# CUHK Workshop 1: Behavioral Finance & Value Investing

February 2025



THE OVERLOOK PARTNERS FUND, L.P.

### Introduction

- Investing is a Relative Zero-Sum Game, and After Fees Most Funds Underperform
- Value Investing is "Investing" not "Speculating" = Intrinsic Value Driven, Long-Term
  - Are there many investors in the market, or is everyone a speculator? Who has an indefinite holding period?
- Why Does the Opportunity Exist?
- Can Understanding Biases Help Us Become Better
  Investors?



### Introduction

- Price is Determined by the Marginal Buyer and Seller of the Security
- Who is the Marginal Buyer and Seller of a Security? What Edge Do You Have Over Them?
  - Informational, Analytical, Time Horizon, and Sentiment
  - Types of Participants (Hedge Funds, Long Only, Quant, Retail, Passive)
- Stochastic Not Deterministic, Understand Edge is a Source of Safety
  - Significant Variance in Distribution of Long-Term Returns
  - Understanding Biases Avoids Being the Patsy



## **Capitalism & Its Brutality**

### • Capitalism is Brutal, Schumpeter's (1942) Creative Destruction!

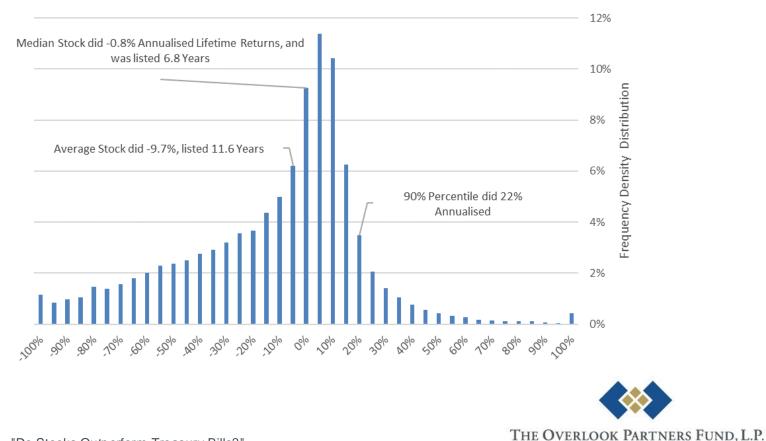
- Only 86 stocks (0.33% of stocks) account for over half the US market wealth creation from 1926 to 2016, and 4% account for all stock market-gains above treasury bills.
- Only c.43% of stocks exceeded treasuries. (Bessembinder, 2018)
- 36% of stocks faced >80% lifetime cumulative declines (totalreturn)
- Over 10-year period 39% of stocks had negative absolute returns, and 58% underperformed the market (Klement; 2020)



### **Underappreciation of Compounding**

#### Most Investors and Individuals Underappreciate Compounding

#### - Which stock do you think had the best cumulative lifetime returns in the US (1926 to 2024)?



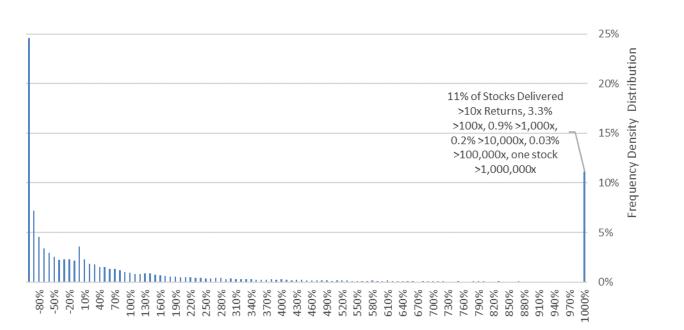
Distribution of Annualised Lifetime Stock Returns

### **Underappreciation of Compounding**

#### Compounding Has a Significant Impact on the Distribution!

- Is it smart to interrupt the compounding of your winners? Coffee can approach?

Distribution of Cumulative Lifetime Stock Returns





30%

### **Excessive Information & Shortening Attention Spans**

- The World Is Short Patience and Long Instant Gratification
- Meme Stocks, Crypto, Get Rich Quick



Source: WFE, IMF. \*NYSE and NASDAQ market capitalisation divided by total turnover value



### **Behavioral Finance**

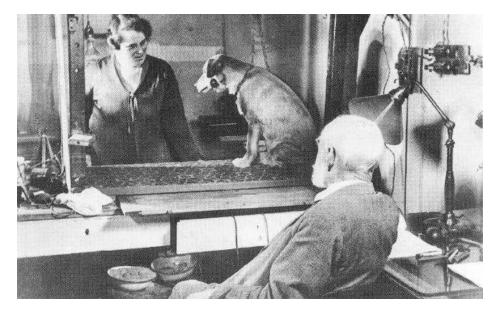
- Daniel Kahneman Won the Nobel Prize (2002), Due to Behavorial Finance
- People Aren't Rational Utility Maximisers, Heurestics and Biases are at Large
- Anchoring, Confirmation, Recency, Herding, Ambiguity Aversion, Myopic Loss Aversion
  - Do these systematic biases explain why discrepancies to fair-value may exist?
  - Can understanding our biases help us avoid eroding our edge?





### **Incentives & Loss Aversion**

- Just Like Pavlov's Dog: Incentives, Feedback Loops, and Conditioning
  - Long-Termism is a Key Edge (Clients, Information, Politics, Gratification)
  - Loss Aversion: Losses Hurt More Than Gains Bring Happiness
  - Loss Aversion, Social Proof, Recency Bias all Intertwine with Incentives
    - Lollapalooza as Munger would say!





THE OVERLOOK PARTNERS FUND, L.P.

# Herding, Confirmation

- Herding Bias: Consensus Thinking, Swings in Market Sentiment
  - Solution: No Friends, Avoid Sell-Side, Find Own Niche Herd
- Confirmation Bias + Ambiguity Aversion: Premature and Lasting Conclusions
  - Solution: Reject Null Hypotheses Not Confirm Them
  - Solution: Control Source of Information, Start with Objective Truths





# **Recency (Availability), Anchoring**

#### Recency Bias: Over Emphasize Recent Events

- Solution: Look at long-term historical data, and seek information that leans against recent events
- Anchoring Bias: Focus on Arbitrary Reference Points, Slow to Adjust
  - Solution: Avoid Consensus, Use Base-Rates (Long-Term History), Adopt Scenario Analysis & Think Through Logically



### **Behavioral Finance – Munger's Speech**

Munger's Psychological Tendencies	<b>Behavorial Bias</b>	Academic Coined	Market Issues & Implications
1. Reward and Punishment	<b>Incentive-Caused Bias</b>	Jensen (2000)	Principle-Agency Issues (Beta-Loving - Fees, Career Asymmetry,
Superresponse			Consensus Thinking - Internal Politics), Short-Termism
2. Liking/Loving	Affinity/Familiarity Bias	Huberman (2001)	Loved & Simple Businesses, Charismatic CEOs, Home Bias, LT Winners
3. Disliking/Hating	Negativity Bias	Rozin; Royzman (2001)	Overreact Negative News, Avoid Hates Sectors (Tobacco, Coal, Vices)
4. Doubt-Avoidance	Ambiguity Aversion	Ellsberg (1961)	Underappreciate Uncertainty (Stochastic not Deterministics), Sentiment Driven, Recency Bias
5. Inconsistency-Avoidance	Status Quo Bias	Samuelson; Zeckhauser (1988)	LT Momentum, Inability to Update Thoughts with Evidence
6. Curiosity			Excessive Trading
7. Kantian Fairness	Fairness Bias	Kahneman et al. (1986)	Slow to Adopt New Trends (Feels Unfair)
8. Envy/Jealousy	Relative Deprivation Bias	Festinger (1954)	Consensus, Leverage, Difficulty in Underperforming
9. Reciprocation	Reciprocity Bias	Cialdini (2001)	Favour Broker & Network Sourced Ideas
10. Influence-from-Mere-Association	Halo Effect	Thorndike (1920)	Bias Towardsw Visionary CEOs, Familiary Loved Brands
11. Pain-Avoiding Denial	Loss Aversion	Kahneman; Tversky (1979)	Holding Losers, Prematurely Selling Winners
12. Excessive Self-Regard	<b>Overconfidence Bias</b>	Barber; Odean (2001)	Excessive Concentration & Trading
13. Overoptimism	Optimism Bias	Weinstein (1980)	Overvaluation of Highly Uncertain Stocks (Risk-Loving; Beta Paradox)
14. Deprival-Superreaction	Endowment Effect	Thaler (1980)	Prefer Existing Positions to New Ideas
15. Social Proof	Herding Behavior	Banerjee (1992)	Consensus, Sell-Side Reliance, Bubbles
16. Contrast-Misreaction	Anchoring Bias	Tversky; Kahneman (1974)	Slowness to Adjust to Cycles (Fundamentals, Sentiment), Valuation Anchoring
17. Stress-Influence	Emotional Bias	Loewenstein et al. (2001)	Overreaction to Bad News, Regret Aversion (FOMO Trades)
18. Availability-Misweighing	Availability Heuristic (Recency Bias)	Tversky; Kahneman (1973)	Over-emphasis Recent News, Consensus (Frequent Views), and Trends
19. Use-It-or-Lose-It	Skill Decay Bias		
20. Drug-Misinfluence	Impulsivity Bias		Over-Acting
21. Senescence-Misinfluence	Cognitive Decline Bias	Park et al. (2002)	
22. Authority-Misinfluence	Authority Bias	Milgram (1963)	Over Confidence from "Experts" (Insiders, Specialists, Famed Investors - Valeant?)
23. Twaddle	Noise Trading Bias	Black (1986)	
24. Reason-Respecting	Narrative Fallacy	Taleb (2007)	Herd Behaviour, Simplistic Narratives
25. Lollapalooza			Amplified Interactions (Market Sell-Offs, Periods of Stress)

CUHK Workshop 1: Searching for Ideas

Feb 2025



# **Investing in Stocks**

#### What Comes to Your Mind?

Window IBot FYI	P f A Setup	Aa Contact Un 🛆 🔤 Televisional 🖉 🖉	14:50:
MDER ENTRY	AI + 3 © Z X MONT	04 € Hope 150 His Scal ContSpeads Watchist27 Wetchist28 > + + 0	
CL @ May'21 ONYMEX +	+63.30 63.31 · Adaptive * Strategy Builder *	EXCHTRDNCOMPANY NAME BD ASK LAST	CHANG
	Stock		
	BID HID ASK IBKR		
	MSFT		
	TSLA	SMART USD TESLA INC 733.93 734.11 734.14 +1.	91
	Optio		
BUY SELL	SIBUIT		.65
	Mocation: All  Minimal AvailableEquity  Minimal Southernian Future Future		
@ Hay/21 ONTH @	Character and the Allerthe Phalle conding a life Edd Many	tes Ausi/21 e0LGLOBUSDE-mm S&P 500416041604160.50+42.	
3.31.			16
.16 0.25%	The second	Lord 21 primes when use crude of 63.30 03.31 03.31 40.	
	64.00 PX		-
Ask 63.30 x 63.31	BUY LMT 63.00 USD.0 USD.0	HF IDEA. CHF United States dollar 0.921 - 0.92 0.92153	137
11 × 16			294
0 63.57 - 62.53	Provide the second s		-29
x.	49.00 US G	ovt Bonds	
Oprdnt 316K	45.00 US-T d	GOVT Nete 0.1 SMART_USDUnited States Treasury 99.94 99.9 99.9531 +0.00	139
Opnint 118K	41.00 US-T 0	GOVT Note 0.5 SMART_USDUnited States Treasury 98.65 98.6 98.6636 +0.27	30
	CL @ MAY'21 Futures@NYMEX Delayed + 37.00 US-T @	GOVT Note 1.1 SMART USD United States Treasury 99.45 99.4 99.4586 +0.52	11
	34.00 Germ	ian Govt Bonds	
	1620% 643621% 643632% 643532% 643535% 31.00 DE 60	NT Feb15'31 SMART EUR BUNDESREPUB. DEUTSC c102.5880	
	DE 60	NT 2.0 Aug15 SMART EUR BUNDESREPUB. DEUTSC c106.4260	
	Volume S00.0K Corpo	orate Bonds	
		CORP 1.0 Nev SMART EUR Apple Inc c102.2000	
	CAT C	ORP 1.9 Mar1 SMART USD Caterpliar Inc 98.57 98.8 98.5540 +0.90	00
	Nov '20 Dec '20 Jan '21 Feb '21 Mar '21 Apr '21 +		
	Quert has been been and has Direction D .		
WITY Live Orders	Trades Summary Orders + All + All + All + LIVE+ + 0.2 + C.X. NEWS	Traders' Insight III (K Coart III + Search 10	2.
	Key Mocation Action Type Details Crint Py Quantity/ux 1 TIME-	SOURCE SYMBOL HEADLINE	RAI
D. IN MAY 21 BINIMER		The Explosion of SPACs — Should You Care?	n/s
US-T GOVT Note 0.125 F_		TI Giving Credit Where It's Due	
15KR		I TI Your Rek-On Roadmap	
		11 A New Era for Crypto: What Comes Next After Coinbase's Direct Listing	
		) TI First 'Inverse Bitcoin ETF' Launches On Toronto Stock Exchange	
		TI Defying Expected Norms	-n/a
		i TI Chart of The Week: Global Economy: Fiscal Policy ) TI Saving Investors from Meme Stocks: GameStop (GME)	0.95
	[LIVE] filter is used. Click here to show all orders 11:00	In saving investors from vience stocks, camestop (GMC)	1.00





### **Stock Market vs Shopping Mall**

- Shopping
  - Spend Some Money and Get Something Back
- When You Buy Shares, What Do You Get Back?
- We Are Consumers Who Pays Money
  - What About Being the One Who Receives Money?







## **Value Investing**

- Spend the Money and Get a "Number" *Lottery (Speculation)*
- Instead, Buying Shares is Buying an Ownership to a Business
  - Allow An Ordinary Person to Be Part of the Ones "Receiving Money"
- Is Not About Short-Term Trading
  - As You Don't Pay to Get a "Number" to Be Played Around with
- Is About Long-Term Ownership
- However, the Price You Pay Is the Cost





## **Stock Market vs Shopping Mall**

#### What Would Make Your Purchase a "Good Deal"?

- The Product Has Very Good Quality?
- The Price Is Very Cheap?
- It Would Need to Be Combination of Both "Value-for-Money"

### Same Concept for Stock Investment

- Good Quality Find A Superior Business
- Pay a Reasonable or Bargain Price

### Hold It for the Long Term

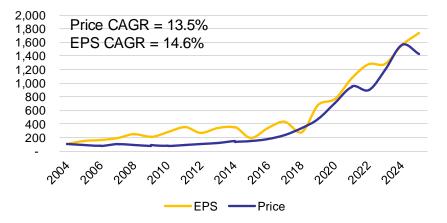
- Don't Kill the Goose That Lays the Golden Eggs
- Let the Benefit Compound



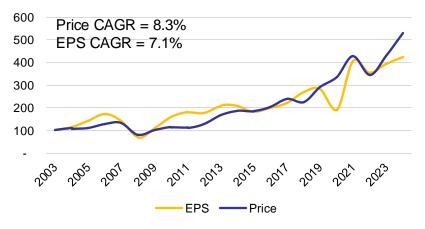


### What Drives Stock Price over the LT

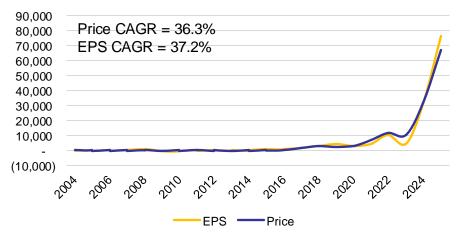
#### Microsoft Price vs EPS, Index to 100



#### S&P500 Price vs EPS, Index to 100



#### Nvidia Price vs EPS, Index to 100



### Per Share Growth is the Key Driver of Share Price Over the Long Term

- Plus Dividend Received

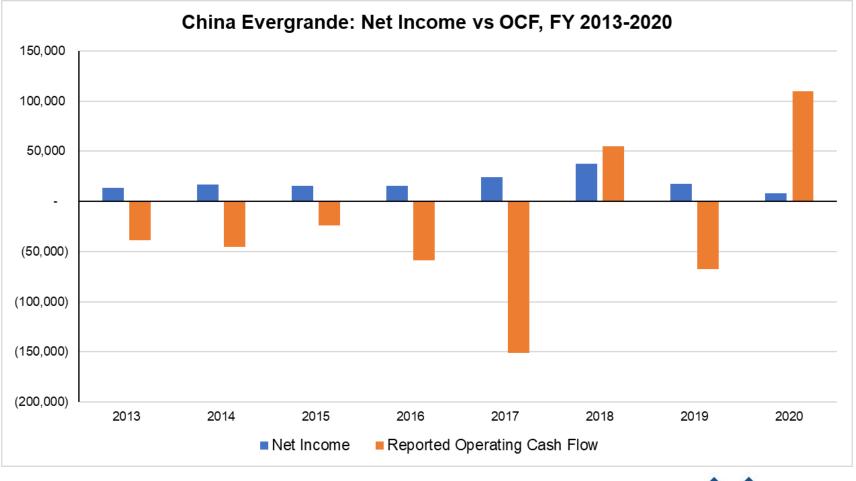


### **Looking for Desired Characteristics**

- Goal: Find Businesses that Can Deliver LT Per Share Growth
- First and Foremost, Growth Requires Investment
- Assume You Are Running a Clothing Store, to Grow:
  - Invest in Store Renovation Capex (Capital Expenditure)
  - Purchase the Clothes in Advanced Working Capital Investment
  - General Expenses, e.g. Salary, Marketing
- Desired Characteristic Consistent Generation of Free Cash Flow
  - More Important to Focus On Cash Flow than Accounting Profits



### **Example: China Evergrande**



THE OVERLOOK PARTNERS FUND, L.P.

## **For Reference**

#### Some Definitions of Cash Flows

- Reported Cash Flow from Operation
- Free Cash Flow to Firm (FCFF) & Free Cash Flow to Equity (FCFE)
- Owner Earnings
  - NI + DA ± Non-Cash Items ± Chg in WC Maintenance Capex
  - Maintenance Capex Need to Be Estimated Subjectively; Depreciation Might Be Used As a Crude Approximate

### Measuring "Consistent Generation"

- Cash Flow Conversion Ratio: Cash Flow / Net Income
- Cash Flow Margin: Cash Flow / Revenue
- Cash Flow Growth

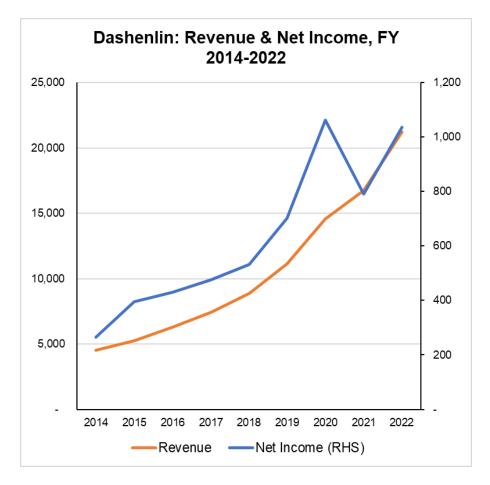


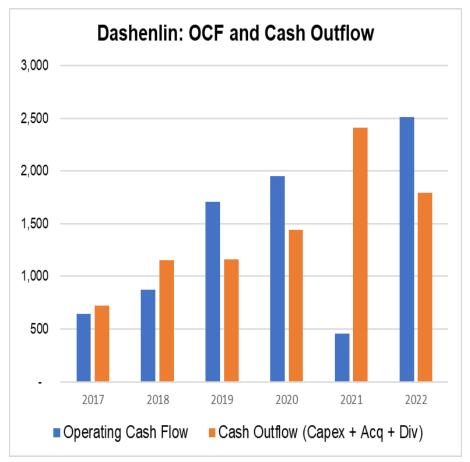
## **Positive Cash Generation is Not Enough**

- Need to Generate High Enough Cash to Fund the Growth
- External Financings Needed If Cash Generated Is Less Than Cash Required
  - As a Result, Existing Shareholders Will Be Diluted
- Two Major Types of External Financing:
  - Debt Issuance => Profit Shared with Creditors
  - New Share Issuance => Direct Dilution
- Desired Characteristic Self-Financed Growth



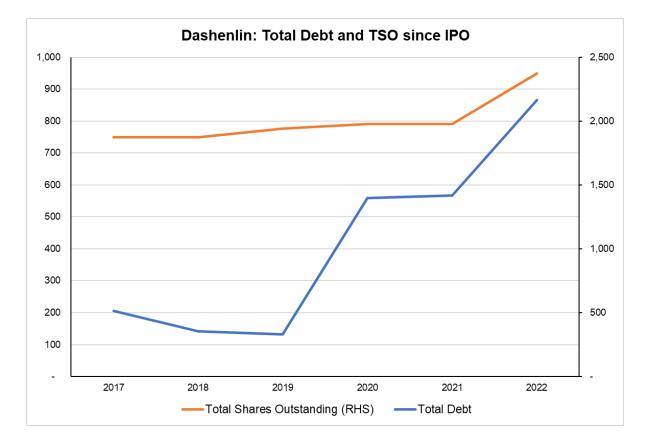
### **Example: Dashenlin Pharmacy**







### **Example: Dashenlin Pharmacy**





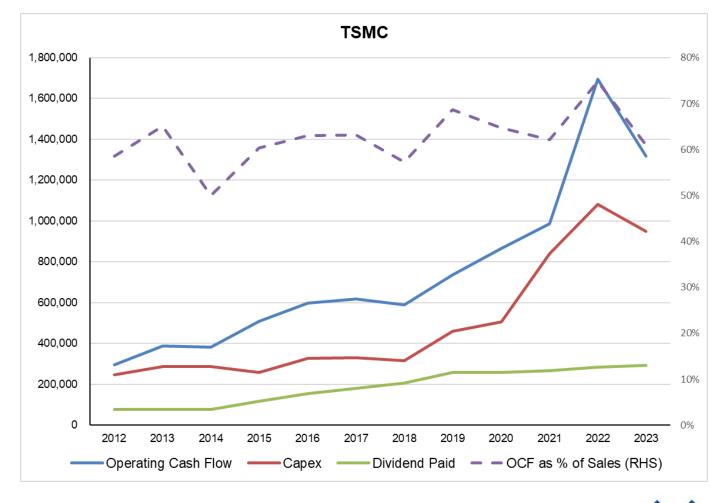
### **For Reference**

### Some Favorable Traits to Look For

- High Cash Flow Generation
  - · As Mentioned in "Consistent Generation of Free Cash Flow"
- Negative/Low Working Capital
  - Net Working Capital = Account Receivable + Inventory Account Payable
  - Net Working Capital Days = AR Days + Inv Days AP Days
- Low Capex Intensity
  - Capex as % of Sales



### **Example of Self-Financed Growth: TSMC**



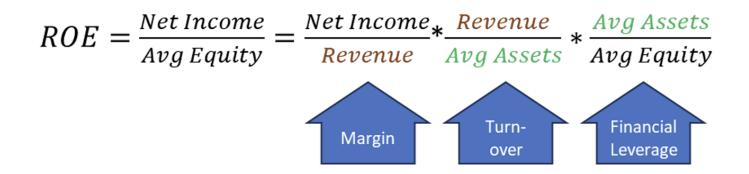
THE OVERLOOK PARTNERS FUND, L.P.

### **Business Returns**

- We Want a Virtuous Cycle: Investment => Return, Return
   => Support Future Growth
- Two Important Measures of Return
  - Return on Equity (ROE)
  - Return on Invested Capital (ROIC)
- Desired Characteristic High Rates of Business Returns
- Further Breakdown of the Returns Provides More Insights
  - ROE: DuPont Model
  - ROIC Tree



## **The DuPont Model**



#### Three Major Sources of High Returns

- High Margin: Purchase the Cloth for \$100, Sell it for \$1000
- High Efficiency (Asset Turnover): High Daily Sales per Store
- High Leverage: Generally, NOT a Reflection of Superior Business



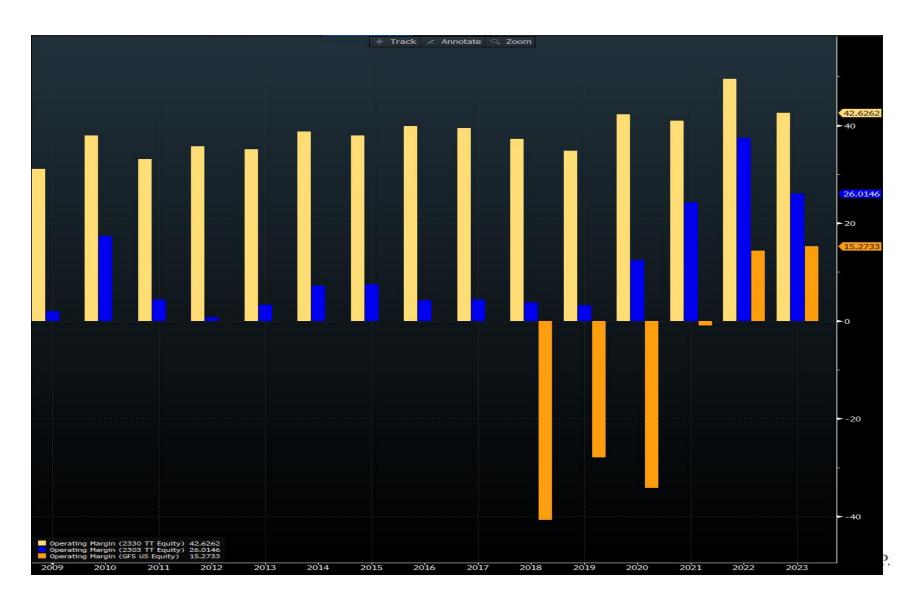
### **Understand the "Moat" Behind**

### High Returns Attract Competition

- If You Sell the \$100 Cloth for \$1000, Your Neighbor Will Likely Sell It for \$800
- Superior Businesses Are Able to Defend the High Return with Their Moats
  - E.g., Brand Power for Clothing Store
- Critical to Understand the Moat, and How They Would Evolves in the Long Term
  - Dupont Model Provides the Guide
- Desired Characteristic Strong Moat Usually Associates
   with Dominant Market Share



### **OPM: TSMC vs UMC vs GlobalFoundries**



# **Superior Business Quality Is Not Enough**

### The Business Results Need to Be Delivered to Shareholders

- Superior Businesses Generate Good Cash Flows and Returns
- But Shareholders Can Only Benefit When Those Cash Flows Are Spent Wisely

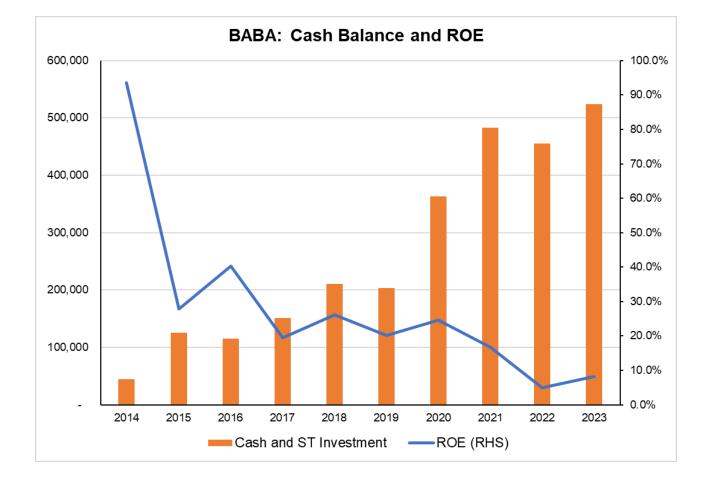
### Management Need to Allocate the Cash Appropriately

- Investment Need to Generate High-Enough Returns
- Returns Excessive Cash to Shareholders
  - Dividends and Buybacks

### Desired Characteristic – Appropriate Capital Allocation



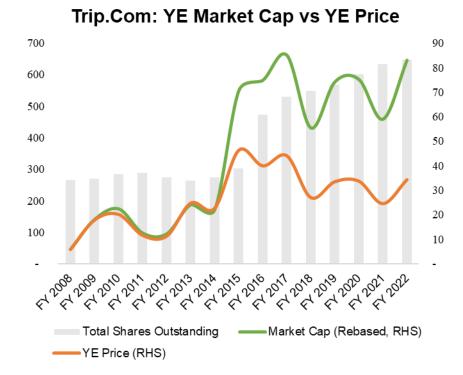




THE OVERLOOK PARTNERS FUND, L.P.

### **The Outcome of Superior Business**

- Superior Long-Term EPS Performance
- Important to Focus on EPS Rather Than Total Earnings
  - Takes Share Dilution Into Account
  - Sources of Dilution: External Financing, ESOP





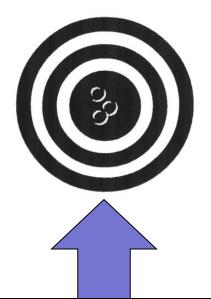
#### AAPL: YE Market Cap vs YE Price

## **List of Desired Characteristics Discussed**

- Consistent Generation of Free Cash Flow
- Self-Financed Growth
- High Rates of Return
  - Sustainable Moats
  - Dominant Market Share
- Superior LT EPS Performance
- Appropriate Capital Allocation
  - Returns for Shareholders



### **Idea Generation: Rifle vs Shotgun**

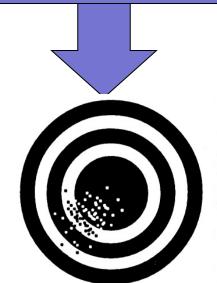


#### **Bottoms-Up Approach**

- Begin with Single Stock or Subsector in Mind
- Build up Knowledge Base & Understanding
- Go deep

#### **Top-Down Approach**

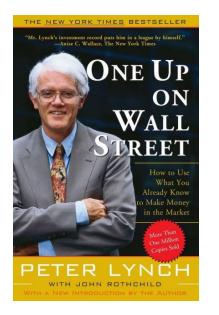
- Start with Wide Investible Universe
- Narrow Down Based on Multiple Criteria
- Can add Macro Overlay
- Output = Short list



RS FUND, L.P.

### **Bottoms-Up**





### "If you like the store, chances are you'll love the stock" – Peter Lynch

- Services: MSFT, Netflix, Spotify
- Consumer Goods: AAPL, Lululemon, Nike
- Individual Investors Can Have an Edge over Professional Fund Managers
- Start with A List of Companies You Like, and Use the Characteristics as A Reference Check List
  - Great Products ≠ Great Companies ≠ Great Investments Today
  - Remember the Price and Value

## **Top-Down: Stock Screening**

- Pick the Desired Criteria
- Start From the Whole Investable Universe, Or Pick A Few Industries that You Are Familiar With
- Time-Series Perspective
  - Consistency / Stability, e.g., Std Dev of 5-Yr Margins
  - Improvement / Growth, e.g., 5-Yr EPS CAGR

#### Cross-Sectional Perspective

- Across the Investable Universe, e.g., top 10% OPM
- Industry Neutral, e.g., Top 20 Companies with Highest OPM from Each Industry



