

Tunisian economy in the face of the Covid-19 pandemic: State of play, analysis and outlook

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Résumé

L'objectif poursuivi par cette étude est d'étudier le type de la pandémie de la Covid-19, d'analyser leurs effets sur l'économie tunisienne et de voir la manière dans la gouvernance conditionne cet effet. Dans une optique classique et keynésienne, nous avons montré que la Covid-19 est un choc de demande. Elle devient, de temps en temps, un choc d'offre. Les analyses graphiques de notre étude justifient l'effet néfaste de la crise de la Covid-2019 sur le secteur touristique tunisien. La maîtrise du déficit du solde commercial a observé. L'évolution du PIB tunisien a dégradé.

Les mots clés: Covid-19, Secteur touristique, Solde commercial, Exportation, Importation

JEL Classification Codes: H75, Z30, E30

Abstract

The objective of this study is to study the type of Covid-19 pandemic, its effects on the Tunisian economy, and how governance conditions this effect. From classic and Keynesian perspective, we have shown that Covid-19 is a demand shock. It becomes, from time to time, supply shock. The graphical analyses of our study justify the negative impact of the Covid-19 on the Tunisian tourism sector. The control of the trade deficit has been observed. The evolution of Tunisian GDP has deteriorated. State intervention will be the recommendation of our study.

Key Word: Covid-19, Tourism, Trade Balance Export, Import

JEL Classification: H75, Z30, E30

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Introduction

One of the major shocks in 2020 is the spread of Covid-2019 and its impact on the global economy. According to WHO (2020), Covid-19 is a life-threatening disease first born in China (Wuhan) in late 2019. This virus has spread rapidly from China to America, Asian countries, the European Union, Africa. Theoretically, the important effect of each crisis appears with the most open countries and vice versa for the least closed countries. By the late 2000s, most countries were integrated into the global economy to improve well-being. This can exacerbate the effects of Covid-19 and subsequent economic conditions.

Integration of a global economy automatically facilitates the contagion of the Covid-2019 effect on macroeconomic quantities (domestic investment, consumption, unemployment, exports, imports, public expenditure, budgetary balance, movement of international capital, etc.). Most of the authors measured the degree of integration of the trade openness index, the financial integration index, capital flows, etc.

According to Chin and Ito (2006, 2008), the average of the KAOPEN index of the Tunisian economy is equal to 0.55 between 1995 and 2017. According to Chin and Ito (2007, 2017), the Tunisian economy is well integrated into the global economy. This can simplify and deepen the spread and impact of Covid-2019 on the Tunisian economy. To achieve this, in addition to the introduction, the research study addresses the following areas:

- (1) Type of Covid-19 shock
- (2) Characteristics and status of the Covid-19 pandemic in Tunisia
- (3) Effects of Covid-19 on the Tunisian economy
- (4) Lessons learned and recommendations

1-Type of Covid-19 shock from an economic perspective

Covid-19 accompanies demand shocks such as lower consumption due to distance and containment measures, and supply shocks due to lower production.

The degree to which global input mobility has decreased due to lower transportation and travel flows due to the spread of the Covid-19 pandemic, border closures or travel restrictions. This pandemic is reducing production and, in turn, decreasing profits, wages, and as a result of lower demand, increased social pressures and uncertainty. In this case we can say that the world is facing twin shocks (health and economic).

Baldwin and Tomiura (2020) announce that Covid-19 is a supply and demand shock. That is, the spread of Covid-2019 is reducing the flow of goods and services and the degree of international trade. In this regard, the Covid-19 pandemic is causing health and economic contagion.

Covid-19 is accompanied by an economic crisis through lower production and demand, slowing global growth and tightening financial conditions, and falling commodity prices (the price of oil, which has fallen by 50% since the beginning of 2020).

According to the economic literature, there are two types of shock (supply or demand shock). The shock must be exogenous or endogenous, of external or internal origin of the economic system. Generally, each shock leads to macroeconomic imbalances that can result in unemployment, external imbalance, budget deficit, monetary depreciation, inflation, etc.

As far as supply shock is concerned, supply shock is said to positively or negatively affect production (such as the 1929 crisis: crisis of overproduction) and requires the adoption of supply policies or structural policies to deal with it.

The demand shock is likely to change consumption positively or negatively. The latter requires remedying it to operate short-term policies such as monetary policy, fiscal policy of Keynesian revival.

As classical point of view, supply is fundamentally determined by the labor and capital, which constitute the factors of production. Indeed, supply creates its own demand so that the change in supply can only come from a change in one of the factors of production. In this case, since the market ensures balance, therefore, imbalance is not conceivable, if there is a voluntary type of unemployment or state intervention to disrupt the balances.

As a Keynesian point of view, supply is demand-driven, so any shock to reduce consumption should result in a decline in production. In this regard, the Keynesians explained the depression of 1930 by the lack of demand, the supply being higher. They insist on state intervention.

The spread of Covid-19 is an unpredictable shock, changing the behavior of economic agents and disrupting macroeconomic balances. The adoption of containment leads to increased unemployment and absenteeism, lower incomes, lower consumption, lower tax revenues and, in turn, lowers production. So, at the beginning of the health crisis, we can say that there is a demand shock. But from time to time, the spread of Covid-2019 becomes a supply shock.

That is to say, the closure of borders by several countries contributes to the disruption of the world production chain, to the decline of exports and imports, to the decline of foreign exchange reserves, etc. Thus, because several countries in the world would face a strong demand whose supply would not follow, we can also admit that the world economy is hit by a supply shock.

Finally, with respect to the nature of the shock of the spread of Covid-2019, the spread of Covid-2019 is said to be a shock of demand and supply, according to classical school logic and the Keynesians.

2-Characteristics and status of the Covid-19 pandemic in Tunisia

2-1- Characteristic of the Covid-19 pandemic

Whose scientific name is Covid-19 (English acronym for coronavirus disease 2019) is an emerging infectious disease that is caused by a strain of coronavirus, called SARS-CoV-2 and thus belongs to a large family of viruses, the coronavirus. These proteins, which owe their name to the crown shape of the proteins that coat them, are part of a vast family of viruses, some of which infect different animals, others humans. They are likely to cause a wide range of diseases. In humans, these diseases range from a common cold to a severe lung infection sometimes there is no sign of disease. But often this virus can take the form of a simple cold or a serious respiratory infection such as pneumonia responsible for acute respiratory distress that can cause the death of the patient, with a mortality rate very heavily dependent on his age³. Her most common symptoms are fever, cough and respiratory discomfort.

The rate of spread of Covid-2019 around the world and over time is typical for an exponential function and should draw the attention of authorities around the world to the time available to eradicate it and avoid the worst⁴.

Covid-19 is a contagious phenomenon with interpersonal transfer via respiratory droplets, especially when people cough or sneeze, or through manual contact with a contaminated surface followed by a touch of the hand on the face. The incubation period is between 2 and 14 days, with an average of five days. The infection disappears when the virus excretion disappears from the throat. At the end of November 2020, there is no known treatment or vaccine for Covid-2019⁵.

The frequent washing of hands, the limitation of interpersonal contacts, the wearing of a medical mask by people make it possible to limit the rate of contagion and reproduction of the virus and consequently to facilitate the management of the crisis by the health services.

2-2-Update on the evolution of Covid-19 in Tunisia

The rapid spread of Covid-19 worldwide is explained by the Chinese government's delay in alerting the international community about the birth of Covid-2019 and the implementation of means of response. This delay would have facilitated the movement of several people from Wuhan and thus the spread of Covid-19.

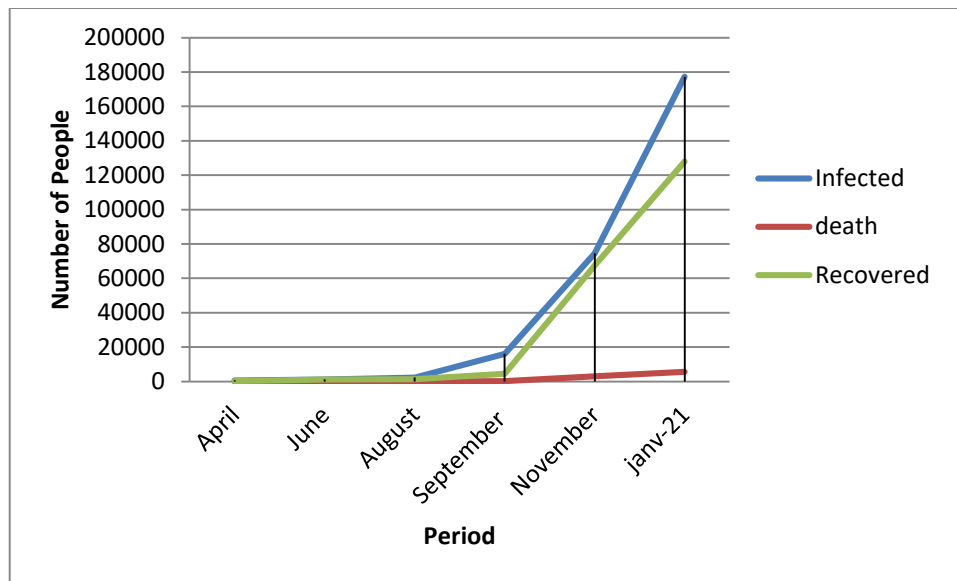
The first infected Tunisian case appears in 2 March 2020. The exceptional evolution of cases infected with Covid-2019 in Tunisia, as shown in Figure 1 above, explains the lack of effective treatment of the virus.

³ Ibanda (2020)

⁴ OMS (2020)

⁵ OMS (2020)

Figure 1: Distribution of Cases Infected with Covid-19 in Tunisia



Source: Authored (2020) by INS (2020, 2021) and Ministry of Health (2020, 2021)

In Tunisia, as of January 15, 2021, there have been 177,231 cases of Covid-19 infections, with 5,616 deaths and 127,854 cured. According to the diagram below, the evolution of Tunisian infected cases has two phases:

- From April to August 2020 the spread of Covid-19 in Tunisia is low compared to other countries in the World (at the end of July, the number of infected in South Africa is equal to 151209 cases, in Egypt 68311 cases against 2314 infected cases in Tunisia⁶). The success of the containment measures is explained by the commitment of the Tunisian state to support vulnerable populations and businesses most affected, through subsidies and tax exemptions.
- From August 2020 to January 15, 2021 the spread of Covid-19 in Tunisia experienced a rapid increase from 2314 to 177213 infected cases. This increase is explained by the ease and speed of Covid-19 contagion, the lack of containment measures.

3. Impact of the Covid-19 crisis on Tunisian economy

The Tunisian economy is very open to the rest of the world, and therefore very vulnerable to the Covid-19 crisis. According to previous reviews, Tunisia has an undifferentiated economic fabric. The Tunisian economy is based on agriculture, tourism, agri-food production and mining production. So the impact of Covid-2019 can threaten economic growth. This section will analyze the impact of the spread of Covid-19 on the tourism sector, external trade and GDP.

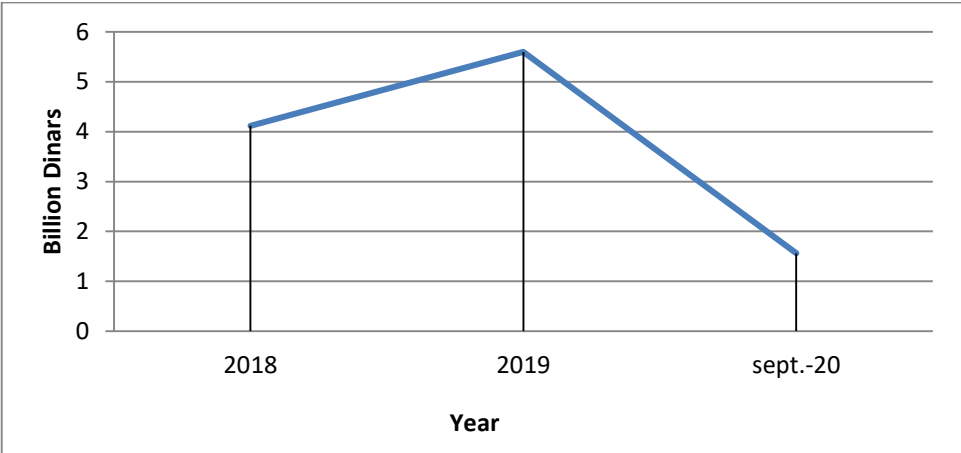
3.1. Impacts of the Covid-19 Crisis on tourism sector

According to the Tunisian Hospitality Federation (2019), the Tunisian tourism sector contributed 14% of GDP in 2018. With the spread of Covid-19, Tunisia's tourism sector has

⁶ OMS (2020)

disrupted. The diagram below shows the evolution of tourism sector revenues between 2018 and 2020.

Figure 2: Evolution of tourism sector revenues between 2018 and 2020



Source: Authored by BCT (2020) and FTH (2020)

According to the diagram above, we note that tourism receipts have registered an upward trend from 4.12 in 2018 to 5.6 Billion Dinars in 2019. This increase is explained by the improved tourist services, the depreciation of the Tunisian Dinars vs the Euro.

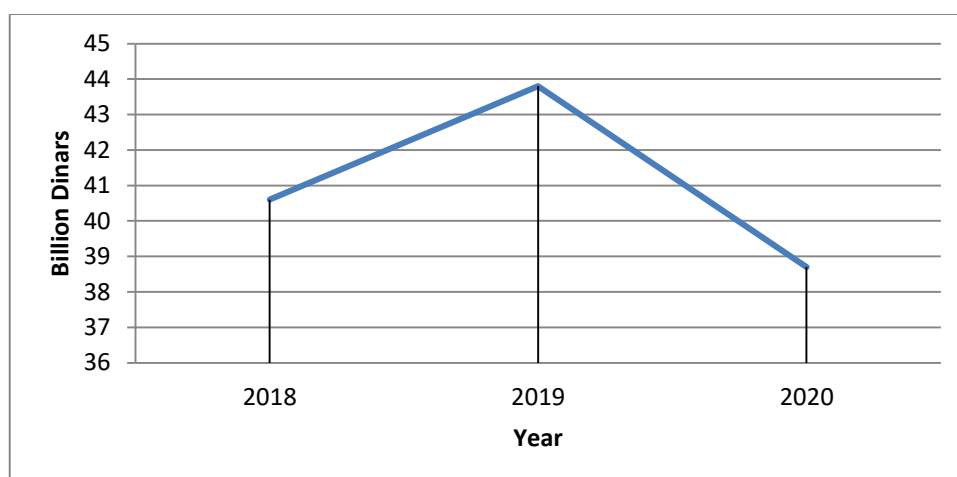
Over the period from 2019 to September 2020, tourist receipts have captured a free Shiite of 5.6 to 1.56 billion Dinars. This trend is explained by the decrease in tourism due to the closure of the borders from March to May 2020 and the spread of Covid-2019. In this regard, border arrivals were 1,714,493 tourists on September 20, 2020, down 75.2% from 2019. The current situation of the tourism sector may reduce the share of the contribution to GDP.

3.2. Effects of the Covid-19 crisis on Foreign Trade

According to the balance of payment structure, the difference between the value of exports and imports refers to the trade balance. Before explaining the impact of Covid-2019 on the trade balance, it is therefore necessary to study the evolution of exports and imports. 3.2.1. Export Impacts of the Covid-19 Crisis.

Clothing, leather, phosphate and olive oil are the main components of Tunisia’s exports. According WMC (2021), the value of Tunisian exports decreased by 11.7% over the period 2019 - 2020. The diagram below shows the evolution of Tunisian exports from 2018 to 2020.

Figure 3: Evolution of Tunisian exports between 2018 and 2020



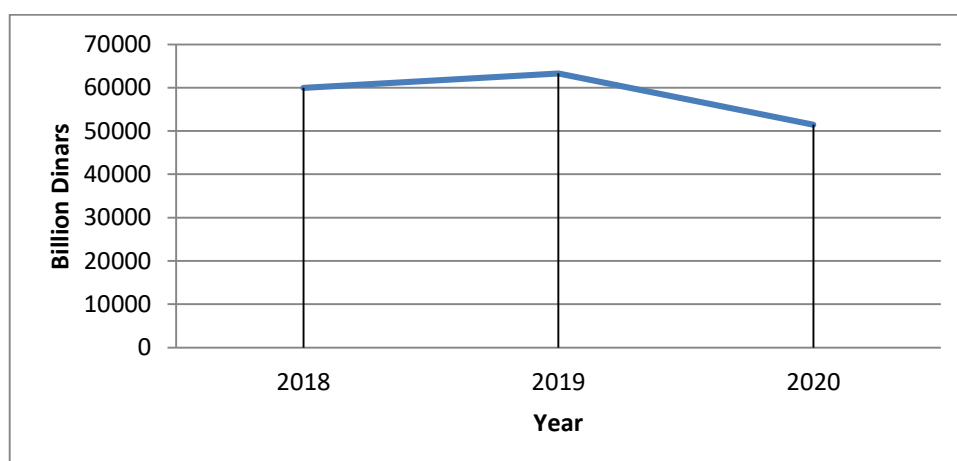
Source: Constructed by the author according WMC (2021)

According to the above diagram it is concluded that Tunisian exports increased from 40.6 to 43.8 billion Dinars in 2018 in 2019. From 2019 to 2021 Tunisian exports decreased from 43.8 to 38.7 billion Dinars. From an economic point of view, this deterioration is explained by the decline in external demand (the decline in Tunisian exports to certain European partners and North African countries). In this regard, Tunisian exports fell by 11.3% in 2020⁷ with the European Union, 28.8% with Algeria, 20.5% with Libya and 13.4% with Egypt.

3.2.1. Effect of the Covid-19 crisis on imports

According to WMC (2021), imports from Tunisia increased by 5.5% over the 2018-2019 periods. On the other hand, imports from Tunisia decreased by 18.7% from 2019 to 2020. The diagram below shows the evolution of Tunisia's imports from 2018 to 2020.

Figure 4: Evolution of Tunisia's imports between 2018 and 2020



Source: Constructed by the author according to the WMC (2021)

⁷ WCI (2020)

According to the above diagram, Tunisia’s imports increased from 59,992 in 2018 to 63,291.6 Million Dinars in 2019. The value of imports from 2019 to 2020 captured a decrease from Dinars 63291.6 to 51463.7 million⁸.

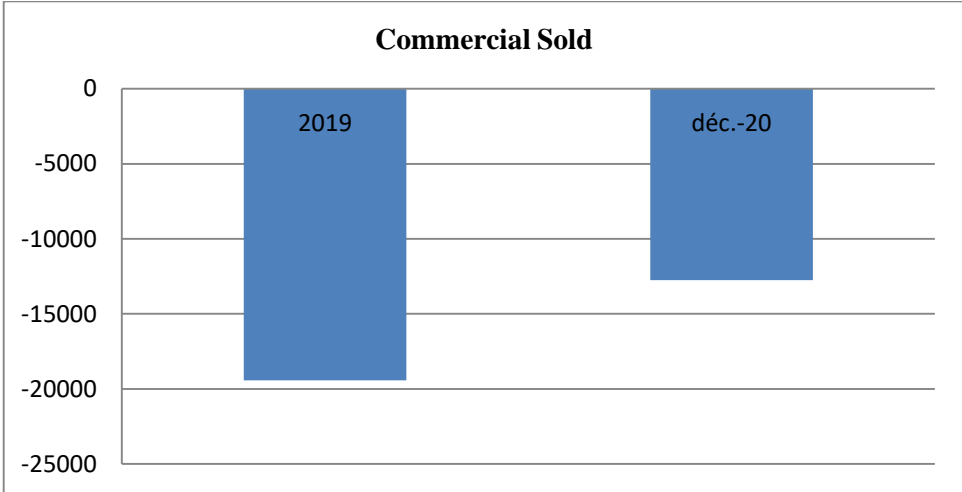
The decrease in Tunisia’s imports is explained by lower demand for capital goods, raw materials and consumer goods. According WMC (2021), imports of capital goods decreased by 24.6%, imports of raw materials decreased by 14.5%. Imports of consumer goods fell 13.8 %. Merchandise trade with the European Union declined from 49.9% in 2019 to 2120 of Tunisia’s total imports.

From an economic point of view, the decrease in imports from Tunisia can improve the state of the trade balance. But this improvement remains a hostage to the evolution of exports.

3.2.2. Trade Balance Effects of the Covid-19 Crisis

As noted above, the trade balance refers to the difference between the value of exports and imports. In this section we analyze the state of the Tunisian trade balance for the years 2019 and 2020. The diagram below shows the Tunisian trade balance of 2019 and 2020 in Million Dinars.

Figure 5: Tunisian trade balance for 2019 and 2020 in Million Dinars



Source: Authored according INS (2020) and WMC (2021)

According INS (2021), Tunisia recorded a trade deficit of 12,757.8 in 2020 against 19,436.2 Million Dinars in 2019. The trade deficit explains in large part by the deficit recorded with China in 5393,8 Million Dinars, in Turkey, in 2140,6 Million Dinars and in Algeria in 1719,5 Million Dinars. Following the reduction in the trade deficit, the coverage rate in 2020 increased 5.9 points compared to 2019 to 75.2% from 69.3% in 2019.

Finally, with respect to the impact of the Covid-2019 crisis on trade balances, the spread of Covid-2019 is contributing to the improvement of the trade deficit. This improvement is explained by the decrease in imports despite the decrease in exports.

⁸ WCI (2020)

3.3. Effects of the Covid-19 Crisis on GDP

The spread of Covid-19 would lead to economic growth of -4.4% in 2020, compared to growth initially forecast under the 2020 Finance Act of 2.7%⁹. The decrease in Tunisian economic growth is explained by:

- Supply shock whose impact is direct and negative on the activity of several sectors. In this regard, according UNDP (2020), imports from Tunisia would also fall by -18.7% between 2019 and 2020.

- Reduction in household demand due to containment and declining incomes for many households. For example, in 2020 the main components of aggregate demand would also suffer a decrease of -4.9% of aggregate investment, -8% of household consumption and -11.7% for exports¹⁰.

According UNDP (2020), the decrease in production and containment would lead to an increase in the unemployment rate estimated at 21.6% in 2020 compared to 15% in 2019.

Finally, Covid-19 is having a negative impact on the tourism sector, positive impact trade balance despite the drop in exports from 2019 to 2020. Again, it reduces the level of economic growth.

4. Lessons learned and recommendations

In this part, the first stage will present the main recommendations at the global level and in a second stage; the main Tunisian recommendations will be presented.

4.1. Lessons learned and overall recommendations

On the basis of the teachings of the Spanish flu that prevailed all over the world between 1918 and 1920¹¹, the crisis of 1930 and 2007 is said.

-Due to declining demand, some businesses may be unable to meet their commitments and will need liquidity or credit; some employees may lose their jobs. This could lead to recession (decrease in production and wages). Economic measures or policies should be aimed at avoiding firm bankruptcies and supporting vulnerable households during the crisis period.

-Each crisis requires the mobilization of monetary policies to support demand, and budgetary policies to support output and households. For example, the reduction in tax burdens in some affected sectors is indicated during this period of crisis. In this case it is said that fiscal policy is the best policy to respond to the effects of crises.

-Coordination of economic policies, regional and international cooperation, and support from each other are essential at this time of crisis to get out of it.

⁹ PNUD 2020

¹⁰ PNUD 2020

¹¹ Voir sur : [https://www.alternatives-economiques.fr/publication/coronavirus-tenir choc/197001010100-00092339.html](https://www.alternatives-economiques.fr/publication/coronavirus-tenir-choc/197001010100-00092339.html).

-Consider social workers for formal and informal workers and for healthy formal or informal enterprises, and provide public services.

4.2. Tunisian recommendations

In light of the graphical analyses and economic explanations it is said, to contain the current economic crisis of Covid-19 and limit its effects in the meantime, recall that it is essential for Tunisia too:

- Encourage the tourism sector either by subsidizing and/or reducing the tax burden on this sector.
- Encourage exporting companies.
- Assist small and medium-sized enterprises to support economic activity.
- Provide public services.
- Consider worker, social workers to increase consumption and hence generate demand.
- Impose budgetary discipline and adjust the State budget in line with the economic situation to ensure the stability of the macroeconomic framework.
- Encourage investment in the aftermath of the crisis by lowering the interest rate.

The latest recommendations are the economic solutions to revive the Tunisian economy.

Conclusion

We guided our work to identify the nature of the Covid-19 pandemic and its effects on the Tunisian economy, particularly the tourism sector, foreign trade indicators and GDP. Based on the classic and Keynesian lens, we have shown that the Covid-19 crisis is a supply and demand shock. The rapid spread of Covid-19 and the containment strategy are resulting in lower demand and supply of goods and services.

Following the graphic analysis, we justified the negative impact of the Covid-19 pandemic on the Tunisian tourism sector. Tunisian imports and exports declined from 2019 to 2020. Despite the reduction in exports, the trade deficit deteriorated between 2019 and 2020.

We also showed that the spread of Covid-19 would lead to economic growth of -4.4% in 2020, compared to growth initially forecast under the 2020 Finance Act of 2.7%.

In the light of the theoretical lessons and the state of some macroeconomic magnitudes, we recommend the Tunisian authority to coordinate macroeconomic policies, encourage the tourism sector and exporting enterprises, help national enterprises, Consider social workers and encourage investment in the aftermath of the crisis by lowering the interest rate to contain the current Covid-19 economic crisis, limit its effects in the meantime and boost economic growth. But the questions that now presuppose is; What is the impact of the Covid-19 crisis of

the Tunisian financial system? What is the impact of the Covid-19 crisis on the informal sector? What are the social costs of the Covid-19 crisis?

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Abbreviations Lists

FTH : Fédération Tunisienne de l'Hôtellerie

WMC: WebMangerCentet

INS: Institut National de Statistique

OMS: Organisation Mondiale de Santé

PNUD: Programme des Nations Unis pour le Développement

BAD: Banque Afrique de Développement

MST: Ministère de Santé Tunisienne