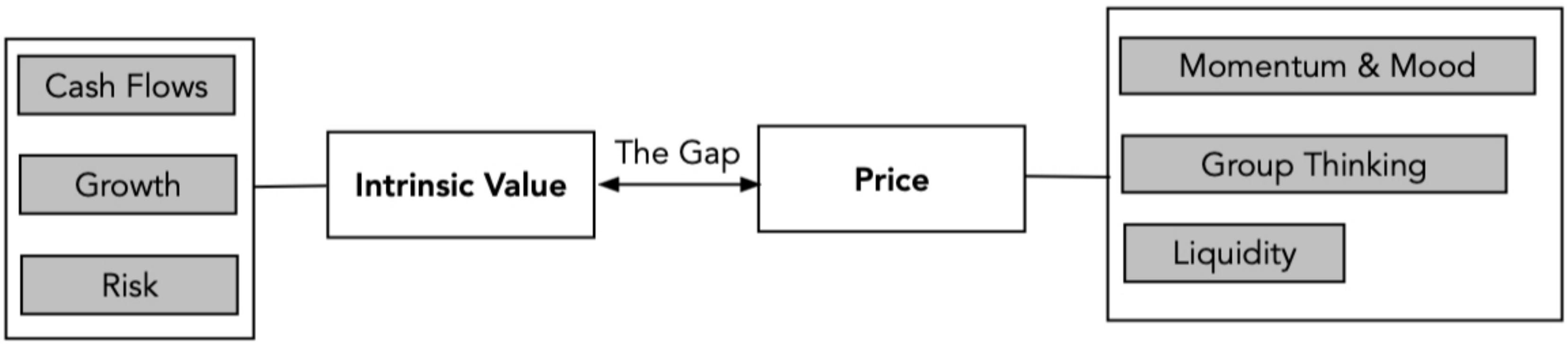
ILLUSION AND REALITY: STOCK SPLITS AND INDEX IN(EX)CLUSIONS!

Market Domination!

A Momentous Day (or not)!

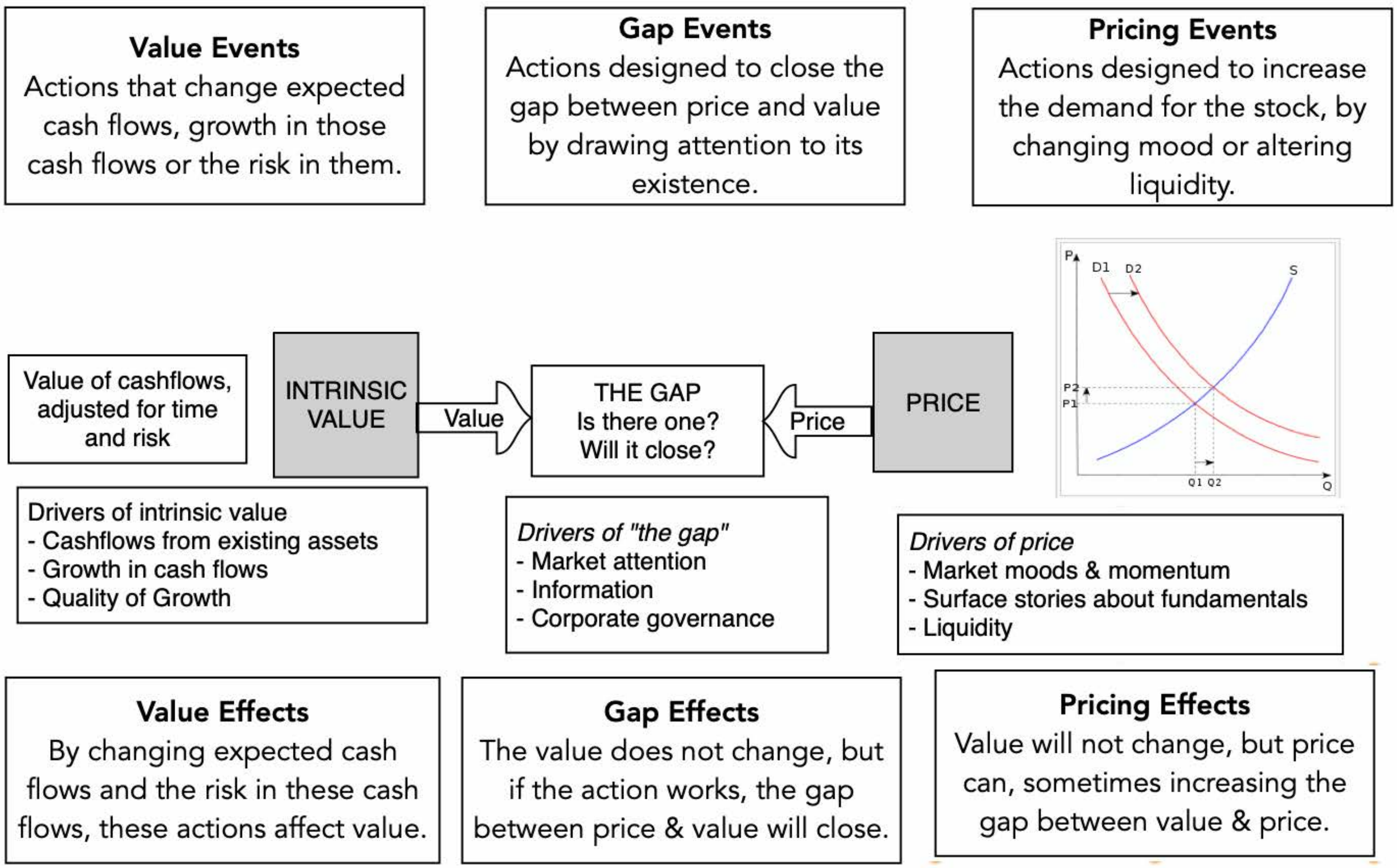
- After big market movements, we are eager to look for explanations, fundamental reasons why a stock or stocks collectively moved on that day, but the reality is that a great deal of the price movement on a day-to-day basis has nothing to do with earnings, cash flows or risk.
- On August 31, this reality was brought home by two events, neither with a strong connection to fundamentals, that represented the news of the day and contributed to price movements.
  - The first was that two of the highest profile stocks in the market, Apple and Tesla, had stock splits that day (August 31), though the market had been trading on the expectation of these stock splits, for weeks leading into the day.
  - On the same day, the Dow 30, a hopelessly flawed, but still among the most followed indices in the market, also announced a major reshuffling, replacing **Exxon Mobil, Pfizer and Raytheon**, three of its components, with **Honeywell, Salesforce and Amgen**.

Value and Price: Revisiting Basics



- A *value-based investor*, for instance, believes that value and price can diverge, often by large amounts and for long periods, but that the price will eventually converge on value, delivering profits to those with the patience to hold on to the investment.
- A *trader*, in contrast, has little interest in value and plays the pricing game, gauging momentum and mood shifts to make money, and using liquidity or the lack of it to magnify these gains.
- An *efficient marketer* may agree that the price and value processes can diverge, creating gaps, but also believes that investors are incapable of finding and taking advantage of the gaps.

Value, Gap & Pricing Events



Mostly Value Events

- When a manufacturing company adds to its production capacity or a retailer opens new stores, the effects will almost entirely be on value. Since these actions are generally in the normal course of operations for these firms, they are unlikely to attract new market attention (which you need for gap events) or change market mood and momentum.
- Higher profile actions, though, almost always have spillover effects, and here are two examples.
  - When Walmart recently announced its intent to partner with Microsoft to buy TikTok, there is clearly a value impact that this action will have, costing tens of billions in current cash flows, while promising to deliver higher growth and cash flows in the future. At the same time, this action, by attracting tech investors to buy Walmart, may alter momentum and have a secondary impact on pricing.
  - When a California court ruled against ride sharing companies a few weeks ago, on the issue of drivers being employees rather than independent contractors, that decision had consequences for cost structure and value for Uber and Lyft, but it may have induced some investors to revisit the price-value gap.

Mostly Gap Events

- Gap events can be initiated either by the companies that are being mispriced (or at least perceive themselves to be mispriced) or by investors with the same perception. In academic finance, these events are termed signals, and while there is no guarantee that they will work, the motivation is to try to close the perceived gap between price and value.
- The cleanest example is a *spin off or a split up*, where a multi business company spins off one or more of its businesses or splits itself up, with no consequential changes in how it is run as a company, but with two objectives.
  - One is that the action will expose the disconnect between the underlying fundamentals and the pricing, by providing more transparency on cash flows, growth and risk of individual businesses.
  - The other is that the action will draw investor attention to the company, and that the attention can lead to a repricing of the stock. Not all gap events originate with the company.
- When *activist investors target a company* either as a buy or a short sale, they are attempting to provide the catalysts for the pricing gap to close, though their end games may involve changing the way the company is run, thus affecting cash flows, risk and value.

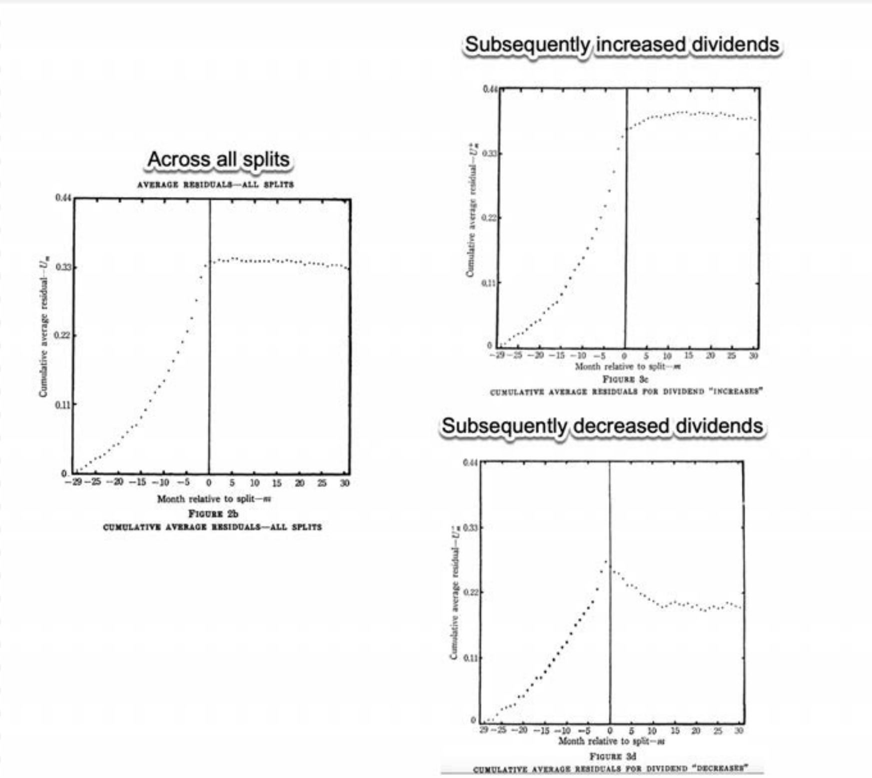
Mostly Pricing Events

- With mostly pricing events, the end game is altering mood and momentum or changing the liquidity in the stock, and by doing so, affecting the pricing of a stock.
- An emerging market company that lists its shares on a more liquid, developed market exchange, for instance, has clearly not altered its fundamentals through that action. There is no value effect, but
  - It may benefit from higher liquidity pushing up price.
  - There can be spillover effects from increased information disclosure, perhaps helping to close gaps between price and value, and perhaps even greater access to capital, allowing for a value effect.

Buybacks: Who and Why?

- There are some events that can fall into any of the three buckets, depending upon who initiates the event and how the market views the initiator.
- Stock buybacks are perhaps the best example, since there are arguments you can make for buybacks to be value, gap or pricing events.
  - If companies buy back stock, using borrowed money, the intent is to change value by altering the financing mix and cost of capital.
  - In contrast, if companies buy back stock, but only if they perceive their shares to be under valued, the buyback becomes a gap event, focused on moving prices up to intrinsic value.
  - Finally, if companies buy back stock to feed pricing momentum or to provide a floor to the price, buybacks are primarily pricing events.

Stock Splits: The Evidence



- In the decades since, there have been dozens of studies and while t*hey generally find that split announcements are accompanied by small stock price increases*, they disagree on the reasons.
- Some argue that it is because of post-split changes in liquidity, some posit that it is because splits operate as signals and some claim that they change value.

Stock Splits: The Value Effect

- A stock split or dividend is a purely cosmetic action, and the analogy that I would offer is that a pizza, sliced into six pieces, will not taste better and nor will there be more of it, if it sliced into twelve pieces.
- Neither Tesla nor Apple become more valuable companies, because of their stock splits, because nothing fundamental has changed in either company, as a consequence of the split.
- In short, if you thought Apple was overvalued on August 30, trading at $500/share, you would still find it overvalued trading at $125/share, after a four for one stock split, since both price and value will be a fourth of what they were the prior day

Stock Splits: The Gap Effect

- There is an argument to be made that stock splits can operate as gap events, *especially if a company is lightly followed and little attention is being paid to it*, leading it to be under valued.
- The split, while just cosmetic, can bring the company (at least briefly) into the news and *that attention may be sufficient to causing the gap to close*, by pushing the price towards value (which remains unchanged).
- This argument does not hold for Apple, the most highly valued company in the world, and Tesla, a company that clearly has never had a problem with attention seeking, but it could be used by a company like Marten Transport, which announced a 3 for 2 split on July 17, 2020, after seeing its stock price stagnate for a three year period.

Stock Split: The Pricing Effect

- Liquidity: With high priced stocks, the argument that stock splits *reduce transactions costs* and increase liquidity had more resonance in the past when trading shares in less than round lots often cost substantially more than in odd numbers. In addition, an argument can be made that when share prices reach really high levels, *some investors will be shut out of the stock*, because they cannot afford to buy any shares in it, round lot or not. Here, a stock split, by bringing the price down to more affordable levels *expands its investor base*, and by doing so, its stock price.
- Momentum feed: Stock splits feed momentum that is already prevalent in the stock, perhaps because of the perception that lower priced shares (even if there are more of them out there) just seem cheaper to investors.

Index Inclusions (and Exclusions): The Evidence

- Positive or negative: The consensus view across studies is that a company that is added to (removed from) the S&P 500 sees *its stock price increase (decrease) modestly*, and that the *change is permanent*. There are two caveats.
  - The first is that this increase may be more a consequence of the circumstances that led to the the company being added on to the index than the index addition. This paper, for instance, looked at a matched sample, where companies added to the index were paired with companies with similar characteristics (high momentum, rising earnings etc.) that were not added to the index and concluded that there was no index addition effect.
  - The second is that there seems to be some evidence that the index effect has become smaller over time, rather than larger, even as passive investing has become a larger part of the index.
- Volatility and variance: There is some evidence that a stocks that get added to the index see *increased price volatility*, as institutions become bigger players, and *move more with the index*, for the obvious reason that they are now part of it.

Index Inclusions (and Exclusions): The Value Effect

- As with stock splits, it is difficult to make an argument that index inclusion or exclusion changes value, but there is a possible, albeit unlikely, path.
- When a company becomes part of a widely followed and tracked index like the S&P 500, its investor base will change to become more institutional and more passive.
  - You can argue that these investors bring very different preferences for risk, investing, capital structure and cash return than investors in the rest of the market.
  - For instance, a study documents that companies that become part of the S&P 500 tend to behave more like their peer group and take lower return investments, after the index inclusion than before the inclusion, and this can affect value adversely.

Index Inclusions (and Exclusions): The Gap Effect

- There is no index that looks at how much a company is under or over valued in making a judgment on whether to include it.
- That said, though, companies that get added on to the index tend to be companies whose stock prices have done better in the period prior to that add on, than the companies removed from it were doing prior to their removal.
- For some contrarians, the act of being included in an index may therefore be a signal that the stock price has outrun value.

Index Inclusions (and Exclusions): The Pricing Effect

- Index inclusion can increase the investor base for a company, by drawing in investors who invest only in that index (like index funds) or primarily in the index (like many large active institutional investors), and that increase should play out in a jump in stock prices on the stock.
- The effect, though, will vary depending upon the company in question and the index on which it is listed.
  - The Dow 30 may be widely followed index, but it is not an index fund favorite or even one that institutional investors use to track their returns.
  - In contrast, when ServiceNow was added to the S&P 500, its stock price climbed 4%, reflecting both the company's status (low profile, not widely followed) and the S&P 500's standing as an index.
- I know that many Tesla bulls are awaiting its inclusion in the S&P 500, and with the full recognition that I will be wrong in hindsight, there is nothing that leads me to be believe that it will be a game changer for the company. In fact, you could argue that this company's rise in market capitalization has come from individual investors with strong views on the company, and that the investors that may be drawn to the company post-index-inclusion may not be in sync with the company's business practices.

What now?

- If you are an investor, nothing that happened on August 31 should alter your views on the company. In other words, if you believed that Tesla and Apple were (under) over valued on August 30, 2020, you will continue to do so on August 31.
- If you believe that one or both of these stocks is under or over valued, and you are hoping that the stock splits will close the gap, I am afraid that you are disappointed. These are among the most widely followed stocks in the world and stock splits are not going to cause neglected details to come to the surface.
- However, if you are a trader and you play the momentum game, this is your moment of maximum pain and gain.
  - It is conceivable, and perhaps even likely, that the split will keep the momentum going for the near term, and that you can take advantage by buying today and holding for a period.
  - The problem with momentum is that it is fickle and for those who bought the stock expecting the stock split to be their big payday, if the results fall short of expectations, there will be disappointment.