

Effects of Coronavirus on Nepalese Economy

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Abstract

This article, Effects of Coronavirus on Nepalese Economy, focuses on the effects the coronavirus had on the economic growth in Nepal during the pandemic situation. The main objective of this study was to explore the effects of COVID-19 on the Nepalese economy and to provide some guidance to policymakers to minimize the economic losses from COVID-19. This study employed a descriptive research design to explore the impact of COVID-19 on Nepal's GDP growth. The results indicate that the virus was found to be hitting these sectors hardest: mining and quarrying, industrial sectors, construction sectors, hotel and restaurant sectors, transportation, communication, and storage sectors. The expected growth rate of these sectors exhibits negative scenarios; however, the estimated growth rate of fishery, electricity, gas and water, health and social work, and public administration and defense exhibits positive scenarios.

Keywords: gross domestic product, pandemic, COVID-19, coronavirus, risk

Introduction

The Novel Coronavirus (COVID-19) pandemic, spreading from China, has badly affected the global economy. At the time of writing this paper, 215 countries were suffering from COVID-19 although at least 12 countries were suffering more from this disease. The Nepalese economy has also been suffering from this pandemic since the middle of March. This disease is likely to hit the Nepalese economy the hardest, compared with other South Asian countries. The Asian Development Bank (ADB) estimated that Nepal would bear a 13% loss in gross domestic product (GDP) (Rs. 16950.1 million losses in GDP), India 6%, and Pakistan 5% during the pandemic situation (Asian Development Bank, 2020).

The COVID-19 pandemic will hard-hit Nepal's tourism industry. With the outbreak of disease, tourist arrivals completely dropped from March 24, 2020. Hotels and restaurants have been shut completely from March 24 to till. Overall, travel receipts, which supply about 2.0 to 3.0% of GDP, will decline this fiscal year. However, the extent of the decline will depend on the persistence of this disease. The fall could be more if there is a wide and prolonged outbreak of this disease. Income from remittance will also

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hard hit by the COVID-19 Pandemic. The estimated remittance income fell by 2% to 16% during a year—that is, remittance income of about \$8 billion per fiscal year, a major source of foreign earnings. A sharp decline in remittance income would undermine Nepal's external stability.

International trade has also been adversely affected with the complete closure of the border from 24 March 2020. Only essential goods, such as food, medicines, and fruits, are being imported, but exports are completely closed. Commodity prices of food and beverages have risen, and the supply chain has been disrupted.

In a globally integrated economy, the effect of diseases has become apparent everywhere since the outbreak beyond mortality and morbidity. The pandemic situation has slowed down the Nepalese economy with interruptions to production and disrupted the functioning of industrial sectors. Nepalese industries depend upon inputs from abroad, but it is not easy to import from outside the countries whose industrial production is also collapsing. Transport is completely restricted and the Nepalese financial market is completely closed, thereby slowing down the economic activities of the Nepalese economy.

This paper attempts to quantify the potential loss to the Nepalese economy from COVID-19 under different possible scenarios. The goal of this paper is to explore the effects of COVID-19 on the Nepalese economy and provide guidance to policymakers to minimize economic loss during the period of the Pandemic situation. The rest of the study is organized as follows. The second section includes a review of the relevant literature. In section three, this study specifies the effects of COVID-19 on the economic development of the nation. The last section concludes this study and discusses some policy implications.

Spread of COVID-19

The data about the spread of Coronavirus was collected from Worldometer as well as the Health Ministry of Nepal. The data shows that the US had the highest number of infected people. Globally 8,629,294 individuals were infected as of 19th of June 2020. The statistics are reported in Table 1

Table 1*COVID-19 Statistics*

Country	Total Cases	Total Deaths	Total Recovered
World	8,629,294	457,609	4,565,421
USA	2,266,245	120,738	931,355
India	384,953	12,667	205,844
Pakistan	165,062	3,229	61,383
China	83,325	4,634	78,398
Nepal	8,274	22	1,402

Note. World Meter and Health Ministry of Nepal (June 19, 2020).

Table 1 shows the spread of diseases all over the world, as well as in Nepal and its neighboring countries India and China. India had the highest number of infected individuals compared with Nepal and China. Almost all area of Nepal is associated with India economically and culturally. Therefore, the spread of the pandemic situation in India directly affects the Nepalese people as well as the Nepalese economy.

Literature Review

Previous studies examined that population health (as measured by life expectancy, infant and child mortality, and maternal mortality) is a direct function of economic growth and welfare of the society (Bloom & Sachs, 1998; Cuddington & Hancock, 1994; Haacker, 2004; Pritchett & Summers, 1996; WHO Commission on Macroeconomics and Health, 2001).

Haacker (2004) examined the relationship between HIV/AIDS virus-infected individuals and its effects on change in households, businesses, and government costs. The spread of HIV/AIDS virus changed labour supply decisions, adversely affected the efficiency of labour and household income, increased in public health expenditure, and reduced investment activities, directly affecting the economic growth of the nation. This study concluded that the spread of any type of pandemic situation adversely affected the economic growth of the nation. These studies employed the computable general equilibrium (CGE) macroeconomic models to explore the impact of HIV/AIDS on macroeconomic variables (Cuddington, 1993a; Cuddington, 1993b; Haacker, 2002a; Freire, 2004; World Bank, 2006).

The influenza virus is far different from HIV, and the spread of coronavirus is sudden and unexpected (McKibbin & Fernando, 2020). Before COVID-19, the world economies faced Spanish influenza and SARS types of pandemic situations. These types of influenza had a great negative effect on the economic development of the nation, and a large number of people were suffering from these viruses (Barry, 2004). A large number of people felt a risk at the onset of the pandemic, and there was a high risk of dying from the disease. Thus, it directly reduced production and productivity all over the world.

McKibbin and Fernando (2020) examined the macroeconomic impact of COVID-19. This study stated that the evaluation of its economic impact was highly uncertain due to the uncertainty of the pandemic situation that made it difficult to formulate appropriate macroeconomic policy for policymakers. The general equilibrium model was used to examine the effect of COVID-19 on the different scenarios of macroeconomic outcomes and financial markets. This study converted the various shocks into economic shocks based on the epidemiological assumptions—and reduced labor supply in each country—owing to high mortality, rise in the cost of doing business in each sector, halt of transportation and other disruption of production, consumption reduction, change in income and price of goods and services, increase in countries' risk from the spread of virus, and vulnerabilities to changing macroeconomic conditions. This study found an inverse relationship between the spread of the virus and macroeconomic variables due to an increase in health expenditure, a decrease in labour supply, and a decrease in the demand channels of consumers.

Ozili and Arun (2020) explored the impact of coronavirus on the global economy. This study tried to show how a health crisis translated to an economic crisis. Two methods were used to explore the effects of the virus on economic activities. First, the spread of COVID-19 compelled the people to maintain social distancing that shut down all economic activities like corporate office, capital market, business activities, and construction activities. Second, a faster spread of the virus led to uncertainty about how bad a situation could get, prompted people to panic buying, and encouraged them towards investment and international trade, thereby reducing the demand and supply of goods and services as well as economic activities as a whole. This study found that an increase in several lockdown days led to a negative impact on monetary policy decisions,

international trade, capital markets, and all economic activities of the world. In contrast, the restriction on international movement led to high fiscal policy spending, making a positive impact on economic activities. Nonetheless, a large spread of coronavirus cases did not have a significant effect on the level of economic activities.

Fernandes (2020) analyzed the economic effects coronavirus outbreak (COVID-19) on the world economy. This study estimated the global economic cost of COVID-19 under different scenarios. The COVID-19 outbreak started in December 2019 in Wuhan city in China and continuously spread globally. A global mortality rate stands at 15 % due to the coronavirus disease. Thus, governments around the world have been making contingency plans, such as lockdowns, aid packages, and health expenditures. Furthermore, most of countries have been adopting lockdown policies to maintain social distancing which led to a decrease in consumption and interruption to production. The overall functioning of the global supply chain has been disrupted. A large number of people have been losing their jobs, shutting down economic activities, and leaving global financial markets almost comatose. All these activities made a negative impact on aggregate demand aggregate supply and all other macroeconomic indicators. This study concluded that there were asymmetric impacts across sectors. The impacts depended upon the structure of the economy, and the service-oriented economy was more affected than the agriculture-based one.

Methodology and Data

This section has developed the method used to examine the effects of coronavirus on the Nepalese economy. This paper employed a descriptive research design to examine the effects of COVID-19 on the Nepalese economy. This paper used primary as well as secondary data collected from the Ministry of Finance, Central Bureau of Statistics, Asian Development Bank report, Planning Commission of Nepal, and personal interviews from industrialists, Bankers, economists, and tourism sectors of Nepal. Furthermore, the literature review was used to establish the effects of the coronavirus outbreak on macroeconomic variables. Based on the literature, this study explored the effect on GDP, tourism sectors agriculture sectors, and manufacturing sectors.

Result and Discussions

This study attempted to explore the future economic status of Nepal after the coronavirus in 2020. Therefore, the study made a visualization of the future position of macroeconomic variables. The coronavirus was found to have brought many risks to the development of the Nepalese economy. A rapid spread of infections puts a limit on human-development capacity and the production and productivity of the economy. To get rid of the problems of COVID-19, social distancing, a desperate step for now, stagnated business activities and shut down manufacturing industries. Moreover, the tourism sectors and road and air transportation facilities came to a grinding halt owing to social distancing and lockdown. Thus, more people lost their jobs in the tourism sector. Table 2 presents the effects of coronavirus on the growth rate of GDP in Nepal.

Table 2
Actual and Estimated GDP Growth Rate

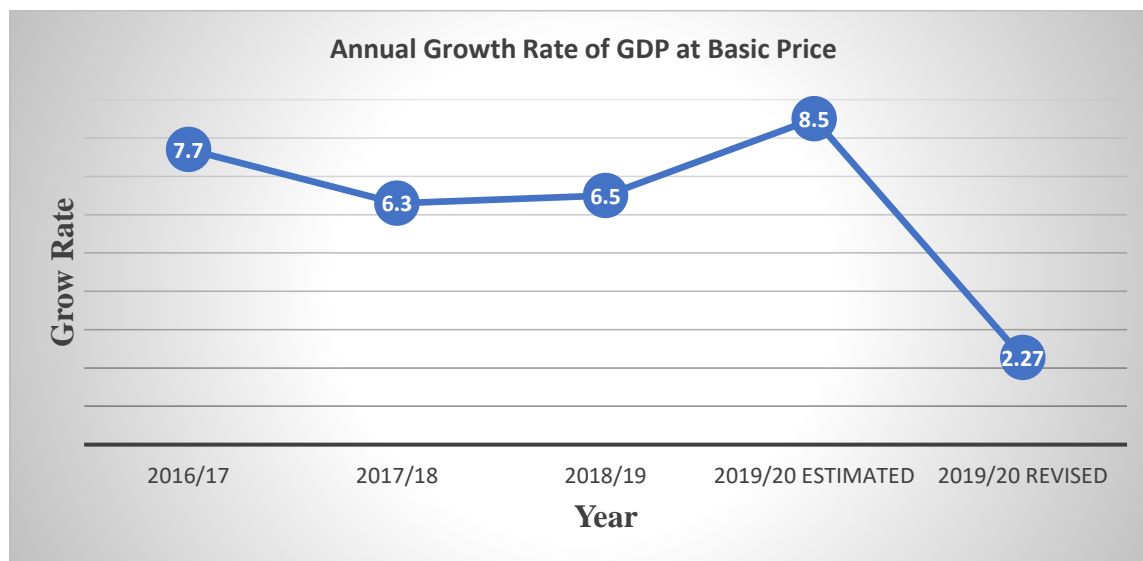
Variables /	Year	2016/17	2017/18	2018/19	2019/20 Estimated	2019/20 Revised
Annual growth rate of GDP at basic price		7.7	6.3	6.5	8.5	2.27

Note. Central Bureau of Statistics Nepal (2020).

Table 2 shows the GDP growth rate of Nepal in 2016/17, 2017/18, and 2018/19 at basic prices. GDP growth was revised in FY 2020 from 8.5 a year earlier to 2.27 %. This estimated growth rate is likely to decline further if the lockdown period continues. A major notable factor, reducing economic growth rate, remained a global outbreak of novel coronavirus disease. The outbreak of this disease—and subsequent nationwide lockdown imposed from 24 March until now—hardest hit primary, secondary, and tertiary sectors of the Nepalese economy. This pandemic would adversely affect the remittances flows of this fiscal year.

Figure 1

Annual GDP Growth Rate and Revised Growth for Fiscal Year 2019/20



GDP growth after the earthquake trended upward before the outbreak of the coronavirus in Nepal. Responsible to the rise the growth were political stability, bumper harvest, better management of electricity supply, increase in foreign direct investment flows, and large numbers of tourists’ arrivals. Nevertheless, the outbreaks of COVID-19, and the nationwide lockdown imposed from 24 March onward hard-hit industry, services, agriculture production, and other economic activities. Thus, the Central Bureau of Statistics of Nepal revised the growth of Nepal’s GDP to 2.27% this fiscal year, a sharp drop from the 8.5% that the government had initially set for itself.

The agriculture sector contributed 28.20% to GDP last fiscal year. Although its contribution to GDP appears to have been gradually declining every year. The growth rate from the primary sector is estimated to be 2.54% during the current fiscal year. However, rice production fell due to late monsoon, floods in early July, and lack of appropriate seeds, and pest infestation in some farmlands. Furthermore, agriculture sectors were also badly affected by the lockdown. The lockdown made it difficult to cultivate agricultural products owing to the limited supply of labour and social distancing, adversely affecting the agricultural products within the country.

The contribution of secondary sectors (construction, industries, electricity, gas, and water) to GDP was 13.72% in the previous fiscal year. The preliminary gross value-added growth at the basic price was estimated to be 3.36%. However, major industries

like cement, iron rod, steel, and brick are closed during this lockdown. Similarly, construction activities also completely came to a complete halt during the lockdown periods. Thus, the growth rate from the secondary sector was observed to suffer a great deal from the spread of coronavirus.

Tertiary sectors (e.g., wholesale and retail trade, hotel and restaurant, transportation, communication and storage, financial intermediation, real estate, renting and business activities, public administration and defense, education, health and social work, and other community, social and personal services) made 58.08% contribution to GDP in the previous fiscal year. The outbreak of coronavirus in Nepal hardest hit tourism sectors, air transportation, real estate business, and education sectors. Thus, the Central Bureau of Statistics of Nepal revised the growth of Nepal's GDP from the tertiary sector to 1.99% this fiscal year, a sharp drop from the 7.3% that the government had initially set for itself.

The outbreak of COVID-19 was found to be badly affecting all sectors of the economy. Table 3 shows the estimated and revised growth rate after the pandemic situation in Nepal.

Table 3 shows the estimated gross value added sectorwise GDP growth before and after coronavirus outbreaks in Nepal. COVID-19 hardly hit the mining and quarrying, industrial sectors, construction sectors, Hotel and restaurant sectors, transportation, communication, and storage sectors. The growth rate of these sectors could be negative due to the pandemic of COVID-19 in Nepal. Figure 3 shows that the growth rate of all sectors (outbreak of virus) would decline, except fishery, electricity, gas and water, health and social work, and public administration and defense. These data showed the effect of coronavirus on the Nepalese economy.

Table 3*Gross Value Added by Industry Classification*

Sectors	Estimated GDP	Revised GDP
Agriculture and forestry	5.02	2.48
Fishery	5.60	7.17
Mining and quarrying	9.47	-0.69
Industry	5.78	-2.27
Electricity, gas, and water	12.4	28.75
Construction	8.94	-0.31
Wholesale and retail trade	10.89	2.11
Hotel and restaurant	8.33	-16.30
Transportation, communication, and storage	5.9	-2.45
Financial intermediation	6.18	5.15
Real estate, renting, and business activities	6.12	3.25
Education	5.17	4.88
Health and social work	6.69	7.07
Other community, social and personal services	6.03	4.71
Public administration and defense	5.56	6.91

Note. Central Bureau of Statistics Nepal (2020).

The coronavirus outbreak in Nepal has caused problems with supply and demand for items excluding food, medicine, and daily needs items. This cycle has adversely affected the cash flow of the business unit and it has affected the loan recovery of the banks. According to the Bankers around 30 % of the loan amount remained due in 3rd quarter of the FY. 2020. Furthermore, demand for loans has been zero during the lockdown period which has raised the liquidity in banking sectors. The whole scenario has a negative impact on employment, output, and economic growth in the Nepalese economy.

Opportunities From COVID-19

The coronavirus crisis left Nepal broken and isolated, but the country is full of hidden potential and undiscovered opportunities. There are new challenges arising from

the outbreak's deadly virus, stressing the need to boost our competitive environment now and in the future. It generates a collection of approaches, it avoids the loss of acceptance of others and searches the e-solutions in business and other economic and social activities through e-technology.

The outbreaks of coronavirus forced a large number of workers, with high marginal productivity, to return home from abroad—the workers that could compensate for Nepal's loss of gross domestic product through a rise in the supply of skilled and young labourers within the country.

With the spread of infectious diseases, customers started to gather resilience and those affected by the virus spread had to change their daily routines. Thus, on the one hand, it changed the consumption pattern of consumers, and on the other, it preserved the environment. A long-time lockdown, postponement of industrial production, and stop of road and air transportation reduced air pollution for the future. The preservation of the environment is a necessary condition for sustainable economic development.

The outbreaks of the coronavirus completely disrupted international trade. Thus, most of the countries have been spending a large part of their income on producing necessary goods and services based on local resources. It could reduce the dependency by mobilizing the ideal local resources within the country, and the country would move towards self-sufficiency. Furthermore, coronavirus has raised health risks, production and consumption risks, foreign currency management risks, and financial management risks. Nevertheless, it has indirectly forced us to manage these risks by raising management capacity.

To get rid of the next human threat from COVID-19, and such types of viruses, and to derive the various opportunities from the crisis, it is necessary to explore the risk issues and problems in this epidemic. This means it is necessary to explore the tools and techniques used to analyze the crisis. The analysis based on the proposed framework, necessary to be tested through experiment, helps to get rid of the future risk. Thus, the spread of the virus has raised the capacity to search the new things.

Conclusion and Policy Implication

This paper has explored some preliminary effects of the COVID-19 outbreak on the Nepalese economy. A large spread of coronavirus would trigger a recession in 2020 within seven Provinces of Nepal. Policymakers were under huge pressure to respond to

the COVID-19 outbreak. As a result, the Nepal government's fast policy decisions are most likely to provide both negative and positive effects on the Nepalese economy. Lockdown policies to maintain social distancing have driven the economy toward a recession. The main finding of this study is that a long time of lockdown and social distancing policy appeared to adversely affect the general economic activities through its negative impact on GDP growth in Nepal.

The outbreak of the coronavirus-induced public health crisis created an opportunity for the government to make reforms in the health sector. Furthermore, the government of Nepal seems to have also used the crisis as an opportunity to fix the economic system and the financial system and usher the country into self-sufficiency. Nepal has begun to produce necessary goods and services based on local resources—the production that could reduce dependency habits through mobilizing the ideal local resources within the country and that could move the country towards self-sufficiency.

Policy responses are required to get rid of the negative impact of coronavirus on the Nepalese economy. Government and central banks need to ensure that disrupted economies get positive shocks in their respective field. A drop in interest rate is a policy response of the central bank, but the crisis needs a juggling balance between monetary, fiscal, and health policy responses on the part of the government to shepherd the Nepalese economy through the economic problems. Thus, the government of Nepal has made policies to largely mobilize the primary sector from which the secondary and tertiary sectors of the economy can get the opportunity to mobilize resources. Furthermore, small- and medium-sized business houses seem to be suffering from liquidity issues; thus, special facilities may be appropriate for lending purposes. Most important, every cloud has a silver lining; therefore, the government could draw a lot of lessons from the crisis and translate it into an opportunity by pursuing appropriate policy responses.

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