions and market developments to life via interviews, additional commentary and writer perspectives;
- Macabacus
- SEC – Edgar; 10-K & 10-Q; 8-K (Press Releases); Earnings Call Transcripts & Presentations
- Books: *Monkey Business, Liar's Pokers, Barbarians at the Gate, Too Big to Fail, Den of Thieves, The Smartest Guys in the Room*

GENERAL RESOURCES

UPDATED APRIL 2020

READING RESOURCES

- **Investment Management (wealth management, asset management, investment consulting):**
- Institutional Investor, CFA Journal (FAJ), Journal of Portfolio Management, Journal of Investing, Pensions & Investments
- Cliff Asness (AQR), Ray Dalio (Bridgewater), and Howard Marks materials (blog posts, interviews, papers, letters)
- CB Insights (for Venture Capital updates)
- Dan Primack on Axios (for PE deals)
- Crunchbase and Pitchbook (for Venture Capital deals/searching for firms)
- Zero Hedge, SeekingAlpha
- Biotech: Atlas Venture Blog (https://atlasventure.com/trending)
- Books: *Pioneering Portfolio Management, Capital Ideas, More Money than God, The Money Flood,* William Bernstein's *Deep Risk*
- **Sales and Trading/Quant:**
- MFA
- Books: *Hedgehogging, Market Wizards, Black Edge, The Futures, When Genius Failed, Trend Following with Managed Futures: The Search for Crisis Alpha, The Battle of Bretton Woods, Flash Boys*

GENERAL RESOURCES

UPDATED APRIL 2020

POCAST & E-MAIL RESOURCES

- **Investment Management:**
- 20VC (VC focus), Village Global (VC focus), Capital Allocators, Invest like the Best
- Matt Levine (free, daily)
- Byrne Hobart (paid, daily e-mail)
- Alex Danco (weekly e-mail)
- OSAM (e-mail has monthly best reads, also check out their papers)
- Ben Thompson/Stratechery
- **Notable Impact Investors:**
- Generation, Capricorn, Omidyar, TPG, Bain, Cambridge Associates (most large consulting firms have good research/dedicated MRI practice groups), Jeremey Grantham, DBL Partners, Rethink Impact, Kauffman, Knight Foundation

VI. Q&A

HOW WORK IS FUN

Stuff I've (TK) thought about this week

- **Fundamentally, what drives asset returns? And how can an investor make money?**
- **How are the financial markets connected to the real economy?**
- **Future of hedge funds (which have performed poorly for the last decade)?**
- **Role of private equity and venture capital in the economy?**
- **Role of shareholder activism in the US (and ex-US) economy?**
- **How will climate change affect assets?**
- **Is bitcoin a currency?**
- **Role of inflation hedging and high volatility assets in portfolios?**
- **Trade-off between diversification and concentration (in highest conviction positions/factors) in a portfolio?**
- **Why did GMO include both earnings growth and margin expansion (along with dividends and multiple expansion) in their model that explains equity returns (which was shared in their most recent letter: *The S&P 500: Just Say No*)?**