Our *Promise* to Clients

*W*e are anything but just another Wall Street firm, and therefore not everyone who knocks on our door is an appropriate client for us.

*O*ur clients are our partners, and just like partners in a marriage, we need to share the same values. Our values are spelled out in Six Commandments of Value Investing (read, listen).

*W*e promise to be honest and transparent with our partners. We will invest their money with the same thoughtfulness, care, diligence, and slight hint of paranoia that we employ in investing our own (easy for us to do, as nearly all the liquid net worth of our portfolio managers and their families is invested in the same stocks our clients own).

*W*e are a firm with a soul, and we'll never do anything that would put our interests before those of our clients.

*W*e're not trying to be the biggest investing firm, just the best one. In addition to striving to provide great true-risk-adjusted returns, we'll deliver excellent customer service and a one-of-a-kind client experience.

June 10, 2020

Dear Valued Client,

I (this is Vitaliy writing) want to apologize for the long-windedness of this letter – I selfishly used it as a canvas for thinking about the virus, the economy, geopolitics, and all the changes transpiring around us. I suggest you don't try to read the whole letter at once. It is simply too long (sorry) and at times too dense (sorry again). But please, do read it.

The Fischer Random Chess Stock Market

I grew up in Russia, where chess was a spectator sport. Chess is almost as old as the New Testament and has only gone through minor changes over its long history. Chess has the longest recorded history of any sport – you can study the first recorded game, played in Valencia, Spain in 1475. The game, which was called "Scachs d'Amor" ("The Chess Game of Love") by those who played and recorded it, comes to us in the form of a poem comprising 64 stanzas of 9 lines each.

Any player who takes chess seriously will carefully study every move in the tens of thousands of games played by grandmasters over the last six hundred years of recorded chess history. Chess players study opening systems – the series of first moves (five to fifteen in number) early in the game that lead to the middle-game formation of pieces. They study opening systems to the point that the early part of the game requires very little thinking; it is quite mechanical – you execute openings that you've studied day and night and thoroughly memorized. As the game leaves its opening phase and goes into middle- and then end-game stages, raw thinking becomes more and more important.

Enter Fischer random chess, which was popularized by the eccentric American world chess champion Bobby Fischer in 1996. It is the same as the traditional game, except that the first rank, the standard opening arrangement of kings, queens, bishops, knights, and rooks, is randomly reshuffled (symmetrically for white and black) every game. The second rank, where the pawns open the game, is untouched. The rules, objectives, and strategies are the same – you want to control the center; your pieces need to protect each other; your king has to be protected at all times; and the goal is the same: kill the other king.

The beauty and the difficulty of Fischer random is that memorization of the opening system is completely useless – there are 960 variations of starting positions for your army (this is why this game is also called Chess960). You cannot make an automatic move like pawn E2 to E4,

because the piece behind it may not be a king but a rook. Studying the middle and end games still has tremendous value.

There is a parallel between today's stock market and Fischer random chess. The last time we faced a global pandemic was in 1918, and this might as well have been in the BC era. Few of us were alive then, but even the history books are not that useful, as the structure of the US and global economy, the central bank system, the diversity and dynamism of society, and the state of technological progress are nothing like the world knew then. Most of the mental models we as investors rely on are based on an environment that no longer exists. The only common denominator between now and then is that humans have not really changed that much – it takes a few millennia to rewire our DNA and thus our fundamental behavior.

I look at my thinking from a few months ago – which seems like it was a decade ago – and realize it was naïve. In the initial shock of pandemic, I did not realize that I was using the playbook (opening moves) for a traditional recession as we approached our investment decisions. We were playing the wrong game.

We need to confront this environment on its own unique terms: we have never been here before. We have to be incredibly careful not to fall back on using old mental models. With every move we make, we have to reexamine our assumptions.

Let me give you this example. As the economy reopens and we come back to work, a lot of people won't return to their offices. Many companies have already announced that they will expand WFH (work from home). This means people will commute less … and the demand for cars and gasoline may be very different.

I visited Russia in 2008 for the first time since leaving it in 1991, and I discovered something interesting: When people talk, the distance they maintain between each other is much shorter than in the US. Americans keep at least two or three feet between them. Russians are comfortable with one foot. I (being Americanized at this point) found myself slightly uncomfortable being in such close proximity to friends I talked to, and I kept stepping back. It did not take me long to realize why social distance in conversation is different in Russia. Despite Russia's enormous size, public transportation is always packed, elevators are tiny, and apartments are cramped. This built environment has shaped how people interact socially.

Will this pandemic permanently reshape distancing requirements for us – will two feet turn into four or six feet? Over the last few decades the airlines, trying to lower their costs, increased the number of seats on planes and thus shrank the distance between passengers. Will they have to rewind the clock and make seating more spacious again? If they do, ticket prices will have to go up, and may go up a lot, since airlines' operating costs will not decline; they will only go up. Higher ticket prices may reshape air travel. Flying may turn into a luxury item again. You'll have fewer planes flying. Businesses may substitute Zoom calls for travel. You'll need fewer planes and fewer hotel rooms. Thus, if you are in the business of making flying buses (planes), your industry might go from 4-5% forever growth – this was the expectation as people in emerging markets became wealthier and started travelling – into a glacial decline.

In 2008 – despite the magnitude of the recession – we did not have to think about such fundamental shifts. I am not sure whether the travel industry will change this profoundly, but there is not a zero probability that this scenario will be our reality, all because of a microbe we cannot see.

As time passes and we enter into the middlegame, we'll have a lot more clarity. We'll get more familiar with our position on the board with game pieces like vaccines and cures, and the old normal may more or less resume. But today we have to face the fact that we are playing Fischer Random chess and must weigh our moves both carefully and creatively.

As we look today at the global economy, the potential outcomes are very wide. We've taken a position of hoping for the best but investing for the worst.

Let's review our latest decisions.

Purchase of Svenska Handelsbanken (SVNLF)

Svenska, based in Sweden, is one of the best-run banks in the world. We wanted to own it for a long time and finally got the opportunity. When we look at a financial company, we zoom in on its performance during a past financial crisis. The Great Recession was the ultimate stress test so far for financial firms being subjected to incredible pain. Svenska sailed through the crisis as if 2008 was just another a year – its loan losses "spiked" from 0.1% to 0.2%. (By comparison, JP Morgan's losses were 3.5% in 2008.)

Here is an interesting fact: The debt of JP Morgan, Wells Fargo, and Bank of America – the largest and the best-capitalized banks in the US – is rated A- by Standard and Poor's. Svenska's rating is AA-. To put that in the proper context, the UK – a country that can print its own money and has nuclear weapons – also has a debt rating of AA-.

Svenska's greatness starts from how it is structured. It is decentralized – the branches are responsible for their own profits and losses and underwriting decisions. Each branch strives to achieve above-average performance and thus pull up the profitability of the whole company. Svenska does not pay bonuses, and thus there are no short-term profit incentives. Instead, the employees are owners of the firm – they own about 10% through a special account funded by the company.

Svenska's lending practices are very conservative – loan-to-value for Svenska-generated mortgages is 55%. House prices would have to drop 45% before Svenska would start losing money on mortgages.

The coronavirus crisis may rival the magnitude of the Great Recession, but Svenska's conservative lending practices and incredibly strong balance sheet should get us through the thick and thin without even minor scratches.

We bought one of the best banks in the world for less than book value, or less than 10 times earnings. Earnings will likely grow about 5% a year; and in addition, at some point Svenska's

valuation will come back to normal, increasing 50-80%. Svenska has historically traded at 1.5-1.8 times book. It also pays a 7.5% dividend, which it has raised over time with earnings.

In early March European governments asked all banks to suspend their dividends due to the coronavirus. They did not want to run into political issues like the airlines did in the US, where bailout money will go to plug the hole freshly created in companies' balance sheets by share buybacks. Svenska complied (begrudgingly); however, it said that just as in any other banking crisis over the last fifty years, it would not need government assistance. It will not actually cancel its dividend but postpone the decision on paying it to fall 2020.

Since we rarely refer to book value, let's take a small detour and explain what it means. If you look at a company's balance sheet, book value is the difference between the company's assets and its liabilities – it is the company's equity. We rarely use it as a yardstick of value when we analyze nonfinancial companies, and for a good reason: a large chunk of the assets (and some of the liabilities) on a typical company's financial statements are divorced from economic reality.

In the very, very old (manufacturing) economy, the cost of land and building a factory, less a company's borrowings, was indicative of what the company's equity (book value) was. However, even then the book value measure was not without flaws, as it recorded the value of long-term assets (land, for instance) at cost. If land appreciated over the years, its value in the company's financial statements did not change.

Book value in today's economy is even less relevant for most companies. Take Apple, for instance: One of the most valuable companies in the world, it doesn't even own its factories. The value that you don't see on Apple's balance sheet is that sparkle in Apple customers' eyes when they use the company's products. That sparkle is the intangible good that Apple created by building (often) revolutionary products. That good – Apple's brand – is created by R&D (research and development) and marketing, and both of these expenses are income statement items and never make it to the balance sheet, at least not in a tangible, easily observable form.

To make things even more complicated, share buybacks are not kind to book value. Despite Apple's earnings rising from $37 billion in 2013 to $57 billion in 2020, its book value declined from $123 billion to $78 billion over the same time period. How could this happen? Apple bought a few hundred billion dollars of its own stock in the open market and reduced its book value. We can keep going into the not-so-exciting weeds of book value, but we don't want to put you to sleep so early in the letter –just trust us; share buybacks distort the book value of the company.

When we analyze Apple, along with many other things we pay close attention to its assets (mainly cash, accounts receivable, and inventories) and its liabilities (accounts payable and debt), but we pay little attention to its book value.

Financial companies are different beasts. Their assets (loans) and liabilities (customer deposits and borrowings) must be marked to market (values) quarterly, and thus book value becomes a useful metric. At one times book value, we basically bought Svenska at its liquidation value and paid nothing for the company's future ability to grow, its superior return on capital, its unique

culture, etc. In other words, buying a poorly run bank at book value may or may not be a bargain, but one of the best-run banks in the world at book value is an incredible steal.

Sale of Melrose Industries (MLSPF)

Even before the coronavirus we were not big fans of the airlines business. Planes are expensive. Airlines have to pay for them whether they are fully occupied during normal economic times or when they are half-loaded during recessions. Their other big cost is fuel – airlines have little control over it. If they hedge the oil price and it goes up, they are heroes. If they hedge oil and it declines, their unhedged competition will have an economic advantage. It is very difficult to develop competitive advantage; customers usually have very little loyalty and price is the deciding factor for most buying decisions.

Warren Buffett invested in the airlines industry in the ’80s, lost money, and swore he’d never invest in it again. However, after the Great Financial Crisis the industry went through significant consolidation by mergers and attrition, leaving four carriers controlling the bulk of the market. Fewer competitors made competition more rational and turned these airlines into much better businesses. So Buffett changed his mind and bought a 10% stake in all four of the largest US airlines. For a few years it seemed that he was finally right about the airlines.

Airlines were never our cup of tea. The high fixed-cost structure of the industry and its past history of going bankrupt every other recession made our EQ when it comes to airlines very low. When Buffett bought them, for some value investors, the airlines had been blessed by the high priest. We are agnostic (growing up in Soviet Russia has its rare benefits) and have to own our decisions, so we passed on the airlines without spending much time thinking about them.

Typically, when you go into recession you can look at the rear-view mirror earnings for a cyclical company and that becomes your goal post for future earnings power within a year or two, max. We don’t know how long it will take until we’ll again see the 2019 earnings power of airlines and the travel industry in general. Here is what we know. Though it is hard to imagine this today, the fear of COVID-19 will eventually go away, either because there is a vaccine or a cure, or because the virus is gone, or because we will simply adapt to its existence.

But even in absence of a vaccine or cure, we’ll change our behavior, and that will happen slowly on the margin. After being locked up for a few months, not seeing friends and relatives except on Zoom or Facetime, we’ll timidly visit their houses and sit six feet apart on their porches. (My family did this on Mother’s Day.) Then we’ll invite very close friends – the ones who stuck religiously to social distancing– to our homes for dinner. Then we might chance visiting a restaurant with outdoor seating. Then, on a rainy day, we’ll go inside the restaurant and find that it now has huge spacing between the tables. We’ll make a lot of small incremental decisions; each will be a tiny compromise that will nudge us out of our fear.

Of course, each time we read about serious virus flare ups, we’ll take one step back.

Flying is at one extreme in the spectrum of social distancing. It requires finding your way through airports packed with people and then getting on a plane that, even after the middle seats are removed will still have a higher density than a packed bar on Friday night in Manhattan. Thus flying will require a great many little, incremental, marginal decisions before we overcome the fear of boarding a plane.

Vaccine availability would instantly vanquish fear, and our behavior would come back to normal. Well, almost. There will be scar tissue on the economy – trillions in government debt and persistently high unemployment – that will take time to clear up. People are not flying today because we are in lockdown; they'll be flying less than they used to after lockdown is over because they are still afraid; and after their fear is gone they'll still be flying less because they cannot afford the flights.

We imagine that when Buffett bought airlines in 2015, he thought the worst case would be a significant recession where plane occupancy would fall from the usual 80-90% to 50-60% (according to the FT, only four airlines out of a few hundred are profitable at 62% occupancy). His thinking was that the airlines would lose some for a few quarters, but the recession would be anything but an existential crisis for them. Recessions last months and expansion years, and he thought he had bought them cheap on full-cycle (both recession and expansion) earnings.

Despite being the Oracle of Omaha, he did not foresee that one day we might have a different type of recession where 95% of the planes would be grounded, not because people couldn't afford to buy a tickets but because they would be required to stay home by their governments, or would be afraid that close proximity to others would make them sick or even kill them.

Very few businesses can survive when 95% of their revenue goes away for an extended period of time. Even fewer can survive when they have a large fixed-asset base that needs to be paid for whether they are using it or not.

The sad reality is that unless airlines raise new capital, they will go bankrupt. This capital, though it might save them, will reduce the value of their businesses. Equity issuances, especially at today's depressed stock prices, would permanently dilute shareholders, as future earnings will be shared with a much-increased shareholder base.

If the airlines issue debt, it will not be cheap capital, either, and will burden these companies, which already have a lot of fixed costs, with another cost – significant interest payments that will substantially reduce their future earnings power. The longer the fear of the virus lingers on, the more money these companies will lose and the greater the damage that will be done to their balance sheets and thus their future earnings power.

In our thinking about the virus we have three timelines, or eras: BC – before coronavirus, DC – during coronavirus (now), and AC – after coronavirus (the virus is completely gone, or there is a vaccine or effective treatment. The longer the DC era lasts the more impact it has on the AC era. The DC era comes with high unemployment and enormous government spending – larger deficits and an ever-growing debt pile that is no longer counted in billions but in trillions.

The future of the airlines is path-dependent, and they have little control over that path; it is controlled by the virus (or the fear of the virus).

We don't own airlines, so why am I spending so much time talking about them? There are several reasons. First, because they are companies that are antithetical to our portfolio philosophy. Charlie Munger says, "Tell me where I am going to die so I won't go there." So it's worth having a clear picture of the types of businesses you don't want to own.

Second, we wanted to point out Buffett's ability to change his mind. Interestingly, Buffett, who was already the largest shareholder of US airlines, bought more airline stocks a few weeks before he sold them. We did something similar this quarter, too: We increased our position in Melrose Industries, just to sell the full position two weeks later. (More about Melrose to follow).

Third, like Buffett, we were playing traditional chess, not realizing that the game had changed to Fischer random chess. We were following the normal recession handbook (mental models) but then realized that this is anything but a normal recession. We have to be incredibly careful about using our past mental models today; they were built in a very different environment. Today, past experience is not useless, but if relied on blindly it can be dangerous. Some things will play out in the future as they have in the past, but many won't.

We needed to start using a first-principles approach – a concept we shamelessly borrowed from physics. We took out a blank piece of paper, assumed we knew nothing, and instead of continuing to think by analogy, started questioning every assumption we make in our analysis.

Our decision to sell Melrose Industries is very similar to Buffett's sale of the airlines. We sold Melrose before the Berkshire Hathaway annual meeting. It was a difficult decision, not because we cemented a loss but because we parted with a business we really liked, that was run by good management, and that was significantly undervalued when we bought it.

When we were buying Melrose we stress-tested it for a severe recession; however, the decline that Melrose is probably experiencing today did not occur to us in our wildest imagination. Melrose is a very strong player in two industries that have been impacted tremendously: the airlines space (it makes parts that go into planes and engines) and car parts (it is one of the largest makers of transmissions for cars). We talked to the company. It has credit lines and cash to give it immediate liquidity, but we are not sure if it will be enough.

We had applied the traditional recession mental model to our analysis, and we were wrong. Given the world we are looking at now, we should have sold it sooner.

Buying new planes is the last thing on airlines' minds today. Also, only 20% of Melrose's business comes from replacement parts. Melrose's auto parts business (ironically, the business we worried about the most when we bought the stock) may be okay; it may even generate some profit; but we are not sure it will be able to sustain the company. We simply don't know what the losses are going to be in the airlines space and for how long. We have a tremendous respect for the Melrose management team – they're a big reason why we bought the stock – but at this point the problem that Melrose is facing is bigger than them.

If you look carefully through your portfolio, you'll see that we've positioned it to the opposite side of the spectrum from the airlines. Most of our holdings are concentrated in four industries: defense, healthcare, tobacco (where we are permitted by clients), and telecommunications. These industries have one thing in common: They will not be structurally impacted by the virus.

Consumption of goods and services in the four industries is completely insensitive to the virus. These companies all have very stable cash flows and pricing power – in the event of deflation they'll maintain their prices, while during inflation they'll raise them.

Purchase and Sale of Discover Financial Services (DFS)

We cannot remember a time when we bought a company just to sell it a week later. This is exactly what happened with DFS. We dusted off our old models, updated them, and spent an intense weekend analyzing the credit card industry and DFS.

What changed in one week?

When we were buying the stock, we estimated DFS's earnings power at about $8 a share, so in the mid-$30s (down from the $80s) it looked like a bargain. However, in our analysis we were modeling a short-term default rate of 9% – during the financial crisis it got down to 8% or so. A week later, after we listened to earnings calls from other financial institutions, we realized that the 9% assumption was not conservative enough and that actual defaults might end up being a lot higher (in the mid-teens). In that situation DFS would have to issue stock, reducing the company's earnings power. When facts (assumptions) change, we change our mind, even if it's just a week later. We sold the stock.

Purchase of Comcast Communications (CMCSA)

Comcast requires little introduction – it is the largest cable and media company in the US. It has operating profit (before taxes) of about $21 billion, about $15 billion of which comes from broadband and TV service. The rest, about $6 billion, comes from the NBCUniversal movie studio, NBCUniversal Networks, Universal theme parks, and Sky (broadband and TV service in the UK). We have been thinking about Comcast for a while. It is a great business – in most markets the broadband business is a monopoly, and the only alternative is DSL provided by the local phone company, which is a lot slower and thus an inferior choice.

Over the last few decades the internet became a necessity we cannot live without. It has turned into a utility, except that a cable company's pricing is not controlled by the government, and thus it has pricing power.

In our analysis of cable companies in the past we always struggled with one question: What impact would cord cutting have on a company's cash flows? Consumers are ditching their TV cable boxes and subscribing to TV services from YouTube, Hulu, Roku, and others. This is not a

fad but a trend that will continue for a long time. A third of Comcast's revenue ($23 billion) comes from TV services – a number we could not ignore. Comcast did not disclose profits from the TV services, and thus we struggled to estimate the impact cord cutting would have on the company's profitability.

We had an "Aha!" moment when we read the annual report of CableOne, a similar but smaller cable company. In the report CableOne's management mentioned that its traditional broadband business is 7-9 times more profitable than its TV subscription business. This makes sense – the bulk of your Comcast TV bill goes to content providers (HBO, ESPN, Discovery Channel, etc.). On the other hand, the content cost for broadband is exactly $0. This little insight allowed us to estimate operating profits of Comcast's TV business – about $1.2 billion or 6% of earnings. The TV business is declining about 5% a year, and even if this decline tripled to 15%, it would only be impacting a small portion of Comcast's earnings.

In the future, in the AC era, when the virus is not a health threat, this giant experiment of working from home will have changed the way companies do business. Interesting factoid: 95% of Comcast's customer service representatives working remotely today. We are quite certain that number is similar to those for gig (and not so gig) economy workers in other fields. Twitter announced that its employees won't have to come to the office anymore. Companies will be rethinking their real estate footprint and how they work. Packing people into grey cubicles in loud call centers will look so 2019 in 2020 and beyond.

At the same time, it is very unlikely that everyone will want to work from home, either – we need social interaction with people other than our spouses and kids. As we put our futurist hat on, we think the office model of tomorrow is going to be a hybrid one. Many companies will reduce their central office footprint and start "subscribing" (or timesharing, if you like) geographically diverse space from companies like WeWork and IWG (formerly known as Regus). An employee who used to commute an hour to work may go to the closest WeWork location near her, pick an empty desk, connect her laptop to WiFi, and start working. Some employees may turn Starbucks into their office away from home.

No matter how the future looks, the internet will be at the core of it, and so will Comcast. A high-speed, reliable internet connection is as important to today's household as hot water.

Comcast's non-cable businesses have been impacted by the virus to various degrees: NBCUniversal Networks was supposed to benefit from Olympics coverage, but the Olympics have been moved to 2021. Comcast's theme parks (5% of operating profits) are closed until … they are not. Disney already opened its Disney World China in a limited way. In our analysis we reduced the earnings power of parks going forward.

Today movie theaters are closed, and this may force Comcast's movie business to evolve a different business model – it may actually benefit from the closures. In early March when the theaters started to close, Comcast's DreamWorks studio released *The Troll World Tour* animated movie as a digital rental, skipping movie theaters. It grossed $100 million, out of which Comcast got to keep $80 million, instead of the $50 million it would have had if the movie was released in theaters. (Theaters get 50% of box office revenues; pay-per-view companies' take is 20%).

If this crisis had happened 20 or even 10 years ago, Comcast's movie business would have been devastated. Now, because there is a small, digitally connected movie theater in our living rooms, this business will simply evolve.

That is true for many businesses today. Even at IMA, the only person coming to the office is our analyst Brendan Snow, not because he needs to come to the office, but he lives less than a block away and found having IMA's global headquarters all to himself a better place to work than his apartment. (He is probably wearing slippers and a bathrobe while he does research – we'll never know, nor do we want to know.) All of IMA's operations and research systems are in the cloud, our Comcast-powered phone system also works on our smartphones, and we communicate between each other using Slack messaging software.

Back to Comcast. Its non-cable businesses are impacted by the virus, but the weight of impact on their cash flows will not sink overall cash flow to the level where it endangers the viability of the enterprise, and the impact on long-term earnings power is unlikely to be significant. In fact, Comcast raised its dividend in April.

Comcast is run by Brian Roberts, the son of founder Ralph Roberts. Brian has an owner-operator mentality. We estimate Comcast will earn about $4 to $4.30 in 2024; and at 15 times, the stock is worth around $60-65 – a 70-80% upside, and at our purchase price there seems to be little downside.

Purchase of General Dynamics (GD)

We purchased several American and European defense companies. We like these businesses for several reasons: Their business will not be significantly impacted by or changed by the coronavirus. The government will maintain military production, and maintenance of submarines, aircraft, and tanks will continue with or without social distancing.

Also, the world is not becoming safer. Nationalistic tensions were on the rise before the virus; but despite the stump speeches by politicians about job losses due to globalization, companies had little incentive to bring manufacturing back to the US. This has changed. The virus exposed the weaknesses of the global trade and just-in-time inventory systems, which were efficient (required less capital and resulted in lower costs) but not resilient (could not handle shocks and interruptions and conflicting geopolitical interests).

The US's inability to manufacture something so simple as an N95 mask was a wakeup call that we need to bring our strategic manufacturing back on-shore. On-shoring will start with strategic items. However, the definition of "strategic" will expand. In the past the defense industry was strategic. The new definition won't apply to just that industry (and to masks and active pharmaceutical ingredients [APIs]) but to other advanced technologies as well. Taiwan Semiconductor, one of the largest semiconductor manufacturers, has announced what would have been unthinkable even six months ago: It will build a $12 billion factory in Arizona that

will manufacture microprocessors. Tech manufacturing is usually done in clusters, and this means the semiconductor supply chain may partially migrate to the US.

We don't want to be party spoilers here, because this is good news for the US, as it will bring jobs back here. But factories like this one will bring fewer jobs than the tens of billions of dollars of investment in them would seem to imply. To be competitive with Asian counterparts, which have a lower cost of living and thus lower labor costs, these factories will need to be incredibly automated, and thus capital (machines and robots) will be doing most of the work, not humans.

Also, this means China will be pouring billions of dollars into subsidizing their own tech sector – it doesn't want to be reliant on the US any more than we want to rely on them. This is not good news for our tech companies – the likes of Qualcomm and Micron – as the Chinese market will be shut off for them in the future (this is why we reduced our Micron position).

The positive side effect of global trade that we rarely think about is that it has created deep interdependencies among trading countries and thus made the world safer. It forced us to trust each other more. Reversing globalization, in tandem with the US's stepping away from the role of global leader (not a political statement, just a fact), makes the world less safe. Thus, despite governments' budgets being strained by COVID-19, we think defense spending will continue to go higher (financed by governments printing money), not just in the US but in Europe as well.

General Dynamics is one of the largest US defense contractors. The breadth of its products range from submarines to tanks. Over the last ten years it has almost doubled its earnings to $12 per share. We estimate it will earn about $16 in 2024. Historically it has been one of the best-managed defense contractors and should trade at 15 times earnings and thus be worth $240 – about an 80% upside (not including dividends, which would add another 15% or so).

Most importantly, we think there is very little downside in this stock. Three quarters of revenues and profitability comes from the defense business and the rest from Gulfstream, the company's private jet business. That business, though it has exposure to economic cyclicality, is likely going to be impacted less by social distancing than the commercial airline business, and may actually benefit from the latter's troubles, as business travelers may choose to migrate from the "confines" of first class to private planes. If we are wrong about the Gulfstream business and it struggles, then GD will earn $12 a share instead of $16 and the stock will trade at $180 or so. As of this writing the stock is around $130.

Purchase and Sale of Raytheon (RTX)

We purchased Raytheon for the same reason we bought all other defense stocks in the portfolio. Then, as we became concerned about the commercial aviation industry, we decided to sell the stock. After the United Technologies acquisition, almost half of Raytheon's sales have come from the commercial aviation business.

Purchase of Twitter (TWTR)

Twitter is probably the most important social media platform ever created. Unlike Facebook/Instagram and LinkedIn, where people showcase their personal and professional lives, Twitter is a social network of ideas. It is the place where global leaders (including the American president) communicate with the world, but it is also so much more. It is a place where if you thoughtfully plug in you can learn from the best in any industry or any profession. Twitter has 160 million daily users (this number went up 23% last quarter), and its users are fanatical about it – many spend more time on Twitter than they do watching TV.

Though it is the premier global social media platform, Twitter as a business has stagnated since it went public. Its user interface has not changed much; it still feels like it was designed by programmers for programmers, and it lacks simple features like the ability to edit a tweet (my personal complaint). A person new to twitter is completely lost as to what to do next or whom to follow. These drawbacks have limited Twitter's growth.

Twitter is extremely undermonetized; in other words its revenue per user has huge room to grow. It has two types of advertising platforms – brand building and direct to consumer. Brand building has proven to be highly effective. When Disney, for instance, wanted to launch Disney+, Twitter was the perfect platform, as it can blast messages to all North American users at once. However, Twitter's direct marketing platform, where ads are targeted based on a user's specific social profile, has been very lacking (we are being kind here). Of Twitter's two advertising engines, only one has been firing on all cylinders.

Also, just like LinkedIn, Twitter can offer premium services to its users and charge for them – this could tap another significant vein of revenue.

Twitter's management has been its strength and, later, its weakness. Jack Dorsey, who started Twitter, is CEO of both Twitter and another public company, Square.

Square has been very successful and arguably has consumed a lot of Jack's time. Twitter may have been treated like a forgotten mistress. The company would argue that in the last few years it has spent time on improving the "health" of the platform – making sure there are actual users on Twitter, not just computer bots, and that people feel safe (no bullying, for instance). Wall Street argues, on the other hand, that Twitter can both walk and chew gum, especially if it spends $730 million on R&D a year.

Twitter has $3.5 billion of net cash on its balance sheet. It is very profitable – it earned $1.2 billion in 2019. If it improves onboarding, there is no reason why it cannot triple or quadruple its user base. (If 10% of people globally used it, that would be 600 million users. Facebook has 1.1 billion users.) The company can increase revenue per user by fixing its direct-to-consumer advertising platform, which the company says it will improve in 2020. (The IMA marketing department tried to use the current marketing platform. It was horrible.) If Twitter achieves a Facebook-like profitability profile (margins) –and there is no structural reason why it cannot – it will have earnings of $3-5 per share and the stock will be trading in the triple digits (as of this writing it is about $30).

This would all have been wishful thinking on our part if a very respected private equity firm, Silver Lake Capital (they took Dell private), and activist investor Elliott Capital had not recently taken a significant position in the firm. They are an interesting combination of a forward-looking long-term-oriented private equity firm and an aggressive, more short-term oriented hedge fund. They asked for boards seats (which they got) and the replacement of Jack Dorsey (which they did not get, at least not yet).

We see little risk in the stock today – if business doesn't improve much, it is worth today's price. We are buying the world's most important social media platform at less than $30 billion (net of cash). Even before government debt went up by a few trillion in a matter of weeks, that was very cheap.

A few days after we bought the stock, Twitter got into hot water with the current American president – Twitter put a fact-check link next to his tweet. The last thing we want to discuss in these letters is politics, so we won't. However, we don't believe this incident will have significant consequences for Twitter's long-term business value.

DXC Technology Company (DXC)

This quarter we gained additional insights into DXC and became even more confident that at the end it will turn into a decent investment (it's an incredible investment at today's price).

We need to tell you a back story. We bought DXC after CSC merged with HP's services business. We owned CSC in the past when it was run by Mike Lawrie, who did a phenomenal turnaround of the company. Mike has worked for IBM and a very respected private equity firm, ValueAct. While at ValueAct he turned around Misys, a British technology company. When we bought DXC we were attracted by its cheapness, but we were also drawn in by Mike Lawrie.

At the time of the purchase the company had had a few weak quarters (the stock had declined from $110 to $50) but announced a goal to earn around $13 a share (from $7 at the time we purchased it).

The gap from $7 to $13 was to be bridged not by significant revenue growth but by margin expansion through cost reductions. DXC's margins have already been going up, and Mike Lawrie has assured us that they can be higher as DXC consolidates the CSC and HP Services businesses together, the company closes redundant data centers, etc. We compared margins at the time of purchase to those of DXC's competitors (the likes of Cognizant, Accenture, and Infosys), and DXC's were much lower at the time.

After we purchased it, the company continued to experience what management called "one-off" issues. Keeping in mind that the CSC turnaround was not linear, we figured integration of the two large companies would have its ups and downs, so we were patient.

In August 2019 Mike Lawrie abruptly announced that he was leaving. He explained that he had gone to the board a year earlier when the stock was $100 and told them that he wanted to retire in a year. The company looked for a replacement, found Mike Salvino – who used to run a large

division at Accenture – and appointed him to the board, and he was ready to take over from Mike Lawrie in a few months.

After Salvino took on the CEO role he made a few announcements: first, the sale of three businesses. Second, he lowered earnings projections for 2020 by $2, from $7 to $5, saying that $7 of earnings was not going away but being postponed. Third, the company would use proceeds from the sale of the three businesses to buy back stock (it seemed like it would buy 60% of shares).

We increased our position in DXC at this point – this buyback and the low stock price made it almost impossible for the stock to remain around $30, because reducing the share count would drive earnings to $7-9 a share.

Okay, you are almost caught up.

Over the last few months, we've subscribed to a service through which we can interview executives who worked for companies we are interested in or their competitors, suppliers, or customers. This service comes with an archive of past interviews. Reading these interviews gave us a new perspective on DXC.

We were wrong in our assessment of Mike Lawrie. Lawrie was good at turnarounds, but he was not good at running companies. He seemed to have only one arrow in his quiver – cost cutting. It was the right tactic with CSC, which was dripping with fat. However, it was suffocating DXC. Customers were leaving because DXC's service had suffered. In one interview, an executive who ran Latin America for DXC complained that he could not hire a programmer without Mike's approval. (Remember, this is a company with 130,000 people.)

Cost cutting went too far and employees were leaving because DXC became a toxic place to work. Unhappy employees lead to unhappy customers (especially in the services business), and thus customers were not renewing contracts and leaving, too. Now we can see that DXC's roadmap of getting from $7 to $13 of earnings per share was on the back of unhappy employees and customers, and even if achieved it would not have been sustainable. Here is a lesson for us: Turning around a company and running it day to day are two different skills sets and at times can oppose one another.

We also confirmed what we already knew: DXC runs a mission-critical IT business for its customers, and it has a customer-specific skill set that often makes it impossible for customers to switch. For instance, it runs the Delta Airlines reservation system, which was designed in Cobol (an almost dead programming language – sorry Cobol), and it would be incredibly difficult (if not impossible) for Delta to switch away from it.

Most importantly, ex-DXC executives and customers raved about Mike Salvino. He was very well-respected when he was at Accenture. Salvino, on his very first call, mentioned that he would be calling all large customers and asking for their feedback on what DXC could do better. In one of the interviews we've read, a customer mentioned that he got one of those calls from Salvino, and he was very pleased with the progress DXC was making.

Six months ago Salvino identified 40 contracts that were in trouble and said he would personally work to try to fix them. As of the end of May issues with 35 of the contracts had been fixed, three are still being resolved, and two customers will be leaving. One customer that had a bad experience with DXC said things have been improving since Salvino joined DXC. He also said that employees are coming back to DXC. (Salvino mentioned this on the conference call, too.)

The way employees are viewing the company is that it is improving every month. (We saw that in comments on another service we subscribe to, Glassdoor.) Salvino announced an increase in pay for service employees (this is in part why earnings will go to $5 before they come back to $7). But he also announced that DXC has too many management layers and they'll be delayering the company, which should bring $700 million of cost savings in 2021 (about $1.80 a share), which will go directly to the bottom line.

What we have learned since the last time we wrote to you has made us more optimistic about DXC and Mike Salvino. In the past we looked at DXC as a non-growing business; today we see that there is no reason the company cannot start growing again – happy customers will lead to more business. The coronavirus is going to be a headwind, but according to management, only 15% of the company's business is exposed to the travel and leisure industries.

The company took a significant goodwill charge last quarter ($15 a share). I am sure it made an accountant somewhere in a dimly lit room smile, but to be honest, to us it means absolutely nothing – it has zero impact on the company's cash flow or its value; it's just archaic, non-cash accounting noise.

We think the company will earn at least $5, and most likely $7-9, and thus it is worth around $70 to over $100. (We know, these numbers look absurd now, considering that the stock is in the teens today.) Also, the market was worried that that sale of the US state and local service business, which accounts for 8% of DXC's revenue, to Veritas (a private equity firm) for $5 billion would not go through. In late May management confirmed that the sale will happen sooner than expected (probably in September).

DXC generated $1.5 billion of net income and $5.58 in earnings per share over the last 12 months. It has $3.6 billion in cash and $8.6 billion in debt, or $5 billion of net debt. After the sale it will have only $1.5 billion of net debt (some of the proceeds from the sale will go to Uncle Sam). Again remember, an average business, which accounted for 8% of DXC revenue, is going to be sold for $5 billion; and DXC is still in planning to sell two other businesses (17% of revenue or so) for … we don't know, $5 to $12 billion. The market value of the whole company today is $4 billion. These numbers make no sense at all, none. The last time we felt this way was when we owned Computer Sciences Corp – DXC's predecessor.

In fact, at the end of the May call Mike Salvino commented that DXC may decide not to sell one of the two businesses, Workplace and Mobility, as this business has benefited tremendously from the coronavirus, since it helps companies manage employees that work from home. The shocking part about DXC's current valuation is that this tiny Workplace and Mobility business, which accounts for 10% of DXC's revenue, is worth more than the whole company's market capitalization today.

Saying DXC is cheap is like saying the US President uses Twitter occasionally. DXC is insanely cheap. More importantly, DXC is unlikely to remain cheap forever.

Tanger Outlets (SKT)

Most Tanger stores were closed during March and April, with some starting to open in May. This is what Tanger management said on their May earnings conference call:

> *In late March, we offered all tenants in our consolidated portfolio the option to defer 100% of April and May rents, while reserving all of our rights under these lease agreements. Deferred rent would then be payable in January and February of 2021, providing what we believe will be sufficient time to rebuild operations and monetize their inventory. With this proactive approach, we allowed tenants to preserve capital in the short term. And in turn, we are helping them to be prepared to reopen as soon as possible.*

This decision makes a lot of sense. First of all, some of Tanger's tenants may not have had a choice – they simply could not afford to pay – while with others who could pay (the likes of Nike and Levi Strauss) the decision created goodwill. Eighty-eight percent of tenants took Tanger up on its generous and necessary offer.

The company also said, "We expect to have sufficient liquidity to meet our obligations even under our most conservative rent collection scenario of not receiving any rent for approximately 2 years, assuming no dividend payments or debt maturities, and we remain in compliance with our debt covenants." They should be able to survive the difficulties of the short term.

We spend a lot of time thinking about Tanger and are optimistic about its future, for several reasons: First, People have already binge-watched the full library of Netflix, and they want to get out. Shopping in America is a necessary pastime – no virus can kill this part of the American spirit. Now, given the urge to shop, would you rather go to an open-air outlet mall or a traditional indoor shopping mall? Most likely, you'd choose the open-air (outlet) mall.

Second, department stores are either going out of business (JCPenney, Neiman Marcus) or closing stores (Macy's and Nordstrom). This hurts traditional malls because these department stores were the anchor tenants, the main attractions that brought people to the malls. The pain being felt by traditional malls helps outlets.

Third, online shopping works well for necessities but is not really good for buying clothes.

Steve Tanger loves to say, "During good times people like a bargain; during tough times they need a bargain." Today people need a bargain, and though some people will be looking for these bargains in the safety of online social distancing, shopping for clothes online is difficult, as our bodies are not uniform. My wife (this is Vitaliy writing) just bought four dresses on Amazon, and they are all going back for various reasons – they did not fit right; they looked different in the picture than in real life; the material did not feel right, etc.

Camping World (CWH)

Camping World should have been the worst-performing stock in our portfolio during the recession. After all, unemployed people have less discretionary spending to buy RVs. But this is anything but a traditional recession.

In past summers the menu of things people could do was very wide – Disneyland, cruises, Europe… the list is very long and most things involve flying. Now that flying is off the menu, the list of things people can do is very short, and travel in an RV is the most appropriate choice for social distancing. Though unemployment is in the double digits, the majority of the country is still employed and needs to do something this summer.

The money people saved for Disneyland can go to buy an RV, and CWH will be delighted to sell them one. When we bought CWH we thought its earnings power was around $4-4.50 – which we may get to see in 2020. At 10 or 12 times earnings CWH may turn into a $40-$56 stock with a much stronger balance sheet.

This pandemic may also have a long-lasting impact on the RV industry, and it will expose a much larger portion of the population to RVing. Not to get too anecdotal here (this is Vitaliy writing), but my wife, who is the last person in the world who would set foot in an RV, is shopping for an RV as I type this. (Okay, she is asleep as I am writing, because it's 5am, but she was shopping for it last evening).

McKesson (MCK)

McKesson and other drug distributors (Cardinal Health and Amerisource Bergen) reported revenue growth of 15% in the last quarter, which was mostly driven by people stockpiling medicines ahead of the lockdowns. We expect sales to decline next quarter. Overall this business is doing well, though the company has warned that its sales will be impacted by 15% or so due to fewer surgeries and doctor visits during lockdown. Out of all the companies we own, we worry about drug distributors the least. MCK is still on its way to make $20 a share in 2024 (it has earned $15 in 2020). Over the last few months, MCK spun off ChangeHealth. We are still deciding what to do with this business.

Mylan Laboratories (MYL)

There is really nothing new to report with MYL. The business is doing absolutely fine, and MYL is waiting to be merged with Pfizer's generic business. In the meantime, it is expected to earn $4.30-4.50 a share. Its business is not exposed to Coronavirus, and we are still puzzled why it is not a $50 or $60 stock. The merger, new dividend, ongoing debt paydown, and renaming of the business to Viatris may change that.

Berkshire Hathaway (BRK.B)

We are less excited about Berkshire Hathaway than when we bought it. We are concerned about BRK's insurance exposure to business interruptions due to COVID-19. We talked to several experts, and it is not clear to us what the extent of that exposure is. Buffett mentioned in BRK's annual meeting (unfortunately virtual this year) that he too is unclear on what the exposure is, and it is likely going to be litigated for years.

Also, part of our thesis was that Berkshire Hathaway was the lender of last resort and would turn its $120 billion cash pile into a much larger number. Well, the Federal Reserve spoiled that party by buying $3 trillion of bond ETFs, thus allowing both the weak and strong indiscriminate access to the bond market. As Buffett said, his phone did not ring. We don't feel any urgency to sell BRK but may use it as a source of cash if more attractive opportunities come around.

Uber (UBER)

We added to our Uber position when the stock collapsed. Its management made all the right decisions during the crisis: It reduced costs by a billion dollars (we are quite certain management was itching to do this but needed an excuse); it came out with new services, including a package delivery service – now you can call Uber and place a package in the car and the driver will deliver it for you; and it issued new post-COVID-19 safety procedures for drivers and passengers. Uber Eats' business is exploding – but it's not profitable, yet.

We are asking ourselves a question that we don't have an answer to yet: Has social distancing impacted the size of Uber's potential market in the long run, post-2022 and beyond? On one side, Uber benefits from the high density of public transportation – ridesharing seems like an intimate experience compared to the subway or a bus. On the other hand, driving your own car is the most social-distancing-friendly mode of transportation.

Uber rides are taken when we go to bars, sporting events, restaurants; go to and from the airport (about 15% of all rides); and commute to work. Most of these activities will come back to normal; it's only a matter of time. Didi – a ridesharing company in China – reports that rides have returned to 70% of where they were before the crisis. (China is a few months ahead of the rest of the world.) If the US and other countries follow a similar pattern, that is good news for Uber, especially since it has reduced its expenses. What we don't know is what impact working from home will have on Uber use. On one side, it reduces its use case. However, fewer commutes also means people may give up their second car and use Uber as a substitute to run errands, etc.

Q&A - You Ask, We Answer

We received a lot of questions on put options.

We are still conflicted about what we should have done with them. With the benefit of hindsight, the right decision would have been to sell them all in March and take profits. Why didn't we? Well, we had no idea what the market would do next. We (and you) would have felt awful had we removed the hedges and the market fell another 25%. The right approach would have been to practice incrementalism – we should have removed (sold) some of the hedges. The market moved too fast in both directions.

We've been asked how we determine how much of the portfolio we want to hedge. We usually try to hedge half of our equity exposure. Hedging the full portfolio is expensive even when puts are cheap. We are not buying new puts now because, to be frank, they are just too expensive.

Some clients asked about the class action lawsuit notices they are receiving about Camping World (CWH).

Unfortunately, any time a stock declines by around 50% or more, lawyers come out of the woodwork and initiate class action suits against the companies' management. Sometimes these lawsuits have merit; most of the time they do not. In some rare cases, these lawsuits result in a small financial payoff for those who participate, but the vast majority of the time they result in nothing. However, if you would like to participate, we'll happily provide the support and materials you'll need to do so. We'd caution, however, that most of the time the only parties that benefit from these lawsuits are lawyers.

Our Thoughts on the Stock Market

If in early January, you'd have described to us everything that was to happen with the world and global economy and then asked us to guess where the stock market would be, we would not have guessed it would be at today's level.

Looking at the stock market today, the first thought that comes to mind is that it is divorced from economic reality. The S&P 500 is only a few percent away from where it started 2020.

On the surface it looks like stocks discount one incredibly rosy version of the future. In that version everything goes back to normal like nothing happened; we basically just entered and quickly exited a sharp recession and earnings came back to pre-coronavirus normal. Though that is a possible outcome, it is not a probable one, judging by what is happening right now. We'd

like to note that, in any scenario, we'll exit with close to $10 trillion of additional debt on the government's and the Fed's balance sheets

I used the word discount. To discount something you bring future earnings (cash flows) at a discount rate to today's dollars. The Federal Reserve bought trillions of dollars of US Treasuries and corporate bonds of suspect quality through ETFs, taking interest rates to almost zero. This act has pushed the discount rate lower and wound up the spring of the music box in the Fed's game of musical chairs. So the market behavior to a large degree reflects not the sum of future scenarios but the much lower discount rate by which these scenarios are discounted.

Since the Fed is buying, the music is playing, and investors keep dancing (speculating). Greed is back. It seems that this music just keeps on playing.

But will it?

The economy is a very complex organic system created by trillions of individual transactions. The Fed's involvement introduces inorganic matter into the ecosystem that slowly poisons and atrophies the system. The Fed's active involvement distorts price signaling (higher prices lead to higher demand and vice versa) as it manipulates the price of the most fundamental commodity in the system – interest rates (the price of money).

The Fed's buying junk bonds through ETFs has brought us closer to a Walking Dead economy. It has given a further lease on life to mostly dead companies that otherwise would have perished. But it's easy for me to sit here and criticize. If I ran the Fed in March 2020, I probably would have done the same thing – the possible cost of doing nothing would have been a global depression. The bottom line is that the Fed temporarily stimulated a humongous amount of greed in a system that was shaking in fear.

We are not investing in the economy we'd like to have, but in the one we have. However, this dance cannot go on forever or at some point the Fed will own all financial assets and the US economy will turn into a Potemkin village. This is why, though it has been unfashionable and even counterproductive lately, we'll keep sticking to buying great, undervalued companies, not just great companies irrespective of price.

Nifty FANGAM

While you are pondering on this, here is another observation.

If you look deeper under the hood of the stock market, you'll see that there is a significant dichotomy between bytes stocks and atoms stocks. The atoms are losing to the bytes, badly. If you compare performance of the S&P 500 (SPY) traditional market-capitalization index – the

one you see in the news – to its less-known cousin, the S&P 500 equal-weighted (RSP), you'll see a significant disparity in performance.

In the market cap-weighted version, the top five stocks (all five are members of FANGAM gang – Facebook, Amazon, Netflix, Google, Apple, Microsoft) now represent 21% of the capitalization of the index (the last time this happened was 1999) and thus account for 21% of the returns. In RSP these stocks have a weight of 0.1% (they're just 5 out of 500 stocks).

SPY is down 6% for the year, where RSP is down 16% – remember, same stocks, it's just that SPY is heavily weighted toward bytes stocks, as they have larger market caps, and RSP treats bytes and atoms equally. The virus has been much kinder to bytes than atoms stocks; it has benefitted those companies as our world has become a bit more virtual and atoms were impacted by social distancing. The problem is, bytes were very expensive going into the coronavirus crisis, and they just got even more pricey (unless their businesses have improved to a greater degree than their stocks prices appreciated, which is possible but unlikely, with the possible exception of Amazon).

Just as any propaganda needs a certain germ of truth to grow from, so do bubbles. The FANGAM are incredible companies (germ of truth), and they function better in the virus-infested world (another germ of truth). But at the core, their existence is grounded in the world that is built of atoms, not bytes.

For instance, Google's advertising business will continue to take market share from non-digital forms of advertisement (not sure if any are left), but atom-based companies are the largest source of Google's advertising revenue. If the atom world is not doing well, neither will Google. Also, the law of large numbers usually kicks in at some point: A company cannot grow at supernormal rates forever or it will become bigger than the market it is serving.

The Nifty Fifty stocks come to mind here. Those were the fifty stocks – the who's who of the 1960s –that made America great (then): Coca Cola, Disney, IBM, Philip Morris, McDonalds, Procter & Gamble … the list goes on. Though today we look at some of them as has-beens, in the '60s and '70s the world was their oyster. Coke and McDonalds were spring chickens then, spreading the American health values of diabetes and cholesterol (okay, maybe I'm being too hard on them) across this awesome planet.

Although it was hard to imagine in the '70s that any of these companies would not shine forever, they are a useful reminder that even great companies get disrupted. Avon, Kodak, Polaroid, GE, Xerox –all were Nifty Fifties, and all either went bankrupt or are heading towards irrelevancy.

In the 1960s and early 1970s these stocks were one-rule stock – and the rule was, buy! They were bought, and bought, and bought. They were great companies and paying attention to how much you paid for them was irrelevant.

Until.

The Nifty FANGAM is arguably not as expensive as the Nifty Fifty was in 1972. [Lawrence Hamtil] put this nice table together, using data gathered by The Brooklyn Investor blog, which divides the Nifty Fifty stocks into two groups. The cheap basket traded at around 28 times earnings and the expensive basket at about 60 or so. Neither the cheap nor the expensive basket did well in the decade of the '70s. Today, FANGAM stocks in general trade closer to the cheap basket's valuation.

"Cheap" Nifty Fifty Stocks

			Subsequent Annualized Total Returns			
Company	Symbol	Starting P/E	10-yr	20-yr	30-yr	40-yr
Philip Morris	MO	25.9	6.85%	18.71%	16.94%	16.53%
Bristol-Myers	BMY	27.6	5.35%	13.10%	11.76%	10.17%
Pfizer	PFE	29	2.63%	11.41%	14.45%	10.40%
Pepsico	PEP	29.3	2.83%	13.55%	13.63%	11.42%
Procter & Gamble	PG	32	-1.59%	8.57%	10.76%	9.50%
IBM	IBM	37.4	-2.53%	1.95%	6.14%	7.20%
Dow Chemical	DWDP	25.5	-0.85%	8.50%	8.74%	7.22%

"Expensive" Nifty Fifty Stocks

			Subsequent Annualized Total Returns			
Company	Symbol	Starting P/E	10-yr	20-yr	30-yr	40-yr
McDonald's	MCD	85.7	1.75%	12.06%	11.53%	12.17%
Int'l Flavors & Fragrances	IFF	75.8	-5.24%	6.93%	5.50%	5.87%
Walt Disney	DIS	81.6	-3.78%	10.81%	9.40%	9.12%
Johnson & Johnson	JNJ	61.9	1.72%	10.48%	13.38%	10.62%
Coca Cola	KO	47.6	-6.93%	11.83%	11.52%	9.98%
Eli Lilly	LLY	46	-0.72%	8.26%	11.17%	7.99%
Merck	MRK	45.9	-0.23%	14.31%	13.11%	9.75%

Start date 6/1/72 *Sources: Brooklyn Investor; Morningstar*

If you bought and held Coke or McDonalds in 1972 (or any other Nifty Fifty stock), then you experienced a painful decade of no returns; in fact, at times you were down 50% or more. Coca Cola was as great a company in 1974 as it was in 1972, but the stock was down 50% from its high. Okay, Coca Cola was trading at 47 times earnings in 1972. But even a company like Procter & Gamble that was trading at "only" 32 times earnings in 1972 was down almost 50% in 1974 from its 1972 high. It took until the early 80s – a decade – until investors who bought Nifty Fifties at the top broke even – and this applies to almost all of them.

Nifty Fifty (1970's)

MO
ALTRIA GROUP INC · 1M · Cboe BZX
40.73 +1.68 (+4.30%)
7 years
0.55
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
1971
1973
1975
1977
1979
1981
1D 5D 1M 3M 6M YTD 1Y 5Y All
11:16:34 (UTC)
% log auto

DIS
WALT DISNEY COMPANY (THE) · 1M · Cboe BZX
124.82 +7.52 (+6.41%)
13 Years
7.00
6.00
5.00
4.60
4.00
3.00
2.00
1.00
0.00
1969
1972
1975
1978
1981
1984
1987
1D 5D 1M 3M 6M YTD 1Y 5Y All
01:40:24 (UTC)
% log auto

In today's far less patient world, that decade might as well be infinity.

As I am writing this I am struggling with a few issues. First, interest rates and inflation were much higher in the '70s and early '80s. Now, interest rates are at zero, going to negative or to … no idea what level. Globalization was deflationary, thus de-globalization will likely be inflationary; but automation may dampen the inflationary impact, at least some of it. If we get negative rates, then on one hand they should boost stocks' price-to-earnings ratio. (Paradoxically, the further a company's cash flow is in the future, the more it is worth in today's dollars. Yes, makes little sense to us, either). On the other hand, if we have negative rates, that means we are desperate and thus earnings are collapsing.

In an inflationary environment, most earnings growth will be eaten away by declining price-to-earnings, as it happened in the ’70s.

Another issue: If you held many Nifty Fifties for 20 years, from 1972 to 1992, they would have delivered a decent (10%-plus) return. This sounds great in theory; however, most people would have run out of patience after a decade of no or negative returns and thus not have been around for the fruits of the ’80s decade. In other words, shareholders who bought the stocks in 1970 were not the ones who benefitted from the returns in the late ’80s.

Today the Nifty FANGAM has turned into one-rule stocks – buy! (irrespective of price). If you did not own them over the last decade, your portfolio had an enormous headwind against it.

But what the Nifty Fifties showed us is that company greatness and past growth are not enough. Starting valuation – what you actually pay for the business –matters. The great companies will still be great when their stocks are down a bunch and they have a decade of no returns. Dividends aside, stock returns in the long run are not just driven by earnings growth but by what the price-to-earnings does as well. If price-to-earnings is high, it’s mean reverts – declines – chipping away at the return you receive from earnings growth. I (this is Vitaliy) wrote two books on this topic.

The ’70s were almost fifty years ago. Fine, just look up Microsoft, Cisco Systems, Coca Cola, and Wal-Mart stock charts from the late ’90s, and you’ll see that history repeats itself, again and again (see charts below).

What you pay for even a great company matters. Paraphrasing the great Freddie Mercury, there must be more to the stock market than FANGAM (though that has not been the case lately). They were the tailwind for the S&P 500, but they’ll likely turn into a headwind over the next decade, and become an anchor around its neck.

Nifty Nineties (1990’s)

MSFT
Microsoft Corp. · 1M · Cboe BZX
182.92 −0.33 (−0.18%)
18 years
200.00
182.92
25d 9h
160.00
140.00
120.00
100.00
80.00
60.00
40.00
20.00
0.00
1999
2002
2005
2008
2011
2014
2017
2020
1D 5D 1M 3M 6M YTD 1Y 5Y All
11:34:42 (UTC)
% log auto

KO
COCA-COLA CO · 1M · Cboe BZX
47.92 +1.24 (+2.66%)
12 + Years
60.00
56.00
52.00
47.92
25d 9h
44.00
40.00
36.00
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As always, should you have any questions or require any additional information, please do not hesitate to contact us.

Enjoy and Prosper,

Vitaliy N. Katsenelson, CFA
Chief Executive Officer

And

Michael L. Conn, CFA
Chairman

Our *Promise* to Clients

*W*e are anything but just another Wall Street firm, and therefore not everyone who knocks on our door is an appropriate client for us.

*O*ur clients are our partners, and just like partners in a marriage, we need to share the same values. Our values are spelled out in Six Commandments of Value Investing (read, listen).

*W*e promise to be honest and transparent with our partners. We will invest their money with the same thoughtfulness, care, diligence, and slight hint of paranoia that we employ in investing our own (easy for us to do, as nearly all the liquid net worth of our portfolio managers and their families is invested in the same stocks our clients own).

*W*e are a firm with a soul, and we'll never do anything that would put our interests before those of our clients.

*W*e're not trying to be the biggest investing firm, just the best one. In addition to striving to provide great true-risk-adjusted returns, we'll deliver excellent customer service and a one-of-a-kind client experience.

August 7, 2020

Dear Valued Client,

This letter has a very narrow focus on a few new decisions we've made over the last few months. It will not update you on existing positions - we are still in the middle of earnings season. We'll discuss existing positions and less controversial new purchases in the next letter.

Beloved Country. Unloved Hedge. (Purchase of SPDR Gold Shares (GLD)

I usually love writing. I get up early every morning, make a cup of coffee, put on my headphones, and look forward to discovering what my subconscious will surprise me with.

Not this time.

I hated every minute I spent working on this article.

There are many reasons for this.

A few times, as I wrote, I got close to a line I don't like to cross – the politics line. I rarely discuss politics even with my friends. I have occasional political discussions with my kids (I try to show them all sides). I don't allow broadcasts of political debates in IMA hallways. They don't have the intellectual rigor we require in our research. They bring unwanted toxicity, resolve nothing, and nobody's mind ever gets changed.

I block most political discussions from my daily life and focus on things that have a shelf life longer than an overripe banana (things like books).

But writing this piece was particularly painful because it made me think more about the negative changes that are happening to the country I love.

Why write it, then?

I am not writing this to vent my frustration (I scream into my pillow for that) or to provide a recipe of what must be done (you've got TV talking heads for that). I really didn't want to write about our national failings, but I have a pragmatic reason for doing so: As the world around us changes, we need to keep making changes to our portfolio. The coronavirus has compressed years of changes into months. It may be the straw that broke an aging, overconfident camel's

back.

I remember reading in January about the virus infecting China and catching myself thinking "This is a China problem; these viruses don't come to the US." Today as I consider this line of thinking I realize it is insanely naïve, ridden with arrogance, and very dangerous.

If I was the only one infected by such thinking, I'd take a mental note not to do it again, or maybe I'd be lying on the couch sharing it with my shrink, not writing about it. But this arrogant thinking has infected the whole country and most importantly our government. I am not talking about our virus response, or the tensions between liberty, commerce, and public health. I am talking about something else.

This arrogance was not built up out of thin air.

The US truly has so many advantages the rest of the world does not. It is flanked by two oceans, and it has two friendly neighbors, the polite one in the north and the fun one in the south. It has an abundance of fertile ground to feed itself and enough other natural resources to be independent from the rest of the world. It has not fought a war on its own territory with a foreign power in over two hundred years.

It is the world's largest democracy (measured by GDP; India is the largest by population). It is the cradle of technological innovation – every piece of technology that sits on my desk has its roots in the US.

It is for these reasons that the US dollar became the world's reserve currency.

America's competitive advantages are rooted in its geography, but the reason the dollar became the global reserve currency is that the US had the world's largest, strongest (steadily growing and conservatively financed) economy and a stable political system (the US Constitution is a big help here).

Let's zoom in on this point for a minute. Despite your ability to touch the green US dollar in your wallet, it is just a piece of paper that is worth something only if you and everyone around you believes in it. After World War II, the world believed in it.

People basically looked at the places where they lived and at America, and many of them concluded that the US was the safest place to keep their savings. They didn't have to worry that if they put their money in the US dollar it would lose its value. The dollar was not going to be diluted by hyperinflation or burned up by a foreign or civil war. The political system was stable and strong, and people didn't have to worry that at some point they wouldn't be able to take their money out of US banks and bring it home.

However, currency is a very nebulous concept. It's a story, and one that is not rooted in nature; it is completely based on mass perception.

This brings us back to arrogance.

The problem with arrogance is that it changes your behavior. You start believing that you are very special for reasons that are not grounded in reality. You start believing that bad things happen only to other people and nations because they are not as special as you. You can do anything you want – borrow and spend as much as you like – and nothing bad will happen to you. This behavior in turn starts to undermine the core reasons why people trusted your country and currency to begin with.

This is exactly what is now happening to the US. In 2020 the ratio of our debt to the output of the economy (debt to GDP) is likely going to exceed 120% (and might be as high as 130%). You can blame the virus for some of that, but the national debt had been going up steadily every single year. We ran huge budget deficits in bad times and in good times, long before the virus came on shore.

In 2000, only 20 years ago, our debt was $6 trillion – a 30% debt to GDP. It was $14 trillion in 2010 and $23 trillion in 2019, increasing $1 trillion a year while the US economy was booming. Or maybe that is why the US economy was booming. We were charging a trillion a year, year after year, on our national credit card to buy things and to engineer this growth. By 2019, ten (!) years after the Great Financial Crisis, the Fed was still running quantitative easing.

In 2019 debt to GDP was over 100%, eclipsing the EU's ratio of 86%.
(Yes, the capitalist US was more indebted than the "socialist" EU). We have not acutely felt that debt burden, because interest rates declined over the last two decades.

Then the virus arrived.

The US has spent 12% of GDP (so far) to keep the economy afloat during the shutdown – twice as much in terms of GDP as the rest of the world, four times as much as the largest European countries, three times as much as Japan.

Our debt has skyrocketed by another … maybe $6 trillion – too soon to tell. The Fed already owned $2.5 trillion of our government bonds in 2019, and now it owns $3.7 trillion of our fine paper and is a buyer of our corporate bonds and ETFs. Stocks are likely to be next.

Credit rating agencies have already put our AAA-rated debt on "negative watch," signaling a possible downgrade. Countries like the US that borrow in their own currency don't default on their debt, at least not by failing to make payments. Instead, we'll "honor" our obligations through massive money printing, which could bring massive inflation and tank the US dollar (who wants to own a currency that buys less and less?). God help you if you reached for yield and loaded up on long-term bonds (a trade that minted money for the last 30 years). Long-term bonds will be widow-makers.

But our large debt pile is only part of the story. In the largest economy in the world, the staunchest advocate of free markets, the cost of money (arguably the most important commodity) is set by a dozen economists. (Think about that when you hear the US calling another nation a manipulator of its currency.)

In 2020 the social fabric of our society is tearing apart. It is our tribe against their tribe. Every

time you think the toxicity of our politics cannot get any worse, it does. Unlike in the country that came together during World War II or 9/11, this time the coronavirus has pulled us further apart. It doesn't look like the outcome of the 2020 elections will change that, and so the inertia of the last 20 years will persist.

Our foreign policy. Nobody knows what it is. The only time we hear about it is when we bicker with our neighbors and allies, bomb some country in the Middle East most Americans cannot find on a map, ratchet up tensions with China, or for the nth time slap sanctions on Russia.

The world used to look at the US as the global leader, as a moral compass. Let me put it this way. If Martians landed on the Earth today and took a careful look at our behavior, I don't think they'd conclude that we are the shining light of democracy.

This is incredibly difficult to write, but bad things don't just happen in other countries; they can happen here too. The US response to COVID-19 is a visceral reminder of that. We'd like to believe that the US is special, and it is special to us, but the laws of physics are not suspended here, and neither are medical and economic principles.

Though the US dollar is unlikely to lose its reserve currency status in the immediate future – for no other reason than that there are no better alternatives (every contender has problems of its own) – the strength we've seen over the last decade will likely fade in the rear-view mirror.

The virus has accelerated trends already in place – it has hastened the beginning of the end of globalization. Globalization was a tailwind to the US dollar in its role as the central medium of global exchange, and deglobalization (localization) has the opposite effect. We are also wading (and are already knee deep) into a cold war with China (a topic for separate discussion). We are waging a technological cold war with them and vice versa.

The dollar's decline may mean higher prices, higher inflation (we are a net importer), and higher interest rates (the Fed will try to squash interest rates, until it cannot).

In our portfolio we are already partially positioned for this shift, by owning foreign stocks – a weaker dollar means their earnings will go up in the US dollar terms.

But there is another thing we can do – buy gold.

That's something we have resisted doing for a long time. (I expressed my thoughts on gold here in October 2019.) There are so many reasons why I don't want to like gold: I have no idea how much it is worth (it doesn't have cash flows); it is a medieval relic; it has no productive value – it just sits in the vaults of central banks or stashed under mattresses.

Gold is hedging us against two scenarios: a weaker US dollar and the debasement of all currencies – the dollar declines but so do other currencies. Dollar outflows will be looking for homes. Some will flow into euros, British pounds, and Swiss francs, and some into gold – an incorruptible asset class (central banks and politicians cannot create more gold).

In the past our justification for not owning gold was that we'd rather own good companies, and we'll continue to do that. Gold will become just another position in our portfolio – an unloved hedge.

Despite the somber voice of this letter. The US is not turning into Zimbabwe anytime soon. Yes, we'll have challenges, but we'll get through it. The British Pound was the world's reserve currency for over a century, until the dollar unseated it about seventy years ago. The United Kingdom is still thriving today even despite going through a messy divorce (Brexit) with its European neighbors.

Yes, the US will have challenges, but we'll adapt to them. At IMA, we'd just like to do it early.

Purchase of Wells Fargo (WFC)

We've been eyeing Wells Fargo for a while. It used to be one of the best-run banks in the US. Warren Buffett is one of its largest shareholders. Charlie Munger loaded up on WFC during the Great Financial Crisis (GFC) through the Daily Journal (a company on whose board he sits). WFC has a very large and stable deposit base, which gives the company a cost advantage over its competitors when it comes to funding its loans. Despite buying a very troubled Wachovia, which bought very troubled Golden West, Wells Fargo sailed through the GFC.

We don't know when the trouble started, but WFC's focus created an incentive for employees to sell products to customers at any cost. Employees then opened a few million checking and savings accounts for customers who never asked for them.

The actual harm to individual customers was tiny (we are talking $20 or so per consumer), but the cost to the bank was enormous – its reputation suffered, it paid billions in penalties, regulators put the company under a giant microscope which resulted in a much higher cost structure (more on this soon), and the Fed basically restricted the company from growing its loan book until all the problems are solved (the restrictions are still in place, though they were eased slightly in April).

So there are a lot of things not to like about WFC, but the price of WFC stock reflected this. JP Morgan was trading at 1.2 times book (value of its equity), while WFC was trading at 0.65 times book. The stock was down 50% year to date.

Aside from its cheapness, let us tell you what we see in Wells Fargo. It is the largest bank on the West Coast of the US. It is incredibly inconvenient to switch banks, so despite the headlines, customers are sticking around. We don't want to minimize any kind of malfeasance, but if my bank, US Bank, had opened me an extra account, I probably wouldn't have noticed it. As long as I was getting good service from the bank and could get whatever financial products I needed, I'd do nothing. This is what most WFC customers did – nothing.

WFC needs a culture reboot, and they have the right guy for that – Charles Scharf. Scharf worked for Jamie Dimon at JP Morgan, where he was CEO of retail and financial services; then in 2012 he went to run Visa. He seems very capable and is highly respected in the industry. What made Wells Fargo great is still there – its enormous footprint and huge customer base. WFC used to have a good culture and Scharf does not face an impossible task in bringing it back.

The light went on for us when we listened to Scharf in WFC's latest earnings call. The following especially caught our attention:

> I have acknowledged in the past that our expenses are too high and that we're building road maps to improve our efficiency ratio. To repeat, **there is nothing structurally different about Wells Fargo that should prevent us from being as efficient as our large peers**, but we are far from it. **For us to bring our level of efficiency close to our peers, the math would tell you we need to eliminate over $10 billion of expenses….**
>
> This will be a multiyear effort for sure, but we would like to see a reduction in expenses next year....
>
> It is important to note that I deeply believe that this exercise is about making us a better and more efficient company, not just about reducing expenses. We have too many management layers, spans of controls for managers are too narrow, and we have resources dedicated to activities that are not a priority today. This cannot continue. [Emphasis ours.]

The pandemic gave Scharf a license to cut out $10 billion of expenses. That may not sound like a lot when the US government just created $6 trillion out of thin air, but the market capitalization of Wells Fargo is a mere $100 billion. If Scharf keeps his promise – and we don't see any reasons why he cannot (WFC's expenses are significantly above its peers) – then if you put a 10 times multiple on earnings that would come from these expenses going away, you'll get the rest of the company (which is, by the way, very profitable) for free. In other words, we are paying $25 for a company that can earn $6–8 per share.

So, tails we double or triple our money from here. Now let's talk about heads – the risk. In addition to the risks of WFC's failing to fix its culture (a more difficult task and thus higher-risk) and cut costs (lower-risk), there are two additional risks: higher losses due to the pandemic and a drastic decline in interest rates, which would in turn reduce WFC's net income margin (the difference between what it charges on loans and its cost of borrowing). We stress-tested different scenarios.

Wells Fargo has had good underwriting discipline. The people that sign off on loans are not the same people that are incentivized to originate them. What gives us some comfort in this area is that for two years regulators have limited how much WFC can grow, and so it had to turn away business and thus had much stricter underwriting than it did in the problem period.

In our stress tests we challenged the level of losses WFC has to endure before it starts losing money. During the GFC, WFC loan losses as a percentage of total assets were 2% (a good chunk of these losses were generated by Wachovia). This time losses have to be 2.4% before WFC's net income goes negative. Also, losses would actually spread out over more than one year, and thus WFC should have plenty of resilience to handle the pain of credit losses.

Here is another piece of good news for the US and Wells Fargo. Since the GFC US regulators have gone medieval on the US banks – they've been run as utilities, and their balance sheets are the best they've ever been. Unlike in 2008, the US financial system can take some serious beatings by the pandemic and still come out okay.

Another risk of a more permanent nature is lower net income margins. Svenska Handelsbanken, which we also own, operates in the land of negative interest rates and earns a 1.5% net income margin. (It borrows at negative rates and lends at exceptionally low rates.) Today WFC's net income margin stands at 2.7%. We took it down to 1.5%, and we still get $2.80 of earnings per share or so (assuming the bank cuts costs). In this scenario, at 8 times earnings we get roughly our purchase price.

WFC requires us to dwell not on what the company is today but on what it can become (or come back to): one of the best banks in the US. Most importantly, its success is not path-dependent – its balance sheet and still very strong franchise can get WFC through thick or thin.

Tesla Put Options

We bought a tiny position in Tesla put options that are deep (very far) out-of-the-money. When Tesla stock was pushing $1,500 we made a tiny, tiny bet that its stock price will fall to $390 or below. As a reminder, Tesla stock was at $250 less than six months ago. We look at these put options as a low-probability, high-payoff hedge. Though we believe Tesla is a very important company and I (this is Vitaliy writing) love its products, its stock represents what is wrong with this market – without any changes in fundamentals, the stock went vertical.

Here is our writeup on Tesla.

Tesla's Stock Price Discounts Temporal Wormhole into the Future

Tesla's market capitalization just crossed $300 billion. It's the largest car maker in the world, even larger than Toyota, which produced almost nine million cars in 2019 and had a market capitalization of $200 billion. Tesla market cap implies that the market believes that its production will go up more than 20-fold from the 400,000 cars a year it produces today to … ten million cars.

As the market valuation of Tesla raced to the moon, its debt rating remained as junk (Toyota is A+, GM is BBB). The largest automaker in the world is junk-rated.

In the past I have made the analogy that the transition from internal combustion engine (ICE) cars to electric motors is akin to the transition from dumbphones to smartphones. It's a domain shift. So maybe another domain shift will bring higher margins to Tesla, as happened for Apple with the iPhone. Unlike other car makers, Tesla is vertically integrated: It manufactures most of the components that go into its cars (including seats); thus gains from the economies of scale that used to accrue to its suppliers will accrue to Tesla.

Also, software plays a bigger role in a Tesla than in a traditional car. There is self-driving, over-the-air updates, and an iPad-like interface that powers all the controls, for starters. So if advanced software helps Tesla get higher margins than traditional car companies, it may not have to make as many cars to get to Toyota's profitability. Bulls would even argue that self-driving alone may send Tesla's margins to the moon. I'd like to pour cold water on that argument: Full autonomous driving is a good decade away. (I discuss it in great detail here, in my 37-page Tesla writeup).

Most importantly, going from 400,000 cars to … many millions a year is not an easy nor a cheap journey. The market confuses Tesla with other Silicon Valley tech companies. Yes, Tesla is much more a technology company than your typical ICE car company is. It creates its own software and even the microprocessor that powers self-driving, but it still cannot escape the reality that it has to bend a lot of metal to produce its electric cars.

Unlike Facebook, which a decade ago could increase its user base ten- or- twenty-fold by spending a few hundred million dollars on data centers, Tesla will require an incredible amount of capital to increase production many-fold . To produce fewer than half a million cars, as it does today, Tesla needed a $25 billion investment in property, plants, and equipment. This is where bits meet atoms and face financial gravity. Tesla is barely breaking even today and will need to raise and invest not just tens of billions but hundreds of billions of dollars to increase its production enough to grow into its current valuation.

And then there is an element of time. Tesla has been stuck at producing 90,000 cars for the last eight quarters. It can only blame the coronavirus for a quarter or two. Getting to an annual production of even a few million cars will require time – a lot of time. A lot of dirt has to be moved, permits issued, equipment installed, people hired.

In Star Trek there are convenient wormholes, which cut corners through space, getting you to that galaxy a billion light years away in hours. Low interest rates have messed with the temporal properties of the market and created a wormhole in time and in Tesla's stock (as well as in many other stocks – I talked about them here). It will take years, maybe even a decade, for Tesla to produce enough cars to justify its valuation. Today's market valuation assumes it has already happened – that the capital has been raised and spent and that it cost nothing.

A few additional thoughts on ICE makers.

What is interesting to me is that today the market is basically valuing ICE makers as melting ice cubes (pardon the pun). It tacitly assumes that they won't be able to transition to electric vehicles, and so it values only their ICE cash flows, giving them basically no terminal value for their businesses.

Transitioning from one domain to another is incredibly difficult – your assets turn into liabilities. Even your knowledge in the old domain is often a liability in the new one. Just imagine being the best horse carriage maker in 1910 and making cars at the same time. Your horse carriages still provide huge cash flows. You still have to come up with new, better horse carriages and market and advertise them. But you know that at some point in time that business will be worth zero. This is the feeling I got when Chevy introduced its new Corvette. This is yet another topic I explore in great depth in my 37-page writeup.

One route that might save the ICE industry is the standardization of the hardware that goes into cars. Think of smartphones. Most of the parts that go into them are standardized. The memory that goes into iPhones and Android phones is the same; so are the batteries, sensors, microprocessors. (Apple develops its own, but most Android phones are powered by microprocessors designed by Qualcomm or Samsung). Software, too: All Android phones, which are 80% of all smartphones globally, run software created by Google. This standardization of components brings costs down substantially. Imagine if every smartphone manufacturer had its own version of everything that goes into a smartphone.

Now think about ICE car companies today. The only parts that are standard among cars are the tires and batteries (thank god!). All other parts – engines, transmissions, running gear – are basically custom to each manufacturer and each brand. (Toyota parts may or may not work in a Lexus.)

The best way to drive down costs of EVs is to borrow the standardization approach from the smartphone industry. That's the right answer for the industry – EV costs would decline tremendously – but I'm not sure car companies can bend their thinking that far without plunging into an identity crisis. If car companies don't design the parts or even the software that go into their EVs, then what are they? Marketers? Assemblers? Designers?

Tesla doesn't have this identity crisis to grapple with. Nor does it have to make horse carriages while it is working on new cars.

There are several significant differences between phones and cars, thus requiring a tweak to my dumbphone/smartphone analogy.

First, cars cost a lot more than phones. A few-hundred-dollar difference in dumbphone vs. smartphone does not impact consumer behavior that much. Thousands of dollars do. The functionality of EVs and ICE cars is not much different – they both get you from point A to point B. Thus EVs (and especially their batteries) have to come down in price to be a truly attractive alternative to ICE cars. Lower maintenance and fuel savings are good carrots, but they come in the future years of ownership, while paying a higher price is up-front.

Second, because functionality is so similar, most consumers driving ICE cars do not know what they are missing.

Which brings me to the final point: The replacement cycle for phones is a year or two, but for cars it is about twelve years. Thus the transition to EVs will be gradual, giving ICE carmakers time to adjust.

When I wrote my Tesla analysis I opened it with this quote from F. Scott Fitzgerald: "The test of a first-rate intelligence is the ability to hold two opposed ideas in mind at the same time and still retain the ability to function." You can see that analysis of Tesla and the automotive industry today requires holding a lot of opposing ideas, including that Tesla's stock price depends on Elon's ability to maintain a temporal wormhole.

Disclosure: I own a Tesla Model 3 and love it; I have a small position in Tesla puts in case the temporal wormhole collapses.

Use of Call Options

We discussed our use of options in a previous letter. At that time we covered the use of put options to hedge. Today we'd like to explore our use of call options. But first let's run through a quick primer on options.

A call option gives you the right to buy a stock at a certain price (strike price).

A put option gives you the right to sell a stock at a certain price.

If you buy an option you are buying a right, not an obligation. Thus, your risk is limited to the premium you paid for the option.

If you sell an option you are getting on the opposite side of the trade and now have an obligation (and potentially much higher risk). This distinction is important: We have been a buyer, not a seller, of options.

When you buy an option, the strike price (the price at which you want to buy or sell the stock) falls into one of three categories: in the money, at the money, or out of the money. Here is an

example: Let’s say IBM stock is trading at $100. You are buying a call option. At an $80 strike price the option is $20 *in* the money. At $100 it is *at* the money. At $120 it is $20 *out* of the money.

A few more things. The price (premium) of the option is influenced by intrinsic and extrinsic factors. There is just one intrinsic factor for a call option: the difference between the stock price and the strike price. For the example above, the $80 in-the-money option has an intrinsic value of $20 (the difference between the $100 stock price and the $80 strike).

At-the-money or out-of-the-money options have zero intrinsic value.

Extrinsic value is a bit more difficult concept; therefore we’ll simplify it to two things that really matter: time and volatility. (We are ignoring a few other things, but these two will capture most of the extrinsic value.)

The higher the volatility of the stock, the more expensive the option is.

The longer the time to expiration, the more expensive the option is. We can buy options that expire in one week, or in one or two years. Usually the longer expirations are cheaper on a dollars-per-day basis. Here is an example. If we bought a one-year contract and when it expired we bought another one for a year, the cost of these two contracts would be more than if we just bought one two-year contract.

One last but important nuance: Extrinsic costs are usually higher when you buy at- or out-of-the-money options than in-the-money options. This factor will become important soon. The more in-the-money the option is, the lower the extrinsic cost and the higher the intrinsic cost.

We were thinking about buying gold for a while but did not want to commit 4–5% of our portfolio to it. We felt that it was too much capital to tie up in an (unloved) hedge – an asset that just sits there and looks pretty. So we sucked our thumb for a while – we were stuck in decision paralysis.

And then while analyzing Wells Fargo (WFC), we realized that by buying in-the-money options we had little extrinsic cost; most of it was intrinsic. For Wells Fargo we bought $15 strike-price calls when the stock was at $25 (or so). So the intrinsic value of our option was $10 ($25 - $15). The extrinsic value was $1.29, or a 12% cost over a year and half. Our total cost was thus $11.29. (We have to warn you, these numbers will not exactly be the ones you’ll see on your statement. Stock and option prices move constantly. But your numbers will be very close to these.)

So in other words, if in a year and a half (the length of the option contact we bought), Wells Fargo stock is trading at the same price of $25, the intrinsic value will not have changed; it will still be $10. But time value and volatility value would converge to $0, and thus the option would be worth $10. We’d be down 12% on this 1% position.

However, options come with leverage, and the leverage of this option is about 2 times. So in other words, in committing 1% of the portfolio to Wells Fargo we created a 2% position. This 1% will behave as a 2% position on the upside and *downside, too*. In other words, for the most part this 1% in-the-money call option in WFC will behave as if we invested 2% in WFC stock.

This brings us to the Gold ETF (GLD). For most clients we bought in-the-money $150-strike, two-year call options with an extrinsic value of about 12% (total). At this strike, leverage was about 4x, so 1% allowed us to get to a 4% position.

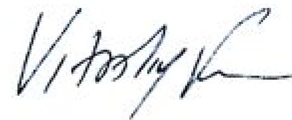
Options are a tool. They are not our primary tool, but at times, in the right circumstances their use makes sense. They can both reduce risk and increase returns of the portfolio. We want to double stress this point - we aren't going "option crazy", just using safe options to express what we view as asymmetric bets without committing too much capital. Call options made sense for WFC and GLD because the price of volatility was cheap.

In accounts where options are not set up to own we bought shares of WFC and GLD. Since we have become more fully invested some accounts didn't have the cash to buy. However, we love where our portfolio is now and didn't want to sell any companies to raise cash.

If your account is not set up for buying options please contact Lisa Martin at lm@imausa.com to complete an application.

As always, should you have any questions or require any additional information, please do not hesitate to contact us.

Enjoy and Prosper,



Vitaliy N. Katsenelson, CFA
Chief Executive Officer

And

Michael L. Conn, CFA
Chairman