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VACCINES MARKET: RACE TO THE OLD WORLD

By Samuel Benedict and Jaden Josefin, Market Research Analyst

If we were to say that there is no vaccine available yet for HIV, a virus that existed since 1920, what would your initial reaction be? Surprised? Fear that COVID-19 would have the same outcome? Currently, COVID-19 has 16 million positive cases with over 675,000 deaths. Not to mention, an all time high death rate close to 10,000 in a day was recorded on 24 July 2020. However, reopening of businesses simply must be done to prevent the economy from sinking further down amid the lurking danger of this pandemic. As if wiping out GDP and employment rate isn't enough, there is no absolute certainty when will this pandemic come to an end. This is no exception for the stock market, as most businesses and investors alike are anxiously waiting for the times where they can operate normally without the current restrictions. Hence, the development of vaccines and treatments for COVID-19 should undoubtedly be the priority for countries before they can return to the old normal.

Accessibility

One of the biggest challenges once vaccines are ready to be released would be accessibility. Political tension will arise as soon as a certain nation has access earlier than the others. Ethical dillemas will come to light when under-developed countries are not able to purchase the vaccines in bulk due to the profit margin set by biotech companies. Looking from the macroeconomics point of view, the nation who sells vaccines must take the opportunity to recover their GDP and budget deficit, after a massive spending on expansionary policies. Afterall, biotech companies still need the money for manufacturing in the long run and of course, to be incentivized. On the other hand, if there is no action taken, not only the mortality rate for developing and underdeveloped countries is going up, but also their debts.

WHO Statement

Addressing the issue above, WHO forms a program called COVAX Facility, designed to provide rapid and fair access for every country from various socioeconomic status. As of now, 75 countries are partnering with up to 90 low income countries through COVAX Advance Market Commitment. This instrument has collected close to $600 million through voluntary donations. The goal will be achieved by diversifying the risk in developing vaccines. Relying only on a few financially stable countries to develop vaccines wouldn't be cost efficient, and if they fail, it would simply delay the progress. Another way to speed up accessibility is to invest in the manufacturing process early, so that the supply can grow in scale to meet the worldwide demand. By the end of 2021, 2 billion doses of qualified vaccines should reach 20% of participating countries with priorities given to medical workers and countries who are most vulnerable.

Vaccine Development Timeline

As of July 26, there are 5 institutions who are currently developing their vaccine at the Phase 3 clinical trials, including Sinovac and AstraZeneca - University of Oxford. They will be followed by Moderna - NIAID on July 27 as well as 12 other players that are still in the Phase 2, 17 other developers in Phase 1, and 142 institutions still working on their pre-clinical trial studies. [1]

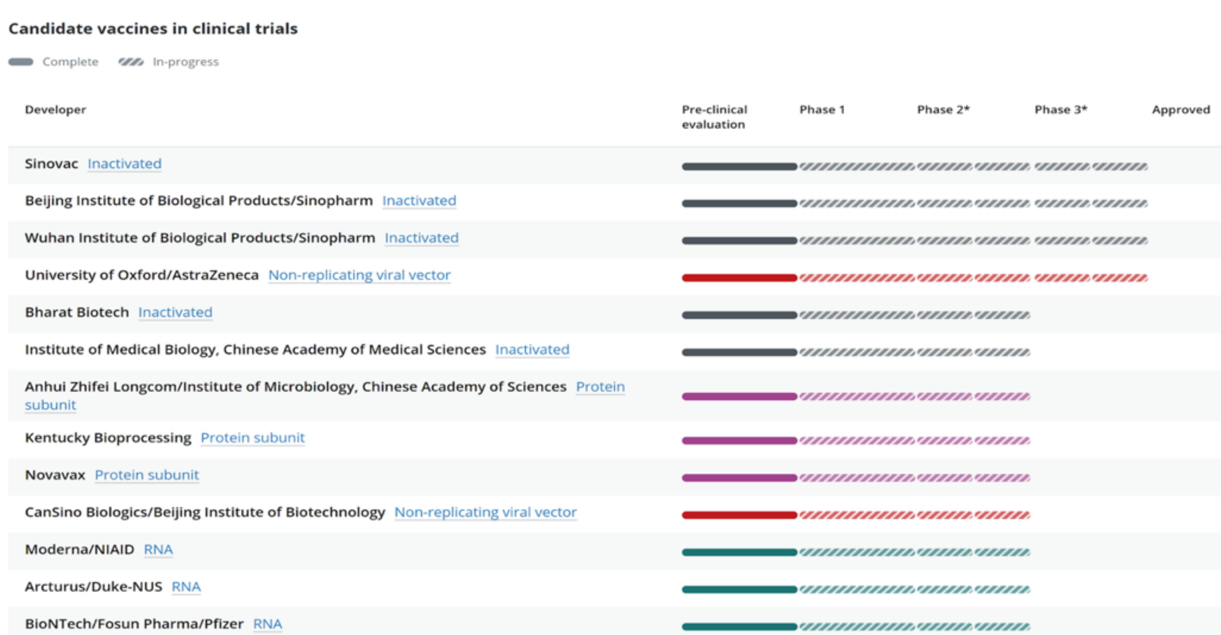

Figure 1: Vaccine development progress as of July 26, 2020
(Source: CBC Coronavirus Tracker)

How COVID-19 Vaccines Work and Types of Vaccines Developed

There are different scientific approaches in creating this vaccine. Most of the time, companies are going for the traditional route, while others come out with innovative methods that might yield a more effective result. Vaccines usually contain a tamed virus or part of the virus. In this case, parts of the SARS-CoV-2 (the virus that causes COVID-19) will be injected inside the patient's body without causing COVID-19 to the patient [3]. This traditional approach is currently used by Sinovac, Sinopharm, and Bharat Biotech. However, these kinds of vaccines are hard to be mass produced, yet they must be grown at large quantities. This is a huge time and capital distress that healthcare companies cannot afford during this dire time [2]. Hence, some COVID-19 vaccines are created based on 3 different alternative methods that can be developed faster and scalable.

The first alternative is to insert non-replicating viral vectors that will not be able to reproduce inside the human body. This vaccine is currently developed by AstraZeneca - University of Oxford [3]. Another alternative is to insert the coronavirus protein subunit that has been grown outside of the body, an approach currently examined by Novavax. Although protein subunit vaccines are easier to be mass produced, they are less powerful than non-replicating viral vector vaccines. Recently, the most popular alternative is the mRNA and DNA vaccine developed by the likes of Moderna - NIAID (mRNA) and BioNTech - Pfizer (DNA). Since this vaccine does not need any virus cultivation and it can be standardized across the vaccines, the production process is much faster and cheaper than traditional vaccines [2].

Phases of Vaccine Trials

Ottawa is, of course, notable for the founding and being the headquarters of Shopify. Ottawa is home to many startups, such as SurveyMonkey, Rewind, and GoFor Delivers. Ottawa is also host to many satellite offices, such as Canadian company OpenText and SAP. With many booming startups based in Ottawa, there is significant growth potential for the tech sector in Ottawa. Nearly 10% of workers in Ottawa fall into the tech sector, with about 64,500 tech workers (as of 2019 end), making it of largest proportions in North America [4].

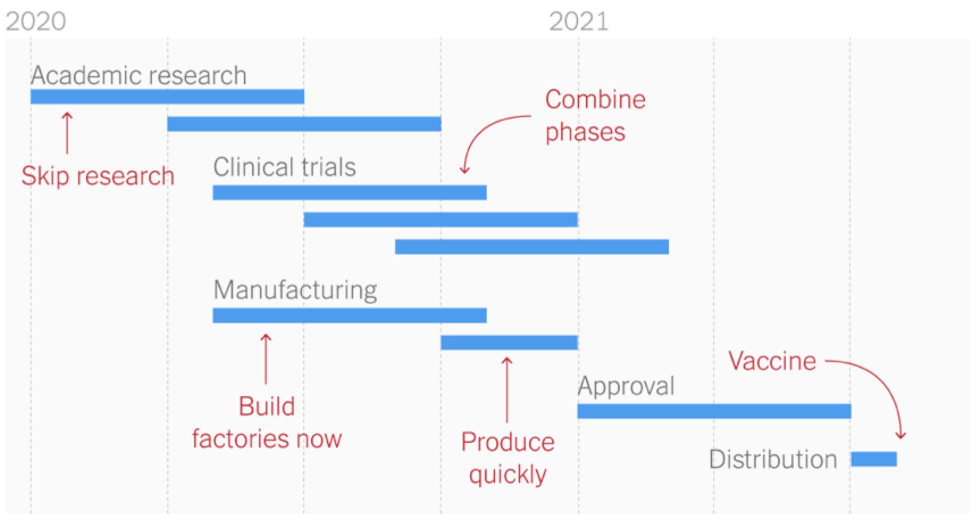

Figure 2: Timeline of Vaccine Research
(Source: The NY Times)

Market Movers Under the Spotlight

Figure 3: Stock Chart of Moderna (NYSE:MRNA) in red and AstraZeneca (NYSE:AZN) in blue
(Source: TradingView, annotated by the authors)

Moderna - NIAID

Moderna (NYSE:MRNA), a rising star during the pandemic has been given a sheer amount of spotlight, but will they be able to justify their 400% spike in price since March or simply falls short of expectation? The result of the upcoming phase 3 of the development progress shall give the investors the answer they are looking for. After returning to consolidation between late May and early July, Moderna went back up to an all time high of $94/share before slipping down 20% last week. There are some factors that come into play for the dip. Besides from the dip in early July due to the delay of phase 3, Moderna has endured overbought ratings by some analysts [7]. This is mainly due to the unknown result of the vaccine when tested on a large scale. In addition to that, Moderna lost its patent case against arbutus obligating them to pay royalty fees for every vaccine sold.

Looking at its financials, Moderna has a gradual increase of net income loss paired with decreasing revenue each year amounting to negative $546 million in 2019. Not to mention, its concerning negative free cash flow from year to year especially last year's negative $491 million despite decreased capital spending is a red warning. These two reasons explain why their current valuation can be considered as overvalued on top of their negative p/e ratio. With that in mind, they have to deliver the expectations of huge sales of Covid19 vaccines in the upcoming years to return those investors who have high risk appetite. Nevertheless, Moderna is still one of the flourishing biotech companies that offers convincing progress, but profitability is yet to come in the following quarters.

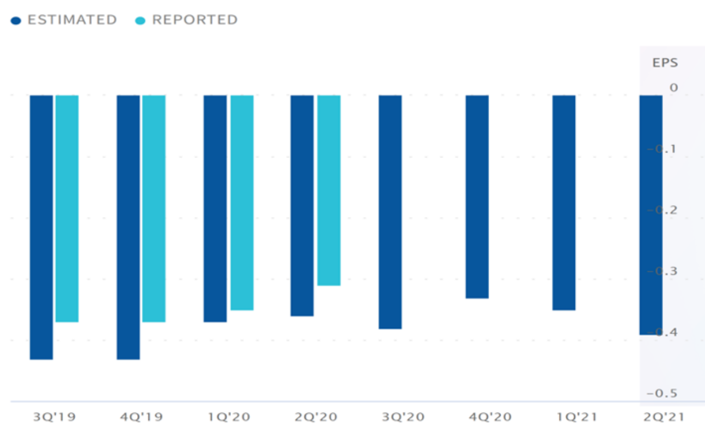

Figure 4: Moderna's Negative Earnings Per Share Reported at Each Quarter
(Source: NASDAQ)

AstraZeneca - University of Oxford

AstraZeneca (NYSE:AZN), a multinational pharmaceutical company based in Cambridge, deserved their own merit too. Their partnership with Oxford University has caught some attention from non-profit foundations offering $750 million in funding and $174 million from Emergent for manufacturing. Currently, they are expanding their supply chain across the globe to meet their target of providing 400 million doses before the end of 2020 with priority for low to medium income countries. After securing a deal to supply 400 million doses to the UK and US, they admitted that profit is not the goal during the pandemic. Despite their phase 2 success, the stock market didn't reflect the positive result in the past week. This is mainly due to their competitors being able to provide similar results earlier. Looking at the stock chart above, AZN has had a steady rise of 40% in price since mid March. AZN is also less volatile than MRNA since MRNA has a lower float with relatively high volume, allowing the price to be influenced more easily.

Looking through their latest quarterly earnings and yearly reports, Astrazeneca has recorded $1536 million in net income for their first 2 quarters of 2020 which already exceeds their annual net income in 2019. On top of that, they have exceeded the forecasted earnings per share 2 quarters in a row by 12% and 9% respectively.

However, shifting from their recent performance, AstraZeneca has been significantly declining from year to year in terms of net income(80%), free cash flow and their operating margin. With its current p/e ratio standing at 29.54x compared to other large cap companies averaging 15x, this company is promising significant growth at its price point. Could the recent quarterly earnings foreshadow their turning point after 10 years of declining performance? Regardless, AstraZeneca is still one of the possible catalysts for economic recovery in the upcoming years.

Other American and European Major Players

As COVID-19 vaccines became a top research priority, many countries funded the research in hope for a faster vaccine development. The US Government, for example, created a US$10 million funding program called Operation Warp Speed, which aimed to distribute 300 million doses of COVID-19 vaccine in the US by January 2021. This joint operation involves major US government agencies such as NIH, HHS, CDC, FDA, BARDA, and 7 funding beneficiaries, which are Johnson & Johnson, Moderna, AstraZeneca, BioNTech-Pfizer, Merck, Vaxart, Inovio, and Novavax [8].

Figure 5: Novel Biotech Companies (NASDAQ: NVAX, BNTX) has higher share price acceleration than big pharmaceuticals (NYSE:PFE, GSK).
(Source: TradingView)

Novavax (NASDAQ:NVAX) was promised US$1.6 billion for 100 million doses of vaccine (NVX-CoV2373) should they successfully pass the clinical trials. The optimism is reflected in their stock price, as it has launched by 32.65x this year amid their other success in the development of seasonal influenza vaccine. Their second quarter earnings also surprised investors, beating analysts' estimates by 13.65% [9]. Similar to Moderna, their financial earnings for the last 10 years have been abysmal, failing to obtain a positive figure for net income nor free cash flow.

Compared to the companies mentioned above, Novavax is tiny in market capitalization allowing its price to be way more volatile due to its low float and high volume. Few years back, they suffered a massive dip in stock price after failing a phase 3 trial for a vaccine they were trying to develop, and they haven't been able to recover until mid may. Assuming even if they are successful in developing the vaccine, it will be challenging for them to sustain that high level of growth especially once Covid19 is over globally. By the nature of biotechnology companies, the market sentiment is very sensitive towards the news. Any positive signal from competitors, then the momentum will be disrupted with no exception for Novavax. So at the end of the day, it is no surprise that Novavax currently is able to regain some momentum, but the challenge will be the innovations they are offering in the future to fight their competitors who in paper hold the majority of the market share. Novavax should take advantage of the current situation to build their reputation and once again regain investors' trust for the long term.

Another major player in this vaccine race is BioNTech (NASDAQ:BNTX) and Pfizer (NYSE:PFE), with both recently being promised US$2 billion for 100 million doses of their vaccine that is currently entering the late-stage clinical trial. This inflates BioNTech stocks by 224% this year. On the other hand, Pfizer sees its stock price rising by 29.3% ever since the stock crash in mid March, but has been down by 1.4% from this year's opening. Earnings per share for Pfizer in the second quarter is $0.78/share, exceeding estimate by 14 cents.
Another interesting player is GlaxoSmithKline (NYSE:GSK), where the UK-based pharma is teaming up with Medicago to launch a tobacco plant-based vaccine by the first half of 2021 [10].

Other Asian Major Players

On the other side of the world, scientists from Chinese biotech and pharmaceutical companies are also working day and night to develop the COVID-19 vaccine. Sinovac is currently on its phase 3 trial which involves 9000 Brazilian volunteers. After the trials are approved, they will be set to produce 300 million doses of CoronaVac per year using their current manufacturing capability [11]. Sinopharm (HKG:1099), a Chinese state-owned enterprise, have also been successful with their phase 1 and 2 trials, with all participants developing neutralizing antibodies. They are also about to set their phase 3 trials in the UAE. Unfortunately for Sinopharm, their stocks have decreased by almost a third of its value at the start of the year. Despite posting a consistent EPS growth of 25% over the last 3 years, their stocks have long been undervalued as shown by their P/E ratio (8.5x), which is way lower than comparable biotech stocks [12]. Nevertheless, the Chinese government still backed both Sinovac and Sinopharm, each with RMB 1 billion (around US$140 million) of funding.

SK Biosciences is a Korean biotech company that is also racing against time in vaccine development. Their work has been rewarded with a funding of $3.6 million by The Bill & Melinda Gates Foundation, and they are expected to be able to deliver 200 million vaccines by June 2021. This led to a 25% jump in share price of its parent company, SK Chemicals (KRX:285130). They are planning for an IPO in 2021 and are poised to follow the footsteps of their sister company, SK Biopharmaceuticals (KRX:326030). The Korean pharma have successfully launched their IPO last month and their stock price have rocketed by 50% since thanks to their success in developing vaccines for CNS disorders [13].

Conclusion

The stock market has always rebounded from viral outbreaks in the past, but there are no guarantees for a smooth sail to recovery. Perhaps, a speedy vaccine development helps to remove some of the uncertainties in the stock market, and so far we've seen promising growth. With massive investments from private entities and government, we have reached phase 3 of the vaccine trial with a healthy degree of optimism. There are potential challenges ahead during the distribution of vaccines, and WHO has taken the initiative to provide a solution for it. Just like the vaccine trial phase, the economy needs time to progress over the quarters.

[[1]https://www.theguardian.com/world/ng-interactive/2020/jul/25/coronavirus-vaccine-tracker-how-close-are-we-to-a-vaccine
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JUNE 2020

The pandemic's impact on residential, retail and office REITs

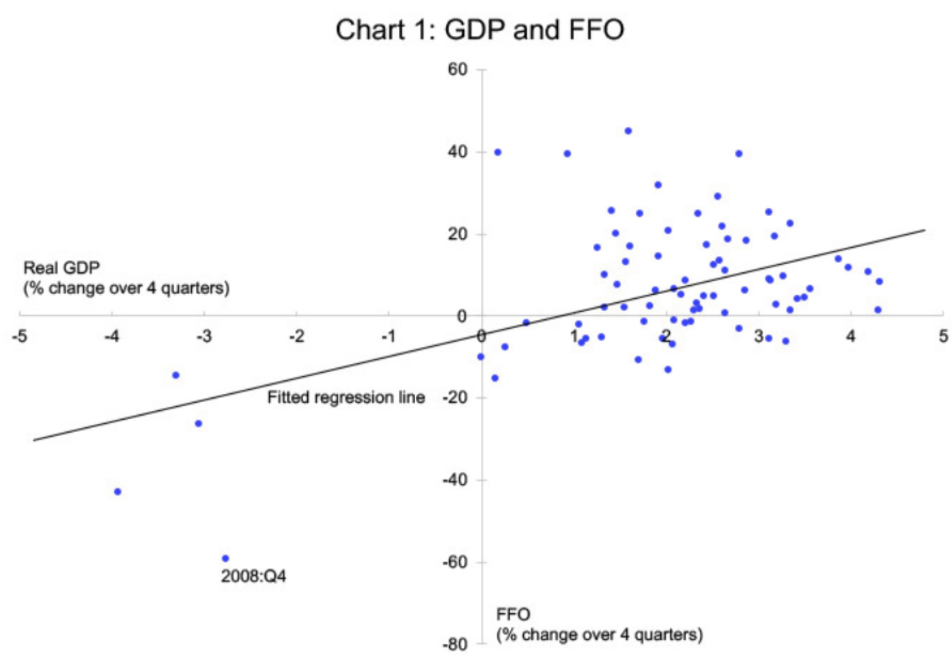
By Ethan, Market Research Analyst

Real Estate Investment Trusts (REITs) have been one of the hardest hit sectors of the economy. Only energy, financials, and industrials have performed worse. As indicated by the S&P 500 Real Estate index, the REIT market declined 38.5% from its mid-February high, when COVID-19 began to spread around the world. As cases rose, social distancing measures designed to slow the spread of the virus resulted in an abrupt shutdown of many businesses, causing unemployment rates to skyrocket [1]. With these two factors, businesses and people found it increasingly difficult to pay their rent in the months ahead This created cash flow challenges for many landlords across all sub-sectors of the real estate market.

***Exhibit 1: See below performance comparison of the S&P 500 index, S&P 500 - Real Estate index and S&P 500 - Energy index**. Sourced from Bloomberg.*

With the economy entering an unprecedented recession. The government of Canada created financial support for families and businesses to stay afloat [2]. Most of these supports allowed businesses and people to continue to pay rent, minimizing the impact on the economy. Federal government aid included the Canada Emergency Response Benefit (CERB) providing a taxable benefit of $2,000 every 4 weeks until the fall. Eligible individuals are those who stopped working or those whose work hours have been reduced due to COVID-19. The government as well created business financial aid packages such as the Canada Emergency Wage Subsidy (CEWS) which covered a portion of an employee's wages for eligible employers. Allowing businesses to re-hire employees and avoid layoffs. Another program was the Canada Emergency Commercial Rent Assistance (CECRA) which provided relief for small businesses experiencing financial hardship. Over the course of the program property owners would reduce rent by at least 75% for the months of April to July for their small business tenants. Where CECRA would cover 50% of the rent with the tenant paying up to 25% and the property owner forgiving at least 25%. In addition, Canada Emergency Business Account (CEB) gave interest-free loans up to $40,000 to small business and not-for-profits. All these financial packages increased Canada's current-year deficit to at least $250 billion [3]. The largest one-year fiscal swing any advanced economy tracked by the IMF had recorded [3]. Sooner rather than later, these financial programs will end, and people will have to return to work. But until cases completely subside or a vaccine is found, the economy and GDP will be limited. In turn REITs' market performance will be lackluster as one of the key metrics for any REIT, funds from operations (FFO) will follow GDP [4]. Where the larger FFO represents financial prosperity.

Chart 1: See below the relationship between GDP and FFO. *Sourced from BEA, Nareit T-Tracker.*



REIT Subsector Performance

Even though all REITs were affected by the pandemic some had it worse than others. As Table 1 indicates below, some of the least affected property sectors include data centers, infrastructure, and industrial all of which are up YTD as of June. This is primarily due to the nature of these properties as social distancing rules do not create major issues. On the other end, lodging/resorts, retail, and home/commercial financing have been the hardest hit.

Table 1: See below REIT performance by property sector. *Sourced from Nareit.*

FTSE Nareit U.S. Real Estate Index Series					
Property Sector	Jan	Feb	Mar	Apr	June-YTD
Office	0.7	(10.3)	(20.4)	7.5	(24.5)
Industrial	3.7	(9.0)	(5.0)	8.0	2.3
Retail	(3.4)	(7.5)	(42.7)	14.8	(36.8)
Residential	3.7	(7.3)	(21.5)	8.6	(17.7)
Diversified	1.8	(12.0)	(32.0)	13.1	(30.6)
Lodging/Resorts	(10.9)	(13.9)	(36.6)	11.3	(48.7)
Health Care	3.2	(8.0)	(33.4)	10.0	(25.4)
Self Storage	4.5	(6.6)	(5.6)	(6.7)	(9.5)
Timber	(4.4)	(11.0)	(28.6)	22.1	(23.1)
Infrastructure	2.5	(1.4)	(1.7)	9.6	16.6
Data Centers	1.1	(2.7)	10.5	8.1	19.2
Specialty	3.9	(7.5)	(33.7)	6.8	(24.0)
Home Financing	4.2	(8.1)	(54.5)	16.8	(40.9)
Commercial Financing	2.2	(9.0)	(52.1)	25.0	(36.4)
All Equity REITs	**1.3**	**(7.0)**	**(18.7)**	**8.8**	**(13.3)**

Below describes some of the effects the pandemic has had on residential, retail and office REITs. Furthermore, below discusses the impact on various REITs and how they have managed COVID-19.

REIT Subsector Performance

Among residential REITs, apartments had the steepest decline in return compared to single family homes [5]. This is directly correlated to the fact that low income families typically live in apartments. In addition, higher unemployment rates prevailed among the service industry causing financial uncertainty whether rent would be paid. In general, COVID-19 has impacted the residential REIT sector in three ways 1) rental collection trended near historical levels, 2) occupancy remains resilient, and 3) rental rate increases paused [6].

Canadian Apartment Properties Real Estate Investment Trust – CAR-UN.TO

Market Cap.	$8,230M
NAV	$50.00
Est P/FFO	20.97x
Current EV/EBITDA	24.69x
Dividend Yield	2.87%

Canadian Apartment Properties REIT (CAPREIT) is one of the largest residential REITs in Canada. It owns a diversified portfolio comprised of approximately 56,800 suites including apartment buildings, townhouses and manufacturing housing communities in Canada, specifically Ontario (GTA) and Quebec [7]. The pandemic caused the REIT's share price to decline 38.20% from its peak to its trough. Nevertheless, remains down 22.35% from its peak. With major presence in high-density urban cities, where lock downs were strictly enforced contributed to its drop. As borders remain closed, immigration to cities such as Toronto and Montreal remain absent which is a big portion of leases in the cities [8]. However, the REIT has taken several steps to preserve its liquidity, including the deferral of acquisitions, property development, and major repairs and maintenance [6].

Retail REIT Sector

Among retail REITs, regional malls declined the most followed by shopping centers, and free-standing stores [5]. This arises as social distancing measures are more flexible for less-dense, street accessible stores, thus it allows free-standing shops the ability to resume business before its counterparts. Nevertheless, the financial viability of a business largely depends on the store itself and its business fundamentals. Over the past couple of years, retail has been directly impacted by the shift of consumers choosing online shopping over the conventional brick-and-mortar method [9]. As a result, the pandemic sped up exposing businesses with little to no online presence causing many stores to close permanently and even sending some into bankruptcy including J. Crew, JCPenny, Brooks Brothers, among others [10].

Choice Properties Real Estate Investment Trust -(CHP-UN.TO)

Market Cap.	$8,846M
NAV	$14.25
Est P/FFO	13.66x
Current EV/EBITDA	18.05x
Dividend Yield	5.96%

Choice Properties (CHP), 63% owned by George Weston is a REIT spin-off of Loblaw Companies and primarily owns and operates grocery-anchored shopping centers. CHP is the owner, manager and developer of a high-quality portfolio comprising 724 properties totaling 65.6 million square feet of gross leasable area [7].

The pandemic caused its shares to fall 29.15% from its peak to its lowest point, but remains down 17.91% from its peak in Februray. However, the impact on CHP has been minimial compared to its retail peers. This is supported by the fact that Loblaw accounts for 56.1% of CHP's gross rent [6]. Large grocers have been able to stay open as an essential service, providing a level of security for CHP. In light of this the REIT continued to have strong occupancy and rent collections. As of April 22, Choice had received 86% of contractual rents for April, 84% from Retail, and 89% from Office [6]. The majoirty of uncollected office rents pertain to retail tenants in office buildings. Also, Choice has healthy liquidity of $1.4B, providing safety if the pademic continues to be an issue in the next several months [6].

RioCan Real Estate Investment Trust (REI-UN.TO)

Market Cap.	$4,936M
NAV	$24.50
Est P/FFO	9.38x
Current EV/EBITDA	15.38x
Dividend Yield	9.66%

RioCan owns, manages and develops retail-focused, properties located in prime, high-density transit-oriented areas where Canadians want to shop, live and work. As of March 31, 2020, their portfolio comprised of 222 properties with an aggregate net leasable area of approximately 38.6 million square feet [7].

The pandemic resulted in a 54.92% decline from its peak to its lowest point in March. Furthermore, its shares remain down 46.60% from its peak. Its share price continues to be depressed as its portfolio is not predominately made up of grocery chains like CHP. In addition, one of RioCan's largest tenants is Cineplex, accounting for 3.6% of total rent [6]. As of April 30, REI had approved 17% of April rent for deferral. As a result, 55% of total April gross rents were received and 28% remain uncollected [6]. With poor rent collection, REI has taken necessary steps to address its near-term debt obligations including re-financing maturing debt and mortgages.

Office REIT Sector

COVID-19 impact on offices has led to high turnover vacancy. But with the advance in technology many businesses, especially medium to large corporations have been able to send their employees to work from home, while still earning revenue. As such office tenants generally have greater financial strength to continue to make payments [11] What is left to be seen is the impact on office REITs long-term as companies such as Google and Shopify announce employees will work from home until 2021 [12].

Allied Properties Real Estate Investment Trust (AP-UN.TO)

Market Cap.	$4,936M
NAV	$24.50
Est P/FFO	9.38x
Current EV/EBITDA	15.38x
Dividend Yield	9.66%

Allied Properties Real Estate Investment Trust (Allied) is a real estate investment trust that invests in office properties in Canada. About 60% of its tenants operate in the telecom, information technology, business service, and professional sectors [13].

The pandemic resulted in a share price decline of 46.78% from its peak to its bottom in March. Since then the share price has rose 28.44%. This is due to higher turnover vacancy which has been offset slightly by higher data center space utilization. For the month of April, Allied had collected 90% of rent but many of Allied core office markets were near record-low vacancies [6]. Most rent deferrals were to storefront retail and office users in early stage of business development. This represented 8% of total rent.

Conclusion

Amid all the volatility in the markets even as some countries appear to have the virus under control. Major countries such as the United States are continuing to report higher cases, and it does not seem to be slowing down. Furthermore, the fear of second waves worldwide further hinders bull positions in the REIT market, particularly retail. Nevertheless, many REITs are selling well below their NAV and are financially positioned to weather the storm a little longer. In addition, knowing the different sectors of REITs allows one to grasp the fundamentals of short-term and long-term impacts of COVID-19. Thus, while fear still exist in the market it causes many investors to make irrational decisions and ignore even the most resilient, high-quality REITs. This creates an opportunity to obtain discounts on financially stable and high-growth subsectors of the real estate market.

Recommendations for long-term investments (5+ years)

A safe bet is sticking to large-cap residential REITs, as people will always need a roof over their head. Meaning there is no ambiguity that residential demand in Canada will be shirking anytime soon. Also, discounts are still priced into the markets as borders remain closed and immigration is minimized, which nonetheless is a short-term demand issue.

Stay away from retail REITs. COVID-19 will continue to have short-term impact on these markets as discussed above. What is more important however is the uncertainty of long-term growth within retail with the ever-increasing demand for online shopping.

If you are considering capitalizing on online shopping but want to stay within the real estate field. Storage REITs will continue to grow as Amazon, among other competitors will need more and larger facilities to store their inventory.

For the time being, stay away from office REITs. Even though offices will eventually open back up. With companies such as Google announcing that their employees will be working from home (WFH) until June 2021 [12]. Along with many international companies hiring people from different locations and allowing WFH. It reduces the need to have larger and more office locations. In addition, I believe what used to be a 5-day work week in the office could shift to a 3-4 days in the office and 1-2 days WFH. Businesses might find this a reasonable choice as commuting times are becoming longer every year [14]. In addition, WFH can increase efficiency in certain tasks [15]. Nevertheless, a conclusive long-term outlook for office REITs will require more time to unfold as the post-pandemic work lifestyle is yet to be seen. If you want to capitalize on this trend of WFH and bet on technology. I recommend going with data center REITs, which own and manage facilities that customers use to safely store data, which will exponentially grow as cloud computing evolves and gets integrated into more businesses.

A risky but high return choice would be to invest in the heavily impacted lodging/hotels REITs. Of course, short-term (1-year) return will be minimal. Nevertheless, if this sector can survive on domestic demand and find ways to refinance expiring debts using the low-interest rate environment. I see this as a relatively easy way to make capital gains as the sector remains heavily discounted. Furthermore, I do not see travel being hindered long term, unless virtual reality replaces actual vacation which I believe is a bit of a stretch.

Short-term Volatility

With shorter time frames (1-2 years), people might deem retail REITs as one of the best options as there is a huge market consensus to stay away from it (buy at low prices when everyone wants to sell and vice-versa). Also, as a shift from brick-and-mortar stores to online will not occur overnight. There is a valid opinion that money can still be made in the near future. For example, if a vaccine is found, it is inevitable all REITs will increase in value. Going one step further is if you bought RioCan REIT now, you could profit 100% just from price appreciation if the stock returned to pre-pandemic levels. However, it is up to the investor to determine the amount of risk they should take and the length of their time horizon.

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[2]https://www.canada.ca/en/department-finance/economic-response-plan.html
[3]https://financialpost.com/news/economy/justin-trudeaus-gaping-deficit-begins-new-era-of-debt-for-canada
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[5] https://www.reit.com/sites/default/files/returns/prop.pdf
[6] CIBC Equity Research Report
[7] Capital IQ
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JULY 2020

Crumbling US-China Relations will lead to Crumbling Markets

By Matthew Unrau, Market Research Analyst

The latest episode of China-US diplomatic relations shows the United States Government ordering the Chinese Consulate in Houston to be closed and the Chinese Government retaliating by ordering an American Consulate to shut its doors in China. This comes on the heels of a rather ‘big moment’ in US-China relations in the Phase 1 Trade Deal that was signed in January. This has the potential to have drastic consequences on the global economy that has already suffered due to the virus. If diplomatic relations suffer anymore the markets could tumble farther.

Why Should You Care?

Before we begin, I’ll start by defining a consulate. A consulate is a smaller version of the embassy located in many cities across the country. These consulates act as hubs for handling small diplomatic issues such as issuing visas and aiding in international trade. Although not as drastic as shutting down the embassy, shutting down a consulate will create severe tensions between the countries.
Both countries are among the most affected economies by the pandemic. China needs to re-establish itself as a trustworthy and reliable place for companies to manufacture produces and the United States needs all the help it can get to climb out of the economic downturn caused by the virus. These countries need to work together to help each other. If trade ties are severed any further, it could cause both countries more trouble than they are equipped to handle as they battle coronavirus. Less and inconsistent trade will lead to a slower recovery out of the pandemic and stock markets falling as a result.

The Lead-Up

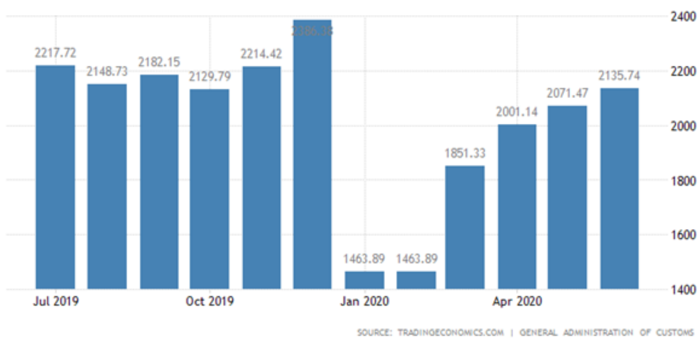
After the Phase 1 trade deal, the US and Chinese markets soared and reached new heights before the Covid-19 virus halted the world's economy. The trade deal consists of China agreeing to purchase at least 200 billion USD worth of goods from the United States to shrink the trade deficit, the reduction of some tariffs on Chinese goods entering the United States to 7.5%, with more reductions as a part of Phase 2, and the agreement to not devalue each other's currency. Another big part of the deal was stronger legal protection for Chinese patents and copyrights. China commits to eliminating pressure for foreign companies to transfer technology and data to China for incentives such as market access among other government advantages. This deal greatly benefitted the United States as well as allowing China to continue to grow and continue the business. This was evident when the United States' main stock exchange, the S&P 500, rose to its all-time high after the deal was signed and China's stock exchange rose before the virus came along a month later. [1]

This when market sentiment turned sour, along with US-China relations. Due to the epicentre of the virus being located in Wuhan, China, President of the United States Donald Trump blatantly blamed the virus on China. The POTUS stresses that "China must be accountable for its 'secrecy, deception, and cover-up'" [2] that allowed Covid-19 to become a global pandemic. In general, China's secrecy has been a problem for the United States and was addressed in the Phase 1 trade deal. In total, the FBI has "about 2000 active cases related to Chinese counterintelligence operations in the U.S." [3]. Years of "criminal and covert activity" carried out by China to steal trade, technology and financial secrets [4]. The latest of these came when the FBI uncovered Chinese efforts to steal possible coronavirus vaccines. Subsequently, the United States closed down the consulate in Houston.

However, the officials of the United States wanted to distinguish the decision from the current pandemic and Hong Kong tensions. The U.S wanted to send a message that it wasn't going to take China's spying anymore, "particularly on economic and intellectual property issues." [5] According to a senior counsellor to the director of the FBI Sumon Dantiki, Chinese government Intellectual Property theft will be treated as issues of national security, not just criminal matters. [6] In general, the United States is tired of years of the Chinese Government trying to use its consulates as "espionage hubs" and Secretary of State Pompeo is cracking down on them. China has denied all accusations and responded by closing the American consulate in Chengdu, a key outpost for watching events in Tibet.

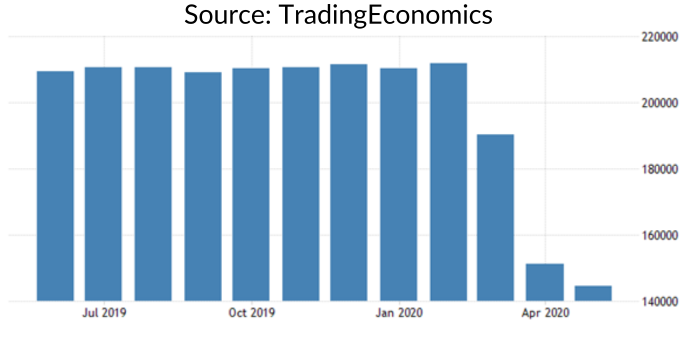
The Immediate Impact

These tensions have an immediate impact and the potential to slow the global recovery from Coronavirus. Even with the trade war going on in 2019, both countries remained among each other's top trade partners. With both countries suffering immensely due to the coronavirus, albeit for slightly different reasons, they need each other to climb out of this economic downturn. Both countries will have an incentive to keep the trade deal present for at least the time being.



Graph 1: China's Exports by month from July 2019 to June 2020

Source: TradingEconomics



Graph 2: US exports by month from June 2019 to May 2020
Source: TradingEconomics

These two graphs above show the export data for both China and the US over the past year (US trade data for June gets released on August 5, 2020). Clearly, the trend shows China's exports suffering whenever the virus first originated in Wuhan. However, they have almost recovered to pre-virus levels. China has gotten the virus relatively under control, only reporting 50-100 daily cases for the last week and 5-10 daily cases for the preceding weeks. This is significantly less than the 60,000 – 70,000 daily cases the United States is reporting. As a result, China can resume its usual economic activity, while the US struggles to contain the virus. This is evident in the American exports declining each month since February 2020 to all-time lows in May. The United States will need to increase exports to be able to recover from the effects of the virus.

According to the US Census Bureau, China only makes up about 6.9% of US exports (third behind Canada and Mexico) but leads with 16% of imports to the United States. A lot of tech companies get their resources from China and has a big part in manufacturing tech. [7]. Now, the United States found ways around getting imports from China during the trade war as they can turn to countries like Vietnam and Taiwan. In response to the tariffs imposed in 2018/2019, the United States increased imports from Vietnam by 33.4%, Taiwan by 20.2% and decreased imports from China by 12.4%, most notably 34.1% on goods with an additional 25% tariff and 23.6% on goods with tariffs of 10-25% [8]. These countries do not have a trade agreement yet with the United States and could both benefit from more trade with the United States to grow their economies. However, it must be noted that a lot of money would have to be used to create the infrastructure necessary to replicate the effects of the 'manufacturing hub' that is China, something the United States would have trouble financing during the pandemic. On the other hand, China would have trouble being able to replace the United States as its main exporter. The pandemic has slowed down growth in almost every country and as a result, imports have taken a dip. According to TradingEconomics, both the US and China have import patterns similar to those of their exports.

Now my point is simple, The United States will not be able to easily finance a replacement of China as countries like Vietnam and Taiwan each represent a tenth of the import power of China [9]. China will be able to export its goods to other countries slowing down its economic recovery. These countries need each other and the Phase 1 trade deal to recover their economies as quickly as possible to pre-virus levels.

What does the Future Hold?

Last week, Donald Trump told the media that the trade deal "means less to me now that when I made it." Eswar Prasad, former leader of the China team of the International Monetary Fund, believes that the "phase-one trade deal hangs by a thread." [10]. China's Jiang Yuechen, says that "China is working very hard to honour its promises." [11]. The trade deal is holding the two countries' diplomatic relations together. Getting rid of this trade deal would not only result in another round of tit for tat tariffs, sanction, and visa restrictions that both countries do not want but possibly more hostile relations between the countries leading to war. As a result, I believe that both countries will honour the trade deal until the economic outlook gets better.

By no means, do I think a Phase 2 deal is remotely close to being on the table at this point and I believe that it will be a long time before we see one judging by Trump and Pompeo’s actions.

Ray Dalio, founder of Bridgewater Associates warns that this could escalate into a US-China capital war, that could devalue the dollar. He outlines that “If you say by law ‘Don’t Invest in China’, or even possibly withholding the payments of bonds that the United States owes payment on in China – these things are possibilities, and they have big implications such as the value of the dollar.” [12] He believes that the US isn’t doing the sound things anymore; earning more than they spend, building the balance the sheet, not running deficits, and will lead to the decline of the dollar. According to Bloomberg, “the dollar has fallen against all major currencies tracked in the past three months” [13].

Turning to a point of view of the stock markets, this could be compared to the effects of the trade war in 2018-2019. There was a lot of fear and anxiety in the markets leading to high volatility. I believe that this time, a failed trade deal would decimate both the United States’ and China’s markets as they need each other to recover. Especially since the S&P 500 is reaching new highs in the middle of a pandemic, all it needs is a little push to send it into a correction. To conclude, these countries need the trade deal to hang out to any diplomatic ties, to hang on to the value of the dollar and to prevent a major correction in the stock markets.

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JULY 2020

Tesla Earnings Report

By Johnson Shih, Market Research Analyst

FINANCIAL SUMMARY
(Unaudited)

($ in millions, except percentages and per share data)	Q2-2019	Q3-2019	Q4-2019	Q1-2020	Q2-2020	QoQ	YoY
Automotive revenues	5,376	5,353	6,368	5,132	5,179	1%	-4%
of which regulatory credits	111	134	133	354	428	21%	286%
Automotive gross profit	1,016	1,222	1,434	1,311	1,317	0%	30%
Automotive gross margin	18.9%	22.8%	22.5%	25.5%	25.4%	-12 bp	653 bp
Total revenues	6,350	6,303	7,384	5,985	6,036	1%	-5%
Total gross profit	921	1,191	1,391	1,234	1,267	3%	38%
Total GAAP gross margin	14.5%	18.9%	18.8%	20.6%	21.0%	37 bp	649 bp
Operating expenses	1,088	930	1,032	951	940	-1%	-14%
(Loss) income from operations	(167)	261	359	283	327	16%	N/A
Operating margin	-2.6%	4.1%	4.9%	4.7%	5.4%	69 bp	805 bp
Adjusted EBITDA	572	1,083	1,175	951	1,209	27%	111%
Adjusted EBITDA margin	9.0%	17.2%	15.9%	15.9%	20.0%	414 bp	1,102 bp
Net (loss) income attributable to common stockholders (GAAP)	(408)	143	105	16	104	550%	N/A
Net (loss) income attributable to common stockholders (non-GAAP)	(198)	342	386	227	451	99%	N/A
EPS attributable to common stockholders, diluted (GAAP)	(2.31)	0.78	0.56	0.08	0.50	525%	N/A
EPS attributable to common stockholders, diluted (non-GAAP)	(1.12)	1.86	2.06	1.14	2.18	91%	N/A
Net cash provided by (used in) operating activities	864	756	1,425	(440)	964	N/A	12%
Capital expenditures	(250)	(385)	(412)	(455)	(546)	20%	118%
Free cash flow	614	371	1,013	(895)	418	N/A	-32%
Cash and cash equivalents	4,955	5,338	6,268	8,080	8,615	7%	74%

EPS = Earnings per share

A week ago, Tesla released its Q2 2020 earnings report, which has impressed many investors that Tesla is able to make a profit despite the disconnection of global supply chain and factory shutdown due to the COVID-19 pandemic in the past few months. Tesla has reported a $6B total revenues and a $104M GAAP net income, which has outperformed against the Wall Street’s expectations of $5.4B revenues and a $250M net loss. [1] Although revenue growth remains relatively flat, the fact that Tesla is able to maintain its revenue level while other car manufactures, such as Ford and General Motor, both recorded a decrease of more than 30% loss in revenue in 2nd quarter of 2020. [2] [3]

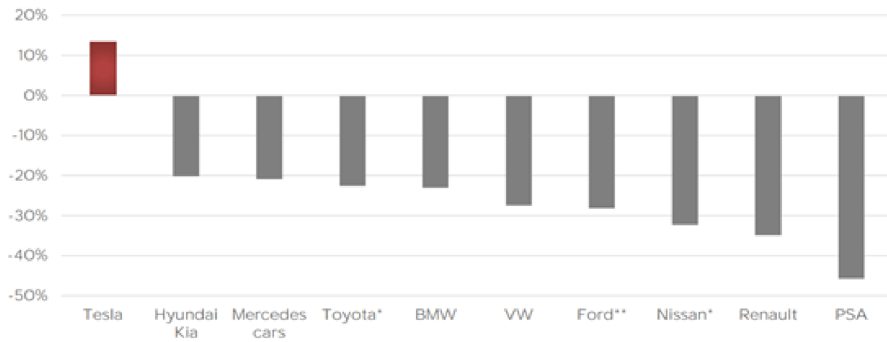
More importantly, Tesla has recorded its fourth consecutive positive quarterly earnings on a GAAP basis, which means it now can be considered for inclusion on the S&P 500 index. The addition to the index would require many index funds to further purchase the stock, which will very likely to drive the price even higher.

Taking a closer look at the revenue breakdowns, the revenue has been positively impacted by the high vehicle delivery which offsets the negative impact of the lower selling price. Another important component of the sales is the regulatory credit sales which have almost tripled compared to 2019 Q2. The regulatory credit is that environmental emission regulators give out credits to automobile manufacturers for producing and selling electric cars. Since Tesla has more than enough of credit gained from the production and sales of electric vehicles, it turns around and sells the excessive 100%-margin credits to other car manufacturers who are in need of buying credits to avoid the penalties. However, the demand for regulatory credit sales is unsustainable in the long term, as other carmakers will soon roll out their own electric models. [1]

On the other hand, although the factory shutdown has incurred a significant amount of expenses, the total operating costs are lower because of the temporary employee compensation reduction and the partnership with the Chinese leading battery firm that reduces the production costs. As factories are back to its full capacity operation, investors should not be too worried about the incurred costs but to focus on whether Tesla is able to further reduce the manufacturing costs. [1]

Installed Annual Capacity		Current	Status
Fremont	Model S / Model X	90,000	Production
	Model 3 / Model Y	* 400,000	Production
Shanghai	Model 3	200,000	Production
	Model Y	-	Construction
Berlin	Model 3	-	In development
	Model Y	-	Construction
New US factory	Model Y	-	In development
	Cybertruck	-	In development
United States	Tesla Semi	-	In development
	Roadster	-	In development

* Model 3 / Model Y installed capacity in Fremont will extend to 500,000 in 2020



Global vehicle deliveries in the 1st half of 2020 (YoY)

Tesla also achieved better than expected vehicle production and delivery in 2020 Q2 than its competitors. Tesla has once again emphasized the importance of the China market. Model 3 has become the best-selling electric car in China, and also able to compete with premium mid-size sedans with its competitive pricing. As the Shanghai factory of Model Y will be soon finished and ready for production in 2021, as well as other in-development Model Y factories in Berlin and the US, investors can expect better delivery efficiency in the shortcoming future. Tesla's EC revenue ultimately comes down to two factors, price and quantity. Tesla has decreased their selling price to stoke demand for the electric cars. To offset the effect of dropping average selling price, Tesla needs to deliver at a higher efficiency to meet the strong demand. With the re-opening of Shanghai and Fremont's factories and the launching factories next year, it is likely to achieve a positive growth in revenue next year. [1] [4]

From a technology standpoint, Tesla continues to improve its car software with more enablement and made substantial progress in its autopilot and full self-driving technology. In addition, it also announced in July 2020 that Model S has reached a new EPA-driving range record of 402 miles, which makes Model S the longest range EV in the market. This milestone will be a motivation for customers who have been considering switching from hybrid cars to a fully electric car. [1]

In addition to the car business, Elon Musk also has an ambitious target for Tesla's sustainable energy business. During the earnings conference call, he outlined how Tesla's is taking further steps in the mission of increasing the use of clean energy and noted that the home solar panels are available at a price of $1.49/watt. Tesla believes that the solar panels have the lowest costs in the US market, and it has a competitive edge. The solar panel roof installations almost tripled in Q2 2020 compared to Q1 2020, despite the permit office closure due to the pandemic. Meanwhile, the Megapack storage business achieved its first quarterly profit just under a year after its initial announcement. Although, Tesla is better known for its electric car business, Musk claimed that the solar business could eventually end up being the same size as the automobile business. Although the clean energy business of Tesla showed some impressive records, the contribution to the share price is insignificant as the business size remain relatively small.

In summary, the earnings report gives the investors' confidence about the future outlook of Tesla, as well as a serious warning for short sellers who have been doubting the profitability of Tesla. With the product line expansion and capacity extension, improvement of product costs and driving range, leading autopilot and full self-driving technology, and higher vehicle deliveries, we are positive about the future outlook of Tesla.

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[4] https://www.cnet.com/roadshow/news/tesla-roadster-production-california-texas/