The Economic Impacts Of The Coronavirus (COVID-19) On The Global Market

What is The State Of COVID-19?

According to the World Health Organization COVID-19 was first reported in December 31 2019, originating in Wuhan, China (WHO, 2020). Though this is the official date, several news reports have argued the virus was known in the area well before, thus the proliferation may be a gray area. COVID-19 has been detected in several continents (Europe, USA, Afrika, Asia, Australia), making it close to a pandemic, but still not one in definite terms, as the spread is not unexpected (The Guardian, 2020). COVID-19 is compared to the regular flu (influenza) due to the large case population; more than 90,000 infected globally with more than 3,100 deaths; MERS and SARS case populations were much lower (Joseph, 2020). Still, differences remain; the regular flu has a mortality rate of less than 1%, while COVID-19 has shown a mortality rate close to 3.4% (ibid); but the virus shows less mortality rate than MERS (34%) and SARS (9.5%) (The Economic Times, 2020).

The WHO pushes global countries to implement contact-tracing as it is believed to contain the virus from spreading further; as has been positively experienced currently in China (Joseph, 2020). Likewise, WHO officials stress the importance of individual common sense in constraining the virus proliferation (ibid), since the scope of regulatory control to containment are marginal on a societal level; all affected countries would have to shut down to restrain people contact. Though governments have not officially suggested such measures, many companies, e.g. Facebook, Google, Microsoft, and organizations have decided to pull out of or cancel upcoming events and conferences due to the coronavirus outbreak (Rodriguez, 2020).

Before And After COVID-19.

Though the COVID-19 outbreak is relatively novel, global markets have taken a toll.

To get a holistic view of the current global market condition, [major] global stock indices are analyzed.

1. How Was The Global Market Condition Before The COVID-19 Detection?

Figure 1 show the MSCI World index during the past 5 years, indicating an overall positive global trend.

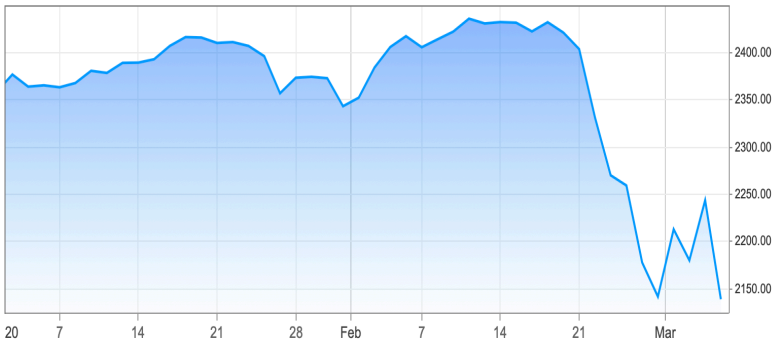
Figure 1. MSCI World Index. 5 year trend 2015-2020

Source: CNBC n.d.a

2. How Is The Global Market Condition After The COVID-19 Detection?

Evidently, COVID-19 has affected the global markets adversely (see fig 2).

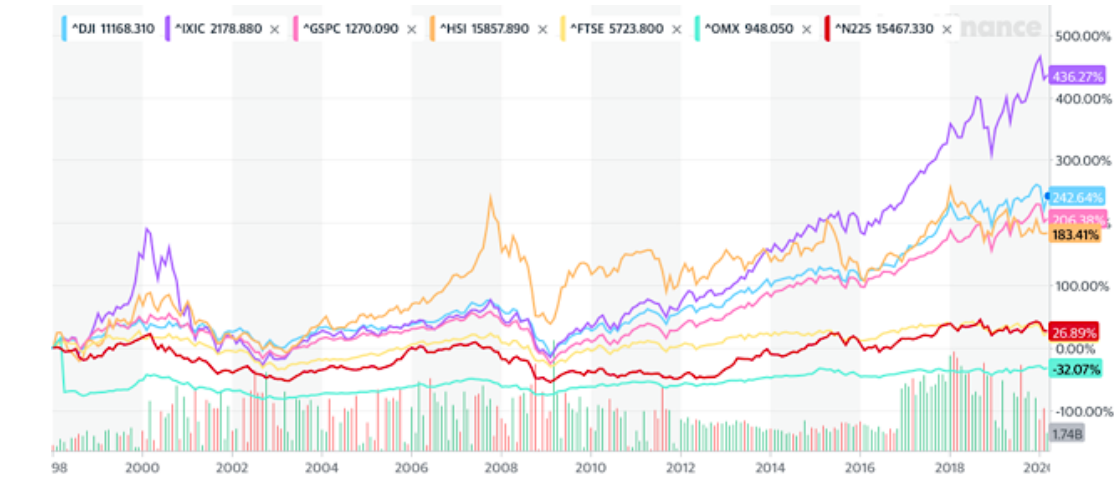
Figure 2. MSCI World Index YTD 2020



Source: CNBC n.d.b

However, to truly evaluate the ramification of the decrease during this short period, major global indices, incl. Stockholm Stock Exchange OMX 30, during the period 1998 – 2020 have been analyzed (see fig 3; see Appendix A for list classification) to display the market falls and their effects during key periods; such as the IT bubble (2000), terrorist attacks (2001), and the financial crisis (2008).

Figure 3. Market Indices 1998-2020



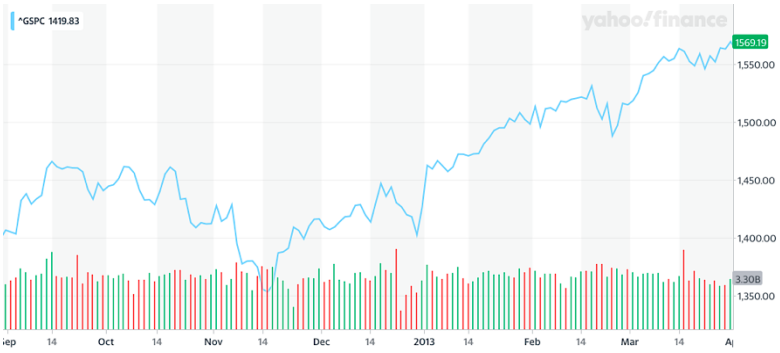
Source: Yahoo Finance

The indices accordingly indicate an overall positive trend. The outbreaks of SARS and MERS are not historically easily detected; SARS´ duration is assumed for the period 2002 -2004, and MERS´ 2012 - current (NIH, n.d). Nevertheless, COVID-19 is clearly striking a toll on global markets, the question is therefore *to what extent?* Since the outbreak is in its infancy, the overall impacts are hard to detect.

But to grasp the ramification of the COVID-19 outbreak to some extent, the S&P 500 has been examined during the MERS outbreak to act as a comparison (see fig. 4) (since the SARS outbreak is hard to detect in lieu of the IT bubble and terrorist attacks). Assuming the MERS outbreak did in fact affect the market at least during its inception in September 2012, one can see that the market began falling in October, hit rock bottom in November, and then recovered in January the year after. Still, it is important to consider that the market during this year (2012) was still recovering from the global financial crisis (2008); and the US quantitative easing (bond-buying) program of 2008 was very much in effect.

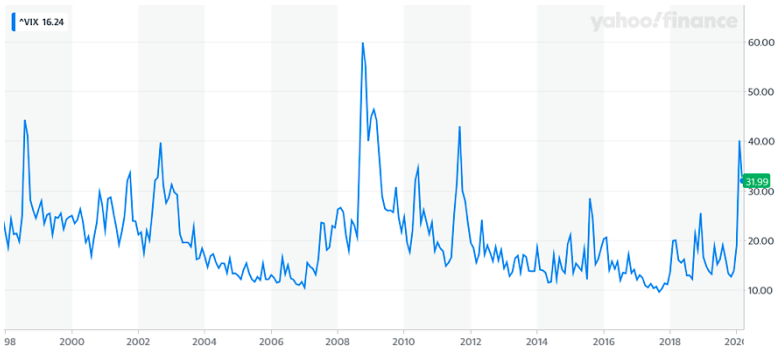
Finally, the volatility Index (VIX) during the period 1998 – 2020 is examined to estimate the possible ramification of COVID-19 on the market (see fig. 5). Evidently, volatility spiked during 1999 (IT bubble), 2008 (financial crisis), 2012 (EU debt crisis) and 2020. It is thus safe to assume that COVID-19 has pushed the latest spike indicating stress in the market.

Figure 4. S&P 500. Sep 1 2012 – Apr 1 2013



Source: Yahoo Finance

Figure 5. VIX Volatility Index 1998 - 2020



Source: Yahoo Finance

What Are The Political, Social, And Economic Effects?

The most severe COVID-19 case in Europe is in **Italy**. The country has initiated nationwide shutdown of schools and universities throughout March 15 in an attempt to contain the outbreak (Follain, *et al.,* 2020). Likewise, further societal contractions are in place, such as cancellation of sports competitions, which allegedly is increasing

the risk for a recession in the country (ibid). The government is investigating to insert a €3.6 billion stimulus package; and is increasing the deficit estimation of their DGP to above 2.4% (ibid).
Consequences: (1) Shutting down schools and universities force people [workers] to stay at home and care for their children. Consequently, less people attend work, and thus will have less household income, which naturally lead to a decrease in purchasing power. (2) Subsequently, companies will lack the workforce to properly fuel their engine and possible earnings contractions may realize. These factors may push Italy down a slippery slope to recession. (3) What´s more, Italy may drag other linked economies with it; trade dependent economies such as France, Germany, Austria, and the Balkan nations may see a downfall (Ellyatt, 2020), consequently affecting value chains linked to these nations.

Sweden has also seen a rising number of the COVID-19 outbreak throughout the nation. Initially, the virus is assumed to come with people who have travelled or been in contact with people who travelled to northern Italy or Iran. The government pushes for contact-tracing in an effort to contain proliferation and has inserted travel constrictions (krisinformation, 2020). Additionally, many companies, such as Volvo, SKF and Scania, have restricted domestic and international work related travels and resorted to online meetings instead (Arevik, 2020). Likewise, universities urge students and employees who have been in contact with affected areas to stay at home; while some schools are shutting down.
Consequences: (1) Similar to Italy, should schools shut down, people ought to stay home from work and care for children. However, the situation has not required such measures yet. (2) But should the development of the COVID-19 outbreak push onto that direction, the economy may take a hit; especially, since the Swedish central bank hiked interest rates as early as in December 2019. This monetary contraction policy may be short lived, and the CB may be forcing interest rates down again in an effort to avoid a possible recession. (3) Likewise, Swedish companies that are highly depended on [Asian] trade may sooner than later see a toll to their production; as many production sites in China are in quarantine, importing intermediate or finished goods pose a challenge thus affecting production of Swedish companies; consequently, affecting the country´s imports and exports likewise.

China, where COVID-19 originated, has implemented a government mandate shutdown in a containment effort affecting several industries throughout the country. The Chinese economy is now seeing its first contraction since its great surge in the 1970s (He, 2020).
Consequences: (1) Direct consequences of the government mandate shutdown include labor outcome; as previously mentioned, less work result in less household income and less spending; China has not reported any fiscal or monetary policies to battle this. (2) The Chinese production shutdown affect all trade depended countries (including Sweden). (3) Since China is attempting to switch from a low value added production country into offering high value added activities and being part of high value added global value chains the COVID-19 outbreak may well make or break such efforts. The outbreak may force companies to look to other countries for low cost activities, such as low cost production or labor. And eventually gaining China higher value added activities, such as technological services. On the other hand, China may be forced to continue with low value adding activities to stop the economic contraction due to the COVID-19 outbreak, causing a setback to the ambitious goal of the *"Made in China 2025"* strategy. (4) On a different note, a positive outcome of the COVID-19 outbreak which caused domestic production shutdown has pushed nitrogen dioxide levels down, improving the air quality in the country; however, this may be a false positive as carbon emission levels will probably increase again once the shutdown derails.

USA has proposed a bill on March 4 concluding $8.3 billion to help fight the COVID-19 outbreak and the spread of the virus; of which $3 billion is going towards research in finding a vaccine and to diagnostics tests, and $2.2 billion are to be used in preventive actions. However, the acceptance of the bill is still pending (Foran *et al.,* 2020). Moreover, USA is heavily dependent on China both as an import origin and export destination causing US industry turmoil; 22% of US imports come from China, while 11% of US exports are destined to China (Oec World, n.d.). Thus, since China has a production shutdown, delayed supply chain inputs consequently delay US productions forcing domestic manufacturing, which account for 11% of the US economy, down; the national factory activity level came close to contraction levels amid the coronavirus outbreak in February (Mutikani, 2020). Consequently, less inputs result in less outputs; Apple, for instance, has been

affected by lower production, thus warning investors the company will not meet revenue targets for Q1 2020 (ibid).

Consequences: (1) Delayed inputs cause supply chain bottlenecks and slowdown in manufacturing which may lead to not only less production but also less workload (*read* less consumption). (2) Import and exports may be affected, impacting the country´s trade balance.

Industries Highly Affected By The COVID-19 Outbreak.

Airline, travel, hospitality, tourism: Major airlines, such as Delta, United, SAS, etc. as well as countries, has introduced travel restrictions and cancelled flights to and from highly affected countries, e.g. China, Italy and Iran. Less travels subsequently lead to less tourism and decreasing hospitality rates.

Heavy manufacture depended industries: Industries such as automobile and auto parts, technology and components e.g. smartphones, computer, etc., and apparel, are all subject to manufacturing, especially from Asia, and therefore may be affected by production halts. For instance, Swedish giants H&M and Volvo have several production sites in Asia.

Entertainment: Accordingly, film festivals, sport tournaments, and the like, are postponing events due to the outbreak.

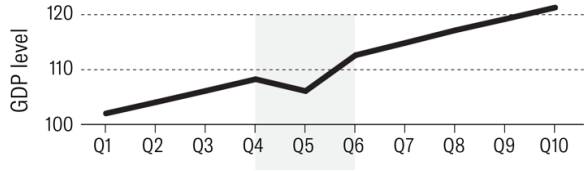
Industries That May See A Positive Impact Due To The COVID-19 Outbreak.

Healthcare technology and medical equipment companies: In an effort to virus containment, China has called on its technological scene to develop measures for the outbreak. Supposedly China has developed disinfecting-robots, smart helmets that can detect fever, automated drones which conduct thermal imaging and deliver medical equipment, amongst other things. The country has allegedly also taken greater advantage of the its surveillance system by detecting- fever and individuals not wearing masks (Jakhar, 2020). However, the tech scene (in China as well as globally) is one industry not to take light on as inventions and innovations may very well be on their way.

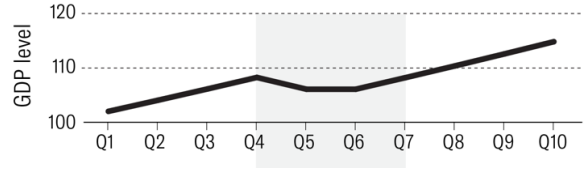
What Economic Impacts May COVID-19 Have On The Global Market?

Since almost all countries are linked through global value chains (GVC) and regional value chains (RVC), the COVID-19 outbreak in one country do affect all countries in one way or another, especially trade. While the outbreak has taken a toll on the world´s second largest economy, China, the ramifications of COVID-19 can be felt throughout nations. Some industries are evidently hit harder than others, such as airline, travel, hospitality, and tourism, and some countries likewise, e.g. Italy and China. The China production shutdown hit several industries around the world as global companies source inputs from the country which now are delayed subsequently pushing their manufacturing into a bottleneck. Likewise, the eruption of inputs, such as labor and material, affect input price, and ultimately output price. Additionally, shutdowns that retain people from working cause a decrease in household income, which consequently result in less purchasing power and ultimately less consumption. Decreased spending cause economic contraction, and thus monetary and fiscal policies are required to prevent a *real* recession (economic contraction). Ultimately, the COVID-19 outbreak may realize tumbling GDP growth; three possible market supply and demand scenarios can be expected: V-shaped, U-shaped, L-shaped (Carlsson-Szlezak *et al.,* 2020).

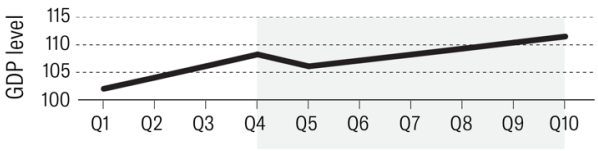
V-shaped: a shock, due to output imbalances caused by e.g. the production shutdown and consequently delayed inputs and manufacturing bottlenecks, cause a sharp decline but eventually growth rebounds.



U-shaped: more severe than the V-shape; in this scenario there is a permanent loss of output even though growth eventually recover.



L-shaped: the worst scenario; significant damage is made to the supply side, such as labor or productivity e.g. the shutdowns eventually cause companies to lay off workers to a great extent increasing unemployment, consequently impairing growth prospects.



Source: Carlsson-Szlezak et al., 2020

COVID-19 is likely a V-shape scenario as the effect to the market is more a correction than a bear prospect. Likewise, comparing COVID-19 to MERS market ramifications estimate a V-shape scenario. However, although COVID-19 has a mortality rate significantly less than MERS and SARS, the virus is spreading at a rate equal to regular influenza causing societal and production shutdowns. Thus, the virus could hit hard on consumer confidence making a U-shape scenario possible. An L-shape scenario is currently not deemed probable (Carlsson-Szlezak *et al.,* 2020), however, in the long-run should no cure for the COVID-19 outbreak be present, severe damage to employment rates are unavoidable, requiring fiscal and monetary policy reforms.

Microeconomic impacts: The COVID-19 outbreak may structurally impair consumer confidence even though assuming a V-shape or U-shape scenario where growth recovers. Fear of travel, fear of crowded areas, etc. may increase the demand for online and remote life; such as online workspaces, online shopping, and online education. This give greater importance to certain industries, *ceteris paribus*, over others, such as health-tech, technology (gaming, VR, AR), ICT, social media, online services, and home-delivery.

Macroeconomic impacts: Initially, nations have worked towards a more connected trade, increasing the importance of GVC. However, COVID-19 may put more emphasis on RGV. Likewise, prospects of Industry 4.0 and environmental impacts have pushed countries and companies to stress the importance of sustainability (both environmental and competitive). For instance, Industry 4.0 may emphasize decentralization over previous immense centralization practices; and environmental concerns have pushed companies to seek closer-to-market production in an attempt to cut down on their environmental footprint. Thus, RGV and closer-to-market production may gain traction, ultimately, affecting the labor force. Additionally, government spending and investments in public healthcare system as well as prevention system may increase; and the importance of a well-functioning global health care system may be vital for future virus outbreak prevention. Hence, while RGV may gain traction when it comes to trade and consumption, global health policies may also gain immense importance. Finally, interest rates may be reduced (thus regress the interest hike by the Swedish CB for instance) in an attempt to boost consumer confidence; however, if fear and uncertainty remain consumers may engage in more saving over spending. However, as interest rates are low, consumers (investors) must resort to high risk investments to gain any interest on their savings in order to track inflation.

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APPENDICES

Appendix A. Indices classification.

- NASDAQ Composite, USA*: IXIC*
- Dow Jones, USA: *DJI*
- S&P 500, USA: *GSPC*
- Nikkei 225, Japan: *N225*
- Hang Seng, Hong Kong: *HSI*
- London Stock Exchange, UK: *FTSE*
- OMX30, Sweden: *OMX*