#### Chapter 1

## Sustainable Stock Exchanges and Borsa İstanbul 8

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#### Abstract

Integrating into the new world order change is possible not only by finding a way through the economic and financial conditions of the day and the crises that can be seen one after another, but also by providing a long-term concrete, positive change in terms of the ecological system. Solving the economic and environmental problems we face today; Finding ways to transform it into science-based policies and business strategies will be important in eliminating problems that may occur in the future. Today, deep transformations have begun to occur in the functioning of capital markets. In order to solve the current and upcoming problems in the markets, it is necessary to act quickly and achieve radical change. Doing sustainable business in the markets is critical and inevitable. Sustainability means taking the right positions that are required by the conditions of the day. Stock markets are important elements that play a proactive role in increasing growth, development and welfare in countries. Stock exchanges, which have thousands of years of history, today position themselves as sustainable ways of doing business and by protecting the environment without harming nature. Thus, sustainable finance is supported. While working with their stakeholders in the markets, exchanges have an intellectual portfolio consisting of market regulators, market participants, standard setters and subject matter experts. The increase in the number of investors sensitive to social responsibility and sustainability activities and the environmentally friendly expectations of investors all over the world has increased awareness among both companies and regulators. In this study; The contributions of the sustainability and social responsibilities of stock exchanges to the economic and socio-political stability of the society and the studies on this subject have been investigated. In this context, Borsa İstanbul was evaluated along with other stock exchanges in the world. Borsa Istanbul provides services to companies and investors by taking corporate responsibilities in the sustainable development process.

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#### 1. Introduction

Although companies that adopted the goal of only making profits under the mask of our old way of doing business and the free market economy and ignored social, environmental and moral values for this purpose, achieved profit maximization for a while, their aim is no longer only to make profits, but also to fulfill their social and environmental responsibilities. has begun to take its place among the priorities of companies. This change has also changed investors' expectations. However, approaches to sustainability need to be incorporated into not only a company's business strategy but also its corporate culture. It is equally important to ensure that all employees embrace sustainability by making sustainability a part of the company's mission and values. Companies that move away from sustainability goals are not limited to their environmental costs; they pose a great danger not only to the environment but also to the society and the world in which they live. After the dangers affecting the whole world, especially the financial crises that have rapid contagion effects, it has become clear that unsustainability and old business models are serious threats to humanity. The new process is now a priority for organizations such as the World Bank, The International Monetary Fund, The World Federation of Exchanges, and The Organization for Economic Development and Cooperation to operate companies that are sensitive to people and the environment we live in.

Today, international capital markets, institutions and stock exchanges; It is a common view that they have responsibilities such as guiding companies on environmental, social and financial issues and conveying the sustainability policies implemented by these companies to investors. Organizations and stock exchanges that take an active role in the capital market take initiatives for environmental protection and sustainability by carrying out various studies to raise awareness on environmental, social and financial management issues. In addition, many stock exchanges in the world; With the initiatives of The World Federation of Exchanges (WFE), The United Nations Global Compact (UNGC), The Sustainable Stock Exchanges Initiative (SSE) and The United Nations Principles of Responsible Investment (UNPRI). Together they act together on sustainability.

As corporate sustainability and social responsibility issues began to take place among the priorities of the capital markets, this issue started to have an important place in the agenda of Borsa İstanbul. However, first of all, if we look at the progress regarding environmental and climate change awareness in Turkey; Studies on the subject started in the last quarter of the 20th century. In this context, The Undersecretariat for Environment was established within

the Prime Ministry in 1978 in order to carry out national and international studies on the environment. Thus, environmental awareness began to take place in state policy. At the Johannesburg Summit held in 2002, Türkiye presented a national sustainable development report. In addition to ministry and public institution employees, representatives from non-governmental organizations and the private sector took part in the preparation of this report. The report also included the topics of combating climate change, protecting Turkey's environmental and socio-economic situation, as well as industrial and biological diversity (Ozmehmet, 2008: 1861). Turkey's target in carbon emissions by 2030 is to reduce up to 21 percent. Within the scope of COP 26 held in Glasgow in 2021, countries were called to accelerate their efforts to update their national contribution declarations. Based on this, Turkey started to update the Intended Nationally Determined Contribution (INDC) declaration it submitted in 2015. These update studies are carried out in cooperation with the Ministry of Environment, Urbanization and Climate Change and the United Nations Development Program (UNDP) (Murat, 2023: 2).

Borsa İstanbul transforms the long-term business model of companies with its sustainability activities and contributes to increasing the value of companies in the long term. Accordingly, the stock market contributes to the environment and society. Borsa İstanbul joined the United Nations Global Compact initiative on October 26, 2005, and the United Nations Principles for Responsible Investment (UNPRI) in 2010. In 2012, Borsa İstanbul became one of the leading stock exchanges committed to contributing to long-term sustainable investments in capital markets by participating in the Sustainabile Stock Exchanges Initiative 2012 Global Dialogue. The Sustainability Platform was established at Borsa İstanbul in 2013. The Sustainability Guide was prepared in 2014 to inform investors and companies. This date has been one of the milestones for Borsa İstanbul. With the BIST Sustainability 25 Index, which started to be published as of November 21, 2022, an index consisting of large and liquid companies with high sustainability performance has been created.

In the study, Borsa İstanbul and other stock exchanges; It draws attention to the importance of using methods and financial instruments that can reduce the pressure on financial markets and investors due to the problems arising from climate change and environmental risks caused by global warming. In addition, the sustainability index in stock market transactions, the actions that companies need to take on economic, social and environmental issues and the criteria for the commitments made on these issues also constitute the subject of the study. It was clearly seen in the study that; It is seen that stock exchanges have an active role in the creation and dissemination processes of sustainability awareness in capital markets and that they lead both companies and investors in the sustainability process, whether national or international.

## 2. Literature Research

In the recent past, many studies have been conducted on the development, responsibilities and duties of stock exchanges and capital markets. Most of these studies are naturally on the effects of stock markets on countries and societies. However, the issue of sustainability in stock markets and capital markets was not seriously questioned until approximately the beginning of the 21st century. Although early examples of studies conducted in this context were seen in 1990, the actual studies began intensively after the 2008 world economic crisis. Some of these studies are as follows:

In this study, Daly (1990) evaluated sustainable development with its theoretical dimensions and emphasized that it is the most important conceptual problem we need to solve when thinking about economic development and the environment in the next decade

Schulze (2008) emphasized in this study the importance of encouraging the development of sustainable and cooperative banks. In this study, Sivalingam (2008) concluded that unsustainable small and medium-sized companies have low performance, using the efficient market hypothesis and the Kuala Lumpur Stock Exchange example. In their study, Moneva & Ortas (2008) examined whether the stock markets of European companies were affected by the issue of sustainability. They concluded that sustainability has a positive impact on the share value of the stock market index. Cahaya et al. (2008) included in their study the social disclosure practices of organizations traded on the Jakarta Stock Exchange. They also emphasized that company size has a positive importance and that disclosures made in transparency have an impact on performance. In their study, Royal & O'Donnell (2008) analyzed the intangible aspects of publicly traded companies on global stock markets and stated that ecological sustainability and organizations should be redesigned to contribute to a sustainable economy. In their study, Panait & Lupu (2009) drew attention to the response of the Bucharest Stock Exchange during the financial market crisis and its proposal for sustainable development. Siddy (2009) stated in this study that companies whose sustainable investment areas are especially Brazil, India, China and South Africa have shown remarkable developments in the economies. Socially responsible or ethical when creating a portfolio for sustainable investment market elements; to offer specialized green investment strategies in companies, to consider issues such as clean technology, renewable energy, environmental services and health; The issues of using non-traditional financial instruments are mentioned in the study (Siddy, 2009: 3).

Ortas et al. (2010) analyzed sustainable and traditional stock market indices in the Spanish market. They emphasized that it would be appropriate for individual and institutional investors to use non-traditional financial instruments to diversify their portfolios. Ortas et al. (2010) analyzed sustainable and traditional stock market indices in the Spanish market. They emphasized that it would be appropriate for individual and institutional investors to use non-traditional financial instruments to diversify their portfolios. Olowe et al. (2011) emphasized that in the Nigerian stock market, the stock market could not show its full potential and the conditions for fulfilling the sustainability requirement in the long term. Burhan et al. (2012) stated in their research on the Indonesian stock market that sustainability reporting affects company performance. Oberndorfer et al. (2013) analyzed the effects of German companies on the performance of stocks traded in the Dow Jones STOXX Sustainability Index and the Dow Jones Sustainability World Index. As a result, they found that inclusion in the sustainable stock index had negative effects in the examined period range. Hunter (2014). In this research, he evaluated the sustainability reporting of tourism companies listed on the Johannesburg Stock Exchange. He explained that sustainability reporting developed over a four-year period, based on the findings. Hunter also emphasized that these companies examined in the study have a competitive advantage. Orsato et al. (2015) in their study, they examined the stocks traded in the Corporate Sustainability Index of the São Paulo Stock Exchange. The results of the study showed that the companies' efforts to be green were positive and the results supported the literature. In Hartono & Utami (2016) research; They looked at the impact of sustainable growth rates of companies on the current ratio, which is one of the focuses of liquidity ratio, price/earnings ratio and profitability ratio, and examined to what extent it affects the earnings of companies by comparing the companies listed in the Kehati Sri Index and IDX30 Index. Results; In terms of profitability, the return on assets results show that there is a significant difference with the Sri Kehati Index and the IDX30 Index, while the t-test result on the price-earnings ratio concluded that the average price/earnings ratio of both indices is not significantly different. In their study, Vijaya & Reddy (2017) stated that stock exchanges play an important role in achieving sustainable goals and that environmentally conscious investors stand at the center of the competition between companies. In their article, Mohammadi et

al. (2018) evaluated the data of 98 companies in the Tehran Stock Exchange between 2010 and 2015 and stated that improving sustainability disclosure had a positive effect on the market valuation of companies. In their study, Wasara & Ganda (2019) recommended that mining companies listed on the Johannesburg Stock Exchange adopt corporate social disclosures as they will be encouraged to fulfill their social responsibilities and be sustainable, while also providing financial benefits. In their research, Ionita & Dinu (2021) aimed to test the impact of intangible assets on firm value and sustainable growth, while investigating the connection between companies' intellectual capital investments and how they can be transformed into financial value. It has been concluded that sustainability has an impact on performance in companies listed on the Romanian stock exchange. However, it has been concluded that intangible assets classified as research-development (R&D) and Patents do not have a positive impact on companies. Sinha & Sinha (2022) discussed in their study the importance of the roles of stock and bond markets in strengthening green finance. They also determined the increase of the green financial instruments market over the years. Slimane (2023) explained in his study what stock exchanges need to do to achieve their sustainability goals. By analyzing a sample of 85 stock exchanges in the world, it has been determined that all of them contribute to the achievement of the Sustainable Development Goals. In addition, the study emphasized that stock exchange managers play an active role in fulfilling their sustainability commitments and the vital role of stock exchanges in the transition to sustainability.

## 3. Sustainable Stock Exchanges

Historically, stock markets have played an important role in economic growth and development by enabling effective capital formation. However, stock markets over time; They have changed in terms of structure, integration with each other and speed of activity. However, this development took place in an environment where the unsustainability of the economic growth path was increasingly revealed, both socially and environmentally.

As the costs of institutions and investments implemented without cooperation with the environment begin to increase, capital markets have accelerated the adoption of innovative approaches in the context of green finance. Markets in this context; They have tried to combat climate change by switching to an application and investment approach that minimizes carbon emissions (Keskin, 2023: 162). When looking at the stock markets in the context of sustainability; While the existence of entities that do not bear environmental responsibilities in the developing market structure is

the source of the problem, they can also be seen as a potential partner in the solution of this problem. Stock exchanges also enable the development of sustainability indices, ratings and related products that are useful for investors who want to move towards more sustainable investments. However, addressing some of the challenges posed by new market structures is among the duties of stock exchanges. Improving the understanding of the impact of sustainability on the current and developing market structure and basic capital increase and redefining market quality to reflect this connection have made it necessary for stock markets to be among the main topics. In addition, providing environmentally sensitive investors with access to suitable financial instruments and financing environmentally sensitive investments from appropriate sources are among the priority issues of the stock exchanges (Keskin, 2022: 54).

Companies struggle to be competitive in today's dynamic and global markets. In this period, companies direct their resources to issues such as artificial intelligence, innovation, cyber security, R&D and consumer satisfaction. But a priority issue for the success of companies is sustainability. Companies that want to be successful in the long term and remain in harmony with the environment must prioritize sustainability factors. While companies are preparing their growth plans in this direction, information about sustainability has begun to be used more and more in shaping financing decisions.

The level of companies' ability to integrate sustainability studies into their areas of activity is carefully evaluated by investors. However, companies that take sustainability issues into consideration make gains. In addition, companies gain access to financial resources on long-term, cheap and advantageous terms. Regardless of the scale of companies, internalizing their understanding of sustainability and designing their future programs and targets accordingly plays an important role in building a more livable world. Stock exchanges have a duty to improve the perception of sustainability and take part in corporate strategies.

Sustainable stock exchanges; They continue to work to discover how companies can improve their performance and promote sustainability in collaboration with entrepreneurs, investors, companies, regulators, supervisors, policy makers and relevant international organizations.

## 3.1. Sustainability Indices

Reversing the problem of bad progress in climate change is possible by making sustainability management a priority for businesses. The solution to this problem lies in the sustainability efforts of stock exchanges. Sustainability indices listed by stock exchanges are a tool used to measure the sustainability of the company according to environmental and social factors. With a sustainability index, a company provides non-financial data that can tell investors about the importance they place on environmental management and social responsibility. Sustainability indices are not only considered as a measure of risk for investors, but are also increasing in importance day by day as a measure of environmental impact.

The widespread use of green financial instruments, which are developing rapidly, depends on investors creating their portfolios from green financial instruments (Keskin, 2023c: 87). At this stage, stock exchanges have a duty. It is a reality that cannot be ignored that stock markets have sustainable indices.

The historical background of sustainability indices dates back to the last quarter of the 20th century. KLD Research & Analytics, the company that produces the Domini 400 Social Index, indices, started calculating the sustainable index in 1990. This has the distinction of being the first sustainability index. However, investors did not show interest in this index. Nine years after this date, the sustainability indices created by Dow Jones and FTSE in 1999 and 2001 attracted the close attention of both investors and companies. As a result of the success of these sustainable indices, studies on their impact on the corporate performance of companies have begun intensively (Fowler and Hope, 2007: 243). The thirty-year timeline of sustainable indices is shown in Figure 1.

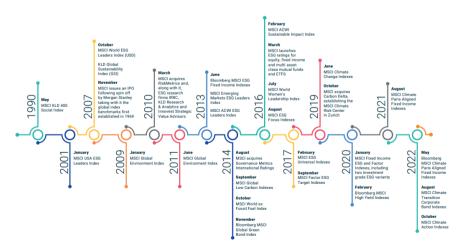


Figure 1: Environmental, Social, and Governance (ESG) and Climate Indexes

Source: MSCI, 2023.

Sustainability indices are used by investors who want to add sustainable investments to their portfolios. This growing interest around the world is partly due to the fact that a business's sustainability performance is a strong and reliable indicator of future performance.

Benefits of a sustainable index to companies; They are very valuable tools for comparing the non-financial performance of the business. Measuring the effectiveness of the business is the first stage of solving problems. Additionally, being listed in a sustainability index enables the company to track progress and make reliable plans for improvement.

Investors of sustainability indices gain information about companies' indicators of future financial performance. This data contains valuable information for investors seeking long-term sustainable portfolios. Along with these, sustainability indices also make business sustainability data publicly available. This also provides transparency, as sustainability becomes increasingly important to consumers. As a result, markets are moving towards a sustainable direction (Mustapha, 2022).

## 3.2. Sustainability Reporting

Sustainability reporting is the voluntary, requested or mandatory disclosure of non-financial performance information to persons outside the organization (Erkens et al., 2015). As with all disclosures, its purpose is to shed light on a company's sustainability activities, increasing company transparency for investors while inspiring other businesses to provide the same transparency.

The Non-Financial Reporting Directive (NFRD) was revised by the European Commission by implementing the Corporate Sustainability Reporting Directive (CSRD) on 21 April 2021. In this regulation, the information that should be included in the sustainability report is given in table 1.

Categories	Subcategories
Environmental protection	Climate change Use of natural resources Pollutant discharges Waste Biodiversity and ecosystem protection
Social responsibility and treatment of employees	Employees and workforce Social issues
Respect for human rights	General human rights reporting criteria Human rights in supply chains Areas of high risk for civil and political rights Impacts on indigenous and local communities Sources of conflict Data protection
Fighting corruption and bribery	Anti-Corruption Anti-Corruption Whistleblowing channels
General positive effects	General and sectoral positive effects of product/opportunity resources Diversity on company boards (in terms of age, gender, education and professional experience).

Tablo 1: The EU Non Financial Reporting Directive

#### Source: Tcfdhub, 2020.

While the main purpose of the sustainability report is to ensure transparency about the company's contribution to sustainable development, it also provides information to investors, employees, market participants, civil society members, customers, etc. It is also used as a tool of accountability to third parties.

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#### 4. World Federation of Exchanges, WFE

It is seen that stock exchanges are taking a greater role in sustainability and more and more stock exchanges are developing projects that are sensitive to social life and the environment. It is seen that the sustainabilityrelated strategies of the World Federation of Exchanges (WFE) member exchanges are grouped into three general categories: The first of these; To raise awareness about the environment, social responsibility and corporate governance in listed companies. Another; Creating sustainability indices, developing information services and products for investors, and thirdly; To create a private market where investment instruments issued in accordance with Environmental, Social and Governance (ESG) principles are traded.

WFE is a global group for exchanges and clearing houses around the world. In 1961, WFE was founded as a global association for exchanges and clearing houses. Its headquarters is in London. WFE is the definitive and reliable source for exchange-traded statistics. It provides approximately 350+ market data each year. It also provides information and predictions about developments in global stock markets with its free statistical database. WFE works with standard expenditures, policy studies, complements and government policies worldwide to support and promote the development of fair, transparent, cohesive and efficient markets (WFE, 2023).

#### 5. The Sustainable Stock Exchanges (SSE)

It is an initiative that aims to contribute to the development of sustainable investments that draw attention to environmental, social and corporate governance issues by collaborating with stock exchanges with the support of the United Nations.

The SSE initiative is a United Nations Initiative Organized by the United Nations Conference on Trade and Development (UNCTAD), United Nations Global Compact, United Nations Environment Program Finance Initiative (UNEP-FI) and Principles for Responsible Investment (PRI) It is a Partnership Program. SSE's mission is to provide a global platform to explore how the performance of environmental, social and corporate governance activities can be improved and sustainable investments promoted, in cooperation with stock exchanges, regulators and relevant international organisations. Financing of the UN Sustainable Development Goals is also included in its work. SSE implements this mission through an integrated program that includes pursuing evidence-based policy analysis, organizing a network and forum to build multicenter consensus, and providing technical assistance services.

# 5.1. United Nations Conference on Trade and Development (UNCTAD)

UNCTAD is recognized as a global hub for investment and enterprise for sustainable development. With decades of successful experience, it provides research and policy analysis, intergovernmental consensus building and technical assistance services internationally in more than 150 countries. UNCTAD prepares the Annual World Investment Report and also organizes the World Investment Forum every two years as part of its global event activity.

## 5.2. United Nations Environment Programme Finance Initiative (UNEP-FI)

UNEP-FI is a global partnership between the United Nations Environment Program (UNEP) and the global financial sector. UNEP FI works closely with the two hundred financial institutions participating in the UNEP FI Statements and a number of partner organizations to develop and promote the links between sustainability and financial performance. UNEP FI fulfills its mission to mark, promote and achieve the adoption of good environmental and sustainability practices at all levels of financial institution operations through peer-to-peer networks, research and education.

## 5.3. United Nations Global Compact

The UN Global Compact produces policies for work committed to aligning its operations and strategies with the universally accepted principle of human rights, labour, environment and anti-corruption centres. Thus, it helps to support the advancement of markets, trade, technology and finance in business, which is the main force of globalization, benefiting economies and society everywhere.

## 5.4. Principles for Responsible Investment (PRI)

The United Nations-backed Responsible Investment Principles Initiative is a network of international companies working together to realize the principle of responsible investment. The principles provide a framework to enable all expenditures to be included in decision-making and ownership practices on environmental social governance issues, thus aligning with social goals.

#### 6. Sustainability and Borsa İstanbul

BIST is one of the stock exchanges that committed to promote longterm and sustainable investments in the markets at the "Sustainable Stock Exchanges Initiative 2012 Global Dialogue" meeting held in Rio de Janeiro on June 18, 2012. Along with BIST, the Egyptian Stock Exchange, NASDAQ OMX, Johannesburg Stock Exchange and BM&F Bovespa exchanges have also made the same commitment. In 2013, NYSE also participated in the same initiative (BIST, 2012: 8).

Within the categories of sustainability strategies of World Federation of Exchanges (WFE) member stock exchanges; To raise awareness about the environment, social responsibility and corporate governance in companies traded on stock exchanges, in line with the rules; BIST prepared a guide in 2014 to inform and guide companies about sustainability. With the impact of the developments that have emerged over time, it updated the guide in 2020 and prepared the Sustainability Guide for Companies with the theme "Existing in the Future".

Under the title of creating sustainability indices and developing information services and products for investors, BIST started to calculate the BIST Sustainability Index in 2014. The methodology of the index was changed in 2021. Within the scope of the agreement made between Borsa İstanbul and the global data company Refinitiv, Refinitiv's sustainability assessment results are used when calculating the index. Thanks to the change, it was aimed to comply with current developments in the field of sustainable finance and to include more companies in the index. On the other hand, the Sustainability Participation Index started to be calculated in 2021. Thus, the number of sustainability-themed indices increased to two.

In the category of creating a private market/market where investment instruments issued in accordance with Environmental, Social and Governance (ESG) principles are traded, BIST is preparing legislation on sustainable finance products in Turkey under the leadership of the Capital Markets Board (CMB) and with the contributions of Borsa İstanbul. continues. With the Green Debt Instrument and Green Lease Certificate Guide, the draft of which has been put out for comment by the CMB, it is aimed to increase the issuance of sustainable debt instruments and lease certificates in the capital market, to strengthen investor confidence through transparency and external evaluation obligations, and to diversify investment opportunities in projects that contribute to sustainable development. Currently, there is no market or market that includes only these products. Depending on the developments in the field of legislation, different decisions may be taken in the future. Information about Borsa İstanbul's successful practices in line with the Sustainable Development Goals set by the UN, social responsibility strategies and how these were integrated into corporate processes were shared through Sustainability Reports between 2014 and 2016. Since 2017, a separate sustainability report has not been published, and information on ESG performances and targets is presented to stakeholders through integrated activity reports. In integrated activity reports prepared in accordance with the international Integrated Reporting Framework, information regarding Borsa İstanbul's sustainable business model and the value it produces for its stakeholders is handled with an integrated mindset. The report describes Borsa İstanbul's strategic response to external factors and risks affecting the capital markets from a long-term perspective, and focuses on the activities carried out throughout the year within the framework of priority issues (BIST, 2023).

The Sustainability Committee was established in 2015 to work on the holistic and effective implementation of sustainability at Borsa İstanbul, monitoring the sustainability strategy and performance, and integrating sustainability into decision-making mechanisms and business models. The committee consists of the managers of the relevant units or representatives deemed appropriate by the managers and the relevant Deputy General Manager.

A Sustainability Platform was also established at BIST. It was created to make evaluations about the results-oriented and effective work carried out in the field of sustainability and to establish a platform where the steps that can be taken together in sustainability will be discussed. Apart from Borsa İstanbul, non-governmental organizations consisting of professional associations, associations and foundations, international organizations and public regulatory authorities can become members of the platform. Private sector organizations cannot become members, but they can attend meetings (when deemed necessary by members). In 2019 and 2020, with the authority given by the Presidential Office Investment Environment Improvement Coordination Board, platform members carried out studies for the development of sustainable finance in Turkey. The Sustainability Principles Compliance Framework, which is a concrete product of these studies, was published by the Capital Markets Board in 2020 and became part of the legislation (BIST, 2023).

## 6.1. Borsa İstanbul and Sustainability Platform

In order to make evaluations on the realization of studies in the field of sustainability in a result-oriented and effective manner and to create a sharing network that will enable the discussion of joint steps to be taken in sustainability, the platform is organized with the participation of Borsa İstanbul and non-governmental organizations consisting of professional associations, associations and foundations, international organizations and public regulatory authorities. has been formed. Platform; It operates in areas such as increasing awareness and knowledge about the concept of sustainability, including sustainability issues in relevant legislation and regulations, disseminating sustainability practices and collaborating with international organizations in order to develop long-term and strong cooperation (BIST, 2023).

#### 6.2. Borsa İstanbul Sustainability Index

In the capital markets, stock exchanges are among the top institutions that serve the flow of funds; Working with a focus on green finance, they play an important role in the world's transition to a low-carbon economy and in the fight against climate change with innovative green products and green services (Keskin, 2023: 2b.). In this context, BIST Sustainability and BIST Sustainability 25 indices were created, which include the shares of companies traded on Borsa İstanbul and whose corporate sustainability performances are at a high level. BIST Sustainability Index guides companies in the process of creating policies regarding the environmental, social and corporate governance risks of the Stock Exchanges and conveys information about the companies' sustainability policies to responsible investors. The index has been calculated since November 4, 2014. With the BIST Sustainability 25 Index, which started to be published on November 21, 2022, an index consisting of liquid companies with high sustainability performance was created. In order to be included in the BIST Sustainability Index, companies; The overall sustainability score must be 50 or above, each main title score must be 40 or above, and at least 8 of the category scores must be 26 or above. Shares to be included in the BIST Sustainability 25 Index; It is determined by selecting the 25 shares with the highest trading volume and market value among the shares of companies with an overall sustainability score of 70 or above, each main title score of 60 or above, and at least 8 of the category scores being 50 or above (BIST, 2023b).

With the start of the calculation of the BIST Sustainability Index, effective management of corporate risks and opportunities provides companies with a competitive advantage. In addition, it is an index designed to enable companies to obtain financing under new and favorable conditions in the capital markets. BIST Sustainability 25 Index is an index that distinguishes companies that adopt sustainability and social responsibility principles and will enable investors to invest in these companies. Thus, it offers new

alternative financial instruments for asset managers to issue various financial products such as funds, exchange traded funds and structured products based on sustainability principles (BIST, 2023b).

## 7. Conclusion and Evaluation

While the visibility of the environment and climate-related approaches of stock exchanges around the world continues to increase, climate changes and green finance undertaken by financial regulators must come to life in all economies. Climate change not only negatively affects human physical life; It also puts pressure on inflation, economic growth and financial system stability. Today, stock markets, like no other financial institution, have reached levels where they cannot ignore climate changes and environmental problems.

Considering the structures of stock exchanges around the world, it is the responsibility of stock exchanges to organize sustainable indices for environmentally friendly financial trends that investors should follow to maintain high environmentally friendly standards and to ensure that companies adopt and implement sustainability standards. As a result, all stock exchanges in the world have started to list sustainability indices.

Sustainability Indices are measurements of social and environmental performance in businesses. They help investors build sustainable portfolios and consumers spend their money sustainably. More importantly, they also help businesses track their own sustainability, which is an important part of improving sustainability. These indices determine companies' approaches to sustainability-related problems such as global warming, depletion of natural resources, decrease in water resources, health, security and employment. It ensures that the activities and decisions taken by the businesses included in the sustainable index are independently evaluated and, in a sense, registered. Additionally, sustainable indices allow companies to compare their corporate sustainability performance locally and globally. In this context, sustainable indices organized by stock exchanges provide companies with the opportunity to improve their corporate transparency and accountability and risk management skills regarding sustainability issues.

Stock exchanges have enforcement powers in foreign markets, indices, development of financial products, setting regulatory standards and responsibilities. In line with the theoretical information obtained in the study, it has been determined that stock exchanges have an undeniable role in the formation and dissemination processes of the concept of sustainability and thus guide companies and investors with corporate responsibility towards sustainable development.

### **Bibliographies**

- BIST (2023). Sustainability Platform. Available: https://borsalstanbul.com/tr/
- BIST (2012). 2012 Activity Report. Available: https://www.borsalstanbul. com/files/borsa-lstanbul-2012-faaliyet-raporu.pdf 27.11.2023.
- BIST (2020). Sustainability Guide for Companies. Available: https://www.borsalstanbul.com/ files/Surdurulebilirlik\_Rehberi\_2020.pdf 27.11.2023.
- BIST (2023b). Sustainability Indices Available: https://borsalstanbul.com/tr/
- Burhan, AHN ve Rahmanti, W. (2012). The impact of sustainability reporting on company performance. Ventura Journal of Economics, Business and Accounting, 15 (2), 257-272.
- Cahaya, FR, Porter, SA ve Brown, AM (2008). Jakarta Menkul Kıymetler Borsası'nda işlem gören kuruluşların sosyal açıklama uygulamaları. Asya-Pasifik Çevresel Sorumluluk Merkezi Dergisi , 14 (1), 2-11.
- Daly, H. E. (1990). Sustainable development: from concept and theory to operational principles. Population and development review, 16, 25-43.
- Erkens, M, Paugam, L & Stolowy, H. (2015). Non-financial information: State of the art and research perspectives based on a bibliometric study. Comptabilité Contrôle Audit. Tome 21 (3): 15–92.
- Fowler, S. J., & Hope, C. (2007). A critical review of sustainable business indices and their impact. Journal of Business Ethics, 76, 243-252.
- Hartono, G. C., & Utami, S. R. (2016). The comparison of sustainable growth rate, firm's performance and value among the firms in Sri Kehati index and IDX30 index in Indonesia Stock Exchange. International Journal of Advanced Research in Management and Social Sciences, 5(5), 68-81.
- Hunter, C. (2014). Assessing the sustainability reporting of selected tourism companies listed on the Johannesburg Stock Exchange (JSE). University of Johannesburg (South Africa).
- Ionita, C., & Dinu, E. (2021). The effect of intangible assets on sustainable growth and firm value–Evidence on intellectual capital investment in companies listed on Bucharest Stock Exchange. Kybernetes, 50(10), 2823-2849.
- Keskin, M. (2022). Climate Transformation and Green Finance. Euroasia Journal Of Social Sciences & Humanities. 9:2. pp: 54-69 | Doi: http://dx.doi. org/10.38064/eurssh.339
- Keskin, M. (2023). Green Portfolio and Türkiye Examples. Evolution of Financial Markets-II (pp. 161-179). Özgür Yayın Dağıtım Ltd. Şti..
- Keskin, M. (2023b). Environment-Friendly Green Banking Products and Applications in Türkiye. Evolution of Financial Markets: Banking, Risk Management, Market and Institutions (pp. 1-19). Özgür Yayın Dağıtım Ltd. Şti.

- Keskin, M. (2023c). Creating Value with Sustainable Bonds. Perspective on Social Problems in Social Sciences: Theoretical Studies, (pp. 59-92). (pp. 1-19). Özgür Yayın Dağıtım Ltd. Şti.
- Mohammadi, M. A. D., Mardani, A., Ali Khan, M. N. A., & Streimikiene, D. (2018). Corporate sustainability disclosure and market valuation in a Middle Eastern Nation: evidence from listed firms on the Tehran Stock Exchange: sensitive industries versus non-sensitive industries. Economic research-Ekonomska istraživanja, 31(1), 1488-1511.
- Moneva, J. M., & Ortas, E. (2008). Are stock markets influenced by sustainability matter? Evidence from European companies. International Journal of Sustainable Economy, 1(1), 1-16.
- MSCI, (2023). Explore ESG indexes. 30+ Years of MSCI ESG and Climate Indexes Available: https://www.msci.com/our-solutions/indexes/esg-
- Murat, D. K. (2023). Development of business models suitable for sustainable development goals: A research on eco-entrepreneurship. Marmara Universitiy. Published PhD. Thesis. İstanbul.
- Mustapha, S. (2022). What is a sustainability index and why are they important? Metrikus. Available: https://www.metrikus.io/
- Oberndorfer, U., Schmidt, P., Wagner, M., & Ziegler, A. (2013). Does the stock market value the inclusion in a sustainability stock index? An event study analysis for German firms. Journal of Environmental Economics and Management, 66(3), 497-509.
- Olowe, O., Matthew, O., & Fasina, F. (2011). Nigerian stock exchange and economic development. Knowledge Management, Information Management, Learning Management, 14, 14-38.
- Orsato, R. J., Garcia, A., Mendes-Da-Silva, W., Simonetti, R., & Monzoni, M. (2015). Sustainability indexes: why join in? A study of the 'Corporate Sustainability Index (ISE)'in Brazil. Journal of Cleaner Production, 96, 161-170.
- Ortas, E., Moneva, J. M., & Salvador, M. (2010). Conditional volatility in sustainable and traditional stock exchange indexes: analysis of the Spanish market. Journal of Globalization, Competitiveness & Governability/Revista de Globalización, Competitividad y Gobernabilidad/Revista de Globalização, Competitividade e Governabilidade, 4(2), 104-129.
- Ozmehmet, D. E. (2008). Dünyada Ve Tükiye Sürdürülebilir Kalkınma Yaklaşımları. Yaşar Üniversitesi E-Dergisi, 3(12), 1853-1876. https://doi. org/10.19168/jyu.48930.
- Panait, I., & Lupu, I. (2009). The behavior of the Bucharest Stock Exchange during the current financial markets crisis and proposed measures for its sustainable development. Annals of Spiru Haret University Annals–Economic Series, 1(1), 73-80.

- Royal, C., & O'Donnell, L. (2008). Emerging human capital analytics for investment processes. Journal of Intellectual Capital, 9(3), 367-379.
- Schulze, W. G. (2008). Financial institutions and stock exchanges. Annual Survey of South African Law, 2008(1), 359-387.
- Siddy, D. (2009). Exchanges and sustainable investment. report prepared for the World Federation of Exchange, Delsus Limited.
- Sinha, A. B., & Sinha, A. (2022). Green Finance and ESG: Compliance of Global Stock Exchanges. IUP Journal of Applied Finance, 28(3).
- Sivalingam, G. (2008). Entry, exit, ownership structure and the efficient market hypothesis: A case study of the Kuala Lumpur Stock Exchange. Corporate Ownership & Control c, 5, 4.
- Slimane, F. B. (2023). Stock exchanges and sustainability goals: a commitment to progress. International Journal of Sustainable Development, 26(2), 86-101.
- Tcfdhub, (2020). 2019 Research Report: An analysis of the sustainability reports of 1000 companies pursuant to the EU Non-Financial Reporting Directive. Erişim: https://www.tcfdhub.org/resource/2019.
- Vijaya, P., & Reddy, D. P. S. (2017). A Study on Stock Exchanges & Sustainable Development. International Journal of Management (IJM), 8(2).
- Wasara, T. M., & Ganda, F. (2019). The relationship between corporate sustainability disclosure and firm financial performance in Johannesburg Stock Exchange (JSE) listed mining companies. Sustainability, 11(16), 4496.
- WFE, (2023). World Federation of Exchanges Vision & Mission. Erişim: www-world--exchanges-org.
- Zhongfu, Y., Jianhui, J., & Pinglin, H. (2011). The study on the correlation between environmental information disclosure and economic performance-with empirical data from the manufacturing industries at Shanghai Stock Exchange in China. Energy Procedia, 5, 1218-1224.