COVID-19 in China: facts and figures, the big picture

1.1 The beginnings

By the end of December 2019, a new coronavirus (later called SARS-CoV-2) appeared in Wuhan\(^1\), inflicting a very contagious disease (COVID-19\(^2\)) on the local population. At the onset of the epidemic, Chinese authorities downplayed the event, severely punishing the whistle-blowers for “spreading false rumours”, although some of them were doctors\(^3\). Afterwards, when the peril became quite apparent, instead of taking prompt containment measures, the authorities tried to cover up the epidemic outbreak, concealing it from the World Health Organization (WHO), as well as from both the national and the global communities. Under such circumstances, the virus could spread very easily, all the more so since people travelled intensely across the country at the time, visiting their families as they would have normally done on the Eve of the New Chinese Year and Spring Festival holidays. Prior to presenting his resignation, the mayor of Wuhan confessed that before quarantine had been instituted and before the close-down, around 5 million citizens had already left the town (Bosotti, 2020). Soon afterwards, the SARS-CoV-2 was present not only in China, but in over 160 countries on all continents, generating enormous human and economic losses, almost collapsing some of the most advanced medical systems of the world and making all of us aware of how interdependent and vulnerable humankind has become.

The WHO only declared the coronavirus a global emergency for health on January 30, 2020, and only on March 11, 2020, it announced that COVID-19 had become pandemic (WHO, 2020). For the mismanagement of the world health crisis and for its biased behaviour towards China, primarily for backing and echoing China’s assertion that the virus cannot be transmitted from one person to another, the WHO is at present criticized by the US administration and cut from US financing.

1.2 From skepticism and concealment, to vigorous intervention

Once they realized the severity of the situation, which could no longer be hidden, the Chinese authorities launched an extremely drastic set of containment measures and also informed the WHO, about a

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\(^1\) Wuhan is the capital city of the Hubei province, in central China.
\(^2\) COVID-19 comes from “corona virus disease-2019” (the year of the outburst).
\(^3\) The first and most notorious was Dr. Li Wenliang, who was arrested for “spreading false rumours” and forced to recognise the accusations in written. By the end of January Dr. Li died from COVID-19, his death stirring much grief and indignation among the Chinese.
month later than they should have done it. The fight against the COVID-19 epidemic in China included a host of different measures: the postponement of the citizens’ return from holidays, to limit traveling between cities; Wuhan and the whole of Hubei province, about 60 million people were placed under quarantine; public transport at first and then transport by private cars were forbidden; courses in all types of schools were interrupted; public gatherings, festivities, shows, competitions were postponed; lots of companies stopped their productive activity; people were advised and later on even forced to stay indoors and limit their going out to only two hours a day for shopping, risking severe punishment in case of disobedience; hygiene and self-protection measures were intensely popularized; all streets and public places were continuously disinfected; two more large hospitals were rapidly built in Wuhan and the medical staff was supplemented by thousands of doctors and nurses coming from other provinces; the central government allocated 10 more billion USD to the anti-coronavirus fight, including for an antidote and vaccine research (Pound, 2020). However, besides managing the outbreak, it seems that the measures urged by the authorities in the first quarter of 2020 have been not only severe, but sometimes abusive and humiliating, casting aside the citizens’ basic human rights.

1.3 Chinese official reporting raises many question marks and doubts

According to the official reports, state interventions proved very efficient and, as a result, China was able to manage the epidemic quite swiftly, summing-up just under 83 thousand people tested positive and only a little over 4,600 dead. These numbers seem quite large at first sight and, no doubt, very saddening, but still, at present, when we can see the huge drama of the other infected countries – with a much smaller and less dense population than China’s and with more advanced medical systems listing much more infected and dead people – the Chinese figures appear, in hindsight, incredibly low. By comparison to other countries, COVID-19 seems to have been extremely less virulent in China, where the number of deaths/100 000 residents reached only 0.2 as of April, while at the same time it was 38 in Spain, 34.2 in Belgium, 33.8 in Italy, 22.4 in France, 17.1 in the UK, 16.4 in Netherlands, 7.9 in the U.S. and 3.9 in Germany (Woodward & Gal, 2020).

The Chinese official announcement was that the source of the infection was a wet market in Wuhan, where people might have got infected either from bats, or from snakes. But the fact that the authorities first tried to hide the truth and afterwards to alter it with the potential purpose of not letting the real proportions of the outbreak be known, fuelled suspicion and speculations that the coronavirus could have been a lab virus, escaped from one of the two specialised labs in Wuhan, of which one, unique in China, the Wuhan Institute of Virology (WIV), was studying precisely dangerous bat coronaviruses and was located just some hundred meters away from the wet market reported as the epicentre of the epidemic.

Moreover, besides the question marks regarding the coronavirus origins, statistical data on China’s COVID-19 outbreak also raised great doubts, not only due to the incredibly low figures reported, but also because of some other curious facts that do not match the official reports.

One of them is a Taiwan News information about a well-known Chinese company, Tencent, which was in charge of managing the statistics of the Wuhan epidemic and, in this capacity, posted “by mistake” a number of COVID-19 confirmed cases ten times larger than the officially reported figure (154 023, as of February 1st, 2020), plus a number of suspicious cases (79 808) four times larger and a number of deaths (24 589) “much bigger” than the 300 cases officially announced at the time. It is interesting to mention that Tencent made a similar mistake three times, while the figures it “posted by mistake” broadly matched the levels resulting from the estimative calculations of some famous United Kingdom and Hong Kong virologists (Epoch Times, 2020).

Another intriguing situation that fuelled the suspicion that Chinese reporting was not truthful was the official announcement by the MIIT, on March 19, about 21 million cellular phone accounts and 840 000 landline numbers that had been closed in China between November 2019 and February 2020. That was

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4 There are documented cases of people who were beaten by the police, of people walked enchain in the streets and presented as bad examples for not wearing masks, of families locked in their houses and having their doors nailed, as well as cases of people that disappeared after expressing opinions not accepted by the authorities. Boards containing menacing messages for those who would dare not report their symptoms, or inform about their neighbours’ “suspicious” behaviour were also displayed in some cities. (Yu, 2020).

5 As of May 15, 2020, there were already 4.5 million people who tested positive for SARS-CoV-2 in the world and over 302 000 deceased (Roman, 2020).

6 Huanan Seafood Wholesale Market

7 Wuhan Institute of Virology (WIV), a biosafety level 4 lab, was set up with the help of France and the US.

8 The Ministry of Industry and Information Technology (MIIT) announces every three month the total number of phone users by provinces. In December 2019 it released the statistics for the end of November 2019, i.e. 1.600 957 billion users, a number that dropped to 1.579 927 in March 2020, which is 21.3 million less. Additionally, the number of landline users dropped from190.83 million to 189.99 million, which is 0.84 million less. (Hao, 2020).
normally a time of the year when the number of users was on the rise, not to mention China’s high digitization level and the strong dependence of its citizens on their cellular devices for almost every daily activity, from buying transport tickets and restaurant or theatre bookings, to shopping, making all sorts of payments, dealing with official institutions and even getting the new health code which allows people to move around after quarantine (Hao, 2020). While the explanations of the telecom companies make reference to people giving up a second cell phone account, migrant workers and companies saving by closing telephone accounts during the lockdown etc., the numbers are too large to be credibly explained only in this way.

Some of the accounts might have belonged to the dead from COVID-19, but that assumption should be proven, which is not easy, given the level of secrecy employed by the Chinese. However, pieces of information regarding the non-stop activity of the 7 funeral homes in Wuhan, supplemented by other 40 mobile cremators – 5 ton daily burning capacity each – that have been functioning 24 hours a day, 7 days a week in January-February (Jaquet, 2020), as well as news about the kilometre-long queues of people waiting to receive the funerary urns of their dead loved ones (Haitao, 2020), seem to add to the puzzle, leading to the same conclusion that massive underreporting occurred (at least concerning the death toll). If that is the case, the erroneous or concealed data might be responsible for many wrong decisions made in the rest of the world and even for the transformation of a local epidemic into the pandemic that swept the entire globe with dire consequences, as never before in our known history.

1.4 In a nutshell: the COVID-19 epidemic short-term impact on Chinese economy

For the first time since 1992, China reported a negative quarterly growth rate of -6.8% in the first quarter (Q1) of 2020. If growth remains negative for the whole year 2020, China could undergo its first major contraction since the Mao Zedung era, in the 1970s (Bloomberg, 2020). However, according to forecasts by major international institutions, that will not happen: the World Bank envisages a 2% growth for 2020 in a baseline scenario, and stagnation in the worst-case scenario, with only 0.1% growth rate (Vaswani, 2020). The IMF expects a 1.2% GDP growth in 2020 (Kondapalli, 2020), while the European Commission forecasts 1% GDP growth in 2020 and 7.8% in 2021 (European Commission, 2020).

The Q1 manufacturing contracted by 10.2%, construction by 17.5% and the services sector by 5.2% with transport, accommodation and restaurant services hit the hardest. Industrial production was 8.4% down, with the automotive, transport equipment, general machinery and textiles sectors the most affected (by -28%, to -30% each), while electronics and pharmaceuticals were the first to lead the recovery. In Q1/2020, investments were 10% lower than in Q1/2019, with the hardest blows suffered by manufacturing (-25.5%) and infrastructure (-19.7%) (Zenglein & Karnfeld, 2020).

The official unemployment rate was 6%, higher than usual but considerably below the level controversially presented in a recent report by Zhongtai Securities, a Chinese investment bank, which estimated a real unemployment rate of 20.5%, the equivalent of about 70 million unemployed. This figure stirred much discontent and the director of research immediately lost his leadership position for this reason (Caixin Global, 2020). As the lockdown triggered simultaneous supply and demand shocks, inflation remained at low levels, around 4-5%.

2 Three main trends hastened by the COVID-19 pandemic

When the COVID-19 epidemic flared up in China, the country’s economy was already suffering from internal inefficiencies and imbalances, delayed reforms, a huge and ever more perilous debt burden. It was also quite shuttered by almost two difficult years of trade war and fraught negotiations with the US. Chinese economic growth had been declining year by year since the global economic crisis of 2008-2010, and it followed the same trend in 2019, reaching just 6.1%, a level within the planned limits established by the government (6%-6.5%), but the slowest in the recent 29 years. To meet its planned target of doubling the economy between 2010-2020, China should manage a growth rate of minimum 6% in 2020, which we know now will be no longer possible, after a first quarter -6.8% growth rate and once that the COVID-19 epidemic turned into a pandemic that inflicted simultaneous shocks on both the domestic and the external supply and demand.

Besides the impact on their macroeconomic parameters, the COVID-19 pandemic also had a role in highlighting some of China’s and other nations’ administration shortfalls (as for instance those related to the

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9 According to Asia News, the 7 funeral houses in Wuhan distributed 500 urns per day, on average, leading to a potential total of about 45 000 dead in this city alone (Haitao, 2020).
national healthcare or social protection systems), it revealed some of the global production system’s “weaknesses” [such as the strong co-dependencies created between western economies and China by the global value chains (GVCs)] and it contributed to speeding up some of the long-term trends that had already been on track in China and globally, but were progressing at a slower pace. The following three trends stand out among the most important ones that have been potentiated by the coronavirus pandemic and have a significant impact on China.

2.1 The pandemic accelerates GVCs restructuring

The world economy is now more integrated than ever. Industrial production is largely globalized, including in its intricate architecture multiple global value chains and international supply networks that integrate into their structures companies from various countries, according to their comparative and competitive advantages, with the aim of maximizing efficiency and profits. To that end, GVCs are most often targeting costs minimization, sometimes while simultaneously increasing innovation, the knowledge-based and high-skill contents of goods, improving their quality, diversifying and customizing supply etc.

However, having such a design, the global production system is prone to maximizing the interdependence between the participant companies and economies, so that none of them can operate as efficiently when not associated with the others, and also none of them is able to avoid the negative externalities resulting from events taking place in any of the partner countries. The more so in case of unexpected events described as black swans, as it happens with the current pandemic started in China.

In the global production system, China is playing a central role, of workshop of the world, taking part in the production of the great majority of manufactured goods, mostly as executor of the activities in the middle links of the value chains. Over the last few decades, by way of its ever larger integration into the GVCs, China has become one of the most important and largest producers of intermediate goods, as well as the main trading partner for over 120 countries and the dominant actor in many international markets, from either the exporter’s, or the importer’s position. Moreover, in many product categories, China is the largest manufacturer globally, delivering, for instance, 90% of the personal computers produced worldwide, 90% of the cell phones, 80% of the air conditioning devices, 70% of the photovoltaic panels, 65% of the footwear and so on. Increasingly integrated into the world economy, this country has become almost an unavoidable partner and, at the same time, a major source of externalities for almost all the other economies.

China was definitely one of the main beneficiaries of globalization. Searching for cheap production sites and large markets, western multinational companies (MNCs) invested there massively, relocated production facilities and research units, transferred knowledge, technologies and know-how, including China in most of the GVCs. The US, the EU, Japan and other developed countries educated millions of Chinese students, received Chinese interns and hired Chinese graduates in their companies, institutes, laboratories and banks. Later, many of them returned to their motherland and contributed to the development of local manufacturing, research and finance. Besides the decades of huge national investment effort, this substantial foreign contribution was the key ingredient that helped China leapfrog to the position of second largest economy in the world, the largest industrial producer and number one global trader. Its tight integration into the global and regional value chains - which make the vascular system that feeds and breeds global production - was essential for China’s rise, its international repositioning, influence and intensity of the spillover effects on the other economies, the negative ones (such as a pandemic) included. Both China and the world have benefitted from the world production system and its efficient value chains, and both share now one of its downsides, in the guise of the COVID-19 pandemic.

By forcing most of the countries to acknowledge that they are no longer able to provide critical goods for their populations’ health safety and that they even have to fiercely compete one against the other for Chinese imports, the current pandemic crisis proved that all the decades-long west-to-east transfers of capital, production capacities, technology and knowledge triggered a too great imbalance in global distribution of industrial capacity, and a too risky dependency on China. As a result, western countries will from now on try to “decouple” their economies from China’s, by cutting capital flows to it, by stimulating the repatriation and/or

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10 The black swan theory was developed by Nassim Nicholas Taleb with the purposes of explaining the occurrence in history, science, technology, finance etc. of very rare, surprising and hard to anticipate events, which by their development and powerful impact on a large scale, come to play a major role in the respective field and in society. The name is a metaphor that comes from the ancient belief that there were no black swans, invalidated in the 17th century, when the first European explorers saw that black swans did exist in Australia.
relocation to other countries, nearer to their borders, of their MNCs’ China units. In other words, they will start restructuring and redesigning the global value chains, turning them into regional or national ones, abandoning the purpose of production cost minimization – the engine of GVCs development for so many years - in order to obtain improved safety and security of supply.

The GVCs reform process, already started as a consequence of the US-China trade war, will further involve, with various intensities, more actors (Japan, the EU Member States, Australia, India, countries in SE Asia, Central and Eastern Europe, Mexico etc.). Also, while it will be lengthy - as not all western companies will immediately rush out of China giving up its many still attractive advantages -, the value chain (VC) transforming process will certainly be faster than before the COVID-19 pandemic, leading to: (i) shorter, regional or national VCs that (ii) aiming at safety and security, not at low costs; (iii) multiple supply sources that limit dependencies; (iv) the abandoning of just-in-time (JIT) deliveries and the return to stockpiling; (v) a new international division of labour; (vi) more investments in R&D&I and in implementing new technologies, to put a brake on the resulting price upswing. Technology transfers, cooperation and professional exchanges in education and research might all suffer set-backs, as well as foreign direct investments and international trade, especially trade in intermediary goods and at least in the short run. In other words, globalization as we know it, will step back, international relations will be redefined, and a new international division of labour will be born.

2.2 The pandemic is speeding up digital transformation and large-scale use of new technologies

The coronavirus crisis highlighted the importance of digitization and of implementing new technologies on a larger scale in our daily life. These have become critical not only as valuable inputs in our productive activities, but also as increasingly important factors providing better quality public goods and quality of life upgrades. Innovative and state-of-the-art technologies have become indispensable in healthcare, education, distance interconnectivity, entertainment, shopping, the management of our daily commitments etc., as we could all experience during this pandemic.

China, which has been at the forefront of the digital economy way before the COVID-19 outburst, provides an early example of how a pandemic could enhance technological development, as Alibaba and the Chinese e-commerce market - currently the largest in the world, with 45% of the global retail -, got the decisive boost that brought them in their present position during the SARS outbreak and quarantine of 2002-2004. At present, the Chinese digital ecosystem is one of the most sophisticated globally, involving over 850 million internet users and a quarter of the world’s unicorns11. In 2019, it accounted for 24% of the total retail sales, as compared to just 9% in Germany and 11% in the US. Also, mobile payment penetration was triple that of the US. (Leung, Ngai, Seong & Woetzel, 2020). In most of the other countries the resistance to digitization was quite strong and only now, with the pandemic outburst, it vanished, creating a window of opportunity for making substantial progress towards the digital transformation of economies.

During the recent lockdowns, we all resorted to e-commerce, online medical consultations, digital payments, online interaction with public institutions, family and friends. Students took online video courses, passed online exams and everybody was able to enjoy video gaming or online streamed movies. But more than that, as a frontrunner in digitization, smart cities, artificial intelligence, China could use robots in hospitals and in buildings under quarantine, to supplement and protect the medical staff and to distribute food and water. It also resorted to face recognition technologies and to various online applications to trace the potentially infected and to enforce the lockdown rules. As regards business, according to a McKinsey study, COVID-19 has accelerated the digital development in China in three major directions (i) in B2C interactions, mainly via online channels, (ii) in B2B activities that usually implied physical interactions and (iii) in the business processes themselves (Leung, Ngai & Woetzel, 2020).

The current trend of rapid expansion in digitization and the use of new technologies in day to day life will go on, both in China and in other countries. However, in China’s case, the quicker adoption of the new technologies has a peculiar component resulting from an already existing trend that is now reinforced and is seriously denting human dignity, freedoms and rights: a mix of elements that includes (i) censorship and banned access to certain internet resources, overwhelmingly occidental, (ii) an increasingly intrusive surveillance system, plus data collection from the population’s private life and (iii) a social credit system, which is reliant on artificial intelligence (AI), big data and other new technologies, to monitor and rate every person’s behaviour, opinions and assertions and reward or punish them according to opaque criteria. The COVID-19 pandemic was used as a good opportunity to expand the already large number of surveillance cameras in cities

11 Unicorns are start-up companies which are valued in excess of 1 billion USD.
and to introduce them in buildings and apartments, allegedly to help identify the ill people. There is a great chance that these devices will no longer be removed and will continue to collect personal data, helping tighten control.

2.3 The pandemic pushes innovation more to the forefront

The coronavirus crisis has highlighted once more the importance of supporting and investing in scientific research and innovation, as the need for a specific treatment, for new vaccines, new protocols and new equipment to fight SARs-CoV-2 turned all the attention and all the hopes to the researchers in this field.

China placed innovation at the core of its national development strategy and has made constant efforts to support investment in research and development (R&D) for many years. As such, it is now ranking second globally in terms of R&D investments, still at a considerable distance\(^\text{12}\) behind the US, but ahead of some huge research forces such as Japan, Germany, South Korea, France, or the UK (Deloitte, 2019). While the gap between the second and the first place was constantly narrowing (Lee, 2020), China still invests in research less than half the amount invested annually by the US and, – more important than the amounts invested – about 80% of its R&D system relies only on acquired knowledge and on innovation created by other countries, to produce and improve its supply of products and services. China is still a follower in R&D, although a quick one, and it still remains strongly dependent on the western breakthroughs in fundamental research and on their innovations.

When, as part of the trade war waged against China, President Trump ordered American manufacturing companies to stop delivering certain high-end electronic components, ZTE, a Chinese IT global giant, got shortly on the verge of collapse. In just a month. That was a telling demonstration of how vulnerable Chinese high-tech companies still are, even the national champions, due to their lagging behind in creativity. But, at the same time, it was also a powerful incentive for China to focus with more energy in support of innovation and to become even more resolute in implementing its innovation-specific strategies. As such, China will not step back, it will multiply its efforts even more, following the trade war with the US, the COVID-19 pandemic and the recent tensions with the West.

However, if before the COVID-19 pandemic and the US-China trade war, western countries, the US included, were very supportive of China’s R&D endeavours, that attitude will probably no longer continue, at least not at the same scale. Western countries are going to revise their China policies and, as such, they will pay more attention to protecting their knowledge creation and new technological accomplishments, they will share less and will be on guard when Chinese companies, famous for their efficient industrial espionage, will want to invest in, or take over western enterprises. Also, cooperation in research, access in universities, labs and companies and western financing for Chinese research might become more difficult to get. These developments will make it much harder and will probably slow down Chinese research advancement, but at the same time they will force the innovation system in China to start create knowledge and strive to produce authentic breakthroughs itself.

3 Conclusions

Without doubt, the COVID-19 pandemic is one of the hardest tests humankind had to pass all along its history, in terms of its unexpected severity, infectiousness and the communities’ unpreparedness but, primarily, in terms of losses (in lives, assets, jobs, money, relationships, trust, sense of safety, etc.) and long-time consequences, some of them imaginable, most of them probably not. How much we lost, it remains to be estimated; we know it is huge, but a thorough evaluation will probably be impossible. What consequences to expect, it is not completely clear either, but we will surely have to cope with the vagaries of more crises: an already visible economic one (high unemployment in many countries, millions of lost jobs globally, lost production, sharply declining and even negative growth in many economies etc.), combined with an on-going but hopefully receding oil and gas crisis, plus a sure-to-come debt crisis (generated by the nations’ financial efforts to reign the pandemic and restart economies) and even a potential food crisis. Additionally, we will see major reforms of the global production system (primarily of the GVCs) and probably of the international bodies, starting with the WHO.

\(^{12}\) In 2017, the US invested in R&D USD 564 billion, China USD 254 billion (Lee, 2020).
People all over the world are now eager to return to their normal, pre-pandemic, pre-crisis lives and livelihoods, while governments all over the world also want their economies to return to the normal, pre-pandemic, pre-crisis activities, so that economic loss is stopped and recovery begins.

But the world cannot be the same after this pandemic and, in fact, nor should it remain the same. Let us not forget that economies were already ailing long before the pandemic outburst. They had been already signalling for quite a long time that our way of producing and consuming goods and services was not right: it was abusive towards the planet, towards the natural environment and even towards ourselves, it was wasteful, irrational, contrary to our best interest, unbalanced and unjust to many. That “normal” we seem to wish for is in reality exactly what created many of our current problems, some of which were highlighted once more by the pandemic: on the one hand, we could see the poor means and preparedness of public services (health, education, social security systems etc.), the high pollution (in cities, the anti-pandemic measures reminded everyone what fresh air really is), the modest incomes and the poverty (the lockdown showed that not only in developing countries, but also in the developed ones, many people could not live more than a few weeks without their periodically-received wages); on the other hand, we could see the growing and spreading populism (always over-promising and under-delivering) doubled by rampant corruption, illiberal and autocratic leadership tendencies. In the background, but in fact everywhere in this picture of our normal life, the profit maximization goal, which is not wrong in itself, but it becomes highly damaging when met at all costs.

Let us not forget that this pandemic taught us some lessons:

- That people and life should always be the first priority;
- That when not taking the trouble to prepare for the worst, we might prepare for the worst trouble;
- That we must be open to change, to new technologies, to new ways of working, learning, doing business, leading;
- That countries should not try selfish solutions (Remember the US president’s pretence. No country should enjoy exclusivity or priority of treatment or vaccination);
- That acting honestly may save trouble and lives (Remember China’s information concealing and under-reporting, with their consequences);
- That in our globalized world, problems tend to get globalized too (e.g. the current pandemic) and, as such, we can succeed in solving them only if we cooperate, share knowledge and information, work together for the common good.

The COVID-19 pandemic should be seen as a window of opportunity to undertake a large scale reform of our “normal” way of production, consumption, governance, considering the lessons that we have just been taught, but protecting the most important achievements that humankind has attained along its development and now seem to be endangered: freedoms and all the other human rights, democracy, rule of law, multilateralism and rules-based international relations decided together.

References:


