*"There are **known knowns**. These are things we know we know.*
*There are also **known unknowns**. That is, we know there are some things we do not know.*
*But there are also **unknown unknowns**, the ones we don't know we don't know."*
Former US Secretary of Defence Donald Rumsfeld

It is fascinating how an open and innovative mind can answer the most mundane of questions in the most insightful of ways. A "**known known**" can become an "**unknown known**". Because things are constantly changing, we need to be Bayesian about our beliefs. Update them when new information arrives. In that context we look at two questions most investors always ask especially now and is it time to update our beliefs about them. Valuation and Market Cycles.

Is the stock market overvalued?

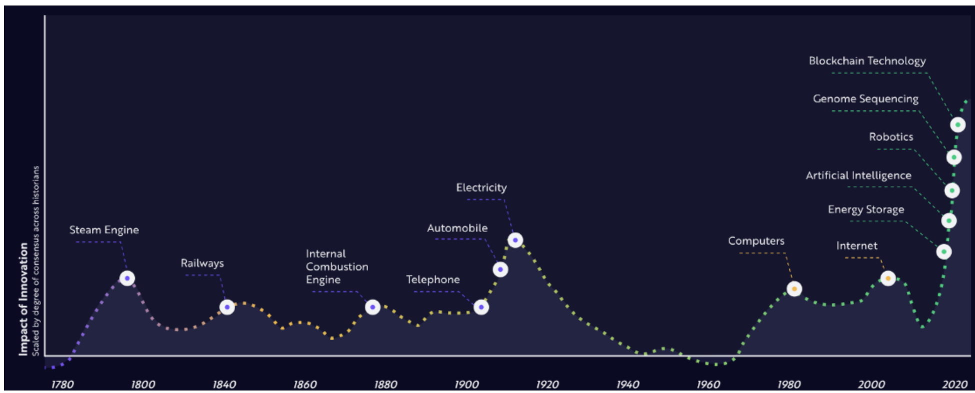
Cathie Wood, Founder and CEO - Ark Invest

Cathie Wood, Founder and CEO of Ark Invest ($53 Bn AUM), manages a suite of ETFs which invest in innovative companies in genomics, blockchain, AI and Robotics among others. She was named "Stock Picker of the Year 2020" by Bloomberg. She is one of the biggest bulls on Tesla and it is one of the largest holding in her funds since 2017. Her style of research is open source – which is unique in today's day and age where everyone tries to protect their "edge". So, when she talks, we listen.

Recently Elon Musk asked her on twitter what she thought about the famous Buffett Valuation Indicator i.e. Market Capitalization to GDP ratio. It has become popular, thanks to Warren Buffett when back in 2001 he remarked in a Fortune Magazine interview that "it is probably the best single measure of where valuations stand at any given moment." Buffett believes anything over 1 means the market is overvalued.

(Source: longtermtrends.net)

Currently we are at 2 times of market cap to GDP in the US and slightly over 1 times GDP in India. This beyond Dotcom(2000) and GFC (2008) valuations. On this metric the market appears to be fairly overvalued. But as we have seen post 2008, fundamental metrics of valuation have not been very useful to evaluate new age technology driven companies, the share of which is significant in the US stock markets, and may not be captured completely by GDP calculations.



Cathie views this time period as similar to the early 1900s when telephone, electricity and the car were emerging technologies globally which led the industrial revolution. Productivity gains, combined with low interest rates and the Gold Standard led to deflation as consumers put off purchases in expectation of lower prices. This could perhaps happen or is happening now. Lower inflation in the economy and higher inflation in asset prices. As the graph[1] above shows, the technologically-enabled innovation platforms evolving today are: genomic sequencing, robotics, energy storage, artificial intelligence, and blockchain technology. Moreover, Bitcoin could be today's "gold standard", increasing purchasing power!"

"This time is different" are dangerous words in forecasting markets. Most forecasters use post World War II history as their guide. On that basis, never has the equity market been higher relative to GDP. In the late 1800's, however, it seems to have been 2-3 times higher "concludes Wood.

This is an interesting way to look at the market currently and it is only in hindsight that we will know if Wood was right, and markets go up from here. Or we see a repeat of what happened in 1929 when too much of a good thing went bad. Rest assured we are prepared for both scenarios.

This is a "cricket analogy ahead" alert.

Are market cycles getting shorter post 2008?

Another interesting phenomenon of these times are much **Shorter Market Cycles.**

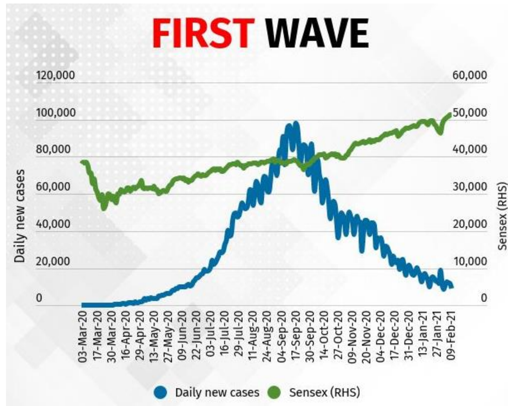
The underlying market structure has changed a lot of post 2008. It is not a one-time phenomenon. We have seen this time and again. Brexit, US Presidential election and Demonetization shocks in 2016. GST, ILFS, Yes Bank and other shocks over 2017-18. Each time the market has fallen sharply and recovered fairly quickly.

In this case investors have two choices. Stay invested and take the blows on the chin like Pujara. Or be quick and nimble like Rishabh Pant. Play yourself in and then take your chances and go all out for winners. In a portfolio (i.e., team) we need both kind of approaches. And more importantly we need to learn, adapt and move ahead fearlessly. We aim to balance out between these two styles but have been more defensive in the past. Now that we have played ourselves in, we will lean more toward Pant style. That leads to more activity but protects downside in "**unknown known**" and especially in "**unknown unknown**" situations. Important thing is to not lose your wicket if you are playing a test match. And keep the scoreboard ticking.

In March 2020, the market fell 20 %, by 12th March 2020, from the January 2020 peak. After a 40% fall in 64 days, a low was made on 24th March. Most bear markets take months if not years to bottom out. By Nov 2020 it was

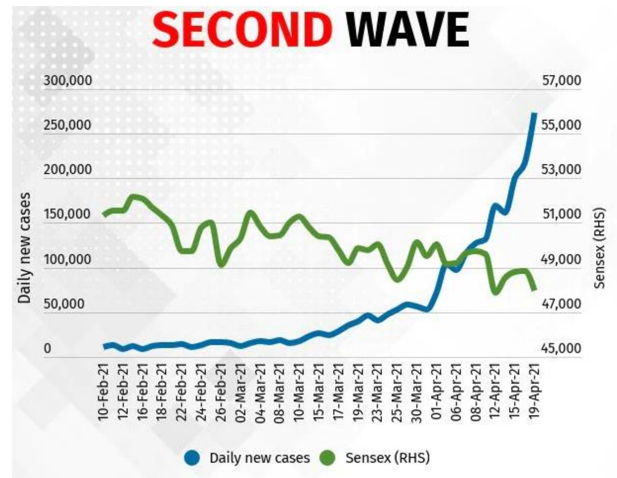
[1] (Source: ArkInvest.com)

back to its previous ATH and is now 18% higher than its Jan 2020 ATH. All this in a year. Thanks to the Federal Reserve fire hosing the markets with liquidity – at your service since 2008.

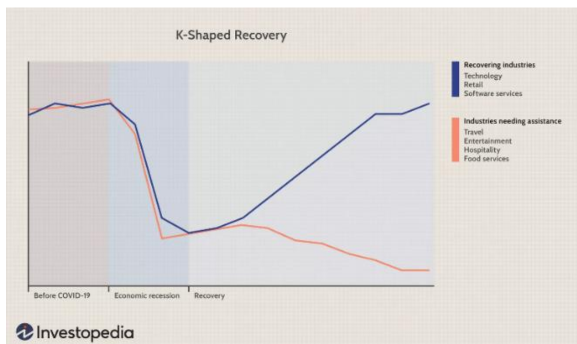


In March 2020[2], the reaction of the Markets to the pandemic was violent. The COVID pandemic was an ***"unknown unknown"***. And now in April 2021[3] we are in an expected second wave which is stronger and steeper than the first. This around it is a ***"known unknown"***. The unknown is how long it will take for the world to emerge from this crisis but it's not a surprise. And we have a vaccine that works even if partially, and may be enough to break the chain.

RBI, under Dr. Das, has been quite savvy in managing the situation and markets have so far responded positively to measures taken and commentary. RBI is trying to manage the yield curve, wherein it is trying to bring down 10 yr rates (at which the government will carry out most of it's borrowing program) and shore up shorter term rates. The assurance of the governor that RBI will remain "accommodative as long as necessary" which is the Federal Reserve Chairman's equivalent of we will do "whatever it takes" to support the economy, is quite heartening to hear. The Budget was also categorical in stating that growth will take priority over fiscal tightening. It will however be a tight rope walk between inflation expectations management, government borrowing and interest rates. The Fed has also managed to combat the bond vigilantes for now. Stimulus cheques are being mailed regularly to American citizens which seems to be their version of Universal Basic Income (UBI). This is being seen in India also with state government providing food and allowances to those eligible.



Economic Recovery



We have seen the steep bounce back in equity prices as an indication that economy will also recover in a similar "V" shaped fashion. However, that seems unlikely now. It is more likely to be a K shaped recovery where some industries (IT, Pharma, FMCG, Metals) may sustain their recovery and others (Consumer Discretionary, Auto, Hospitality) may take a much longer time to get back to pre-covid levels. Numerous industries will see the change in their business model as permanent and some will not exist at all. Others will thrive like never before. Our endeavour will be to stay with those.

[2] Source: Moneycontrol.com
[3] Source: Moneycontrol.com

Hard things are easy. Easy things are hard.

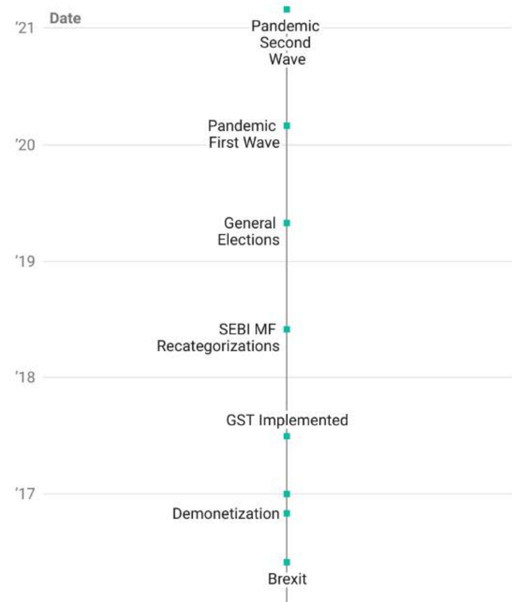
Moravec's Paradox4

Rubber hits the road – The last five years @ QED Capital.

Melanie Mitchell, in her book *"Artificial Intelligence: A Guide for Thinking Humans"* explains that activities that most people find extremely hard like playing chess or higher mathematics, have been relatively easy to train machines to compute. Yet many tasks that humans find easy or even trivial such as learning to speak or understanding body language have not yet been conquered by machines. Today we are seeing this in the vaccine-vaccination paradox. The hard part of creating a vaccine proved (relatively) easy; the easy task of vaccination has proved to be very hard. This happens because we falsely equate what is hard to ***conceptualize*** with what is a massive challenge to **execute**. Quantum Physics is conceptually hard, administering 2.6 bn doses of vaccine in a country which is large diverse and has a creaky healthcare delivery infrastructure is a massive practical challenge.

Investing is somewhat similar. The hard part of creating the process and system which has a long-term edge has been (relatively) easy for us to do. The easy part of tuning out the noise in completely and slavishly implementing the system has proved to be a practical difficulty. We are however, getting better at it, as is KL Rahul. The rolling volatility graph on the next page illustrates how much volatility and noise has spiked up post March 2020.

Since we started investing in June 2016, we have seen many "once in a 100 year" type events and some cyclical ones occur. Like Pujara we took some blows and like Pant we hit some out of the park (see our top winners' graph below). But as it was the start of our long-term innings, we chose to err on the side of protecting our downside. With the benefit of hindsight, we should not have. But if only we could read tomorrow's newspaper today.



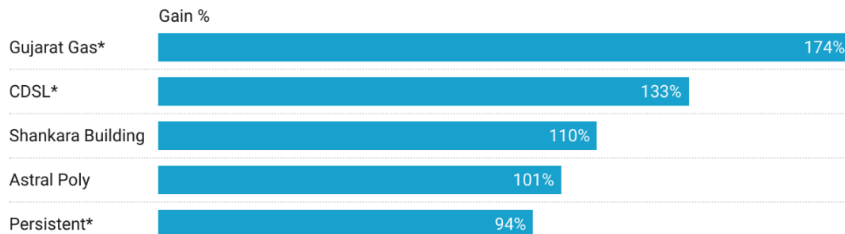
Known Unknowns - Brexit and Trump becoming US President. I was wrong. GST and other regulatory changes were also known but the impact was not known. But they added to the noise. In hindsight that may have contributed to our taking the foot off the accelerator. I would put demonetization also here. We were aware that this government would be tough on black money. But the method applied was a huge shock to the economy and market. But both recovered fast.

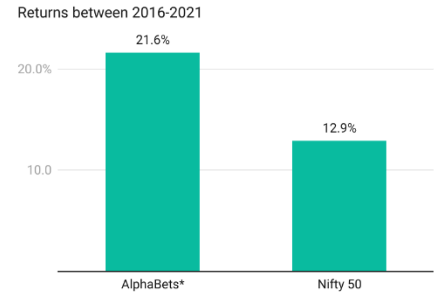
Unknown Unknown – Pandemic First Wave was a true black swan event.

[4] Hans Moravec, founder of robotics company, Seegrid.

AlphaBets 2016-21 – Looking through the rear-view mirror.

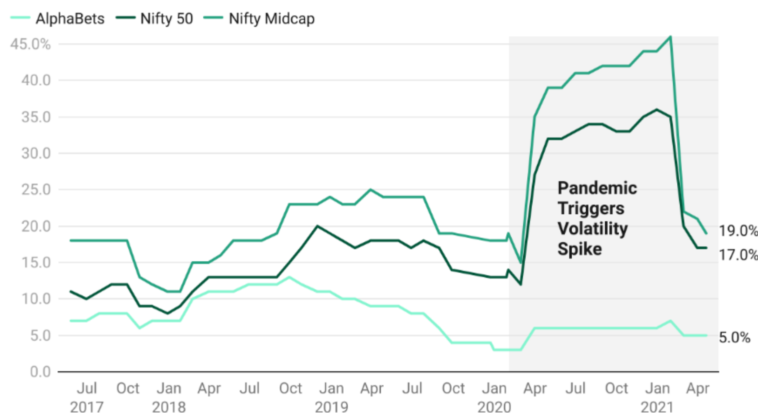
Let us look at some numbers here to back up what I have said above. From July 2016-March 2021, portfolio returns (actual IRR) vs the benchmark is as below.





Adjusted for risk to Nifty's level of drawdown and volatility, our returns are in the range of 23% CAGR. This is in the same region as the IRR that we calculated on our equity. This gives us confidence that our stock picking process is robust. The bar chart shows our top five winners out of which we are still holding on to three of those.

How do we know that losers have not been high? Two metrics will tell you that – Max drawdown and volatility. If we had too many losers, then those numbers would have been extremely high because when stocks go down their volatility is much higher than on the way up. That is how markets wipe out five year returns in one.



As the graph above shows our equity market volatility spiked sharply in March 2020 and peaked out in Jan 2021. After which it has fallen back close to pre pandemic levels. AlphaBets volatility has usually been at half of the index volatility. But post the pandemic induced spike we did not add risk quickly enough – Or deploy the cash fast. That proved to be a drag on returns. Cash holdings are what were responsible for that. We will in the future, once a portfolio is fully deployed, aim to not take cash holdings on average more than 30-50% of portfolio and that too if required. If we need to deploy it back rapidly, we will do.

We have already started implementing this since early last year. And we will do more of it this year. The question may be asked why we don't do it immediately? I would like to blame it on Druckenmiller, George Soros' true

protégé. Druckenmiller called the dotcom top a couple of months early. After that he felt left out. His younger counter parts were beating him by a mile. Druckenmiller knew exactly what he was doing – he just couldn't stop himself. In an interview later he said, "I bought $6 billion worth of tech stocks, and in six weeks I had lost $3 billion in that one play. You asked me what I learned. I didn't learn anything. I already knew that I wasn't supposed to do that. I was just an emotional basket case and couldn't help myself. So maybe I learned not to do it again, but I already knew that." In poker terms he was "on tilt". And we don't want to do a Druckenmiller by going on tilt and raise risk at the wrong time. We have already started doing it and will sync to system over a few months or earlier if we get good entry opportunities. Last year the 4 year returns of the Nifty and Midcap index were at 0.8% and –3.7% CAGR respectively. This year it has jumped to a massive 11.5% and 12.4%. Next year could again be different. Volatility is still quite high.

	AlphaBets*	AlphaBets^	Nifty 50	MidCap
Since Inception	7.5%	15%	11.5%	12.4%
Max Drawdown	−9%	−18%	−29.9%	−45%
Sharpe Ratio	0.87	0.83	0.59	0.51

*CAGR Jul 2016 - Mar 2021 *Post Fees ^Risk Adjusted

It has been almost 2 years since we launched IndexAlpha which is a tactically managed portfolio of Equity Index Funds/ETFs and Debt Funds/ETFs. It has also been almost a year and a year since we launched a 60/40 version of it called IndexAlpha Balanced. The two-year performance for both is given below. Please note that these portfolios are at times customised according to a client's risk profile and long terms goals. Hence, the performance of every portfolio and investment experience of every investor may not be the same. The table below gives the live performance from April 2019-March 2021 of a standard IndexAlpha and IndexAlpha Balanced Portfolio

	IndexAlpha	IndexAlpha Balanced	Nifty 100
Returns	11.3%	10.8%	11.9%
Max DD	17%	24%	38%

Getting Rich Slowly

In 1969, Warren Buffett closed his investment partnership, to focus on Berkshire Hathaway. It was trading at $40/share. By 1974 or a **full five years later**, the stock price was still selling at $40/share. These shares are selling for $391,500 today. Patience was richly rewarded. So was the fortitude to see **over 50% losses** 3 times during that period and several years when Berkshire underperformed the benchmark. To do different than the benchmark you will have to be different and that can turn out to be good in some years and not so good in others.

The long and short of the above was that some changes have been made to our investing process which will increase both returns and risk. And we will pivot slowly but sure surely. Most of the time, our advice will never sound as alluring as it should in the high-flying world of stock picking. Do you want to know why? As Warren Buffett once told Jeff Bezos, "Because nobody wants to get rich slow."

Happy investing and thank you for reading!

Mask up, stay safe and take care. Thank you for investing with us.

Anish Teli and QED Capital Team

April 2021