Study of the Socio-Economic Impact of the COVID-19 Crisis in Morocco

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Abstract

In late December 2019, the world is shaken by a pandemic caused by Covid-19 virus which has struck almost every continent without exception and claimed millions of lives. The health crisis caused by this pandemic was very quickly accompanied in several countries by a socio-economic crisis, in particular due to the disastrous implications of the confinement and the shutdown of activity in several economic sectors. Morocco, like almost all the countries of the world, is facing an unprecedented socio-economic scenario, dictated by the spread of the pandemic of the new coronavirus Covid-19. Through this paper, we will deepen an analysis of the various socio- economic effects caused by this crisis of COVID-19 at the national economy. This study also reviews recent trends and updates aimed at further understanding the problem of coronaviruses.

Keywords: COVID-19 Pandemic, Socio-economic impact, contagion, Effect’s spillover, Moroccan economy.

JEL classification: E26-E24-E23-F13-F43-G01-H12-H63-I15-I25-J65

1. Introduction

For the first time since 1918 health crisis and the World Wars, humanity is facing a worst global disaster COVID-19, generating dramatic health, economic and social effects. The COVID-19 crisis, described by the economist as the "black swam", is an unprecedented violent crisis that affects all countries regardless of their level of development, and thereby the world economy. The risk linked to the pandemic was not included in the list of the 10 most likely risks of the “Global Risk Report” published by the World Economic Forum in January 2020. The cases of the development of epidemics are not without precedent, even in recent history (SARS in 2002, H1N1 in 2010, Ebola in 2014, MERS in 2019), but the COVID-19 epidemic represents an extreme case, by its magnitude. In fact, in December 2019, novel Coronavirus (nCoV), which is another public health problem, has emerged in the Huanan Seafood Market, where livestock animals are also traded, in Wuhan[1] State of Hubei Province in China and has been the focus of global attention due to a pneumonia epidemic of unknown cause. On January 7, 2020, Chinese scientists determined a new coronavirus as the cause of this disease. Given the similarities with SARS-CoV, the World Health Organization (WHO) gave on January 12 the name SARS CoV-2 to the new virus and COVID-19 to the disease associated with it (Sahin et.al, 2019; Johnson et.al, 2020; Chinazzi et. al, 2020; WHO, 2020; Sohrabi et.al, 2020).

Unlike the previous epidemics, COVID-19 epidemic has spread rapidly to almost the whole world within the next few months (Albulescu, 2020). On January 13, a first case was discovered outside mainland China. Two cruise ships (the MS Westerdam and the Diamond Princess) are also affected. At the end of January, the first cases appeared in Europe, then on the American continent and the African continent. On January 30, 2020, the World Health Organization (WHO, 2020b) alerted to the virus and ended up declaring the situation a Public Health Emergency of International Concern (USPPI). The epidemic's epicenter has shifted to Europe, affecting Italy and Spain head-on. The total number of sick people outside China exceeded 1,500 in mid-February. The first transmission, person-to-person, is reported in Italy on February 21, 2020 and on February 23, 2020, Italy declared the lockdown of Lombardy. On February 25, the number of new cases reported daily outside China is higher than there. The World Health Organization (WHO, 2020), qualified on March 11, 2020, the outbreak of the COVID-19 as a global pandemic. On April 15, 2020, the International Monetary Fund renames the crisis “Great Lockdown”, in reference to the Great Depression and the Great Recession. In order to eradicate this

[1] SARS-COV2 appeared at the end of December 2019 in Wuhan capital of central China's Hubei province, where 11 million inhabitants live. The city is a pioneer in new technologies and constitutes an industrial megalopolis attracting more than 5 million workers from China and countries around the world. It is a communication hub and an important crossroads for intra and international travel.

pandemic, the World Health Organization recommended maintaining social distance, which generated the severe lockdown situation on the Globe. So, the health crisis becomes a global economic crisis due to the cancel of flights, restriction on labor mobility and volatility in stock markets, fall in oil prices, and so on[2]. In 2021, the behavior of SARS-COV2 has changed so much with the Delta variant which the situation is very different from the year before. The Delta variant gradually takes the place of the variant which was dominant until then, it replicates more and it is 60% to 70% more transmissible. The Delta is less lethal, but it can give serious forms. When a person is symptomatic with the Delta variant, their viral load is higher than with the previous variant, this means it is more contagious. On the other hand, this viral load is less important in the vaccinated persons, which reduces the transmissibility. On 26 November 2021, WHO designated the variant B.1.1.529 a variant of concern, named Omicron, on the advice of WHO's Technical Advisory Group on Virus Evolution (TAG-VE). Omicron has several mutations that may have an impact on how it behaves, for example, on how easily it spreads or the severity of illness it causes. Here is a summary of what is currently known.

The coronavirus epidemic has spread to the whole world with unprecedented speed and scale, a result of the international mobility of people that characterizes globalized economies. So, the current coronavirus flu that causes the disease has spread rapidly to over 227 countries, infecting over 263,563,622 cases of Covid-19 and causing over 5 232 562 deaths, as of 4:57pm CET, 3 December 2021 and a total of 7 864 123 038vaccine doses have been administered (WHO Coronavirus Disease (Covid-19) Dashboard, 2021).

The COVID-19 crisis is expected to result in a global recession that is not only the deepest since World War II, but also much more severe than that caused by the 2007-2008 financial crisis, and more synchronized than ever, with a record number of countries experiencing negative GDP per capita growth in 2020 and in 2021. In addition to its very negative impact on the health and economy, this crisis has very unequal social impacts which vary from one social stratum to another. It has a devastating impact on employment, education and poor households that lack sufficient savings and financial resources and those with vulnerable jobs.

Morocco has also been affected by the pandemic and is listed as the first country in Africa with the highest number of reported coronavirus cases ahead of Tunisia, Libya, Egypt and Kenia. The first positive case of COVID-19 was recorded in a Moroccan national residing in Italy on March 2, 2020. The authorities have taken firm measures to limit the contagion of the coronavirus and prevent a deplorable health situation. The state of emergency has been declared since March 20, Moroccans must therefore face a long "confinement", a situation unprecedented for more than a century. Since Tuesday, August 3, the night curfew, imposed since the end of December on the whole of Morocco, has been in effect from 9 p.m. to 5 a.m. It was previously in effect from 11 p.m. to 4:30 a.m and this in the context that Morocco is receiving its 3rd wave of COVID-19. On January 28, 2021, Morocco launched its national vaccination campaign, which will be deployed in several phases, this campaign intends to vaccinate free of charge all Moroccan citizens and residents aged at least 17 years, or a total of approximately 25 million people. Morocco began on August 31, 2021 a vast anti-Covid vaccination campaign for young people aged 12 to 17 in order to limit the spread of the virus. The goal is to immunize 80% of the population, or 30 million people, with the Sinopharm, AstraZeneca and Pfizer / BioNTech vaccines. On July 5, Morocco became the first country on the African continent to produce vaccines against Covid-19 and will produce 5 million doses per month in the short term. The coronavirus vaccination campaign with the third dose of the vaccine was launched on Monday, October 4, 2021. Following the recommendations of the Scientific and Technical Committee, the positive results obtained during the national vaccination campaign and the improvement of the epidemiological situation, the Moroccan government has decided to take a series of measures, including the lifting of the traffic ban night throughout the country, from Wednesday 10 November 2021. Moreover, there have been in 4:57pm CET, 3 December 2021 a total of 950 088 contaminations and 14 779 deaths have been recorded since the first case reported in March 2020. As of 29 November 2021, a total of 48 851 348 vaccine doses have been administered (Moroccan Ministry of Health).

Morocco in turn has suffered serious consequences in terms of health, social and economic issues which has turned its priorities upside down and exposed the failings of its development model. Faced with this alarming situation, the state took action by proposing various measures from the start of the crisis health in order to minimize the impact of this pandemic and preserve the social stability of a side and the maintenance of stable economic activity on the other.

The objective of this research paper is to assess from various angles the impact of this health crisis in Morocco. In addition, for improving the assessment of the impact of the crisis, we are also able in this study to identify

[2] According to the Managing Director of the IMF, this Covid 19 crisis has the worst economic consequences since the Great Depression of 1929, and global growth will become strongly negative in 2020 and worse in 2021, if the crisis continues.

the sectors most affected and those with the highest spillover effects. This should help identify the sectors to target with a public policy of economic support and recovery, to ensure a better return on public effort. This paper tries to analyze the challenges of COVID-19. In addition, it aims to provide a socio-economic perspective of COVID-19 in Morocco using some statistical figure of economic and social indicators.

The motivation to carry out this work is a major concern of taking a critical look into how COVID-19 has affected the national economy and helping to nourish reflection on the assessment of the various effects of a major crisis and the possible conditions to come out with the lesser evil. This study also tends to identify the major and structuring challenges, in particular for health, education, employment, very small and medium-sized enterprises, the informal sector and key economic sectors, the objective being to assess the strategic impact to inform decision-making decision among development actors. Also, this work will have practical implications in terms of helping to build social and economic theory and policy for Morocco.

Indeed, the discussion in this article contributes to the literature on the economic and financial crisis (Allen and Carletti, 2010; Jagannathan et al, 2013; Mian and Sufi, 2010; Stiglitz, 2010; Ozili, 2020) by showing that non-financial and / or non-economic factors can trigger both financial and economic collapse in unprecedented ways. The implication for financial stability is that future stress testing of the resilience of the financial system should consider human health factors as an important part of their stress testing exercises. Finally, this study will contribute to the recent literature by exploring the effect of COVID-19 in the Moroccan context.

2. Search methodology

In order to better understand and analyze the critical health situation affecting Morocco and its effects on Moroccan economy and citizens, we have to go through these different issues mentioned below, which will be the subject and main axes of our article.

- What is the scale of the pandemic in the Word?
- What are the social, economic and health effects of the COVID-19 pandemic in Morocco?

To answer these questions, the usual approach consists in carrying out our empirical and descriptive study based on theoretical and methodological foundations according to the state of the art inspired by large reviews of the literature, alternately at the social and economic levels. Also, the privileged areas concern in particular human capital with its component's economics of employment, education and health and in general, the economics of development and macroeconomic behavior.

The main focus of our study is to collect and prepare data on health and socio-economic indicators with the scope of analyze the socio-economic impact of the Covid 19 crisis in Morocco.

The literature research has been carried out by using the main term 'COVID19' combined with, the keywords of our paper from the Google Scholar and some famous web sites such Elsevier, Springer, etc. In addition, our analysis is based on the data collected from various primary and secondary sources to analyze the impact of the pandemic from the Moroccan perspective. Our study relies on secondary data from several reputable secondary resources, including the World Health Organization, IMF, OECD, WTTC (World Travel Tourism Council), International Labor Organization (ILO) and World Bank. In addition, existing guidelines including those by Ministry of Health, Government of Morocco, financial institutions were required. We also used reports published by the HCP and the results of their surveys of businesses, the Data from the 2014 Household Living Standards, the general Moroccan treasure, the conjecture notes 2020 and 2021, the publications of Bank Al Maghrib. Other supporting sources come from different study and reports of the impact of COVID-19 from the conducted research in several institution, including AACAPS, CDG capital, the exchange office. The period of the analysis is primarily focused from March 2020 to 3 December 2021, while to explore the economic impact in different sectors, the data from various reports have been taken from the last years.

This article is divided into several sections, each of which deals with the most important aspects. After an introduction, the second section discusses methodology that was employed while the third section presents a review of the literature on the risk factors associated with Covid-19 and its socio-economic impacts. Then, the fourth part offers some results and an analysis of the economic repercussions of the coronavirus in the national economy in the first sub section followed by a presentation and the discussion of the social effects of the Covid crisis in Morocco. Finally, the last section gives a conclusion with important recommendations.

3. Literature Review

Since the start of the Covid 19 pandemic, Several Academic works were starting to emerge to assess the different socio-economic impact of this crisis.

At economic level: The literature on the cause of recessions is vast (Kindleberger C. P., 1973; West, 1990) Gomulka, Stanislaw & Johnson, Paul, 1991; Bernanke B. 2000; Boyer R., Mistral J. 1978; Jagannathan et al, 2013; Stiglitz, 2010; Gaiotti, 2013; Bezemer, 2011; Mian and Sufi, 2010; Bentolila et al, 2018; Bagliano and Morana, 2012). Economic recessions are often studied from three perspectives. The first concentrates on recession causes (West, 1990; Blanchard, 1993; Wilson, 1985), the second examines its consequences (Cummings, 1987; Edgell and Duke, 1986; Moen, 1979; Taussig and Fenwick, 1999) and the last focuses on recession predictions (Camacho and Perez-Quiros, 2002; Western and Healy, 1999).

The cause of the 2020 global recession was novel in modern history. The coronavirus triggered a new type of recession that was different from the past triggers of a recession. For instance, the Asian Financial crisis of 1997 was caused by the collapse of the Thai baht in July 1997, which created panic that caused a region-wide financial crisis and economic recession in Asia (Diaz-Alejandro, Carlos F. 1988; Radelet and Sachs, 1998; Krugman, Paul. 1999, A; Joosten, W. 2004). The 2008 global financial crisis, which translated to a recession, was caused by loose monetary policy which created a bubble, followed by subprime mortgages, weak regulatory structures, and high leverage in the banking sector (Aitoutouhen. L (2016), Allen and Carletti, 2010). The 2010 recession in Greece was caused by the after effect of the financial crisis, structural weaknesses in the Greek economy, and lack of monetary policy flexibility as a member of the Eurozone (Rady, 2012).

Throughout history, pandemics have had three broad kinds of economic impact – direct costs, long-term burden and indirect costs. Direct costs can be really high – for example, during the Ebola outbreak, it amounted to 3 years of funding for the WHO. One of the main long-term burdens is loss of earnings of those who died, estimated to be around 80 per cent of the global economic losses. Indirect costs include anything that contributes to a decline in GDP. First, the estimated costs of epidemics vary significantly, depending on their severity and how they were dealt with. The 1918 influenza is generally considered as the costliest epidemic in modern history. (Correia et al, 2020) estimate that this pandemic curtailed manufacturing activity by around 20%, while (Barro et al, 2020) estimate the negative impact on GDP to be around 6–8% overall. Social distancing measures were introduced to contain the 1918 pandemic, but these varied across jurisdictions and there was no synchronized stop in economic activity. The Global Preparedness Monitoring Board (2019), for example, estimates that the cost of such a pandemic could be close to 5% of global GDP.

The economic loss recorded due to SARS in 2003 is only 0.1% of GDP global (Lee and Mckibbin, 2004). Indeed, this outbreak of 2003 has caused the annual GDP of China to decrease by 1 per cent and that of South-East Asia by 0.5 per cent (Qui, Rutherford, Mao & Chu, 2017). Also, for H1N1 "bird flu" avian influenza the loss recorded is 0.1% of global GDP. It is to highlight that the Ebola epidemic suffered a more remarkable loss in Guinea of 3.4% but remains when even low compared to world production. The coronavirus pandemic has triggered a global recession in 2020, which was a reflection of the difficult choice that many countries had to make in order to save their people rather than their economies. Some countries, however, have used this as an opportunity to revamp their economic and financial systems with planned federal stimulus packages (Ozili & Arun, 2020). In this context, (Barro et al., 2020; Gourinchas, 2020; Eichenbaum et al. 2020; Gourinchas, 2020) estimates a reduction in GDP compared to 2019 of 6.5% for a 2 months confinement and 10% for 3 months in the United States. In addition, (Mckibbin and Fernando, 2020) explained in their results that the cost of economic loss caused by COVID-19 begins to escalate into trillions of dollars, an over 40% deflation in China's economy in the first quarter of 2020, and 14% shrinkage in the US economy in the next quarter of the same year (WEF, 2020a) due to COVID-19.

The COVID-19 is considered stronger compared with the severe acute respiratory syndrome (SARS) pandemic in 2003. An excess of 60 nations have been affected toward the start of March 2020 (Albulescu, 2020). COVID-19 has caused great fears from regulators and businesses and weakened global financial and economic systems (Phan and Narayan, 2020). The resulting slowdown in global economic activity threatens to plunge many countries into recession and undermine financial stability (Boot, et al., 2020). In this context of outbreak, the head of the IMF (Kristalina Georgieva) said that the World economy had entered a recession "as bad or worse" than the global financial crisis of 2008–2009, (Elliott, 2020). In addition, (Gopinath, 2020a, 2020b) noted that adapting to lockdown measures pushed most countries into deep containment, which led to a global recession. Ultimately, the optimal containment policy depends on the evolution of the epidemic and the associated economic impact. In fact, that taken from the model of (Eichenbaum et al. 2020) saves 0.6 million lives in the United States but amplifies the severity of the recession by reducing consumption from 2% (without containment) to 9% (with).

The available evidence from these outbreaks provides information that can help policymakers start thinking about all the possible implications of COVID-19, which is why (Mckibbin and Fernando. 2020) founded an economic model known as the name G-Cubed, and which they use to estimate the economic impact of the current global COVID-19 crisis in seven scenarios. The model takes into consideration a range of epidemiological assumptions which allows them to be converted into quantifiable economic shocks to the reduced workforce in each country due to deaths rising costs of doing business in each country.

There are parallels between the COVID-19 crisis and the events of 2007-2008: as in 2020, many people in the earlier recession assumed the impacts would largely be localized (in that case based on an assumption that the subprime mortgage crisis would be a relatively minor problem affecting only the US, but ultimately affecting the global financial system) (Elliot, 2020). The sudden economic disruption caused by COVID-19 is not only destructive but also has spillover implications because it created demand and supply shocks in almost every area of human endeavor (El-Erian, 2020).

The COVID-19 crisis is already guaranteed to go down in history as a global health crisis, which will have culminated in a major economic and social crisis (Heyer and Timbeau, 2020). But the specificity of this, is mainly due to the fact that it does not result from some reversal of the economic or financial cycle, but from the desire of governments to shut down part of production in the name of the best interest of human life. In doing so, the economist's conceptual tools for analyzing the effects of an economic crisis on organizations (companies, associations, national economy, etc.) are difficult to mobilize as they stand (Boyer, 2020).

(Boon, Haugh, Pain and Salins. 2020) described three channels through which the COVID-19 pandemic may affect the global economy. The closure of factories, cutbacks in the service sector, disruption in the worldwide supply chain will lead to an overall decline in the supply. On the other hand, the significant drop in travel and tourism, education and other entertainment services will affect the demand side. Finally, increases in the uncertainty of the environment will lead to a rise in the opportunity cost of investment. (Baldwin R, Tomiura E. 2020) believe that the COVID-19 pandemic would have health and economic contagion effects and they also note that this virus is a shock of supply and demand, it affects international trade in goods and services.

The pandemic seems to be a major blow to the current form of globalization (Bremmer 2020), that slows its speed, if not reversing it (Bloom 2020), and even may create a new version of globalization which is more regulated (Hutton 2020). However, globalization, with worldwide flow of people, goods, money, information, and ideas in huge scale and speed, might also be responsible for allowing the speedy spread of the outbreak. For instance, since the spread of the COVID-19 disease relies heavily on human-to-human interactions, movement of people internationally could be a dominant driver of its outbreak (Farzanegan, 2020). This health crisis could promote the deployment of the digital economy, which would boost productivity and growth, (Antonin Bergeaud, Gilbert Cette, Rémy Lecat, 2020).

The recent COVID-19 outbreak and the relevant precautionary measures to limit its spreading are having clear impacts on human mobility at global scale. This provoked a reduction of domestic and international volumes of air passenger traffic to and from China in February (Iacus et al., 2020). The coronavirus outbreak has also interrupted trade, supply chains and tourism, all of which have had an impact on the global economy (Ahani and Nilashi, 2020). Indeed, (McKibbin and Fernando, 2020) demonstrate that in the short run, even a controlled outbreak could significantly affect the global economy.

(Evenett, 2020) provides a critical review of the initial trade policy response to COVID-19. Furthermore, domestic and international trade has been severely impacted by the Covid-19 outbreak (Goodell and Huynh 2020). The economists are still struggling to come up with the economic loss which will be far greater than the cost of preventive measure put in place to combat Covid-19 (Anderson et al. 2020; Meo et al. 2020).

A global collapse in demand for hotels and restaurants led to a 20% drop in prices for agricultural products (Nicola et al., 2020a). The consequences of the COVID-19 pandemic on food and nutrition security are likely to be significant and further increase poverty and malnutrition (Bashuna & Addom, 2020).

Furthermore, it should be noted that the COVID-19 shock is as much monetary as it is financial. Indeed, as estimated by the COVID-19 pandemic, it creates more fear and uncertainty, affecting the global economy and amplifying volatility in financial markets (Albulescu Claudiu, 2020). The recession, which will be induced by the persistence of the COVID-19 pandemic over time, will pose solvency problems for some businesses and households and put pressure on bank balance sheets, potentially leading to an increase in non-performing loans and debts, bank failures (Beck Thorsten, 2020). Moreover, the impact of COVID-19 on economics in general and on stock markets in particular has been the subject of extensive research. For instance, (Baker et al., 2020) evaluated the unprecedented impact that the US stock market sustained from the COVID-19 pandemic than to previous pandemics in 1918–1919, 1957–1958, and 1968. The results indicated that government restrictions on commercial activities and voluntary social distancing were the main reasons for such a forceful impact on the service-oriented economy of the US that was reflected in its stock market. (Baker et al., 2020) argued that the influence of COVID-19-related news on stock market volatility was much greater than other previously reported infectious diseases, such as the “Ebola and SARS epidemics”.

Due to globalization, the current crisis will aggravate the economic condition, which can pave the way toward financial meltdown (Huang et al., 2020). This pandemic has caused a severe psychological impact on the economy while agitating service industries and financial markets. Moreover, the coronavirus outbreak has severely affected the financial markets while declining the value of stock index up to 10% in one day (Daube, 2020). In addition, (Ramelli and Wagner. 2020) examined the impact of COVID-19 pandemic on stock price reactions in US firms. They concluded that the pandemic led to an extremely negative and volatile aggregate market reactions. Indeed, according to (Lyócsa et al. 2020), almost all stock markets have experienced a rapid decline in their capitalizations directly after the coronavirus outbreak. This can be explained according to (Pena-Marin et al. 2020) by the price shock caused by the effect of the decline in investor confidence, mainly those who want to achieve short-term performance. (Chaudhary et al., 2020b), found in their comparative study between stock market indices Indians (BSE 500 and BSE Sensex) and the three global indices (S&P 500, Nikkei 225 and FTSE 100), that companies operating in the health sector are the only ones that have maintained acceptable levels of performance during the Covid crisis -19. Global financial markets are also responsive to changes and global stock indices have fallen (McKibbin & Fernando, 2020). Conversely, (Chaudhary et al. 2020a) argue that most stock markets around the world have experienced a strong recovery after the lockdown despite the worsening epidemiological situation and the collapse of macroeconomic indicators.

(Wren-Lewis. 2020), claimed that the Covid-19 pandemic would significantly affect the GDP due to reduction in the production and change in consumer demands. Further, the pandemic will worsen the situation in case if the banks failed to meet the financing needs of the firms due to a sudden fall in demand. This will ultimately lead to the collapse of the stock markets around the world. In addition, (Hassan and Gavilanes, 2021) study the impact of the COVID19 contamination rate on the returns of stock market indices and prices of selected commodities, such as gold, platinum, silver, West Texas Intermediate (WTI), and Brent oil. They show that a 1% increase in the virus contamination rate reduces stock market returns by 2.3% on daily basis. Based on their estimations, the largest drop is observed in oil barrel prices, wherein an increase in the virus spread rate causes a reduction of 4.08% and 3.26% in Brent and WTI oil prices, respectively.

For its part, (Yilmazkuday, 2020) looked at the influence of COVID-19-related cases in the United States on the S&P 500 Index. The empirical findings indicate that a 1% rise in cumulative daily COVID-19 related cases in the United States induces about 0,01 percent of a cumulative decrease in the S&P500 Index after one day, and about 0,03 percent of a decrease after one month, based on a structural vector autoregression model. In the same vein, using panel data analysis, (Al-Awadhi et al., 2020) tested the effect of the COVID-19 virus on the Chinese stock market. The findings indicate that both the daily growth in total confirmed cases and total cases of death caused by COVID-19 have significant negative effects on stock returns across all companies. (Sansa and Hasan, 2020) investigated the effect of COVID-19 on the financial markets in the United States and China. Their results indicate that there is a positive significant relationship between the COVID-19 confirmed cases in both financial markets, based on a simple regression model, suggesting that COVID-19 had a significant impact on the financial markets. In addition, using the (DCC-GARCH) model, to estimate the volatility of the Moroccan All-Share Index (MASI) induced by the instability of the financial situation following the pandemic, (Beraich et al., 2021) investigated the effect of the pandemic crisis on the Moroccan stock market, and demonstrated how the containment decisions have negatively impacted the stock market's performance. The findings show that during the study period, the value of the stock market index experienced a major shock and high volatility in its profitability during the period of containment, followed by a period of partial recovery after de-containment.

Regarding the effects of the Covid-19 crisis on the banking or financial system, most researchers agree on the possibility of financial instability over time, the absence of appropriate response measures and effective, which would include: fear and uncertainty (Albulescu C., 2020b and 2020c; Mann C., 2020; Baker S. et al., 2020), the absence of clear and honest communication from the authorities around the pandemic (Weder M., 2020;

Ceccheti G., 2020), the lack of communication between the supervisory bodies and the banks (Tobias A. and Aditya N., 2020), the lack of liquidity (Weder M. , 2020; Beck T., 2020; Tobias A. and Aditya N., 2020), the non-assistance of vulnerable firms and households (Boone L., 2020; Wren-Lewis S., 2020), inadequate response measures (Beck T., 2020), solvency problems for both firms and households as well as for banks resulting in the increase in non-performing loans (Beck T., 2020), the contagion effects following the interconnection of banks (Ceccheti G., 2020), mismanagement of credit risk (Tobias A. and Aditya N., 2020), lack of international collaboration of national regulators (Tobias A . and Aditya N., 2020; Beck T., 2020). (Aldasoro et al., 2020), analyze the effects of Covid-19 on the European and American banking sector. They find that the scale of the Covid-19 crisis means that no bank will remain untouched.

Regarding the real estate market, (Allen-Coghlan, M.; McQuinn, K.M. 2020) analyzed different future scenarios in this market and predicted a price decline caused by a decrease in house-hold incomes over the next 18 months. This decline has been relatively contained due to the incentives that the Irish government introduced to tackle rising unemployment and the consequent difficulties that families face in terms of paying rent or mortgages. A contraction in the volume of housing sales is highlighted in a study on the Turkish real estate market. This study analyses real estate trends from 2010 to 2020, focusing in particular on variations in the period 2019–2020, confirming the negative shock on the real estate market due to the COVID-19 pandemic, (Tanrivermis, H., 2020). The research assumes that the housing market will only reach stability after the pandemic, unlike the commercial real estate market, which will accelerate.

(Olivier Blanchard, 2020) believes that it is unlikely to see strong demand that would generate inflation. Precautionary savings are expected to play a lasting role, leading to low consumption, and uncertainty is expected to slow investment. The challenge for monetary and budgetary policy will therefore probably be to support demand and avoid deflation rather than the other way around. (Baker et al. 2020) found that consumer spending in the United States is highly dependent on the severity of the disease's outbreak in the state and the strength of the local government's response.

<u>At social level</u>: The Covid-19 pandemic has affected societies and economies in their "epicenter" (Sinapin, 2020). Although the impact of the pandemic varies from country to country, it will most likely increase poverty and inequality globally, making the achievement of the SDGs even more urgent. There have also been massive job losses, particularly among the migrant labor force. All of this threatens to reverse all the progress made in the fight against poverty in the developing nations (United Nations Report, 2020). The pandemic has contributed to stress, anxiety, and even panic in individuals, conflict and abuse in some families, and intergroup tensions through avoidance, blame, stigmatization, and conflict over resources (Dubey et al. 2020). The other social factor refers to the lack of adequate consumption of antiseptics at home, which leads to other problems, such as damage to the respiratory system. People have reacted to this pandemic and became sensitive in interacting other individuals at large (Paital et al., 2020). Indeed, to evaluate the socio-economic impact of COVID-19 on individuals, a micro-economic model is developed by Amory Martin et al. (2020) to estimate the direct impact of distancing on household income, savings, consumption, and poverty.

The Covid-19 crisis will inevitably plunge the world economy into recession in 2020. The first available indicators - increase in jobless claims or partial unemployment - already show an unprecedented collapse in activity, (Christophe Blot, Paul Hubert, 30 April 2020). According to the Pew Research Center, the highest risks of layoffs are in the accommodations, retail trade, transportation services and arts entertainment and recreation services sector (Kochhar and Barroso 2020). Additionally, among the sectors that lost the most jobs in March are the leisure and hospitality and health and educational services (Burns 2020). Using a variable vector autoregression model based on data from recent disasters, (Ludvigson et al. 2020) estimates a cumulative loss of 24 million jobs in the U.S. over the course of 10 months, largely due to a 17% loss in service sector employment. Only 37% of jobs in the U.S. can be performed at home, and many lower-income countries have a lower share of jobs that can be performed remotely (Dingel and Neiman, 2020). Consumer discretionary spending is in free fall as non-essential businesses are closed and individuals are saving more.

The cessation of economic activity following the outbreak of confinement would lead to a 20% drop in the income of individuals globally, which would lead to an increase in the number of people living in extreme poverty from 434 million to nearly 1.2 billion worldwide (World Bank, 2020). In this perspective, (Buheji et al., 2020) estimate that around 49 million people, belonging to the four continents of the world, will fall into extreme poverty (with an income of less than $ 1.90 per day per person). The impoverished are facing enormous challenges due to this pandemic, as it is nearly impossible for them to survive while adhering to the social restrictions amid lockdown. The main concern in developed nations is the long-term impact, potentially leaving millions of people unemployed. Separate special lockdown and national emergency rules for the poorer sections of society is a recommendation for any similar future scenario in the developing countries (Buheji, Mavric & Cunha, 2020). Thus, precarious housing and social exclusion in general have been associated with an increased risk of other respiratory infections (Smith et al., 2020). In fact, the risk of infection and death linked to Covid-19 is higher in the most disadvantaged regions (Lusignan et al., 2020) and among poor and vulnerable people.

Covid-19 poses serious concerns to the global education system. In fact, a study has indicated that there have been severe learning disruptions, and reduced access to education infrastructure and research facilities in recent times. Students are feeling the burden of education loans more than ever now, and also are dealing with problems such as poor connectivity, electricity and technological issues (Onyema et al., 2020). According to Sudevan (2020), UNESCO estimates that, 1,026 billion children worldwide have been affected by school closures due to this pandemic, which is 72% of the world's student population.

The consequences of COVID-19 for the society and economy of India were analyzed by (Aneza and Ahuja, 2020). A lying impact assessment is conducted in all three industries -primary, secondary and service-with the impact on informal sector, poverty, job losses migrants, and health. There has been a disproportionate loss in all sectors of the economy and in one sector, even. The societal impact is also serious with loss of work, psychological illness, and increased domestic violence. (Ozili, 2020) has examined the impact of socio-economic on Covid-19 in Africa and its response of policy. Coronavirus pandemic affected countries of Africa and its impact on African regions in comparison to other regions was more severe.

Khalatbari-Soltani et al. (2020) recommended that it was crucial to collect data on socio-economic determinants in COVID-19 studies. Some studies have examined socio-economic impacts on COVID-19, e.g., income (Kim and Bostwick 2020), education (Kim and Bostwick 2020; Drefahl et al. 2020), living condition (Raisi-Estabragh et al. 2020), population density (Gu et al. 2020). Kim and Bostwick (2020) created a social vulnerability index (SVI) by using data about poverty, education, female-headed households with children, median household income, and employment ratio.

4. Results and analysis

According to Chakraborty and Maity (2020) the loss of lives because of disaster and pandemic causes definite irreplaceable damage to human society. But apart from the loss of human lives, the COVID-19 pandemic has severely destabilized the global economy. The years 2020 and 2021 were marked by an unprecedented crisis, that of the COVID-19 pandemic, which exerted a health and economic contagion in the all the world. The first country to suffer the impact of COVID-19 is China, the world's second-largest economy with a share of 15.8% in world GDP (World Bank) and 12.8% in world merchandise exports UNCTAD[3]. The pandemic COVID-19 has the potential to be the largest macroeconomic shock to not only developed but developing and emerging economies over the past 100 years (Hevia and Neumeyer, 2020). Indeed, (Evans and Over, 2020) provide some potential economic channel of COVID-19 for low and middle-income countries.

4.1. Contagion economic of the Covid 19 crisis in Morocco

The spread of COVID-19 has severely slowed production activities and trade flows, restricted travel and disrupted supply chains around the world in 2020 and 2021. Merchant services were, in general, the most affected than industry following the restrictive measures and health requirements imposed by countries[4]. Business investment has fallen sharply and household consumption has slowed significantly. According to the (IMF), the world economy has experienced a sharp contraction of -3% in 2020 (84,705,425.88 US dollar)[5] after a growth of 2.8% in 2019. Generally speaking, all countries in the world have recorded growth rates below potential levels. Thus, the GDP of advanced countries fell by 4.7% against a growth of 1.7% in 2019 of a magnitude, however, uneven from one country to another.

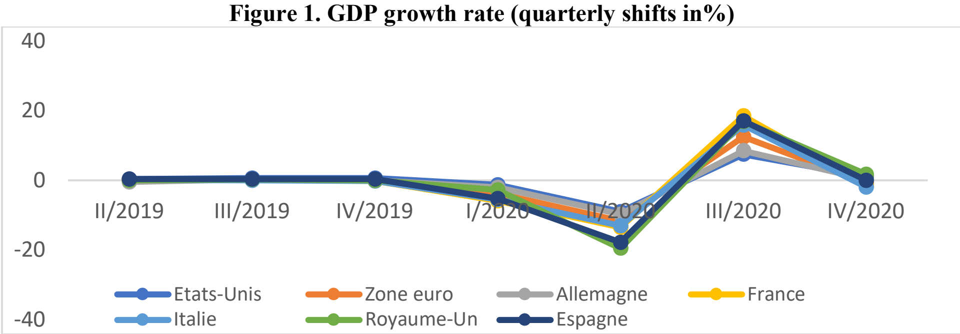
The deterioration of domestic economic conditions, the decline in world trade and the reversal of capital flows in emerging and developing countries resulted in a GDP contraction of 2.2% after growth of 3.7% in 2019. It is the countries of Latin America and the Caribbean that recorded the largest declines in their GDP due to the predominance of the informal sector and the high level of poverty. For their part, the emerging economies of Europe and Asia suffered from the deterioration of the external environment, although China and Turkey

[3] United Nations Conference on Trade and Development
[4] This pandemic has worked in favor of certain sectors such as the digital sector which benefited from the crisis and which recorded better results than those before the crisis such as GAFAM (Google, Apple, Facebook, Amazon and Microsoft).
[5] World Bank national accounts data, and OECD National Accounts data files.

posted positive growth rates of 2.3% and 1.8% respectively after 5.8% and 0.9% a year earlier. Also, economic activity declined by 3.4% in the Middle East and North Africa region in 2020, the region's exporting countries suffered the double shock of the fall in the price of oil and the related containment measures pandemic, bringing the contraction of their GDP to -4.5% (-0.3% in 2019). As for the oil-importing countries, the decline in their GDP of 0.8% reflects, in addition to the impact of health restrictions, the notable repercussions of the decline in tourism, capital flows and trade. As for Africa, the World Bank (2020) notes that the COVID-19 is a crisis on top of many other crises, including locust invasions, drought, change climate, conflict, violence and the underdevelopment of food markets. World Bank experts point out that, weak external demand, the sharp drop in commodity prices and the upheaval in the tourism sector would have a negative effect on economic activity in sub-Saharan Africa. They also specify that Africa is characterized by the precariousness of most jobs, the large size of the informal sector (89% of total employment), the limited coverage of pension and unemployment insurance schemes, and the predominance of micro, SME enterprises.

In addition to the health challenges, there are also the negative repercussions of this crisis on the economies of African countries. Several sectors have been affected (trade, tourism, exports, imports, etc.) following the containment policy and the brakes imposed on circulation at the global level. In the same wake, Sub-Saharan Africa suffered heavily from the effects of the pandemic crisis in 2020. Sanitary measures and the deterioration of the external environment weighed on regional economic activity, causing a GDP contraction of 1.9 %. In particular, some countries dependent on tourism (Cape Verde, Mauritius and Seychelles) recorded a decline of more than 13% of their GDP. In addition, the fall in the prices of raw materials (including oil) largely contributed to the contraction of the economy of South Africa, Namibia and Zimbabwe by -7%, -7.2% and -8%, respectively. In addition, the decline in growth was limited in some countries, including Nigeria (from 2.2% to -1.8%), Senegal (from 4.4% to 0.8%), Mali (from 4.8% to -2%), the Ivory Coast (from 6.2% to 2.3%) and Gabon (from 3.9% to -1.8%). By group of countries, GDP growth fell from 6.5% to -0.2% in the East African community, from 5.7% to 1.1% in the UEMOA and from 2.1% to -3.1% in the CEMAC region.

Figure 1. GDP growth rate (quarterly shifts in%)



Source: OECD, INSEE

The year 2021 would, however, usher in a favorable outlook. It should benefit from an expected recovery in demand in connection with the improvement of the international economy following the progress of vaccination campaigns, thus promoting the opening of international borders and leading to renewed confidence among households and investors. According to IMF, Global GDP growth is expected to reach 6% in 2021, then slow to 4.4% in 2022. the recovery in global economic activity should have picked up slightly in the second quarter of 2021. The restart of activity would have concerned industry more than services and would have been faster in some emerging economies, particularly in China, India and Turkey, than in advanced economies. The composite index of Purchasing Managers (PMI) for global production hit 58.8 in May, well above its long-term average.

After three months of the appearance of the virus, the first cases of contamination by the virus were detected in Morocco on March 2, 2020 and the authorities quickly took firm measures to limit the contagion by closing air and sea borders, stopping face-to-face studies for all levels of education, state of alert and total containment with the exception of vital sectors. These preventive measures adopted by the authorities have resulted in significant consequences on the economy by affecting production and consumption and hence the living standards of Moroccans by widening inequalities.

In Pre-COVID era, the economy in Morocco has been characterized by macroeconomic stability and low inflation. It must be said that Morocco has returned to economic growth since the beginning of the 2000s, nevertheless it remains correlated to the agricultural sector and to the global economic situation. Thus since

2014, there has been a slowdown in GDP, and reached 2.2% in 2019, against 3% in 2018. This slowdown is mainly due to the volatility of the agricultural sector and weak growth in the tertiary sector (World Bank).

According to the report of the Voluntary National Review on the implementation of the Sustainable Development Goals (SDGs), the COVID -19 pandemic, which has affected the global economy with severe health and socio-economic consequences, has affected the development trajectory initiated by Morocco. This report also notes that Morocco was quickly reactive in managing this crisis and mitigating its effects.

The effects of the health disaster in Morocco are certainly endogenous, but also exogenous, given that the national economy is strongly indexed to the economies of the State main partners, in particular the countries of the European Union. On the one hand, the effect of the exogenous shock linked to the recession of the world economy affects sectors and activities oriented towards the exterior, such as exports of world trades from Morocco, tourism receipts, transfers from MRE and foreign direct investments. As a result, the current account is under pressure as are international foreign exchange reserves which are considered key elements in Morocco's current economic model. On the other hand, an internal shock with the temporary cessation of activities oriented towards the internal market, causing a deep recession with a contagion effect from Europe.

Under the effect of the supply and demand shocks of the health crisis and the impact of the drought which severely affected agricultural production, the Moroccan economy experienced a notable recession in 2020 of around 6.3%, the first in more than two decades. As for the economic outlook, it remains surrounded by uncertainties, particularly in relation to the evolution of the epidemiological situation. However, thanks to an improvement in climatic conditions leading to a good 2020/2021 agricultural season and to the various support and stimulus measures, the national economy should return to growth which would be 5.3% in 2021 and 3.3% in 2022. With regard to inflation, it should stand at 1% in 2021 and then at 1.2% in 2022. In its update on the evolution of the economy, published on April 2, the Bretton Woods institution notes that Morocco has had a very difficult year 2020 due to the Covid-19 pandemic and the drought. The IMF forecasts a rebound in 2021, an upward trend in Moroccan GDP of 4.9%. In addition, the World Bank underlined that Morocco should record growth of around 4.2% in 2021 after an economic recession of more than 6.3% more severe than that experienced in Morocco in 1995 (-5.4%), standing at 112.22 billion US dollars in 2020 after a growth of + 2.5% (119.7 billion dollars) in 2019 and 118.1 billion in 2018 confirming a much greater impact than that of the financial crisis of 2008, while the growth average stood at - 3.4% for the zone (Mena). The growth rate estimated at 4.8% when the 2021 Finance Law was drawn up gained 0.4 points at the end of the first quarter. It will reach 5.2% according to new forecasts from the Economic Watch Committee. For its part, the HCP forecasts growth of 4.6% in 2021. In the second quarter of 2021, the national economy would have recovered by 12.6%, instead of 1% a quarter earlier. This development would have been favored by the 19.3% increase in agricultural value added and the 11.7% rebound in non-agricultural activities.

a. Impacts by sector: Effects Spillover

The decline in economic activity has seriously affected all sectors, but not to the same extent. The sectors of Moroccan economy which are hit hard by the health crisis are primarily the tourism and transport sectors and logistics in supply chains, but also, transversally, the informal sector (much more difficult to measure).

- **Primary sector: Agriculture and allied activities**

Unlike many developed countries, agriculture is one of the pillars of Morocco's economy. This sector represents more than 17% of the country's GDP and more than 30% of available jobs[6]. The agricultural sector is suffering the consequences of the drought and the pandemic. The impact of the drought is expected and direct, but the effect of the pandemic will be channeled more through declining local and foreign demand. The 2019/2020 agricultural campaign would have been impacted, for the second year in a row, by unfavorable climatic conditions. In this context, the primary sector would have generated added value, down 7.1% in 2020 after a 4.6% drop in 2019, once again contributing negatively to the growth of GDP of -0,9 points. The cancellation of the International Agricultural Show in Morocco SIAM, initially planned for April 2020 in Meknes, should cost the segment of cooperatives and economic groups more than 12 M MAD of goods with a risk loss of turnover of between 60% and 80%. Agricultural activity would have retained its dynamism that began at the start of 2021, posting an increase of 19.3% in the second quarter of 2021.

[6] High Commission for Planning, conjuncture note, N° 40, July 2021

- **Secondary sector: Industry activities**

Industrial activities would have suffered from the negative repercussions of the temporary stoppage of the activity of several industrial operators and the withdrawal of their dynamism on the national and international market. Their added value would thus have fallen sharply by 7% in 2020 against an increase of 2.8% in 2019. Thus, the automotive, aeronautics and textile sectors have mainly suffered from the effects of the crisis, due to their needs for raw materials from China and other countries, (Bouhia, 2020). Moroccan industry is directly impacted, through the cessation of orders from the main contractors, partial unemployment of employees and the slowdown in industrial production

- **The manufacturing industry**

The manufacturing sector is the major contributor of GDP and employment in the secondary sector and has been recognized as an engine for vibrant growth and creator of the nation's wealth (Rele, 2020). The manufacturing sector is important in the way that it has strong linkages with other sectors, both forward and backward linkages so any impact in this sector will affect other sectors as well. Overall, the manufacturing sector is going to be affected badly by demand–supply disruptions and global value supply chain. In the second quarter of 2021, the manufacturing industry would have jumped 20.2% instead of -20.8% in the same period of the year 2020, in annual variations.

The added value of the agri-food industry sector is said to have improved in 2020, recording modest growth of around 0.6% in 2020 against an increase of 1.1% the previous year. Indeed, this industry is said to have continued its upward trend at a rate of + 1.9% in the first quarter of 2021. In addition to the stability of local demand, the sector's activity would have been boosted by the increase in external demand, in particular for "preserved fruit" and "preserved vegetables". On the other hand, exports in quantity of “canned fish” would have fallen by 10.3%, following the decline in local fish production.

The food industry is said to have continued its upward trend for the third successive quarter, marking an increase of 7.9% in the second quarter of 2021, compared to -1.6% a year earlier. In a context of stable internal demand, this development would have been driven by the increase in external demand addressed to Morocco. In addition to the lack of foreign agricultural labor, the cold snap in Europe would have continued to boost imports from Morocco, by + 48.3% for canned vegetables and + 155.9% for fruits and jams, in annual variations, for the first two months of the second quarter of 2021. On the other hand, the quantity of canned fish would have fallen by 17.8%, following the general rise in the costs of raw materials.

The mechanical and metallurgical industries would have fallen by 6.4% in the first quarter of 2021, instead of -11.1% a quarter earlier, suffering from the sluggishness of demand. external address to the sector. In the second quarter of 2021, IMMEs would have jumped by 51.4% after almost total paralysis of its activity, during the same period of 2020. The two months of April and May of 2021 would have recorded a strong recovery in terms of quantity exported. Exports of electronic components, electric wires and cables and other insulated conductors for electricity, would have increased by more than 50% for all products.

For its part, the chemical and para-chemical industries would have recorded an added value increasing by nearly 7.6% in 2020 against 5.6% in 2019. Despite its increase of 4.8% in the second quarter of 2021, the chemical industry would have shown a deceleration in its growth rate since the third quarter of 2020. The sector's activity would have experienced a decline of 0.4 % compared to the previous quarter, following the contraction of the quantity of exports of fertilizers by 17.1% and that of phosphoric acid by 7.8%.

The extractive industry could suffer the depressive effect of the global economy. In fact, the added value of the extractive industries would have increased by nearly 4.4% in 2020 against 2.4% in 2019. In the second quarter of 2021, the mining sector would have slowed down posting an increase of 1.2% year-on-year, after increasing by 5.2% a quarter earlier. The deceleration in exports of raw phosphate, faced with strong competition from Asia, would have been dampened by the resilience of demand from local chemical industries. The surge in international prices of sulfur and ammonia would have resulted in an increase in the production costs of local processing industries, but their activity would have strengthened by 4.2% year-on-year, thanks in particular to the strengthening of exports of phosphate derivatives destined for African countries and Latin America. In this context, the production of non-metallic minerals would have increased by 3.1% in the second quarter of 2021, while that of metals would have posted an increase of 3.6%, in the wake of the continued recovery in international zinc prices, copper and lead.

- **Textile and clothing industry**

The textiles and clothing sector is among the sectors most affected by the pandemic. In this context, the textile and leather activities are said to have fallen by nearly 14.1% in 2020 after an increase of 3.1% in 2019. In addition to the fallout from the COVID -19 crisis, this sector suffered from structural problems, in particular severe Turkish and Chinese competition in addition to the significant weight of the informal sector. These weaknesses are said to have been aggravated, firstly by the disruption of the supply chains of industrial units with inputs from Asia, particularly from China, and by the fall in external demand, in particular from Spain and France. However, these difficulties are said to have been alleviated by the emergence of strong global and national demand for medical-related textile articles[7]. In the first quarter of 2021, the activity of the textile and leather sector is said to have fallen by 7.8%, compared to -9.6% a quarter earlier. In addition to the sluggish and uncertain local market, external demand addressed to the sector would have fallen by 12% for “hosiery articles” and by 6.8% for “ready-made clothes”, under the effect of the lower production rate of the activity in Morocco, of the famous Spanish textile group "Inditex". This industry is said to have recovered by + 47.9% in the second quarter of 2021, compared to the same period of the previous year, which had seen a total cessation of activity. After announcing the cancellation of orders for the summer season, in the first quarter of 2021, European contractors (especially French and Spanish), absorbing nearly 65% of Moroccan exports of textiles and clothing, have resumed normally their activity.

- **Automotive industry**

The temporary suspension of automotive activity could have repercussions on the 180,000 individuals employed by the automotive industry, the 250 automotive suppliers operating in Morocco around nine ecosystems. Another negative impact concerns national vehicle sales, which are expected to decline given the low propensity for durable goods consumption by the Moroccan population and the postponement of the Auto Expo originally scheduled for June 2020. It should be noted that this automotive sector represents 27% of global exports in 2019 with an export turnover of around 7 billion euros in 2019. As the country's leading exporting sector, 97% of national cars exported to the world are destined for the French, Spanish and German markets. The current health crisis also risks compromising the goal of achieving an annual production capacity of 1 million locally manufactured vehicles by the year 2022 and an export turnover of 100 billion Dirham. The construction of a new car factory by a major French equipment manufacturer in the city of Kenitra will increase vehicle production capacity by 50% in 2021, which will likely boost exports.

However, the automotive sector has reportedly experienced a slowdown in its dynamics. Exports of "passenger cars" and "parts and parts for cars and passenger vehicles" would have posted increases of 3.5% and 41.7% in the first quarter of 2021 instead of + 18.8% and +65, 9% the previous quarter. In the second quarter of 2021, external sales of the automotive sector would have almost doubled for passenger car parts and parts, and would have posted an increase of 41.1% for passenger cars. In the aviation industry, exports of aircraft parts are said to have increased by 31.8%.

- **Construction activities**

The real estate sector has been severely impacted by the health crisis in different ways, largely dependent on region and asset class. The abrupt stoppage of construction work, combined with the postponement of sales operations by some owners led to a tightening of supply on the residential market, resulting in an increase in prices in advanced economies of 4.3% against 1,7% a year ago. The countries that experienced the sharp increases in residential property prices are Australia (4.5% vs. -5.5%), Canada (7.3% vs. -0.7%) and Luxembourg (13, 5% against 8.2%). On the other hand, price growth slowed in emerging countries to 1% after 1.6% in 2019, penalized by both the drop in demand and the drop in supply (suspension of construction sites and interruption of transactions). In particular, prices fell in India (-4.1%) and China (-0.1%) and recorded notable increases in Peru (7.9%), Thailand (7.6%) and in Turkey (5.4%). For its part, commercial real estate has not been spared from the effects of the pandemic in view of the significant drops in transactions and prices.

In the context of the crisis, the situation in the Construction sector is alarming, production has been stopped, and even sales scheduled are suspended as the notaries have also stopped their activities. This blocking both at the level of production and at the level of marketing can only be the origin of negative consequences on

[7] In the face of declining demand in textiles and in a spirit marked by the principles of solidarity and unity, several factories have converted their activity to the production of masks protection. Indeed, and following the obligation to wear masks by citizens, the Ministry of Industry has set itself the goal of producing daily of 5 million masks. 100% Moroccan production masks have undergone a conformity check and meet the "NM / ST 21.5.200" standard of the Moroccan Institute of Standardization (IMANOR).

employment and cash flow which represents 63 billion DHS annually[8]. Since June 2020, the construction sector has resumed. This was measured by the increase in the volume of cement sales by 18.6% in August, after a drop of 15.8% between January and August 2020. For its part, the added value of the sector had fallen by 6.7% in 2020. The construction materials production index had practically stagnated, while employment in the sector had lost nearly 9,000 jobs during the year 2020. The underperformance of the Real Estate sector worsened further in 2020, reaching -44.11% after -36.19% in 2019. The real estate market was able to return to its pre-crisis level from the 3rd quarter of 2020, after having marked a significant drop during the 2nd quarter of 2020. This gradual return to normal is attributable to party to the support measures taken by the Economic Watch Committee in favor of real estate companies, in particular the support system called "Damane Relance Promotion Immobilière" and the 50% reduction in registration fees on the acquisition of real estate. In the second quarter of 2021, the construction has recovered after having virtually stagnated in the first quarter of 2021, marking an increase of 9.6%, instead of -12.4%, in the same quarter a year earlier. The production of construction materials is said to have recovered, in particular that of cement, sales of which have increased by 41.7%, year-on-year. Real estate transactions have reportedly rebounded particularly in social housing, driven by the introduction of tax advantages granted to registration fees (50% reduction in registration fees for the benefit of buyers). Also, demand addressed to the real estate sector would have picked up and loans to real estate would have increased by 4.3% at the end of May 2021. The business climate indicator is said to have continued its upward trend in the second quarter, after gaining 0.3 points in the first quarter of 2021.

- **Energy sector**

The added value of the energy sector would have posted a decline of nearly 4.1% in 2020, following the drop in several industrial activities, after a sharp rebound of 13.2% recorded in 2019[9]. This weakening of the Electric power production would also have been accentuated by the contraction in external demand for electricity from Spain. In the second quarter of 2021, Electricity added value is said to have increased by 13.5%, benefiting, in large part, from a base adjustment effect after the 11.5% decrease in electricity activity observed during the same period a year earlier. This performance would have been attributable to the growth of both ONEE thermal power plant activity and concessional ones. In addition, reflecting the effort made by Morocco in terms of renewable energies, the production of the Noor station would have recorded an increase of 3%, instead of a decrease of 3.2%. The positive development of the sector would have been the result of the increase in demand from very high voltage operators, whose growth rate + 72.9%, in annual variation, instead of a decrease of 42.6%, a year earlier.

▪ **Effect of Covid -19 on Service Sector**

The Covid-19 pandemic marked a considerable halt to the majority of economic activities, and more particularly those in the tertiary sector which is the key driver of economic growth and largest contributor of GDP. Several important dimensions of service sector like, transport and tourism are worst hit globally except for telecommunications which has not seen any remarkable change since March 16 and the start of containment measures. The loss to the service sector will be based on the severity and longevity of the crisis.

- **Tourism industry**

Due to lockdown enforcements and voluntary social distancing, services sector, travel, tourism, catering and leisure, got affected critically. China, where the novel virus showed up first, the foregone tourism revenue was forecasted by luxurious travel agencies as 75% and this would mean almost $ 95 billion in 2020 referring to 2019 data. The global tourism industry was brought to a halt in March 2020, when all international borders were closed due to the pandemic. According to the World Travel and Tourism Council (WTTC), 1.5 billion people crossed international borders in 2019, with tourism accounting for 29% of global service exports.

With a contribution of 10.3% to global GDP and job creation estimated at 330 million in 2019, the tourism and travel sector is asserting itself as one of the pillars of the world economy. The sector has lived during the last decade to the rhythm of the good performances that have driven the forecasts of the World Tourism Organization (UNWTO), which forecast oscillating growth between 3% to 4% for the year 2020. Globally, the number of tourist arrivals fell by 83.3% in the first quarter of 2021, year-on-year, due to continued general travel restrictions. It should be remembered that for the whole of 2020, the number of tourist arrivals worldwide

[8] The 2019 HCP report "Morocco in Numbers" shows that the real estate sector and construction, employment 10.8% of the active Moroccan population, generates for the region of the great Casablanca more than 3000 billion DH.

[9] The spectacular fall in oil prices has led to a significant reduction in the country's energy bill. According to the exchange Office, the bill fell to $ 7.6 million in December 2019, against $ 8.23 million in December 2018.

fell by 73%, year-on-year, after an increase of 4% in 2019. Nevertheless, air traffic flows have been shaped at national and regional scale by shocks due to political instability, terrorism and economic crises (Gabrielli et al., 2019). In addition, the air traffic industry has shown strong dependency on pandemia outbreaks in the past such as SARS in 2003 and MERS in 2015 (IATA, 2020).

The impact of the crisis on this sector in Morocco is likely to be severe following the cessation of air traffic and confinement, which have as a direct consequence, the decline, or even the cessation of accommodation, catering and travel agencies, tourist transport companies and car rental companies[10]. Faced with this unprecedented situation, the National Confederation of Tourism has sounded the alarm, estimating that the sector could suffer losses estimated at 138 billion dirhams between 2020 and 2022. As for events, all major events were canceled, including the strategic Meknes Agricultural Show (SIAM). This tourism sector is also said to have suffered from the cancellation of Operation Marhaba 2020 and 2021, given the importance of the share of MRE in tourist arrivals. According to the Ministry of Tourism, the sector has been hit hard by the coronavirus pandemic the arrivals at border posts experienced a drastic drop of -79% in 2020 compared to 2019 with 2.8 million non-resident tourists. The nights recorded at classified accommodation establishments followed the same trend, going from 25.2 million in 2019 to 7 million in 2020, a decrease of -72% between the two years. At the same time, travel receipts for 2020 amounted to 36.4 billion dirhams, recording a loss of -54% compared to those of 2019. It should be noted that for 750,000 jobs threatened, only 126,000 are declared to the CNSS (Alami, 2020), which means that 624,000 employees are not entitled to aid from the Special Fund for the management of the COVID-19 pandemic. In the best of situations, some will receive aid reserved for the informal sector. The accommodation and catering business would have recorded a strong rebound in the second quarter of 2021, driven by the easing of health and travel restrictions between cities and the gradual opening of airspace. Overall tourist overnight stays would have evolved at the same pace, following the strengthening of internal tourism, and travel receipts would have improved by nearly 58%[11].

- **The Transportation Sector**

Transport was one of the sectors most affected by the Covid-19 crisis during the year 2020 and 2021. In fact, the disruption in the transport system quickly affecting the demand in the service sector that is crucial for micro, small and medium enterprises (MSME) which are more fragile to market demands (Bouey, 2020). In Morocco, transport operations, the second component of trade in services, due to the importance of income and expenditure recorded annually has experienced a huge setback following the closure of borders and the restriction of national travel. Likewise, the added value of the transport sector would have registered a fall of 25.8% in 2020 after an increase of 6.6% in 2019, under the effect of the temporary stoppages of its activities. Also, this sector recorded a deficit balance that worsened by 77%. This situation results from the drop in revenue of 34.3% or -11.9 billion DH: 22.6 billion DH in 2020 against 34.5 billion DH in 2019, mitigated however, by the fall in expenditure of 27.4% or -10,1 billion DH. The drop in revenue from the transport section mainly follows the drop in revenue from air transport by 61%. In the second quarter of 2021, the added value of transport has recovered 64.8%, compared to a drop of 10.9% a quarter earlier, following a mechanical adjustment linked to the base effect and to a significant recovery in air and rail transport, following the easing of state measures emergency and the reopening of international borders.

Air transport in Morocco is one of the sectors most affected by the effects of the coronavirus pandemic due to the precautionary measures applied and the decline in demand. It should be noted that the kingdom's air traffic, for the year 2019 representing more than 27% of the added value of the sector and totaled a number of arrivals of 25,059,840 passengers, an increase of 11.18% compared to the year 2018, according to the data from the National Airports Office. At the same time, the surplus from air transport operations fell by 73% (+ 2.1 billion DH in 2020 against + 7.8 billion DH a year earlier)[12]. The drop in traffic passengers of national airlines has passed from -71.4% in the fourth quarter of 2020 to -59.3% in the first quarter 2021. In the same wake, freight had maintained its decline from -70.4% to -57.7%[13].

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[10] The contribution of the tourism sector to the national GDP was around 6.9% in 2018 (HCP, 2018). The balance sheet for 2019 recorded an upward trend compared to the years previous ones with a total of 25.2 million overnight stays and 12.93 million arrivals. It should also be noted that two thirds of the tourist season take place from June. But with 80% of tourists outside the Moroccan diaspora coming from Europe, the losses are expected to be significant for a sector whose contribution to GDP is greater than 8%, the highest level in the region.

[11] High Commission for Planning, conjuncture note, N° 40, July 2021

[12] Office de change, Rapport annuel de la balance des paiements et de la position extérieure globale du Maroc 2020

[13] High Commission for Planning, conjuncture note, N° 40, July 2021

Rail and Land transport were also reportedly affected by the decline in the number of rail travelers due to the suspension or restriction of travel between cities from March 24. This sector would have been showed a slightly lower surplus balance of 0.6 billion DH in 2020. The decline in the number of passengers transported by rail, which began in the third quarter of 2020 (-55.8%, instead of -91.2% in the second quarter), continued in the fourth quarter, with decrease of -39.9%, in annual variation. On the other hand, rail freight transport was not impacted by the health crisis in the fourth quarter of 2020, marking an increase of 2.8%, instead of + 10.4% a quarter earlier. In the first quarter of 2021, the tonnage transported by rail continued its recovery that began in the third quarter of 2020, driven by the good performance of the transport of phosphates, whose revenue growth had reached 2.2%, instead of + 5.8% a quarter earlier. In contrast, the number of passengers by rail fell 23%, following a drop of 39.9% a quarter earlier[14]. At the end of June 2021, ONCF achieved a turnover of 1.6 billion DH, which is already more than 91% of the level of activity achieved during the same period in 2019.

Conversely, maritime transport would have continued its upward trend in connection with the recovery in world trade during the second half of 2020. In this line, these operations have showed a reduction deficit of 39.5% or 4.5 billion DH in 2020[15]. At the beginning of the 2021, maritime transport would have posted a decrease of 7.7%. This development would be attributable to a decline in both imports and exports. In the first quarter of 2021, the total tonnage transported reached 22.8 million tones, showing a decrease of 2.3% instead of -0.3% in the fourth quarter of 2020. This underperformance is explained by a drop in imports of 3.6%[16].

- **Telecommunication and Offshoring in the context of the Covid 19 crisis**

The Covid-19 pandemic has had a significant impact on virtually every industry. The Offshoring and the Information Technology sectors are no exception. In fact, these sectors depend mainly on local economic dynamics and on the investments of major clients, in particular telecoms operators, banks, private companies and public administrations, and to a lesser extent export consisting mainly of offshoring. The main problem facing IT manufacturers during this period concerns delivery times, which are getting longer and longer, due to the suspension of imports.

The postal and Telecommunications will benefit from a new growth dynamic for two reasons. On the one hand, the sharp increase in Mobile Data of more than 50% during the confinement period, would promote a change in consumption habits in Morocco. On the other hand, private and public players will evolve towards models that rely more on digitization, which would boost the development of high and very high-speed Internet segments. In this perspective, teleworking and the massive use of digital technology during confinement have demonstrated the contribution of digitalization to improving services to citizens and to education.

The postal and telecommunications sector, is said to have fallen by nearly 1.3% in 2020 after a slight increase of 0.3% recorded in 2019. In fact, after a slight drop recorded in 2019, revenues from telecommunications, IT and information services are rising in 2020 reaching 17.2 billion DH against 15.3 billion DH in 2019 and 15.6 billion DH in 2018. For the year 2020, revenues from telecommunications services capture 53.1% of total revenues reaching 9.1 billion DH against 8.2 billion DH a year earlier, an increase of 11.3%. For their part, IT services revenue stood at DH 8 billion against DH 7 billion in 2019, an increase of 13.9%. They represent 46.3% of total revenue. Indeed, the revenue from information services stabilized at 0.5% of total revenue[17]. Moreover. the added value of telecommunications would have recovered slightly in the second quarter of 2021, posting an increase of 1.6%, in the first quarter of 2021. The decline in roaming and international entry activities had impacted the added value of the sector in the first quarter of 2021, which fell by -4%, instead of -1% a quarter earlier. In contrast, internet subscriptions increased by 16% in the first quarter of 2021, compared to + 17.4% in the previous quarter, driven by the impetus for mobile internet subscriptions, which represents 93% of subscriptions. Fixed telephony subscriptions had, for their part, preserved their momentum, posting growth of 12.4%, instead of + 14.7% a quarter earlier. Despite this good performance, the number of units reported fell by -14% in the first quarter of 2021, compared to -10.4% in the previous quarter[18]. Considered one of Morocco's flagship professions, the Offshoring employed 110,000 people at the end of 2019, around three main businesses: ITO (information technology), BPO (business process outsourcing) and CRM (customer relationship management) and carried out a double-digit growth of 28%. The Offshoring does not appear to escape the consequences of the pandemic. In fact, the turnover fell by 10 to 15% in March 2020.

[14] High Commission for Planning, conjuncture note, N° 40, July 2021
[15] Rapport annuel de la balance des paiements et de la position extérieure globale du Maroc 2020
[16] High Commission for Planning, conjuncture note, N° 40, July 2021
[17] Rapport annuel de la balance des paiements et de la position extérieure globale du Maroc 2020
[18] High Commission for Planning, conjuncture note, N° 40, July 2021

c. The financial sector in the context of the Covid 19 crisis

The financial sector who has got the most important role to play in the crisis times has also been having huge problems in the World like Twin Balance Sheet (TBS), high levels of non-performing assets (NPAs) and an inadequately capitalized banking system. In the private corporate sector too, firms are financially weak and over-leveraged, (Sengupta & Vardhan, 2019). The stock market has also seen the worst in March, 2020 due to the lockdown and collapse of various business activities. The recently published Financial Stability Report in April 2020 said that the Covid -19 pandemic has a significant impact on the financial systems, and further escalation of the crisis could affect the global financial stability. In addition, according to the same IMF's report, investment flows have experienced a strong portfolio reversal, never before recorded, especially in emerging and pre-emerging countries.

Stock markets, exchange rates and commodity price quotes are once again subject to large fluctuations due to the Covid -19, although this impact may be short-lived. As discussed in Global Financial Stability Report, 2020, which named the crisis as "The Great Lockdown", the "Equity markets experienced the fastest drop in history. Moreover, Market risk is one of the major upheavals that world could witness in 2019. In fact, this risk would arise in 2020 mainly and firstly from:

<u>The very high volatility of oil prices</u>: It should be noted that the instability of oil prices was already observed in 2018 following a number of geopolitical factors. It is therefore very possible that this volatility will be even more intense in 2019, following situations of discomfort that could emerge or worsen in producer countries such as Venezuela, Iran, and even other countries as well. The contraction in Chinese demand has also led to the drop in the world price of oil (Brent). At a meeting of the Organization of the Petroleum Exporting Countries (OPEC) in Vienna on March 6, Russia's refusal to cut oil production sparked retaliation from Saudi Arabia with extraordinary discounts to buyers and a threat to pump more crude oil. Saudi Arabia, considered the leader of OPEC, increased its oil supply by 25% from February, bringing production volume to an all-time high (Nicola et al., 2020a). This caused the steepest one-day drop in prices in nearly 30 years. On March 23, Brent crude fell 24% from $ 34 per barrel to $ 25.70 (Theron, 2020).

<u>The monetary policy</u>: the second threatening factor for international markets, is the question relating to the monetary policy of the US Federal Reserve (FED). The markets feared an increase in key rates but the Central Bank of the United States decided to keep them unchanged for the first three months of 2020. If, however, another Fed rate hike takes effect, the markets will likely see a rise in the dollar and potential higher debt service costs for companies and countries that are indebted in US dollars. This stock market euphoria is in the midst of an economic collapse, first of all due to the hyper-accommodating policies of the central banks, which lowered their rates to historically low levels, injecting billions into the economic circuit. The idea is to make money as cheap as possible to restart consumption and investment. After four years of hike in key rates, the US Fed has lowered them three times since July 31, 2020. Currently, their range is between 1.50% and 1.75%. In Europe, the ECB is even lending at a loss to stimulate the economies of euro-zone countries. The Frankfurt institution also lowered its deposit rate from -0.40% to -0.50% in September to push banks to lend more.

<u>The financial bubble</u>: the third big risk is the bursting of the financial bubble. Currently, in the United States, companies have an extremely high valuation of financial assets. Indeed, the Dow Jones is at twice its level before the 2008 crisis, which seems to be totally unrelated to political and economic fundamentals. A phenomenon of abundant liquidity, in a context of low interest rates, which sparked a great resurgence of interest in the stock market, has become the only alternative for investors and stock market to make their money grow. This dichotomy between the gloomy environment and the exuberance of the markets has led many to argue that the world is once again going through a new financial bubble.

All of this, coupled with massive cash injections by governments into their stimulus packages and massive asset buyback policies by central banks, has created an abundance of liquidity never seen in the history of the world. Moreover, while Europe has mounted a 750-billion-euro stimulus package, the new President of the USA has come up with a mega new deal of $ 1.8 trillion. An announcement that gave a boost to global stock markets, now called on Wall Street the "Biden Bounce".

At the same time, also thanks to massive government aid, household savings are growing, in fact, more than $ 2 trillion more in the United States alone. Except that, this money is not going into consumption, let alone investing in the real economy, but it is invested in the financial markets. In this context, according to a Bank of America survey, 64% of Americans prefer to put their money in financial circuits rather than spend it, which allows the bubble to inflate even more[19]. (Robert Boyer, 2020) confirms that [20] it is often in the most total exuberance that crashes occur. From the point of view of the real economy, the formation of bubbles is to be feared, because, when prices are carried away, resources are poorly allocated. A Crash is therefore not to be ruled out, and its triggers can be multiple: highly indebted companies in distress, a loss of confidence in the actions of central banks, a major geopolitical tension, the return of a fourth wave of the Covid or quite simply a disillusionment with the current vaccination campaigns. It should be noted that corporate appetite for IPOs is another sign of the market boom. In fact, in 2020, the year of the great recession, 420 companies went public in the United States, raising a total of 145 billion dollars from investors, an absolute record for thirty years.

The stock markets have been significantly and negatively affected by such pandemic. In this way, the spread of the disease in the first quarter of 2020 led to a rapid collapse in stock prices, accompanied by an increase in their volatility and a decline in the rates of sovereign yields. In this context, the most important financial markets begin to fall on February 24, 2020, due to significant increase in number of Covid-19 cases outside mainland China. The most serious consequences took place on Monday, March 9, 2020, when several world stock markets collapsed including Tokyo with (-4.6%), Frankfurt (-7.94%), London (-7.69%) and Paris (-8.39%). Between the beginning of March and March 23, 2020, the Dow Jones lost 10,000 points, or 35% of its value. For instance, the Dow Jones and S&P500 had undergone as much as a 30% decrease in values during March 2020 (Iqbal et al., 2021). Other stock markets such as markets in Europe, UK, Australia and Asia have also shown similar decrease (Zhang et al., 2020)[21]. In total, in 2020, changes in the stock indexes of advanced economies fluctuated by -13.8% for the FTSE 100, -4.7% for the EUROSTOXX 50, 4.5% for the NIKKEI and 2% for the Dow Jones Industrial. At the same time, volatility rose in 2020, going from an average of 15 to 29 for the VIX and VSTOXX. The stock indexes of the main emerging countries also ended the year with declines, with the exception of that of China which jumped 16.9%. Sovereign rates, for their part, trended lower amid lower key rates, negative growth prospects and investor enthusiasm for safe-haven securities. As for the yield on US Treasuries, it plunged 125 bp. In emerging and developing countries, sovereign rates fell sharply, losing 282.5 bp for Turkey, 69 bp for Brazil and 89 bp for India, while in China, the rate cut was is limited to 23 bp. In the midst of a global pandemic, the major stock market indices are realizing inexplicable performances. However, stock prices rebounded, volatility eased and rates generally recovered, thanks to a reopening of economic activity, government stimulus plans announced and monetary and prudential policies put in place by most countries. In this context, American and European financial center are reaching record levels in 2021, with double-digit performance, completely out of step with the real economy and the risks that still weigh on the world. It should be mentioned that, IMF chief economist Gita Gopinath had already sounded the alarm in June 2020 on this subject by highlighting a striking divergence between financial markets and the real economy, with financial indicators predicting better prospects for recovery than suggested by the real activity. In France, the CAC 40 in March 2021, reached 6,300 points, exceeding its historic peak of 2007, just before the subprime crisis. In one year, the Paris Bourse has soared by 60%. In Germany, Dax reached its all-time high level in March 2021, now posting an annual performance of 10.64%, and thus wiping out any losses caused by the Covid-19 crisis. Same euphoria in England where the FTSE 100 shows a YTD of 8.24%, a little less than the place of Milan and its 9.78% or even the Belgian or Spanish places which align gains since the beginning of January of 10.76 % and 11.31%. In Japan, another major global financial center, the Nikkei has reached its highest for six years. Same trend in the United States where the flagship index, the Dow Jones has garnered 11.97% gains since the start of the year, to post an increase of 120% since March 2009. The Dow Jones has thus exceeded, despite the crisis of Covid-19, the threshold of 15,000 points, a first in its history.

The national financial sector, made up of credit institutions, similar organizations, insurance and reinsurance companies, social welfare organizations, brokerage firms, collective investment organizations and their management companies, as well as infrastructure market, is of major importance for the Moroccan economy. These sectors ensuring the financing of the economy had not escaped the effects of the pandemic during the year 2020 and 2021. In fact, this national financial sector accounts in 2020 for nearly 244% of the national GDP in terms of assets against 216% a year earlier. The total cumulative balance sheet of all the financial

[19] Especially since, forced to stay at home and fleeing the virus, millions of people have become stock marketers on Robinhood or other brokerage apps, amplifying speculative packs. Gathered on online forums, crowds converged to push up shares of struggling companies, the case of GameStop being edifying (+ 2460% in a few days in January).

[20] Capitalismes à l'épreuve de la pandemic (Ed. La Découverte, 2020)

[21] From academic standpoint, many researchers have increasingly analyzed the effect of the Covid-19 health crisis on the behavior and dynamics of stock markets. For instance, Al-Awadhi et al. (2020) report that daily growth in total confirmed cases and cases of death due to the Covid-19 pandemic adversely and significantly influence stock returns of Chinese companies. Ashraf (2020) shows the stock markets increasingly react to the Covid-19 health crisis and such reaction changes over time according to the stage of such pandemic.

institutions that make it up amounted at the end of 2020 to 2.620 billion dirhams after 2.482 billion dirhams in 2019, an increase of 5.6% against 6.2 % in 2019. The banking sector remains the predominant component of the national financial system, with a share of 62%[22].

The uncertainty surrounding the evolution of the Covid-19 pandemic caused major disruptions in the financial markets at the start of the crisis, particularly at the level of the Casablanca Stock Exchange, which recorded significant underperformance and high volatility. After the upward trajectory taken by the MASI, the main index of the Casablanca Stock market, during the second half of 2019 reaching a value of 12,171.90 at the end of the year, i.e., an annual performance of 7.11%, the stock market continued on the same trend bullish during the month of January 2020 when it reached a maximum value of 12,600.45 on January 24. Against the backdrop of uncertainties linked to the Covid-19 pandemic, this MASI index, had reached its lowest level, falling to 8,987.89 points recorded on March 18, 2020, a decline of 26.2% compared to the end of 2019 and a fall of 26.7% since March 2, 2020, the date of the announcement of the first case of Covid in Morocco. In addition, the Casablanca Stock Exchange suffered a fall of 28.14% between February 21 and March 18, 2020, accompanied by high volatility. There followed a phase of gradual recovery towards a MASI value of 11,287.38 at the end of 2020.

However, the COVID-19 crisis has not had a crippling effect on investors as it has in many other countries. Thus, in the first quarter of 2020, Morocco even saw a 147% increase in stock transactions compared to 2019. For its part, the volume on the central market reached a daily average of 132 million dirhams, up 4% compared to 2019. During the first half of 2020, the volatility of the stock market experienced strong variations, going from a minimum of 6.47% recorded on January 7 to a maximum of 57.31% reached on March 30. This is a historic peak in the volatility exceeding that reached on October 14, 2008 during the last international financial crisis, i.e., 38.34%. However, during the second half of the year, volatility gradually declined to more moderate levels, in a range between 5.18% and 17.59%. Compared to previous years, the volatility of the MASI is sharply increasing in 2020 with an average value of 15.12%, i.e., double the years 2018 and 2019, where the average value was respectively 7.508% and 7.653%.

In terms of volume on the central and block markets, the Casablanca Stock Exchange recorded in 2020, a transaction volume of around 49 billion dirhams, down 16.06% compared to 2019 when the volume had reached 58.4 billion of dirhams. This development is due to the 41% drop in volume at the level of the block market, which fell to 16 billion dirhams in 2020 against 27.2 billion dirhams in 2019. It should be recalled that the year 2019 was recorded an exceptional volume of nearly 9 billion dirhams relating to the sale of 8% of the capital of Itissalat AL-MAGHRIB. Moreover, the drop in turnover for the Casablanca Stock market was limited to 5% at the end of December 2020. For its part, the volume of capital raising in shares on the stock market in 2020 amounted to 3 billion dirhams, down nearly 70% compared to 2019, after the increases of 200% and 129% recorded respectively in 2018 and 2019.

After the significant drop recorded during the outbreak of the health crisis in March 2020, which was accompanied by volatility well above historical highs, the stock market gradually recovered a good part of its losses in 2020, thus limiting its annual underperformance at -7.27% against -26.2% recorded on March 18, 2020. Regarding the overall market valuation, it remains relatively high in 2020, despite the drop in prices. It should be important to mention that only an IPO in the amount of 600 million dirhams was realized in 2020. The majority of fundraising was carried out by issuers already listed, in the form of a capital increase, of which 62.7% in cash, 37% by conversion of dividends and 0.3% by contribution in kind. Over the year 2020, nine out of twenty-four business sectors recorded a positive performance, compared to seventeen in 2019.

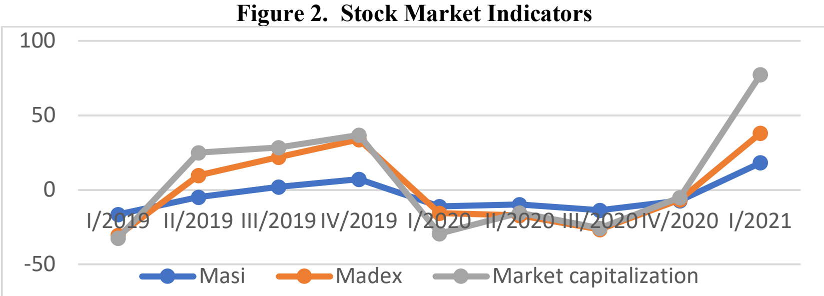
The liquidity of the stock market has been fluctuating since 2011 in a low range between 11% and 7%. It was 8.8% in 2020 against 9.7% in 2019. This structural weakness in liquidity is a consequence of a limited floating factor as well as a typology of investors dominated by "Institutional" including the investment horizon is generally medium and long term. Indeed, in order to meet the expectations of investors interested in liquid stocks, the Casablanca Stock Exchange launched in December 2020 a new compact index, the MSI20. This index includes the top 20 stocks in terms of free float capitalization and liquidity.

The UCITS industry has shown itself to be resilient in the face of the health crisis situation. With more than 500 managed UCITS, it consolidates its place in the Moroccan financial system as an important vehicle for the mobilization of savings for the financing of the economy and the revitalization of the financial markets. The net assets of UCITS at the end of May 2020 were at the same level as at the end of 2019, i.e., 471 billion

[22] Rapport sur la stabilité financière – Exercice 2020, Numéro 8- AACAPS, BAM, AMMC.

dirhams, despite redemption movements induced by the unfavorable evolution of the stock market, the fears of investors regarding the outlook of the national economy, and the mobilization by institutional investors of the liquidity necessary for their contributions to the Covid-19 solidarity fund. At the end of 2020, the net assets which continued to grow to reach 523 billion dirhams or nearly 49% of GDP and with an increase of 11.2%. These net assets remain predominantly held by financial institutions and are mainly invested in securities issued by the State and securities issued by financial institutions[23] [24].

Figure 2. Stock Market Indicators



Source: HCP

The market recovery was largely explained by the sustainability of a low interest rate environment in Morocco, announcements of vaccination campaigns, and the return of dividend distribution from banks. In the second quarter of 2021, growth in the equity market is said to have consolidated after having recorded a decrease a quarter earlier. The stock market indices would have seen significant upward movements, explained in part by the base effect as the declines recorded in the second quarter of 2020 were brutal with the expansion of the Covid-19 pandemic. The MASI and MADEX stock indexes are said to have increased by 22% and 22.2% respectively, year-on-year, after increases of 18.3% and 18.5% in the previous quarter. Market capitalization is said to have continued to appreciate, improving from 18.4% to 21.7% between the two successive quarters. The pharmaceutical industry sector would have recorded the strongest growth, i.e., + 139%, followed by the engineering and industrial equipment goods sector (+ 82.2%), mining (+ 71.1 %), chemicals (+ 68.6%) and the hardware and software sector (+ 37.8%). On the other hand, only a few sectors would have recorded negative trends. They would have concerned, among other things, the utilities sector (-8.1%), telecommunications (-1.4%) and the drinks sector (-1%). In the same way, transaction volume is said to have increased by 30.8% year-on-year in the second quarter of 2021, after declining 35.3% a quarter earlier. The central market would have participated for 88.6% of the overall volume. For its part, turnover in the block market is said to have fallen by 41.6% and only generated 11.4% of overall turnover. In this context of progress in the performance of the Casablanca financial center, the market capitalization would have prolonged its appreciation in the second quarter of 2021. It would have stood at 637.5 billion dh, recording a growth of 21.7% in annual variation, that is to say a gain of 113.6 billion dh around.

- **The banking system**

The years 2020 and 2021 were marked by a deep economic recession induced by the Covid-19 crisis which did not fail to be reflected in the indicators of the banking system, in particular through the acceleration of bad debts, tensions on liquidity or the slowdown in the distribution of credits. In fact, the market capitalization of the banking sector has realized its lowest level since the financial crisis of 2008. Indeed, in the first quarter of 2020, the market capitalization global banking fell to 4.9 trillion euros, down 31% year-over-year. After rising to stabilize at around 5.2 trillion euros, market capitalization climbed to 6.1 trillion euros in the fourth quarter of 2020, but still down 20% year-on-year. The market capitalization of the world's top 100 jumped by nearly 19% to reach 5.6 trillion euros in the first quarter of 2021, an increase of 43% year-on-year. The recovery was notably driven by the good performance of US banks, whose profits rose 22.6% year-on-year. In addition, Western European banks grew 18.2% year-on-year. The ING Group was the best performing among European banks, with a TSR of 38.4% between January and March of this year. Société Générale, the Swedish group

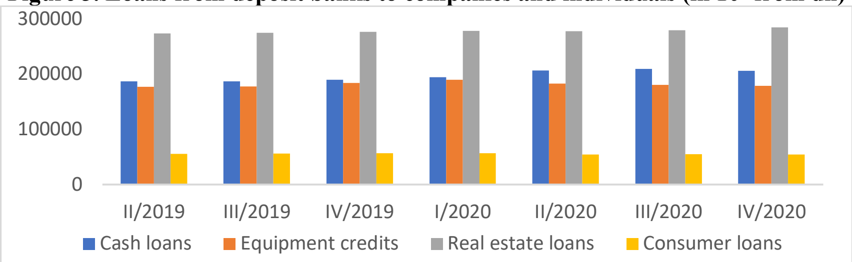
[23] The evolution of UCITS net assets has grown steadily over the past seven years. It rose from 245 billion dirhams at the end of 2013 to 523 billion dirhams at the end of 2020, i.e., an average annual growth rate of 11.5% against 3.5% between 2011 and 2013.

[24] The fund creation dynamic continued in 2020 with 28 funds created. A trend towards bond funds was observed. Indeed, out of a total of 28 funds created, almost two-thirds, or 18 funds concern the “Bond” category. The remainder concerns the “Diversified” category with 4 funds created and 6 funds divided equally between the “Monetary” class and the “Shares” class. As of December 31, 2020, 35% of UCITS, i.e., 176, are medium and long-term bond funds (OMLT). Indeed, the latter correspond to the investment profile of institutional investors, who are the main investors in UCITS. This predominance is also reflected at the level of assets under management. Indeed, the "OMLT" category posted at the end of 2020, net assets of 307.4 billion dirhams, or 58.7% of total net assets.

SEB and Barclays followed with 31.1%, 30.8% and 27.5% respectively. Credit Suisse was the only bank among European banks to post a negative TSR of -13.1% over this period.

Thanks to the measures undertaken by Morocco to support the economy and the banking sector, the total assets of the banking sector amounted to 1,508 billion dirhams, up 5.7% after 5.8% a year earlier. It represents 138% of GDP instead of 124% in 2019 and 122% in 2018. This ratio has greatly increased, under the effect of the contraction of nominal GDP in 2020. Despite the deceleration in economic growth, 2020 saw an improvement in the gross outstanding bank loans. This can be explained by the various support and stimulus measures introduced by the central bank and the government. In this context, bank loans stood at 957.4 billion MAD at the end of December 2020, an increase of 4.4% compared to the end of 2019. This improvement results from an increase of 28.2 billion MAD in loans to businesses and to a lesser extent an increase of MAD 12.1 billion in loans distributed to households. The bulk of the increase in business loans concerned the growth in accounts receivable and cash loans which posted an increase of 8.5%, thus offsetting the 3.0% drop in loans to business, equipment and the decline of 0.7% in loans distributed to real estate developers, a response to the poor economic situation experienced by the real estate sector in this period. Indeed, in order to overcome the effects of the pandemic, companies have resorted to bank credit to finance mainly their working capital needs to the detriment of investment. For their part, loans to households were impacted by the fall in consumer loans. At the end of December 2020, they recorded a decline of 4.1% compared to the end of December 2019. This deterioration reflects the effects of the pandemic on household consumption and the increased level of uncertainty perceived through the unemployment rate which rose from 9.2% in 2019 to 11.9% in 2020[25].

Figure 3. Loans from deposit banks to companies and individuals (in 10^6 from dh)



Source: HCP

On the resource side, the sector benefited from a good performance of bank deposits which posted an increase of 5.6%, the strongest increase in the last four years. This could be explained by investors' preference for cash in this period of crisis and in the absence of favorable investment conditions and, to a lesser extent, by the change in consumption patterns of Moroccans. At the end of 2020, deposits collected from customers continued to constitute the main resource for banks, representing nearly 67% of financing against 11% for debts to credit institutions and similar, 8% for bond debts and 10% in the form of equity. The structure of these resources remained broadly stable, marked by a slight increase in the share of debts to credit institutions and similar to the detriment of bond debt, in line with the increase in liquidity contributions from Bank Al-Maghrib and the drop in emissions on the private debt market under the effect of the Covid-19 crisis. The overall banks' securities portfolio increased by 8.7% in 2020 after 9.6% a year earlier. It stands at 335.4 billion dirhams, grabbing 22.2% of bank employment. 54% of it is made up of Treasury bills, which for their part increased for the year 2020 by 11.6% against 9.5% in 2019.

Under these conditions, the exercise of the solvency macro stress based on the economic projections of Bank Al-Maghrib of June 2020 and June 2021 continue to demonstrate to this date the resilience and the ability of banks to cope globally with the shock induced by the Covid-19 crisis and to maintain compliance with regulatory requirements, thanks in particular to the capital buffers that they have built up in recent years and to the implementation by the banking sector of Bank Al-Maghrib's recommendation of the non-distribution of dividends. On a social basis, the average equity ratio thus stood at 15.7% in 2020 against 15.6% a year earlier and 14.7% in 2018. The Tier 1 ratio, for its part, was located at 11.4% against 11.5% and 10.9% respectively in 2019 and 2018[26]. In addition, the liquidity needs of the banking system increased overall during the year 2020, going from 64.1 billion dirhams in December 2019 to 83.4 billion dirhams in December 2020, due to the significant increase in currency circulation. Indeed, the latter recorded an increase of 20.1% compared to 2019 to stand at 300.6 billion MAD at the end of December 2020[27]. In this context, Bank Al Maghrib conducted

[25] CDG CAPITALE, note d'analyse. Mai 2021, le secteur bancaire marocain face à la crise Covid 19
[26] Rapport sur la stabilité financière, Exercice 2020, numéro 8 BAM, AACAPS AMMC
[27] CDG CAPITALE, note d'analyse, Mai 2021 'le secteur bancaire marocaine face à la crise de Covid – 19

an accommodating monetary policy, increasing the average daily outstanding amount of its injections to 92 billion in 2020 instead of 76.4 billion dirhams in 2019. In addition, the injections of the Central Bank reached 97.3 billion dirhams during December 2020 against 66.1 billion during the same period of last year[28]. In view of these developments and those expected in currency circulation and foreign exchange reserves, the central bank forecasts a bank liquidity deficit of around MAD 84.1 billion for 2021. In addition, to alleviate the impact of the crisis, Bank Al-Maghrib also made two cuts in the key rate. from 2.25% to 2% in March then to 1.50% in June 2020, putting pressure on both lending rates and the cost of resources and fully freeing the account from the compulsory reserve. At the same time, the quality of bank assets deteriorated, with a 13.9% increase in bad debts, reaching nearly 80 billion dirhams in 2020, an additional 10 billion dirhams. The banking sector default rate increased to 8.2% for 2020 from 7.5% a year earlier. This development is explained by the deterioration of economic conditions under the effect of the health crisis, which amplified the difficulties of certain companies and increased the arrears of households weakened by the reduction in their activity and the loss of employment.

Banks have also made provisions of a general nature, amounting to 13.7 billion dirhams, up 27.7% compared to the end of 2019. These provisions constitute, alongside prudential capital, mattresses aimed at covering sensitive debts and thus protecting banks in the event of possible credit shocks. Although provisions have been made for almost 70% of bad loans and the largest banks have significantly increased provisioning levels recently, the pre-crisis banking sector capitalization ratio (15.6% at end 2019) remains a little low, given the risks associated with the property.

The profitability of the banking sector recorded a cumulative net profit down 43.2% to 6.8 billion dirhams, the largest drop in the last decade. This underperformance results in particular from a sharp increase in the cost of risk of around 74.1% and an increase in non-current charges for banks following their contribution to the Covid-19 special fund. For its part, the cumulative net banking income (NBI) of the banking sector remained broadly stable from one year to the next and stood at nearly 49.5 billion dirhams, covering a decrease in the margin on commissions (-4, 7%), a stagnation in the result of market operations and an increase in the interest margin (+ 3.4%) mainly driven by a volume effect. The average return on assets (ROA) thus fell to 0.5% after 0.9% in 2019 and that on equity (ROE) to 4.8% after 9.4% a year earlier. Despite this context, banks continue to post capital above the regulatory minima, benefiting from support measures for the banking sector and economic agents[29]. In addition, Banks remain vulnerable to the risk of concentration on their largest counterparties and the shocks of their default. Their gross balance sheet and off-balance sheet exposures to large debtors increased by 1.7% in 2020, of which 38% concern the 10 largest non-financial groups.

Regarding financial conditions, lending interest rates recorded year-over-year declines in the fourth quarter of 2020, albeit moderate, particularly those applicable to accounts receivable and cash loans. Likewise, rates on the secondary market for Treasury bills were down compared to the previous year, especially for long maturities. In the same vein, the cost of financing banks has also fallen, mainly following the downward trend in lending rates and the twice reduction of the key rate by 75 basis points in 2020. In addition, the rate of increase in loans to the non-financial sector slowed down by closing the year 2020 with an increase of 3.8% against 5.5% in 2019, suffering from an economic situation severely weakened by the crisis of the Covid 19.

Table 1. Moroccan Bank Indicators

	II/2019	III/2019	IV/2019	I/2020	II/2020	III/2020	IV/2020
Money supply	1334585	1342500	1370518	1381620	1435073	1444883	1485118
Liquid investments	723805	729946	741517	728102	770517	774910	796454
Liquidity of the economy	2058390	2072446	2112035	2109721	2205590	2219794	2281572

Source: HCP

The growth of claims on the economy would have continued to decelerate since the third quarter of 2020. Their outstanding would have increased by 4.1% in the first quarter of 2021, instead of + 4.6% a quarter earlier. This development would be attributable, in particular, to a sharp decline in consumer loans for households and those for business equipment. For its part, interest rates in the market interbank would have fallen by 72 basis points, year-on-year, stabilizing at 1.5% in the first quarter of 2021, i.e., the same level as the director of Bank Al-

[28] In this context, in order to avoid an imminent liquidity crisis, and following forecasts on the liquidity deficit bank, BAM increased weekly injections from 72 Mrdh at the end of February 2020 to 102 Mrdh at the end of March.
[29] Rapport sur la stabilité financière, Exercice 2020, numéro 8 BAM, AACAPS AMMC

Maghrib. At the same time, rates would have fallen further on the Treasury bill auction market, with declines of 80 and 54 basis for 1- and 5-year maturity rates, respectively. Credit rates would have declined, for their part, by 31 basis points on average.

The banks' liquidity requirement eased in March 2021 to 61.2 billion DH on average per week, against 63.3 billion a month earlier, according to Bank Al-Maghrib. In this context, the Bank's liquidity injections amounted to a total amount of MAD 72.2 billion, including MAD 27.4 billion through 7-day advances, MAD 15.7 billion in the form of repo transactions, 27, 9 billion dirhams as guaranteed loans and 1.2 billion dirhams for currency swap operations, the interbank rate stood at 1.50% on average, in line with the key rate.

The growth of the money supply would have decelerated slightly, standing at + 7.6%, in the first quarter of 2021, after + 8.4% a quarter earlier. The need for bank liquidity would have eased, following the 16.7% improvement in official foreign exchange reserve assets. Bank Al-Maghrib would thus have reduced the volume of its financing to banks, while adapting the mechanism of its interventions. Net claims on the central government would also have increased, marking a 16.2% increase in the Treasury's monetary debt.

Net financing of the Treasury in the auction market would have increased, while rates would have continued to decline in this market. Thus, the 1-year, 5-year and 10-year interest rates would have fallen, on average and in annual variations, by 80, 54 and 31 basis points respectively. For their part, deposit rates would have continued to decline in the first quarter of 2021. The weighted average deposit rates at 6 and 12 months would have fallen by 32 and 30 basis points respectively, compared to their level a year earlier. The lending rates would have seen, as a weighted average and annual variation, a drop of 44 points in the first quarter of 2021, to stand at 4.45%. This development would be the result of the drop of 60 and 48 basis points in the rates applied to loans to corporate treasury and to mortgage loans. For its part, the growth in claims on the economy is said to have accelerated in the second quarter of 2021.

Interbank interest rates would have fallen by 43 basis points year-on-year, standing at 1.5% on average in the second quarter of 2021. Net financing of the Treasury on the auction market would have increased during the same period, while rates would have continued to decline in this market. Thus, the 1-year, 5-year and 10-year interest rates would have fallen, in average and annual variations, by 66, 46 and 8 basis points respectively. For their part, borrowing rates would have continued to decline. The weighted average 6-month and 12-month deposit rates would have fallen by 47 and 42 basis points respectively, compared to their level a year earlier. Also, the growth of the money supply would have decelerated slightly, standing at + 6.4%, in the second quarter of 2021, after + 7.6% a quarter earlier.

- **Insurance industry**

The Covid-19 health crisis has plunged the world economy into uncertainty. Like many industries, insurance has not been spared. In Morocco, the fall in the financial markets, the difficulties encountered by their customers and, in certain branches and a strong predictable drift in claims experience are likely to have a major impact on the balance sheet of insurers but also on their operating accounts. This insurance sector has experienced an evolution of 7.76% during the year 2019, this evolution is justified by the introduction of new investment instruments on the Moroccan capital market, in particular OPCIs, should offer insurers an interesting alternative of diversification of their investments.

The measures undertaken by the actors of the sector are numerous to face the crisis, including; the contribution to the COVID-19 fund, the application of discounts on automobile insurance premiums during the period of confinement and the support by the companies of assistance with the burial costs of nationals stranded abroad even in the event that pandemics are excluded from contracts. In addition, a flagship measure has concerned the distribution of dividends by setting the distributable limit at 30% of net income. In this sense, and in order to mitigate the impact of the fall in stock market values on the level of depreciation of company assets, the Supervisory Authority has opted for an increase in the trigger threshold for the provision for long-term depreciation by raising it from 25 to 30%. On the other hand, the reference period used to calculate the average price is six months instead of three months. Thus, the losses avoided to the market by these measures are estimated at 700 million MAD (76 million USD, by the Department of Studies and Financial Forecasts).

Despite a difficult economic situation marked by a health crisis with significant impacts on economic activity, the insurance sector was able to maintain its growth with premiums written in direct business of 45.1 billion dirhams (+ 1%), decelerating compared to 2019 (+ 8.6%). This development, in times of crisis, was only possible thanks to the entry into force of the compulsory plan to cover the consequences of catastrophic events which generated, for the insurance plan, written premiums of 476.7 million dirhams. In reinsurance, accepted premiums show strong growth of 45.9% to 3 billion DH. At the origin of this clear increase, the flow of acceptances generated by the guarantee against the consequences of catastrophic events (+361.3 million dirhams), the increase in acceptances of optional Moroccan business (+341 million dirhams) and the increase in foreign affairs acceptances (+116 million dirhams). Thus, taking into account reinsurance acceptances, the sector's turnover amounted to DH 48.1 billion, an increase of 3% compared to 2019.

The analysis by branch shows a contraction of life insurance and capitalization of 0.3% to 20.4 billion dirhams, marking a break with the growth recorded over the past ten years. For its part, death insurance shows a decline of 3.2% to 2.9 billion dirhams. With, this underperformance, life and capitalization insurance saw its contribution to total turnover drop to 45.2% from 45.8% a year earlier.

Despite this resistance, the sector continues to face structural problems, particularly in terms of premium collection and depreciation of its assets. In 2020, a performance which is achieved by the good behavior of the non-Life branch improved by 2.2% to 24.7 billion dirhams, benefiting both from the contribution of the new guarantee against the consequences of catastrophic events and from the good performance of the company 'fire and natural elements' insurance. On the other hand, auto insurance, which drains the bulk of non-life turnover, is virtually stagnant to stand at 12 billion dirhams, despite the effort made by insurance operators in May 2020 towards insured individuals and consisting of a 30% discount on the portion of the Civil Liability premium and related guarantees covering two months of confinement.

The insurance sector has been hit hard by the contraction of the stock market in the wake of the health crisis. Thus, despite the good performance of the operating margin, the aggregate net income of insurance companies fell in 2020 by 21% to 2.9 billion DH. This decrease concerns both the technical result (-12.6%) and the non-technical result (-424.5%). With the marked drop in net income and the increase in equity capital of 5.0%, to 40.1 billion dirhams, the average return on equity (ROE) fell from 9.6% in 2019 to 7.3% in 2020. For its part, in 2020, the solvency margin also fell from 413.4% to 369.3%. Covering only the underwriting risk at this stage, the excess margin should drop significantly with the transition to the prudential risk-based solvency regime which covers a wider range of risks to which the insurance sector is exposed. This decrease is the direct consequence of the fall in unrealized capital gains (-25.7%) and in the net income (-21%).

The insurance penetration rate, appreciated to 4.1% against 3.9% in 2019. This increase is mainly attributable to the decline in national GDP. Indeed, this penetration rate figure certainly among the highest in the region, but which remains below those observed in advanced economies where it is reached 9% in particular for OECD countries. At the end of 2020, the structure of the asset portfolio has remained virtually stable with a share of 48.5% and 94.7 billion dirhams of outstanding amounts, interest rate assets remain the leading investment instrument for insurance companies, followed by equity assets with a share of 45.3% and 88.6 billion dirhams outstanding. Although the share of equities was down 0.5% compared to 2019. In 2020, the unrealized capital gains of insurance companies were severely impacted by the financial market. Their amount fell from 34.1 to 25.3 billion dirhams, a decrease of 25.7%. In detail, it was the unrealized capital gains of the “equities” pocket that suffered the biggest drop. Their amount stood at 16.1 billion dirhams, down 34.8%, while that of fixed income assets appreciated 1.6% to 7 billion dirhams. The result is a deterioration in the ratio of unrealized capital gains on investments, which drops from 18.5% in 2019 to 13% in 2020.

- **The foreign exchange Market: An appreciation of the effective value of the dirham**

Like other financial markets, foreign exchange markets have also been affected by the health crisis. Thus, after depreciating against the dollar during the first four months of 2020, the euro appreciated over the rest of the year, settling at 1.141 dollars on average in 2020. Status safe haven to which the dollar rose from the onset of the crisis explains its appreciation at the start of the year, nevertheless the massive interventions of the various central banks and public authorities and the rebound in Stock indexes subsequently caused the dollar to weaken. Indeed, in 2020, the deterioration of the health situation in the United States and the announcement of the abandonment of the Federal Reserve's official inflation target helped to strengthen the euro. Also, the issuance of a common European debt following the adoption of the multibillion-euro stimulus plan, would have strengthened the role of the euro as a reserve currency.

The pandemic will seriously affect Morocco's main sources of foreign currency, which will dry up for a long time, at least for two years. These are tourism receipts, transfers from Moroccans living abroad (MRE), foreign demand and direct investments from abroad (FDI). This limited capacity of foreign exchange reserves will have a major impact on the country's capacity to guarantee and secure the import of the resources necessary for walking of the national economy, and which is currently limited to 5 months of imports, something which may lead Morocco to resort to international financial institutions, and risk by consequently the restriction of its sovereignty in the economic decisions of the country. At the end of 2019, foreign exchange reserves reached USD 25.3 billion, equivalent to 5.4 months of imports of goods and services. It should be mentioned that the flexibility, even limited, introduced recently by Bank Al-Maghrib will also limit the impact on foreign exchange reserves. The customs administration has also taken favorable steps in this direction[30].

Table 2. Average exchange rate against the dirham

	II/2019	III/2019	IV/2019	I/2020	II/2020	III/2020	IV/2020
Euro (E)	10,85	10,67	10,69	10,71	10,9	10,87	10,91
US dollar ($)	9,6	9,69	9,62	9,68	9,68	9,22	8,97
British Pound (£)	12,16	11,97	12,61	11,98	12,13	11,96	12,05

Source: HCP

In 2020, the dirham experienced a slight depreciation against the euro and the dollar, deemed "healthy". It should be recalled that Bank Al-Maghrib planned, at the end of its last monetary policy council of the year 2020, a strengthening of transfers of MRE which should total 70 billion DH in 2021 against 65.8 billion DH in 2020. Indeed, FDI inflows should resume their dynamism to reach a volume corresponding to 3.1% of GDP. Furthermore, and due to the contraction of imports and the resilience of MRE remittances, the current account ended with a deficit of 3% of GDP in 2020 (4.1% of GDP in 2019). Indeed, over the forecast horizon and assuming planned international outflows from the Treasury, official reserve assets would stand at 328.5 billion dirhams at the end of 2021 and 338.6 billion dirhams at the end of 2022, i.e., ensuring coverage the equivalent of 7 months and 6 days and 7 months and 13 days of imports of goods and services, respectively (The Department of Studies and Financial Forecasts).

After losing 1.7% of its average value, against the euro, in the fourth quarter of 2020, year on year, the dirham would have depreciated by 1.4% in the first quarter of 2021. Indeed, the dirham / euro parity would have fallen, at 10.80 dirhams, against 10.64 dirhams a year earlier. In an international market characterized by a fall in the value of the American dollar at the expense of the euro, the national currency would have undergone, in the second quarter of 2021, an appreciation of 1.4% against the euro and of 10% vis-à-vis the euro against the dollar. By currency, public external debt was dominated during the first three months of 2021, by the euro (59.6%), while the US dollar represented 30.9% and the Japanese yen 2.8 %, in addition the part of the debt at fixed interest rate amounted to 74.3% against 25.7% at variable rate.

d. Impact of the Covid 19 crisis on others macroeconomic indicators

- **At the trade level and Exterior account**

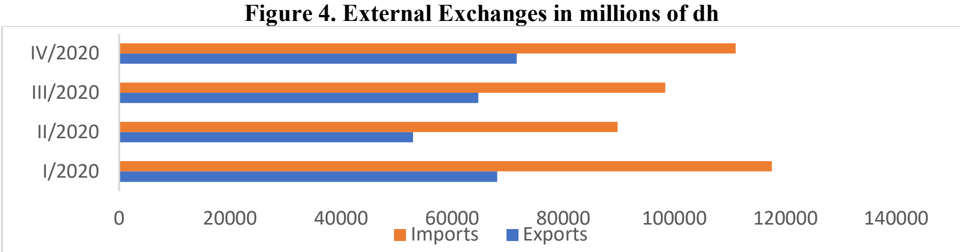
In the context of global recession, Covid-19 caused a significant decline in world trade of 9% in 2020 compared to 2019 and more intensely affected services which fell by 16.5%. Global merchandise trade, meanwhile, fell by 6% compared to 2019, according to UNCTAD[31] estimates. Indeed, International trade in goods is said to have increased in the first quarter 2021, by 3% year-on-year, benefiting from an upturn in imports from emerging economies more vigorous than that of advanced economies. In line with the expected recovery in global activity, world trade is expected to increase by around 3.9% in 2021 (IMF). In Morocco, regarding the external accounts, the impact of the health crisis was less important than initially expected. The year 2020 thus ended with a current account deficit of 1.5% of GDP, down by more than 2 percentage points compared to 2019. This reduction is explained in particular by the decrease trade deficit, resulting in an improvement of 4.3 percentage points in the coverage rate of the latter, reaching 62.2%. On the export side, the decline mainly concerned the automotive (-9.9%), aeronautics (-28.3%) and textiles and leather (-18.9%) sectors. On the other hand, the “phosphates and derivatives” sector saw its sales increase by 3.9% while the exports of the “agriculture and agrifood” and “Electronics and Electricity” sectors have almost stabilized with an evolution each 0.3%. For imports, the decline was observed in particular in energy products (-34.6%), consumer goods (- 15.9%) and capital goods (-13.7%). At the same time, travel receipts fell by 36.5 billion dirhams or 53.7% compared to 2019, when transfers from Moroccans living abroad (MRE) showed resilience with an improvement 4.9% to 68.2 billion dirhams after 65 billion dirhams in 2019, despite the severity of the crisis hitting host countries. For their part, foreign direct investment receipts fell to 27.5 billion dirhams after 34.5 billion dirhams a year earlier and the net flow of foreign direct investment by residents fell by 45.6% to 4.7

[30] On the foreign exchange market, the fluctuation band of the national currency compared to its reference rate had widened from ± 2.5% introduced in 2018 to ± 5%, and this since the month of March 2020.

[31] United Nations Conference on Trade and Development

billion dirhams. Under these conditions and following the drawing on the precautionary and liquidity line (LPL) of the IMF in April 2020 for nearly the equivalent of $ 3 billion and the strong mobilization of external financing by the Treasury, the official assets of reserve recorded a significant increase of 26.5%, reaching 30% of GDP, to stand at 320.6 billion dirhams at the end of 2020 against 253.4 billion dirhams in 2019, thus making it possible to cover the equivalent of 7 months and 13 days of imports of goods and services.

Figure 4. External Exchanges in millions of dh



Source: HCP

Against this backdrop of international prospects, the national economy should benefit from the recovery effects of expected growth in major trading partners, particularly European countries. In the first half of 2021, exports stand at 152.882MDH, the highest level reached during the same period over the past five years, up 29.590MDH compared to the end of June 2020. In parallel, imports increase by + 40.835MDH or + 19.5%. Thus, the trade deficit stands at 97.445MDH, an increase of 13% or + 11.245MDH. The coverage rate, for its part, improved by 2.2 points (61.1% at the end of June 2021 against 58.9% at the end of June 2020).

Over the forecast horizon and assuming planned international outflows from the Treasury, official reserve assets would stand at 328.5 billion dirhams at the end of 2021 and 338.6 billion dirhams at the end of 2022, i.e., the equivalent of 7 months and 6 days and 7 months and 13 days of imports of goods and services, respectively. Regarding the balance of payments, its deficit is likely to reach 7% of GDP in 2021, due to the decrease in exports, tourism income and the deficit of the trade balance, in view of the impact of the pandemic on all production chains and international trade.

- **Consumption and investment**

GDP growth in Morocco is mainly driven by consumption and investment spending, “the two being intimately interdependent”. The freeze in business activities, the expected rise in the unemployment rate as well as the health measures undertaken would have had a negative impact on both general consumption and investment.

In total, national final consumption would have fallen by 5.4% in 2020 instead of an average annual increase of 3.9% between 2008 and 2019. Its contribution to GDP growth would have been negative by -4.1 points instead of a positive contribution of 1.6 points in 2019. As regard to the consumption of households, which had fallen by 4.3% in the fourth quarter of 2020, would have rebounded by 0.8% in the first quarter of 2021, driven by a slight increase of household spending on durable and manufactured goods, particularly household equipment and, to a lesser extent, those of transport and restoration. In a context of a slight upward reversal of 1.7% in consumer prices and a rebound of nearly 65% in remittances from MRE, household consumption would have recovered by 18.9% in the second quarter of 2021, driven by the increase in purchases of food, manufactured goods and transport, catering and leisure services. Imports of finished consumer goods are said to have almost doubled in the two months of April and May 2021, after increasing by 11% in the first quarter of 2021. On the other hand, general government consumption would have rebounded by almost 6.2% in 2020, explained by the significant increase in State expenditure, linked to the measures to manage the repercussions of the health crisis. The contribution of government consumption to growth would thus have been 1.2 points instead of 0.6 points in 2019. In the second quarter of 2021, consumption by general government is said to have increased by 5.3%, in line with the increase in public administration expenditure.

As for investment, it would have suffered the setbacks of the health crisis which in 2020 would have led to a reduction in budgetary investment expenditure of nearly 4.7% and a drop in imports of capital goods. Indeed, taking into account the impact of the drought and the health crisis, which would have caused a sharp fall in the change in inventories of almost 18.1%, gross investment would have fallen by around 9.8% in 2020, making a negative contribution to economic growth of -3.2 points instead of a positive contribution of 0.3 points in 2019. During the second quarter of 2021, gross capital formation would have continued its upward trend which began at the start of the current year, posting an increase of 5.5% compared to the previous year. The investment effort is said to have been maintained for equipment and manufactured products, in a context of recovery in local demand and the dissipation of supply difficulties, particularly from abroad. Imports of capital goods would have increased by nearly 50% during the two months of April and May 2021. Investment in construction, for its part, continued its upward trend, benefiting from the recovery in demand and of real estate supply in a context of a 4.4% increase in real estate loans at the end of May 2021.

- **Rising Global Inflation**

The disruption of production in certain sectors of activity and the decline in aggregate supply on a global scale should translate into increased inflation in the medium and long term. Nevertheless, and in the very short term and despite the Covid-19 crisis, prices seem stable and sometimes falling, especially in developed countries. This observation can be explained on the one hand by the existence of strategic stocks, particularly for basic necessities, and by the contraction in demand on the other. In times of crisis, and with declines in purchasing power, economic agents tend to reduce their consumption to the most vital products[32]. Rising commodity prices and chain disruptions supply, coupled with a recovery in demand would have translated into a rise in global inflation. The inflation rate would have reached, in the second quarter of 2021, +1.8 % in the euro zone and + 4.6% in the United States, instead of + 0.2% and + 0.5% respectively, at the same period a year earlier.

One of the main objectives of national monetary policy is to keep the inflation rate particularly low. Inflation, measured by the change in the consumer price index, weakened markedly in 2019, settling at 0.2% after reaching 1.6% in 2018. In 2020, despite the crisis health of COVID-19 and its visible repercussions on changes in other macroeconomic indicators, the inflation rate remained at a low level standing at 0.7% on average. The level of inflation reflected in 2020 a 0.9% increase in the consumer price index of food products and a 0.5% increase in that of non-food products. With the recovery in activity and the increase in international oil prices and certain food products, it should increase, while remaining at moderate levels, rising to 0.9% in 2021.

Figure 5: Inflation in %

Source: BAM

In the second quarter of 2021, inflation would have accelerated for the first time since the start of the pandemic, standing at + 1.7%, year-on-year, after remaining low throughout the year elapsed, in connection with the health context. This acceleration in consumer prices would have been favored by the 2.1% rebound in the prices of non-food products and the 1.3% increase in those of food products.

- **Publics Finances:** The increase in public deficits and debts

The government's response to mitigate the repercussions of the pandemic on the health system and economic activity has severely affected public finances in both advanced countries as well as emerging and developing countries. Thus, the majority of countries have resorted to borrowing on the internal and / or external market to cope with the drop in resources (reduction in tax revenue) and the significant increase in expenditure (health expenditure, social assistance, etc. liquidity support measures for companies in difficulty). As a result, public debt to GDP peaked at an increase of 16.3 percentage points in advanced countries, averaging 120.1%. Several countries saw their debt ratio cross the 100% mark, including Canada (117.8% after 86.8%), Cyprus (118.2% after 94%), France (113.5% after 98.1%), Spain (117.1% after 95.5%), Belgium (115% after 98.1%) and the United Kingdom (103.7% after 85.2%). Likewise, the average debt ratio of the group of emerging countries and middle-income economies increased by 9.7 percentage points, reaching 64.4% of GDP. This development mainly reflects the exceptional debt ratio increases of more than 40 percentage points in some countries (Seychelles, Sudan and Venezuela).

The decrease in tax revenue linked to economic decline, combined with the increase in spending due to the management of Covid-19, would explain the increase in public deficits and debt. In terms of the public deficit and taking into account the positive balance of 5.3 billion dirhams of the Special Fund for the management of the Covid-19 pandemic, the execution of the amending finance law revealed a budget deficit (excluding privatization) of 7.6% of GDP in 2020 against 4.1% in 2019. This increase is explained in particular by a fall in ordinary revenue of 7.6% to 253.1 billion dirhams (mainly driven by the decline tax revenue of 6.8% attributable to the economic recession) and an increase in ordinary expenditure by 2.1% to 255.9 billion

[32] According to IMF forecasts, consumer price indices in developed countries are expected to increase on average by 0.5% in 2020 to resume their usual rate of 1.5% in 2021. In emerging and developing countries, the evolution of the consumer price index should be constant between 2020 and 2021, i.e., a variation of 4.5% on average.

dirhams and investment expenditure by 18.8% to 85.9 billion. This financing need would have largely exceeded the annual average of the deficits recorded between 2012- 2019[33], i.e., 4.5% of GDP and would have been much higher than the forecasts of the 2020 finance law. At the end of June, the budget deficit reached 29.5 billion MAD, against 29 billion MAD a year earlier, or 41.5% of that forecast under LF-2021. Indeed, it emerges from the execution results of the FL at the end of June 2021 that revenues have increased by nearly MAD 10.8 billion compared to June 2020, resulting from an increase in tax revenues of 8.3 billion dirhams and non-tax revenues of 1.5 billion dirhams, according to the ministry of 'Economy, Finance and Administrative Reform.

The widening deficit is mainly explained by the increase in social and economic spending related to Covid19 and the decrease in tax revenues, in particular from the corporate tax. Energy subsidies will also fall due to falling gas prices. However, as the compensation fund represents barely 5% of overall expenditure, the potential gains will remain limited. It is therefore the public investment item that offers the most flexibility. With an envelope of MAD 70 billion (21% of total expenditure), a 10% decrease in the latter would, for example, reduce budgetary expenditure by 0.6 percentage point of GDP. This increase in the deficit would have been mitigated by the improvement in the balance of special Treasury accounts. The special fund for the management of the Covid-19 pandemic would have been only derisively funded during the first six months of the year 2021. These changes in income and ordinary expenditure resulted in a negative ordinary balance of MAD 8.4 billion against MAD -12.7 billion at the end of June 2020, i.e., an improvement of MAD 4.2 billion.

At the end of June 2021, the receipts recorded on a net basis of refunds, reductions and tax refunds, an increase of nearly 10.8 billion DH compared to the end of June 2020 and a realization rate of 50.4% compared to the forecasts of the law of finance (LF). Tax revenues showed good behavior, with the exception of the corporate tax which fell by 3 billion DH or 11.8%, in particular in relation to the decline in activity in 2020. Overall, tax revenues are registered an increase of 8.3 billion DH or 8.4%, thus recording a rate of achievement of 55.2%. This increase is 11.8 billion DH or 12%, taking into account the solidarity contribution allocated, in 2021, to the Social Protection and Social Cohesion Support Fund.

The needs necessary to contain the socio-economic effects of the crisis would have led to an increase in public spending. The additional expenditure would have concerned, in particular, subsidies paid to employees, cash transfers to workers in the informal sector and support for the financing of enterprises. Likewise, the costs of upgrading the medical device as well as supporting the national economy would have been covered mainly by the special fund for the management of the pandemic. At the first half of 2021, the execution of ordinary expenditure shows an increase of 6.6 billion DH or 5.4% and an execution rate of 51.8%. The evolution of these expenses compared to the end of June 2020 is explained by the increase in expenditure on goods and services of 4.2 billion DH, of which 4.5 billion DH for personnel costs, in particular under the effect of the reminders (+2.5 billion DH) and measures of the 3rd tranche of the salary increase decided in 2019 within the framework of social dialogue. Expenditures for "other goods and services" have recorded a slight decline of 0.3 billion DH. The compensation charge increased by 1.6 billion DH in connection in particular with the increase in the price of butane gas which reached an average of 530.01 $ / T. Interest on the debt increased by 697 million dirhams, covering an increase of 752 million dirhams in interest on the external debt and a slight decrease in those relating to the domestic debt (-55 million dirhams). Regarding investment spending, emissions reached 31.8 billion dirhams, almost the same level as at the end of June 2020. Compared to the forecasts of the FL 2021, their realization rate stood at 46,7%.

The underperformance of the revenue of the State, combined with the acceleration of the needs necessary to counter the adverse economic and social effects of the pandemic would have increased the financing needs of the treasury. In this context, the Moroccan economy has managed to preserve its access to external financing, benefiting from large disbursements from multilateral actors and from relatively stable net flows of foreign direct investment. Indeed, public debt has broken all records since the start of the pandemic. In fact, less than a month from the announcement of the state of emergency, from April 6 to 8, 2020, there was the bill authorizing the uncapping of foreign currency borrowing, the drawdown of $ 275 million from the loan of the World Bank reserved before disasters then the drawing on the Precautionary and Liquidity Line (LPL) for an amount equivalent to nearly 3 billion dollars, i.e., the total amount of the line, were used to cushion the

[33] It should be remembered that the budget deficit stabilized at 41 billion DH in 2019 thanks to the sale of 8% of Maroc Telecom's capital and innovative financing mechanisms.

economic and social impact. The WB reports that the budgetary response to the pandemic, mainly financed by borrowing, has supported businesses as well as households, to compensate for the loss of their income[34].

For some time now, the ratings of US agencies have shown a decline in creditworthiness. Thus, the worrying increase in public debt and budget deficits are the two main factors that have led the international rating agencies Standard & Poor's and Moody's (April 2021) and Fitch (October 2020) to downgrade Morocco's rating. And yet, these ratings did not prevent the government in September 2020 from raising 1 billion euros on the international market to repay a fall in debt and to return to the market in early December of the same year by raising a record amount of $ 3 billion in a sale of three-tranche bonds, with maturities of 7, 12 and 30 years and at fairly high interest rates, compared to the loan in September of the same year. Under these conditions, the Treasury's financing requirement rose to 67.6 billion dh at the end of 2020 and was covered in particular by the use, on the one hand, of external financing with a net flow of 42.9 billion dirhams and, on the other hand, domestic market for a net flow of 24.7 billion dirhams. Accordingly, the ratio of Treasury debt increased to 76.4% of GDP, after being stabilized around 65% since 2016. This trend is characterized by a predominance of debt which represents 58.1% of the GDP against 18.3% of the GDP for the external debt. Thereby, the outstanding domestic debt of the Treasury amounted to 632.9 billion dirhams at the end of December 2020, up 8.1% compared to the end of 2019. As for the component external, its outstanding amount reached the equivalent of 199.5 billion dirhams, an increase of 23.5% compared to the end of 2019.

During the first three months of 2021, the drawdowns on public external loans thus amounted to an overall volume of MAD 8.6 billion, including MAD 6.4 billion mobilized by the Treasury (MAD 4 billion for support for reforms, 2 billion DH for measures to mitigate the impacts of the pandemic of the new coronavirus and 0.4 billion DH for budget projects) and 2.2 billion DH for the benefit of projects of Establishments and public enterprises (EEP) and public utility institutions (IUP), details the DTFE. In this perspective, the outstanding public external debt stood at DH 373.7 billion at the end of the first quarter of 2021, according to the Treasury and External Finance Department (DTFE). This debt is distributed over the Treasury (200.9 billion DH) and other public borrowers (172.8 billion DH). In total, and taking into account in particular the drawdown on the IMF's Precautionary and Liquidity Line (LPL) and the issues carried out by the Treasury on the international market, official reserve assets increased by 69.7 billion DH to reach DH 320, 6 billion, thus ensuring coverage of a little over 7 months of imports of goods and services[35].

4.2. Social Impacts of Covid 19 crisis

The pandemic crisis could have negative and very unequal social impacts that vary from one social class to another. Widespread losses of jobs and income, as well as economic insecurity affecting families, are likely to increase poverty in the World and in Morocco.

a. Employment and labor market

The deterioration of economic conditions in various countries has resulted in an increase in the level of unemployment, despite the various exceptional measures aimed at preserving jobs and wages. According to the United Nations Framework Report (2020), the COVID-19 pandemic has been recognized as one of the world's most serious pandemics that has resulted into crisis around the world plunging the world's economy into a recession with historical levels of unemployment, restrictions on the free movement of people and increased levels of deprivation. In the International Labor Organization report (2020), partial or full lockdown affects almost 2.7 billion workers representing about 81% of the workforce worldwide. Therefore, this crisis will also threaten the sustainable development goal of the United Nation due to the loss of jobs and livelihood opportunities for many people who engage in the small and medium-sized enterprises (SMEs). The category of employees who were hardly hit by the COVID-19 pandemic is daily wage earners, self-employed individuals, migrant workers and refugees across the globe. Also, the manufacturing and service industries' jobs that have been massively affected, includes trade, transport, tourism, aviation and the hotel industry.

The direction of the International Labor Organization (ILO), specify in the executive summary 'the world of work and Covid-19', that before the pandemic, only 57% of the working population occupied an employment,

[34] Even more worrying is that debt has become a source of structural financing for the general budget and public expenditure in general because the tax system is unable to finance state expenditure. More than a third of General Budget expenditure is financed with debt. And yet, not all of these debts were injected with the intention of an economic stimulus that generates wealth and jobs, where investment is the keystone. Public investment should be directed towards projects intended to support Moroccan exports in order to replenish the state coffers in foreign currency and to strengthen the attractiveness of the country for the foreign investors.

[35] Rapport annuel de la balance des paiements et de la position extérieure globale du Maroc 2020

and about 188 million people were unemployed. Most of those with a job were working in diverse sectors of the informal economy, three out of four workers, according to the ILO (United Nations, 2020). The equivalent of 255 million jobs were lost in 2020, which is four times the number of jobs lost during the global financial crisis of 2009. In advanced countries, the unemployment rate jumped from 3.7% to 8.1% in the United States, from 7.6% to 7.9% in the Eurozone and from 5.7% to 9, 6% in Canada. In emerging and developing countries, the most marked increases concerned, among others, the Bahamas, Panama and the Philippines. Overall, this trend could exacerbate the financial vulnerabilities of households, which in turn would affect the banking and financial sector. Informal workers are affected in some countries more than others, as India, Nigeria and Brazil.

In 2020, the national economy lost 432,000 jobs against the creation of 165,000 jobs in 2019. This loss affected both areas (295,000 in rural areas and 137,000 in urban areas) and all sectors of activity. The service sector lost 107,000 jobs, that of "agriculture, forestry and fishing" 273,000, that of "industry including crafts" 37,000, and that of construction 9,000. In addition to the loss of jobs, the number of hours worked per week fell 20% from 494 million hours to 394 million hours, corresponding to 2.1 million full-time jobs.

Unemployment stands at 1,429,000 people nationally, with an increase of 322,000 people raising the unemployment rate from 9.2% to 11.9%, nationally from 12.9% to 15.8 % in urban areas and from 3.7% to 5.9% in rural areas. For its part, the employed population in a situation of underemployment reached 1,127,000 people against 1,001,000 a year earlier. The underemployment rate fell from 9.2% to 10.7%, at the national level, from 8.3% to 10.1% in urban areas and from 10.4% to 11.6% in rural areas.

In the second quarter of 2021, the unemployment rate in Morocco rose to 12.8 percent from 12.3 percent in the same period a year ago. It was the highest jobless rate since the last quarter of 2001, amid the lingering effects of a prolonged pandemic crisis, according to the High Commission for Planning (HCP). Also, the number of unemployed went up by 128 thousand to 1.605 million, the employed increased by 405 thousand to 10.892 million and labor force rose by 533 thousand to 12.497 million. Among sectors, more jobs were shed in industry including handicrafts (-53 thousand), but employment increased in agriculture (+318 thousand), construction (+108 thousand) and services (+40 thousand). The youth unemployment rate went down to 30.8 percent from 33.4 percent a year ago. This rate recorded a sharp increase in urban areas, from 15.6 to 18.2%, and a decrease in rural areas from 7.2% to 4.8%, specifies the HCP in an information note relating to the labor market situation in the second quarter of 2021. It has been estimated that globally, women are more likely to be vulnerable to losing their jobs as compared to men due to the COVID-19 pandemic. Indeed, this rate increased moderately among men, from 11.3% to 11.9%, and women, from 15.6% to 15.9%. It saw a decline of 2.6 points among young people aged 15 to 24, from 33.4% to 30.8%. Regarding graduates, the unemployment rate increased by 2.2 points, from 18.2% to 20.4% between the second quarters of 2020 and 2021, specifies the HCP, noting that the rate of Unemployment of senior graduates rose to 25.3% and the unemployment rate of mid-level graduates to 17.6%[36]. For its part, the number of unemployed increased by 128,000 people between the second quarter of 2020 and that of 2021, from 1,477,000 unemployed to 1,605,000, which corresponds to an increase of 9%. This increase is the result of a reduction of 100,000 unemployed in rural areas and an increase of 228,000 in urban areas.

In addition, the volume of active workers in a situation of underemployment fell by 360,000 at the national level, between the second of 2020 and the second of 2021, from 1,359,000 to 999,000 people. The rate of underemployment thus fell from 13% to 9.2% at the national level, from 12.2% to 8.9% in urban areas and from 14.1% to 9.5% in rural areas, while that the volume of the active population in a situation of underemployment linked to the number of hours worked, has fallen to 470,000 people nationally. According to the HCP, the working population in a situation of underemployment linked to insufficient income or the mismatch between training and employment has increased from 402,000 to 529,000 people nationally. The corresponding rate fell from 3.8% to 4.9%. Indeed, the categories of the population that have experienced the greatest declines in the underemployment rate are people aged 25 to 34 (-4.4 points), people with no diploma (-4.3 points) and men (-3.8 points).

The informal economy is a major issue for the Moroccan government given its scale and its significant share in the country's economy. It was and remains a blind spot for economic and social policies. Despite its contribution to the Moroccan economy through production, income generation and job promotion, it poses a great challenge given its negative effects on employees, Moroccan businesses and the state. The General

[36] The results of study conducted by (Furceri, Loungani, Ostry, & Pizzuto, 2020) confirms that those having basic education (low skilled) are affected more than those with higher and advanced degrees, in terms of loss of income hence confirming increase in income inequality after during and after pandemics.

Confederation of Enterprises in Morocco (CGEM) carried out a study in 2018 on the informal economy and its impact on the competitiveness of enterprises. This study notes that the informal economy impacts public revenues through the loss of income in taxes as well as in social contributions. According to the CGEM, it represents more than 20% of the GDP and is present in several sectors, in particular in textiles and clothing with 54%, 31% in the building sector, 32% in road transport of goods and 26% in the food industry (CGEM, 2018). Indeed, the informal sector workers were already facing issues like low wages and income and in this pandemic, they are among the most affected people. In addition to the significant weight of the informal economy, it is home to nearly 4.3 million households, according to the Minister of Economy and Finance.

According to the International Labor Organization, informal employment represents in 2020, 80% of total employment in the Morocco, a very high level compared to the countries of the MENA region (67%), but lower than the countries of sub-Saharan Africa (86%).

b. Increase in poverty: a significant risk in Morocco

Reducing poverty and inequality are central to the UN's Sustainable Development Goals (SDGs) and the World Bank Group's twin goals for 2030. Although it is often thought of as a lack of material resources, poverty is correlated closely with all aspects of a person's life: the world's poor are more likely to be malnourished, they have less access to services like education, electricity, sanitation and healthcare, and they are more vulnerable to conflict and climate change. At least 49 million individuals all over the world are expected to dive into "extreme poverty" as a direct result of the destruction caused by the pandemic according to World Bank (2020).

According to the United Nations, the relative poverty rate, representing workers receiving monthly less than 50% of the median wage of the general population, is expected to increase by 34 percentage points internationally for the population working in the informal sector. Moreover, according to the International Labor Organization, nearly more than 108 million people have been pushed into poverty. The most vulnerable and disadvantaged include young people, women, informal workers and migrants. The ILO estimates also that the number of working poor could increase by 35 million people (ILO, 2020). Already, the number of hungry people in the world has increased from 135 million in 2019 to 165 million in 2020, a phenomenon made worse by political instability. And as a result of Covid, the planet has 125 million more human beings living on less than $ 1.9 a day (WB, 2020). In the same context, a report from the World Bank estimated that 11 million people could fall into poverty across East Asia and the Pacific (World Bank 2020). Analyzing the effect of the pandemic on poor communities across four continents, (Buheji et al. 2020) estimates that 49 million individuals will be driven into extreme poverty in 2020 (living on less than $1.90 per day). The U.S. economy, where gross domestic product (GDP) fell by 4.8% in the first quarter, is projected to fall into recession in 2020, with a contraction of 5.0% in a likely scenario (McKibbin and Fernando 2020; Fernandes 2020).

Over the past ten years, Morocco has experienced a real decline in the level of poverty and improved standard of living, as well as an increase in GDP per capita. However, the health crisis will generate a decline in these improvements, risking to tip over 300,000 more Moroccans in poverty. The volatility of the economy will have also an effect on the class just above poverty which is likely to be found at a very tangent level, especially for informal jobs, the recovery of which risks delay. On a note of HCP, and although absolute poverty has fallen sharply to around 4%, multidimensional poverty has affected millions of people, judging by the number of families who have requested support from the Covid fund and which is around 6 million households, i.e., the three quarter of Moroccan households.

Informal and indirect jobs, estimated at 5 million people whose activity depends on structured and profitable enterprises, now in difficulty, would increase the ranks of the poor at worst and at best affect the well-being of those whose consumption are just above the poverty line. A small negative shock can push this group back into poverty. For its part, the percentage of the population "vulnerable" to poverty varies according to household expenditure selected as a threshold by the World Bank. Using an expenditure threshold of $ 5.5, the number of poor and non-poor but vulnerable to poverty is surprisingly high around 25% in 2019. Therefore, due to the economic crisis, nearly 10 million Moroccans may become poor or risk falling into poverty due to the crisis given that the majority of jobs are in the informal sector and in sectors such as tourism, catering, services (transport, shops) and those who do not have the possibility of undertaking their work remotely.

These major repercussions of the Covid-19 pandemic on the socioeconomic well-being of households are forcing Morocco to react by doubling the efforts and urgent measures to fight against the exacerbation of precariousness, in order to stem the increase in poverty and social inequalities and strengthen the resilience of households vulnerable to the health crisis to reverse the trend towards a more egalitarian society. For this, the State granted direct aid of 800 to 1,200 DH for the benefit of more than 5.5 million households affiliated or not to RAMED, for an envelope of 15 billion DH. In addition, the CNSS affiliates have received the lump sum of 2,000 DH and half a million households have benefited from the postponement of bank maturities. Without this financial support, this poverty would have worsened, according to the HCP, which indicates that this public support reduced the incidence of poverty by 9%, vulnerability by 8% and inequalities by 6%.

Indeed, all the measures taken by the public authorities would have made it possible to prevent more than 860,000 people from falling into poverty and nearly 1.2 million people from falling below the vulnerability threshold. In particular, the cash transfers paid to households by the Covid-19 Special Fund would have saved between 554,000 and 835,000 people above the national poverty line and between 700,000 and 1.1 million people above the threshold vulnerability.

Poverty, already noticeable in Morocco for several years, has taken on alarming proportions since the advent of Covid-19. The poverty rate has been multiplied by 7, from 1.7% before the crisis to 11.7% during confinement, reveals the HCP in its latest note on "the evolution of household living standards and the impact of the Covid-19 pandemic on social inequalities". Paradoxically, this pauperization was felt more in the cities, where this percentage was multiplied by 14, to reach 7.1%, against 0.5%. In rural areas, we note the multiplication of this rate by 5, or 19.8%, against 3.9%.

The absolute poverty rate has been reduced by 9% at the national level, from 11.7% before the transfer of public aid to 2.5% after the transfer, respectively from 7.1% to 1.4 % in urban areas, and from 19.8% to 4.5% in rural areas. The Gini index, a synthetic measure of social inequalities, fell from 44.4% without public transfers to 38.4% after receipt of public aid.

Obviously, the HCP has underlined an increase in the vulnerability rate, which rose from 7.3% to 16.7%. In this segment also, it is the urbanites who are the most affected with a rate of 14.6% (4.5% before the crisis), against 20.2% for rural people (11.9% before the pandemic). Indeed, in a Morocco marked by social inequalities and which remains 121st in 2020 in the world for its human development index, these social inequalities deteriorated and exceeded the socially intolerable and critical threshold (42%), underlines the HCP. The crisis was "very" anti-poor, "noted UNICEF for its part last fall, in its study on the impact of the pandemic on child poverty, the latter having been particularly penalized by the health crisis.

c. Impact of Covid -19 on public health

On the social register, public health is the first victim of the Covid and more precisely of confinement especially after the appearance of several variants of the virus, the observation of a clear reduction in the vaccination rate and the management of chronic and long-term diseases. This outbreak is resulting in additional health issues like anxiety, stress, depression, anger, fear, etc., (Torales, O'Higgins, Castaldelli-Maia, & Ventriglio, 2020). Recent studies in psychological science and evidence show that similar pandemics like the current one increased mental health problems like post-traumatic stress disorder (PTSD), confusion, loneliness feeling, boredom during and after the quarantine too (Brooks et al., 2020).

The COVID-19 pandemic has posed an unprecedented challenge to health systems around the world. In particular, the risk to healthcare workers is one of the greatest vulnerabilities in healthcare systems around the world. Since most healthcare workers are unable to work remotely, strategies including early deployment of viral testing for asymptomatic and / or frontline healthcare workers are imperative (Tanne et al., 2020). High healthcare costs, shortages of protective equipment, including face masks, and low numbers of intensive care unit beds and ventilators ultimately revealed weaknesses in the delivery of patient care.

Profound changes in the dynamics of healthcare are expected to result, leading to massive investments in disease prevention infrastructure and accelerated digital transformation of healthcare delivery. (Nicola et al. 2020b) highlighted the change in health policy and clinical management as new evidence emerges. Conversely, opportunities for companies engaged in vaccine and drug development have emerged simultaneously.

In this way, the leaders of the International Monetary Fund, the World Bank Group, the World Health Organization and the World Trade Organization held the second high-level consultations on November 9 with the CEOs of major manufacturers of COVID-19 vaccines. At the meeting, all participants agreed on the urgency of providing more doses to low-income countries, where less than 2.5% of the population has been fully immunized. The purpose of the meeting was to determine how to ensure a more equitable distribution of vaccines and all participants pledged to continue working together to achieve greater clarity on donations, vaccine exchanges and delivery schedules so that the distribution of these life-saving vaccines can more effectively target the countries that need them most. In addition, Professor Sahin's team has started to develop several candidate vaccines based on the messenger RNA (mRNA) technique with the aim of bringing to market the one that would present the best profile in terms of safety and efficacy.

Since WHO raised the status of COVD-19 from epidemic to pandemic, 35 companies and academic institutions have rushed to develop an effective vaccine. Four potential vaccines are currently being tested on animals. The Coalition for Epidemic Preparedness Innovations (CEPI), is leading various efforts to fund and coordinate the development of the COVID-19 vaccine. They announced a $ 4.4 million partnership fund with Novavax and Oxford University to develop a viable solution. The Gates Foundation, Wellcome and Mastercard have also committed $ 125 million to find new treatments for COVID-19. Social distancing precautions are paramount to the containment effort. In addition, COVID-19 has left several hospitals in turmoil, having reached its maximum capacity. As a result, various countries are turning to technological solutions, to care for patients and at the same time minimize the risk of person-to-person transmission. In various cities in China, paging robots powered by fifth generation wireless networks are being used to enable healthcare workers to communicate with patients, monitor their health and deliver medical supplies, work-from-home applications are also being adopted. Automating services has been a major focus for China, and COVID-19 has helped accelerate its adoption. Demand for respirators has skyrocketed due to the COVID-19 outbreak. Governments around the world are trying to buy these devices to help people in intensive care.

In the context of the current health crisis, everyone agrees that it is necessary to invest heavily in public health. However, health spending has changed very little and has not met the needs expressed by professionals and citizens. The health budget is close to 5% of the General Budget, far from the 10% for countries in the region and the 15% recommended by the World Health Organization (WHO). After 18 months of the onset of the Covid 19 health crisis, the budget allocated to covid 19 for health aspects was around 2.2 billion dirhams, which represents 10% of the budget of the ministry of health. Thus, the cost to households, which in the absence of a universal medical coverage system bear more than 50% of health expenditure, will be increased. There are also fears of a return of certain communicable diseases that Morocco has taken years to eradicate.

d. Education systems

Covid-19 pandemic has affected all levels of the education system across the globe from pre-school to tertiary education level. As of April 8, 2020, schools have been suspended nationwide in 188 countries, according to UNESCO. Over 90% of enrolled learners (1.5 billion young people) worldwide are out of education. The UNESCO Director-General Audrey Azoulay warned that “the global scale and speed of the current educational disruption is unparalleled.” The pandemic has exacerbated the learning crisis and its consequences on the human capital of a whole generation of students are likely to last. In fin April 2020, 94% of the world's students - or 1.6 billion children - were no longer attending classes following the closure of schools. At the worst time of the crisis, 220 million students around the world were affected by the closure of universities (UNESCO, 2020). The World Economic Forum reports that there is an increase in the use of language apps, virtual online classes, video conferencing tools and online learning software in the months following the closure of schools.

The World Bank responded promptly to the pandemic and stepped-up support to countries by activating different channels and priority interventions. It helps 62 countries to make investments covering the entire education cycle, from early childhood to higher education. The World Bank's new commitments to education in the last fiscal year amounted to $ 5.3 billion, a never-before-seen figure, and it is expected to increase further to 6.2 billion dollars this year. The portfolio of ongoing projects exceeds $ 20.6 billion. To date, World Bank-supported projects benefit more than 400 million students and 16 million teachers, or roughly one-third of the student body and nearly one-quarter of the teaching community in client countries. The World Bank also provides rapid advisory support in 65 countries and leverages partnerships (with UNICEF, DFID, Harvard University, Oxford University, Johns Hopkins University, OECD, UNESCO, etc.) to continue to support national responses to the pandemic. Due to the Covid-19 pandemic, a global coalition has been launched to accelerate the implementation of distance education. The solutions adopted differ according to the level of development of the countries and their connectivity. According to UNICEF data, among 127 countries, 73% have used digital platforms to ensure pedagogical continuity in teaching. This percentage rises to 75% for television use (90% in Europe and Central Asia and 100% in South Asia). Sub-Saharan Africa is the region with the highest rates of vulnerability and inequality.

Following the appearance of the first case of the COVID-19 virus, Morocco declared the entry into a state of health emergency in order to curb the spread of the virus. To this end, classes in all public and private establishments were suspended from Monday March 16 in Morocco. In order to ensure the pedagogical continuity of the 2019-2020 school and university year, the Ministry of National Education, Vocational Training, Higher Education and Scientific Research has launched a distance education system that would allow different professors and teachers to communicate directly with their pupils or students through the use of different information and communication technologies (ICT) through different platforms. (Video clips, Classroom, Zoom, etc.)

For its part, the High Commission for Planning (HCP) survey on the impact of Covid-19 revealed that 51% of households with children in primary school and 48% of those with children in middle school, had difficulty follow the courses remotely during confinement due to a lack of access channels to the courses. This reason is raised, in particular, by rural households (55% for primary and 54% for college level), and poor households (respectively 60% and 53%). For 41% of households with children in secondary school, and 29% in higher education, the insufficiency of these channels was the main difficulty. The survey also reveals that social networks are the most used to take distance learning courses: 40% of households with children in elementary school, 44% in middle school and 46% in secondary school. The use of digital platforms was low: 9% for primary, 20% for college secondary and 30 % for qualifying secondary. These digital media are less widespread in rural areas (respectively 4%, 12% and 27%).

So, with the switch to distance education, a large number of students have found themselves dropping out of school due to a lack of telecommunications means, thus accentuating the usual school dropout estimated at more than 200,000 students per year. In 2020, 150,000 students left private establishments for public ones against 53,000 the previous year, a figure which has tripled and which corroborates the influence of the crisis and its foundations on the choice of schooling for students. Likewise, services relating to health and education would have experienced a dynamism with an increase in their added value of 4.6% in 2020 against 2.4% recorded in 2019. Indeed, following the pressures exerted by the covid-19 crisis, a considerable effort would have been deployed to consolidate and strengthen the capacities of the health system, and improve its quality.

e. Impacts on the cultural, artistic and sporting activities level

On the cultural and sporting activities level, the impact is almost total following the cancellation of the various sportif, cultural and artistic events, which constitute a spiritual refuge and a space for free expression and sharing of ideas between people of various influxes.

The cultural industries have been very affected by the suspension and cancellation of their events. Indeed, artists in an economically precarious situation and the cultural tourism sector remains seriously affected. The repercussions are enormous and affect the fundamental right of access to culture (UNESCO, 2020b). For its part, cultural tourism accounts for nearly 40% of global tourism revenue. At the height of the global crisis, 95% of museums remained closed and 9 out of 10 countries had closed their World Heritage sites. Many intangible cultural practices have been disrupted, which has had not only an impact on the cultural life of communities but also consequences for people working in performing arts and traditional crafts who operate largely in the informal sector. In addition, professionals in the creative sector, such as those in theaters, commercial art galleries and gourmet restaurants, have also been affected[37].

Restrictions related to the Covid-19 have not stopped artists from sharing their art with the public online. Several festivals and cultural events were able to rise to the challenge and organize cultural events online. For example, the International Documentary Film Festival of Agadir, the Fez Festival of Sacred Music or Visa for Music 2020. Braving the Covid-19 pandemic, art galleries brightened up the days of confinement with virtual exhibitions. For this, the Hiba Foundation organized online competitions and continued to share calls for projects offering opportunities for cultural development. The French institute also offered several opportunities and kept up the pace for a diverse cultural digital offering. The Cervantes Institute has also diversified its offer between online shows, concerts, film screenings. For its part, the Moroccan Cinematographic Center has offered a series of Moroccan feature films online on its website. The National Museum Foundation was able to reach a large public thanks to virtual visits to museums and other activities scheduled after the end of confinement to welcome art enthusiasts on site while respecting health protection measures.

According to the Minister of Culture, Youth and Sports, the transversal systems put in place thanks to the Covid-19 Fund have enabled more than 3,700 holders of artist cards to benefit from Tadamon Covid systems (Ramed and informal), i.e., an acceptance rate of 70%. Nevertheless, the year 2020 also offered a testament to

[37] CULTURE & COVID-19 2 Impact & Réponse CE BULLETIN DE SUIVI produit par l'UNESCO

the creativity and love of cultural professionals for their profession. Many of them multiplied online demonstrations and supported an increasingly won-over audience. In the same way, the national steering committee, composed in particular of representatives of the Interior, the Ministry of Health and the Royal Gendarmerie, announced that sporting and cultural events in Morocco would be scheduled and cancelled. In this context, the organizers of the Doukkala International Festival of Culture and Art have announced the postponement of the 14th edition, initially scheduled for March, in El Jadida. In addition, the event, "host a delegation from Italy", is finally due to take place next June. "This is the first festival to postpone its activities due to the coronavirus, especially since its guests were from Italy,". Also, the 2nd edition of the International Tea Fair which was to take place in Agadir was also canceled. In Tafraout, the organizers of the National Almond Tree Festival have also announced the postponement of the 10th edition which was to take place from March 5 to 8. In Tangier, the National Film Festival opened on February 28 continues normally, with several screenings on the program. Also, the Ministry of Agriculture announced the cancellation of the 15th edition of the International Exhibition of Agriculture in Morocco (SIAM).

The major role of sporting activity risks being threatened by the onset of epidemics or pandemics. These influence sports activities and major world events. In this sense, a body of scientific research has tried to prove the impact of health crises on the sports economy (Ebola; H1N1; covid19….), (Unathi S, June 2019).

Covid-19 is having a big impact on sports calendars as some of the world's biggest sporting events are scheduled for 2020. The highly anticipated Euro 2020 football tournament has been postponed for 12 months while the playoffs have been postponed to earlier until June 2020. The International Olympic Committee is committed to hosting the Tokyo 2020 Olympic Games in the summer without delay. However, they have now made the decision to postpone the Games until 2021. Similarly, the Formula 1 Australian Grand Prix has been postponed, with Bahrain and Vietnam canceling their meetings until further notice. In addition, all sporting activities in Morocco, are suspended. This has had a direct impact on the economics of sport in general and on national sports media in particular. The suspension and cancellation of national sporting events has resulted in negative consequences for the national economy. Sports associations (clubs) generally play a mediating role between the individual as part of society and the state as a major player in the sports economy (Richard & Ben Ross, 2000)[38]. The Stadia agency and sports Management School carried out a study evaluating the impact of Covid 19 on the sports industry in Morocco in 2021. According to the study, the activity of the sector shows a decrease of 64% on the 50 companies surveyed, 98% were deeply impacted by the crisis. In addition, the Judo Grand Prix scheduled for March 6-8, 2020 in Rabat, was canceled on "decision of the Moroccan government". The list of canceled or postponed sporting events could grow, starting with the CAF Cup quarter-final football matches. On the sports agenda, the Royal Moroccan Federation of University Sports (FRMSU) announced on March 3 the postponement of the 22nd World University Cross-Country Championship, which was to be organized for the first time in Marrakech, on March 7.

Conclusion and recommendations

At the end of 2019, the humanity has experienced one of the worst crises in its history that is Covid-19 pandemic. This unprecedented crisis has had catastrophic socio-economic consequences for the whole world. Indeed, this COVID-19 crisis is plunging the planetary economy into its worst recession since World War II, which, according to the International Monetary Fund (IMF), resulted in a decrease in global GDP of 3.5 % in 2020 amounted to about 84.54 trillion U.S. dollars, almost three trillion lower than in 2019. The global economy is set to expand 5.6 percent in 2021-its strongest post-recession pace in 80 years-. According to new estimates from the WTO, the volume of world merchandise trade is expected to increase by 8.0% in 2021 after having fallen 5.3% in 2020. In addition, the health crisis has called into question the foundations of the current global economic system. Thus, countries and governments today find themselves confronted with a major necessity which requires them to make radical and profound changes in their economic strategies. In fact, the debates over the post-pandemic have begun. Perhaps they will lead to systemic changes and a new world order.

In this paper, we have analyzed the socio-economic impacts of COVID-19 globally and especially on Morocco. The impact assessment on the basis of available literature is made on all the three sectors (primary, secondary,

[38] Moreover, using data from Mexico's National Health Service and the Mexican League baseball game, a study examining the relationship between the appearance of the H1N1 virus and social gathering found that the onset of H1N1 flu reduced attendance at baseball games by 15-30% with a greater reduction in attendance where there have been more reports of influenza-related illnesses.

service), financial sectors and some important indicators macro-economic. Indeed, the impact on education, health, poverty, job losses, informal sector, and so forth were analyzed.

The findings from our analysis revealed that during the year 2020 and 2021, the Moroccan economy suffered serious and negative consequences for socioeconomic livelihood in Morocco, following the internal and external repercussions of the health crisis. The all sectors of the economy have been disproportionately affected and even within a sector, there is a disproportionate loss. So far, the main sectors affected are mainly tourism, automotive and textiles. At social level, the impact in health, job losses, informal, education, and so forth is enormous. Also, a notable recession in 2020 of around 6.3%, 432,000 people lost their jobs in the 2020 in Morocco, the agriculture has generated added value, down 7.1% in 2020, the added value of industry sector would thus have fallen sharply by 7% in 2020 and the execution of the amending finance law revealed a budget deficit of 7.6% of GDP in 2020. The study found indeed that the Moroccan health system has been overwhelmed by the growing number of people affected by Covid 19 in the country to the point of using temporary structures as isolation centers, private clinics and treatment for the pandemic.

Generally, the socio-economic impact of the crisis will undoubtedly be felt first and harshly by workers in the informal sector who represent a large majority of working Moroccans generally employed in sectors particularly vulnerable to the crisis. In this difficult situation, Morocco has undertaken strict public health measures that allowed the country to react quickly against the evolution of the pandemic, the country has put some organizational measures and has also set up the National COVID-19 Fund in order to mitigate the impacts of the pandemic on businesses and vulnerable households. In the same vein, various fiscal and monetary policy measures are undertaken and announced by the government and BAM but prominent economists are of the view that more spending is needed by the government regardless of the GDP numbers and fiscal deficit.

Recommendations from our study draws on the need for the Morocco to develop others important measures and take multiple actions on different levels to avoid the negative effect of post Covid-19 pandemic like:

- Morocco may convert the challenges posed by the COVID-19 pandemic into prospects and opportunities and this by investing massively in the health sector, facilitating infrastructural development, improving health facilities and making a formulation of public health policies.
- The problem of the informal sector, which remains a sector which contributes to a large extent to the creation of added value and employment must be solved.
- There is the need for the government to expand the economy by promoting the industrial and agricultural and tourism sectors which accounts for Morocco's largest revenue.
- When Morocco is reflecting on a new development model, it would be useful to draw the necessary conclusions from this health crisis to decide on the values on which it want to establish the social contract, to explore new directions and to look back on the path of strong and inclusive growth.
- Faced with a probable decline in the growth, other's scenarios at different levels can be developed to take into account the risk of other waves of contamination that prolong the total duration of confinement, i.e., an impact on economic activity.
- Engage in sectors with high potential by federating large companies and consolidating those which are small and medium-sized, by means of the strengthening and contribution to their own resources. Indeed, create support for the SMEs and MSMEs which generate massive employment for many Moroccans.
- The sectors of the life economy, namely education, health, basic infrastructure, savings, insurance and credit, digitization and security, will have to take the lead over everything else to ensure the vital balance of the society.
- The budgetary and monetary policies must be coordinated within the framework of a countercyclical policy that will stimulate economic activity and alleviate the economic, social and psychological difficulties that the Covid pandemic has caused.
- Reinforce immediately human rights-based action in response to COVID-19 and the coming recession global is an urgent priority. In this perspective, the best response to a possible economic and social catastrophe caused by the 2019 disease crisis (COVID-19) is to put financial resources at the service of human rights and to support disadvantaged populations with bold financial measures.
- The State must double efforts and urgent measures in favor of Moroccan households, in order to stem the increase in poverty and social inequalities, and to strengthen the resilience of households vulnerable to the crisis health care to reverse the trend towards a more egalitarian society.

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