



# A VIRAL MARKET UPDATE III: PRICE VS VALUE, INVESTING VS TRADING

A Market Update

# How much can happen in eleven days?

- This is the third and I hope the last of my viral market updates, reflecting how much change a week can deliver, and last week delivered more change than most investors could handle.
- Not only did we see two of the worst market days in history, in absolute terms, we also saw the worst single day in US market history since October 19, 1987, in percentage terms, on March 12.
- In fact, the price change this week has been so dramatic that it makes the tables that I provided on where the market damage was last week, across sectors and regions, seem dated.
- In this post, I will update those tables, but I want to focus on a much larger question of how investors should craft a response to the market meltdown, and how that response cannot be one-size-fits-all.

# Price vs Value

## *Tools for intrinsic analysis*

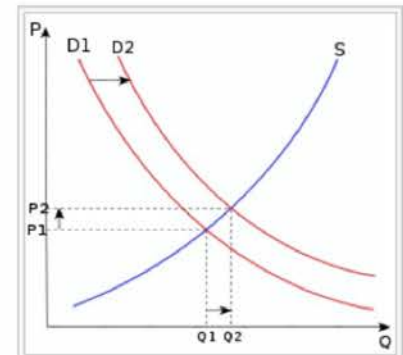
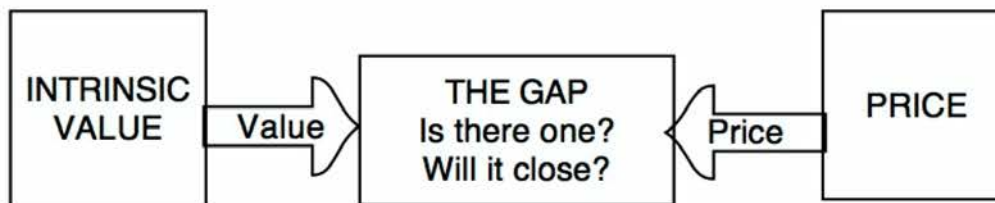
- Discounted Cashflow Valuation (DCF)
- Intrinsic multiples
- Book value based approaches
- Excess Return Models

## *Tools for "the gap"*

- Behavioral finance
- Price catalysts

## *Tools for pricing*

- Multiples and comparables
- Charting and technical indicators
- Pseudo DCF



## *Drivers of intrinsic value*

- Cashflows from existing assets
- Growth in cash flows
- Quality of Growth

## *Drivers of "the gap"*

- Information
- Liquidity
- Corporate governance

## *Drivers of price*

- Market moods & momentum
- Surface stories about fundamentals

# 1. Upper and Lower Bounds

- Since price is determined by demand and supply, and there is nothing that requires that those buying and selling in markets have to be constrained, at least in the near term, by fundamentals, it follows that there is no upper or lower bound to prices.
- Value on the other hand has both upper and lower bounds, with both bounds being set by expected cash flows, growth and risk. The upper bound is set by those who are more optimistic about a stock and the lower bound by those who are most pessimistic about that same stock, in terms of future expectations or liquidation value.
  - It is possible, for some stocks, especially early in the life cycle and with substantial uncertainty about the future, for the lower bound on value to be zero,
  - Stocks collectively cannot have that lower bound. For equities collectively to be worth nothing, you would require an apocalyptic scenario, one in which there is little point thinking about investments anyway.

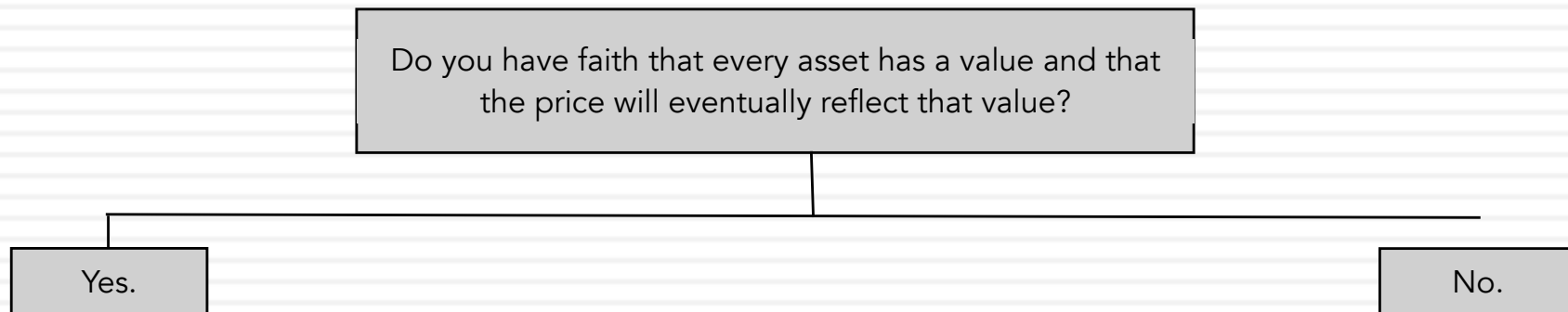
## 2. Price is reactive, value is proactive

- Incremental Information versus Fundamental Information: Pricing forces can take information that, at least at first sight, seems insignificant to long term value and cause price changes that are disproportional. Thus, when the mood is upbeat, small pieces of good news can result in big jumps in stock prices, but if that mood turns sour, small pieces of bad news can cause large drops in stock prices.
- Reactive versus Proactive: Traders react to the incremental information to adjust the price and put little thought into whether the starting price itself has a basis to it. Value is driven by expectations of cash flows, growth and risk, and information has to be used to reassess those expectations, a more difficult task, but one that forces you to separate the wheat from the chaff.

### 3. Price may never converge on value...

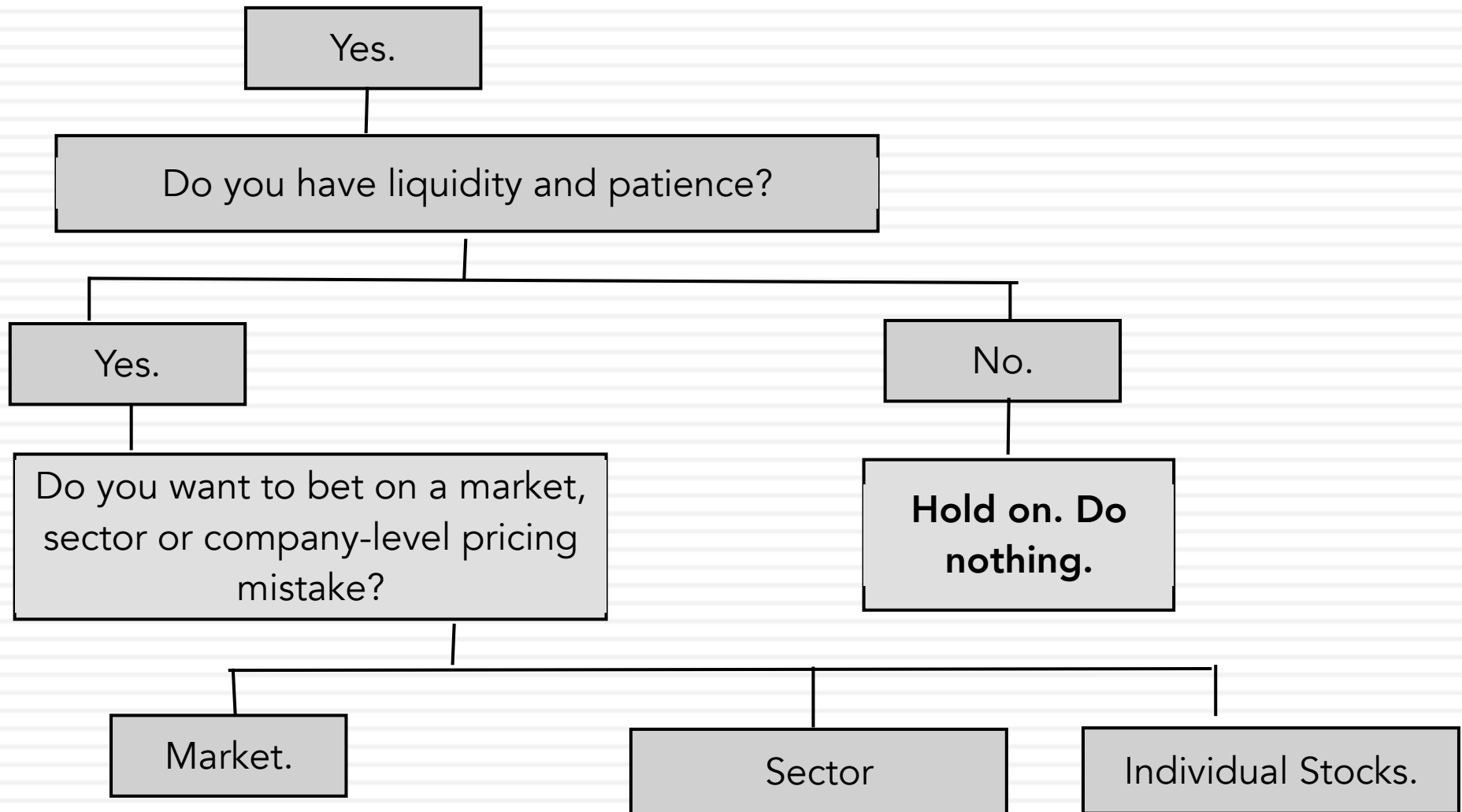
- ❑ Old time value investors live by the adage that the price can go up and down, with little relationship to value, but that it will eventually converge to value.
- ❑ Absent a catalyst causing the convergence, price will not only diverge from value in the short term, but it could do so in the long term. Keynes was close to the truth when he said that the "market can stay irrational longer than you and I can stay solvent".
- ❑ So what is it that keeps investors toiling at the fundamentals, hoping to get rewarded? The answer is faith, faith that they can estimate value and faith that the price will adjust to value. It is faith because I can offer you no proof for either proposition, and it is faith, because its strength will be tested by markets like this one.

# An Investing Game Plan: Step 1



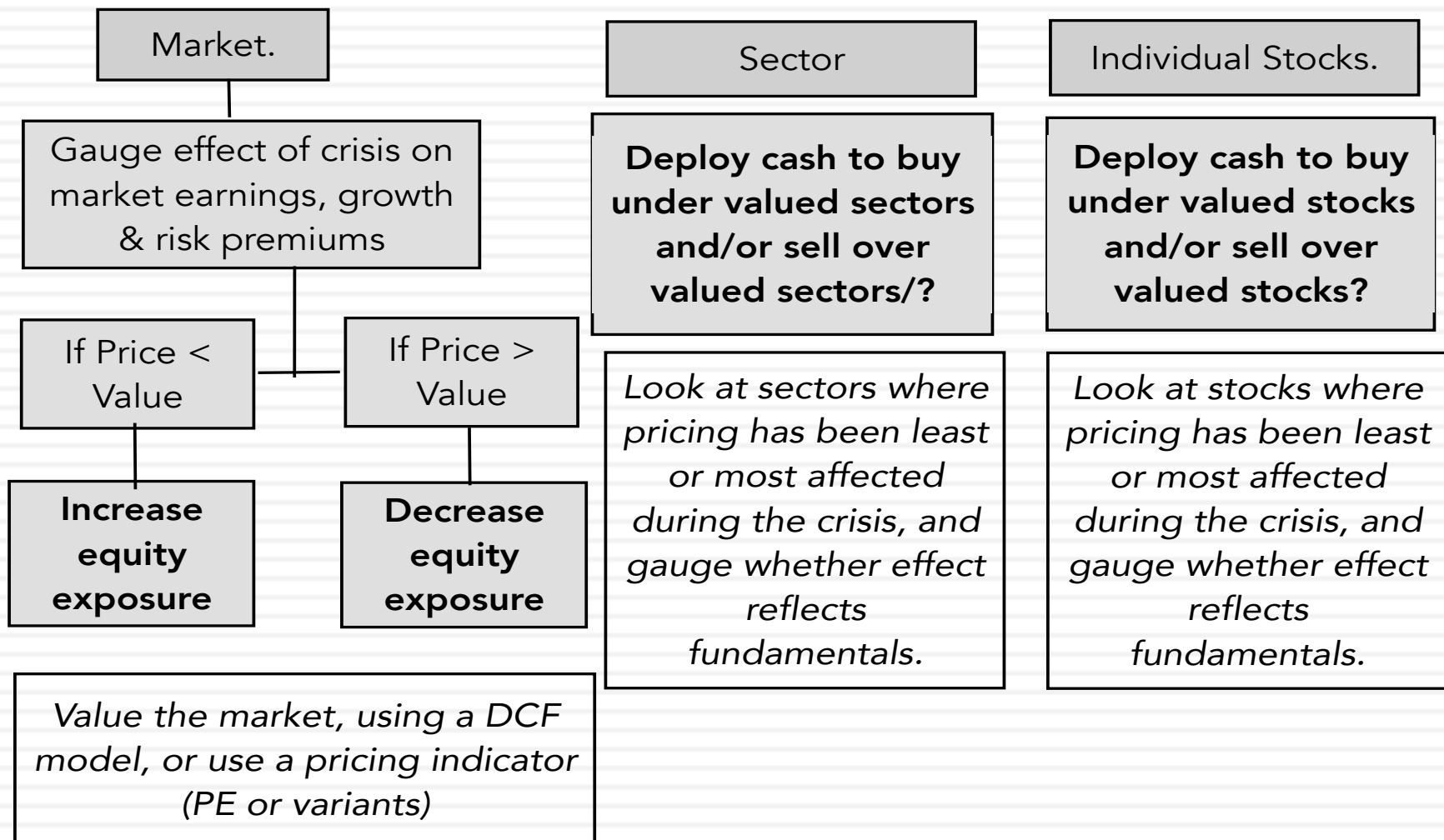
- In the abstract, most market participants describe themselves as long term, patient and believers in value.
- Warren Buffett once said that it is only when the tide goes out that you can tell who's been swimming naked, and it is only when the market goes into crisis mode that you can tell the investors from the traders.

## Step 2a: If you have faith

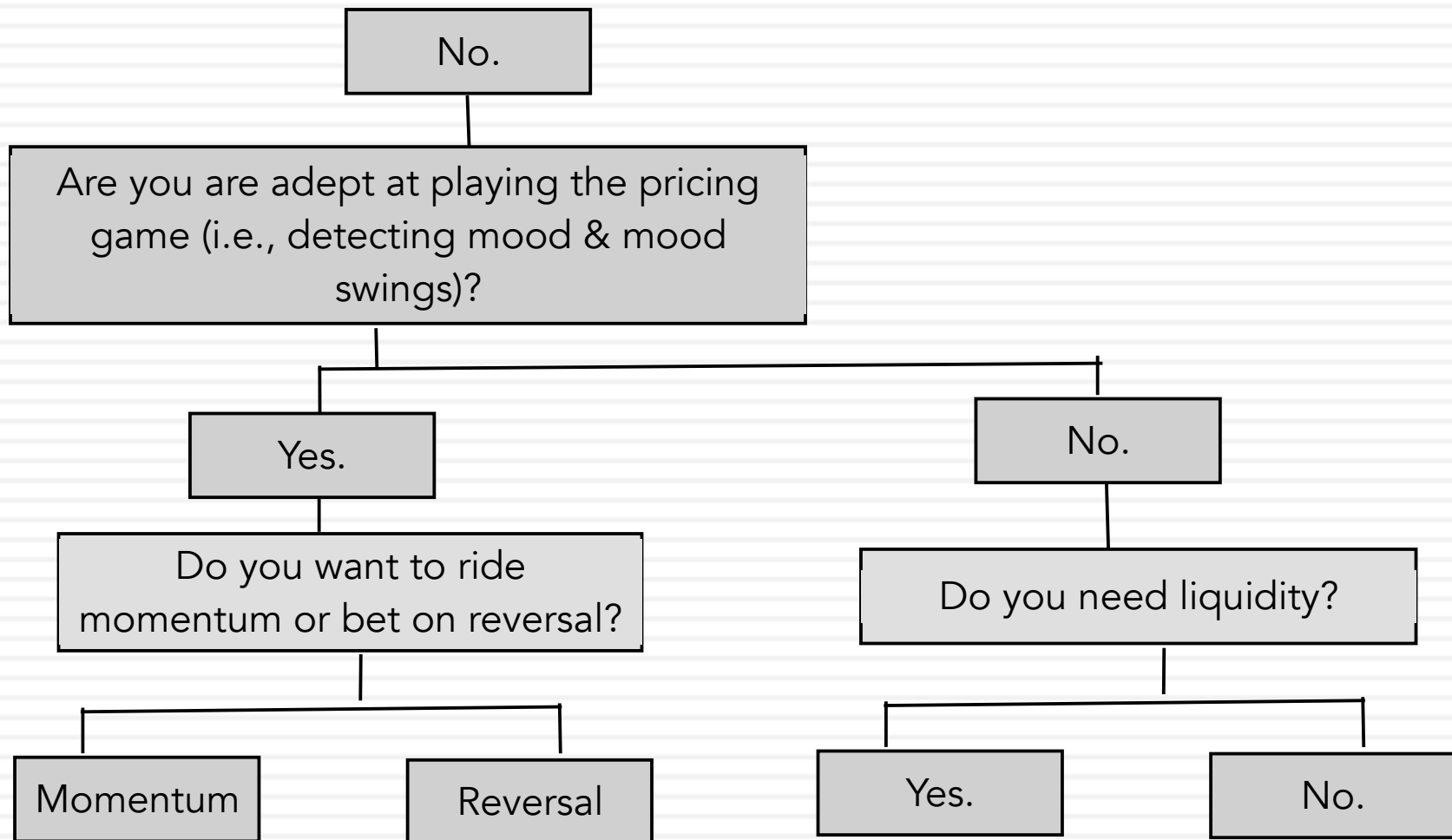




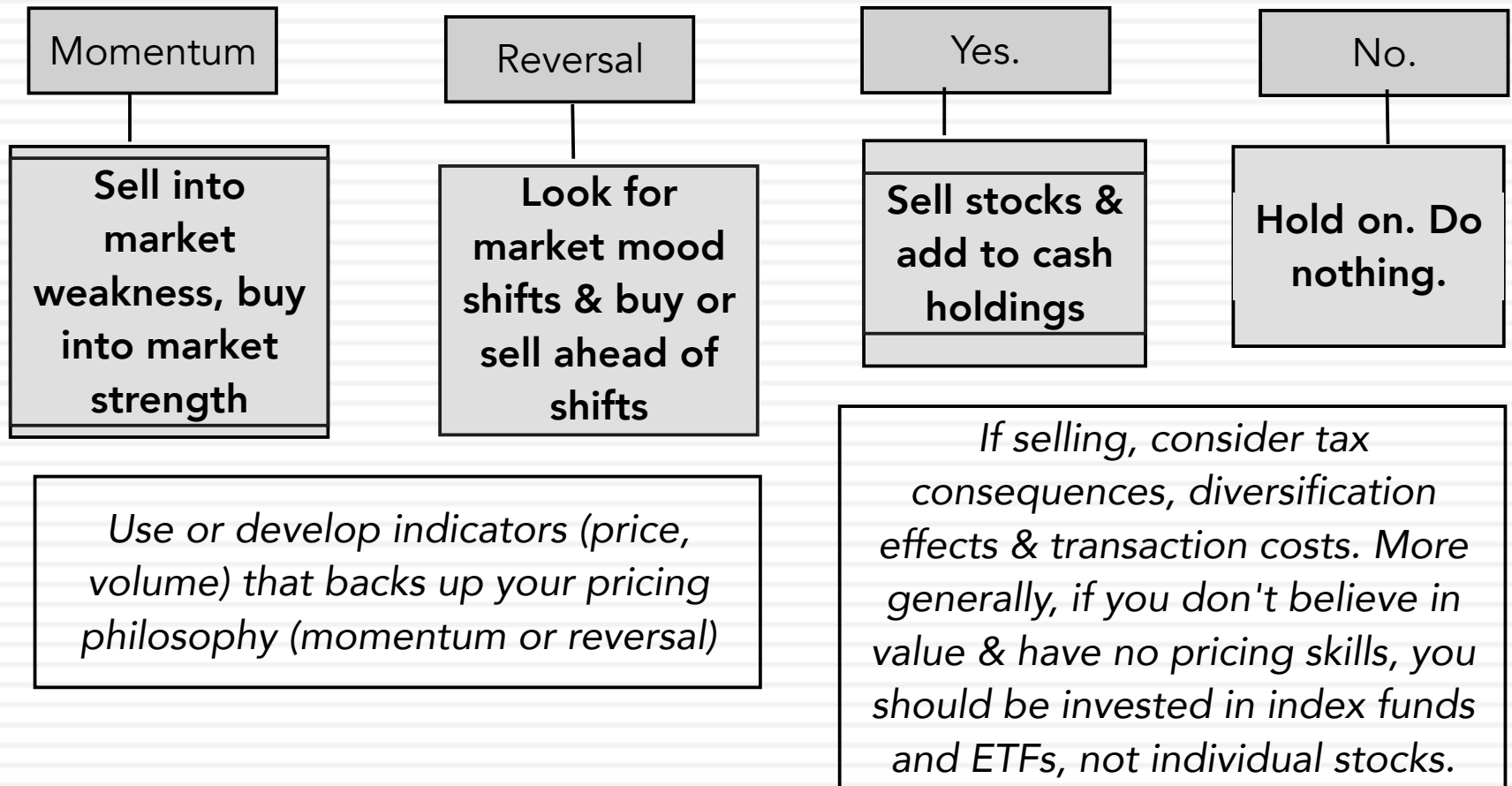
# Step 2b: Value Action Plan



# Step 3a: if you don't have faith

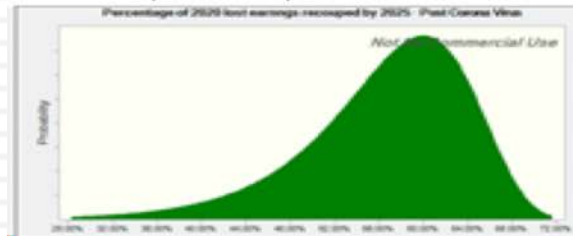


# Step 3b: Pricing Action Plan

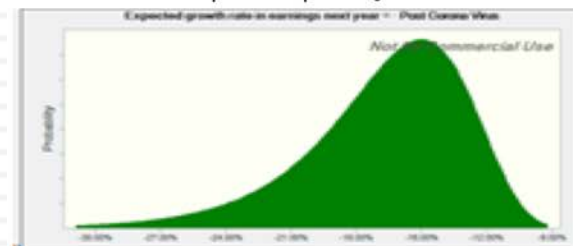


# What now? Valuing the Index

Expected drop in 2020 Earnings



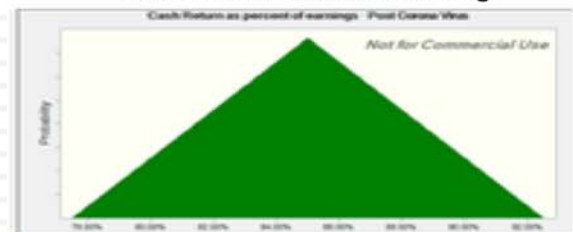
% of drop recouped by 2025



Equity Risk Premium

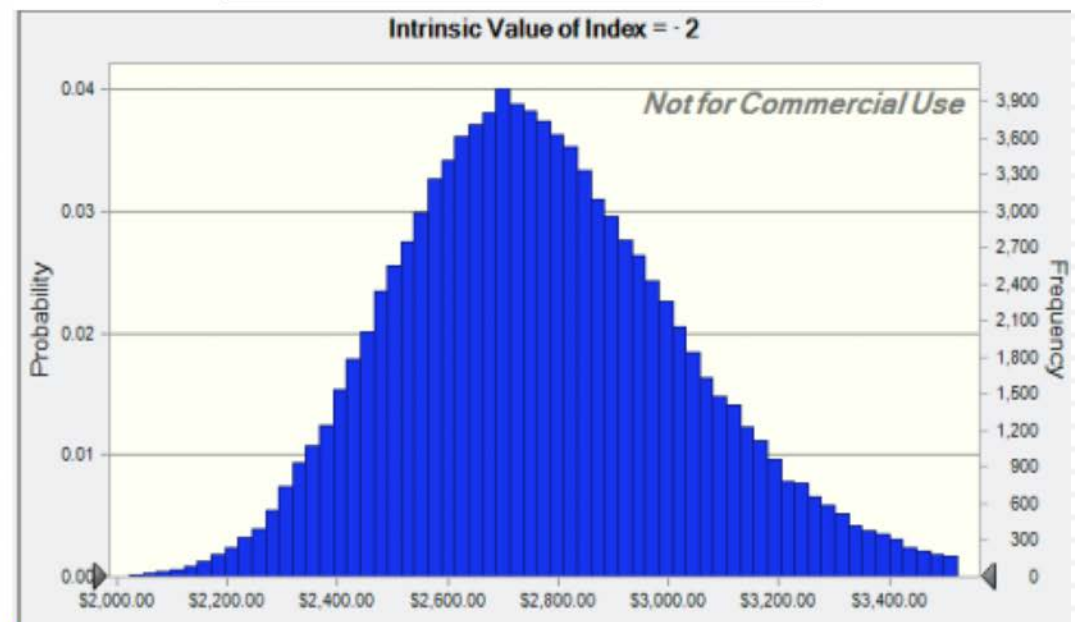


Cash Returned as % of Earnings



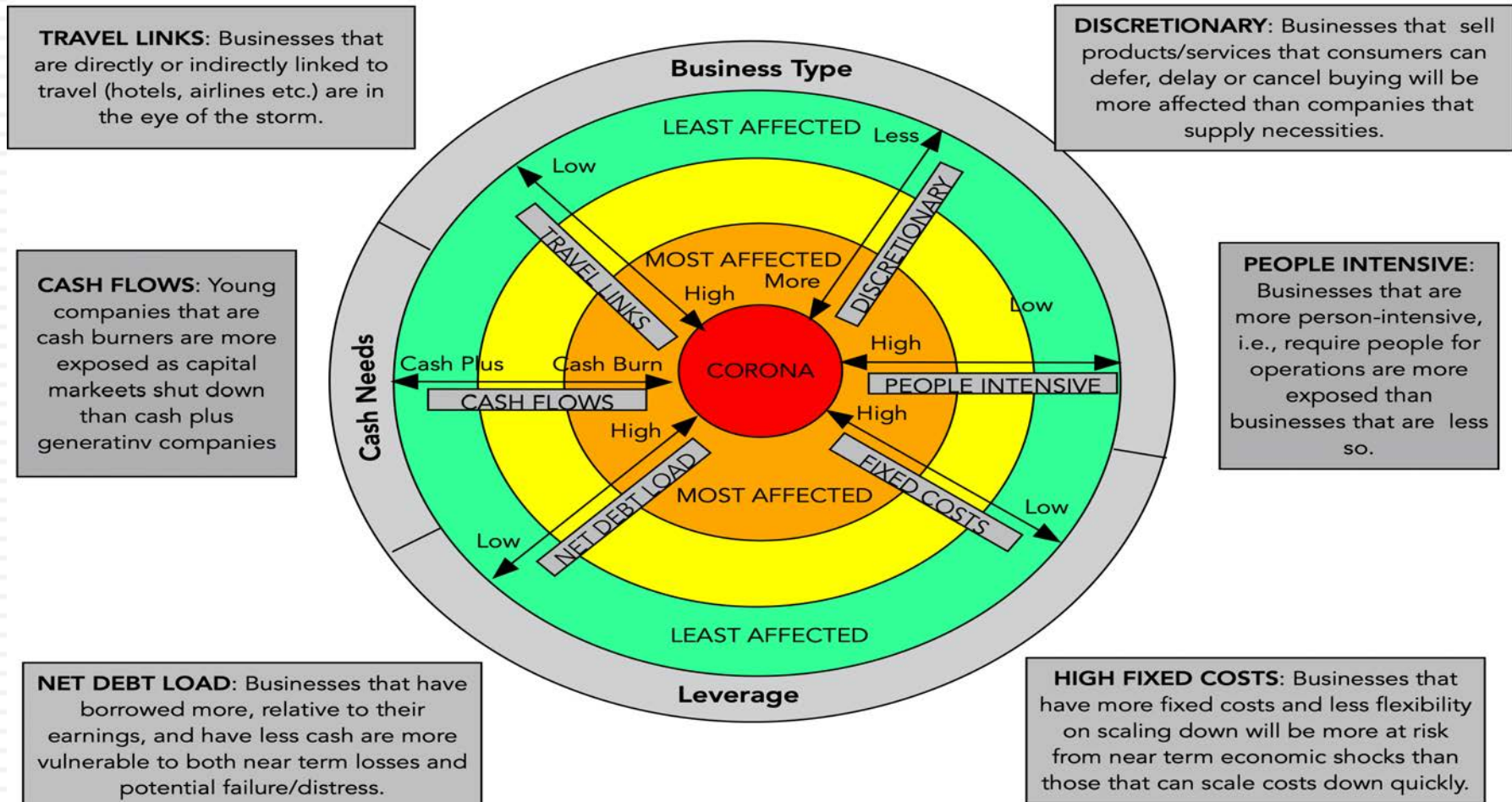
Valuing the S&P 500 Index: March 13, 2020

Percentile	S&P 500 Index
0%	\$1,903.33
10%	\$2,450.16
20%	\$2,547.91
30%	\$2,621.98
40%	\$2,688.01
50%	\$2,750.84
60%	\$2,817.83
70%	\$2,893.02
80%	\$2,986.04
90%	\$3,123.78
100%	\$4,452.38



# Individual Stocks

**CIRCLES OF INFECTION: CORONA'S EFFECT ON BUSINESSES**



# Checking the Market Reaction: Across Sectors

				Change: March 6 to March 13		Change: February 14 to March 13	
Sector	Mkt Cap (2/14/20)	Mkt Cap (3/6/20)	Mkt Cap (3/13/20)	In US\$	% Change	In US\$	% Change
Communication Services	\$ 7,385,392	\$ 6,713,153	\$ 6,034,139	\$ (679,014)	-10.11%	\$ (1,351,253)	-18.30%
Consumer Discretionary	\$ 10,171,514	\$ 9,143,782	\$ 7,935,563	\$ (1,208,220)	-13.21%	\$ (2,235,952)	-21.98%
Consumer Staples	\$ 7,138,675	\$ 6,801,556	\$ 6,118,502	\$ (683,054)	-10.04%	\$ (1,020,173)	-14.29%
Energy	\$ 5,940,191	\$ 5,216,807	\$ 4,175,556	\$ (1,041,251)	-19.96%	\$ (1,764,635)	-29.71%
Financials	\$ 14,988,514	\$ 13,148,086	\$ 11,441,814	\$ (1,706,272)	-12.98%	\$ (3,546,700)	-23.66%
Health Care	\$ 8,980,312	\$ 8,488,527	\$ 7,575,039	\$ (913,488)	-10.76%	\$ (1,405,273)	-15.65%
Industrials	\$ 10,192,168	\$ 9,170,793	\$ 7,856,741	\$ (1,314,052)	-14.33%	\$ (2,335,427)	-22.91%
Information Technology	\$ 13,644,359	\$ 12,240,365	\$ 11,153,945	\$ (1,086,420)	-8.88%	\$ (2,490,413)	-18.25%
Materials	\$ 4,998,500	\$ 4,588,699	\$ 3,879,406	\$ (709,293)	-15.46%	\$ (1,119,094)	-22.39%
Real Estate	\$ 4,054,083	\$ 3,805,872	\$ 3,285,821	\$ (520,051)	-13.66%	\$ (768,261)	-18.95%
Utilities	\$ 3,210,657	\$ 3,070,265	\$ 2,593,116	\$ (477,148)	-15.54%	\$ (617,541)	-19.23%



# Most and Least Affected Industries..

Least Affected Industries				
<i>Industry</i>	<i>Mkt Cap (2/14/20)</i>	<i>Mkt Cap (3/13/20)</i>	<i>In US\$</i>	<i>% Change</i>
Real Estate (Development)	810,712.6	719,648.3	\$ (91,064)	-11.23%
Coal & Related Energy	170,806.2	150,153.0	\$ (20,653)	-12.09%
Retail (General)	1,062,967.2	932,738.2	\$(130,229)	-12.25%
Education	192,688.1	168,959.4	\$ (23,729)	-12.31%
Telecom. Equipment	554,320.5	485,947.0	\$ (68,373)	-12.33%
Utility (Water)	144,783.9	126,220.2	\$ (18,564)	-12.82%
Brokerage & Investment Banking	838,338.7	730,417.4	\$(107,921)	-12.87%
Food Processing	1,796,803.1	1,562,318.1	\$(234,485)	-13.05%
Drugs (Biotechnology)	1,413,205.3	1,227,737.8	\$(185,468)	-13.12%
Environmental & Waste Services	272,507.1	235,014.6	\$ (37,492)	-13.76%
Most Affected Industries				
<i>Industry</i>	<i>Mkt Cap (2/14/20)</i>	<i>Mkt Cap (3/13/20)</i>	<i>In US\$</i>	<i>% Change</i>
Oil/Gas (Production and Exploration)	692,799.5	375,733.1	\$(317,066)	-45.77%
Reinsurance	180,549.7	114,566.6	\$ (65,983)	-36.55%
Oilfield Svcs/Equip.	743,475.0	474,984.1	\$(268,491)	-36.11%
Food Wholesalers	92,955.9	60,117.6	\$ (32,838)	-35.33%
Oil/Gas Distribution	653,803.4	425,010.1	\$(228,793)	-34.99%
Homebuilding	247,441.4	162,598.6	\$ (84,843)	-34.29%
Hotel/Gaming	715,874.1	477,395.9	\$(238,478)	-33.31%
Air Transport	559,979.4	383,258.4	\$(176,721)	-31.56%
Trucking	238,734.2	163,489.2	\$ (75,245)	-31.52%
Aerospace/Defense	1,280,933.2	879,816.8	\$(401,116)	-31.31%

# And Regionally...

Region	Number of firms	Mkt Cap (2/14/20)	Mkt Cap (3/6/20)	Mkt Cap (3/13/20)	Change: March 6 to March 13		Change: February 14 to March 13	
					In US\$	% Change	In US\$	% Change
Africa	673	\$ 579,809	\$ 509,219	\$ 430,506	\$ (78,713)	-15.46%	\$ (149,304)	-25.75%
Asia w/o China	10,215	\$ 7,324,162	\$ 6,680,107	\$ 5,808,584	\$ (871,522)	-13.05%	\$ (1,515,578)	-20.69%
Australia & NZ	1,382	\$ 1,618,971	\$ 1,398,182	\$ 1,151,663	\$ (246,519)	-17.63%	\$ (467,308)	-28.86%
Canada	1,584	\$ 2,279,552	\$ 2,030,199	\$ 1,651,541	\$ (378,658)	-18.65%	\$ (628,011)	-27.55%
China	6,187	\$ 14,038,597	\$ 14,329,150	\$ 13,310,886	\$ (1,018,264)	-7.11%	\$ (727,711)	-5.18%
EU & Environs	4,830	\$ 13,688,735	\$ 12,298,490	\$ 9,924,462	\$ (2,374,028)	-19.30%	\$ (3,764,272)	-27.50%
Eastern Europe & Russia	428	\$ 819,963	\$ 684,758	\$ 539,415	\$ (145,343)	-21.23%	\$ (280,548)	-34.21%
Japan	3,830	\$ 6,056,658	\$ 5,483,527	\$ 4,608,251	\$ (875,276)	-15.96%	\$ (1,448,407)	-23.91%
Latin America & Caribbean	955	\$ 2,384,209	\$ 2,008,812	\$ 1,725,704	\$ (283,108)	-14.09%	\$ (658,505)	-27.62%
Middle East	1,291	\$ 3,098,369	\$ 2,997,725	\$ 2,591,599	\$ (406,127)	-13.55%	\$ (506,770)	-16.36%
UK	1,111	\$ 3,071,405	\$ 2,679,581	\$ 2,170,196	\$ (509,385)	-19.01%	\$ (901,209)	-29.34%
United States	4,987	\$ 35,745,235	\$ 31,289,391	\$ 28,137,890	\$ (3,151,501)	-10.07%	\$ (7,607,345)	-21.28%
Global	38,086	\$ 90,705,665	\$ 82,389,141	\$ 72,050,697	\$ (10,338,444)	-12.55%	\$ (18,654,968)	-20.57%



# Investing End Game

- The market damage lines up well with our priors, which is what makes investing tricky. In fact, there are two perspectives that you can bring to surveying these stocks, leading to contradictory strategies.
  - If you believe that markets have over reacted, your best chance at finding value might be to look in the rubble, the worst affected regions, sectors and companies
  - If you think that markets have not fully incorporated the economic damage from the virus, you should look at the regions, sectors and companies that are more protected.
- The first two stocks on my radar for in-depth intrinsic valuation are **Zoom**, one of the few stocks that has benefited from this crisis, and **Boeing**, a stock that has lost more than half of its market capitalization, as its high-leverage, travel-focused business is put to the test by this virus.