



Degree Program in Strategic Management

Course of Quantitative methods in Strategic Management

THE IMPACTS OF COVID-19 ON THE
CONSUMERS BEHAVIOUR IN THE
FASHION INDUSTRY: EXPLORING
COMPANIES STRATEGIES FOR A POST
PANDEMIC WORLD

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INTRODUCTION

Over the past two decades, the fashion industry has undergone profound change, driven by structural, technological and cultural factors that have redefined production models and consumer behaviour. The growing internationalisation of markets, the expansion of global value chains, the advent of digital platforms and the emergence of new environmental and social sensibilities have transformed fashion from a traditional manufacturing sector into a complex, interconnected and highly innovative ecosystem.

In this rapidly changing scenario, the COVID-19 pandemic represented a clear, unexpected and widespread disruption. Starting in March 2020, the spread of the virus led to the closure of entire economies, the halt of trade, the suspension of non-essential production activities and a sudden redefinition of collective priorities. The pandemic was an exogenous shock of global proportions that affected entire sectors, simultaneously impacting supply and demand, production and consumption, value chains and organisational models. The pandemic crisis has had an impact at multiple levels. At the macroeconomic level, it has led to a global recession and a reorganisation of geopolitical and economic balances. At the microeconomic level, it has compromised the financial stability of businesses, especially smaller or less structured ones. At the behavioural level, it has radically changed purchasing habits, accelerating the digital transition and promoting the emergence of new values, such as sustainability, durability and ethical awareness. At the financial level, it has influenced stock market dynamics, introducing high volatility in the markets and accentuating the role of expectations and cognitive biases in investor behaviour.

The fashion industry, which is closely linked to people's mobility, the in-store experience, the seasonal cycle of collections and international events (trade fairs, fashion shows, fashion weeks), has been among the hardest hit. This has been a very hard blow for Italian manufacturing. Italian fashion, in particular, is a central component of the national production system. It contributes over 5% of GDP, comprises over 53,000 companies and

employs more than one million people, and is part of a supply chain that goes far beyond the simple production of clothing, including textiles, leather, accessories, distribution, communication and digital services. The sector is also strongly linked to our country's image around the world, both in terms of exports and as an expression of cultural prestige recognised as an example of excellence. However, it is also a complex, fragmented system that is heavily dependent on vulnerable segments, such as physical retail and international tourism. For this reason, it is a privileged observatory for understanding the transformations taking place. The Italian fashion industry has some inherent weaknesses: it's mostly made up of small and medium-sized businesses, often family-run, with limited financial and organisational capacity compared to big international groups.

So, the decision to focus on Italy isn't random. The pandemic crisis has acted as a stress test for the entire sector, highlighting its systemic weaknesses but also its potential. The restrictions imposed to contain the virus – lockdowns, physical store closures, cancellation of trade fairs and reduced international mobility – caused a sudden collapse in sales, with negative peaks of over 80% in the most critical months of 2020. The disruption of global supply chains further complicated the situation, slowing or halting the production of entire collections. In addition, the decline in tourism – which is crucial for the luxury sector – had a direct impact on demand, especially in cities of art and highly attractive locations.

In this dramatic scenario, however, new avenues have opened up. Many companies have accelerated the digitalisation process, strengthening e-commerce and experimenting with new ways of interacting with customers, such as virtual showrooms and live streaming. Others have rethought their production chains with a view to greater sustainability, reducing collections, focusing on eco-friendly materials and promoting local production. In some cases, the crisis has encouraged a return to the values of craftsmanship, quality and product durability, countering the dominant fast fashion model. The pandemic crisis has therefore also proved to be an accelerator for innovation.

This paper aims to analyse in depth the response of the Italian fashion industry to the pandemic crisis, with the aim of identifying the resilience strategies adopted and assessing their effectiveness in terms of economic and financial performance. In particular, we intend to investigate whether the levers of digitalisation, sustainability and skills

enhancement have contributed to strengthening the adaptive capacity of companies in the sector and improving their competitive positioning in the medium term. To this end, a methodological approach has been developed that combines quantitative analysis of financial and stock market data with a broader reflection on investor behaviour and the mechanisms of risk and opportunity perception in times of crisis.

The thesis is divided into three chapters. The first chapter is dedicated to the context. After a brief overview of the dynamics of the pandemic in Italy, the effects on the main macroeconomic variables (GDP, consumption, exports) and on public intervention (lockdowns, fiscal policies, ECB measures) are analysed. In particular, the so-called “V-shaped curve” that characterised the crisis and the subsequent rebound, which can also be observed in the performance of financial markets, is traced.

The second chapter addresses the fashion industry's response to the crisis. After a critical review of the literature, an analytical framework is developed that identifies three strategic macro-variables: digital innovation, environmental and social sustainability, and skills development. The methodological design of the survey is described, based on a quantitative analysis of six listed Italian companies (three large caps and three small caps) operating in the fashion sector and selected to represent a variety of business models and operating sizes. For each of these companies, financial data (turnover, operating profit, debt) and stock market data (share prices, volumes, price changes) are collected for the period 2018–2022.

The third chapter presents the results of the quantitative analysis. The performance of the companies is compared both with each other and with the FTSE All Share index to assess any deviations and identify recurring patterns. Particular attention is paid to the presence of overreaction phenomena at times of market emotional peaks (e.g. initial lockdowns, reopening, vaccine announcements), to any correlation between volumes and prices, and to behavioural differences among investors towards companies with different capitalisation. We also reflect on the cognitive biases that influence financial decisions in highly uncertain contexts: from irrational optimism to herd behaviour, from selective confirmation to post-decision regret.

The approach adopted aims to offer an integrated reading, combining empirical data and interpretative theories. The pandemic is understood here not only as a crisis but as a

catalyst for transformations already underway: the digitalisation of sales channels, the hybridisation of the shopping experience (physical/digital), the redefinition of seasonality, and the growth of second-hand and conscious consumption. In this sense, the work also takes on a forward-looking dimension, questioning the direction the fashion industry may take in the post-pandemic world.

There are three main research questions:

1. How have Italian companies in the fashion industry reacted to the pandemic crisis in terms of economic and financial performance and market positioning?
2. Which strategies have proven most effective in containing the effects of the crisis and promoting recovery?
3. To what extent have size characteristics (large vs. small cap) influenced resilience and perceived attractiveness to investors?

Through these questions, the thesis aims to make an original contribution to the academic and managerial debate on the future of the fashion industry.

From a methodological point of view, the analysis was developed through a quantitative approach that combines the examination of stock market performance and financial data from a selected sample of Italian fashion companies listed on the Milan Stock Exchange.

In particular, six companies were analysed – divided into two subgroups based on capitalisation (large cap: Moncler, Ferragamo, Tod's; small cap: Aeffe, Piquadro, Zucchi) – with reference to the period 2018–2022. For each company, data was collected on turnover, net profit, operating profit and net debt, as well as daily listing data (opening, closing, maximum and minimum prices) and trading volumes. Stock returns were calculated on a percentage basis, while the analysis of shock moments (first lockdowns, reopenings, second wave) aimed to identify any overreaction or undervaluation. In addition, position indices (average, median), dispersion (standard deviation, coefficient of variation) and regression were used to explore the correlation between price and volume changes. The FTSE All Share index was used to verify whether the behaviour of fashion stocks followed specific dynamics compared to the market. Finally, the integration of accounting and stock market data made it possible to assess not only the

objective performance of companies, but also investors' perceptions of the strategies adopted during and after the pandemic crisis.

The analysis seeks to highlight the levers that companies in the fashion sector have used to respond to the pandemic crisis, verifying whether they have been characterised by a contingent impact, based on short-term needs, or whether they have involved broader dynamics of strategic vision, openness to change and the ability to intercept new social and cultural trends.

1. THE FASHION INDUSTRY AND THE PANDEMIC CRISIS

1.1 Fashion facts in Italy

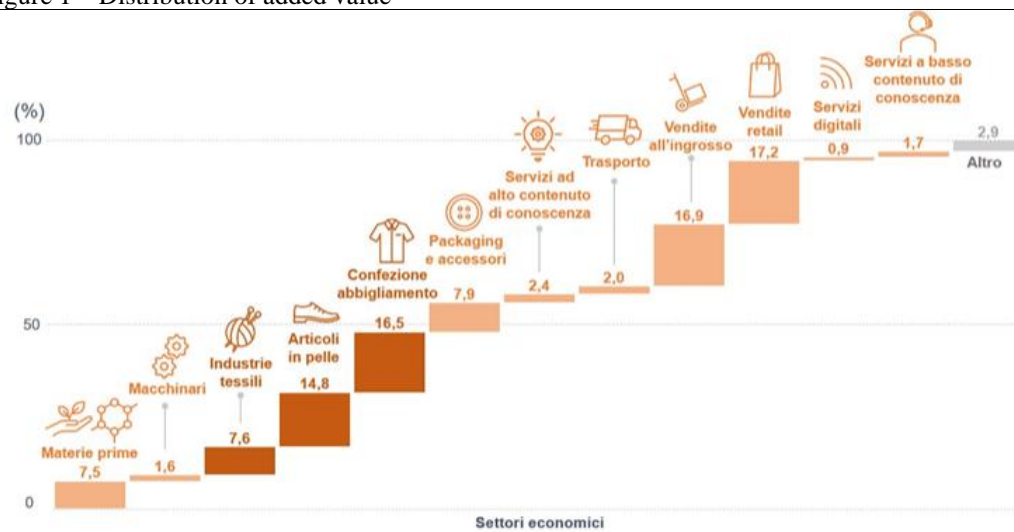
The fashion sector is among the most representative of Made in Italy and has a significant impact on our country's economy, today accounting for over 5% of GDP and employing over a million people in the production chain. Italy is a leader particularly in the production of high fashion, covering 29% of the market at European level. The fact that most of the large luxury groups choose Italy as their country of production is evidence of a great tradition in design and quality manufacturing, due to the quality of materials and professional workmanship.

The fashion system includes 53,000 enterprises, representing 13% of the value of the Italian manufacturing sector. The large predominance of these are SMEs (around 80%). To refer to fashion as a single sector, however, would be reductive because it does not adequately highlight the richness of an articulated and competency-rich production dimension. In fact, the sector is made up of three industries (textiles, clothing and leather goods) and the production chain involves no less than thirty-seven industries, which are also involved in supporting major luxury brands.

Combined, this structure of the sector determines a strong distribution of added value, which is over EUR 75 billion. Forty per cent of added value is absorbed by the main sectors and the clothing manufacturing and production chains; but a significant amount (around 34%) is related to wholesale and retail (Figure 1)

This characterisation also has a significant impact on exports. Italian fashion is universally recognised as a sector of excellence and has contributed around EUR 65 billion to total exports. Non-European countries represent 55% of the value of exports: a sign of the ability of Italian fashion to penetrate even markets where purchasing power is growing, such as Asian markets (CDP, 2024).

Figure 1 – Distribution of added value



Source: CDP, 2024

These data give the dimension of a driving sector of the Italian economy. Between 2015 and 2023, revenues grew by 73% (an average annual increase of 7%) (Figure 2)

Figure 2 – Revenues in the fashion industry: 2015-2023



Source: Ifis, 2024

These figures also accompanied the growth in profits and EBITDA: Figure 3 shows that these factors had an overall growth of more than 170% over the period 2015-2023, with an annual average of more than 13%.

Figura 3 – Profitability and economic performance of the sector: 2015-2023



Source: Ifis, 2024

The trend of the data therefore shows a constant growth. It does, however, highlight the presence of a strong depression within the annual series: all the data we have presented show a ‘V-shaped’ trend in the curve corresponding to the 2020 pandemic crisis. The collapse of all indicators at the hardest phase of the crisis, in the early 2020s, was in fact followed by an equally rapid recovery that brought the values of profits and earnings back to pre-covid levels. And it is on this point that it is useful to deepen the analysis, to see how the fashion industry reacted to the challenges posed by the pandemic.

1.2 The pandemic crisis

After a several weeks of uncertainty on the evening of 9 March 2020, Prime Minister Conte addressed all Italians to announce the most drastic of measures to try to combat the spread of the coronavirus: a generalised lockdown of the entire country, with people being

banned from leaving their homes except for work, health reasons or situations of necessity. The measure had already been expected for several days: until then, there had been confidence that the spread of the virus could be stemmed through selective 'red zones' identified on the basis of epidemiological data on the course of contagion and the spread of the disease. Already on 31 January, after confirming the first two cases of contagion recorded in Italy (two Chinese tourists), Conte had proclaimed a state of health emergency: the news from China concerning the spread of the SARS-Cov-2 infection was becoming increasingly worrying, not least because the virus was now showing that it had spread well beyond the province of Wuhan, where it had first been detected, and above all because the first data coming out of China showed that it was not only particularly contagious, but that transmission also occurred through contact with asymptomatic individuals. On 18 February, a manager resident in Codogno had gone to the local emergency room with fever and pneumonia: he had initially refused admission, but two days later was forced to return to hospital, where he was admitted to intensive care. The test had certified that he was positive for the virus: he was the so-called 'patient 1', i.e. the first Italian patient to test positive for Sars-Cov-2. Codogno and nine other municipalities in the Bassa Lodigiana area had been the subject of the first 'red zone': 47,000 people had been locked in their homes, with checkpoints set up on the roads and the army garrisoning them. Another event would have been decisive - according to the opinion of some immunologists - for the spread of the contagion: on 19 February, at the San Siro, Atalanta had hosted Valencia in the first leg of the round of 16 of the Champions League: Atalanta, in front of 51,000 people, would have won 4 to 1, but that evening would also have led to a significant peak in contagions, to the point of being considered the 'zero match' for the spread of the pandemic.

The areas of Italy declared 'red zones' had expanded exponentially over the following days, especially in Lombardy, and in the meantime, the media began to offer daily bulletins on the spread of the Coronavirus: how many new cases, how many cured, how many deaths, how many admissions to intensive care would be information repeated daily for over two and a half years.

The COVID-19 virus was highly contagious, but in most cases paucisymptomatic or even asymptomatic. However, it affected a large number of people, and among them a

significant number of people suffering from a number of important comorbidities: it was among these people that the most serious cases were registered: the number of these patients was growing day by day, and hospitals (and in particular intensive care units) soon went into crisis due to the large number of patients admitted¹.

The trend we have briefly described only partially succeeds in representing the climate of uncertainty, fear and grief for the loss of loved ones that pervaded the whole country in the early 2020s: the memory of those events is still vivid in all of us and it is beyond the scope of this work to chronicle the various passages. Yet, in order to represent the stages of a health crisis unprecedented in the post-World War II period - at least in the most developed areas of the world - some aspects must be emphasised and examined in depth.

The Sars-Cov-2 crisis presented itself as an unprecedented event in terms of its diffusion and devastating impact on our healthcare system, which had apparently been caught unprepared. Among the factors that had contributed to the spread of the virus was a certain underestimation of the events by politicians and citizens, who had experienced several times the alarm over the danger of a generalised pandemic that had then turned out - fortunately - to be less disastrous than expected.

The first alarm over the spread of a virus potentially capable of causing a pandemic had occurred in 2003, with SARS: spread in China and south-east Asia, it had not, however, reached Europe: there had been about eight thousand infections (only four in Italy) and 774 deaths. The mortality rate was 9.4%, but the virus had a very limited spread because it was not very contagious (Caivano V., Fancello F., Gentile M., 2020). The closest example to what would later happen, however, had occurred in 2009, with the spread of the A/H1N1 virus (also known as 'swine flu'): having started in Mexico, the virus (belonging to the type A influenza viruses) had spread much more rapidly, with over 1.5 million cases and 18,000 deaths (1% mortality rate). In contrast to SARS, major countermeasures were taken for the A/H1N1 virus, because the speed with which it spread and the danger it showed had prompted major organisational investments, resulting in the creation of a network of hospitals that were to act as HUBs in the event that the virus

¹ The virus was named 2019-nCoV by the Chinese authorities who first 'intercepted' it. The World Health Organisation changed the name of the virus to Sars-CoVid-19, an acronym for Corona Virus disease and the year in which it was detected (2019, indeed).

affected a large number of people at the same time. A vaccine was also prepared, proposed by Novartis and purchased in several million doses, but the adherence to the vaccination campaign was all in all rather low, both among citizens and insiders. Then came the MERS-CoV crisis in 2012: the epicentre this time was Saudi Arabia, where the first cases had occurred. The virus is still circulating, although the ascertained cases are rather limited (less than 2500 in total), albeit with a very high mortality rate, estimated at 34%.

All the precedents we have mentioned had one thing in common: the alarm and the level of attention that the health institutions had launched had resulted in quite limited consequences. Thus, when Covid-19 began to spread, many thought of a repetition of situations already experienced and underestimated the danger: at the end of February, the mayor of Milan Sala had relaunched the hashtag ‘#milananononsiferma’, while PD secretary Zingaretti had attended an aperitif on the Navigli with the youth of his party.

A few days later, the situation would explode, leading first to the closure of Lombardy - declared a ‘red zone’ on 7 March; two days later, as we have seen, Giuseppe Conte would impose the lockdown throughout the country, with the closure of offices, schools, and non-essential public services.

Our country's healthcare system went into crisis: it proved fragile and basically unprepared. The need to reduce physical contacts led to the reduction of planned healthcare activities (diagnostics, outpatient visits and non-urgent surgeries were suspended) and to the concentration of resources in intensive care and sub-intensive care units: it was in this area, in fact, that the pressure had proved unsustainable for the system. Between January and April 2020, the health authorities had to decide to open makeshift ICU beds, changing traditional hospital settings (reducing ordinary beds to make way for so-called ‘Covid beds’); it was at this stage that a dramatic shortage of professionals would emerge, forcing administrators to take unprecedented emergency measures: Retired doctors and nurses were called back into service and ‘enlisted’ in the ranks of the National Health Service, while final-year students from specialisation schools also acquired a decisive role, effectively anticipating their entry into the public service with ad hoc recruitment. From the clinical point of view, guidelines and ministerial indications were in charge of guiding the choices of professionals in the decision-making process of admissions (Gristina G. R., Piccini M., 2022). The effects of the reduction in planned

activity had an important effect on the health of the population: some studies, focusing in particular on cardiovascular diseases, highlighted the negative effects on the health of people suffering from chronic illnesses, who were in fact prevented from receiving treatment during those month (Toniolo M, Negri F, Antonutti M, Masè M, Facchin D., 2020; De Rosa S, Spaccarotella C, Basso C, et al. 2020). Finally, the system also proved to be largely unprepared in terms of personal protective equipment: masks, suits, gloves, and hand sanitizing gel were—during that initial phase—resources that were not always accessible. They were mostly imported from abroad (particularly from China), and the commercial transfer restrictions led to shortages.

While the system was trying to identify operational and managerial solutions to address the new needs, the only measure capable of preventing and limiting contagion was to maximize physical distancing. At this stage, however, the prevailing belief seemed to be that the situation, although dramatic, was ultimately confined to a single, painful, and unrepeatable event. This interpretation was supported by some events recorded as early as April 2020: on April 8, Chinese authorities declared the end of the lockdown in Wuhan after 76 days of complete closure; between mid- and late April, there was a decrease in the number of ICU patients and a reduction in the death toll. At the end of April, the Prime Minister announced that on May 4, restrictions would begin to ease, marking the start of the so-called "Phase 2," with a gradual reopening of businesses and the return to work of over 4 million Italians. Health Minister Speranza published a book titled *Perché guariremo: dai giorni più duri a una nuova idea di salute*. However, the book, released in November 2020, was immediately withdrawn from the market due to the resurgence of the virus.

The belief that the worst was over seemed reinforced by the fact that the number of infections had dropped significantly, reaching its lowest point on June 13, 2020, with "only" 113 cases. As we now recall, this was an illusion. By October, faced with clear evidence of a new wave of infections, the government was forced to implement new restrictive measures: businesses, offices, schools, and universities were once again closed, and a second lockdown was imposed. This lockdown turned out to be much harsher than the previous one, as restrictions were only eased in April 2021.

Compared to the March-May 2020 lockdown, the long period from October 2020 to April 2021 presented both continuity and significant new developments. The national healthcare system continued to struggle with the same critical organizational issues that had emerged during the first phase: a shortage of intensive care beds, limited capacity to manage symptomatic cases at the local level, a reliance on hospitalization as the primary treatment strategy, and difficulties in securing both human and material resources to simultaneously combat the pandemic and ensure routine healthcare services for non-COVID-19 patients. All of this had a significant impact on public health.

The major novelty, however, was the availability of vaccines. Leading pharmaceutical companies had engaged in a true race against time to develop a vaccine capable of protecting people from infection. The first to be registered was Sputnik, the Russian-developed vaccine, which was announced by Putin on August 18, 2020. However, in Europe, the first doses would not become available until late December 2020, when—amidst the peak of the "second wave"—the mass vaccination campaign began. The healthcare system thus faced yet another organizational challenge: administering a two-dose vaccine to (potentially) the entire national population².

However, the second and extremely long phase of lockdown highlighted a different attitude among the population regarding containment measures and the government's ability to handle the pandemic. When Giuseppe Conte announced the lockdown in March 2020, he had clearly stated that protecting public health was a priority over other interests (explicitly, economic ones), even though they were still "worthy of protection."

The belief that the crisis could be resolved within a limited period of restrictions had led to a response from citizens that was not entirely hostile. Slogans such as "*ce la faremo*" and "*andrà tutto bene*" had infused this phase of the pandemic with a sense of optimism. By October, however, when the second wave emerged, the situation had changed. Those who had suffered the most severe economic consequences due to the restrictive

² Although this is not the place to delve into the dynamics concerning the effectiveness of the vaccine, it is important to note that, alongside those who saw it as a possible (if not the only) response to the threats of the pandemic, critical positions quickly emerged regarding the methods, development timeline, and potential dangers of vaccine side effects. After an initial phase of enthusiasm, vaccine opposition grew, fueled by the realization that vaccinated individuals could still contract and transmit the virus. This opposition reached its peak when the government introduced the Green Pass on August 6, 2021, making it a mandatory requirement for access to certain services and activities, including participation in public competitions and the exercise of certain professions (Marini L., Benozzo F., 2022).

measures—such as restaurant owners and entrepreneurs in the tourism and wellness sectors—were far less willing to accept new restrictions, leading to several protests. The willingness to accept that public health should take precedence over economic interests was no longer a universally shared perspective.

1.3 The impact of the crisis on Financial markets and trade

As we mentioned, faced with great uncertainty about how to manage the health effects of a globally widespread contagion, the primary measure that nearly all national governments found themselves forced to implement was physical distancing. People were required to stay at home through regulations enforcing quarantines (of varying lengths and strictness), accompanied by the mandatory closure of almost all commercial and production activities.

This aspect transferred the effects of the health crisis first to the economy and then to the financial sector.

On the economic side, the restrictions introduced to limit contagion had a dual negative effect, impacting both demand and supply. This twin shock, already evident in the initial phase from March to May 2020, deepened further during the second and third waves of the pandemic (between October 2020 and April 2021), seemingly linked to the duration of lockdowns and restrictions imposed on productive activities. Let's examine in detail how this dual shock unfolded.

On the supply side, it mainly manifested through a sharp decline in domestic production levels caused by business closures. In the case of the pandemic, this phenomenon was exacerbated by the global scale of the crisis. It has been said that globalization was the "patient zero" of the pandemic (Marini L., Benozzo F., 2022, p. 96): indeed, much of what happened was largely influenced by the interconnected dependencies between different production sectors, even in geographically distant areas. The blockage of goods at ports and major distribution hubs, along with the halt of transportation activities, contributed to a significant supply-side shock, making it virtually impossible to maintain production levels.

Naturally, not all sectors were affected equally. Those most reliant on globalized supply chains experienced the strongest setbacks, partly because the COVID-19 crisis was highly

asynchronous across different parts of the world. This effect was particularly evident in the sector most exposed to the pandemic: healthcare. The shortage of protective equipment and essential respiratory treatment devices, such as ventilators (whose production was outsourced to China and other Asian countries), was exacerbated by government-imposed restrictions that prevented their distribution. Even though some companies repurposed their production to meet new market demands, the healthcare supply chain showed significant signs of strain (Broadbent M., 2020).

Restrictions on people's travel also contributed to generating the supply shock. The introduction of measures replacing in-person work with so-called smart working had only a limited impact, because not all sectors were able to benefit from it: in particular, the manufacturing and service sectors were obviously excluded, being unable to do anything but close down their operations. Closures that - as restrictions continued - not infrequently turned from temporary to permanent (Lanciano N., Caivano V., Fancello F., Gentile M., 2020).

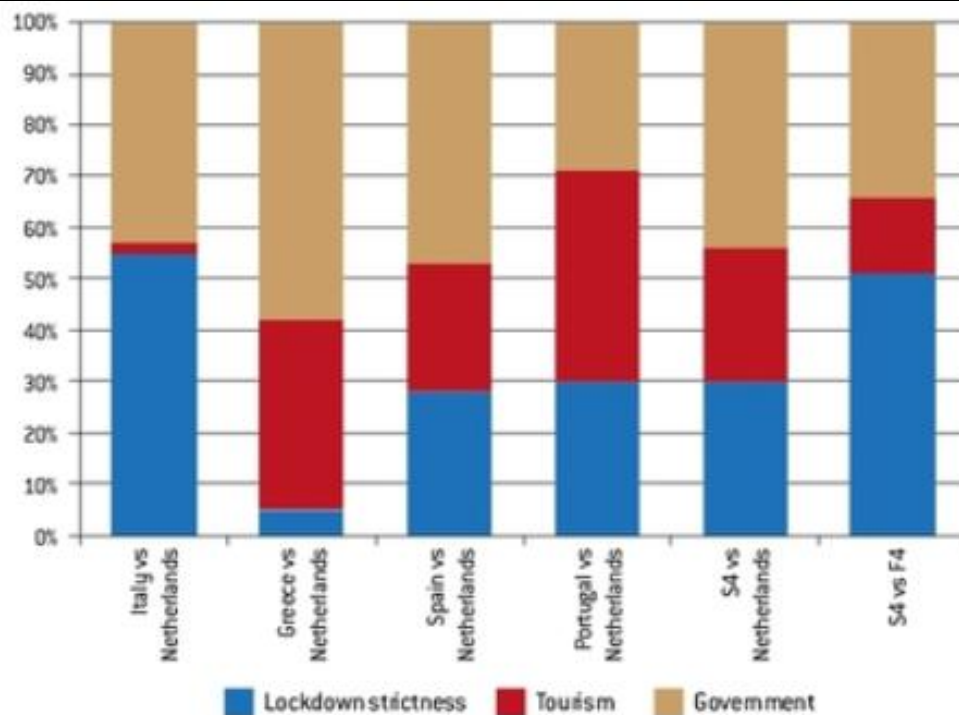
The supply-side shock was accompanied by a sharp and deep drop in demand, activating a sort of vicious circle with very serious consequences for the economy. Indeed, the restrictive measures led to a decline in domestic consumption, particularly for goods and services related to tourism, transportation and entertainment, sectors that are particularly important to our economy). In addition, income contraction has resulted in a lower propensity to consume on the part of people: who have developed a greater aptitude for saving, which is more evident in the less affluent segments of the population and among those most affected by the reduction in assets.

A second area in which demand shock is evident relates to measures that prevented people from traveling. This has had a major impact on countries with a greater vocation for tourism, such as Italy, where the flow of tourists is estimated at around 6 percent of GDP. Again, the asymmetry in the spread of the virus played a key role: in fact, the greatest restrictions in our country were applied during periods of low tourist influx; but while the virus-during the summers of 2020 and 2021-slowed its strength allowing the relaxation of mobility bans in Italy, other countries (China, the United States, Russia, Japan to name a few) experienced new waves of contagion and restricted the ability of their citizens to move (Tosini G., 2022).

Finally, the demand for Italian products abroad was reduced: in fact, restricting the entry of products was a measure applied across the board by all countries affected by COVID: again, the effect on the economy was of quite significant impact.

The “combination” of these two shocks did not affect all countries equally. Indeed, the “depth” of the crisis is dependent on a number of factors (rigidity of restrictions, composition of the country's production system, role of the government in supporting the production activities most exposed to economic shocks etc.) (Sapir A., 2020). Even in homogeneous geographic areas, such as Europe, there were in fact rather marked differences, as the following figure shows:

Figure 4 – Impact of the main factors producing the economic shock in European countries



Source: Sapir A. (2020)

“S4” indicates the group of southern European countries (Greece, Portugal, Italy, Spain); “F4” indicates the so-called “Frugal Four”, namely Austria, Denmark, Sweden and the Netherlands.

If we look at the first column (comparing Italy with the Netherlands), we can see that the factors that most affected the economy were related to restrictions and government choices, while tourism had a less significant impact (reasonably due to the fact that restrictions were relaxed during periods of greater tourist flow from abroad). Spain and

Greece, on the other hand-despite less tight restrictions-have been more impacted by the loss of tourist volumes.

What has been observed is the combined action of the income effect and the wealth effect: in the former case, the contraction (if not loss) of income from one's activities produces a reduction in consumption; in the latter, uncertainty has led to a sharp contraction in investment and performance in financial markets. And indeed, the crisis has manifested its effects on finance as well, making the impact of the coronavirus on world economies even more profound. Indeed, in order to cope with the negative effects from the pandemic, almost all countries had to resort to increased debt both to manage the increased costs to the health care system and to the system of aid to businesses and workers who had lost a major share of their income in connection with the restrictions. Uncertainty about the timing and modalities of the return to what is increasingly referred to as the “new normal” had a major impact on the confidence of financial markets: which reacted with a sharp drop in the first weeks after the imposition of the first lockdown and then slowly rose again over time (Lanciano N., Caivano V., Fancello F., Gentile M., 2020).

1.4 The measures to counter the crisis and the markets' response

The European Central Bank (ECB) played a significant role in supporting the economies of the member states most affected by the pandemic crisis.

On December 10, 2020, the ECB's Governing Council decided to keep interest rates unchanged while monitoring inflation trends, which were expected to approach 2%. However, the most significant measure was the decision to allocate an additional €500 billion to the PEPP (Pandemic Emergency Purchase Programme), extending its effects until March 2022. This asset purchase program had been launched in March 2020, at the peak of the pandemic outbreak, when financial markets were experiencing severe turmoil. The main goal was to reduce financial market volatility, which was particularly impacting states with higher exposure due to the pandemic's economic effects and pre-existing public debt levels.

The ECB initially committed to purchasing €750 billion in bonds to increase their market value, with the expectation that lower interest rates would lead to more favorable lending conditions. This, in turn, was expected to encourage businesses and individuals to take

out sustainable loans to finance the post-pandemic recovery. The anticipated outcomes of this exceptional measure included increased investments, job creation, and economic growth while keeping inflation at a stable 2% over the medium term.

In June 2020, the program was expanded by an additional €600 billion, reaching a total of €1.85 trillion following the latest increase in December 2020. Alongside sovereign bond purchases, these measures aimed to restore stability to member states and implement financial protections for the most vulnerable economies, shielding them from speculative market pressures (Leone M., 2020).

The ECB recognized that the greatest risk posed by the pandemic stemmed from the rising debt levels of both businesses and states. Concerns over sovereign debt sustainability led the ECB to maintain favorable financing conditions over time, reducing the refinancing risks associated with public debt (ECB, 2021, pp. 35-38).

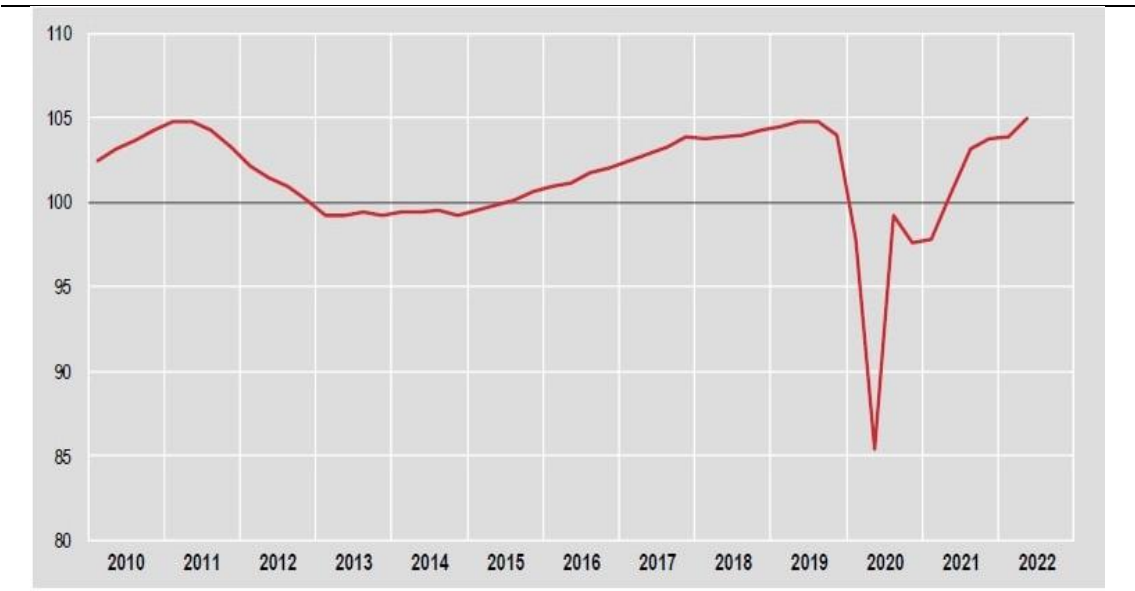
Notably, in 2021, the ECB conducted an assessment of consumer expectations regarding the financial support measures implemented by national governments to assist businesses and households. The findings, published in the ECB's 2021 Annual Report, revealed that these support measures were selectively distributed, with only 30% of households—primarily those facing significant financial difficulties—reporting that they had benefited from the aid (ECB, 2021, pp. 103-107).

However, the ECB's monetary policies in response to the pandemic crisis diverged from their medium-term objectives. As previously mentioned, the target inflation rate was set at approximately 2%. Yet, by the end of 2021, inflation had averaged 2.6%, with December reaching a peak of 5%. This surge prompted the ECB to adjust its interest rate policy in 2022, introducing three successive increases in borrowing costs.

The ECB's policies successfully supported sovereign debt management. However, in the real economy, the ease and affordability of credit access for individuals and businesses led to a surge in demand, particularly for goods. In the Eurozone, where supply in certain sectors was limited, this demand-driven pressure contributed to significant price increases, further fueling inflation—exacerbated by rising energy costs.

All macroeconomic indicators suggest that the easing of the pandemic crisis led to a sharp rise in economic activity. The following table illustrates Italy's GDP trends from 2010 to 2022:

Figure 5 – GDP in Italy between 2010 and second quarter 2022

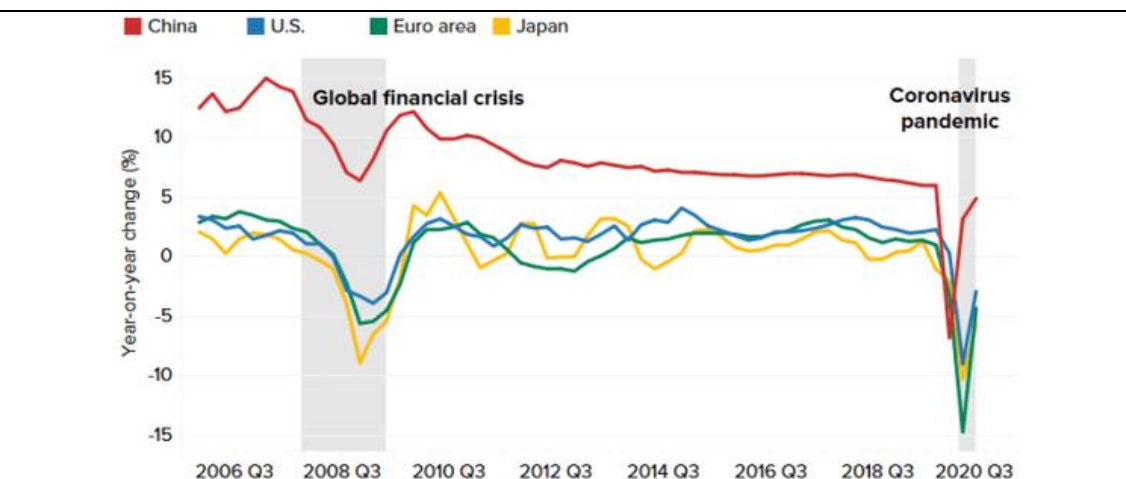


Source: ISTAT, 2022

It is evident that there was a sharp contraction in the spring of 2020 (as well as a milder one covering the last quarter of 2020 and the first quarter of 2021), followed by equally significant rebounds, ultimately restoring GDP levels to their pre-pandemic state. The classic "V-shaped" recovery curve—typically observed whenever a crisis, whether deep or moderate, is followed by a rebound—is not only common across all geographical regions but also reflected in all major internal economic indicators.

The following figure illustrates GDP trends from 2006 to 2020, comparing different geopolitical areas. The presence of "V-shaped" patterns is evident during major crises (such as the 2008 financial crisis), demonstrating a globally shared economic response. The key distinction in the case of the pandemic-induced crisis, however, lies in the unprecedented speed of both the economic decline and the subsequent recovery:

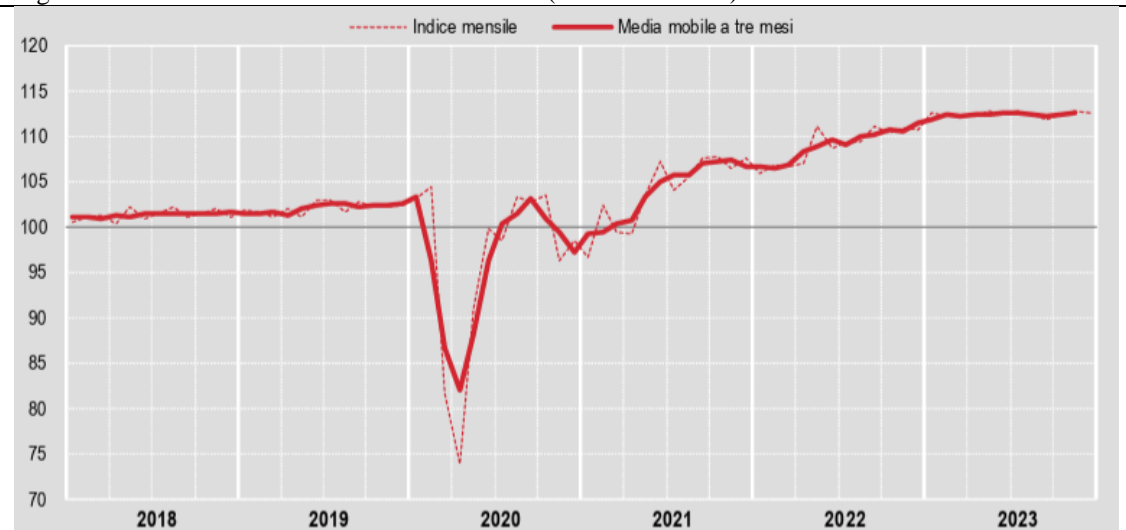
Figure 6 – GDP Trends in Different Geopolitical Contexts – 2006-2020Q3



Fonte: OECD, 2021

The following figure highlights the trend of retail trade in Italy, calculated monthly based on the 2015 baseline index:

Figure 7 – Retail trade trend based on sales value (index 2015=100)



Source: ISTAT, 2023

In this case as well, the trend of the curve follows the classic "V-shaped" configuration. As we mentioned in the previous paragraph, the undesired consequence of this macroeconomic dynamic was the rise in inflation. The ECB's response to this pressure followed the classical approach: the increase in interest rates. From a negative value, interest rates increased (through three successive hikes, the last of which in October 2022) up to 2%, starting from a value of -0.50 percentage points. The goal was to reduce demand

in order to realign supply: a "recipe" for monetary policy that was also shared by the Federal Reserve, which was even more aggressive, declaring its goal of raising interest rates to 3.4% by the end of 2022 (Cingolani S., 2022).

However, in the meantime, international concerns had shifted decisively from the health emergency to a geopolitical crisis that involved Europe like never before.

1.5 The impact of crisis on the fashion sector

The effects of the pandemic have affected the entire economy, but have significantly affected the fashion sector. Luxury. In fact, the month of April is expected to see an 81% drop on an annual basis in the textile, clothing, accessories and leather production sector. Furthermore, a contraction in retail sales of more than 83% compared to April 2019 was recorded. On the other hand, the sector has been able to face the pandemic thanks to digital tools, in particular thanks to e-commerce. What is now worrying, however, is retail employment and the increase in unemployment between 30.4 and 38.3%. Furthermore, on February 21, a memorable date of the important Fashion Week, the first Italian case of Covid-19 is identified. The first to respond is Giorgio Armani who makes the autumn-winter fashion show possible, but behind closed doors. Furthermore, he signs a large donation to Italian hospitals. Fashion is making its voice heard; donations and charitable initiatives are implemented. Among these, Chiara Ferragni and Fedez, Dolce & Gabbana, Versace, Benetton stand out. Many others, such as Miroglio, Zara, Calzedonia, are converting production and actively participating to fight the pandemic. Personal Luxury Goods has recorded strong growth over the last twenty years, as demonstrated by the increase in turnover from around 120 billion (in 2000) to 280 billion euros (2019). In particular, all this was made possible by the extraordinary development of the Chinese market, which represents a customer base equal to 35% of demand.

Almost all companies, following the covid-19 crisis, have recorded a contraction of between 15% (Hermes) and 45% (Ferragamo). Prada has lost around 35%. Nonetheless, Hermes seems to be the one that has best faced the pandemic, maintaining the same economic standards with respect to its employees and avoiding the use of government subsidies. Italian companies, such as Ferragamo and Tod's, have presented greater difficulties. On the other hand, e-commerce has been characterized by a strong push, and this has been demonstrated in particular by Zalando (+46%) and Farfetch (+77%).

Unfortunately, it also has its limits. Not all consumers are digitalized to this extent and not all brands are ready to face the emergency. Either they have not yet developed an e-commerce or they have an online retailer. This determines a loss of between 15 and 25% of sales. In contrast, online sales increased by 20% and physical stores closed by -65%.

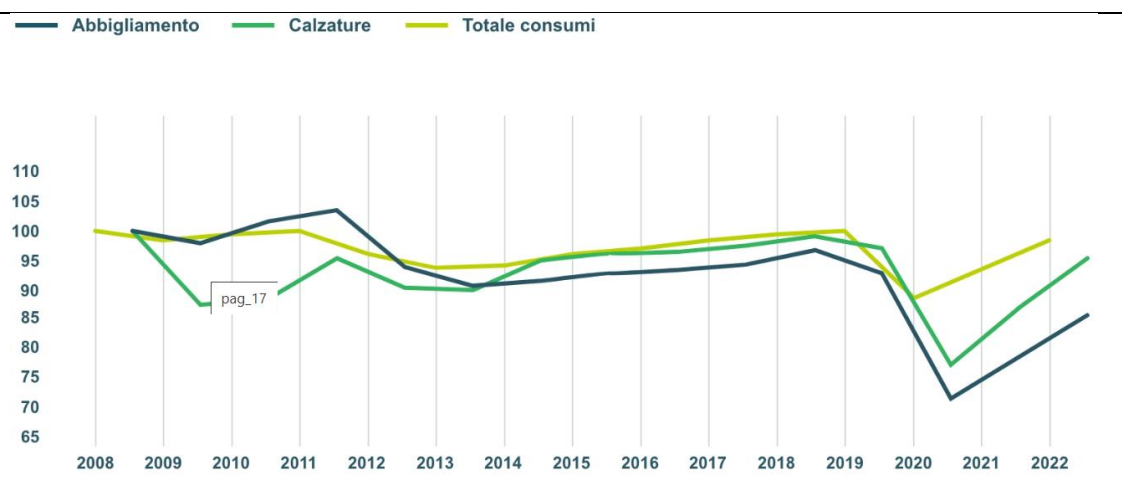
the entire fashion supply chain has been hit by covid-19. The continuity of sales, due to the lockdown, was made possible only by digital platforms, e-commerce. This, if on the one hand has allowed the maintenance of a consumer-retail link, on the other hand could have serious effects on the entrepreneurial organizational structure, weakening the presence of points of sale, and favoring "remote" sales.

COVID restrictions have led to a significant reduction: overall, with the restrictions for Covid-19 in Italy, the absence of shopping tourism that had generated over 7.5 billion euros of consumption by foreigners in 2019 and the high use of smart working in the public and private sectors, Federazione Moda Italia-Confcommercio has predicted: - an overall loss of 20 billion euros of consumption in fashion retail alone in 2020, out of almost 60 billion euros overall; - the permanent closure of 20 thousand fashion stores in Italy out of 115 thousand points of sale; - a fallout on employment for over 50 thousand workers out of 310 thousand workers.

The domestic market in the fashion sector, after a slightly positive 2019 compared to the previous year (+1.1%) - as demonstrated by the data on the trend variations of the Confcommercio Consumption Indicator in quantity - suffered a drastic drop of 24% in 2020, with a strong criticality of consumption highlighted in the first quarter of 2020 (-16.7%, almost double the average of total goods) which became devastating in the second quarter (-45.2%, more than double the average of total goods), without showing signs of recovery in the third quarter (-14.8%, ten times greater than the average of total goods) and in the fourth quarter (-22.0% compared to a decidedly less negative trend, equal to -3.5%, of other goods). From the surveys carried out by Federazione Moda Italia on the associated companies, a more significant drop in value emerged following the significant use of particular pricing policies, during opening times, with discounts, promotions and sales with percentages that are increasingly unsustainable for the future of the companies.

There was a strong anticipation of sales: selling winter in April and summer in October; this led, according to the president, to very short sales periods, the release of few collections and little merchandise sold and too much production. For example, Giorgio Armani, states that we need to return to a more correct seasonality, not put products on sale during the sale; creating the correct idea for the consumer that the correct price is the discounted one, is counterproductive. We must be careful to maintain a fair level of pricing. Sales should be limited to July and January, since behind fashion there is a strong ecosystem that works and must be maintained. But has this pandemic discovered a weak point? The pandemic, again according to the President, has built awareness. We hope for more conscious consumption, which can be advantageous for people and the environment (Figure 8).

Figure 8 - Domestic consumption of clothing and footwear (constant prices; 2008=100)



Source: Sace 2023

As is well known, designers have always considered the shopping experience in prestigious stores as the decisive point of the sales process. Covid has forced them to change their minds: in just eight months the share of sales on the e-commerce channel has gone from 16% to 29%.

Zalando saw a 40% increase year-on-year in April, while the fashion site Farfetch jumped 74% in the 2nd quarter and 45% for the top 100 European brands. And so, to engage the customer "remotely", the effort of brands today is looking at the creation of digital events - such as Livestreams, which are having enormous success in China and are expected to

double sales to 138 billion dollars - to the use of social channels for promotion and to the search for new skills to integrate the customer experience across the various channels, both physical and digital.

At the same time, almost all large international retailers have announced store closures. Zara to cut 1,200 stores in the next 2 years, 250 less for H&M. Only UNIQLO seems to have significant opening plans but in the Chinese market.

2. HOW THE ITALIAN FASHION INDUSTRY REACTED TO THE PANDEMIC CRISIS

2.1 Literature Analysis

The fashion industry was among the hardest hit by the effects of the pandemic. Supply chain disruptions and business closures have revealed the limits of the so-called ‘fast-fashion’ business model (), the paradigm of clothing consumption and the basis of the industry's success in terms of turnover. It is a model that nurtures in consumers the need to buy new clothes all the time, following the trends of a fashion that changes with increasingly rapid cycles. In order to respond to these needs, manufacturers orient their production to stimulate a ‘planned obsolescence’, pushing consumers to buy new clothes all the time by shortening the purchasing cycle: this leads to industrial models oriented towards mass production that can put on the market a surfeit of products, maintaining a policy of low prices at the expense of quality. In order to maintain these objectives, companies have adopted strategies of relocation of production, carried out in countries where single labour is accessible at reduced costs and with an equally reduced focus on environmental and social sustainability. The model, as mentioned above, has ensured large profits; however, it has been subject to significant criticism precisely because of its lack of inclination towards sustainability, not only at the time of production, but also in consumption: overproduction and planned obsolescence in fact produce the need to dispose of unsold stocks, to manage large quantities of clothes that are no longer used either because of changing fashions or because they are unused due to low quality (Chakraborty & Biswas, 2020; Boykoff et al, 2021). However, there is also an alternative to this industrial development model: it is linked to the production of luxury, high-cost, higher-quality clothing. This more limited but equally successful sector also suffers from the problems of relocation and sustainability of production, although it has a lower environmental impact in the waste of consumed goods.

The disruption of the supply chain at a global level has had profound consequences on this industrial model: producing in distant countries has become impossible and the simultaneous impossibility of purchasing in traditional sales channels has led to a rapid contraction in the sector's numbers.

In Italy, the stock rotation index (i.e. the speed with which stocks are replaced) decreased by 30% in the second quarter (the one characterised by the most rigid lockdown period) due to the lack of sales suspension and the non-arrival of new products in shops. The second quarter data contributed decisively to the decrease in the inventory turnover ratio of 2020, which decreased by 11.1% compared to 2019. The production of textiles, clothing and leather goods fell by 81% in the first four months of 2020 compared to the previous year; at the same time, the closure of all trade channels (except online) led to a simultaneous 83% reduction in sales (Intesa, 2021). On an annual basis, the reduction was about 30%, with important repercussions in terms of employment (the sector employs about 300,000 workers in Italy in total). The e-commerce channel has ensured a minimum of operations for many companies in the sector, but has also contributed to certain risks. In terms of employment, the development of online sales has led to a reduction in retail outlets; moreover, it has accentuated the difference between the more structured companies - able to change production and sales processes by implementing a rapid digital transition - and those that have proved (in terms of size and organisational capacity) less effective in moving away from traditional business models.

The crisis was not limited to 2020 and took on a long-lasting character, manifesting its effects also on the operating results of 2021, also due to the second lockdown (autumn 2020-spring 2021), which was less severe than the first, but equally long. In 2021, turnover fell by 22% compared to 2019, even though production had substantially returned to pre-crisis levels (-1.7%). Analysing the industrial production index of the fashion sector, it emerges that the sector showed a similar trend to that of industrial production as a whole; however, the comparison shows less reactivity compared to manufacturing production, which basically returned to pre-covid levels already in 2021, while clothing and fashion still remained well below their initial values, as can be seen in Figure 9 (Benedetti M., Cort F., Guagnini C., 2022).

Figure 9: Industrial production index for manufacturing and fashion 2019=100)



Source: Benedetti M., Cort F., Guagnini C., 2022

The effects of the pandemic have impacted the Italian fashion industry differently than in other contexts. Most companies are medium or small-sized; production processes are often less standardised than in fast-fashion; our companies are therefore able to produce goods of higher quality and with greater attention to environmental and social sustainability. On the other hand, there are still problems related to governance, which is still linked to family and traditional business models. These are characteristics that have enabled Italian fashion to impose itself globally, making the sector one of the strong points of Made in Italy. Once again, the consequences of COVID-19 have been important not only on the domestic market, but also on exports. In the first months of the year, exports fell by -22%, with a recovery in June (during the re-openings after the first lockdown) and even a 3.5% growth in September. This growth must be related to the increased liquidity available to households, which resulted in an increase in consumption. This trend, moreover, is associated with the increased inflationary pressure in the post-pandemic period.

Over the last 10 years, the average sector profitability has remained at a good level, systematically above the average for the manufacturing industry. The Covid-19 crisis and related social restrictions worldwide have severely affected Italian fashion, which was also among the most penalised sectors of Italian manufacturing in 2020 in terms of industrial profitability erosion. (Figure 10). The greatest penalisations affected small and medium-sized companies, as they were focused on the domestic market and/or traditional European markets and had little presence in the online channel.

Figure 10 – Manufacturing industry and fashion system profitability



Source: Benedetti M., Cort F., Guagnini C., 2022

Furthermore, we cannot overlook the impact that the drastic reduction in tourist flows has had on shopping, particularly for luxury goods. The influence of the crisis on fashion companies depended on the actual duration of the stricter measures to contain the pandemic. As the weeks passed, an increasing number of operators globally reported deteriorating financial sustainability. Italy's fashion industry has been significantly affected: tourist flows have been an important factor in the success of Italian fashion and travel restrictions have led to a reduction in retail sales, only partially recovered through e-commerce.

Lockdowns and movement restrictions strongly influenced consumer choices, including on what to wear. The formalwear category, which was already slowing down before the

crisis, suffered a sharp decline. In contrast, there was an increase in demand for sportswear, given the growing consumer interest in health and wellness. Some companies were quick to meet these new consumer demands. The more formal brands have found success for more leisure-focused garments, launching 'luxé leisure' collections, thus focusing on high quality products (in terms of choice of materials and packaging) for an informal lifestyle with a focus on wellness and sustainability. There has also been a 68% decrease in expenditure on clothing compared to 2019, due to the growing emphasis on value for money, whereby consumers prefer to buy garments with higher quality and intended to last longer. There is also a trend to buy second-hand clothes, especially by the younger generation, which is particularly sensitive to the sustainability of products and spending. In this way, they contribute to the circular economy.

The pandemic has changed the fashion paradigm not only from a business perspective, but also in terms of consumer behaviour. The rapid spread of the pandemic has highlighted the problems of globalisation as an economic and social model, and more and more consumers have started to direct their consumption choices towards more conscious and sustainable models. The literature has emphasised this aspect, highlighting how the pandemic has changed consumer behaviour with respect to the consumption of goods. The lockdown restricted purchases and pushed consumers towards reuse of luxury goods (including clothing) and do-it-yourself; moreover, the perception of the problems related to the spread of the disease and the insecurity that followed prompted consumers to prefer sustainable alternatives in their purchases. Although many consumers remained sensitive to price dynamics in their purchases, the increased availability of money in people's pockets resulted in a greater focus on product quality. However, this seems to have been short-lived: the success of some fast-fashion brands despite unsustainable practices in production has raised doubts about consumers' ability to change their behaviour (Strubel J., Goswami S., Kang J.H., Leger R., 2023).

According to some observers, the Italian fashion system has undergone significant stress in relation to new consumer needs and choices. What has emerged is a tendency to favour multi-channel shopping experiences, in which on-line shopping has not been seen as an alternative to purchasing in physical shops, but stimulating a combination of these two possibilities: the spread of e-commerce has made it possible to combine in-store shopping

with the choice of products on e-commerce platforms for models not on display. In addition, the increased focus on the environment has reopened the way for reflections on production processes and more generally on business models. For many companies, this was a compulsory choice, aimed at maintaining (or even increasing) their market penetration; at a general level, however, this resulted in a strong push towards greater resilience in business models. According to the literature, innovation has been oriented along three main lines:

- **Digitalisation:** an improvement in digitalisation is seen as a prerequisite for integrating and monitoring the entire supply chain and better managing production and distribution, avoiding overproduction (typical, as we have seen, of fast-fashion) and supporting the supply of quality products at low prices; many companies, particularly the most competitive ones, have taken advantage of the situation, reading it as an opportunity to maintain their competitive advantage by shifting their sales models towards e-commerce; on the contrary, smaller companies have suffered a setback, because they are less ready to embrace digitalisation (Farah M. F., Ramadan Z., 2020).
- **Green investments:** the creation of models offering products with a low environmental impact is considered crucial. This implies the need to choose quality materials, to make ethical packaging choices and to reduce the environmental impact when transporting goods from production sites to the end user;
- **Competencies:** the valorisation of human capital is fundamental because the sector's competencies (especially in a country with a manufacturing tradition like Italy) are essential to accompany the technological transition and ESG choices (Intesa, 2021).

2.2 Methodological settings and research questions

The working hypothesis that is proposed in this thesis is to verify what emerges from the preliminary analysis and the literature, by testing whether the way fashion companies reacted to covid (digitisation, sustainability and valorisation of competencies) enabled a recovery of the sector. We have seen how the literature has emphasised the difference

between larger and smaller operating size companies. Therefore, we propose an analysis that is based on the performance of stock market indices, through the performance of stocks listed on the FTSE All-Share.

To perform the technical analysis, a number of companies were selected and divided into two groups on the basis of their capitalisation, thus defining a theoretical portfolio of companies equally divided between large-cap and small-cap. As far as large-caps are concerned, we identified three FTSE All-share companies belonging to the fashion sector, namely:

- **Moncler S.p.A.:** this is a company in the fashion sector, which is involved in the design, production and marketing of luxury down jackets, other winter clothing and accessories (bags, gloves, hats, etc.). The capitalisation of Moncler S.p.A. is EUR 17,351,247,936;
- **Salvatore Ferragamo S.p.A.:** which represents one of the main economic players in the luxury sector, with a manufacturing tradition dating back to 1927. The company's business involves the production and distribution of luxury footwear, leather goods, clothing and accessorised collections for both men and women. The products are distributed both through an extensive network of shops operated directly by the company and through single-brand shops operated by third parties. It is also present as a brand in multi-brand shops. The capitalisation of Ferragamo S.p.A. is euro 1,621,227,950;
- **TOD'S S.p.A:** through its own brands (in addition to the parent company, these are Roger Vivier, Hogan and Fay), the company is engaged in the design, production and distribution of luxury apparel, shoes and leather goods, including accessories. Its capitalisation is EUR 1,417,727,211.

With regard to small caps, the ones we will use for our survey belong to the world of fashion and non-durable goods; they are characterised by a much smaller operational size than the large-cap brands we have considered. The companies identified are: survey,

- **Aeffe S.p.A:** is an Italian group active in the fashion and luxury sector, known for the creation, production and distribution of ready-to-wear clothing, footwear, leather goods, lingerie and beachwear. It was founded in 1988 by

fashion designer Alberta Ferretti and has been listed on the stock exchange since 2007. Aeffe S.p.A.'s business model is based on vertical integration and direct control of the main stages of the value chain. It has a capitalisation of EUR 81.8 million;

- **Piquadro S.p.A.:** a historic company that produces and sells leather goods, also through its associated brands The Bridge and Lancel. The group's products are grouped into five clusters: handbags and briefcases; women's bags; wallets and small leather goods; luggage; and accessories. Capitalisation is 91.5 million euro;
- **Vicenzo Zucchi S.p.A.:** is another historic Italian fashion brand, specialising in the design, production and distribution of household linen. Products are sold through the group's proprietary brands (Bassetti, Descamps and Jalla) or through licensed brands such as Lacoste, Laura Ashley and Diesel. Capitalisation is 7,806,898.

In terms of statistical analysis, we have proposed a reading of the main position indices, using quotations between 1 December 2019 and 31 March 2021.

In addition to the long-term dynamics, we consider to identify stock market indices at certain particularly significant moments with respect to pandemic dynamics. In particular:

The performance of securities before the pandemic was assessed by taking the index date of 1 December 2019 as the index date;

- The performance of stocks during the first lockdown took as a reference the prices on the dates of 9 March (date of the start of the first lockdown) and 5 May (date of the first reopening);
- The performance of stocks during the second lockdown considering as reference the dates of 31 October 2020 (start of the second measures restricting the movement of people and the exercise of commercial activities) and 31 March 2021, the date on which the declaration of the end of the pandemic emergency - made in the previous February - began to show its effects.

- For each firm, the price over the entire period under consideration (1 December 2019-31 March 2021) is highlighting through the main position indices for each series.

These data define an initial statistical analysis of the securities' performance over the period considered. In order to verify the economic effects on the entire production chain, these data were compared

- a. with the securities' performance during the year prior to the first index date (1 December 2018-1 December 2019) to show whether the trend was different. The evaluation was carried out using the key position indicators;
- b. with the performance of the securities in the following year (31 March 2021-31 March 2022). Again, the analysis is based on ;
- c. with the Ftse All-share index as a whole, in order to check whether the performance of our portfolios (as a whole and in the split between large- and small-caps) performs differently from the market.

This type of analysis is instrumental in answering the research questions, as they emerge from the literature review. The research questions are as follows:

RQ1 - What were the stock market price trends during the pandemic phases? The trends observed through stock market indices, valuing some historical 'caesuras' (first lockdown in 2020; reopenings in May 2020; second lockdown in autumn 2020; spring 2021) in order to observe the sector's responsiveness and resilience to the crisis as a whole;

RQ2 - Beyond market price data, how have the pandemic events affected the performance of fashion companies listed on the FTSE-All Share? In this case, in addition to the indications offered by the stock market indices, we also took into consideration data on the operating performance of the companies we looked at, using some values that emerged from reading the companies' balance sheets)

RQ3 - After the COVID phase, how did the fashion companies in the FTSE-All share sector perform? This area is analysed using stock market indices and balance sheet data from 2022.

As a whole, the research questions aim to assess the companies' ability to respond to the crisis. The combined use of stock market and balance sheet data makes it possible to assess not only how well companies are operating, but also how well consumers and investors perceive the operating choices they have made. Market performance is in fact an element that makes it possible to concretely assess the success of companies in responding to the crisis. Investors, in fact, are also increasingly sensitive to the dynamics of environmental, social and governance sustainability of companies and are an element of evaluation that combines with the dynamics of sales and profitability of companies, thus completing the overall assessment.

2.3 Information sources and Data organisation

In order to carry out the analysis, we first had to create two datasets, one relating to stock market indices and the other to balance sheet data for the periods under consideration. On the basis of the methodological choices explained in the previous section, we then prepared the data.

The preparation of the stock market indices followed the following steps:

1. All historical data on the performance of the shares of all the companies that make up our two portfolios (that of large-caps and that of small caps) were retrieved, on a daily basis for all reference periods (1 December 2018-31 March 2022). The data took into account, for each day:
 - the opening quotation
 - the closing quotation
 - the maximum quotation
 - the minimum quote
 - the volume of transactions carried out

2. With regard to the market portfolio (FTSE All Share), the same operation was carried out, taking the same elements linked to the quotes (in the minimum and maximum sizes referring to the opening and closing times of the transactions). Again, the time series covered the period from 1 December 2018 to 31 March 2022.

In total, our dataset consists of 6075 records, corresponding to each quotation day.

Once the dataset was prepared and consolidated, we were able to start the necessary operations to develop the subsequent calculations. In particular, we converted share prices into daily percentage returns for the entire historical series. This calculation was performed both for the historical series for each of the companies under analysis and for the trend of the reference stock market.

The second dataset instead concerned the relative data contained in the balance sheets. For each of the companies considered, we retrieved the following values from the balance sheets from 2018 to 2022:

- Turnover
- Income from ordinary activities
- Operating profit
- Net profit
- Net debt

This second database is certainly more limited in size: it consists of only five records, with a total of 150 cells.

All analysis operations were carried out on these two datasets, taking as reference the periods and dates indicated

2.4 Relevant statistical models and events

The theoretical elements presented in the first chapter and the evidence emerging from the literature suggest that fashion companies reacted to the crisis caused by the pandemic by adopting certain countermeasures to reduce the impact of movement restrictions. The shutdowns of business activities (or their restriction), the disruption of the supply chain at global level have led to

- on the demand side, a reduction in consumption, particularly in traditional sales channels;
- on the supply side, the difficulty of importing garments made in countries other than our own (particularly Asian countries) where production had been concentrated, especially for fast-fashion products;

These effects certainly had a negative impact on the overall financial statements of companies in the industry. In order to answer the research questions, we started from hypotheses to be tested by means of statistical models. The hypothesis that we submit for evaluation envisages a scenario in which the pandemic led to uncertainty at a global level and a consequent impact on the performance of stocks: in the years 2020-2021, a series of events took place that constituted a systemic shock for the entire list taken into consideration (FTSE All-Share) and therefore for individual stocks. However, the trend in macroeconomic data showed that after the hardest phase of the pandemic there was a strong recovery, which in theory should also be present in the stock markets. This may have led to an overreaction of fashion stocks.

Underlying this dynamic is investor behaviour. The literature has extensively studied how investors react to significant events, through their deep-seated beliefs to the continuous flow of information. The market's 'rational' reaction should follow the same flow as the news: positive news (e.g. the distribution of dividends, which should be positively valued by investors) should generate value for the stock, which should show a higher average return than before the news came out; on the contrary, the occurrence of an economic or financial crisis should generate more cautious behaviour, which should lead to a decrease in returns after investors become aware of the new events. In reality, things, from a practical point of view, seem to go very differently. An interesting empirical study showed that markets actually react in a mixed manner to the news of the dividend distribution, showing a statistically positive value only on the day of the announcement and the following day; the analysis of the ten days before and after the announcement, on the other hand, shows insignificant changes in average yields, leading to the conclusion that the effect of the news only generates effects in the immediacy of the announcement (Mrzyglod U., Novak S., 2015). Regarding reactions in the crisis period, on the other hand, news announcements related to corporate strategies (increase or decrease in the

customer-supplier portfolio; changes in the management structure, new product launches or legal issues) show a different pattern when they occur in a crisis period, generating an increase in volatility (Neuhierl A., Scherbina A., Schlusche B., 2010)

The difference between expectations and empirical evidence is related to what in Anglo-Saxon literature is referred to as herding (from herd) and which in our country's social studies transposed into economics finds a translation in the locution 'comportamento gregario'. It is precisely the Italian definition that seems to us to be appropriate for identifying behaviour in which investors choose to adopt behaviour that goes along with the current financial trend, rather than considering their own financial objectives.

Gregarious behaviour is adopted in a considerable number of situations relating to people's everyday actions. In the context of financial market dynamics, herding is empirically observed during many situations that produce irrational decisions that in fact constitute a positive feedback with respect to the trend in progress: one need only think of the behaviour that can occur when a speculative bubble manifests itself, with investors choosing certain securities or financial instruments following the behaviour of the masses; or - with an opposite example - when they are induced to sell securities in their portfolio 'only' because many other investors are doing the same thing.

The literature has pointed out that there are two types of gregarious behaviour: we speak of intentional herding when, as in the examples just cited, a part of the investors tends to implement strategies imitating other investors; we will instead have spurious herding when economic operators adopt similar behaviour, the result not of imitation but of an independent elaboration of a series of information relating to certain categories of securities or assets. The difference between these two types of herding is difficult to discern, but it should be noted that in the first case, imitation of behaviour prevails, while in the second, the quality and quantity of information made available to the markets is relevant. (Bikhchandani S., Sharma S., 2001).

In general, investors tend to assess the situation on the basis of past experience; however, in doing so they tend to use certain cognitive and behavioural biases. In the context of financial dynamics, the most important cognitive biases are:

- **overoptimism:** this refers to the tendency to overestimate the possibility of favourable outcomes while underestimating the possibility of unfavourable events occurring. Over-optimism can lead to unfavourable results when stock selection is based on considerations that overestimate the ability to generate profits, leading to distorted estimates of the stock's future performance.
- **overconfidence:** it is an overconfidence in one's own skills and knowledge: an overconfident investor will tend to consider his or her own point of view as the only rational one and to engage in market transactions that otherwise would not be realised. Overconfidence is particularly pronounced after excellent performance in previous, if not exceptional, financial transactions. These successes, in fact, also tend to activate a confirmation bias, which operates particularly on the investor's self-esteem;
- **Home bias and status quo bias:** both relate to portfolio diversification. Although related to each other, they are nevertheless distinct. Investors often tend to favour investments in domestic securities over foreign ones: certain biases linked to the illusion of knowing the company better simply because it operates domestically or for reasons of affection play a decisive factor in this choice. Investors are generally led to believe that information from local companies is easier to identify and evaluate. Home bias is more frequent in older investors who have less ability to use new technologies to collate information on securities and who may have a language barrier that makes it more difficult for them to evaluate documents and information in a language other than their own. Status quo bias, on the other hand, is associated with the natural human tendency to seek stability rather than change. The behavioural bias resulting from this bias is present in numerous contexts of human activity. In the context of investment economics, it is predominantly associated with what is known as 'loss aversion', i.e. the fact that investors tend to give more weight to the possible losses they might incur by changing their financial behaviour than to assess the potential gains that might result from this change.
- **Retrospective bias:** the financial literature refers to retrospective bias as 'hindsight bias': it refers to the erroneous belief that one has foreseen a certain event, but only after it has actually happened. It is a particularly insidious bias,

because it acts as an accelerator of one's forecasting ability, which is thus overestimated. The mechanism is particularly complex: the individual tends to remove the basic assumptions that formed the assessment, replacing them with the new information determined by the event, which is applied to the initial idea.

- **Confirmation bias:** information and data that confirm one's own viewpoint or initial theories are overestimated and used in an almost totalising manner, limiting or completely excluding from the valuation process all data demonstrating contrary trends. In this way, investors select only the information that confirms their investment idea and limit access to more objective information.
- **Regret:** is the most important emotional bias: it is linked to a feeling of dissatisfaction that pervades individuals when they realise they have not done an action that could have been beneficial to them. Regret is linked to the theme of error: this cognitive dissonance becomes more strongly manifest when individuals realise the error inherent in one of their beliefs. Faced with this evidence, people activate irrational behaviour, seeking information that distorts reality in order to find non-existent justifications that neutralise errors. This behaviour occurs when investors refuse to sell shares at a loss even when the outlook is still negative: this is related to the fact that selling shares would be a kind of admission of having made a mistake in choosing a financial investment.

Investor behaviour can lead to an overreaction of the markets (overreaction). This, according to the literature, describes a special situation: systematic growth in share prices (positive feedback) should suggest the triggering of an opposite trend (negative feedback); this movement should be predictable (on the basis of the share's time series) even without recourse to information exogenous to the market. Several reactions can be generated in such a context:

- **directional effect:** a marked price movement in one direction will be followed by a movement in the opposite direction;

- **magnitude effect:** the greater the difference between the starting price and the maximum price, the more extreme the strength of the negative feedback effect will also be;
- **intensity effect:** the speed of the initial price change corresponds to an equally fast rebalancing action (Brown K., Harlow W., 1988)

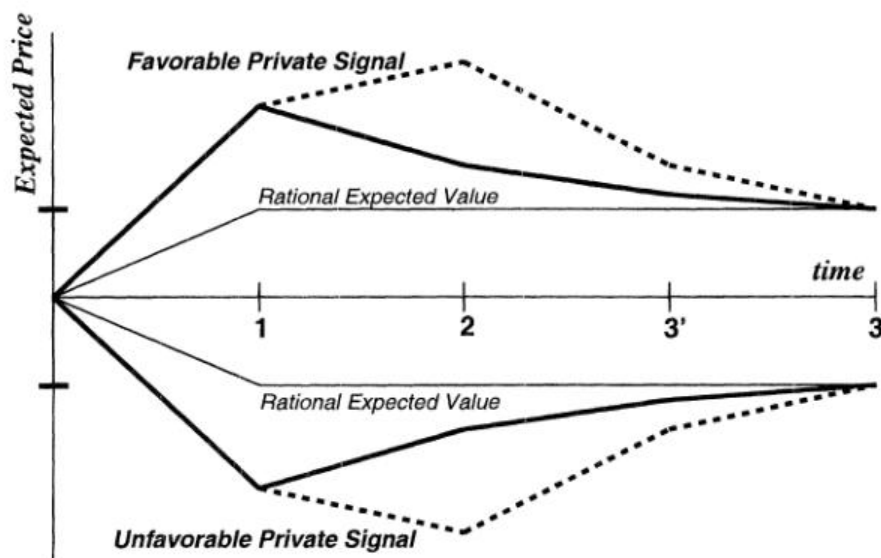
The literature is divided on the interpretation of the overreaction phenomenon. One school of thought would be a response to an underreaction that would be followed by a reversal in the long run. Prices undergo an overreaction process when the average return following a series of good news announcements is lower than the average return following a series of bad news announcements (Barberis et al., 1998). This means following a series of good news announcements an expectation is generated with respect to their performance. Investors exhibit rational (reactive, but not excessive) behaviour when they buy new shares following good news, which as such should generate an increase in share prices. However, the succession of good news makes investors overconfident: they will tend to take a position (i.e. buy shares) even before new positive news hits the market, based on expectations based on its representative bias (i.e. investors wrongly conclude that the company's past growth will continue in the future). In doing so, however, they become irrational and expose themselves to an overreaction, frustrating their expectations when negative news appears, which will trigger the negative feedback that will cause share prices to fall close to their initial levels. The model involving the joint action of underreaction and overreaction was described by Harrison Hong and Jeremy C. Stein (1999). According to the model, private information gradually spreads among the so called *newswatchers*. Initially (at $t=0$), only newswatchers are active; prices adjust slowly to the new information, but because of this slowness, market underreaction occurs. Since *momentum traders* only base their forecasts on price increases, they will only enter the cycle at a later point in time ($t+1$); their entry pushes the price up and in this way a certain profit is generated. This will push other momentum traders to buy shares ($t+i$, with $i > 1$). When the price exceeds the long-run equilibrium, the reversal caused by negative feedback will occur and momentum traders who entered the market after ($t+1$) will suffer losses (Hong H., Stein J. C., 1999).

A part of economics doctrine has instead considered overreaction as a consequence of overconfidence and self-attribution bias. We have already seen the characteristics of overconfidence; self-attribution bias manifests itself instead by activating a dual belief in investors, for whom

- positive results will always depend on their personal skills, abilities and decisions;
- negative outcomes will always be the effect of external circumstances beyond their control.

Overconfidence and self-attribution bias will lead to overreaction, which again will be followed by a reversal in the long run. This second approach to overreaction has been described by Kent Daniel, David Hirshleifer and Avanidhar Subrahmanyam (1998). Investors overestimate their own capabilities and consider themselves better at evaluating securities than what others think of them; in this way they activate the overconfidence bias, generating an overconfidence that is fuelled when public information proves to be in agreement with the information they possess. When information contradicts the information investors privately hold, however, overconfidence does not diminish: the self-attributing bias will tend to make investors credit themselves for past successes, but point to external factors as responsible for failures. Overconfidence will cause prices to rise above their fundamental value to the point of generating the negative feedback that will produce the long-term trend reversal. Figure 11 shows the evolution of the model, highlighting, with respect to the expected value of the rational investor, the development of the curve with the attribution of overconfidence alone (bold line) and the combination of overconfidence and self-attributing bias (dotted line):

Figure 11 – Overconfidence e self-attributing



Source: Daniel K. Et al, 1998, p. 1847

On a general level, therefore, it is possible to state that overreaction is an effect of investor behaviour, which in turn produces important changes in the market. These behaviours are strongly related to cognitive and behavioural biases. The fact that underreaction is, in both models we have proposed, the precondition for overreaction highlights how reactions are affected by investors' emotions (Ritter J., 2003): both overconfidence and an attitude dictated by conservatism (as in the case of underreaction) are at the basis of effects that are, however, not permanent and wear off over time.

Statistical analysis can allow us to observe this dynamic in the context of the pandemic crisis with regard to the performance of listed stocks in the fashion and clothing sector, which we have seen to be among those that the literature has indicated to be most exposed to the effects of the systemic shock caused by a succession of positive or negative news. On the other hand, we have also seen how the possibility for companies to remain in the market effectively also depends on their ability to be resilient to a systemic crisis. In general, this seems to be associated with the operational size of the firms: more structured firms should also be those more ready to change their business models, operating in terms of the development of new sales channels, increased computerisation and a propensity to

innovation. Hence, at the level of hypothesis, we should find a difference between companies with higher and lower capitalisation in the share price performance.

Our investigation focuses on the FTSE All Share index, the list that comprises the most relevant part of our country's stock market. The choice of this list over others is justified by the fact that it offers a more homogeneous picture with respect to the companies with the largest capitalisation (Moncler S.p.A., Salvatore Ferragamo S.p.A. and Tod's S.p.A.) and those with the smallest capitalisation (Piquadro S.p.A., Aeffe S.p.A., Vincenzo Zucchi S.p.A.).

From the point of view of statistical analysis, the model provides for a series of verifications starting from the average returns and transaction volumes in the periods taken into consideration, accompanying the verification with the expected returns. This dynamic is first of all verified through the indices of position and dispersion and of variability, using the averages of the distributions, the standard deviation and the coefficient of variation to verify whether there exist, within the different series, significant variations between the companies with greater capitalisation and those with less capitalisation and between these and the reference list.

On the basis of these measures, we then assessed the phenomenon of overreaction by evaluating not only the entire distribution over the period, but the dynamics of the stocks in the period immediately following it, comparing the expected return $E(R_i)$ of each stock (evaluated as the average of the returns in the previous period) with the returns on the day following the event deemed significant (in our case the first lockdown on 9 March 2020; the reopening on 5 May 2020 and the new lockdown the following autumn) and after 5, 10 and 21 days.

Finally, a regression model was developed to relate the average data trend to the transaction volume. The objective of introducing this model is to observe whether there is a correlation (and, if so, to what extent) between percentage changes in share prices and the volumes of shares traded during the various observation periods. This analysis also aims to highlight whether there is a substantial difference between the reference market (FTSE All-Share) and the securities of the companies in the sample. Furthermore, it will allow us to assess whether there are differences between companies with higher and lower capitalisation.

The intervals were not chosen arbitrarily. Although theories on overreaction have emphasised its long-term effects, some more recent empirical studies have shown that this phenomenon occurs mainly over medium or shorter periods. Overreaction can also occur over shorter periods, even in a single market session, where deviations can occur that create profit opportunities for investors. Based on these studies, intervals of 1, 5, 10 and 21 days were chosen, according to a methodology already used for other studies related to financial market trends during COVID-19 (Kaluge D., Kinesti A., 2021).

3. QUANTITATIVE ANALYSIS

3.1 The Sample

Before moving on to the analysis of the data, it is worth briefly analysing, from a descriptive point of view, the strategies adopted by the companies in the sample to counter the crisis that emerged from the pandemic emergency. In general, they all adopted strategies in line with what emerged from the literature, either by modifying their business model or by accelerating the transition to digital and ESG policies.

Moncler responded to the pandemic with a strategy focused on omnichannel omnichannel and the internalisation of the e-commerce channel. In 2020, the company launched the Omnichannel New Experience (ONE) project, which led to the internalisation of the e-commerce site in the US and Canada, completed in 2021 with Europe, Japan and mainland China. The new platform offers services such as Click and Reserve, Return in Store and Book an Appointment, ensuring a seamless experience between online and offline. In addition, Moncler launched the Moncler Live Boutique service to manage virtual appointments and remote sales, adapting to new consumer needs.

Piquadro, a company specialising in leather goods and accessories, faced the pandemic with a significant acceleration of its digital transformation. Already before 2020, the company had started a digitisation process, but the health emergency made it clear that the e-commerce channel needed to be further strengthened. During the lockdown, Piquadro invested in online platforms and implemented digital marketing strategies to maintain contact with customers, compensating for the temporary closure of physical shops.

Salvatore Ferragamo was also forced to radically reassess its business strategy. The company had launched its e-commerce site in 2009, but the pandemic emergency necessitated further development. In April 2020, Ferragamo unveiled a new website optimised for all devices, integrating editorial content and advanced e-commerce features such as in-store pick-up and the possibility of booking appointments with sales assistants. The new platform provided an immersive experience, combining online shopping with brand value storytelling. In addition, the company implemented digital clientelling services, such as assisted telephone shopping, to maintain direct contact with customers

even when the shops are closed. To maintain the exclusivity of the shopping experience, Ferragamo developed virtual showrooms and interactive product presentations in secure cloud environments reserved for buyers. It also used augmented and virtual reality to present new collections, allowing customers to explore products in an immersive way. The company also introduced virtual appointment services and sent material samples to customers to preserve the tactile aspect of the shopping experience, which is crucial in the luxury sector. Salvatore Ferragamo has also innovated in terms of logistics: the drive for technological innovation has enabled the development of an integrated inventory management system, with the aim of unifying stocks for e-commerce and physical shops. This has allowed greater flexibility in inventory management and a better response to customer needs. In addition, the company centralised the management of European orders through the Florence warehouse, improving delivery efficiency and reducing shipping times.

From a logistical point of view, the company centralised the management of European orders through the Florence warehouse, improving delivery efficiency and reducing shipping time (Belvedere V., Martinelli E. M., Tunisini A., 2021)

The pandemic accelerated the need for Tod's to integrate physical and digital sales channels. The company embarked on a digitisation process that began in 2010 and evolved significantly during and after the pandemic. Tod's internalised the management of its e-commerce portal to offer an omnichannel and multi-touchpoint customer experience, ensuring consistency between the online and in-store experience.

To support this transformation, Tod's relied on the Tesisquare platform to monitor and manage shipments globally. This system enables complete visibility of B2C shipments, integrating various warehouses and boutiques to optimise supply and improve logistics efficiency. In addition, the platform allows monitoring of the entire shipping process, from checkout to delivery, improving the customer experience and returns management. Tod's has also reassessed its distribution strategy, reducing the wholesale channel and focusing on direct retail and e-commerce. This choice has given the company greater control over pricing, inventory and customer relations. As of 30 September 2021, there were 498 Tod's Group physical shops worldwide (312 directly operated and 96 franchised), compared to 405 as of 30 September 2020. This strategy led to significant growth in retail revenue (directly operated shops and online), which increased by 48.5%

in the first nine months of 2021 compared to 2020, representing 72% of total sales. In contrast, the wholesale channel grew by only 19% over the same period (Crivelli G., Ferrando M., 2021).

Vincenzo Zucchi, a historical company in the textile industry, took the opportunity of the pandemic to innovate and focus on sustainability.

In addition, Zucchi has strengthened its online presence, developing a better performing e-commerce and implementing digital communication strategies to reach a wider audience.

The choice to implement a more efficient digital strategy was also the choice of Aelle, which strengthened its e-commerce channel and invested in digital marketing strategies to reach customers during shop closures. In addition, Aeffe was able to reassess its organisational structure to adapt to new market challenges, focusing on greater integration between the group's various brands.

During the period under review, all the companies analysed suffered, to varying degrees, the impact of the COVID-19 health crisis in 2020, with clear effects on turnover, profits and profitability. However, the speed and intensity of the recovery varied significantly from company to company. Table 1 summarises the characteristics of the different companies:

Table 1 - Financial characteristic of the companies in the sample

PIQUADRO SPA						
YEAR	TURNOVER	EBITDA	EBIT	NET PROFIT	NET DEBT	INCOME TYPICAL ACTIVITY
2018/2019	147,47	N/D	-4,35	34,48 ²	-25,6	149,21
2019/2020	155,22	14,02	-6,75	-7,71	36,08	155,22
2020/2021	116,12	11,16	-4,66	-6,12	41,18	116,12
2021/2022	149,42	25,34	9,2	4,44	32,82	149,42
2022/2023	175,6	27,7	11,87	6,5	18,3	175,6

SALVATORE FERRAGAMO SPA						
YEAR	TURNOVER	EBITDA	EBIT	NET PROFIT	NET DEBT	INCOME TYPICAL ACTIVITY
2018	1.347	214	150	88	504,4	1.347
2019	1.398	335,5	149,7	87,3	504,4	1.398
2020	939,2	160,2	-61,5	-71,7	429,2	939,2
2021	1.162	306,7	143,5	86,3	224,5	1.162
2022	1.271	298,9	127,9	65,4	204,1	1.271

MONCLER SPA						
YEAR	TURNOVER	EBITDA	EBIT	NET PROFIT	NET DEBT	INCOME TYPICAL ACTIVITY
2018	1.420	500	380	332	-450	1.420
2019	1.627	575	470	361	-450	1.627
2020	1.440	520	400	300	-400	1.440
2021	2.046	700	600	411	-400	2.046
2022	2.602	1.000	800	606	-400	2.602

AEFFE SPA						
YEAR	TURNOVER	EBITDA	EBIT	NET PROFIT	NET DEBT	INCOME TYPICAL ACTIVITY
2018	346,6	43,3	24,2	11,7	135,2	346,6
2019	361,5	53,1	25,1	11,7	135,2	361,5
2020	279,6	4,5	-24,6	-21,4	141	279,6
2021	333,1	35,3	9,2	12,1	168,7	333,1
2022	363,6	35,6	1,2	-9	231,8	363,6

VINCENZO ZUCCHI SPA						
YEAR	TURNOVER	EBITDA	EBIT	NET PROFIT	NET DEBT	INCOME TYPICAL ACTIVITY
2018	100	10	5	2	50	100
2019	110	12	6	2,5	45	110
2020	90	8	4	1,5	55	90
2021	95	9	4,5	1,8	52	95
2022	105	11	5,5	2,2	48	105

TOD'S SPA						
YEAR	TURNOVER	EBITDA	EBIT	NET PROFIT	NET DEBT	INCOME TYPICAL ACTIVITY
2018	940,4	180	80	47,1	451,2	940,4
2019	1.024	255,4	101,1	46,3	451,2	1.024
2020	647	39,5	-135,4	-73,2	521,3	647
2021	900,4	161,9	24,2	-5,9	510,6	900,4
2022	1.027	207,7	58,2	23,1	555	1.027

Source: Personal draft

The data, considered as a whole, allow some considerations to be made. As far as turnover is concerned, it emerges that COVID hit hard in 2020, with drops in turnover averaging between 20% and 40%. Piquadro dropped from 155 to 116 million (-25%), Tod's from over 1 billion to 647 million (-37%), Ferragamo from 1,398 to 939 million (-33%). Moncler contained its loss (from 1.6 to 1.4 billion), demonstrating greater resilience. The recovery in 2021-2022 was more pronounced for Moncler and Piquadro, which exceeded pre-COVID levels in 2022. Ferragamo and Tod's reached them, while Aeffe and Zucchi showed more modest growth.

EBITDA and profitability followed similar dynamics to turnover. The most capitalised companies with strong brands (Moncler above all) maintained high margins even in 2020, while more exposed companies (such as Aeffe) recorded minimal or negative EBITDA. Piquadro recovered well, rising from 11 million in 2020 to almost 28 million in 2022. Moncler even improved its profitability post-COVID. Ferragamo and Tod's took longer to return to acceptable levels.

All companies, except Moncler, reported a negative net profit in 2020. Aeffe (-21 million), Piquadro (-6), Ferragamo (-72), and Tod's (-73) reflected the sharp decline in demand and the increase in fixed costs. However, from 2021 onwards, most recovered: Moncler posted record profits, Ferragamo and Piquadro returned to profit, while Aeffe showed a more unstable trend (profit in 2021, loss in 2022).

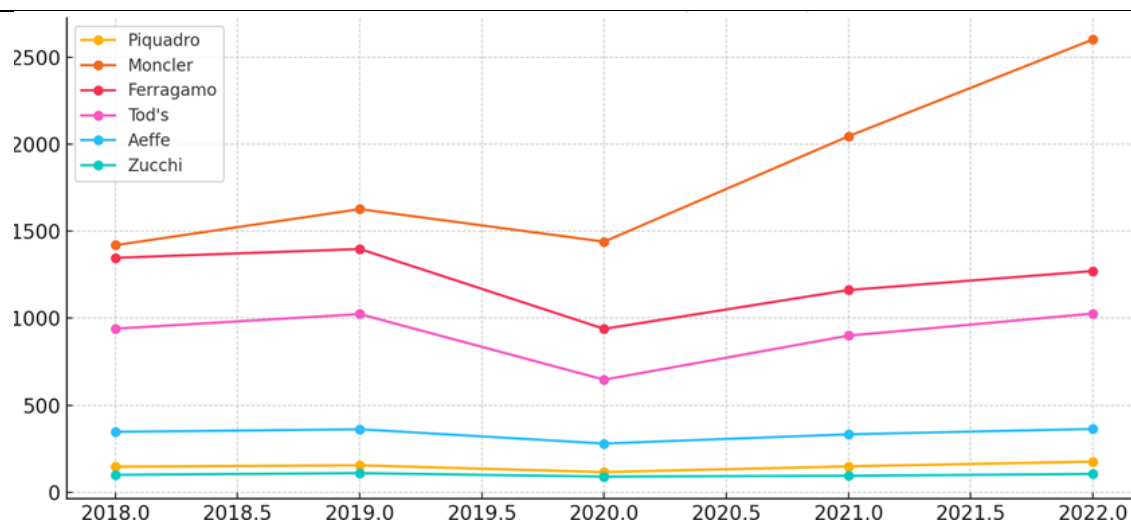
During the crisis, many companies resorted to new debt to cope with shrinking revenues and this trend is reflected in net debt. Tod's, Ferragamo and Aeffe saw their debt increase, albeit moderately. Piquadro, on the other hand, significantly reduced its financial

exposure in 2022, from EUR 41 million to EUR 18 million. Moncler maintained a positive net financial position (cash in excess of debt), a sign of equity strength.

The two-year period 2020-2021 represents a clear watershed. The COVID negatively affected all financial metrics in 2020, but also highlighted the adaptability and resilience of some companies. Moncler is confirmed as the most solid group, with growing results even during a crisis. Piquadro shows a good ability to restructure and relaunch, with significantly improved results in 2022. Ferragamo and Tod's suffered but returned to a growth trajectory. Aeffe and Zucchi, on the other hand, still show some structural fragility. The analysis shows that, in the fashion and luxury sector, brand strength, liquidity management and diversification of sales channels (including e-commerce) have been decisive in tackling the pandemic crisis and restarting.

The trend in company turnover shows a 'V-shaped' curve similar to those we have already seen in our analysis. However, it is interesting to note that the change is more pronounced for companies with greater capitalisation, indicating a greater exposure to the markets; only in the case of Moncler did the initiatives to counter the crisis produce a recovery that led to values higher than those at the start (Figure 12).

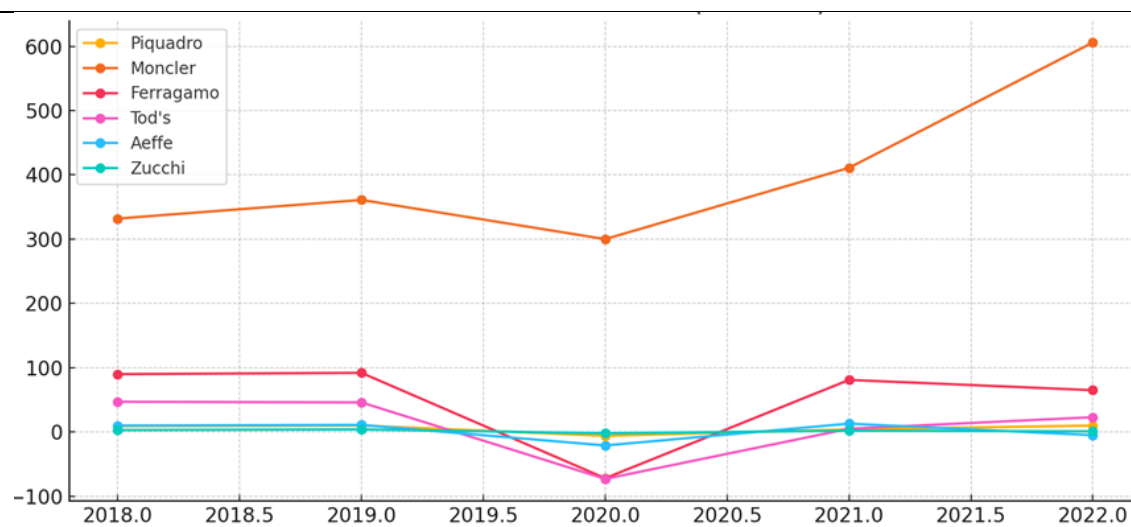
Figure 12 – Turnover 2018-2022 (millions of euro)



Source: Personal Draft

Moncler also distinguishes in terms of net profit (Figure 13), not only because it is the only company with a profit in excess of 300 million euros, but also because it is the only case in our sample that shows growth compared to the starting figure of 2018.

Figur3 13 – Net profit, 2018-2021 (millions of euros)



Fonte: elaborazione personale

A further reflection relates to net profit, which remains one of the most sensitive indicators to external shocks. The year 2020 represented a low point for everyone, but the subsequent ability to recover varies: Moncler was able to react quickly, showing not only resilience but also expansion. This was thanks to a mix of internationalisation, digitalisation and positioning in the high-end luxury segment. Piquadro showed solid restructuring, while Ferragamo and Tod's, while recovering, did so more moderately. Aeffe and Zucchi, on the other hand, showed mixed performance, suggesting structural vulnerabilities in the medium term.

The analysis of the main economic dimensions of the companies in the sample confirms that COVID acted as a 'stress test' on companies' balance sheets. Companies with more robust business models, strong capitalisation and an effective digital strategy have weathered the crisis better and today show clearly recovering economic indicators. For the others, the crisis has left more lasting marks, and full recovery may still take time and targeted interventions (Figure 13).

3.2 Stock market indices and the performance of the stocks in the sample. Statistical Analysis

As far as the position indices are concerned, Table 2 summarises, for each company, the average stock performance over the periods considered and relates it to the performance of the FTSE All-Share.

Table 2 – Average data of FTSE All-Share and the Sample. Percentage variations

STOCK PRICES	FTSE ALL SHARE	MONCLER	TOD'S	SALVATORE FERRAGAMO	AEFFE	ZUCCHI	PIQUADRO
From 1/1/2018 to 29/11/2019	0,02	0,11	-0,07	-0,02	0,01	-0,04	0,06
From 1/1/2019 to 29/11/2019	0,11	0,15	0	0,03	-0,03	0	0,15
From 1/12/2019 to 9/3/2020	-0,16	-0,23	-0,52	-0,52	0,75	-0,37	-0,54
From 10/3/2020 to 4/5/2020	-0,13	0,06	0,04	-0,29	-1,87	0,31	-0,01
From 5/5/2020 to 30/9/2020	0,11	0,08	0,19	0,18	-0,15	-0,13	-0,08
From 1/10/2020 to 31/3/2021	0,21	0,29	0,12	0,24	0,23	0,41	0,33
From 1/4/2021 to 31/3/2022	0,01	0,04	0,2	0,04	0,27	0,27	-0,01

Source: Personal Draft

The averages of price changes do not seem to offer a particular interpretative key. If we take the two analysis clusters ranging from 1 December 2019 to 9 March 2020 and then from 10 March to 4 May 2020 as a reference, predominantly negative average changes stand out, although compared to the previous period they are always below one percentage point. More interesting, however, is to observe how securities behaved on days 1, 5, 10 and 21 after the systemic shock (9 March, start of the lockdown; 5 May, end of the lockdown; start of the new restrictions; and 31 March, with the consolidation of the end of the pandemic emergency).

The shock caused by the announcement of the first lockdown led all stocks and the FTSE All-Share to a strongly negative initial performance, in a market that was, however, already under stress with respect to the news of the ever-widening restrictions and the possibility of a generalised shutdown, a measure that had been talked about for days. But it is interesting to note that after the initial shock passed, both the FTSE All-Share and the individual stocks began a marked ascent. After three weeks, all the stocks in our

sample are trading above the expected return, and only Piquadro is still negative, although less so than the $E(R_i)$. Above all, it is interesting to note how the comparison with the reference market: the FTSE All-Share shows the same progression towards a recovery of the initial values (at the end of the observation period the average return will be slightly better than the expected return), but it does so more slowly. In fact, the quote on day 21 is still negative and below the expected return (Table 4).

Table 4 – Analysis of returns (1, 5, 10 and 21 days) e Expected return of investment – March, 9. Percentage variations

MARCH, 9		E(R_i)	1day	5days	10days	21days
	FTSE ALL-SHARE	-0,16	-11,17	-4,79	-2,51	-0,78
	MONCLER	-0,23	-9,49	-2,11	-1,13	0,14
	TOD'S	-0,52	-6,99	-2,9	1,29	0,42
	FERRAGAMO	-0,52	-6,39	-4,04	0,19	0
	AEFFE	0,75	-1,09	0,99	0,02	0,01
	ZUCCHI	-0,37	-16,79	-5,54	-1,76	1,04
	PIQUADRO	-0,54	-9,66	-1,46	-1,94	-0,33

Source: Personal Draft

The data highlight the presence of a widespread directional effect (initial negative push followed by a trend in the opposite direction), which is evident in all series; the magnitude effect, on the other hand, is only significant in the stock of Vincenzo Zucchi S.p.A., albeit in conjunction with an intensity effect that sees the stock go from the worst performance in the sample on the first day (-16.79%) to the best on the 21st day of observation (1.04%). This stock is the only one in which the phenomenon of overreaction can be observed. As regards the index date for reopening (5 May 2020), the analysis of prices at 1, 5, 10 and 21 days shows less characterisation than expected. Compared to expected returns, some significant aspects emerge:

- the Piquadro stock shows the typical signs of overreaction: a strong positive directional thrust (3.25% on day 1, significantly better than the expected return); an intensity effect that means that, starting from day 5, the values return to close to the expected returns (0.23%), with an intensity that depends on the amplitude of the directional thrust (the highest among the stocks in the sample);

- Aeffe is the stock that closes the observation period with the best performance. From day one, the result is positive and higher than the expected return (with a difference of 2.71%, the largest differential in the entire sample). Despite the presence of a constant directional effect (on the 21st day of observation, negative feedback is not yet visible), the magnitude and intensity are less marked and progressive, confirming what emerges from the literature regarding the interaction between the amplitude and speed of the directional effect;
- Moncler, Ferragamo and Zucchi, on the otherhand, show the opposite trend: a sharp negative directional push followed by a progressive feedback starting from the fifth day. Ferragamo even closed the observation period with a positive performance (+0.57%, with a differential of 0.86 percentage points compared to the expected return).

Table 5 shows the data analysed with respect to the index date of 5 May.

Table 5 – Analysis of returns (1, 5, 10 and 21 days) e Expected return of investment – May, 5. Percentage variations

MAY, 5		E(Ri)	1day	5days	10days	21days
	FTSE ALL-SHARE	-0,13	2,06	0,41	0,23	0,53
	MONCLER	0,06	-4,31	-0,87	-0,97	-0,04
	TOD'S	0,04	-0,58	-1,02	-1,17	-0,52
	FERRAGAMO	-0,29	-3,9	-0,58	-0,78	0,57
	AEFFE	-1,87	0,84	0,95	2,18	2,27
	ZUCCHI	0,31	-4,88	-0,65	-1,27	-0,5
	PIQUADRO	-0,01	3,25	0,23	0,23	0,33

Source: Personal Draft

Compared to the first lockdown, the second phase of restrictions in autumn 2020-spring 2021 had less of an impact on stock prices and the stock market. The data do not show any significant elements in terms of direction, magnitude or intensity that would indicate an overreaction by the markets. The returns recorded on the observation days with the index on 31 March 2020 are all lower than the expected return, with the sole exception of Aeffe, which opened on 31 March with a +1.52% gain but quickly showed the effect of negative feedback, turning negative on the tenth day (-0.06%) and closing the observation

period at -0.76%. Although the observations on the 21st day are all negative (except for Moncler, which shows +0.01%), the data do not seem to indicate any particular sensitivity of the market in general and of fashion stocks in particular to the dynamics of the restrictions linked to the fight against the pandemic (Table 6):

Table 6 – Analysis of returns (1, 5, 10 and 21 days) e Expected return of investment – September, 30. Percentage variations

SEPTEMBER, 30		E(Ri)	1day	5days	10days	21days
	FTSE ALL-SHARE	0,11	-0,24	0,39	0,26	-0,29
	MONCLER	0,08	-0,2	0,78	0,49	0,01
	TOD'S	0,19	-0,64	-0,35	-0,89	-1,17
	FERRAGAMO	0,18	-0,63	0,41	0,49	-0,51
	AEFFE	-0,15	1,52	0,33	-0,06	-0,76
	ZUCCHI	-0,13	-0,05	0,47	0,48	-0,01
	PIQUADRO	-0,08	-2,92	-0,57	-0,47	-0,62

Source: Personal Draft

The data is also similar overall with regard to the announcement of the end of the pandemic emergency, scheduled for 31 March 2021. Here too, the distribution of measurements appears to be largely unresponsive to this event, and the results suggest that performance is the result of endogenous market dynamics. The data for Tod's (the only company showing a positive feedback to an initial overreaction, going from -2.59% on day 1 to +1.6% on day 21 of observation) must also be linked to internal company circumstances (on 31 March 2021, documents were filed in preparation for the Shareholders' Meeting). The data are summarised in Table 7.

Table 7 – Analysis of returns (1, 5, 10 and 21 days) e Expected return of investment – March, 31. Percentage variations

MARCH, 31		E(Ri)	1day	5days	10days	21days
	FTSE ALL-SHARE	0,21	0,05	-0,05	-0,04	-0,09
	MONCLER	0,29	-0,69	0,48	0,26	0,19
	TOD'S	0,12	-2,59	0,13	2,18	1,6
	FERRAGAMO	0,24	-1,03	-0,34	0,66	0,37
	AEFFE	0,23	0	0,01	0,11	0,58
	ZUCCHI	0,41	-0,44	-0,45	-0,14	-0,25
	PIQUADRO	0,33	1,03	-0,83	-0,14	-0,2

Source: Personal Draft (percentages)

In our analysis, we did not limit ourselves to verifying the averages and position indices of the percentage deviations in the share prices of the companies in the sample. An additional dimension taken into consideration is that relating to the value of trades and their performance over time. During the periods under consideration, we assessed how much the shares of individual companies were traded, comparing the value with that of the FTSE All-Share. From a financial point of view, a significant increase in volume is a predictor of a change (positive or negative) in the share price. Table 8 summarises the values considered in the periods indicated:

Table 8 – Trading volumes

TRADING VOLUMES	FTSE ALL SHARE	MONCLER	TOD'S	SALVATORE FERRAGAMO	AEFFE	ZUCCHI	PIQUADRO
From 1/1/2018 to 29/11/2019	435,75	1156,8	66,33	560,93	299,92	11,77	41,98
From 1/1/2019 to 29/11/2019	424,94	990,89	74,8	573,18	292,63	12,42	52,81
From 1/12/2019 to 9/3/2020	458,92	1484,57	80,65	676,4	491,04	42,49	43,21
From 10/3/2020 to 4/5/2020	694,54	1386,74	82,55	756,63	254,52	14,37	28,25
From 5/5/2020 to 30/9/2020	458,03	825,95	83,66	746,56	224,65	13,91	15,54
From 1/10/2020 to 31/3/2021	487,56	816,12	101,57	436,22	297,86	33,47	44,28
From 1/4/2021 to 31/3/2022	446,67	685	153,08	474,65	389,06	17,6	28,11

Source: Personal Draft

As shown, all companies experienced an increase in trading in the two periods covering the period prior to the health crisis, when the first signs of uncertainty appeared, and the full lockdown, with the consequent increase in uncertainty. The reason for this increase is linked to the uncertainty caused by news about the pandemic and then the closures.

The average percentage changes in stock price differentials and trading volumes only offer a partial view of the phenomenon. This information does not provide any insight into volatility: we therefore considered it appropriate to measure this dimension using variance and standard deviation, in order to highlight the effect of the pandemic on stock volatility by comparing their behaviour with pre- and post-pandemic trends.

As regards market volatility, measured on the basis of a comparison with the FTSE All-Share index, there was an increase in percentage changes in the period prior to the

outbreak of the pandemic (December 2019-March 2020); this increase peaked (4.40%) during the pandemic period: This indicates a sharp rise in market volatility, consistent with the overreaction patterns we have already highlighted. As regards stock performance, the increase in the variance of returns is confirmed across the entire fashion and clothing sector, regardless of company capitalisation (Table 9).

Table 9 – Statistical variance and standard deviation. Prices (in percentage)

VARIAZIONE	FTSE ALL SHARE		MONCLER		TOD'S		SALVATORE FERRAGAMO		AEFFE		ZUCCHI		PIQUADRO	
	Varianza	Dev. Std	Varianza	Dev. Std	Varianza	Dev. Std	Varianza	Dev. Std	Varianza	Dev. Std	Varianza	Dev. Std	Varianza	Dev. Std
From 1/1/2018 to 29/11/2019	1,11	1,05	4,02	2	3,48	1,86	3,06	1,75	5,79	2,4	7,77	2,78	3,04	1,74
From 1/1/2019 to 29/11/2019	0,86	0,93	3,84	1,96	2,79	1,67	3,12	1,76	6,33	2,51	5,61	2,39	2,85	1,69
From 1/12/2019 to 9/3/2020	1,9	1,37	3,94	1,98	5,15	2,27	5	2,23	7,74	2,78	12,61	3,55	4,29	2,055
From 10/3/2020 to 4/5/2020	19,35	4,4	25,74	5,07	19,81	4,45	23,42	4,83	24,99	4,99	27,17	5,21	23,71	5,04
From 5/5/2020 to 30/9/2020	2,24	1,49	4,23	2,05	5,34	2,31	9,84	3,31	6,6	2,57	5,08	2,23	3,87	1,96
From 1/10/2020 to 31/3/2021	1,43	1,19	3,91	1,97	6,66	2,58	5,49	2,34	8,47	2,91	6,39	2,53	3,9	1,97
From 1/4/2021 to 31/3/2022	1,72	1,31	4,27	2,06	11,17	3,43	5,08	2,25	9,63	3,1	7,88	2,8	2,83	1,68

Source: Personal draft

In terms of trading volumes, however, it can be seen that larger-cap stocks increased significantly during the lockdown, while smaller-cap stocks decreased (Table 10).

Table 10 – Statistical variance and standard deviation. Trading volumes

VOLUMI	FTSE ALL SHARE		MONCLER		TOD'S		SALVATORE FERRAGAMO		AEFFE		ZUCCHI		PIQUADRO	
	Varianza	Dev. Std	Varianza	Dev. Std	Varianza	Dev. Std	Varianza	Dev. Std	Varianza	Dev. Std	Varianza	Dev. Std	Varianza	Dev. Std
From 1/1/2018 to 29/11/2019	14524,77	120,51	969949,5	984,86	4494,36	70,31	163150,7	403,91	97421,6	312,12	1088,63	32,99	3177,56	55,83
From 1/1/2019 to 29/11/2019	11027,49	105,01	283157,6	532,12	5859,67	76,54	193266,1	439,62	88686,5	297,8	31,7	2,39	4436,95	66,61
From 1/12/2019 to 9/3/2020	38511,09	196,24	1010370	1005,72	4071,48	63,8	195626,1	442,29	105389	324,63	7102,18	84,27	1707,01	41,31
From 10/3/2020 to 4/5/2020	97352,43	312,01	995380,9	997,68	5317,43	72,92	292972	541,26	35885,7	189,43	192,11	13,86	527,65	5,04
From 5/5/2020 to 30/9/2020	26615,56	163,14	95857,52	309,6	3081,52	55,51	318699,6	564,53	102917	320,8	189,5	13,76	1361,29	36,89
From 1/10/2020 to 31/3/2021	24226,64	155,64	106955,8	327,04	8567,21	92,55	105479,5	324,76	277421	497,41	1706,12	41,3	3195,63	56,52
From 1/4/2021 to 31/3/2022	51819,11	227,63	109848,5	331,43	18960,9	137,69	130408,9	361,12	137049	370,2	3133,45	55,97	1629,64	40,33

Source: Personal draft

This trend allows us to make some observations regarding the variance in trading during the pandemic. This factor is an indicator for interpreting investor behaviour and signals a difference between companies with higher and lower capitalisation. The increase in variance is a consequence of the uncertainty that arose during the pandemic, which led to disagreement among investors: many experienced the period of uncertainty fearing negative consequences and therefore sold their shares to those who were more confident about a market recovery. The difference between larger and smaller companies reflects a

cognitive bias among investors: they tend to believe that larger, more solid and better capitalised companies will perform better than smaller ones. This belief is linked to the idea that large companies have the internal resources, organisation and market differentiation to weather a crisis better than smaller ones. As a result, demand from more confident investors has focused on larger-cap stocks, while smaller-cap stocks have been less in demand, particularly at the peak of the crisis.

In any case, the period following the peak of the pandemic crisis and the return to normalisation signals a return of the variance in percentage changes and volumes to levels comparable to those of the pre-pandemic period. The increase in volume variance during the pandemic is a sign of market stress. Large-cap companies experienced a marked but manageable increase, while small-caps showed less regular and more vulnerable volume volatility, consistent with less liquid market models. Table 11 summarises the main differences between the two clusters of companies.

Table 11 – Differences between Big and Small Cap

Characteristic	Big Cap	Small Cap
Average exchanges	High	Low
Increased variance in pandemic	Very strong, but limited	Variable, often erratic
Return to post-crisis normality	Fast	Slower or instable
Explanation	Institutional flows, resilience in business models	Low liquidity, difficulties in changing business model

Source: Personal draft

3.3 Correlation between prices and volume fluctuation

These considerations lead us to evaluate a further model, relating to the correlation between trading volumes and percentage changes. From a financial point of view, an increase in volume could be associated with a significant change in price (either positive or negative). The working hypothesis suggests that a positive correlation implies higher price changes associated with higher volumes. The presence of a negative correlation could be associated with an increase in volumes during stock declines, implying the phenomenon of panic selling.

Table 12 summarises the calculation equations and R2 values:

Table 12 – Correlation between prices (in percentage) and trading volumes: R^2 value

	FTSE ALL SHARE		MONCLER		TOD'S		SALVATORE FERRAGAMO		AEFFE		ZUCCHI		PIQUADRO	
	Formula	R2	Formula	R2	Formula	R2	Formula	R2	Formula	R2	Formula	R2	Formula	R2
From 1/1/2018 to 29/11/2019	$y=-0,0009x-0,3942$	0,009	$y=-0,0001x-0,0463$	0,004	$y=0,0056x-0,469$	0,03	$y=0,0007x-0,398$	0,023	$y=-0,0014x-0,4041$	0,031	$y=-0,0103x-0,1577$	0,015	$y=0,0053x-0,1612$	0,028
From 1/1/2019 to 29/11/2019	$y=-0,0003x-0,2425$	0,001	$y=0,0008x-0,5937$	0,041	$y=-0,0044x-0,313$	0,04	$y=0,0011x-0,6056$	0,075	$y=-0,0014x-0,4501$	0,026	$y=0,0047x-0,0615$	0,004	$y=0,0053x-0,1532$	0,043
From 1/12/2019 to 9/3/2020	$y=-0,0033x-1,4046$	0,225	$y=0,0004x-0,8447$	0,049	$y=-0,0093x-0,2438$	0,068	$y=1e-05x-0,4904$	6,00E-06	$y=-0,0011x-1,234$	0,018	$y=0,0063x-0,6479$	0,0224	$y=0,0061x-0,2798$	0,015
From 10/3/2020 to 4/5/2020	$y=-0,0046x-2,3076$	0,108	$y=-8e-05x-0,1708$	0	$y=0,0094x-0,7381$	0,0236	$y=0,0001x-0,2066$	0	$y=-0,0081x-1,8844$	0,093	$y=0,0611x-0,1217$	0,0264	$y=0,0151x-0,687$	0,004
From 5/5/2020 to 30/9/2020	$y=0,0003x-0,0617$	0,001	$y=0,005x-0,3712$	0,006	$y=0,008x-0,7366$	0,0368	$y=0,0023x-1,578$	0,178	$y=-0,0019x-0,5784$	0,056	$y=0,00204x-0,3674$	0,0158	$y=0,0209x-0,5335$	0,152
From 1/10/2020 to 31/3/2021	$y=0,0017x-0,6206$	0,049	$y=0,0017x-1,1011$	0,077	$y=0,0159x-1,4943$	0,324	$y=0,0034x-1,261$	0,2293	$y=0,0031x-0,6922$	0,276	$y=0,0298x-0,5783$	0,237	$y=0,0105x-0,0267$	0,09
From 1/4/2021 to 31/3/2022	$y=0,0009x-0,4295$	0,026	$y=-0,0013x-0,9542$	0,046	$y=0,0059x-0,5573$	0,017	$y=-0,0037x-1,1989$	0,001	$y=0,0103x-0,1577$	0,199	$y=0,0241x-0,3913$	0,231	$y=-0,0013x-0,0406$	0,0001

Source: Personal Draft

As regards the target market, the data show a rather low coefficient of determination (between 0.009 and 0.001), highlighting a weak relationship between price changes and volumes, underscoring a market that is, all things considered, in equilibrium. This situation changed in the run-up to the pandemic crisis (December 2019-March 2020), when R^2 showed a stronger correlation between trading volumes and percentage changes, suggesting that volumes were highly responsive to price movements. This is an indicator of how investors reacted to growing fears and the first news of the pandemic, showing increasing concern. In the middle of the pandemic, R^2 fell slightly (0.108), showing overall market stabilisation. This is consistent with what we have seen in the 1-, 5-, 10- and 21-day average returns relative to expected returns. From May 2020 onwards, trading became less sensitive to prices, signalling a return to stability or even a certain habituation to pandemic risk.

Looking at individual stocks, the trend has different effects depending on the capitalisation of the companies. During the most acute phase of the crisis, these stocks were more stable; if anything, it should be noted that Tod's and Ferragamo achieved higher values of correlation between trading and percentage price changes in the post-pandemic period (R^2 values of 0.229 and 0.324 respectively), a sign of greater investor attention and a certain speculative or opportunistic return linked to price dynamics, which attracted new demand. The Aeffe stock ($R^2=0.276$ in 2020-21) was also subject to this post-pandemic speculative movement. Other small-cap stocks are the most exposed to market reactions in the post-pandemic period: here too, the data is consistent with what emerged in the dynamics of the relationship between actual and expected returns.

The R^2 analysis clearly shows the effect of the pandemic on the elasticity of volumes relative to prices: in times of crisis and rebound, the price-volume relationship

strengthens. Larger-cap stocks show more subdued reactivity, a sign of greater stability and consideration on the part of investors. Post-pandemic speculation and opportunistic behaviour particularly affect small caps, which are more exposed to stock volatility.

3.4 After the pandemic: back to the past or a “new normal”?

The COVID-19 pandemic has been a systemic event of extraordinary magnitude, capable of disrupting both socio-economic dynamics and established behavioural patterns. As shown by the data analysed, the fashion industry – heavily dependent on international mobility, globalised supply chains and symbolic and identity-based consumption – has suddenly found itself exposed to an unprecedented stress test. The pandemic crisis was not just a temporary interruption, but acted as a catalyst and accelerator of latent transformations. In this context, the central question becomes: after the pandemic, have we witnessed a return to the old or the emergence of a “new normal”?

Analysis of the FTSE All-Share index and the main fashion stocks (Moncler, Ferragamo, Tod's, Piquadro, Aeffe, Zucchi) shows that the announcement of the lockdown in March 2020 generated an initial strongly negative reaction, followed by an attempt at recovery, which, however, varied in intensity and duration from stock to stock. The dynamics observed – including directional effect, magnitude and intensity – reveal the complex interaction between exogenous news and market expectations, suggesting that investor behaviour is not always rational, but often influenced by cognitive and emotional biases. The effect of *overreaction*, theorised by numerous studies and observed specifically for stocks such as Piquadro and Aeffe, highlighted how investor psychology can amplify market fluctuations, especially in contexts of extreme uncertainty. In this sense, the pandemic acted as a multiplier of insecurity, generating widespread volatility, especially in the early stages. The subsequent reopening phase brought mixed signals: for some companies, such as Moncler, the recovery was vigorous; for others, such as Aeffe and Zucchi, it was slower and more uncertain. This highlights that, although the crisis had a widespread impact, it affected companies differently depending on the strength of their business model, capital structure and capacity for innovation.

A key theme that emerged from the study is the varying ability of companies to react. The return to “normality” – understood as simply restoring pre-pandemic conditions – proved, in most cases, not only impossible but also counterproductive. Those companies that were

able to see the crisis as an opportunity to innovate were the same ones that recorded the fastest and most solid recoveries. Moncler, for example, responded with a decisive omnichannel strategy, internalising e-commerce and ensuring a seamless experience between physical and digital. The approach combined technological transformation and customer centricity, confirming the company's ability to act ahead of the market. Ferragamo also rose to the challenge with determination, investing in digitalisation, virtual showrooms, artificial intelligence and integrated logistics, making the customer experience a competitive asset.

On the other hand, companies such as Aeffe and Zucchi, despite having embarked on digitalisation processes, showed signs of greater structural fragility, highlighting organisational delays and less flexibility. The financial results speak for themselves: 2020 was a terrible year for all the companies in the sample, but in the following two years, only a few were able to turn the crisis into strategic momentum. For these companies, the “new normal” was not a passive adaptation, but an active and conscious paradigm shift. These phenomena were also observable in the volatility of trading volumes, which showed a significant correlation with percentage price changes at key moments of the crisis. Larger companies, considered more solid and resilient, attracted a significant share of demand, while small caps were more vulnerable and less liquid. The result is a “selective return” to confidence, reflecting a redefinition of risk hierarchies by investors. A comparative analysis of the pre-, during and post-pandemic periods suggests that the system has not returned exactly to how it was. Average returns and volatility, new business models, the forced digitalisation of sales channels and the redefinition of customer relationships are signs of a deeper transformation that goes beyond the emergency situation. The pandemic has forced companies to equip themselves with structural antibodies – organisational, technological and cultural – to cope with a less predictable world.

A return to the old ways, as the fashion industry was structured, not only seems unlikely but also undesirable. The crisis has exposed the vulnerabilities of a system that is overly dependent on rigid seasonal cycles, globalised production and excessive physical consumption. The “new normal” is based on flexibility, sustainability, digitalisation and customer centricity. Companies that embrace this perspective now have a greater competitive edge and a more solid position in the financial markets.

The pandemic has not been a mere “hiccup” but has opened up an epoch-making crossroads. As the case of the fashion industry analysed in the document shows, a return to the past is neither possible nor desirable. Companies that have had the courage to innovate, rethink themselves and experiment with new models are now better equipped to face an uncertain future.

CONCLUSIONS

The COVID-19 pandemic has been a watershed event for the global economic and manufacturing system. The Italian fashion industry, one of the sectors that symbolises Italian manufacturing, has suffered an unprecedented impact. This thesis seeks to investigate not only the effects of the health crisis on the economic and financial performance of companies in the sector, but also the trajectories of reaction, adaptation and transformation that have emerged. The work was developed on two levels. On the one hand, a quantitative analysis was conducted on six listed Italian companies – three large caps (Moncler, Ferragamo, Tod's) and three small caps (Aeffe, Piquadro, Zucchi) – with the aim of measuring their stock market and accounting performance in the three-year period 2019–2022. On the other hand, a theoretical and interpretative reflection was developed on the structural evolution of the fashion sector in the post-pandemic period, based on changes in consumer behaviour, the technologies adopted and market dynamics.

The analysis reveals several significant findings. First, all the companies considered experienced a dramatic decline in revenues and profitability in 2020, with a partial recovery in the following two years. However, this recovery was neither uniform nor automatic. Companies that were able to react quickly through digitalisation strategies, brand strengthening and a focus on sustainability showed signs of greater resilience. Moncler, for example, recorded a faster and more consistent recovery than other players in the sample, thanks to effective management of digital channels and a communication policy consistent with new consumer values. A second finding concerns the role of company size. The large caps analysed showed greater financial strength and less volatility than small caps. The latter, despite evident efforts to adapt, proved more exposed to market pressure and the contraction in consumption. The difficulties faced by smaller companies can be attributed, at least in part, to less structured decision-making processes, low capitalisation and a delay in adopting technological solutions. This suggests that fashion SMEs need to strengthen their management and innovation capabilities and build networks and consortia capable of increasing critical mass and operational efficiency. From a financial perspective, analysis of market reactions

confirmed the presence of overreaction at key moments of the crisis. In particular, the announcement of the lockdown in March 2020 led to sharp falls in share prices, followed by equally rapid rebounds, often not justified by changes in economic fundamentals. This investor behaviour can be explained by behavioural finance models, which highlight the role of cognitive biases – such as herd behaviour, negative framing and panic selling – in times of high uncertainty. The volatility observed was significantly higher in small caps, indicating a perception of greater risk on the part of the market. However, the most interesting conclusions emerge at the strategic level. The pandemic has not only accelerated existing trends – such as the growth of e-commerce, sustainability and the digitalisation of the supply chain – but has also forced a profound rethink of the fashion industry's development model. The crisis has exposed the limitations of fast fashion, which is based on planned obsolescence, offshore production and low environmental standards. On the contrary, it has rewarded those brands capable of conveying an identity, enhancing their manufacturing heritage and building authentic relationships with consumers. In this context, Italy – with its tradition of craftsmanship, quality materials and widespread creativity – can carve out a leading role in “slow”, circular and conscious fashion. The policy implications are manifold. Firstly, there is a clear need to support the digital transition of SMEs in the sector through tax incentives, training and investment in infrastructure. Secondly, the adoption of ESG (Environmental, Social, Governance) practices should be encouraged, not only to respond to growing consumer demand for sustainability, but also to access forms of subsidised financing and improve corporate reputation. Thirdly, it is desirable to strengthen networks between businesses, universities, research centres and institutions in order to create an innovation ecosystem in fashion that encourages experimentation, internationalisation and competitiveness. The results highlight that resilience is not only a question of scale or structure, but also – and above all – of strategic vision, openness to change and the ability to identify new social and cultural trends. In this sense, companies that have been able to innovate, communicate and reorient their values are those that have weathered the crisis best and appear best prepared to face future challenges. The analysis of the data offered some original insights, which can be summarised as follows:

- a) **Generalised contraction in performance in 2020.** All the companies considered experienced a significant reduction in turnover and profits in 2020. The data show

that Tod's saw its turnover fall from over €916 million in 2019 to €637 million in 2020 (–30.4%); Ferragamo recorded a 33% decline, from €1,377 million to €916 million; Piquadro lost about 25% of its revenues, from €152 million to €116 million; Moncler, while remaining the top performer in the sample, also suffered a contraction of around 11% in turnover. This contraction was also reflected in margins: in all cases, there was a decline in EBIT and net profit, often accompanied by a worsening of debt.

- b) **Uneven recovery in the following two years.** In 2021 and 2022, there was a rebound in revenues, but with varying intensity: Moncler recovered and exceeded pre-pandemic levels as early as 2021, reaching 2,046 million in turnover in 2022; Tod's recovered some of the ground lost, but without returning to 2019 levels, closing 2022 with €1.007 billion (+58% compared to 2020, but still below 2019 values); Small caps, in particular Zucchi, remained far from pre-crisis values, recording much slower and more uncertain growth.
- c) **Significant differences in stock market performance.** Market reactions were equally mixed. Analysis of price changes at key moments (March 2020, May 2020, October 2020, March 2021) shows that:
 - i. Small-cap stocks experienced greater volatility, with daily changes of up to -12% in the days immediately following the announcement of lockdowns.
 - ii. Large-cap stocks showed greater relative stability, despite being affected by the same shocks, with smaller declines and faster rebounds.

Analysis of average returns and standard deviations showed that Moncler achieved a positive average annual return as early as 2021 (+8.3%), compared with negative values for Zucchi (-4.7%) and Piquadro (-3.2%) over the same period.

- d) **Correlation between digitalisation and resilience.** Companies that have implemented advanced digitalisation strategies (Moncler, Ferragamo, Tod's) have achieved more robust results in the medium term, both in terms of revenues and share performance. These companies have
 - i. internalised e-commerce;
 - ii. developed omnichannel experiences;

- iii. used tools such as augmented reality, virtual showrooms and live shopping.

Conversely, more traditional companies (Zucchi, Aeffe) have responded more slowly and in a fragmented manner, reaping fewer benefits from the market recovery.

The comparison between large and small caps highlighted a growing gap between large and small companies in terms of financial capacity (cash availability, access to credit); technological capacity (adoption of advanced solutions); and communication capacity (branding, social media, storytelling). This gap is not only dimensional, but also cultural and strategic. Small caps need specific support (infrastructure, training, aggregation) to avoid remaining marginalised or crushed by large players. Based on these results, a number of recommendations can be formulated that have policy implications for institutions and key players in the sector. In particular, it emerges that institutions can play a key role in supporting the recovery and transition of the fashion sector. The main lines of action include:

Incentives for digitalisation, including vouchers, tax credits and specialist advice;

- Subsidised financing for investments in sustainability, including those linked to the objectives of the European Green Deal;
- Support for training and upskilling of fashion workers (omnichannel models, digital supply chains, use of data);
- Promotion of digital fashion networks and districts that can foster collaboration, co-design and innovation.

With regard to the research questions, the thesis highlighted how Italian companies in the fashion sector reacted to the pandemic crisis in different ways, reflecting varying levels of preparedness, adaptability and availability of resources. All the companies analysed experienced a significant decline in revenues in 2020, but the speed and effectiveness of the recovery in the following two years were correlated with the presence of pre-existing digitalisation and brand management strategies. Companies that had already embarked on digital transformation, established e-commerce channels and built a distinctive identity were able not only to limit their losses but also to strengthen their competitive position.

Conversely, less innovative and less structured companies showed a slower recovery, highlighting greater exposure to systemic risks and a lower ability to respond to changing demand (RQ1).

The strategies that proved most effective in mitigating the impact of the crisis and supporting the recovery were those focused on digitalisation, sustainability and enhancing customer relationships. In particular, the adoption of integrated omnichannel models, the strengthening of online presence, the use of innovative tools (virtual showrooms, live streaming) and the ability to communicate ethical and environmental values have had positive effects in terms of both economic and financial performance and reputation. Companies that have been able to convey consistency between their products, corporate mission and post-pandemic consumer expectations have been rewarded by the market. Furthermore, investment in human capital and organisational flexibility has strengthened internal resilience, making the response to operational and logistical disruptions generated by the crisis more effective (RQ2).

Finally, company size has had a significant influence on resilience and investor perception. Large caps benefited from greater availability of financial resources, greater media visibility and better internal organisation, which enabled them to react more quickly to the shock and maintain relative stock market stability. In addition, strategic communication and financial strength helped to reinforce their attractiveness to investors, reducing the impact of volatility and speculative behaviour. Small caps, on the other hand, showed greater fragility, both operationally and financially, experiencing more pronounced price fluctuations and a slower recovery. These differences suggest that post-crisis resilience does not depend solely on the strategies adopted, but also on the structure and systemic capacity of the company to cope with highly uncertain scenarios (RQ3).

From an academic point of view, the thesis contributes to the literature on business crisis and resilience in at least three ways. First, it shows that resilience is not an abstract quality but a concrete and measurable capacity linked to organisational, technological and cultural factors. It should be built before the crisis by increasing investment in innovation, diversification and human capital development. A second significant aspect highlighted how crises, even when destructive, can be an opportunity for learning and strategic redefinition. Finally, it emerges that investor perception does not always follow rational

logic but is influenced by expectations, emotions and cognitive biases (e.g. overreaction, herding, confirmation bias).

Looking ahead, the fashion industry is at a crossroads. On the one hand, it can try to return to pre-pandemic volumes and margins, ignoring the lessons learned. On the other hand, it can decisively embark on the path of transformation, focusing on quality, innovation and responsibility. The second option appears not only more ethical, but also more sustainable from an economic point of view. Consumers, especially the younger generations, demand consistency, authenticity and transparency. Companies that can meet these expectations will not only have a competitive advantage but also greater social legitimacy. The thesis proposed a replicable analysis methodology based on the integrated analysis of financial data and market behaviour, which is also useful for other industrial sectors. However, the work is not without its limitations. Although representative, the sample considered is small; the analysis focuses on the Italian market and does not include unlisted companies, which nevertheless constitute the majority of the sector. Furthermore, the time frame – limited to the two years following the pandemic – does not allow for the long-term effects to be captured. Further research could extend the survey to a longer time frame, include qualitative indicators (e.g., brand perception, product innovation) and compare the Italian case with other national or sectoral contexts.

On the other hand, the analysis of the overreaction of listed shares proved to be a stimulating area of analysis: in this case, the data showed that market reactions (whether negative or positive) were mainly concentrated in the days immediately following the systemic shock (represented by lockdowns or reopenings). This confirms what has been reported in the literature, namely that the feedback mechanism of share prices mainly develops in the short or very short term, showing a correlation with the directional, magnitude and intensity effects of price changes.

The pandemic crisis has had a disruptive effect on the fashion industry, but it has also accelerated a series of transformations that were already underway. Companies that were able to read these signs and act consistently, with vision and speed, have emerged stronger. Others have been hit hard, revealing pre-existing weaknesses. The future of the fashion industry will depend on its ability to reconcile tradition and innovation, craftsmanship and technology, creativity and responsibility. In this scenario, the Italian

fashion system still has many strings to its bow, but it will need to renew its business models, invest in human capital and respond with courage and clarity to the new demands of the market and society.

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