

Luxembourg, June the 3rd 2020

Dear Limited Investors,

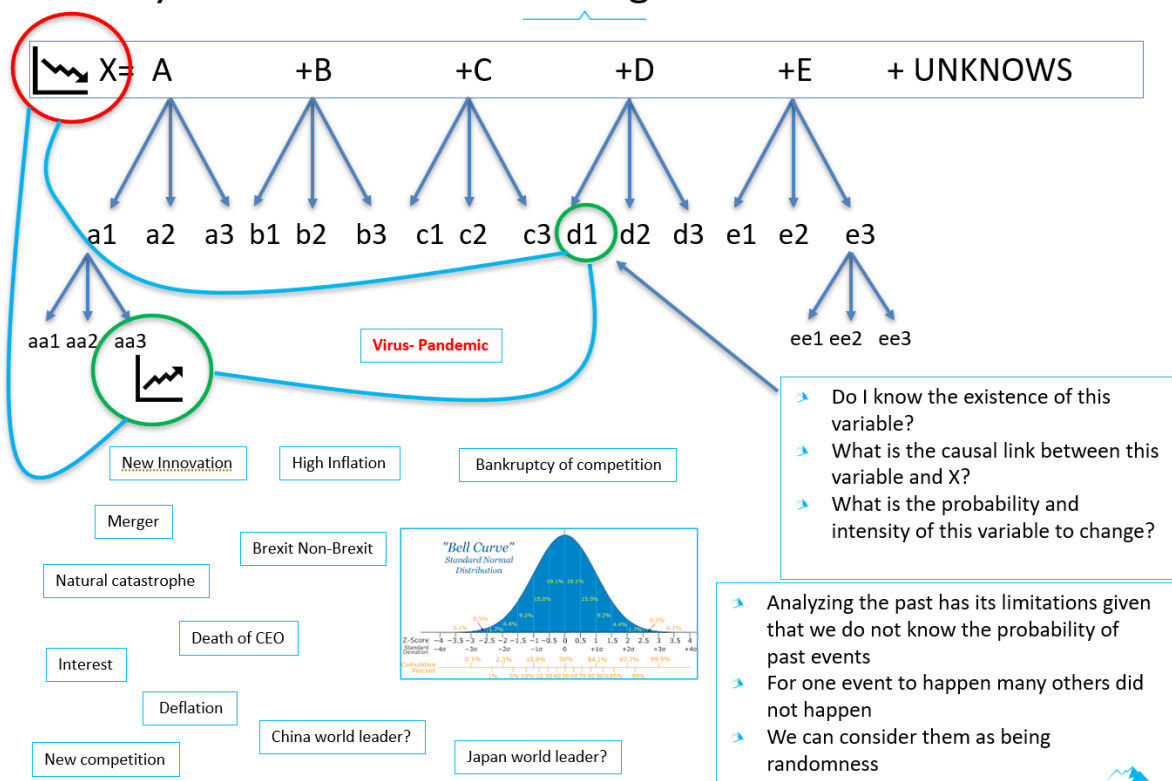
Our Performance during Q1 was -13.4 %, versus our benchmark performance of -21.19%.

What happened?

Every decision we take in life is a bet. Investing is part of betting. By choosing one choice, we decide against many alternative decisions. The future has a sheer unlimited number of variables. Some investors pick variables of the past and hope that the development is quite linear. Others bet more on radical changes in new technology, political changes, high inflation, or low inflation. More rarely, are those that focus on extreme cases such as natural disasters, wars, and pandemics.

In the following chart, I tried to represent my view of any event we are betting on. We do not know all the variables that could have an influence. If we know them, we don't know if they are dependent or independent of each other.

My view on Decision Making in Financial Markets I



While investors were still focusing on the US-China trade war, Brexit and end of cycle discussion, there was an unknown coronavirus that jumped from an animal to a human being (a so-called Zoonosis). Later, it got baptized SARS COV 2. The existence of coronaviruses was well known for decades. Most human beings have or have had a corona type virus.

There were at least three conditions that need to be fulfilled for this particular virus to have a substantial impact on our daily life. First, the virus needs to infect a human. Second, it must be able to spread from human to human. Third, it needs to cause a severe disease, the Covid-19 illness, in this case.

The chart below shows the last and current pandemic. HIV is still a pandemic, even if it is out of most of our minds. The black death caused by bacteria is still unmatched.

Name	Time period	Type / Pre-human host	Death toll
Antonine Plague	165-180	Believed to be either smallpox or measles	5M
Japanese smallpox epidemic	735-737	Variola major virus	1M
Plague of Justinian	541-542	Yersinia pestis bacteria / Rats, fleas	30-50M
Black Death	1347-1351	Yersinia pestis bacteria / Rats, fleas	200M
New World Smallpox Outbreak	1520 – onwards	Variola major virus	56M
Great Plague of London	1665	Yersinia pestis bacteria / Rats, fleas	100,000
Italian plague	1629-1631	Yersinia pestis bacteria / Rats, fleas	1M
Cholera Pandemics 1-6	1817-1923	V. cholerae bacteria	1M+
Third Plague	1885	Yersinia pestis bacteria / Rats, fleas	12M (China and India)
Yellow Fever	Late 1800s	Virus / Mosquitoes	100,000-150,000 (U.S.)
Russian Flu	1889-1890	Believed to be H2N2 (avian origin)	1M
Spanish Flu	1918-1919	H1N1 virus / Pigs	40-50M
Asian Flu	1957-1958	H2N2 virus	1.1M
Hong Kong Flu	1968-1970	H3N2 virus	1M
HIV/AIDS	1981-present	Virus / Chimpanzees	25-35M
Swine Flu	2009-2010	H1N1 virus / Pigs	200,000
SARS	2002-2003	Coronavirus / Bats, Civets	770
Ebola	2014-2016	Ebolavirus / Wild animals	11,000
MERS	2015-Present	Coronavirus / Bats, camels	850
COVID-19	2019-Present	Coronavirus – Unknown (possibly pangolins)	4,700 (as of Mar 12, 2020)

The current death toll of the Covid-19 is 380,000. The event of a human getting infected by a virus that causes severe disease and can spread from one human to another has happened around one time a decade. There are numerous documentaries, movies, ted talks, and even papers by the World Health Organization (WHO) on pandemics.

Ebola and MERS have a much higher death rate than the Sars-CoV-2 virus. However, a significant difference is that the SARS CoV 2 can be transmitted while the host shows no symptoms. This fact creates uncertainty. We could consider this fact as a surprise for the local government where the virus started spreading.

However, can the spreading of the virus from China to the Western World be considered a low probable event? Even if we gave it a 10% probability, as to say 1 in 10 viruses of this type does not spread from China to Europe or the United States, can we consider it as a Black Swan event? I was surprised by how humans think in terms of countries and borders, while the only variable SARS-CoV-2 needs is the movement of hosts.

What do we call an event that we cannot even imagine happening? What do we call an earthquake in a region where no earthquake is supposed to happen? How do we define a political overthrow in a country where few forecasted it? How do we explain the start of a war that nobody had on the radar? What do we call the impact of an asteroid that isn't discovered until the last moment? How do we define a new science that puts the law of gravity out of date?

The WHO was informed by a non-member state, Taiwan, in December. Taiwan restricted its flights to the Wuhan region from the end of last year on and took measures on those who entered the country. We can be sure that the information was spreading. However, due to an error in the information chain or non-reaction, no measures were taken. This is important because it might have significant consequences, as we see in the increasing tensions between the US, the WHO, and China.

In Europe, we had several main hotspots. Fast, organized responses to the threat could have limited the spreading of the virus and potentially avoided the worst. Indeed, the hotspots were in a soccer game in Bergamo, the world women's day in Madrid, a religious gathering in Colmar, and later a skiing resort in Austria.

Unfortunately, in this context, the black swan term is often used as an excuse for lack of preparation, in my opinion. Mr. Louis Pasteur already acknowledged that luck favors the prepared mind.

However, in contrary to governments, most individuals and companies were limited in their decision making even if they considered the spread of the virus to the Western World as a probable event. What should an airline or a restaurant do?

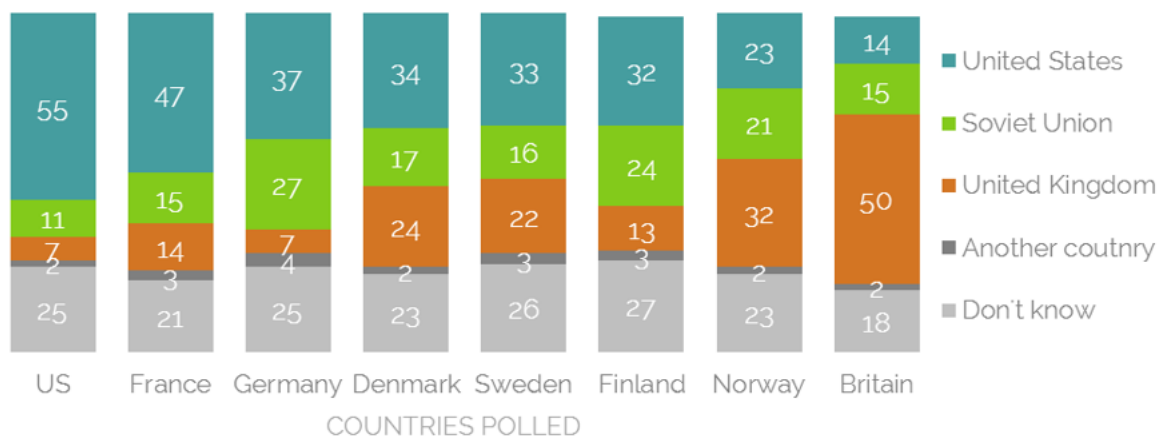
I conclude that I consider the emergence and spreading of SARS CoV 2 to the Western World, not as a black swan event for an observer in the Western World. The first condition, as to say, a surprise in the eye of the observer is not verified.

Once governments considered the virus as a threat, it became the overall dominating variable. The infection went from a nobody caring variable to everybody having an opinion variable. Even if many aspects of the virus were at that time and still are unknown, the objectively known facts are still in debate.

Hereafter, you find one of my favorite charts showing how there can be different opinions on an event from people who have the same knowledge.

Who did the most to win the war?

In your opinion, which one country would you say contributed most to the defeat of Germany in World War Two? (%)



YouGov | yougov.com

Apr 23-28, 2015

As it is with most opinions, most seem to be right, some are at least discussable, and some are objectively wrong. Can we consider that the Soviet Union only contributed 15% to the defeat of Germany whereas Britain contributed 50%?

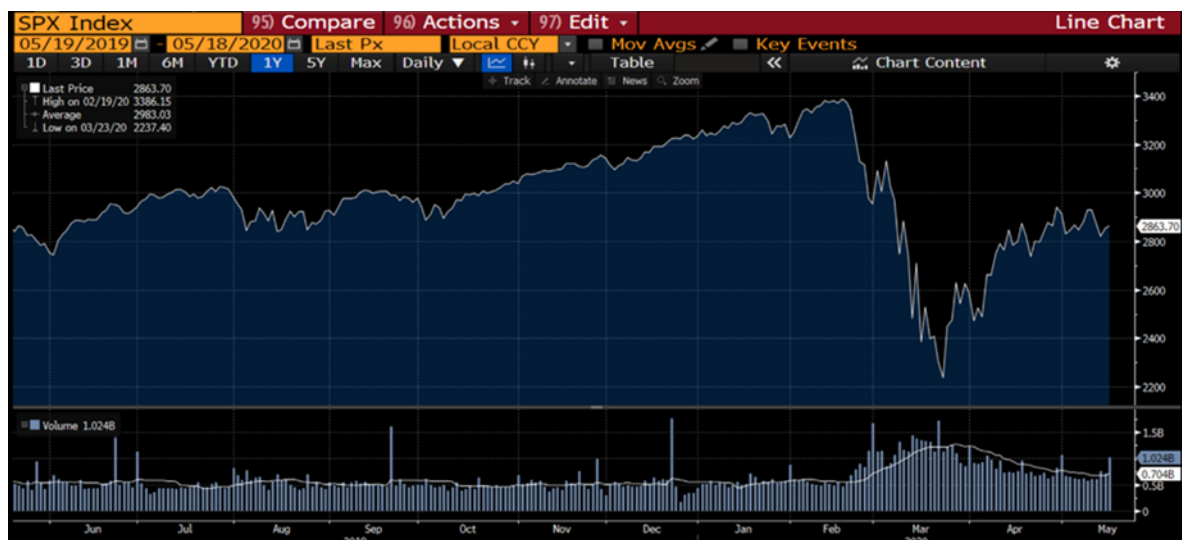
Financial markets

Financial markets did not react after the emergence of the virus in China. There was a small dip after several companies, among others Apple (APPL), warned about the effects that the virus has on supply chains.

However, as it happened over the last decade, the dips were mostly followed by a quick recovery, meaning the market recovered close to as fast to its previous level as it dipped. Implied volatility (the price of insurance against a market drop) was still low.

The triggering event was the spread into the Western World. The non-organized reaction and the shocking pictures from Italy helped increase uncertainty. If it happens in Italy, it can also occur in other parts of the European Union (EU) and the United States (US).

As you can see in the following chart, the S&P 500 dropped around 30% from the end of February to the end of March. It was the fastest decline in history.



In the next chart, you can see that even if the decline was less brutal than during the Great Financial Crises a decade ago, it already outpaced many declines from past recessions.



Why did we not see the usual buy the dip behavior, meaning a close to as fast recovery as there was a drop in the markets? A successful buying the dip approach to saving a Bull market (let's apply the general definition of a less than 20% drop) means there are more buyers than sellers at a less than 20% decline of the market.

What was different this time? As previously mentioned, before the news and pictures from Italy, there was a lot of uncertainty. If modern governments are helped by all this technology and artificial intelligence and are not able to react adequately, what will happen to the economy?

The extended forecast of the future, as written in the first paragraph, was less practicable. Some market participants forecasted an incredibly definitely changing world leading us into a deep recession. Other market participants considered the virus as having the same effects as the seasonal flu.

However after the first news of confinement in the Western World, it was for most market participants evident that economies fall into recession. A recession means that forced sellers will

appear in the market. It might be people that lost their jobs or investors that got overleveraged because of a change of risk appreciation by creditors due to the forecast of a recession. The other market participants anticipate this behavior by trying to sell upfront. Those sellers try to find a lower entry point or just believe that markets do not come back during their investment horizon. They might even anticipate an event that would not have happened without their anticipation. The more the market expects a more prolonged recession, the more forced and non-forced sellers appear.

It was for the first time in a decade that several markets were closed for some minutes because of considerable movements to the downside and also the upside. Markets were reported being “dysfunctional” because of these extreme volatilities.

Can you imagine that a regulatory body forbids you to sell or buy your house during the next 15 minutes to calm your emotions?

Central banks and governments reacted very fast and often coordinated. After the Fed started buying non-investment grade debt, it became clear that the leading central bank in the world does not limit itself to interest rate decreases and yield curve control. No, they did not only take different actions like purchasing assets, but Mr. Powell also made several very aggressive forward guidance.

Markets understood quite fast that central banks are all in. Indeed the fact that they supported markets over the last decades increases the probability that they take even more aggressive measures because they were never able to reverse previous actions.

Governments also reacted far more intensely than in 2008. We saw the most significant economic measures since the second world war.

Very positively was that Germany and France agreed on a 500 Billion Euro aid that is financed by the common budget. This budget might be financed by joint debt. Madame Van der Leyen even increased that budget to 750 Billion Euros, which still has to be voted. This could be the first step to a fiscal union. Maybe and hopefully, this crisis, combined with Brexit, will finally bring us closer together.

I also like that the EU tries to become the leader in the revolution of green energy. I especially like that Hydrogen got the major part of the support. In Europe, we have the densest gas network to transport Hydrogen gas from green energy sources. What I understood is that it is a far more complex system than the storage of batteries. I do believe that it will be more difficult for Europe to compete with Asia, which has decades of experience with battery cells.

The reaction of both institutions made financial markets change their perception of the future. Indeed they forecasted a functioning market due to the central bank's actions and as it is called a V or at least a small U recession due to the government's efforts.

In the next chart, you can see how far ahead markets anticipate a change in the real economy. So maybe this time, the financial markets are forecasting a massive recovery in Q3 and Q4. Later would be a new record of anticipation, or perhaps it was just a bear rally.



Most of us know that roulette balls have no memory. In other words, the probability of having a red ball after 100 black balls should be the same as getting the 101st black ball.

S&P 500: 1926-2020

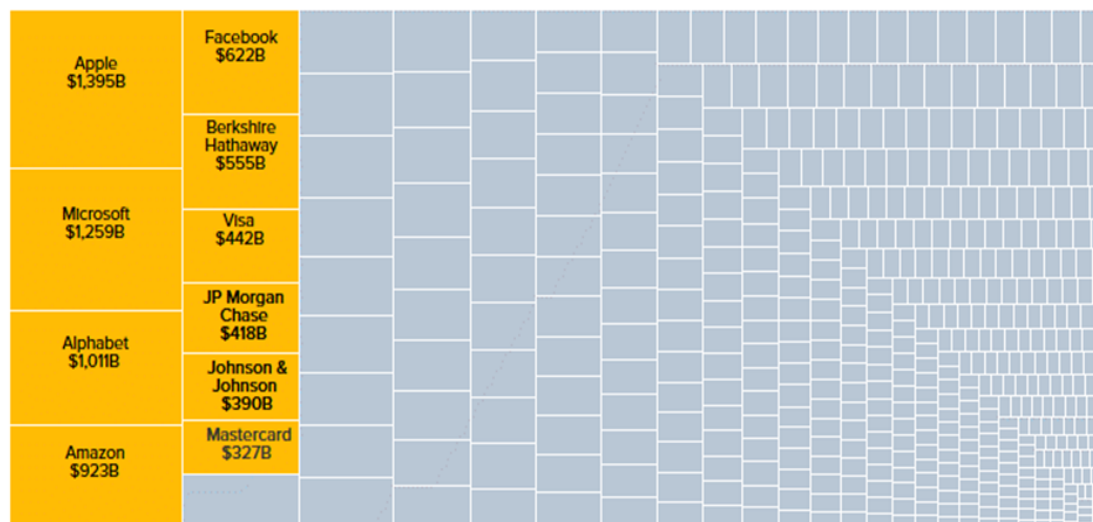
Time Frame	Positive	Negative
Daily	56.0%	44.1%
1 Year	75.4%	24.6%
5 Years	87.8%	12.2%
10 Years	94.7%	5.3%
20 Years	100.0%	0.0%

Daily Returns: Price Only
1-20 Years: Total Returns

The before mentioned table shows us that the longer you hold your position, the higher the probability you make a profit. Markets are biased to the upside due to innovation, productivity, population increase, and inflation. Logically, the lower you buy the market, the more this probability increases. Of course, sellers benefit from the same information as buyers. At a 30% decline, most sellers are probably forced to sell due to overleverage, need of consumption, short investment horizon, or it is just mental.

The S&P 500 erased around 70% of its decline. Lastly, I want to show the limits of the notion "markets," especially in the case of the S&P 500. Indeed the first five most valued companies account for 20% of the index composed of 500 companies. Reinforcing the limitation of an overall market appreciation is the fact that those companies are all from the technology sector.

S&P 500's 10 biggest market caps



SOURCE: S&P Capital IQ, as of Jan. 27 2020



Can we conclude that the current central bank and government actions were adequate? Can we consider that the decision not to save the Lehman Brother bank during the Great Financial Crisis was the wrong decision? Would we have the current stricter regulations for banks without the Lehman bankruptcy? Would banks be as stable as they seem to be in the current environment? Can we consider that Mr. Draghi saved the Euro from his forward guidance "whatever it takes"? If the underlying problems of the EU are not solved, and the Euro blows up in this decade, did Mr. Draghi save the Euro, or did we lose a decade to build a better future?

In general, every decision we take produces short mid and long term effects. Central Bank measures can often have different effects at different moments. A cost return analysis should consider the long term and not the central bankers' term.

I see four main critical points to the governmental and central bank measures.

First, the risk appreciation problematic. Financial markets are one central pillar of our capitalistic approach. They allocate capital between companies and governments based on a risk-return approach. In other words, they appreciate risk and distribute capital in the function of this risk, given that return is more objective than risk. The wisdom of the crowds is seen to be the best risk appreciator.

This risk appreciation by market participants has always been influenced by central banks by interest rate policy and forward guidance, among other things. However, it was never as extreme. Individuals can choose between consumption, investment, and saving. In 2008, central banks started massively decreasing the attractiveness of saving, by increasing its price (negative interest rates). It is also psychologically more difficult to understand that savings earn nothing compared to just earning less in previous crises after a decrease in interest. A reduction in the interest rate from 5% to 2.5%, meaning 50%, is an essential change of income that might push individuals from saving into investment or consumption. However, earning nothing or having to pay even as is the case in the EU or Switzerland, for example, might change the attitude of the most risk-averse savers.

The most dangerous measure, in my opinion, is the aggressive forward guidance. As long as no very courageous central banker starts reversing this upside biased forward guidance or is lying to

decrease trust in the forward guidance, markets are influenced by an Institution that is biased to underestimate the rate of indigenous or exogenous shocks. Just consider your local real estate market. What happens to prices if a representative of an institution who has the monopoly on creating the asset that you accept in exchange for your building publicly affirms: "we have a full arsenal of measures in case of dysfunctioning markets"?

Darwin's theory of biological evolution states that all species of organisms arise and develop through the natural selection of small, inherited variations that increase the individual's ability to compete, survive, and reproduce. The longer the virus spreads, the higher the probability that we change our behavior. This adaption to environmental changes made us the humans we are today. So until what moment can governments justify spending tax payer money to save companies that maybe don't have existential justification due to changing environments? In other words, how long can governments justify to decrease the longer-term productivity of society by short term risk of destabilization? The idea of trying not to let any company go bankrupt due to the virus is not only costly but also unproductive in the longer term and sends a wrong signal to business owners. If you help a weak existing business, you automatically weaken a more productive competitor and decrease the probability of success of new market entrants.

Central banks and governments went from the role of providing short term liquidity to long term solvability. They interfered in the natural cleaning of economies that is the essence of capitalism, the system that proved itself during the past as the most productive.

Second, the debt problem. It went from the most dominating variable during the debt crisis to one that is widely neglected, even if most governments and corporations have a higher debt load than a decade ago. After the Covid19 variable is solved or at least considered less as a threat, the debt problematic might emerge again.

Of course, governments had to react during this crisis and react fast. It seems fair to pay workers and companies for the losses from the interdiction to operate. Furthermore, public investments can help initiate private investment and increase the productivity and assets of an economy more than the cost factor of the measures (Keynes multiplier).

It is, however, also noteworthy that our ancestors negotiated budget and debt rules. Some rules are written in the constitution like Germany, and others are in treaties (for the EU). To our ancestors, those rules were essential fundamentals of our societies. Were they wrong? Were times different?

Even if a debt is only one of many variables that make a country default (cf Japan; book: "this time is different" from Carmen Reinhart and Kenneth Rogoff), high debt decreases the scope of action for future generations. Indeed, first, the debt variable may play a more critical role in price finding again. In this case, higher indebted corporations and countries will pay the price. Furthermore, just as it is for central banks, humans anticipate that debt must be repaid. A higher debt influences their spending and willingness to invest.

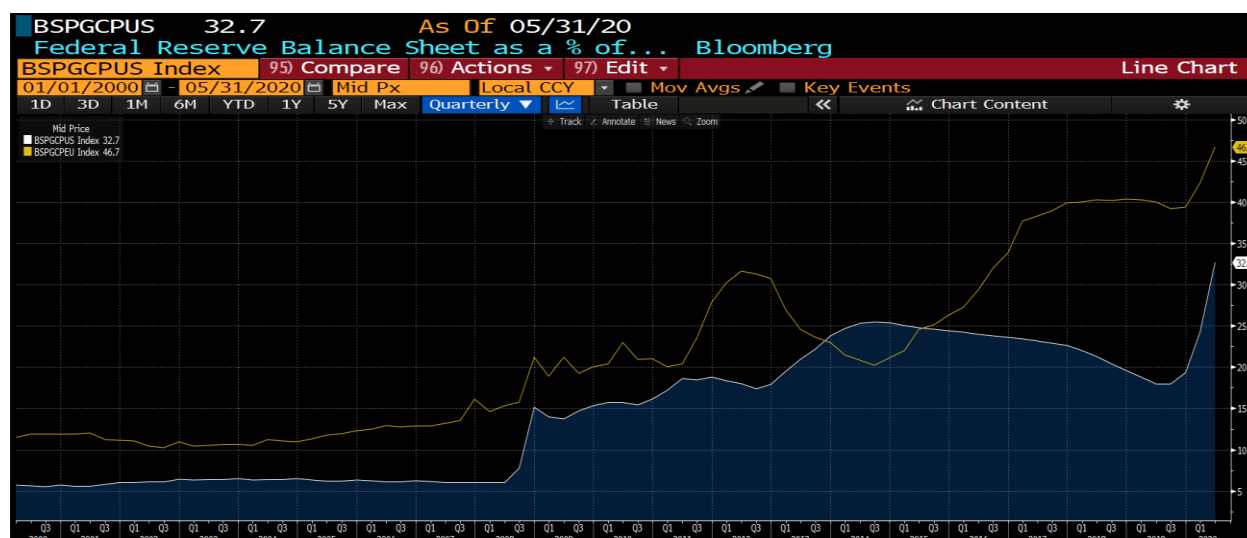
Will the probable low growth economy during the next year be a reason not to lower debt to GDP again?

I believe that the amounts should have been, in many cases, lower and more selective. The COVID 19 disease got budget attributed that other diseases did not manage after years of debate. Furthermore, I never heard a politician say that during a recession, every company needs to be saved. During 2008 it was about the "too big to fail." In other words, the maximization of wealth of a society

requests the saving of one selected company. It is a justifiable breach of the survival of the fittest principle. The exogenous virus shock seems to have provoked a different reaction. The fact that it was exogenous maybe was associated to “bad luck” or “nobody’s fault”. The “too big to fail” turned into “nobody should fail.”

In a complex world, a reaction of one government can constitute an anchor for other countries. I can become a self-fulfilling circle. I stock markets it is often referred to fear of missing out. What do you have to win as a politician if you spend less than in other similar countries? What do you have to lose? There is an asymmetry that explains a lot of the massive spending, in my opinion.

Third, the arsenal of Central banks and governments is limited. It is a cost factor for future generations if they are unable to reverse their previous actions. During the last decade, none of the institutions managed to reverse previous actions. In the following chart, you see the Fed and ECB total assets in percentage to the GDP over 20 years.



This implies that you take actions that were less favored by previous deciders. As I wrote before, we went from passive interest rate management to aggressively try to manipulate the risk appreciation of market participants.

The main problem I see is around human anticipation. Successful forecasting of central banks can give you significant financial rewards. The more the central banks are active in financial markets, the less they can abruptly stop this, the easier it is to forecast their behavior.

I believe that the very active role of central banks was crucial in the wrong appreciation of risk in the virus. By wrong, I mean that it is worse for the overall economy if price finding is very fast and abrupt. Maybe markets would have already reacted after the emergence of the virus in China, which was well-known to most market participants and not waited to the point of no return. Indeed Markets went up until the vast uncertainty around something unknown to most started a vicious, backward cycle.

Aggressive Central Bank measures combined with the increasing numbers on algorithmic trading, passive investment, higher debt will fragile markets (This allegation needs of course to be analyzed more in detail, maybe in the next letter). Those difficult and fast extreme price findings might appear more often.

Finally, it was Central banks again, with even more aggressive measures and words that managed to calm markets. The next indigenous or exogenous shock is somewhere out there. It is also forecastable that our economies grow slow compared to others because of the reduced productivity that is the result of all those measures.

We might soon have the same scenario in EU and the US as in Japan. The BOJ holds around \$250 Billion of stocks in Japanese companies. This is 5% of the market capitalization, in addition to 70% of the governmental debt, and about 6% of the corporate debt market.

In the following chart, you can see the Nikkei still did not reach its previous high thirty years later. The high debt and necessary central bank actions are certainly not the only variables, but they are some that we at least could change. The Japanese economy is growing very slowly, and inflation is very low.



Japan has a robust internal demand and does not rely a lot on foreign trades. Other countries might feel the consequences much faster.

Fourth, central banks are more and more being used as a political tool. The independence of central banks was sealed among others to avoid short term elected governments from benefiting from an unlimited resource of capital that they can use to get reelected.

Our democratic system is built on diversity. In other words, the more opinions there are in parliaments, at every level from the village to the city, the more control for abuse there is. The best form of control is to control people with people that have profoundly different views and meanings of life.

Should this not be true for central banks, given their rising influence on financial markets and politics? They act in a sphere where the reaction of humans play a determinant role. In other words, at least for now a non exact science; their decision implies different effects for different groups of people. Their decision risk to put a burden on future generations. Should they not be elected differently? Maybe central bank committees should be composed of specialists from different domains, ages, and social groups.

Historical books often cover decades, sometimes even centuries. We live and think in days, weeks, and sometimes months. Maybe a new chapter started in 1971 after the US unilaterally

terminated convertibility of the US dollar to gold, effectively bringing the Bretton Woods system to an end and rendering the dollar a fiat currency. The intrinsic value of money was annihilated. Maybe we are now in the last pages of this chapter characterized by continuous increasing debts, central banks taking a more and more active role in financial markets and risk determination, and a growing gap in wealth due to asset inflation and labor deflation. All this combined with much slower growth than the previous decades. What are the borders between a capitalistic market approach and a socialist market approach?

What might happen?

Here are some variables that I consider to be facts. I try to qualify them as positive or negative for financial markets.

Positive	Negative
<ul style="list-style-type: none"> • New infection numbers decreased very fast • The countries are better organized for a new peak • The surprise and panic effect of the virus has gone, also in case of a second wave • The combined human and capital power of the world chases a vaccine • Central banks are reacting fast and with unorthodox methods and will continue to • The interest rate on high yield decreased again • The US elects a new President • Saving alternative even more unattractive due to lower interest rate 	<ul style="list-style-type: none"> • Following the latest tests, there is no herd immunity in most parts of the world • It is still not established if you can get infected several times after a short term immunity because antibodies disappear or the virus changes • In China life is still not back to normal; especially sensitive sectors like traveling and restaurant businesses still suffer a lot • Many stocks even in sensitive areas recovered a lot • Companies and governments are even higher indebted after these crises • Governments have limited resources, and the same public intervention seems unlikely in case of a new peak in infections

Finally, some less certain allegations.

Positive	Negative
<ul style="list-style-type: none"> • A magical three solution seems possible during the next twelve months • No second peak • No other "triage" necessity in the western world • The crises might have brought the EU closer together • Brexit passes smoothly • The adaption of the economy to changing consumer preferences passes softly 	<ul style="list-style-type: none"> • Consumer confidence is down and will stay down for quite some time • It is easier to shut down an economy than to reopen it • Important variables for decreasing infections might be confinement and weather, two variables that will probably change • Furthermore, we will start focusing on the costs of the intervention. Governments need to do budget cuts and raise taxes

	<ul style="list-style-type: none"> • The China-US trade war might intensify • There is a chance of a China EU trade war • Consumer behavior might have changed definitively regarding home office, restaurants, traveling; Only a 15% decline can cause many bankruptcies in those sectors and even entire market disruptions
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The forecasting of the financial market includes forecasting the underlying fundamentals and the interpretation of those future fundamentals by the other market participants. All this by knowing that other market participants do the same and, of course, know that you know about it. (of course, the real economy is also composed of those same individuals. The rules of the game are however different).

The third variable with increasing importance are measures taken by central banks. This makes, in my opinion, the forecasting task easier. Indeed central banks have taken over the last years an essentially active role in the price determination in financial markets, and market participants understand that reverse actions create more substantial shocks and are therefore less likely.

The main risk of price declines might also originate directly indirectly from central banks. First, reverse actions of central banks and second a situation where central banks could not continue the current policy that leads it to the Japanese example. One example would be fast devaluation in purchasing power of consumer goods of the asset that it should protect, the currency.

The idea is to ensure our investments against an environment where central bank action would be limited, first from a structural point of view (inflation) and second from a more political point of view (behavior). Gold is probably one of the best alternatives to problem number one.

I believe that the higher risk lies in problem number two. Indeed it can come fast and abrupt. Mister Powell briefly tried to be courageous at the end of 2018. We know how it ended.

One of the effects of the central bank policy is to decouple financial assets from the real economy. You increase the wealth gap, and as Mr. Charlie Munger said so well, our societies do not work on greed, but on envy. The result might be social unrest or more a conservative radical change in front of the ballot box. The independence pendulum may swing back.

Positions

During this exceptional quarter, quick responding was essential. I had to consider stocks of companies I know less about than others. Hereafter, I will analyze the primary performance of contributors from the quarter.

S&P 500 future option: After the markets fell by 15%, I did an options trade on the S&P 500 trying to take advantage of the volatility skew. During those stressful times, market timing might be more important than stock picking, and given the skew of the volatility curve, I decided to make an options trade. The trade was executed too early.

The position contributed **-2.2%** to the performance in Q1.

Tesla (TSLA): I wrote several analyses about the company. I will send you my newest analysis in the following weeks.

The most bearish analysts throughout the last years were correct on the fundamentals; the most bullish were wrong on the fundamentals. Every bearish analyst was wrong on the price, and even many of the most optimistic analysts underestimated the price evolution. This tells us that sentiment is strong on the stock.

The opinion we have on anything depends on several variables. Those variables are then weighed to be able to come up with a decision that we often qualify simply in bad, reasonable or good, and sometimes with adjectives such as very or pretty.

In the case of TSLA, not many bears question the beauty of its cars, the ingenuity of its central operating hard and software system, the star attitude of its CEO. However, many more variables can affect the future development of the company.

Regarding Mr. Musk, the rocket building variables, the saving the world variable seems to be by far outweighing the numerous legal battles, the numerous visions that never took place, the lack of corporate governance in his company, the non-respect of many corporate governance rules that our ancestors fought for. Most people only have access to a limited number of variables, given the lack of time they have. They depend heavily on journalism. TSLA managed to create its network of information. The reported quote of good news is far higher than of bad news. Many headlines write about a non-GAAP Profit or a battery or autopilot evolution and not about a merger scandal, the non-transparency of the company, or the many forecasts that never took place. I believe the rule of law should prevail over everything, including environmental issues, given that the second one can not exist without the first even in the short term.

Especially we, as Europeans, tend to criticize our car manufacturers for not inventing enough, selling enough EV, or paying enough dividends. The leader of EV is still not earning any money after eighteen years of existence and continuously needs to raise capital. The cumulated losses amount to over \$6 Billion. Can we qualify this as a success in the capitalistic definition of a company? Could this happen in Europe? Is it not an unfair competition if one company does not care about profits and has at least till now easy access to capital?

The promoting of the company is mainly about the following variables:

- Unlimited demand (much higher demand than offer);
- Battery technology advantage;
- Software advantage;
- Autonomous driving.

TSLA keeps a mystery around those variables. The company knows that they are more important for its short and midterm (maybe long term) survival than a small profit.

Is there an unlimited demand? Why are most sales at the end of the quarter with huge discounts? Why is the company still not producing the 10,000 cars a week in Fremont as it forecasted years ago? Why does TSLA have a high amount of Receivables in the Balance Sheet? To whom do they give credit? If the demand is unlimited and the company needs cash, why sell to somebody that needs credit if you have the choice?

Nobody knows the exact terms of the contract with Panasonic. For years TSLA was supposed to build battery cells with Panasonic that nobody else has access to. Now Panasonic also develops for

other car manufacturers, and TSLA was forced to work together with CATP due to Chinese regulation. Now again, they are supposed to build battery cells cheaper and more performant than anybody else. I believe that the real valuable know-how of the battery technology, meaning the battery cell production, is in the hand of the battery cell manufactures. In other words, TSLA competitors can also benefit from know-how.

Regarding the battery management and battery pack system, TSLA might have some advantages resulting in better acceleration and maybe a higher range. However, there is no real proof of that. Most real-time tests are contradictory. Many do not take into consideration the size of the tires, position of the tires, wind resistance, weight, and much more. The more important question are, what is this advantage worth in relation to better manufacturing quality or lower price, and how long does it take to catch up?

TSLA has a software advantage, and the company needs to get credit for this. I agree that legacy car manufacturers could not go all-in on EV. However, there is no excuse for not connecting the car. Indeed, a connected system can be helpful for constantly updating every part of the vehicle over the air, and to sell more higher-margin services than products in the future.

German car manufacturers try to build their own central operating systems. VW is the most dedicated, and the company claims to have its central operating system ready in the new ID3, which it plans to be delivered this summer. I also believe that a central operating system is currently not a necessary condition when buying a car for a significant number of people. Indeed the attached services are too limited also because of the lack of autonomous driving. In other words, it can be compensated by price, at least for now.

Finally, the real winners of this technology trend will be large technology companies like Microsoft (MSFT), Apple (AAPL), Alphabet (GOOGL), Nvidia (NVDA), Intel (INTL), and Amazon (AMZN). Compared to TSLA, Apple gets information about individuals throughout the whole day and not only while driving. The leading legacy car manufacturers are working together with Microsoft and Amazon AWS cloud. Amazon Alexa is integrated directly into the new ID3. Alphabet might be unmatched in autonomous driving not only through its Waymo subsidiary but also because of its long experience in detailed mapping systems. All this makes the legacy car manufacturers seem more and more like pure hardware producers. I do not believe that the vertically integrated TSLA will be able to compete in hardware with the legacy car manufacturers and software with the giant tech companies.

The most significant variable is the autonomous driving software. Indeed, it could justify a much higher valuation for the company in autonomous driving. If TSLA manages Level 5 or even Level 4 autonomous driving, and no other company achieves the same degree of autonomy for a certain amount of time, the company will be able to generate billions out of it. Furthermore, this innovation is probably one of the most significant productivity jumps for humanity in a long time, by allowing humans to do any other task than driving in a car. Finally, and most importantly, it would save millions of lives per year.

You can see what a game-changer such information is but also how immoral it might be to make false promises. How would you judge a pharmaceutical CEO of a multibillion-dollar company promising a cancer cure for years? That company asks you to pay a certain amount upfront to benefit from this potential cure because it is going to be incredibly expensive?

Why does the market believe that TSLA will achieve Level 4 or 5 autonomous driving before anybody else? Of course, it has to be the only different variable. Apparently, TSLA has access to the best data because of all the connected cars. However, nobody outside TSLA knows exactly what data,

how much data, and how the information is collected. Furthermore, without going into detail, data gets more important for edge cases. You don't need more data from changing lanes on a highway; it does not considerably reduce your standard deviation. Even if the TSLA autopilot seems impressive, it is anything close to a Level 4 or Level 5 autonomous driving and did not progress over the last years.

I believe that no company will achieve level 5 autonomous driving during the next decade and would put a higher than 50% bet for the next 30 years. Just consider how wrong the artificial intelligence of software giants as Amazon or Netflix or Facebook are sometimes. So many variables are missing. They assume that I buy or watch the same second item of a group because they concluded that I am part of this group after my first decision. You need to understand the why variables of the purchase and not just the purchase. If we do not fully understand the subconscious information that influences our decision-making process, how should an algorithm know it? By far, the majority of the information caught by our five senses goes directly to our subconscious, in other words, we never really understand why we took a non quantifiable decision? If you do not weaken the brain functioning with drugs, with other distractions or if you drive too fast, our brains manage to drive pretty good. The moving crown trees in the valley under a bridge I was going to cross came into my consciousness once the subconscious judged them as important. Can you imagine doing this with your TSLA or any other brand now? Musk officially stated that in 2017 an autonomous car would cross the United States from Los Angeles to New York City and that in 2020 one million robot cars would be on the streets.

Alphabet, through its Waymo subsidiary, was one of the first movers of autonomous driving. The company decided to concentrate on software and not to build cars. Indeed building cars will always be more complicated than building phones, and more importantly, price increases for the customer are absolute, but for the company, they are relative. In other words, to increase its revenues by 10%, Apple needs to increase its phone prices by \$100. TSLA would have to increase its car prices by \$5,000, which is more difficult for the market to digest and makes the business models totally different.

When could sentiment change? Three events could, at least for some point, weaken the bullish argumentation.

First is the arrival of the first real competition. The ID3 is indeed the first car from VW built on its new MEB platform. It will also be made with VW's own central operating system and have a similar range as Telsa's Model 3. Prices will get more aggressive, the less they sell. Indeed VW and other oldfashioned car manufacturers are indirectly subsidized to sell EVs.

Furthermore, in China, much cheaper but also sufficiently performant cars appear, like the new BYD that was just introduced to the market. If VW sells close to the same number of EVs as TSLA, all other variables get weakened. The only one that can still justify a much higher valuation is the autonomous pilot.

Second, many indicators show at least some things are not normal:

- Why does TSLA still have this high number of receivables? The latest arguments are that quarterly end sales happened to be on Sundays.
- Where are the building costs for its Shanghai factory? Who owns it? How can operating margin be higher with two factories running at low speed versus one factor at high speed?
- Why does TSLA decrease its warranty provision so quickly? Were the previous cars that much less reliable?

- Why did so many key people in the financial, accountant, and legal department leave the company? Many of them due to retirement that was revoked soon after
- Why did insurance companies refuse to insure the board members of TSLA? Or any other reasons why Mr. Musk did it by himself?
- Is it normal that a multibillion-dollar company, in one of the most challenging sectors, has a mid-thirty CFO without any practical experience?
- Where is the TSLA Truck? Mr. Musk used the non-existing solar tile to make the TSLA Solarcity merger tempting to the TSLA shareholders and board. Using non-existing products to its one's benefit by knowing that the products will not be available anytime soon, is in many countries considered as fraud. World-leading companies like Daimler or Volvo are bringing hydrogen trucks to the market. Nikolai a pure hydrogen truck manufacturer, will have its IPO on June the 4th.

Finally, there is the risk of much-needed regulation for its driving assistant program. The NHTSA recommended a provision after several accidents occurred, but it only has an advisory function. Even if a new vaccine against COVID19 might help save hundreds of thousands of lives, the potential vaccine has to follow a procedure before introducing it to the market. At one point, there will be people that died because of a long term procedure. But this is necessary. Indeed the procedure is the enemy of the arbitrary. Why should this be different for an autonomous driving software?

TSLA contributed **-13.4%** to our first-quarter performance.

Thyssenkrupp (TKA)

I held this position already before the crisis. It was an event-based bet on the demerger of the elevator business, and I wrote a paper about the trade that you can find on the website. The company itself is quite complicated because of the many divisions, but I wanted to take advantage of my knowledge in the elevator business. The trade was fortunately insured by a calendar spread to a maximum loss of 30% until the end of March. After the insurance expired, I reduced the position to 2.5%. The objective is that the European steel market needs consolidation.

The increasing competition from outside will push the European Union to support this key sector. TKA started negotiation with Tata Steel again. Tata is in financial trouble and wants to sell its European Business. The company might make concessions as acceptance for a minor part as shareholders, which would have been unimaginable last year. Maybe with that concession, the European Antitrust institution would give the green light. There are still ongoing discussions with the German Salzgitter and the Swedish SSAB. The company might also benefit from the critical planned subvention for the development of Hydrogen in Europe.

Finally, the company kept a .2 Billion Euro participation in the elevator business, a stable anticyclical business that might be relisted in the future.

The TKA position contributed **-4.5%** to our first quarter position

Carvana (CVNA)

I have written several articles on CVNA, just like TSLA, so I don't want to go into too many details.

There are many similarities with the TSLA trade. Both companies are more valuable than their competitors, having the advantage of years of revenues and being profitable. What the autonomous

driving carrot is for TSLA, is the fragmented market is for CVNA. Indeed the US used car market leader, Carmax (KMX) has a less than 4% market share. Why should CVNA not be able to cover 10% in 5 years ahead from now? What does it need to justify having the same PE in five years?

For TSLA, the market believes that the competitors are not able to match TSLA products at all or in time or compensate by price for the lack of know-how. For CVNA, it is even less a product than just a market channel.

The stock market believes that KMX, the market leader who is five times larger and 20% less market cap, is an old-fashioned used car sales company. However, CVNA is a software company. It can Blitzscale, and of course, can justify losses because it needs to grow very fast. We have to remember that the winner gets all. Just like for Facebook, once you buy your car online at CVNA, you will always buy it at CVNA.

The contract of the business model, in my opinion, shows that the only moat they really could establish would be a logistic network, just like the retail arm of AMZN has been doing for years. By doing this, however, the company cannot be considered as a software company (yes, AMZN profited from the black swan event being the cloud). Indeed the \$18,500 on average cars have to be moved around between logistic centers. Furthermore, CVNA builds glass towers where consumers can pick up cars. This avoids the expensive last-mile charge. However, this contributes again to the non-software increased fixed costs model. Finally, cars are not only heavier than books, but they also need a lot of paperwork done beforehand. This requires high back-office costs.

Why should competition like KMX, Autonation (AN) and Penske (PAG) not adapt their market channel in five years and their logistic network? They are already doing it. In retail, multi-channels have been the solution over the last few years. Many pure online retailers start putting sales locations in place. This also helps avoid last-mile delivery, which can make up to 80% of the total delivery costs.

The stock tumbled during the high market volatility. Ally, who has its feet deep in the low credit used car market dealing came up with a \$2 billion credit line for receivables as well as a capital raise of \$500,000. Furthermore, the combination of FED interventions and bullish analyst comments put the stocks close to all-time highs. The company tried a second capital raise just last week. Two leading American banks will try to place around \$500 Million of shares at a limit price of \$92 over the next days, weeks, and months. Of course, both banks raised the target prices of the company.

The company is currently supported by several well-known Hedge Funds and Investment Banks. Given that I believe that the business model is flawed, the investment thesis turns around the access to capital capacity. This gives the position a good insurance potential in case of increasing market stress.

CVNA contributed **-3%** to the first quarter performance.

SIXT (SIX2)

SIXT is a German rental car business company. The founding family is still the major shareholder, and the son of the founder is the current CEO. The original rental business is changing a lot. Companies like UBER have and will try even more to reduce the cost per km of ride-sharing, which is becoming more and more competition of the classic rental system.

SIXT recognized this trend by offering three products, Sixt Rent, Sixt Share, and Sixt Ride. The difference between those services is mainly the length of rental. Furthermore, this year, the company sold its financial leasing business to Hyundai to focus on these new business segments.

It is noteworthy that SIXT suppliers, the large German car manufacturers, are under enormous pressure to reinvent themselves, given that their overall market is shrinking, and they face more and more competition.

Daimler (DAI GY) and BMW (BMW GY) created an UBER-like driving service, called DriveNow. Digitalization makes it easier for car manufacturers to offer those services to end clients, in other terms, to jump over SIXT. The vast network of sales points and employees that SIXT offers are less and less generous. However, the two companies recently pulled out of the US and many European Cities because of the continuous high capital burn.

SIXT also risks having its resale contracts with its supplier renegotiated and burden a higher risk for an asset devaluation. I believe that transfer to EV will put pressure on used car markets because of the constant evolutions in range and charging speed.

Finally, the Coronavirus hit SIXT hard and might produce long-term adverse effects. Most car rental stations are at airports. Current studies foresee a long term decline in business travel and only a return to prior private travel to peek only in 2023, or even later. There might be some people that prefer to travel by rental cars instead of airplanes. Furthermore, SIXT sharing might benefit. However, those services are currently loss-making and will, in my opinion, stay there for a longer time.

SIXT currently has a much higher valuation than its peers. This is based on lower leverage and higher profitability. I believe that this gap is closing. However, the struggling of a weaker, higher leveraged competitor like Hertz in the United States or Europcar in Europe might benefit SIXT, even in an overall shrinking market.

Sixt contributed **+1.0%** to first-quarter performance.

Harley Davidson (HOG)

HOG customer base in the United States has been shrinking for many years. This is more due to an overall shrinking market than lower market participation. HOG has been trying to counterbalance this by increasing its international expansion. The average owner is over 40 years. The motorcycles are expensive, and the technology improvements count less than for other valuable movable assets. It makes it more difficult to resell a new bike to the same client every few years.

In addition to an overall shrinking market, the emergence of more powerful lithium-ion batteries made battery-powered motorcycles an increasing competition. Just as for cars, they are faster, and often more convenient. Furthermore, for motorcycles, the lower range or longer charging time is less a disadvantage. I believe however, that the reduced engine sound might be a disadvantage for HOG.

The former management decided to compete against those new market penetrants by investing heavily in their own electrical motorcycle, the project Livewire.

I believe that this was an error on several levels. First, HOG will never be able to compete on price with Japanese and German motorcycle producers who can leverage the technology due to their experience in electric cars. Second, I believe that HOG cannot justify a higher price in electric bikes as it does for their traditional bikes. Indeed the Livewire is more of a pure mode of transport than an experience, a lifestyle. Third, I believe that both types of bikes cannot sell through the same sales channel. The potential client base is too different. In consequence, the company needs to invest heavily in a new market channel by supporting its dealers to open separate shops.

Just like many companies, HOG used the low-interest environment during the last years to reduce the number of its outstanding shares. I don't think this is beneficial for long term investors in a cyclical company that faces many important existential issues. The higher leverage increases the risk that the company will have difficulties to raise capital and has to pay a higher interest when it needs it most.

Two positive aspects are that the company has one of the strongest brands in the world. I also believe that there will be, for years to come, an addressable market for HOG. It is just not a market where the company should try to grow the price at all. The management should focus on strong brands and values. I believe that new management already took some promising steps.

HOG contributed **+2.5 %** to the first quarter performance.

Other positions

Furthermore, we shorted companies representing two necessary conditions:

- Weak balance sheet, which I define as a constant need of external capital
- The sensitive sector, meaning sectors directly affected by the modified consumer behavior due to this virus

They were mostly companies from the restaurant business and of course from the structural weak car manufacturer sector

- Daimler (DAI GY)
- Faurecia (EO FP)
- Continental (CON GY)
- Duerr (DUE GY)
- Darden (DRI)
- Shake Shack (SHAK)
- Chipotle (CMG)
- Credit Acceptance Corporation (CACC)

After the market dropped by 15%, we started taking long positions. In addition to the before-mentioned S&P 500 options trade, we took positions in the following companies that should be resilient or even take advantage of the crises

- Draegerwerk (DRW3 GY)
- Biomerieux (BIM FP)
- Baxter (BAX)
- Novartis (NOVN SW)
- Vmware (VMW)
- Microsoft (MSFT)
- Teamviewer (TMV)

Furthermore, we took positions in some companies that suffered a lot from the virus, but who might survive it

- Boeing (B)
- Delta Airlines (DAL)
- Dufry (DURN SW)

- Siltronic (WAF GY)
- Uber (UBER)
- Pirelli (PIRC IM)
- Cap Gemini (CAP FP)
- Signet Jewelry (SIG)
- Beyond Meat (BYND)

I hope you enjoyed reading this letter.

Kind Regards,

Marc Daubenfeld

