

## Socio-Economic Change across the Globe amidst of Covid-19: A Statistical Perspective

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### Abstract

COVID-19 upside-down the globe. It's all affected. How we live and connect, fly and ride. How we work and communicate. Even though the world is locked up, governments, epidemiologists, Educational administrators, businessmen's and families around the world are hoping to reopen schools and businesses safely, how to fly and work safely, how to help the millions are under the crisis who have lost their livelihoods and loved ones. They'll affect people worldwide for years to come. Governments making such decisions must have the best knowledge available. During the crisis, the international statistics organisation continued to collaborate with national statistical agencies and initiatives around the globe to make sure that the highest quality information and data are available to support policymaking during and during the catastrophe. This paper offers a bird-eye view of the covid-19 pandemic statistical data analysis by different agencies which had complied by Directing Committee of 36 international organisations.

**Keywords:** Covid-19, Catastrophic, Unprecedented, Diversifying, Enumeration Methodology, United Nations

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Date of Submission: 03-10-2020

Date of Acceptance: 17-10-2020

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### I. Introduction

UN and other member organisations of the Research Activities Coordinating Committee made available a variety of reliable data and information. This article provides a snapshot of some of the most available details about today's COVID-19 effect. Although this study covers many issues, there's a global epidemic and no exception to any aspect of our lives. The study covers many facets of socio-economic and environmental changes to independent housing, schooling, protection and crime improvements, and innovations upsetting public services such as civil aviation and posting services. Research also shows the effects on certain sub-population groups, including women, children, and geographic areas. New statistics are set regularly. 212 cases confirmed COVID-19 specified countries, territories or regions late April. Nearly 3 million infections and over 210,000 deaths in 2020's first four months. These appalling economic figures include a 9% decrease in global demand and export production, with world trade in goods dropping almost 27% in the second quarter of 2020, a record decrease in world commodity prices (-20.4% from February to March 2020). We see the troubling job loss of the social sector, a decrease of approximately 10.5% in overall working hours, equivalent to 305 million full-time jobs. School closures affected about 1.6 billion students, with another 40-60 million people in severe poverty due to the crisis. Can affect the region. For example, the Gulf region predicts Gross Domestic Product growth from 0.6% (best) to -1.9% (worst) in 2020, but from 0.5% to 2.5% in 2021. Although Europe's projections indicate that the Gross Domestic Product decreased 3.5 percent in the first quarter of 2020, the biggest decline since its introduction in 1995.

This study presents current scenerio on how COVID-19 affects different facets of public and private life: economic and environmental uncertainty, wages, education, unemployment, crime, civil aviation and postal services. It also shows how certain sub-populations, including women, adolescents, and geographic regions are affected. Figures from this report are unparalleled tendencies some months back. For example, by the end of April, 212 nations, territories and regions reported Corona cases. Nearly 3 million infections and over 210,000 deaths in 2020's first four months. These impressive economic figures include decreased global demand and productivity by 9% year-on-year, the largest record drop in global commodity prices (-20.4% between February and March 2020), as global retail volumes plummeted by nearly 27% in the second quarter of 2020. On the social side, we face a dramatic job loss: a decrease of nearly 10.5% in average working hours, equal to 305 million full-time jobs. School closures have impacted some 1.6 billion students, and the crisis would add 40-60 million more severe poverty. The study also addresses problems facing national statistical offices. At a time of very significant records, many statistical systems are struggling with simple statistics, showing the requirement to capitalize in data and statistics and the importance of modern numerical systems and data infrastructure.

The study also addresses national statistical agencies' issues. At a time when statistics need simple statistics, emphasise the need to invest in data and statistics, and provide new national statistics and data

technology, many statistical systems fail. This study's statistics are iceberg tips. Readers are encouraged to visit websites of participating organisations to find different resources and quality statistics. As UN Secretary-General Antonio Guterres said: "We will fix COVID-19 with our common sense and truth — and build a healthier, fairer and more prosperous planet." With credible statistical evidence, we sincerely hope this study will contribute to this cause. The study consists of four parts, the first part comprises on Introduction of the topic. The second part is dedicated to Literature review and third part of the study illustrates the impact of covid-19 in detail with statistical data across the globe. The fourth part offers concluding comments.

## **II. Literature Review**

The COVID-19 outbreak, Warwick McKibbin and Roshen Fernando (2020), reported that China's economy was ruined and spread world-wide. The existence and economic effect of the disease is extremely unpredictable and makes it difficult for policymakers to devise effective macroeconomic policy responses. This article discusses seven different scenarios in order to better understand the possible economic impacts of COVID-19 in the coming year using a modelling technique developed by Lee and McKibbin (2003). A global hybrid general equilibrium DSGE / CGE model investigates the effect on macroeconomic outcomes and financial markets of various scenarios. The scenarios in this paper imply that even a localised outbreak could have a short-term impact on the global economy. These scenarios point out the scale of costs that growing investments in public health services in all countries can prevent, but especially in less developed economies, where high population density health care systems are less developed.

COVID-19 was reported by UNDP (2020) which caused a human development crisis. Conditions are close to deprivation levels in some areas of human development in the mid-1980s. But the crisis has hit hard all elements that constitute human development: income (with the greatest downward trend from the Great Depression), health (which directly causes more than 300,000 deaths and potentially leads each day to an additional 6,000 deaths of infants, caused by preventable causes, in the next 6 months) and education (high school-level rates). This must be accurately reported, including less obvious indirect consequences, including increased gender-based violence. The pandemic overlapped unresolved conflicts between people and technology, people and climate. These tensions produced a new wave of inequalities — related to enhanced skills, 21st-century modern necessities, as seen in Human Development Report 2019. However, crisis management will influence how these issues are handled and whether human development inequalities are minimised. This research explores skills to recognise the global human development crisis. Such an approach includes defining the problem and implementing policy responses that embody the desire of citizens to be and do what they aspire to, unlike material resources or economic activity.

UNCTD (2020) reported that COVID-19 caused major global economic disruption. By the end of the first quarter of 2020, the COVID-19 pandemic prevented international travel and had a significant effect on the tourism industry. For many developing and industrialised countries, tourism is a significant source of employment, government income and foreign exchange earnings. Without this vital lifeline, several countries will experience dramatic GDP contraction and increasing unemployment. COVID-19 is tested for tourism using a computable general balancing model (GTAP). Based on the global lock-out duration, the paper estimates direct and indirect shut-down costs for 65 countries and territories and 65 industries. Unemployment may rise by over 20 percentage points in some countries and if tourism stops until one year, those industries are nearly wiped out. The paper also offers policy guidance on mitigating the worst impacts and promoting recovery.

The first case of a COVID-19 outbreak was recorded in the 2020 Congressional Study Review, which spread to more than 200 countries and has a negative effect on global economic development beyond the one experienced in almost a century. By 2020, global economic growth could decline by 3.0 to 6.0% and a modest recovery by 2021, with no second epidemic. After the Great Depression of the 1930s, the pandemic economic effect raises the risk of global economic collapse with unemployment. In terms of lives lost, human costs would have a detrimental impact on global economic growth, growing levels of poverty, transforming lives, destroying jobs and rising social instability. Depending on the degree and nature of the global downturn, world trade could also fall by 13% to 32%, resulting in especially serious economic impacts for developing and emerging trade-dependent economies.

Peterson Ozili and Thankom Arun (2020) How did a downturn turn into a crisis of health? Why has coronavirus spread worldwide? The solution lies in two factors which undermined economic growth. Secondly, the propagation of the virus encouraged social distance and resulted in the closing of financial markets, industries, corporations and businesses. Second, the pace of the virus spreads and the growing uncertainty about the degree to which the situation could lead to consumer flight and investment protection from customers, investors, and foreign trading partners. The results indicate that lockout days, monetary policy decisions and foreign travel restrictions have seriously affected the level of economic activity and the closing, opening and lowering of stock prices for large stock indices. The decrease in internal migration and higher spending on fiscal

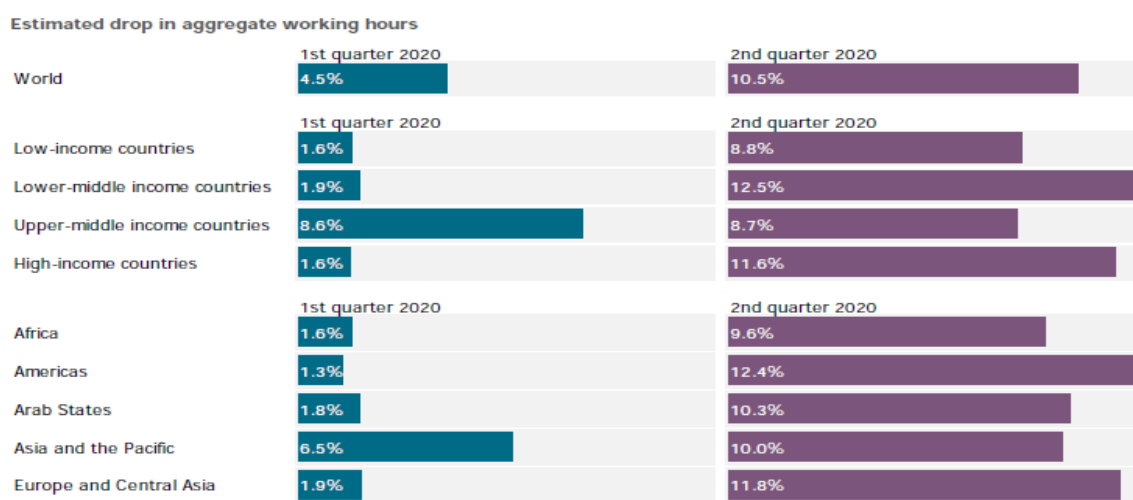
policies had a positive effect on levels of economic activity, while the rise in the number of coronavirus cases did not have any major impact on level of economic activity.

### III. An Assessment of Covid-19 Impact

#### 3.1. Economic Impact : Employment Shock

The ever rising COVID-19 infections, lockdowns, travel bans, social distancing steps, and closures of workplaces and schools are enforced across regions in several countries. In the current century, the total number of hours worked by employees worldwide could decline by about 10.5%. That's 305 million full-time employees with 48-hour workweek. This is WWII's largest economic decline. Indeed, the drop in hours was far past the 2008-2009 financial crisis. What is worrisome is that COVID-19 now affects the developing world, where capability and resources are significantly diminished.

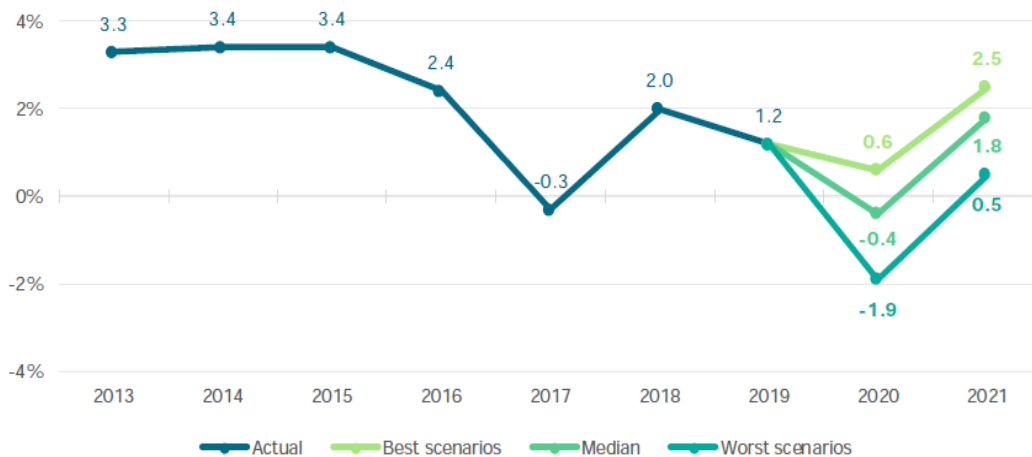
COVID-19 has serious, far-reaching, unpredictable job results. Usually, there is some delay in converting a downturn in business into job losses, but the effect on jobs was immediate and widespread during the current recession due to lockdowns and other measures. Declining jobs means many people worldwide face or face income reductions, led further deterioration in the income and many fell in the vicious circle of poverty again.



#### 3.2. Social Impact: Gross Domestic Product in the Gulf

Although the spread in the Arab Cooperation Council (UAE, Bahrain , Saudi Arabia, Oman , Qatar and Kuwait) of the COVID-19 pandemic in the Gulf region is still less prevalent than other parts of the globe, the economic impact is likely to be more serious. The disagreements between OPEC members and Russia over supply reductions contributed to a decline in oil prices (Brent petroleum price fell from \$68.9 per barrel on 6 January 2020 to \$26.7 per barrel on 30 March 2020).

Like other nations, the Gulf Arab Countries Cooperation Council pledged over USD 120 billion to help economies battle the pandemic 's consequences. Priorities were focused on preventing the spread of the pandemic and preventing a long-term economic crisis with potentially lasting economic damage. Consequently, the Gulf Arab Countries Cooperation Council's policies have generally centred on increasing health spending, benefiting vulnerable communities and stimulating demand. Gross Domestic Product growth rate forecast shows that the Gulf Economy Arab Countries Cooperation Council will contract by -0.4 percent in 2020 before gradually rebounding from 2021. pressure would result from a combination of increasing global risk, declining sovereign GCC bond ratings (with consequently higher bond margins) and capital flight to safe assets



Council for Cooperation of Arab Countries of the Gulf- Gross Domestic Product in Constant Prices (growth rate year on year basis)

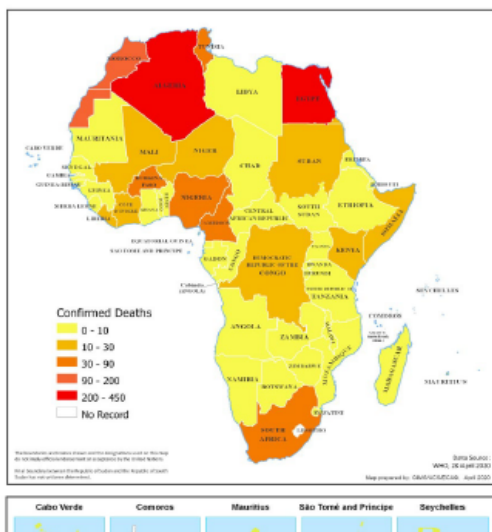
### 3.3. COVID-19 in Africa

Hence, the COVID-19 cases in Africa are currently low relative to other continents, there are strong signs that cases and death rates are increasing over a period. Currently, the epidemic burden poses a significant threat to the continent's over-stressed statistical structures. The fact that out of 54 African countries, 33 are among the world's less developed countries with the most unstable statistical structures exacerbates this poor state of statistical structures on the continent. Many data and statistics are needed to track the SDGs and national development plans. However, collecting such information timely and consistently was a challenge in Africa. In promoting preparation practises, in a vicious loop of insufficient resources and bad results, COVID-19's destructive negative effects would trap countries.

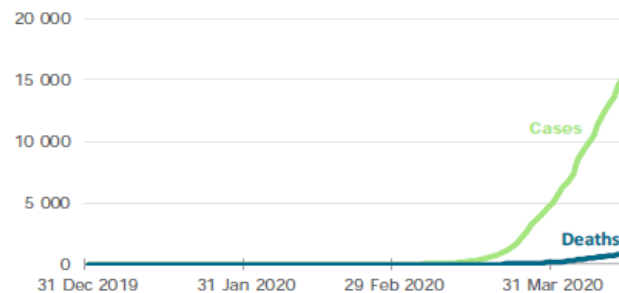
Currently, the data collected at the entry points have not met statistical quality criteria, with little to no participation of the different national statistics and mapping offices in statistical and mapping processes.

Confirmed COVID-19 deaths per million people (April 2020)

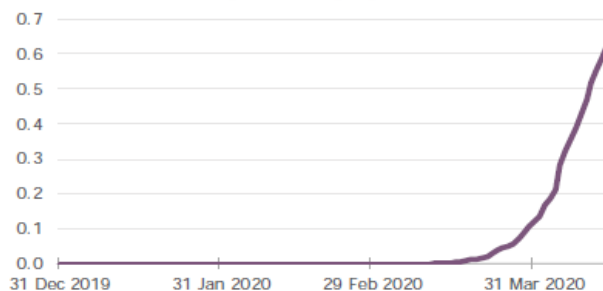
Limited testing and challenges in the attribution of the cause of death means that the number of confirmed deaths may not be an accurate count of the total number of deaths from COVID-19.



Total confirmed cases and deaths in Africa



Total confirmed deaths per million people in Africa



### 3.4. Statistical Impact

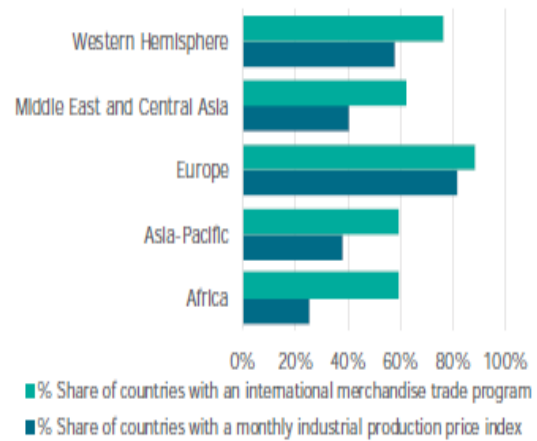
Innovation, Resiliency and Cooperation

Governments and businesses need "evidence" to make informed decisions quickly at any crisis citizens. The way we address the COVID-19 crisis, now impacting the world collectively, depends heavily on a continuous

torrent of timely, high quality knowledge that allows governments and people to take decisions that save lives and save lives. Innovation, adaptation and international cooperation ensure that official reports continue to flow, but are improved to meet COVID-19's specific information requirements.

The table below shows the worldwide average timeliness of key economic indicators and regional availability of monthly high frequency economic indicators. National statistical system's function is to enhance rightness and availability worldwide at a time when its resources and operations are hampered.

Region	Consumer Price Index	Industrial Production Index	Number of persons employed	Exports
Africa	28	77	238	114
Asia-Pacific	38	55	190	96
Europe	18	44	50	45
Middle East and Central Asia	18	51	97	66
Western Hemisphere	27	45	114	64



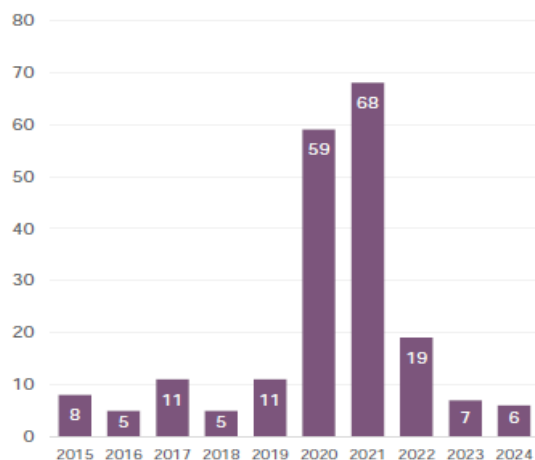
During the COVID-19 crisis, the international statistical community works together to preserve and improve data volume and quality.

Countries and international organisations share best practises on market steadiness such that national and international statistical organisations can continue to report on leading economic indicators, such as CPI Indexes, balance of payments and gross domestic product.

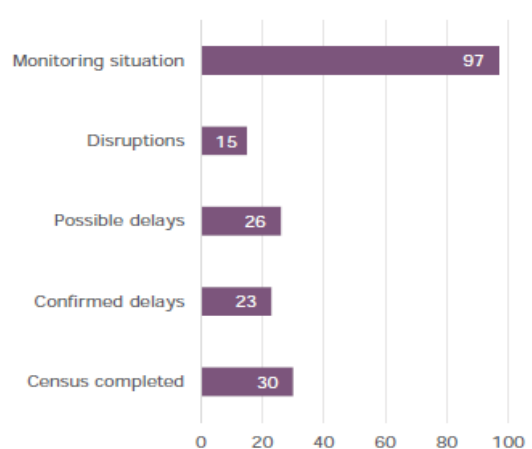
Experts also share ideas and develop innovative initiatives to improve the awareness of the relationship between patients, policymakers and businesses. New research on issues such as home access to medical facilities, mental well-being, senior care, and production of health equipment are being undertaken in record time.

The crisis of the COVID-19 produced a double surprise affecting data demand and supply, causing uncertainty in the data value chain (as above). Politicians, funding partners and citizens need to work quickly and in concert on the demand side in order to embrace the most vulnerable services and to keep them out. However, in many countries, accurate and reliable administrative records are not accessible to provide suitable national and sub-national policy responses for key events and domestic migration. Moreover, the available socio-economic and price data will easily become redundant as circumstances shift on the ground.

2020 census schedule



Impact of COVID-19 on census



#### IV. Conclusion:

COVID-19 introduced new encounters to the global statistical community. Global grinding halt ensures that most global staff in statistical systems (the national statistical agencies, central banks, and government ministries) operate from home, with limited access to tools and data needed to develop and publicize leading economic indicators. Face-to-face surveys are discontinued, in-store purchases are no longer available and business polling is unlikely because either the polling is shut down or the government questionnaires cannot be answered. In addition to these practises, abrupt economic activity changes need faster and more routine operations. The tests faced by the statistical system today had not been seen in the past. Normal methods of assertion are ineffective, for example transfer of previous results or going forward before age trends, given the degree of shutdowns. Interruption in data collection can impair or affect global access to key consumer price-related economic indicators, salaries, currency exchange, international finance, and, in some circumstances, broader economic development. Some countries are well prepared to resolve these issues while others do not need assistance.

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