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The impact of Covid-19 on the behavior of actors and the regulation of the Moroccan stock market

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Abstract

Purpose: This study examines the impact of the COVID-19 health crisis on the behavior of actors and legislation on the Moroccan stock market.

Research Methodology: This study uses the collection and exploitation of data from key institutional reports and legal data limited to certain laws and regulations (excluding relevant case law and doctrine) attesting to the orientations of capital market authorities following the declaration of a state of health emergency.

Results: The analysis revealed that the measures taken by the government, central bank, and AMMC helped curb the capital market and provide investors with the tools they need to strengthen the resilience of Morocco's capital market.

Limitations: The first concerns the difficulty of analyzing the long-term effects of a health crisis. The second limitation concerns the existing models, theories, and methodological limitations.

Contribution: This documentary study synthesizes the psychic reactions and behaviors of Moroccan stock exchange market actors in times of crisis. In addition, it enables researchers to better understand the legal interventions taken to regulate and redirect behaviors influenced by the pandemic in the Moroccan capital market.

Keywords: *Covid-19, stock market, behavior, juridical, impact*

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1. Introduction

The COVID-19 pandemic has had a significant impact on actors on the Casablanca Stock Exchange, a major source of financing for Moroccan companies, leading to substantial losses and increased volatility in share prices. Like other stock markets worldwide, this market experienced a period of significant volatility during the first months of the pandemic. The measures taken by the Moroccan government in March 2020, particularly the closure of businesses and traffic restrictions, have had a significant positive impact on the stock market and the economy in general. The Casablanca Stock Exchange's response to the first health-related financial crisis varied in its history. It took several forms, depending on the intensity of the crisis and its economic and financial effects. At the start of the pandemic, economic uncertainties and financial market instability led to the heavy losses recorded by the Casablanca Stock Exchange. The impact was severe and increased investors' psychological fragility, leading to a sharp fall in the Casablanca Stock Exchange's main index, the MASI (Bennis and Lamrani, 2021). Subsequently, the recovery observed following the financial and fiscal support measures taken by the government and the Central Bank of Morocco (Bank Al-Maghrib) in favor of businesses relatively restored investors' confidence (Azhoune, 2022).

Even so, the situation remains fragile, and the economic uncertainty caused by the pandemic continues to affect the psyche and decision-making behavior of entrepreneurs, stock market traders, and the dynamics of financial markets (Kamil et al., 2022; Nugraheni et al., 2021). The Casablanca stock market remained fairly sensitive to the economic slump and market fluctuations that occurred during the evolution of the intensity of the pandemic and its effects and the implementation of measures taken to support the Moroccan economy.

In this article, we examine in detail the impact of the Covid-19 pandemic on the behavior of actors and the regulation of the Moroccan stock market through a review of the work produced on the subject. This study focused on two points. The first addresses the effects of the pandemic on the behavior of the stock market, investors, management companies, and the Moroccan capital market authority. The second point focuses on measures to support the behavior of these operators impacted by the pandemic in the short and medium terms. The aim is to identify the instruments used to legitimize the behavior of the various capital market actors and, more specifically, the legal basis provided by laws and regulations.

2. Literature review

The pandemic has spread to several countries, affecting both human well-being and business sectors of the global economy. In the financial sector, stock markets have demonstrated a high degree of volatility and slowdown during the pandemic, both in developed and developing countries (Anh & Gan, 2021). N. Liu et al. (2020) found that the pandemic has brought great risks and uncertainties to the global financial market. The risk levels in all the countries increased significantly between February and March 2020. Supporting the argument of Zhang, Hu, and Ji (2020), Liu et al. (2020) highlighted that the pandemic has led to considerable negative shocks to global stock markets. According to Dow Jones and Standard and Poor, company stock prices in the United States fell by 20% in mid-March 2020. Likewise, company stock prices fell dramatically in Nikkei (Jan et al., 2022). The Sri Lankan stock market experienced a 10% drop in stock prices, forcing it to close its trades several times in March 2020. In examining data from Vietnamese companies, Anh and Gan (2021) find that an increase in confirmed cases of COVID-19 negatively affects stock returns. By focusing on US data, Hsu and Liao (2022) concluded that COVID-19 cases are positively associated with stock price volatility and trading volume, and negatively associated with stock returns.

The COVID-19 pandemic has impacted financial market practices in every country around the world. Investors generally use information embedded in such events to make investment decisions. Ramelli and Wagner (2020) examine the effects of social distancing policies on economic activity and stock market indices. Their findings showed that the increasing number of lockdown days, monetary policy decisions, restrictions on international travel, and the closing and opening of the lowest and highest stock prices of major stock indices all had a significant effect on economic activity. Restrictions on internal movements have had a positive effect on economic growth as fiscal policy spending has increased. Sansa (2020) and Wang and Li (2020) observed that financial markets in China remained strong and stable despite this serious pandemic situation.

According to previous studies on consumer psychology and behavioral economics, several psychological factors influence investor behavior (Durante & Laran, 2016). Warganegara 2022 found evidence of herding behavior in the Indonesian stock market before the COVID-19 period and none during the COVID-19 period. According to the results, investors in the Indonesian stock market were more reasonable in their investment decisions during the COVID-19 pandemic. This is because market participants on the Indonesian Stock Exchange do not blindly carry out stock transactions in herd mode to avoid losses or obtain returns during the pandemic period.

H. Liu et al., (2020), Mishra et al., (2020) assumed that stock market falls in affected countries were caused by fear and negative sentiment from investors and other market participants amid the pandemic. Huo and Qiu (2020)found that reversals in Chinese stock prices, both at company and sector levels, declined because of investors' overreactions to the declaration of the pandemic lockdown. In particular, stock market investors did not react to media announcements from the start of the pandemic, but reacted negatively when the spread of the virus intensified (Corbet et al., (2021), thereby causing volatility in returns and falling markets.

Recent literature has highlighted the reasons for pandemic-induced decreases in stock markets in affected countries. The main reasons include restrictions imposed by governments on trade and physical/social distancing practices by people (Baker et al., 2020; Bharti, 2021), the rise in the number of positive COVID-19 cases and deaths (Anh & Gan, 2021), and the reduction of commercial interconnectivity (Vidya & Prabheesh, 2020). The fall in oil prices during the pandemic was also responsible for the decline in stock markets and the increased volatility of returns (Apergis & Apergis, 2020). Additionally, an increase in the number of COVID-19 deaths has increased the fear index, which in turn negatively impacts stock market returns, especially in the United States (Onali, 2020) and Asian countries (Rabhi, 2020).

In the Moroccan context, many early published articles focus on the effects of Covid-19 on the Moroccan stock market, while only a few highlight the impact of Covid-19 on financial volatility (Beraich & El Main, 2022). Nabouk (2021) confirmed the increase in volatility persistence for the Moroccan market as a whole and the appearance of an asymmetric effect on volatility behavior. Moreover, as Ibenrissoul and Aouragh (2021)point out, the feeling of fear generated by the spread of coronavirus is associated with market volatility. They show that the phenomenon of investor overreaction in the Moroccan stock market during the Covid-19 pandemic is explained by the feeling of fear. Uncertainties in developed financial markets, linked to the spread of the coronavirus worldwide, have caused such a feeling of fear.

Thus, using the event method, Youssef (2021) examines the stock price reactions of Moroccan companies during the different periods from March 01, 2019, to June 16, 2020, and shows that the Casablanca Stock Exchange recorded statistically significant average abnormal returns. He concludes that the Covid-19 pandemic has negatively influenced the Moroccan stock market.

Amhiray and El Bakkouchi (2023) analyzed the results of the Casablanca Stock Exchange indices before, during, and after the pandemic. They find that mutual fund subscriptions continued to rise despite the fall in stock market prices and some investors'need for liquidity. They also concluded that the proper management of these funds was due to the daily monitoring of asset and liability transactions and stress tests to monitor resilience.

As far as the legal action towards the financial securities market in Morocco is concerned, the spread of the Covid-19 pandemic and its consequences on the behavior of market players have been the direct cause. The study of the influence would be seen through the eyes of a jurist, through the response of the regulatory and supervisory authorities and the watchdog bodies charged with controlling and decreeing measures adapted to the extent of the volatility observed in the local financial market in search of intrinsic mechanisms enabling a certain resilience of the functional forces of this market to be achieved.

This response takes the form of new legal texts designed to provide players with means and legal cover for using financial instruments, financing methods, and risk management in financial transactions. This is also reflected in the inclusion of legal provisions aimed at reinforcing a rule securing the use of financial instruments, for example, removing or adjusting provisions that have already demonstrated their limitations in a given market segment.

International stock exchanges, including the BVC, went through a specific process that led to the creation of a special fund entitled "Fonds spécial pour la gestion de la pandémie du Covid-19' (Special fund for the management of the Covid-19 pandemic) to finance the pandemic in Morocco, financed by donations from listed companies and the general state budget.Financial institutions have taken steps to reduce corporate tax rates, create banks specialized in business financing, and maintain social benefits (Bennis & Lamrani, 2021).

On June 3, 2020, the Autorité Européenne des Marchés Financiers (AUMF) (European securities and markets authority) gave a positive rating to the Moroccan stock market (Bennis & Lamrani, 2021). Moreover, the general observation following the solemn declaration of the pandemic was the notorious drop in performance, as attested by empirical studies (Shen et al., (2020) analyzing the influence of Covid-19 on the financial performance (measured by the return on assets (ROA)) of Chinese companies. Xinhuao (2020) and Sansa (2020) confirm that lower revenues lead to lower financial performance for listed Chinese and American companies. Similarly, Devi, Warasniasih, Masdiantini, and Musmini (2020) examined the impact of the Covid-19 pandemic on the financial performance of Indonesian listed companies (GWETH, 2022), it should be remembered that financial performance is closely linked to innovation in the adoption of social responsibility, as shown by the example of the study carried out on companies (El Fallahi et al., 2022).

The impact of the pandemic is also felt in terms of the risk affecting confidence in the financial market, as in the case of the French system's ban on short selling (a transaction involving the sale of a security not held in the hope of buying it by the time the sale is settled, at a lower price, and generating a capital gain). This prohibition is subject to the jurisdiction of the AMF (autorité monétaire française, French monetary authority), which controls operations likely to constitute or increase net short positions in shares admitted to trading on a French trading platform (Bine et al., 2020). This institutional and legal response joins the legal arsenal for controlling operations deemed harmful to confidence in the financial market, in the comparative context of the pandemic spread.

The legal response to the pandemic in the financial markets was characterized, among other things, by the adaptation of labor law rules to the modalities imposed by social distancing and its consequences (Kapesa et al., 2023). For example, in Mexico, the legislator has declared Covid-19 an occupational disease (PM as of July 29, 2020) while allowing workers who have tested positive for Covid-19 to claim temporary incapacity to carry out their professional activities (Bermúdez 2021).

Some scholars have even argued that universally recognized human rights, without prejudice to the state’s obligation to intervene in a crisis situation, such as a pandemic, need to be further protected during a crisis. This would be a binding legal commitment, as is the case for Belgium, which is subject to the relevant rules of international law–Article 2 of the Convention for the Protection of Human Rights and Fundamental Freedoms (ECHR). This convention guarantees the right to life and obliges states to take measures to eradicate foreseeable death (Bouhon et al., 2020).

With reference to the studies cited above, we formulated our research hypothesis as follows:
H1: Covid19 has had a negative impact on the behavior of actors in the Moroccan stock market
H2: The measures taken by the State to deal with the covid19 pandemic have had a positive impact on the behavior of actors in the Moroccan stock market
H3: The pandemic prompted the adaptation of certain legal provisions related to the guarantee of financial products and services.
H4: The pandemic prompted the creation of new legal provisions to restore trust in the stock market and reinforce instruments of its resilience.

3. Research methodology

This method follows a qualitative approach. It is based on a documentary analysis that gathers information from all sources related to the behavior of Moroccan stock market actors during the pandemic period, such as research works, articles, and financial reports from the AMMC[1], management companies, Bank Al Maghreb, and the Ministry of Economy and Finance. As part of the legal intervention accompanying the behavioral impact of capital market players following the pandemic, verified legal data were collected as they had exhausted the adoption process or were subject to adoption following the law. Institutional reports, mainly from the market regulator (AMMC), were also used to explain the reasons for and vision of the public authorities and, in particular, the

[1] As a capital market regulatory authority, the AMMC (Moroccan capital markets authority) was established by Law No. 43-12 and has the mission of: Ensure the protection of savings invested in financial instruments; Ensure equal treatment of savers, transparency and integrity of the capital market and information for investors; Ensure the proper functioning of the capital market and ensure the application of legislative and regulatory provisions; Ensure control of the activity of the various organizations and persons subject to its control; Ensure compliance with the legislation and regulations in force relating to the fight against money laundering, by the persons and organizations placed under its control; Contribute to the promotion of financial education for savers; Assist the government in regulating the capital market.

mechanisms likely to achieve a certain resilience in this market. This sorted, exploratory, non-systematic literature review aimed at identifying legal texts that have directly or indirectly provided a framework for financial products or instruments.

4. Results and discussions

4.1 *Analysis of the behavior of Moroccan stock market actors during the Covid-19 pandemic*

At the start of the health crisis linked to the COVID-19 pandemic, the Casablanca Stock Exchange suffered significant losses due to economic uncertainties and investor concerns about the pandemic's impact on key companies and sectors of the Moroccan economy. However, since the second half of 2020, the Casablanca Stock Exchange has begun to recover gradually thanks to the measures taken by the Moroccan government to mitigate the impact of the crisis and the prospects for economic recovery (Financesnews, 2021).

4.1.1 Performance of the Casablanca Stock Exchange

Figure 1: Evolution of the MASI[2] index between June 2019 and June 2023
Source: Investing.com(*Moroccan All Shares | Cours Indice MASI en direct - Investing.com*, 2023)

In 2019, the MASI index on the Casablanca Stock Exchange increased by 7.11%, exceeding analysts' forecasts. This performance was underpinned by falling long-term interest rates and improved corporate earnings. Investors have turned to equities for more attractive dividend prospects. 2019 was marked by favorable market conditions and the advent of major new developments, such as the completion of the regulatory framework for OPCIs (organisme de placement collectif immobilier, real estate collective investment organization), the effective launch of the system for empowering capital market professionals, the entry into force of the new regime for public offerings, and the operationalization of the new Stock Exchange Act. These innovations led to a significant increase in stock market indicators (MASI of 7.11% and market capitalization of 7.65%) and overall transaction volume, which grew by 43.10%.

In 2020, the index fell sharply following the repercussions of the COVID-19 pandemic on the global economy and financial markets and the Casablanca Stock Exchange was not spared. At the start of the year, the MASI index stood at approximately 12,800 points, but in March 2020, it fell to its lowest level of the year, at approximately 7,700 points. As a matter of fact, in mid-March, it recorded a severe decline of almost 9%. In mid-March, a severe decline of approximately 9% was recorded. The MASI index fell by 20.85% during the first five months of 2020, but partial recovery was observed owing to the easing of containment measures and the intervention of the Moroccan central bank to reduce the

[2] Moroccan all shares index: Casablanca Stock Exchange index bringing together all listed shares

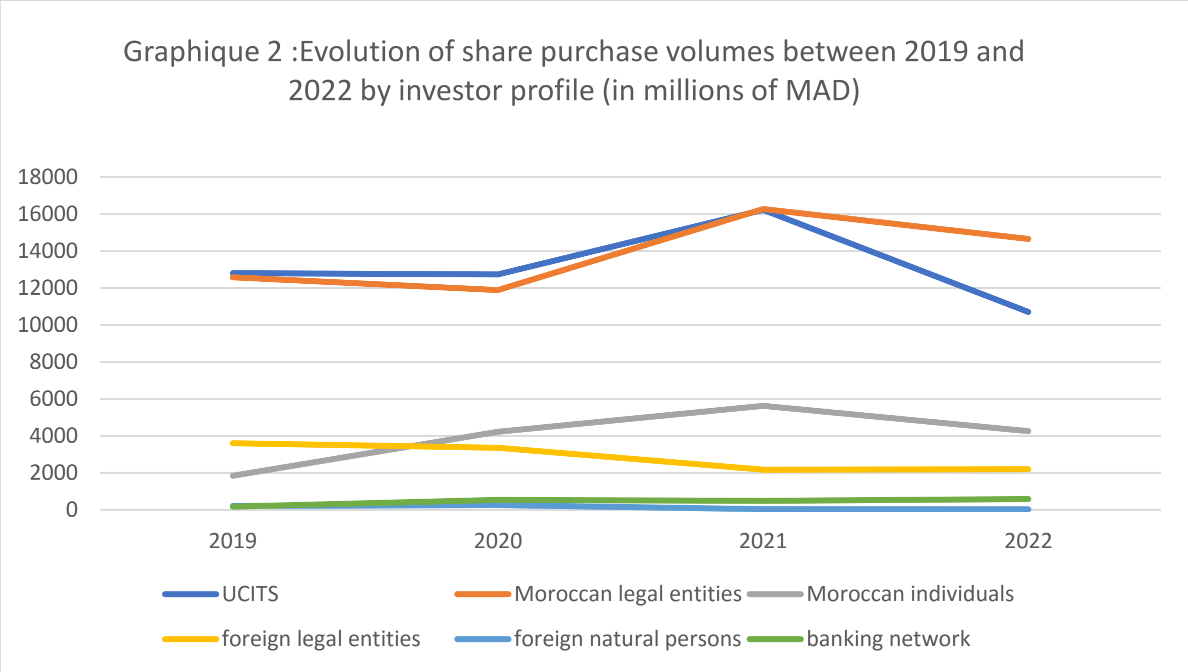
key rate. The year 2020 was characterized by high volatility and significant underperformance on the Casablanca Stock Exchange. This behavior was due to the uncertainty surrounding the evolution of the COVID-19 pandemic, which caused major disruptions in the financial market. The prices plummeted by as much as -26.2% for the general MASI index. Stock market volatility fluctuated widely from a low of 6.47% on January 7 to a high of 57.31% on March 30. This was a historic peak in the volatility of the Casablanca Stock Exchange, exceeding 38.34% on October 14, 2008, during the last international financial crisis. However, in the second half of the year, the volatility gradually fell to moderate levels, ranging from 5.18% to 17.59%(BAM et al., 2020). Despite these unfavorable health and economic conditions, the stock market gradually recovered, closing the year with a negative return of -7.27%.

In 2021, the MASI recorded a performance of 18.35%, which is close to its all-time high. The successful vaccination campaign against COVID-19, the Marhaba summer operation, the positive results of listed companies, and the smooth running of legislative elections were all positive factors. Marked by the prolongation of the health crisis, 2021 was punctuated by the appearance of new variants of the virus and restrictions. Despite this, economic activity at both the global and national scales has picked up overall, thanks in particular to the support policies and stimulus programs undertaken by various countries at an almost universal level, including Morocco. The MASI stock market performance index rose significantly from 11,287.38 points at the end of 2020 to 13,358.32 points at the end of 2021, exceeding its pre-crisis peak level of 12,600.45 points on January 24, 2020. In the first half of 2021, stock market volatility fell significantly after the high levels reached in 2020 following the outbreak of the health crisis, from a high of 17.28% reached on January 8, 2021, to a low of 2.61% reached on May 3, 2021. In the second half of 2021, volatility increased gradually but at moderate levels, ranging from 4.78% to 9.47%. In comparison with the previous year, MASI volatility has halved, with an average value of 7.10% compared with 15.12% in 2020 (BAM et al., 2021).

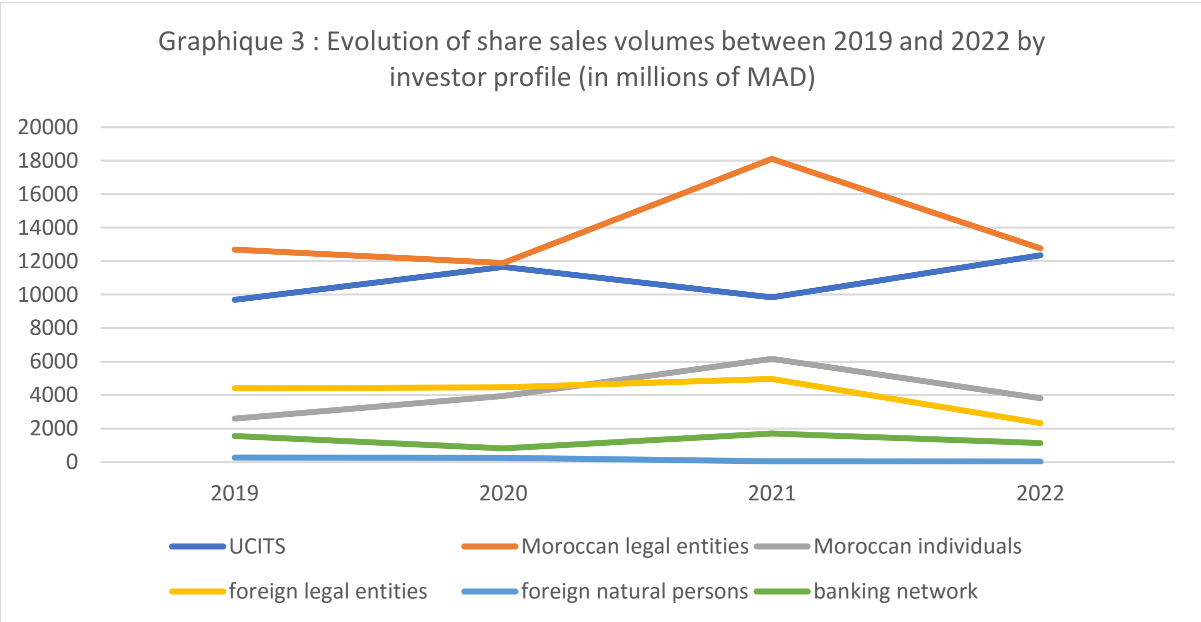
In 2022, as a result of rising interest rates, geopolitical unrest, economic difficulties, and inflation, the Casablanca Stock Exchange ended the year with an underperformance of 19.75% (-21% for MSI 20), compared to an 18.35% rise in 2021. The overall capitalization of the coast has fallen from 690 MMDH by the end of 2021 to 561.1 MMDH by the end of 2022, representing a withdrawal of nearly 130 MMDH or 18.7% (« Bourse," 2023). It has the weakest performance in its recent history, with a capitalization loss of almost DH127 billion. Even though inflation and interest rates are rocketing, there is no reason to expect such a weak stock market year at the start of 2022. The proof is that, on January 10, 2022, the MASI gained up to 5%, around 14,000 points (not far from its 2008 all-time highs). Russia's invasion of Ukraine at the end of February, however, dashed all hopes of short-term capital gains and even another bullish year. The stock market reacted quickly, with MASI dropping by as much as 17% between February and July of the same year. This was followed by a summer with no clear-cut direction, before picking up again in September, after the first rate rise dictated by Bank Al-Maghrib. The year ended with values close to the annual lows at 10,720 points, with overall valuation down sharply to 17x from 19.8 × on average for the five years before the Covid crisis. Average volatility decreased from 9.4% to 10.8% in the first half of 2022.

4.1.2 Investors' behavior before and during the Covid-19 crisis:

Investor behavior is studied through the volume of transactions by investors' profiles before and during the COVID-19 pandemic (between 2019 and 2022) to determine the impact of the pandemic on their decisions to buy or sell shares.



Source: AMMC[3] Annual Reports



Source: (AMMC, 2020c)

In 2019, the overall transaction volume on the Casablanca Stock Exchange's central market stood at 31.2 billion dirhams, which was 16% lower than in that 2018. According to the investor profile, Moroccan legal entities accumulated 40% of the processed volume, which decreased by 8% in 2018. The UCITS[4] increased from 31% in 2018 to 36% in 2019. Foreign legal entities and Moroccan individuals accounted for 13% and 7% of the sample, respectively.

In 2020, the overall transaction volume on the Casablanca Stock Exchange's central market stood at 33

[3] Moroccan Capital Markets Authority
[4] Undertakings for collective investment in transferable securities (OPCVM in French: Organisme de Placement Collectif en Valeurs Mobilières) is an investment fund giving investors of all kinds access to the capital market (shares, bonds, money market, etc.). Investors entrust their savings to market professionals.

billion dirhams, an increase of 5.78% compared to 2019. UCITS and Moroccan legal entities remained the main drivers of the stock market, with a cumulative share of 73%, representing a slight decline in 2019 when the share reached 76%. The weight of UCITS in terms of transaction volume increased slightly, from 36% in 2019 to 37% in 2020. The percentage of Moroccan legal entities dropped to 36% in 2020 compared to 40% in 2019. Moroccan individuals have been more active in the stock market, with their share increasing from 7% in 2019 to 12% in 2020. As for foreign individuals, their share remained very limited at 0.78% in 2020 versus 0.75% a year earlier. The shares of foreign legal entities and banking network customers fell slightly from 13% and 3%, respectively, in 2019, to 12% and 2% in 2020 (VirtualConnect, 2023).

As for investor behavior during the COVID-19 pandemic, the latter did not have a paralyzing effect on investors, as was the case in many other countries. Thus, over the first quarter of 2020, Morocco saw a 147% increase in stock market transactions compared with 2019. Similarly, the number of stock market orders increased by 28%.

In 2020, UCITS, moving on to 2021, observed a change in the distribution of stock market volume (AMMC, 2020c). Moroccan legal entities increased their participation by 42%, thus becoming the most active investor category. This may reflect Moroccan corporate entities' increased investment activity in the market. Moroccan individuals and foreign legal entities maintained their respective shares at 14%, indicating relative stability in the activities of individual and medium-sized enterprises. The year 2020 saw greater participation of banking network players in market transactions. This increase may be the result of various factors such as the specific investment strategies adopted by banking institutions or investment policies aimed at diversifying their portfolios.

In 2021, in terms of transaction volume, the weight of resident legal entities increased to 42% from 36% in 2020, whereas that of UCITS fell from 37% a year earlier to 32% in 2021. Individual residents are more active in the stock market, accounting for 14% of the volume in 2021 and 12% in 2020. As for banking network customers, their share remains limited to 3% in 2021 and 2% in 2020. The shares of foreign legal entities and individuals have fallen slightly from 12% and 0.78%, respectively, in 2020 to 9% and 0.1% in 2021.

In 2022, the total transaction volume on the Casablanca Stock Exchange's central market will be 32.4 billion dirhams, down 20.6% in 2021. According to the investor profile, Moroccan legal entities account for 45% of the volume processed, up to 13% by 2021. UCITS has fallen from 39.7% in 2021 to 33% in 2022. Moroccan individuals and foreign legal entities accounted for 13% and 7% respectively.

4.1.3 Behavior of UCITS during the Covid-19 pandemic

Investing in a UCITS means entrusting your savings to capital market professionals, who offer diversification accessible to all pockets since the minimum one can invest in a UCITS corresponds to one unit or share of that UCITS(AMMC, 2018)**;** portfolio management on the Casablanca stock exchange in 2020 was strongly influenced by the Covid-19 pandemic and its economic impact. Investors face high market volatility, making portfolio management more difficult and complex(Casablanca Stock Exchange 2020).

In this challenging environment, several portfolio management strategies have been proposed to help investors navigate through uncertain markets and achieve their return objectives. Portfolio diversification is an important strategy in portfolio management. In 2020, investors sought to reduce their exposure to risk by diversifying their portfolios (AMMC, 2020a). The health crisis has demonstrated the resilience of these investments, which have enabled shareholders to significantly limit the degradation of their savings and even grow them in times of crisis.

Moreover, this context has enabled these products to be sold and distributed more effectively. This is evidenced by the increase in UCITS investors, which has continued for the fifth year in 2020. This increase was due to contrasting trends by category, with increases in the number of legal entities and individual residents (+4% and +2%, respectively). The number of non-resident individuals and companies fell by 1%. UCITS Equity recorded the best monthly performance at +2.91% (*OPCVM*, s. d.).

UCITS has invested in different sectors, including banking, telecommunications, and utilities, to spread risk. Stock selection is also influenced by the sector performance. Investors chose to invest in technology and communications companies that thrived during the pandemic, while tourism and leisure companies were avoided. Portfolio management on the Casablanca Stock Exchange in 2020 was marked by market volatility due to the Covid-19 pandemic. Investors have to exercise caution and diversify to reduce their risk exposure. Short-term investment strategies were also used to take advantage of market volatility, whereas portfolio analysis tools were used to assess portfolio performance and make informed decisions. Portfolio simulation tools were used to assess the potential returns under different market scenarios.

The net assets under management Undertakings for Collective Investment in Transferable Securities (UCITS) stood at 592.91 billion dirhams (MMDH) at the end of December 2021, up 13.32% on the same period in 2020, according to the Association of Moroccan management companies and investment funds (ASFIM)(tarik, 2022). In monthly terms, UCITS net assets under management fell by 2.24% to 606.47 MMDH by the end of November 2021, according to ASFIM in its December 2021 monthly newsletter, which explains the decline observed by net outflows of nearly 15 MMDH, which mainly concerned monetary UCITS. UCITS's equity posted the highest monthly performance at +0.76%, whereas monetary UCITS had the lowest at +0.12%. Similarly, UCITS achieved the best annual performance in 2021, with a 19.46% variation, whereas monetary UCITS posted the lowest at +1.45%. With the launch of the two funds, the number of UCITS in operation rose to 537 at the end of December 2021, according to ASFIM, noting that throughout 2021, 35 new UCITS were created.

The asset management industry was characterized in 2022 by high risk versus meager returns, in contrast to 2021, which was prolific for savings and investments. UCITS managers did their best to limit their risks. Thus, the UCITS sector was impacted by the stock market downturn and upward pressure on the fixed-income market, with outflows in the MLT, CT, and UCITS equity categories. On December 9, 2022, the total net assets of UCITS stood at MAD 536.5 billion, down by 9.5% at the start of the year.

4.1.4 The Moroccan Capital Market Authority's approach to covid-19

As Morocco's capital market regulator, the Moroccan Capital Markets Authority (AMMC) has not spared the effects of Covid-19. The impact of COVID-19 on AMMC depends on various factors, including containment measures and capital market disruptions. Among the potential impacts of COVID-19 on AMMC, we can cite the following:

1. The COVID-19 pandemic has led to disruptions in global financial markets, including the Moroccan capital market. These disruptions may have impacted AMMC regulatory activities.
2. Containment measures and travel restrictions may make it more difficult for the AMMC to conduct monitoring and regulatory activities. This has led to adjustments in regulatory processes.
3. The COVID-19 pandemic has led to changes in investment trends, with an increase in investment in some sectors (such as technology and healthcare) and a decrease in others (such as travel and tourism). This may have impacted AMMC investment regulations.

Concerning AMMC's response to the Covid-19 crisis, and following the consequences of the Covid-19 health crisis and the organizational changes brought about by containment, AMMC has adopted a comprehensive intervention plan to ensure the smooth functioning of the capital market and the maintenance of the activities of infrastructure and market participants. The Authority also adopted a new organizational structure, with the dual aim of ensuring the completeness of its activities and safeguarding the health of its staff. It defines the actions to be taken and the resources to be deployed in the field, in particular, the development of guides and procedures dedicated to the Covid-19 context and the redeployment of material resources and the organization of teleworking and on-site presence, as well as the acquisition and deployment of new IT and telecom equipment (laptops, Internet connections, etc.), and the acquisition of a new secure video conferencing system (equipment and tools).

Moreover, the AMMC has set up a close coordination and monitoring mechanism between itself, Bank Al-Maghrib, Insurance and Social Security Supervisory Authority, and the Ministry of Economy, Finance, and Administrative Reform to continuously assess the impact of Covid-19 on financial stability. During the health crisis, it also ensured the close monitoring of the stakeholders under its control to help them deploy their continuity plans. It also requires market players to focus their efforts on ensuring the continuity of their activities while respecting the integrity of the markets. Among other things, it has strengthened audit trials and adapted procedures for the transmission of certain reports by stakeholders. To cope with the increased volatility of the prices of instruments listed on the Casablanca Stock Exchange, two measures have been deployed: in particular, the tightening of maximum variation thresholds applicable to listed financial instruments, and the reorganization of trading hours and the processing and settlement of financial instrument transactions(l'Autorité Marocaine du Marché des Capitaux (AMMC), 2020).

4.2 Legal intervention to control the behavioral impact of the stock market in the face of the Covid-19 pandemic

Following the declaration of a state of health emergency in Morocco under decree-law no. 2-20-292 relating to the setting of specific rules for a state of health emergency and the procedures for its declaration, published in Bulletin Officiel (BO) no. 6867 bis of March 24, 2020, the first action was the suspension of economic and social activities for the three (3) months following the declaration. Public authorities have also urged sector regulators to introduce measures to guarantee bank loans and defer and delay the payment of insurance premiums (...) to restore confidence in the capitalist system and the prudential rules decreed by public authorities under the regulation of sector regulators, including the AMMC.

The immediate response to the hazards created by the crisis was essential, regardless of efforts to reflect on long-term actions to be taken in the international financial system. This response came from the Moroccan financial authorities, like their counterparts in other countries, and was encouraged by the World Bank's report, which highlighted the volatility of the international financial system as a direct result of the pandemic's impact on markets.

This response is in line with measures generally aimed at providing banks with refinancing resources, encouraging demand for credit from households and non-financial businesses, the availability of liquidity from credit institutions, restoration of the degree of resilience to the insurance sector, and acting on the transparency and disclosure of information on the local financial market.

4.2.1 Legal intervention focused on guaranteeing financial products

Signs such as the upturn in export activity, mainly in the automotive and agricultural sectors, as well as the Kingdom's overall financial stability following the adoption of the Amending Finance Law for 2020, played a decisive role in the decision-making of players active in the Moroccan stock market (Alami, 2020).

As part of their commitment to citizenship and solidarity, banks are the first warriors listed on Casablanca Stock exchange, contributing a total of 3.32 MMDH to the "Covid-19" pandemic management fund, equivalent to 27% of their profits in 2019. It should be noted that their contribution will be remunerated at the end of 2020 since donations to the "COVID-19" Fund in general are now considered deductible expenses under the guidelines of the LFR 2020 (loi de finance rectificative, the amendment of finance law) (Alami, 2020).

Today, it is a matter of devising public policy to prevent crisis situations in the financial market, including the stock market, through reactivity by outlining programs and measures to remedy the consequences of the pandemic on both confidence in systemic and institutional market regulation and ensuring the market's resilience in the face of exogenous turbulence and speculation.

Financial products refer to the full range of services provided by credit institutions and authorized organizations (investment banks, rating agencies, advisory services, and stock market intermediaries) to beneficiaries who are eligible by law (consumer loans to households, FCPs[5] to beneficiaries meeting the legal conditions, UCITS and, more generally, various public offerings on the public savings market). The legal intervention aimed at providing the financial market, particularly the Moroccan stock market, with sufficient resources to cover credit risk and secure the contractual transaction between the business and the consumer is intended to be cross-cutting.

The Moroccan legislator has introduced texts the granting of guarantees (Damane) for traditional loans, to ensure the continuity of this segment of financial activity and the involvement of the CCG (Caisse Centrale de Garantie)[6] (Central Guarantee Fund) (BAM et al., 2020).

It should be pointed out that the regulatory measure is the concrete expression of one of the recommendations of the CVE (Comité de Veille Économique, Economic Monitoring Committee), which sought to diagnose the financial market based on reliable indicators and to propose measures and instruments to implement them, with a dual objective:

1. Ensuring an immediate response to the consequences of the pandemic crisis on capital market stability.
2. Guarantee the continuity of its operations through the arsenal of preventive measures aimed at stock market players, and the continuity of asset management throughout the crisis period (from 2020 to 2021).

In relation to the essential stock market infrastructure
Bill no. 12-20 on covered bonds gives credit institutions exclusive rights to issue new securities: covered bonds backed by a guarantee.

The legislator has determined the nature and scope of this guarantee, including a portfolio of covers and privileges inherent only to banks. The aim is to enable bankers to issue bonds that provide sufficient insurance for the public savings market and for holders interested in these issues.

The bill was put out for public consultation for a short time to not only solicit the views of professionals and market players but also to ensure that the explanatory memorandum to the bill was circulated at the start of the pandemic (coinciding with the date of the official declaration of the state of health emergency, March 24, 2020).

The legislator did not hesitate to enrich the securities market by authorizing the issuance of bonds while focusing on the elements of trust and related guarantees. This is a coercive legal obligation incumbent on institutional professionals (in this case, banks) to restore a degree of certainty to the capital market and enable its players to diversify their portfolio of (bond) securities to be offered amid a pandemic crisis.

Order no. 1786-20 of 21 kaada (July 13, 2020) set out the terms and conditions for securing risk guarantee operations by the Fond de Plactif (FCP) (Collective investment funds) and the prudential and supervisory rules applicable to them. This decree (a regulatory text issued by the Minister of Finance, Economy, and Administrative Reform) is part of the interest shown by the public authorities (in particular, economic and sectoral regulators) in securing guarantee operations and consolidating them through pronounced government intervention (role of Bank Al-Maghrib, AMMC).

Adopted on the basis of law no. 33-06 on asset securitization, promulgated by dahir no. 1-08-95 of 20 chaoual 1429 (October 20, 2008), as amended and supplemented, and decree no. 2-08-530 of 17 rejeb 1431 (June 30, 2010) implementing the same law, in particular article 12-1.

[5] The FCP is a co-ownership of financial instruments that issues units. By investing in it, investors become holders of units in the FCP and members of a co-ownership. Units are managed by a management company.
[6] It is a public financial institution assimilated to a credit institution in accordance with law no. 103-12 on credit institutions. Its mission is, among other things, to share risks with other players and to cover them up to a given threshold in order to facilitate access to financing.

This decree is made up of eight (8) articles dealing with its scope of application, procedures for carrying out financing risk guarantee operations by securitization collective investment funds, prudential conditions and rules, and control procedures to guarantee financing risks (AMMC, 2018).

At the start of the Covid-19 pandemic crisis, the government intervened to equip financial institutions to guarantee the risks of securitization operations by circumventing the notion of risk, which corresponds to the risk of late or non-payment of the debtor's commitments to one or more originator institutions.

It has been careful to exhaustively determine these initiating establishments, namely credit and similar organizations regardless of where their head office is located, CDG (caisse de dépôt et de gestion (Deposit and Management Fund), the Société Nationale de Garantie et Financement de l'Entreprise, micro-credit organizations, international financial institutions authorized by an agreement signed with the Moroccan government, and les Établissements et Entreprises Publics (EEP) (Public Establishments and Enterprises).

This underscores the need for financial capacity and the ability to manage complex financial operations such as securitization (AMMC, 2020b).

The instruments used to hedge the risks of these operations are either financial guarantees given in the form and terms required by the law or forward financial instruments under the provisions of Article 3 of Law No. 42-12.

In this case, the decree requires that the management regulations include information such as the characteristics of the asset covered by the guarantee, the characteristics of the financing risk guarantee offered by the FPCT (Fonds de placement collectifs en titrisation, collective investment funds in securisation), the additional information to be communicated to security holders, the procedures for early redemption of securities, and the characteristics of the hedging instruments, including their nature, value, scope, duration, and terms and conditions.

These guarantees are granted to the FPCTs by initiating institutions under the conditions set out in the decree. The amount of risk guaranteed cannot exceed the value of all securities issued. Moreover, the number of hedging instruments is also regulated by the aforementioned decree, which sets their thresholds according to the initiating institutions.

The securitization segment was impacted by the pandemic at the start of the crisis, and the Ministry of Economy and Finance was forced to order a halt in order to guarantee the risks involved in these operations, including EEPs (company and public institutions), micro-credit organizations that are vital for financing small projects, and low-income households.

Regulatory intervention reflects public authorities' concern to balance this market by ensuring transparency in the information to be provided to security holders on the obligations incumbent on initiators and those incumbents on FPCTs in terms of risk coverage and applicable prudential rules.

This legal intervention aims to ensure a balance in contractual relations between the various parties involved in financial market operations and to guarantee risks by setting up guarantees in compliance with current laws and regulations and in line with prudential rules.

As such, bill n° 15-18 (Law subsequently promulgated under dahir n° 1-21-24 of 10 rejeb 1442 (February 22, 2021) on collaborative financing (known as crowdfunding) was voted by the House of Representatives in February 2020. This type of fundraising relies on the use of platforms and new digital technology tools to bring together innovative project leaders and special investors (business angels, etc.).

This means of financing is based on techniques that differ from traditional financing, since the aim is to encourage dynamic projects, often but not exclusively in the form of start-ups, which are likely to generate colossal operating profits in the NICT market. The intervention of the legislator at this time, despite a previous reluctance, to provide a legal framework and support for the development of this means of financing on the capital market could only reflect the desire to extend the means of financing on a market impacted by the pandemic crisis (AMMC, 2020d).

Collaborative financing, as regulated by the Moroccan law, takes three (3) forms: loans, capital investment (contribution and organization of the means of subsequent exit), and donations.

4.2.2 Legal intervention to restore market trust

Trust refers to the business climate that should prevail in the capital market, on the part of institutional investors, beneficiaries of financial products and services, and security holders alike, while ensuring transparency in the information circulated under the partnership contract.

The idea is that the confidence of the various players in the capital market, notably companies listed on the stock exchange, portfolio managers of financial securities etc.,, need to operate in a confident environment where the prospects for business continuity are solid and confirmed; hence, the role of the regulatory authorities (the Ministry of Economy and Finance, the AMMC, the Casablanca stock exchange market, and the CGEM (General Confederation of Moroccan companies) in outlining and implementing the rules and standards to concretize them.

1. Legal intervention to boost confidence in the capital market

Initially, the regulatory authorities felt the need to protect the Moroccan capital market from possible opportunism on the part of malicious parties or investors who might take advantage of the market's volatility to inject funds from illegal activities.

To contain this risk, draft law no. 12-18 amending and supplementing law no. 45-03 on the fight against money laundering was drawn up and submitted to the House of Representatives for a vote on March 13, 2020.

This was a declared desire to bring national law in line with new developments in international regulations adopted by the GAFI (Groupe d'action financière, Financial Action Task Force). The duty of transparency and the delimitation of the boundaries of professional secrecy imposed on banking institutions were reviewed based on cross-border movements of (sensitive) data, prompting the GAFI to review the conventional rules currently in place(AMMC, 2020d).

Another legal intervention to boost confidence in the Moroccan capital market is the regulatory overhaul of the chartered accountancy profession, which took place under Decree no. 2-18-454, implementing the Code of Professional Duties of the Ordre des Experts Comptables (Order of chartered accountant, published in BO no. 6844 of January 2, 2020.

Admittedly, the intervention took place before the declaration of a state of health emergency but in the context of the emergence of the pandemic situation and the first signs of an international crisis likely to have an impact on economic activity.

This code of professional duty refers to the following laws:

1. Law no. 43-12, which repeals and replaces dahir Law no. 1-93-212 on the Council for the Code of Ethics in Securities and the information required from legal entities making public offerings. Consolidated by the amendments made to Article 126 of law 19-14. Published in BO No. 6144 (April 2013).
2. Law no. 44-12, which repeals and replaces dahir Law no. 1-93-212 on the Council for the Code of Ethics in Securities and the information required of legal entities making public offerings of securities. Consolidated by the amendments made by Articles 124 and 125 of law 19-14. Published in BO No. 6124 (February 2013).

The decree sets out the list of documents required for Commissaires Aux Comptes' assignments (CAC) (Statutory Auditors) and the conditions for AMMC involvement in the event of dismissal or replacement of statutory auditors by an anonymous company making APE (Appel public à l'épargne, public call for saving (PCS)).

2. Legal intervention to ensure business continuity

Law no. 27-20 implements the special provisions governing the work of the administrative bodies of public limited companies and the procedures for holding their general meetings during a state of health emergency. The law was enacted to bring flexibility to the rules governing the management of SAs (whether PCS or not) compared to the strict rules contained in law no. 17-95.

Among the changes introduced by this law is the procedure for issuing bonds, which is now subject to authorization by the Conseil d'Administration (CA) (Board of Directors (BOD)) or the Management Board, without the need for an l'Assemblée Générale Ordinaire (AGO) (Ordinary General Meeting (OGM)).

As for the organization and holding of general assemblies during the crisis, the same law incorporated exceptional rules such as meeting by videoconference or any other similar means, while respecting the AMMC's recommendations to this effect: the use of reliable technology, providing shareholders with postal voting forms at their request, and communicating transparently and informatively about general assemblies to the various categories of shareholders.

In the same context, the Conseil National de Comptabilité (CNC) (National Accounting Board) issued an opinion (no. 13), published on April 29, 2020, on how to take account of the pandemic's impact on the missions of chartered accountants and CACs, focusing on the nature and characteristics of the information to be included in the ETIC. The Order of chartered accountants has issued a directive (dated April 9, 2020) outlining the actions to be taken in the wake of the pandemic with regard to the audit of summary statements, just as it assimilates the pandemic to a "post-closing event" and the contours of the financial communication imposed on statutory auditors.

In a press release on March 20, 2020, the AMMC authorized the use of telecommuting to carry out its employees' missions. It also recommends the widespread use of this technique in the capital market by various players.

5. Conclusions

Following the Covid-19 pandemic, the Casablanca stock market has experienced high volatility and significant underperformance. The MASI fell sharply from mid-March 2020 onwards because of uncertainty about the evolution of the pandemic, which led to major disruptions in the financial market. In the same year, the transaction volume on the stock exchange's central market increased compared to 2019. UCITS, Moroccan corporate entities, and individuals were the main drivers of the stock market despite the country's health situation, unlike the banking sector and foreign individuals. UCITS managers opted for a cautious approach, adopting a diversification strategy to reduce their risk exposure and increase their savings. The easing of confinement measures, the AMMC's intervention in tightening the maximum variation thresholds applicable to listed financial instruments, the reorganization of trading hours, the processing and settlement of financial instrument transactions, and the central bank's reduction of the key interest rate enabled the Moroccan stock market to recover by the end of 2020, despite the underperformance recorded (HCP, 2020).

Despite the prolongation of the health crisis and the appearance of new variants, 2021 was characterized by a recovery in stock market performance thanks to the support policies and stimulus programs that enabled economic activity to recover (Noures-Sadat & Assalih, 2022).

The year 2022 was a year of underperformance due to rising interest rates, geopolitical unrest, economic difficulties, and inflation. This harmed the behavior of financial market players, who preferred to reduce their transactions during the year.

The COVID-19 pandemic was an opportunity to rethink the capitalist model and the various instruments used to energize the financial market, in this case the stock market management model. The immediate impact following the declaration of a state of health emergency was the suspension of certain activities, in parallel with the use of "Safety" work methods such as videoconferencing with electronic bulletins in compliance with regulations, and the observation of new social distancing measures, even regulatory reporting methods to the financial market watchdog were adapted to the pandemic context.

Far from the actions taken in the immediate term either to eradicate the risk of contagion, since the financial market was characterized by the adoption of measures common to economic activity, or actions reflecting a new vision of the functioning of the financial market (in particular the stock market). This impact needs to be examined in terms of the behavior of market players, while looking for a reference that underpins behavioral change.

Legal underpinning is one of the tools used by the economic watchdog (Bank Al Maghrib), stock market watchdog AMMC, players (led by the Casablanca stock exchange market), and consultative bodies such as the CVE. Legally, we refer to legal texts, according to their normative hierarchy, that have been adopted or put out for consultation and debate as projects attesting to a public will and the progress of a sectoral public policy with well-defined contours.

In this context, the Moroccan financial (and stock) market has not escaped the adoption of actions commonly accepted by capital markets at the international level, and the supervisory authority, the Ministry of Economy and Finance, has played a greater role in setting the priorities and axes characterizing the post-pandemic operation, which would be part of a dedicated New Normal of resilience.

References

Alami, Y. (2020). Contribution à l’étude de l’impact de la crise sanitaire Covid-19 sur la Bourse des Valeurs de Casablanca. *Revue Internationale d’Economie Numérique*, 2(2), 112-131.

Amhiray, A., & El Bakkouchi, M. (2023). L'impact du covid-19 sur la stabilité financière du marché des capitaux marocain. *Revue Française d'Economie et de Gestion*, 4(5).

AMMC. (2018). *Guide pédagogique : Comprendre les OPCVM*. https://www.ammc.ma/sites/default/files/Guide%20pratique%20OPCVM.pdf

AMMC. (2020a). *la Revue du Marché des Capitaux. Dossier spécial Covid-19*. https://www.ammc.ma/sites/default/files/RMC_N4-Juin%202020_0.pdf

AMMC. (2020b). *Orientations LBC/FT dans le contexte de la pandémie COVID-19*.

AMMC. (2020c). *Rapport annuel 2020 et Revue de Presse numéro 6*.

AMMC. (2020d). *Recueil des textes législatifs et réglementaires*.

Anh, D. L. T., & Gan, C. (2021). The impact of the COVID-19 lockdown on stock market performance : Evidence from Vietnam. *Journal of Economic Studies*, *48*(4), 836-851.

Apergis, N., & Apergis, E. (2020). Can the COVID-19 pandemic and oil prices drive the US Partisan Conflict Index? *Energy Research Letters*. https://repository.derby.ac.uk/item/953z7/can-the-covid-19-pandemic-and-oil-prices-drive-the-us-partisan-conflict-index

Azhoune, C. (2022). Bourse marocaine face à la crise financière liée à la pandémie de coronavirus : États des lieux, analyses et perspectives. *Revue Française d’Economie et de Gestion*, *3*(8), Article 8. https://www.revuefreg.fr/index.php/home/article/view/796

Baker, S. R., Bloom, N., Davis, S. J., Kost, K., Sammon, M., & Viratyosin, T. (2020). The unprecedented stock market reaction to COVID-19. *The review of asset pricing studies*, *10*(4), 742-758.

BAM, ACAPS, & AMMC. (2020). *Rapport sur la stabilité financière – Supplément Covid-19*. https://www.ammc.ma/sites/default/files/RSF%20n%C2%B08_Exercice%202020_0.pdf

BAM, B., ACAPS, & AMMC. (2021). *Rapport Annuel Sur La Stabilité Financière - Numéro 7 Supplément COVID-19*. https://www.ammc.ma/sites/default/files/RSF%20N%C2%B09_EXCERCICE%202021_0.PDF

Bennis, L., & Lamrani, K. (2021). Coronavirus Et Son Impact Sur Le Marche Financier Et Les Societes Cotees En Bourse. *Revue Internationale des Sciences de Gestion*, *4*(2), Article 2. https://revue-isg.com/index.php/home/article/view/575

Beraich, M., & El Main, S. E. (2022). Volatility Spillover Effects in the Moroccan Interbank Sector before and during the COVID-19 Crisis. *Risks*, *10*(6), Article 6. https://doi.org/10.3390/risks10060125

Bharti, S. S. (2021). Socio-Economic Impact of COVID-19 Pandemic on Small and Medium-scale Enterprises (SMEs) in India. *Annals of Management and Organization Research*, *3*(2), 129-139.

Bine, P., Barriere, F., & Rotaru, N. (2020). *L'interdiction des ventes à découvert et des positions courtes nettes dans le contexte de la pandémie de Covid-19*. https://www.skadden.com/-/media/files/publications/2020/04/linterdictiondesventesdcouvertedespositionscourtes.pdf

Bouhon, F., Jousten, A., Miny, X., & Slautsky, E. (2020). L'État belge face à la pandémie de Covid-19 : Esquisse d'un régime d'exception. *Courrier hebdomadaire du CRISP*, *2446*(1), 5-56.

Bourse : La capitalisation de la cote baisse de 130 MMDH en 2022. (2023). *Médias24*. https://medias24.com/2023/01/05/bourse-la-capitalisation-de-la-cote-baisse-de-130-mmdh-en-2022/

Casablanca Stock Exchange. (2020). *Annual report*.

Corbet, S., Hou, Y., Hu, Y., Lucey, B., & Oxley, L. (2021). Aye Corona ! The contagion effects of being named Corona during the COVID-19 pandemic. *Finance Research Letters*, *38*, 101591.

Devi, S., Warasniasih, N. M. S., Masdiantini, P. R., & Musmini, L. S. (2020). The impact of COVID-19 pandemic on the financial performance of firms on the Indonesia stock exchange. *Journal of Economics, Business, & Accountancy Ventura*, 23(2), 226-242.

Durante, K. M., & Laran, J. (2016). The Effect of Stress on Consumer Saving and Spending. *Journal of Marketing Research*, *53*(5), 814-828. https://doi.org/10.1509/jmr.15.0319

El Fallahi, F., Ibenrissoul, A., & Adil, E. L. (2022). Does innovation play a role in the relationship between corporate social and financial performance? A systematic literature review. *International Journal of Financial, Accounting, and Management*, *4*(3), 315-334.

GWETH, S. (2022). Performance Financière Des Entreprises Publiques Camerounaises À L'épreuve De La Pandémie Du COVID-19. *Revue D'Etudes en Management et Finance D'Organisation*, *15*.

HCP. (2020). *Reprise d'activité des entreprises suite à la levée du confinement 2ème enquête sur l'impact de la Covid-19 sur l'activité des entreprises*. https://www.hcp.ma/region-drda/Reprise-d-activite-des-entreprises-suite-a-la-levee-du-confinement-2eme-enquete-sur-l-impact-de-la-Covid-19-sur-l_a319.html

Hsu, Y.-L., & Liao, L.-K. C. (2022). Corporate governance and stock performance : The case of COVID-19 crisis. *Journal of Accounting and Public Policy*, *41*(4), 106920.

Huo, X., & Qiu, Z. (2020). How does China's stock market react to the announcement of the COVID-19 pandemic lockdown? *Economic and Political Studies*, *8*(4), 436-461. https://doi.org/10.1080/20954816.2020.1780695

IBENRISSOUL, N., & AOURAGH, N. (2021). La sur-réaction des investisseurs en temps de crise sanitaire : Cas marché boursier marocain. *Revue Française d'Economie et de Gestion*, *2*(10). https://www.revuefreg.fr/index.php/home/article/view/394

Jan, N., Jain, V., Li, Z., Sattar, J., & Tongkachok, K. (2022). Post-COVID-19 investor psychology and individual investment decision : A moderating role of information availability. *Frontiers in Psychology*, *13*, 846088.

Kamil, M. A. A., Wiliasih, R., & Irfany, M. I. (2022). Determinants of Saving Decisions at Indonesian Islamic Banks During the COVID-19 Pandemic. *Annals of Management and Organization Research*, *4*(1), 1-19.

Kapesa, T., Nyagadza, B., Mugano, G., & Cheza, A. (2023). Impact of the COVID-19 pandemic on survival of MSMEs in Zimbabwe. *International Journal of Financial, Accounting, and Management*, *5*(2), 179-194.

l'Autorité Marocaine du Marché des Capitaux (AMMC). (2020). *L'Autorité Marocaine du Marché des Capitaux contribue à l'effort national de lutte contre la propagation du virus Covid 19*. https://www.ammc.ma/sites/default/files/CP%20contribution%20%C3%A0%20l%E2%80%99effort%20national%20de%20lutte%20contre%20la%20propagation%20du%20virus%20Covid%2019.pdf

Liu, H., Manzoor, A., Wang, C., Zhang, L., & Manzoor, Z. (2020). The COVID-19 outbreak and affected countries stock markets response. *International Journal of Environmental Research and Public Health*, *17*(8), 2800.

Liu, N., Zhang, F., Wei, C., Jia, Y., Shang, Z., Sun, L., Wu, L., Sun, Z., Zhou, Y., & Wang, Y. (2020). Prevalence and predictors of PTSS during COVID-19 outbreak in China hardest-hit areas : Gender differences matter. *Psychiatry research*, *287*, 112921.

Mendizábal Bermúdez, G. (2021). L'impact de la pandémie de COVID-19 sur le droit du travail et de la sécurité sociale. *Revue de droit comparé du travail et de la sécurité sociale*, *1*, 162-167.

Mishra, A. K., Rath, B. N., & Dash, A. K. (2020). Does the Indian Financial Market Nosedive because of the COVID-19 Outbreak, in Comparison to after Demonetisation and the GST? *Emerging Markets Finance and Trade*, *56*(10), 2162-2180. https://doi.org/10.1080/1540496X.2020.1785425

Moroccan All Shares | Cours Indice MASI en direct—Investing.com. (2023). Investing.com France. https://fr.investing.com/indices/masi

Nabouk, M. (2021). Effet de la crise de Covid sur la persistance et l'asymétrie de la volatilité du marché boursier marocain. *International Journal of Financial Accountability, Economics, Management, and Auditing (IJFAEMA)*, *3*(4), 441-454.

Noures-Sadat, I., & Assalih, H. (2022). *Analyse théorique de la résilience de la BVC face à la crise sanitaire internationale du COVID-19*. *3*(4).

Nugraheni, N. N. A., Kellen, P. B., & de Rozari, P. E. (2021). The effect of financial behavior, financial literacy, and macroeconomics on stock investment decision-making in East Nusa Tenggara. *Annals of Management and Organization Research*, *3*(1), 1-20.

Onali, E. (2020). Covid-19 and stock market volatility. *Available at SSRN 3571453*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3573622

OPCVM : 2.000 nouveaux investisseurs séduits malgré la crise. (s. d.). http://fnh.ma. Consulté 6 octobre 2023, à l'adresse https://fnh.ma/article/actualite-economique/opcvm-2-000-nouveaux-investisseurs-seduits-malgre-la-crise

Rabhi, A. (2020). Stock market vulnerability to the COVID-19 pandemic : Evidence from emerging Asian stock market. *Journal of Advanced Studies in Finance (JASF)*, *11*(22), 126-131.

Sansa, N. A. (2020). The Impact of the COVID-19 on the Financial Markets : Evidence from China and USA. *Electronic Research Journal of Social Sciences and Humanities*, *2*. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3567901

Shen, H., Fu, M., Pan, H., Yu, Z., & Chen, Y. (2020). The Impact of the COVID-19 Pandemic on Firm Performance. *Emerging Markets Finance and Trade*, *56*(10), 2213-2230. https://doi.org/10.1080/1540496X.2020.1785863

Tarik. (2022). Les OPCVM marocains frôlent les 593 MMDH d'actifs à fin 2021. *Infomédiaire*. https://www.infomediaire.net/les-opcvm-marocains-frolent-les-593-mmdh-dactifs-a-fin-2021/

Vidya, C. T., & Prabheesh, K. P. (2020). Implications of COVID-19 Pandemic on the Global Trade Networks. *Emerging Markets Finance and Trade*, *56*(10), 2408-2421. https://doi.org/10.1080/1540496X.2020.1785426

VirtualConnect. (2023). *La Revue du Marché des Capitaux—Numéro 4—Juin 2020 | AMMC*. https://www.ammc.ma/fr

Wang, L., & Li, Y. (2020). The negotiation of EU–China comprehensive agreement on investment and its potential impact in the post-pandemic era. *Journal of Chinese Economic and Business Studies*, *18*(4), 365-372. https://doi.org/10.1080/14765284.2020.1855846

Warganegara, S. F. A., & Warganegara, D. L. (2022). Herding behavior in the indonesia stock exchange around the covid-19 pandemic. *Fair Value: Jurnal Ilmiah Akuntansi dan Keuangan*, *4*(11), 4912-4921.

Xinhuao. (2020). China Financial market remains stable and Covid-19 impact. *China Daily-Hong Kong*.

Youssef, I. (2021). Contribution à l'analyse de l'impact de la crise sanitaire de Covid-19 sur la Bourse des Valeurs de Casablanca. *African Scientific Journal*, *3*(6). https://doi.org/10.5281/zenodo.5648299

Zhang, D., Hu, M., & Ji, Q. (2020). Financial markets under the global pandemic of COVID-19. *Finance research letters*, 36, 101528.