

IMPACT OF COVID 19 ON MANUFACTURING INDUSTRIES IN INDIA

Gourav Gupta

Student, Master of Business Administration in Finance, Chandigarh University, Mohali, India

E-mail: gouravguptagg111@gmail.com

Chahat Jain

Student, Master of Business Administration in Finance, Chandigarh University, Mohali, India

E-mail: charujain0408@gmail.com

Dr. Vikas Tyagi

Associate Professor, University School of Business, Chandigarh University, India

E-mail: vikas.e8077@cumail.in

ABSTRACT

In the paper we appraise the impact on covid-19 on manufacturing industries. Due to rise the covid-19 the Indian and whole economy is likely to slowdown. Each of the sector has to be suffered like hotels, automobile, railway, airline etc. all are shut down. So the purpose is to appraise the impact on covid-19 on manufacturing industries. The manufacturing sector is the major part of the economy as it account for nearly 16% of the global GDP in the 2018. This covid-19 outbreak has also disrupted in the manufacturing of Asia and also impact on the Indian manufacturing industries. Due to lockdown and quarantine the all product of import and export are shut down. This covid-19 has also impact on the demand and supply side. The supplies of the products are very slow due to lockdown. With the help of this research paper we enlighten the impact on covid-19.

INTRODUCTION

At the end of 2019, a novel covid-19 has identified as cause of cluster of pneumonia cases in Wuhan in city in the Hubei in province of china. It rapidly spread resulting is an epidemic throughout china followed by an increasing number of cases in other country throughout the world. United states, Spain, Italy, Germany, China, are the most effected countries due to the impact of covid-19. That's why there is a lockdown situation in the India or many countries due to every sector has to be suffered like manufacturing sector, banking sector, etc. the impact on covid-19 on manufacturing industries like automobile, food and beverage, chemical industries, electronics, metal, aviation, pharmaceutical, and others. The spread the novel covid-19 pandemic is likely has halted all the operation and businesses in India. Most of the things we import from the china. But now all the imports are shut down. So the major impact on the covid-19 on

manufacturing industries to provide essential products and take care of the social distancing among customers.

Impact of COVID 19 on global manufacturing industry:

Manufacturing industry is a backbone of the global market in the post industrialization era as it contributes 16% of the global GDP in the last face of 2018. It is the combination of designing, processing, and preparation of raw materials to the affective and consumable commodities some examples of manufacturing industries automobile, chemical, food processing, machinery, electronic and other industries.

With this it clearly reflects the focus of government across the countries on manufacturing. Some of the initiatives of the developed and developing economics includes make in India (MII) and made in china (MIC) 2025.

MIC 2025

It is the first stage of the larger three step strategies to transform china into leading manufacturing power as per the economics survey 2019-20 china is focusing on diversification and specialization of the products maximum in the developed economics(Where as India stand towards the diversifying the markets and having little focus on specialization).

MII 2015

It is the flagship program launched in 2015 to encourage the merchandise sector in India. It aims to reduce the India's dependence on exporting nation by producing their own goods. Since 2012 there is a great hype in FDI in India which followed an optimal trend it accounts for \$592 billion (USD) in the last year which clearly reflects the sign of investment friendly policies and FDI allowances in the several sectors(Ex:Air India is open for bidding to increase efficiency and fiscal wallet of the government)

However after the outbreak of CORONAVIRUS the FDI inflows had witnessed a sharp break through. As per UNCTAD (United Nations Conference on Trade and Development) predicts the cause to global FDI will shrink **by 5% to 15%**. It will be coupled with factories shut downs. The maximum negative impact is predicted to be seen on Automobile chemical, Electronics and aircraft sector as they are highly import dependent sectors.

Impact on various industries:

1) **Electronic industry:**

In ASIA

As **china** holds for 85% of the total component's market in Smartphone and 75% in television. Majority of the critical components which can boost the world economy digitally comes from big giants of china which includes Xiomi, vivo,etc. With respect to COVID 19 in the first quarter of 2020 Chinese vendors had increased the price of components by 2% to 3% resulted in great impact on the developed and developing nations.

Among the major continental markets china is the most affected by the condition due to the breakdown of the manufacturing process and shutdown of the factories.

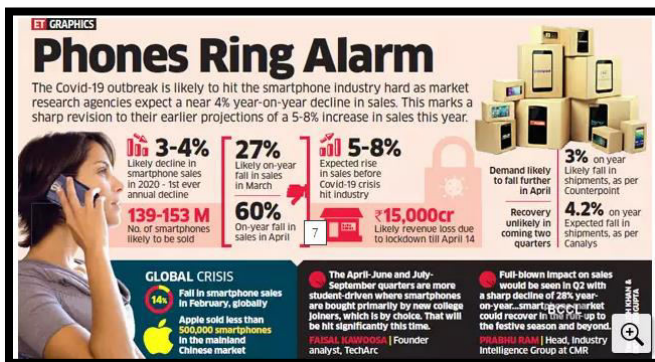
In the major investment led growth and world's fourth largest economy like **Japan** is witnessing a major lockdown which is facing a huge black eye on global electronics sector (ex:Samsung screen is used as a assembly product in USA's Apple).

IN EUROPE

Most of the electronics manufactures had closed their factories and minimizing the production output (decline in sale of Infineon).For instance dialmerVolkswagen declared they will temporary shutdown the production of the engine which will also impact the import dependent companies in this integrated world.

IN NORTH AMERICA

In an era of data analytics the big giant like Google had been impacted by a massive set back in terms of futuristic global harmonic incentives such as electronic nano car to dominos.With respect to COVID 19 there had been a great roll out of Silicon Valley as America is one of the worst effected nations due to COVID 19.



2) Automobile Sector:

IN ASIA

As Asia account for world's largest trading basket with having a major organizations such as **SAARC,MGC,RCEP,ASEAN** and a large chunk of import dependent markets led to the set back of most of the developing economics of indo-pacific region.

A major global hand holder of automobile sector like Maruti& Suzuki,Kawasaki is facing a shortage of supply side constraints which can delay the idea of Paris climate agreement of 2015 of making a great shift towards electric vehicles (EVs).

In developing nations like India,Indonesia is having a major demand of two wheelers which is interconnected to the majority holder **Japan'shero Honda.**

As this virus is contained in china which accounts for maximum can seems to be a disastrous in the futuristic economy.This reflects the **COVID WAR**in the region with renewable energy sources today there are around 5 million EVs on the world roads where china is in the leading position in terms of largest EV markets and research and developments in renewable sector.Lithium ion batteries had scaled up for production for electric vehicles but the COVID19 pandemic had derailed the **global E-mobility revolution** and battery demand in the global market.

IN EUROPE

As Europe is a hand holder of various big companies like MercedesBenz which is one of the first producers of electric vehicles had been disarmed by the global pandemic. The other regions such as Italy and the Scandinavian countries are facing a massive loss due to shut down of markets as per WHO guidelines.

IN AFRICA

A German auto **BMW** had shutdown the plants across the European region and Rosslyn in south Africa until 19thApril owing to the lesser demand and unemployment to help migrate the spread of coronavirus likewise Toyota motors in the **Czech republic** and American auto is also idling the ford factories in the region with regard to effect on the demand side the Toyota and Nissan had also shifted the focus from Africa to other nation as it already had shown the pandemic case of Ebola virus in 2009.



3) Food processing industry:

IN SOUTH AMERICA

As South America is the home to the world's greatest river Amazon and a most fertile basin accounts for majority of the food production in the global economy such as sugar cane, rice, wheat, pulses, potato, tomato, and other kharif and Rabi crops.

A majority of global market is highly dependent on imports from countries such as Brazil, Argentina, Chile, Venezuela and with the help of mercusor Free trade agreement they had a flourishing demand the early face of 21st century with effect to COVID19 majority of the perishable commodities are widely effected as a large food processing industry in the other regions of China, India, USA, Nigeria is effected by the lockdown.

In order to maintain the situation of COVID19 the Brazilian president along with the other counter parts is well aware and trying to store the commodities as much as they can in the cold storage which is already in a full flash capacity.

IN EUROPE

The country like Italy, France, which is the major destinations and a leading rank holder UNESCO world heritage sites is on the top front to tackle the pandemic. The flourishing **wine industry** in Spain and France and majority of the packed food (as per codex norms) is inside the territory waiting for the resolving of this huge pandemic.

In order to maintain the economy the government had shifted this set back to a great policy concerns with removing the export duty and increasing demand side constraint in the market poll.

IN AFRICA

As Africa is the home to **cocoa industry** and a massive population density with a huge dependence on the markets of India and china in terms of fulfilling the food requirement from atlas to the north and Cape Town to the south.

IN ASIA

Countries such as Indonesia, Malaysia are a leading producer of edible oil (palm oil) and with the blockade in the custom market it witnessed a black chain of crisis in the indo-pacific region. Besidesthese countries such as china is not able to provide the effective requirement of raw material in the food processing sector.

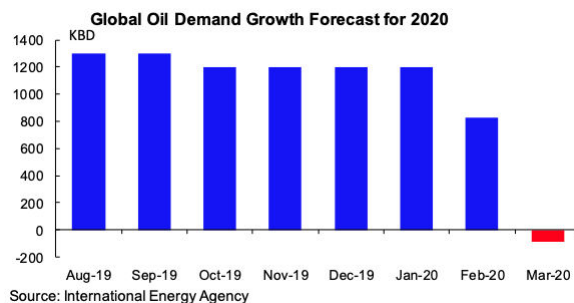


4) **OIL SECTOR:**

With the covid 19 pandemic coupled with the OIL WARbetween Saudi Arabia and Russia the global oil price reduced from \$50 per barrel to \$26 per barrel (179 liters) which had raised a questioned in the gulf region with urgent meeting of **gulf corporation council in the Riyadh.**

In this regard the countries already facing a huge crises of political war had also started witnessing a breakthrough of this global pandemic i.e.COVID19.

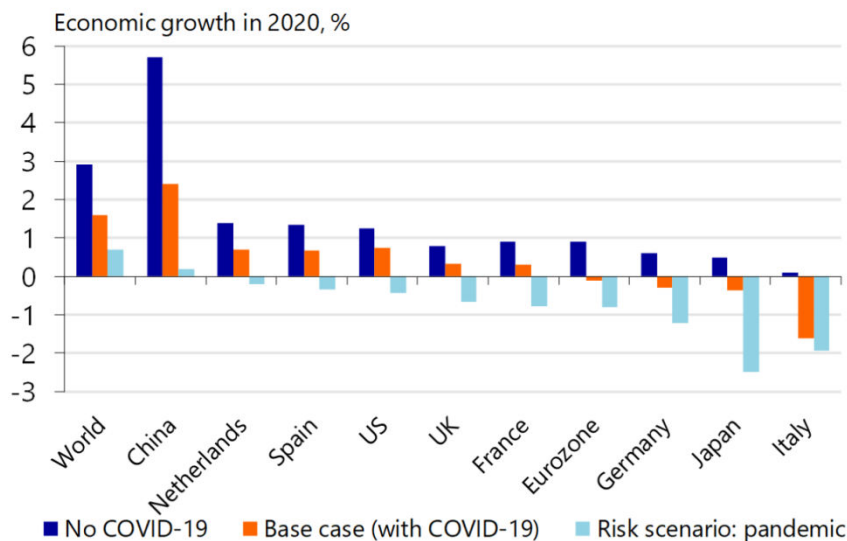
In the fourth industrialized era where most of the above sector is dependent on crude oil reflects a breakdown in the manufacturing industries which can harm the after math of the covid 19.



MEASURES TAKEN IN THE GLOBAL MARKET WITH RESPECT TO COVID 19:

A temporary shift from the profit motive to the service motive the various government of the world such as Japan, Germany, Spain, France, United Kingdom, and USA had suggested the respected countries to resolve out the issue as soon as possible with providing opportunities such as:

- Work from home facility
- Compulsory insurance of the various stake holders
- Providing essential services at the door step
- Involving of the automobile giants for ventilator production
- Respected research and development in order to contain the virus (ex: bear bile by china)
- In acting the essential commodities act in order to avoid black marketing.



IMPACT OF COVID19 ON ASIAN MANUFACTURING INDUSTRY:

INTRODUCTION:

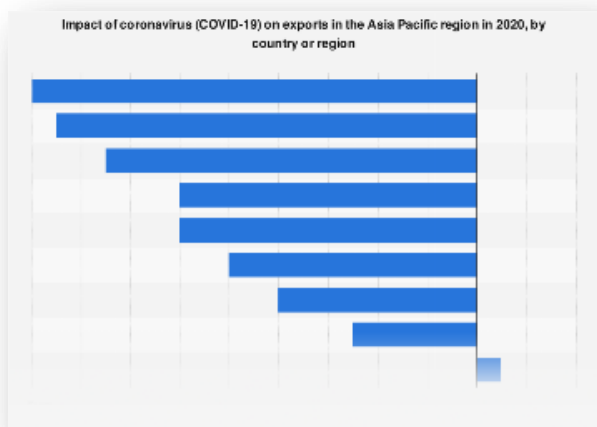
The coronavirus outbreak had made a huge destruction for manufacturing sector in Asia as it accounts for more than 50% of the world mercandise trade and a holder of majority of trade chock points E.g.:**South China Sea** and **Malacca strait** etc. Majority of these countries are regarded as developing countries as designated by WTO.

Some of the coupled reasons of the **COVID19** outbreak with manufacturing industries are:

This outbreak occurred just as suppliers were shutting down for **lunar New Year holiday**(from January).The lunar year is the major disruption for manufacturing sector occurs this continent with **COVID 19**the situation had worsen which will affect the demand and supply of other major economics with this scenario the factories had not resumed their operations from quarter one of 2020.

This will also affect the emerging **gig economics** which is a major source of employment and help in achieving social mobility as per standards of world economic firm (**Amazon, Zomato, and Swiggy**).

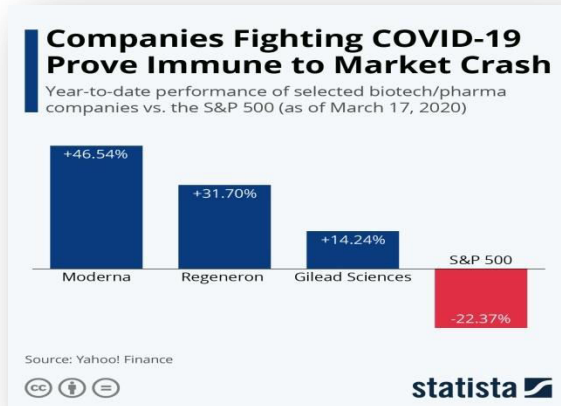
Trading is a major concern as most of the cargos in the indo-pacific region were stucked due to this global threat in the regions of **Indonesia, Philippines, Hong Kong, Japan, south Korea, India** which further lead to the mass migration of work force and shutting down of the factories premises. This crisis is further coupled with the lower supply of the essential commodities which are highly needed by the countries E.g.: Hong Kong's custom area had dismissed the medical trade used in **HYDROCHOLOROXYINE (HCQ)**.



Medical and pharmaceutical sector:

Asia holds majority of the land in the IT sez region which clearly reflects out the potential of **world's largest pharmacy that is tropical evergreen forest**. As per drugs control agreement of WTO.

As Asia is the **largest manufacturing** hub of drugs manufacturing industries and major giants like **Besivance, Bicol** are the leading producers of essential drugs in the global pharmaceutical demand.



With the sudden outbreak and great affection in the Asians economics this industry had faced the shortage of essential ingredients that are used to curb the disease resolution worldwide.

Ex: China is the largest producer of the basic material that are used to produce hydrochloroquine which is demanded by the USA as it can provide relief to the COVID 19 patients globally. Couple with the HongKong holds the tag of mass production of the hand sanitizers and the disease curable masks i.e. N95 which are stuck in the custom union near the SOUTH CHINA SEA.

Automobile industries:

In this integrated world where the Asia accounts for more than the **50% of the global population** and a major trading hotspots in the indo-Pacific make impact severe in one go once followed the path of spreading around **60% of the world automobile market** in Asia where the Hyundai, Maruti& Suzuki of south Korea, Yokohama of Japan and Kia Nissan had face a huge break through with half of the quarterly sale due to lack of the **ASSEMBLY LINE** which are fulfilled by the other countries with this many countries had stopped shipping the cargos in the Asian markets.

As per **VICTORIA KAW** kawa vice president for East Asia and the pacific at the World Bank stats that this reason is already copping with international trade tensions and repercution of covid 19 in china are now faced with the global shock.

CAR MANUFACTURING							
	Feb-19	Feb-20	% change		YTD-19	YTD-20	% change
Total	123,204	122,171	-0.8%		244,094	240,485	-1.5%
Home	25,203	27,172	7.8%		52,067	47,611	-8.6%
Export	98,001	94,999	-3.1%		192,027	192,874	0.4%
% export	79.5%	77.8%			78.7%	80.2%	

Oil industry:

Asia is the neighbor of the oil giant that is the gulf region with an organization called **OPEC & OPEC+** in the industrialized world where oil is considered to be the most important source of factories production around one Third of the total oil exports are through the Malacca strait of Indonesia. With the **Kyoto protocol** and **Kigali convention** of full filling the environmental dream had developed the potential of the solar energy in the Asian region. This incentive by the global community had over through the demand of oil for the effective subsidiaries production such as: Electric vehicle and Bio fuel policies.

Company	Hedge ratio (in percent)	Jet fuel price (in dollars per barrel)
AirAsia	73	60
AirAsia X	73	60
Asia Aviation	73	76
Singapore Airlines	65	75
Bangkok Airways	50-70	75
Cebu Air	46	77
Cathay Pacific	35	64
Garuda Indonesia	31	69
Thai Airways	30	76

Source: DBS Bank

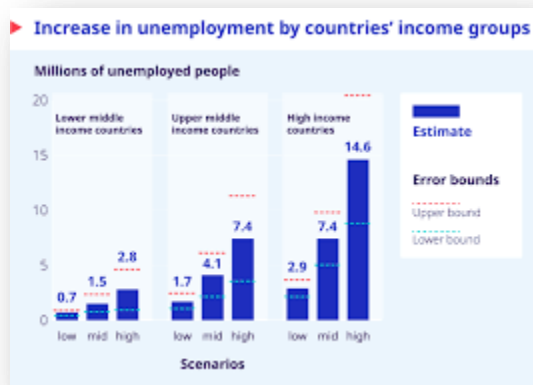
Electronic and IT sector:

Asia is a land home to the major informal sector of employment such as: Gig economy which is clearly reflected in the E-commerce rank holder of **Ali Baba** and **flipkart**. As this companies act as a source of income for mass population but with the impact of covid 19 they are facing a huge setback .As it covers majorities of the sectors & the 24*7 employment source that is:

- Packaging sector.
- Delivery sector.
- IT sector.
- Customer care Etc.

Ali baba will be one of the versly effected E-commerce platform as it sells many wet market commodities that are unfit for human consumption. From the last 25 days the web sites had shutdown which totally stops out the sale through this **C2C** or **B2C** medium of commodity exchange.

Although this sector provides with the more facilities of **WORK FROM HOME INITIATIVE** but it will surely stops up the **R&D** work which need a collaboration of mind in the effective environment.



IMPACT OF COVID-19 ON INDIAN MANUFACTURING INDUSTRIES:

Trade in the time of covid-19 the economic impact on India.

The effect of covid-19 is likely to be seen rise cases in India. Due to covid-19 India has lockdown for 21 days bring the country GDP will decline by 4.7%. The nation has started observation second round effects the virus spread a complete halt to economic activity.

In India 53% of businesses will effect by covid-19. Various hotels and airlines trains are also shut down.

In the third week of March Amazon and flipkart announced that stop the sale of non essential products it only sale the essential products. Due to rise the covid-19 the stock market has also fall down .stock market in India has posted their worse loss in history on March.

The prime minister of India Narendra Modi said that during the 21 day lockdown if this pandemic is not contained it could set us back by decades.

Micro, small and medium enterprises:

The prime minister has announced the economic task force to suggest some steps to ease the situation.

In Bangalore, more than one fourth of India 69 million micro small and medium enterprises may shut stop.

Businesses have been taking a hit due to covid-19 the supply chain has also been disrupted. Import is down and markets are bearish.

An MSME representative has appealed to government to take action to tax concession and easy access to credits.

The china conundrum:

A novel covid-19 caused by severe acute respiratory syndrome has affected the world since it December 2019 in Wuhan. In the wake of pandemic the supply will be extremely weak. Raw material will be in short supply.

In Wuhan it is largest auto hubs in the world. When Wuhan shut of months it would be shortage of components too.

While the world is battling the pandemic and government hyper to save their citizens and the economy. The one nation is stable according to the WHO this is when the level of drop peaks china in the process of recovery begins much of the countries still in the stage of pandemic.

What can the government do?

Government of India is taking all the necessary steps to ensure that we are prepared well to face the challenge and threat posed to the covid-19.

The finance minister has announced the date of tax filing was extended and the amount of EMI also extend.

The other step government should ease to access the credit of MSME.

The government also helps the industries to break some taxes and also provide the salaries to employees.

What is the impact of covid-19 on Indian economy?

World health organization is working with the global experts to provide advice to countries for their precautions and measures.

In the time of outbreak of covid-19 in china is expected to have a significant impact on the supply of products including economic slowdown rate.

In China various cities are lockdown. In China approximately 19.71% GDP at purchasing power parity it will impact the economic globally.

It will estimate that the global GDP will suffer an impact of around 0.5%.

The national lockdown to spread the novel on covid-19 pandemic is likely has halt all businesses in India with essential services. In the real estate sector – among the top contributors to the nation's economic growth- has halted over a 1.3 billion people want under serve restrictions.

The sectors, according to analyst which impact on Indian economy:

- Labour issues.
- Impact on business and financials
- Impact on work.

Impact on Indian economy:

Up to a large extent, it will impact the Indian industries and economy in imports the dependence of India on china is huge.

India imports electronic products from china is 45% one third of machinery and two fifth of organic chemicals that India purchases from the china. 90% of mobiles are come from china in India.

Import from china in India averaged 126.47 INR billion from 1991 until 2020. Reaching an all time high 467.49 INR billion in September of 2018.

China's share in total imports of India.	
Organic chemicals	37%
Inorganic chemicals	13%
Dyes	28%

In terms of export:

The main item to be exported from china to India is electric machinery and equipment organic chemicals, machinery silk and oils.

In China almost 72% of India Company is situated in cities like shanghai, Beijing and Shandon. In this they work in manufacturing, industrial and manufacturing services.

Impact of covid-19 in the industry is moderate:

According to the report the pharmacy businesses and retail shop are also face supply chain and it raise the price by 10%.

Many of the industries and business are shut down due to covid-19 .some commodities like upstream and downstream oil companies could witness the lower global demand.

In India GDP also fall down by it will more down in 2021 if the action is not taken urgently.

In the third quarter (October to December) growth is slowed down to 4.7% and it will fully impact on the fourth quarter.

Let's have a look at the sector wise impact on Indian industries and chemical industry:

The chemical industry has witnessed growth of 13-14 % in the last 5 years. The major growth drivers, behind India chemical industry could be

- **Structural advantage:** with a growing market and purchasing power, the domestic industry is likely to growth at over 10-13% in the coming year. Growing disposable income and increasing urbanization are fuelling the end the consumption for paints textiles, which is turn leads to opportunity for chemical companies.
- **High domestic consumption:** the chemical industry in India is the largest consumer of its own products, consuming 33% of its output.
Covid-19 spread by industries.
- **Shipping industry:** covid-19 outbreak has impacted on the shipping industries, which the slump in demand for goods. Vessel has decline by 75-80% in trade.
- **Auto industry:** the global economy caused by the novel covid-19 comes at the time when both affect the Indian economy and the automotive industry was hoping for recovery. If the shutdown in china continues then it expected to result is an 8-10% contraction of Indian auto manufacturing in 2020.
- **Pharmaceuticals industry:** being one of the top formulations of drug exporter in the world, the pharma industry relies heavily on import as on bulk trades.
- **Textile industry:** due to covid-19 outbreak many garments and textile industries are shut down and halt in the operations.

Covid-19 impact: Indian economy to take hit as covid-19 outbreak jolts businesses says FICCI

The Indian economy is going through a major slowdown. Which was evident through the recent quarter before the crisis struck? Its impact on both side demand and supply elements.

Impact of covid-19 on demand side:

Covid-19 has disrupted the demand chain across the country and wins disruption. It can be seen at the tourism and hotels and aviation sector are among the worst affected that are facing the maximum impact on sector crisis.

Closing of cinemas and declining footfall in shopping has affected the retail sector by impacting the consumption of both essential items.

The financial market has experienced uncertainty about the future course of covid-19 .the market was repeatedly wiped off due to the fall of sensex in the month of March.

Impact on covid-19 on supply side:

In covid-19 the supply side of shutting down of factories results a delay in supply of goods from china which has affected a huge number of manufacturing sectors which source their intermediate and final product from china. Some sectors like pharmaceuticals and electronic and chemical product impacted on a very big time.

Impact of covid-19 on financial markets:

The united nation conference on trade and development has suggested that India impact due to covid-19 outbreak could be around us\$348 million. India is among the top 15 countries that have been effected most as a result of manufacturing slowdown in china and that is disrupted slow down.

For overall the total India impact is estimated to be the most of chemical sector is 129 million dollars, the textile at 64 million dollars.

CONCLUSION:-

As it is one of the worst downgrade period after 2008 recession and with the great impact on world's hand holders our economy had suffered a massive loss in all the sectors as it is rightly said "**ECONOMY=EMPIRE=GROWTH**" and with **Adam smith's socialist philosophy** the "economy must be integrated with pharmaceutical industry" in order to strengthen the relation rather than playing too big to fail game in this integrated world.

References:

<https://www.omrglobal.com/industry-reports/impact-of-covid-19-on-global-manufacturing-industry>

https://m.economictimes.com.cdn.ampproject.org/v/s/m.economictimes.com/news/company/corporate-trends/manufacturing-grinds-to-a-halt-in-key-sectors/amp_articleshow/74765038.cms?amp_js_v=a3&_gsa=1&usqp=mq331AQFKAGwASA%3D#aoh=15857528233250&referrer=https%3A%2F%2Fwww.google.com&_tf=From%20%251%24s&share=https%3A%2F%2Fm.economictimes.com%2Fnews%2Fcompany%2Fcorporate-trends%2Fmanufacturing-grinds-to-a-halt-in-key-sectors%2Farticleshow%2F74765038.cms

<https://www.power-technology.com/comment/covid-19-electric-vehicle-production/>
<https://www.worldbank.org/en/news/press-release/2020/03/30/east-asia-and-pacific-countries-must-act-now-to-mitigate-economic-shock-of-covid-19>

<https://blog.payoneer.com/news/coronavirus-manufacturing-asia/>

<https://www.fpri.org/article/2020/03/central-asias-force-majeure-fears-impact-of-covid-19-outbreak-on-chinas-natural-gas-supply-demands/>

<https://www.indiatoday.in/news-analysis/story/trade-in-the-time-of-covid-19-the-economic-impact-of-coronavirus-on-india-and-beyond-1661118-2020-03-29>

<https://www.jagranjosh.com/general-knowledge/what-is-the-impact-of-coronavirus-on-indian-economy-1582870052-1>

<https://news.abplive.com/business/coronavirus-impact-economy-to-take-hit-as-covid-19-outbreak-jolts-businesses-says-ficci-1179454>

This is not the way references are mentioned. Check other references and revise appropriately.

Countries should start with capital letters

