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**SUSTAINABILITY IN THE BANKING SECTOR: A RESEARCH ON
BIST SUSTAINABILITY INDEX**

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Bankacılık Sektöründe Sürdürülebilirlik: BIST Sürdürülebilirlik Endeksi Üzerine
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ÖZET

Bu tez, sürdürülebilirliğin bankacılık sektörüne entegrasyonunu, özellikle BIST Sürdürülebilirlik 25 Endeksi'nde yer alan bankalara odaklanarak incelemektedir. Sürdürülebilir kalkınmanın desteklenmesinde kritik bir rol oynayan finansal kuruluşlar, giderek daha fazla Kurumsal Sosyal Sorumluluk (KSS) ve Çevresel, Sosyal ve Yönetişim (ÇSY) ilkelerini stratejilerine ve operasyonlarına dahil etmektedir. Bu çalışma, bu bankaların sürdürülebilir uygulamaları nasıl benimsediğini, bu uygulamaların finansal ve finansal olmayan performans üzerindeki etkilerini nasıl değerlendirdiğini ve küresel sürdürülebilirlik hedefleriyle uyum sağlama konusundaki zorlukları nasıl ele aldığını araştırmaktadır. Sürdürülebilirlik raporlarının, finansal verilerin ve nitel değerlendirmelerin detaylı bir analizi yoluyla yapılan araştırma, Türk bankalarının uzun vadeli değer yaratmada, risk yönetiminde ve küresel sürdürülebilirlik hedeflerini ilerletmedeki kritik rolünü vurgulamaktadır. Bulgular, politika yapıcılar, finansal kuruluşlar ve paydaşlar için bankacılık sektöründe sürdürülebilirlik performansını artırmaya yönelik değerli içgörüler sunmaktadır.

Anahtar kelimeler: Sürdürülebilirlik, Bankacılık Sektörü, BIST Sürdürülebilirlik 25 Endeksi, Kurumsal Sosyal Sorumluluk, Çevresel, Sosyal ve Yönetişim.

ABSTRACT

This thesis examines the integration of sustainability into the banking sector, focusing on banks listed in the BIST Sustainability 25 Index. As pivotal players in promoting sustainable development, financial institutions are increasingly incorporating Corporate Social Responsibility (CSR) and Environmental, Social, and Governance (ESG) principles into their strategies and operations. This study explores how these banks adopt sustainable practices, evaluate their impact on financial and non-financial performance, and address challenges in aligning with global sustainability goals. Through a detailed analysis of sustainability reports, financial data, and qualitative assessments, the research highlights the critical role of Turkish banks in fostering long-term value creation, mitigating risks, and advancing global sustainability objectives. The findings provide valuable insights for policymakers, financial institutions, and stakeholders to enhance sustainability performance across the banking sector.

Keywords: Sustainability, Banking Sector, BIST Sustainability 25 Index, Corporate Social Responsibility, Environmental, Social, and Governance.

INTRODUCTION

Sustainability has become essential to business practices across various industries, driven by growing concerns about climate change, social inequality, and corporate governance. The global shift towards sustainable development has profoundly influenced the banking sector, which is uniquely positioned to support and accelerate this transition. Financial institutions, particularly banks, play a vital role in resource allocation and risk management, enabling them to drive sustainability agendas through lending, investment, and advisory functions.

The banking sector's influence extends beyond economic growth and affects environmental stewardship and social responsibility. As intermediaries between savers and borrowers, banks can direct capital toward projects and businesses that align with environmental, social, and governance (ESG) criteria. These criteria have emerged as vital benchmarks for evaluating corporate responsibility and are increasingly used by investors and regulators to assess the sustainability performance of financial institutions.

In this context, the Borsa İstanbul (BIST) Sustainability Index was introduced in 2014 to evaluate and promote sustainable practices among publicly traded companies in Türkiye. The index includes companies that demonstrate a solid commitment to sustainability, with particular emphasis on their performance in areas such as environmental impact, social welfare, and corporate governance. Including financial institutions, particularly banks, in the index reflects the sector's growing responsibility toward fostering sustainable development.

This thesis explores the role of Turkish banks in the BIST Sustainability Index, examining how these institutions integrate sustainability into their business models and operational strategies. The study aims to assess the extent to which these banks adopt ESG principles, their motivations for doing so, and the challenges they face in implementing sustainable practices. Additionally, the research investigates the impact of sustainability on these banks' financial performance and societal contributions.

This study will contribute to the growing body of literature on sustainable banking through a comprehensive analysis of sustainability reports, financial data, and qualitative assessments. It will provide insights into how sustainability shapes the banking sector's future, particularly in emerging markets like Türkiye. By identifying best practices and areas for improvement, the research will offer practical recommendations for banks and policymakers to enhance the sector's contribution to sustainable development.

The findings of this study are particularly relevant in light of global efforts to address climate change and social inequality. As the world moves toward achieving the United Nations' Sustainable Development Goals (SDGs) by 2030, the role of financial institutions in facilitating sustainable economic growth becomes increasingly critical. This research sheds light on the unique challenges and opportunities the Turkish banking sector faces in aligning its operations with global sustainability standards.

1. BANKING SECTOR

1.1. DESCRIPTION OF THE BANK

Banks are the most important institutional structures that make up financial markets, divided into many sub-sectors, and are one of the indispensable monetary and credit policy instruments in all world economies. The functions they undertake and their crucial roles in national development make banks unique in the national and international arena. It is believed that the etymology of the word bank originated from the fact that the Lombard Jews, who were considered the first bankers, put their banking transactions on a table (Banco) and put them on the market. When these bankers, which means bankruptcy in Latin, did not fulfill their obligations, people broke these tables. In addition, the word bank as "Banco" or "Bank" in all languages with slight differences supports this idea. Today, the bank has an extensive range of activities and a field of activity that is increasing daily.

For this reason, it isn't easy to find a definition for banks that includes all their activities. According to some researchers, a bank is defined as an institution that trades money and credit. In contrast, another group of researchers describes a bank as an institution that makes money by selling money.

Banks are businesses that collect and channel the savings of real and legal persons, mediate payments, and provide services such as bills of exchange, invoice collection, and escrow acceptance to provide income to businesses through loans and similar means. A banking enterprise is an economic organization that carries out and regulates all kinds of capital, money and credit transactions to meet the various needs of private and legal persons, states and enterprises in this field. A bank is defined as "an economic organization that carries out and regulates all kinds of capital, money and credit transactions and is committed to meeting the various needs of private and legal persons, states and businesses in this field" (Öçal et al., 1997, p.19).

1.2. CONCEPT OF BANKING

Providing a precise definition of banking is quite challenging. It is stated that the word "bank" originated from the Italian word "Banco" and later became famous as "Banca" (Parasız, 1989, p.11). According to Hincker (1974), various definitions have been proposed for the concept of a bank. However, making a precise definition is difficult, considering legal and economic aspects due to banking constituting a complex set of activities in various fields. Throughout its historical development, these activities have evolved and become more intricate (Cited in Çivi, 1985, p.17). Changes in economics and technology have necessitated a transformation in the banking sector, leading to increased complexity in the sector's activities. Güney (2015) defines the concept of a bank as an institution that accepts deposits and efficiently utilizes these deposits in credit activities. On the other hand, Altuğ (2000) describes it as an economic institution primarily engaged in credit transactions. Öcal (1990) portrays a bank as a business that receives individuals' savings, converts these savings into beneficial loans and placements, and offers various services such as money transfers, payment transactions, promissory note collections, and safekeeping.

As seen, despite the various definitions of a bank, it is not possible to provide a complete and comprehensive definition, as organizations operating in the current banking system have diversified their roles and operations, not only in the money markets but also in the capital markets, which is why they are responsible for a wide range of functions (Babuşcu, 1997, p.56).

1.3. HISTORICAL DEVELOPMENT OF BANKING IN TÜRKİYE

In Türkiye, banks have taken on the responsibility of performing these functions due to the underdevelopment of financial intermediaries outside Western countries' banking sector. They have played a crucial role in shaping our financial system and economy, gathering the savings of the public, and channeling resources into necessary areas (Parasız, 2009, p.106).

1.3.1. Turkish Banking Before the Republic

When examining the development of banking before the Republic, which covers 1847-1923, it can be observed that the first paper currency, "Kaime," was introduced in 1840 to cover budget deficits. Between 1847 and 1923, managing the Ottoman Empire's external debt burden became increasingly challenging, leading to a continuous depreciation of "Kaime" against foreign currencies. As a result, the government, facing difficulties obtaining funds from foreign markets, started exploring different avenues. In 1845, agreements were reached with two reputable Galata bankers as part of measures against using fixed exchange rates for financing imports¹. However, this agreement was not renewed in 1847. Following this development, the Galata bankers, who had been carrying out their duties on behalf of the government, separated from these roles, and the first bank, İstanbul Bankası, was established (Yetiz, 2016, p.106).

While in industrialized Western countries that had undergone the Industrial Revolution, the development of banking focused on channeling the wealth acquired through foreign trade and colonialism into the industrial sector as credit, in the case of the Ottoman Empire, the need to provide funds for the state treasury's debt requirements directed the attention toward banking (Yılmaz, 2007, p.26).

In 1852, İstanbul Bankası ceased its operations and was liquidated, leading to the establishment of the Ottoman Bank, considered the beginning of modern banking in the Ottoman Empire. The Paris Peace Treaty of 1856 played a significant role in this establishment, increasing the Ottoman Empire's opportunities for borrowing foreign debt.

Established in 1863 to provide credit to farmers on reasonable terms, the "Memleket Sandıkları" continued to function under the name "menafî sandıkları" due to allegations of corruption in the distribution of loans. After a while, doubts arose

¹ Galata bankers: A non-Muslim class predominantly consisting of Greeks and Armenians, who lent money to the state through internal borrowing due to financial difficulties in the Ottoman economy.

concerning using the accumulated funds, leading to the establishing of the first publicly funded bank, Ziraat Bankası, in 1888 (Yetiz, 2016, p.106).

Between 1856 and 1875, foreign-based banks were established to lend to the Ottoman Empire and generate interest income. Many of these banks ceased operations after the Ottoman-Russian War of 1876, while the remaining ones were incorporated into the Ottoman Bank (Parasız, 1998, p.109).

Due to the unexpectedly high amount of external debt in the Ottoman Empire, the responsibility for monitoring state revenue sources and debt management activities was transferred to an international organization called "Düyun-u Umumiye" in exchange for the partial cancellation of some foreign debts. As a result of this development, European capital owners' confidence in the Ottoman economy increased, and their willingness to invest in the Ottoman Empire grew. Following the 1881 Muharrem Decree issuance, which transferred economic oversight to Düyun-u Umumiye, the influx of foreign capital into Ottoman territories accelerated. Western countries aimed to establish foreign-owned banks or branches to generate interest income, improve their trade relations with the Ottoman Empire, and engage in ventures in transportation and mining, especially in areas of interest (Akgüç, 1992, p.12).

Foreign countries preferred to focus their activities by establishing banks in regions where they had a particular interest. An example of this is the establishment of a bank named the Ottoman Financial Association by British bankers in 1864, following the development of cotton cultivation in the Aydın and Söke plains and the export of cotton to England. The purpose of establishing this bank was to facilitate the export of cotton under the control of British bankers and merchants (Kazgan, 1997, p.95).

Founded in 1888, Ziraat Bankası is the first national bank established in the Ottoman Empire. The "Memleket Sandıkları," established in previous years, formed the basis of Ziraat Bankası. The "Memleket Sandıkları" were founded with the idea that the improvement of agriculture at that time could only be achieved through cooperation among farmers. After providing valuable services for 15-20

years, these funds were merged under the name Ziraat Bankası through a regulation issued in 1888 (İloğlu, 1994, pp.94-95).

Another national financial institution, the "İstanbul Emniyet Sandığı," was founded in 1868 by Mithat Paşa to gather people's savings and promote savings among the public. In 1984, it was transferred to the T.C. Ziraat Bankası, and its legal entity was terminated. Establishing national banks gained momentum with the declaration of the Second Constitutional Era in 1908. Between 1908 and 1923, 24 national banks were established, but only 14 of them managed to survive in the period following the declaration of the Republic (Parasız, 1997, p.93).

1.3.2. Turkish Banking in the Republican Era

The initial decade of the Republic of Türkiye was marked by efforts to develop the existing economic and social structure inherited from the Ottoman era, which was outdated and predominantly focused on agriculture. Therefore, recognizing the importance of the banking system in accelerating economic development, the government directed its attention towards national banking. The rapid economic growth was seen as the success of national banks. Thirty-five banks commenced operations, including 13 foreign-capital and 22 local-capital banks (Özata, 2010, p.16).

The Republican era, also known as national banking, clearly shows that the Turkish banking system had various organizational forms over time. This organizational structure mainly consists of small local banks and large public banks.

In 1924, the first privately-owned bank, Türkiye İş Bankası, was established, and in 1925, the first development bank, Türkiye Sanayi ve Maadin Bankası, was founded. While the primary goal of Türkiye Sanayi ve Maadin Bankası was to provide credit to the real sector, due to the transfer of resources to joint ventures, it couldn't fulfill its intended function and was handed over to Sümerbank in 1933 (Yetiz, 2016, p.111).

The consequences of the liberal economic policies pursued in the late Ottoman period began manifesting. However, with the outbreak of the Great Depression in

1929, the agriculture and manufacturing sectors were adversely affected. These developments led to an emphasis on statism. Efforts to incentivize the private sector alongside the industrialization drive remained fruitless due to capital shortages.

These developments prompted the government to focus on industrial investments. The economic crisis of the time resulted in decreased agricultural product prices, increased trade deficits, and a decline in farmer incomes. The crisis, in turn, accelerated the search for new initiatives in industrialization. The most significant step taken in banking during the Republic era was the establishment of the Central Bank of the Republic of Türkiye (Türkiye Cumhuriyet Merkez Bankası) on June 30, 1930. Unlike many local banks that provided credit to regional traders, the Central Bank of Türkiye took on tasks such as currency issuance, maintaining the currency's value, lending to banks, and maintaining the economy's liquidity (Özata, 2010, p.18).

Economic state policies influenced the banking system, increasing the number of public banks established through special laws. These included Etibank in 1935, Halk Bankası in 1938, which was established to provide credit to small traders and artisans, Belediyeler Bankası (later transformed into İller Bankası) in 1933 to prepare urban development plans and support local governments, and Denizbank in 1938 for managing inter-port postal services and some port operations (Özata, 2010, p.19).

By the time the period of 1945-1960 was reached, there was a shift away from the state interventionist policies implemented during the crisis. These policies were replaced by those aimed at fostering the development of the private sector. The economic slowdown in the late 1950s, coupled with the effects of World War II, led to a continuation of planned economic policies from 1960 to the 1980s.

To protect savers' earnings, banks established a Liquidation Fund under the supervision of Türkiye Ziraat Bankası. After the 1982 banking crisis, this fund was transferred to the Savings Deposit Insurance Fund (TMSF). Another significant development in banking in 1958 was the establishment of the Turkish Banks Association (Türkiye Bankalar Birliği or TBB). Its purpose was to make decisions

and implement measures to protect the profits and interests of banks, promote the growth and development of the banking system, increase competition, and prevent unfair competition (Yaman, 2018, p.25).

1.3.3. Restructuring Period in Banking and Contemporary Turkish Banking (2002 and beyond)

In April 2001, the "Strong Economy Transition Program" was initiated, covering the period from 2002 to 2004. The program aimed to enhance the economy's resilience against external influences, reduce inflation rates, decrease public debts, and restructure and improve the financial system (TBB, accessed: 20.10.2023).

Following the 2001 crisis, Türkiye, like other developing countries, experienced crises, with a reduction in the number of banks. The total number of banks, 61 in 2001, decreased to 48 in 2004. From 1999 to 2003, 20 banks were transferred to the Savings Deposit Insurance Fund (TMSF), 11 banks were merged, and eight banks ceased their operations (Yığıtoğlu, 2005, p.119).

Since 2002, Türkiye's economy witnessed a period of growth and stability. However, in 2008, there was a rapid economic downturn. The financial crisis that unfolded worldwide after the global financial crisis in 2008 made 2009 a challenging year for all sectors. During the crisis, governments intervened in economies through public sectors and monetary and fiscal policies. Governments provided capital support to financial institutions, while central banks reduced interest rates to provide cash support to markets and financial institutions. Although the impact of these interventions and support remained limited, quicker recovery was observed in more responsive markets (Kaya, 2012, pp.55-56).

From the 2000s to 2007, liquidity was abundant worldwide, which led the banking sector to increase risk appetite in the face of high liquidity. However, the relaxation in risk pricing paved the way for the 2008 global banking crisis. Risky loans were extended, especially in the United States, to individuals without income or assets, and the risk of these loans was not correctly calculated before pricing. Furthermore, high leverage in the financial system was utilized without adequate assessment of

securitization processes (TBB, 2019a, p.50). These reasons primarily contributed to the 2008 mortgage crisis. As a result of the crisis, the global economy contracted, unemployment increased, and the banking sector, primarily until the end of 2009, experienced contractions.

To overcome this crisis, central banks worldwide implemented loose monetary policies. Especially in developed countries, policy interest rates dropped to zero, and even negative interest rate policies started. In addition to these measures, central banks in America and Europe notably acquired toxic assets and private sector bonds to provide more liquidity to the markets and financial institutions. Before the crisis, the Federal Reserve (FED) assets were \$800 billion in 2008, increasing to \$4.1 trillion by 2013. Similar developments were seen at the European Central Bank, where the asset volume increased from 850 million euros to 3 trillion euros during the same period. After 2013, the banking sector became financially stronger. However, profitability ratios declined (TBB, 2019a, pp.51-52). Following the crisis, new restrictive rule sets were introduced to banks through Basel III, with lowered leverage ratios, increased capital adequacy, higher liquidity buffers, and more risk provisions. These rule sets are also implemented in Türkiye today.

The banking sector has adapted its activities to the digital age, offering various products to cater to more customers and increase profitability. Banks continue their operations by leveraging solid organizational structures and investing in technology, primarily based on data analysis.

As of the end of 2019, there were 53 banks, 11,374 branches, 53,000 ATMs, and 204,626 employees in Türkiye. The ratio of the banking sector's total assets to the GDP was 105% in 2019, indicating a banking sector larger than the country's gross domestic product. The industry serves 107 million account holders (individualized accounts among banks), 53 million active digital banking customers, and 24 million active call center customers (TBB, 2019b). However, profound changes continue in the banking sector. Payment systems, fund transfers, customer identification, and financial product creation are no longer the exclusive domain of banks. Technology

firms that follow technological innovations shape their organizations accordingly, gather strategic data-related information, and compete with banks in the sector.

The intense competition in the banking sector makes reaching even a single customer important. Moreover, reaching customers within the banking system and potential customers outside the system is crucial for the industry to offer financial products. Therefore, the banking sector needs data and aims to use it, processed with advanced technologies, to reach the goal of adequate access to individuals, sell more financial products to these customers, and provide better service.

1.4. FUNCTIONS OF BANKING

Banks have different functions according to their tasks in the financial system. Banks' primary task, which are indispensable elements of the financial sector, is to collect deposits and allocate loans. All other activities carried out by banks are formed as a result of credit transactions. We can list the functions of banks in the financial system as follows (Akgüç, 1992, p.7).

1.4.1. Dematerialized Money (Bank Money) Creation Function

Dematerializing money is one of the most essential functions of deposit money banks and commercial banks. Customers prefer to keep demand deposits in banks to secure money and make payments easily. For demand deposits to be used as a means of payment, cheques must be allocated to customers with an account. A customer with a demand deposit account with the bank can ensure that his payments are made through the check allocated to him by the bank. Payment transactions have been facilitated with banking transactions implemented in the form of money transfers from account to account, the problem of having cash has been eliminated, and cheques have become widespread. With this opportunity provided by banks, depositors have access to the convenience of purchasing without holding cash. For this reason, demand deposit accounts are called registered money or bank money (Alkin, 1977, p.177–178).

There is no obligation to have previously deposited money in banks to have registered money. It is also possible for the bank to open a credit account, allocate a chequebook to the account holder depending on this credit account, and create a credit record or to create registered money by fulfilling the payment orders given by the customer (Akgüç, 2011, p.3).

1.4.2. Financial Intermediation Function

The primary function of banks is intermediary operations. What is meant by the intermediary transaction is to evaluate the savings in the economy by acting as a bridge between savings depositors and those who need capital. In other words, it transfers surplus funds from consumers to those who produce under certain conditions and procedures to make a profit. Thus, idle savings are transferred to production and activated, and in this way, banks also perform their intermediary function. The use of savings by savers to those in need of capital through banks and similar financial institutions is called indirect financing (Uzunoğlu, 2014, p.2).

1.4.3. Function of Increasing the Efficiency of Economic Resources

Banks support economic development by effectively transferring the savings they accept to investments in sectors with high-profit shares, which will contribute to the socio-cultural social structure. Banks, which do not create a new resource or value, accelerate economic development by directing the resources they collect to productive areas of use thanks to their expert workforce and knowledge (Altan, 2001, p.69).

1.4.4. Function of Increasing the Effectiveness of Monetary and Fiscal Policies

The content and size of the banking sector are directly proportional to the existence of an effective monetary and fiscal policy. The banking sector plays a vital role in carrying out the monetary policy activities that must be achieved. All monetary policy instruments used by central banks as monetary policy tools, such as deposit

provisions, rediscount interest rates, open market operations, and setting ceiling prices for credit rates, can only contribute positively to the economy in the presence of a developed banking system (Altan, 1998, p.48).

Banks also contribute to the development of fiscal policy by providing the necessary resources for the financing of investments supported by the Treasury from banks through some borrowing methods and supporting the private sector with various public investments (Kınalı, 2012, p.36).

1.4.5. Service Provision Function

The most crucial condition for banks to maintain their existence is to be able to collect deposits. Banks' most efficient deposit is collecting demand deposits (cash) for which they do not distribute interest or dividends. They provide many services to their individual and corporate customers in return for the deposits they collect. The primary purpose of providing these services is to generate revenue. Some of the banking services offered by banks to their customers are as follows (Kınalı, 2012, p.34):

- To make cheque and promissory note transactions,
- To carry out transactions to support exports and imports,
- Conducting foreign exchange and foreign exchange transactions,
- Allocating references and letters of guarantee to corporate clients,
- Performing Remittance and Electronic Funds Transfer (EFT) transactions.

1.4.6. Function of Influencing Asset and Profit Sharing

Due to their deposit collection policies and lending practices, banks greatly influence the distribution of assets and earnings. In particular, providing credit facilities at more favorable rates and attractive conditions to priority development regions contributes to regulating the distribution of national income by reviving the economy and increasing employment in that region. A negative consequence of this practice is that large fund holders earn interest at high rates due to high interest rates

in the countries where it is implemented. As a result, there are great injustices in the distribution of earnings (Serter, 1993, pp.30–40).

1.4.7. Export Promotion Function

The economic policy adopted in a country and the development of exports are closely linked. The state supports foreign trade with policies that support and encourage exports. In addition to this support, if the necessary support is provided to institutions by banks with services such as letters of credit and collateral, a secure system for foreign trade can be created. The existence of a secure foreign trade system will have an encouraging effect on exports (Altan, 1998, pp.42–43).

1.5. TYPES OF BANKS

Banks are classified due to various areas such as activity and law. The most common classification today is as follows.

1.5.1. Banks by Field of Activity

According to the field of activity, banks are grouped into four categories. These are central, deposit, participation, development and investment banks. According to the report published in December 2023, there are 57 banks in our country (<https://www.tbb.org.tr/>, 2023):

Table 1.1 Existing Banks in Türkiye

Type of Banks	Number of Banks
Deposit Banks	35
Investment and Development Banks	16
Participation Banks	6
Total	57

Of these, 35 are deposit banks, 16 are investment and development banks, and 6 are participation banks.

1.5.2. Central Bank

The central bank, known as the state bank and located at the top tab of banks, performs tasks such as printing money, determining price policy, advising the state on economic and financial issues, money supply, managing foreign exchange reserves, and ensuring monetary policy. Türkiye's central bank started operating on October 3, 1931 (Selçuk, 2016, p.184).

1.5.3. Deposit Money Bank

A deposit bank collects deposits from its customers through loans on its behalf and account and makes deposits available to individuals and organizations needing deposits (Durmuş and Ayaydın, 2015, p.155). This bank collects the funds it has collected to meet the fund requirements in time and demand accounts and makes the funds available to individuals and organizations through loans when they need funds (Canbaş and Doğukanlı, 2007, p.131).

1.5.4. Participation Banks

These banks are the type of banks that collect funds without interest instead of banks that collect deposits with interest and deliver these funds to people in need. Participation banks work with an interest-free system and collect funds under the names of "Special Current Account" and "Participation Accounts" and use these funds through methods such as profit-loss partnership, financial leasing, and provision for goods (Yağcılar, 2011, p.13). Although participation banks carry out activities unrelated to interest, they transfer the funds they collect from savers to the real sectors and share the profit-loss with the savers. Due to its operation without interest, uncertainty and speculation, it can take names such as "Islamic Bank" and "Interest-Free Bank" (Özulucan and Deren, 2009, pp.86-87). Below are the banks operating in Türkiye (<https://tkbb.org.tr/bankabilgileri>, 2022):

Table 1.2 Participation Banks

No.	Bank Name
1	Ziraat Participation Bank
2	Vakıf Participation Bank
3	Türkiye Finans Participation Bank
4	Albaraka Türk Participation Bank
5	Kuveyt Türk Participation Bank

The number of personnel of participation banks could not be found based on banks, but in a study conducted in June 2021, it was stated that the total was 17328 (TKBB, 2021, p.9).

1.5.5. Development and Investment Banks

Development and investment banks are not permitted to collect deposits, and the number of branches and employees is low. Generally, these banks carry out their banking activities from a single center with expert personnel (Erbir, 2020, p.48). Investment banks are financial institutions that provide intermediaries for issuing securities to public and private companies to meet the long-term funding needs of these institutions. Investment banks use the resources they receive by issuing securities to buy on their behalf or provide long-term investment loans to companies (Gümüş, 2014, p.351). On the other hand, development banks are financial institutions established to provide investment financing support that developing countries need. These institutions offer funding and technical support to institutions that want to invest in these countries. Its sources include bond issuance and international loans (Selçuk, 2016, p.182).

There are some differences between development banks and investment banks. While the capital of development banks is their resource, the funds whose management is left to them, and the internal and external loans received, investment banks' capital consists of funds obtained from the capital market. While

development banks operate in developing countries, investment banks serve in developed countries (Kaya, 2013, p.106-107). As of 29.04.2022, the development and investment banks in our country are as follows (<https://www.tbb.org.tr/>, 2022):

Table 1.3 Development and Investment Banks

Investment and Development Bank	Number of Branches
Aktif Investment Bank A.Ş.	13
Bank of America Investment Bank A.Ş.	1
BankPozitif Credit and Development Bank A.Ş.	1
D Investment Bank A.Ş.	1
Destek Investment Bank A.Ş.	1
Diler Investment Bank A.Ş.	1
Golden Global Investment Bank A.Ş.	1
GSD Investment Bank A.Ş.	3
İller Bank A.Ş.	19
İstanbul Settlement and Custody Bank A.Ş.	1
Nurol Investment Bank A.Ş.	1
Pasha Investment Bank A.Ş.	1
Standard Chartered Investment Bank Türk A.Ş.	23
Türkiye Kalkınma ve Yatırım Bankası	2
Total	69

1.6. CLASSIFICATION BY OWNERSHIP STRUCTURES

It means that banks' capital is classified according to the resources to which they belong. The classification consists of four headings.

1.6.1. State-Owned Banks

It is a type of bank whose capital consists of resources provided by public institutions and organizations. In general, they are called public banks because they carry out economic activities that should be carried out by the public authority (Selçuk, 2016, p.175). As of 29.04.2022, the banks with public capital in our country are given below (<https://www.tbb.org.tr/>, 2022):

Table 1.4 State-Owned Deposit Money Banks

Banks
Ziraat Bankası
Ziraat Katılım Bankası
Vakıfbank
Vakıf Katılım Bankası
Halk Bankası
İller Bankası
Türk Eximbank
Türkiye Katılım Bankası
Birleşik Fon Bankası
Adabank

1.6.2. Private Equity Banks

It is a type of bank whose capital consists of resources provided by private institutions and organizations. There are no public capital shares in it. These banks are usually established as commercial (deposit) banks (Erbir, 2020, p.48). As of December 2021, the banks with private capital in our country are given below (<https://www.tbb.org.tr/>, 2022):

Table 1.5 Private Equity Deposit Money Banks

Banks	Number of Branches
Akbank A.Ş.	711
Anadolubank A.Ş.	116
Fibabanka A.Ş.	46
Banks	Number of Branches
Turkish Bank A.Ş.	8
Türk Ekonomi Bankası A.Ş.	455
Türkiye İş Bankası A.Ş.	805
Yapı ve Kredi Bankası A.Ş.	3.552
Total	5.931

1.6.3. Foreign-Owned Banks

It is a type of bank whose capital structure consists of foreign individuals and organizations. Before opening a foreign bank, permission must be obtained from the country where it will operate. Foreign banks generally operate in developed and developing countries. The reason for this may be many reasons, such as providing suitable market conditions for the entrepreneur for foreign investment in the country and economic and political conditions (Yağcılar, 2011, p.12). As of 29.04.2022, the banks with foreign capital in our country are given below (<https://www.tbb.org.tr/>, 2022)

Table 1.6 Foreign-Owned Deposit Money Banks

Banks	Number of Branches
A Bank A.Ş.	38
Arap Türk Bankası A.Ş.	7
Bank Mellat	3
Bank of China Türkiye A.Ş.	1
Burgan Bank A.Ş.	32

Citibank A.Ş.	3
Denizbank A.Ş.	606
Total	690

1.6.4. Mixed Capital Banks

It is a type of bank where part of the capital is public, and the other part belongs to real or legal persons. The transfer of some of the shares of public banks to real or legal persons puts that bank in the status of a mixed bank (Kaya, 2013, p.73).

1.7. BANKS BY SCOPE

Banks are listed in 6 ways. These are private, retail, wholesale, international, holding, and coastal banking.

1.7.1. Private Banking

In this type of banking, the bank determines its customer profile and offers alternative products according to the customer's needs and investment preferences. Private banking is the management of assets according to the risks and expectations determined by its customers. Banks provide private banking services through specially prepared branches. Private banking includes products and services such as safe deposit boxes, box office services, investment services, personalized deposits, credit cards, private funds, and standard banking activities (Yağcılar, 2011, p.10).

1.7.2. Retail Banking

These banks are banks that offer deposits and loans to individuals and SMEs. A bank has many areas that deal with small-scale businesses and does a lot of business. Retail banking can reduce risks due to its multifaceted transaction network and many branches and personnel (Selçuk, 2016, p.181). Therefore, there are many idle funds in their vaults. They have a lot of customers. Personnel

expenses are high because they have too many employees. The range of deposits and loans is wide. Interest margins are high. Fee and commission revenues are low (Kaya, 2013, p.72).

1.7.3. Wholesale Banking

In this type of banking, they carry out large-volume activities with high returns instead of the many small-return jobs that retail banking implements. The customer portfolio generally consists of large organizations, governments, and businesses affiliated with governments. They are banks that are in close contact with their customers, which include activities such as realizing loan requests in large amounts and providing funds from international money and capital, and have few employees and branches specialized in their fields (Gümüş, 2014, p.194-195).

1.7.4. International Banking

International banks provide financial services such as credit accounts and set-offs to their foreign customers with a broad customer portfolio. In addition to commercial banking, these banks can carry out many financial transactions (merchant banking, financial leasing, factoring, forfeiting and consultancy). They can operate wholly or partially independently of the economic system of the country in which they are located (Yıldırım, 2020, p.70). These banks provide credit opportunities to foreign and domestic individuals, governments and institutions with the domestic and foreign deposits they collect internationally. It gives credit support in international projects. They carry out foreign exchange transactions and buy and sell international securities. It acts as an intermediary in activities such as the sale and transfer of global companies (Gümüş, 2015, p.483).

1.7.5. Holding Banking

Holding banking means that the management and supervision of a bank are under a holding. The other meaning is that a bank manages and controls more than one bank or financial institution. The purpose of holding companies to access more

accessible funding sources in their search for significant funds has given birth to such banks. While these banks provide low-interest and commission applications to member companies, offering high interest and commissions to non-member companies disrupts the financial structures in banking (Akgüç, 1987, p.63).

1.7.6. Onshore Banking

According to the most common definition of coastal banking, they are free-based banks that use funds obtained from outside the country or within the country according to certain conditions and can carry out transactions such as swaps, factoring, forfeiting, gold-foreign exchange transactions, leasing bond issuances, foreign trade finance, trust services, and where taxes and audits are low outside the laws and laws related to the banking sector of the country in which they are located (Coşkun, 2006, p.35).

1.8. BASIC FUNCTIONING OF BANKS

While banks continuously evolve with technological advancements, some banking operations remain consistent with past practices. These enduring processes shape the banking system and include:

Intermediary Function: Intermediation is a fundamental role of banks, linking capital seekers with savers. This process reallocates the economy's savings, converting surplus resources from consumption into productive investments under specific conditions to generate profit.

Giving Fluency to Resources: Banks collect resources of varying durations and amounts and then distribute them as loans with different terms and quantities. This function facilitates changes in fund maturities and supports investors needing cash flow for more significant investments. Banks channel money from savers to those in need, ensuring market liquidity and creating new resources for investors.

Converting Short-term to Long-term Funds: Banks aggregate short-term, low-volume funds and transform them into long-term substantial financing opportunities for investors.

Enhancing Resource Utilization: Banks efficiently allocate resources to profitable and socially significant areas, significantly impacting economic resource use and driving economic development. Effective resource utilization by banks accelerates economic progress.

Activating Idle Funds: Banks mobilize potentially dormant funds within the economy by reinvesting them with a particular interest income, thus integrating idle money and deposits into their structure.

Enhancing International Trade: A significant challenge in international trade is ensuring payment security. Banks resolve this trust issue by guaranteeing that exporters receive payment on behalf of importers and that importers receive the requested goods. By acting as guarantors, banks facilitate the growth of international trade.

Creation of Dematerialized Money: By providing demand deposit accounts, banks offer customers a secure way to make payments through the banking system. This method allows transactions to be conducted via checks rather than physical money, which is standard practice in developed countries. This process, known as creating bank money, simplifies customer payments and transactions.

Influencing Income and Wealth Distribution: Banks' lending policies can significantly impact the distribution of income and wealth within an economy. By targeting specific regions or income groups with their loans, banks can influence the allocation of income from profits, interest, and wages, benefiting particular sectors or groups.

Financial Advisory Services: Banks offer financial consultancy services beyond loans and deposits. They assist customers in making informed decisions about buying and selling securities and selecting appropriate investment maturities. These services cater to both individual and corporate clients.

Banking services are typically categorized into retail and corporate banking. While services like deposits, foreign exchange trading, and loans are available to individual and corporate customers, certain products like letters of credit,

investment loans, and letters of guarantee are tailored for corporate clients. Conversely, housing loans are usually aimed at individual customers. Differentiating these services helps cater to the specific needs of each customer segment and ensures efficient transactions.

The economic system comprises complex processes where labor, capital, and natural resources are utilized as capital inputs. These resources are essential for producing goods and services that society constantly demands, and they are managed within this intricate system to achieve desired outcomes.

The economic system is an intricate network of processes. To produce the essential goods and services society requires, labor, capital, and natural resources are utilized as capital inputs. These resources are processed within the system to achieve the necessary outputs.

Financial markets serve as a crucial bridge in this economic system. They regulate complex transactions involving income and resource distribution and producing goods and services. Additionally, they facilitate the flow of resources, goods, and services between sellers and buyers (Bayrakdaroglu, 2013, p.4).

The connections between production, financial structures and factors forming economic systems can be summarized as follows (Demirel, 2017, p.4).

Figure 1.1 Market Types in the Economic System

	Perfect competition	Monopolistic competition	Oligopoly	Monopoly
Number of firms	Many small	Many small	A few large	One
Product characteristic	Homogenous	Differentiated	Differentiated	Single
Barriers to entry	None	Slight	High	Very high
Control over price of their products	None	Slight – local competition limits how much they can charge	Varies: oligopolists may either engage in trade wars to reduce market share of rivals and newcomers or aim for more monopolistic situation by cartel, by takeovers and mergers or aggressive marketing.	Considerable
Ability to control the price of inputs	None	Slight	May be high e.g. supermarket chains can set the price for some agricultural produce.	May be very high depending on whether other producers have other outlets for their produce
Other features			Constantly trying to keep themselves and products in consumers eye in order to maintain or even increase market share by branding, heavy advertising, promotions, gimmicks etc.	
Examples	Wool growers, market gardeners	Restaurants, clothing shops.	Car manufacturers, supermarkets, soft drink- (e.g. Coke & Pepsi), cigarettes, fast foods, Kodak (dominant firm)	Water, local electricity, Velcro

Source: Demirel, 2017, p.5.

Economic systems rely on three main markets for production: the "factor market," where the buying and selling of resources occur; the "production market," where goods and services are produced; and the "financial markets," which provide the necessary cash flow during production.

The financial system comprises fund suppliers, demanders, investment instruments, financing mechanisms, and regulatory and supervisory organizations. These elements are characteristic of financial intermediary enterprises (Yetiz, 2008, p.3).

1.9. ALTERNATIVES IN SERVICE DELIVERY CHANNELS

Various distribution channels refer to businesses' distribution channels to reach consumers other than traditional sales channels.

From the point of view of the banking sector, trying to reach customers through branches is expressed as a sales channel in traditional marketing. Technological developments have affected all activity sectors and led to the emergence of alternative distribution channels in the banking sector.

The introduction of credit cards, ATMs, internet banking and telephone banking applications, and payment points with pos devices can be examples of alternative distribution channels that have rapidly entered the banking sector with technology (Demirel, 2017, p.20).

Providing financial services to low-income masses generally requires intensive labor and one-to-one relationships. Financial institutions, branches spread across the board, buildings with high costs, and trained people must be employed to recover expenses to reach such audiences quickly. Alternative distribution channels and financial services can offer significant advantages and opportunities in terms of cost and space when they are brought together with the recipients of the service without intermediaries.

Some of the reasons that cause the banking sector to use the internet to a large extent are the widespread use of the internet, the ability of people to access the internet via mobile phones or computers whenever they want, and the ability to do their shopping through the internet.

For this reason, it has become the top of the alternative distribution channels on the internet (Gökmen, 2013, p.73).

Alternative distribution channels increase the variety of goods or services offered by banks to customers, increase bank profitability, reduce transaction costs, provide cross-selling opportunities, and increase sales and marketing opportunities of individual products directly to customers. Thanks to these channels, banks can appeal to and reach more customers, receive instant feedback, and thus increase their service quality. Thanks to these and similar opportunities, these alternative distribution channels can also perform services the branch cannot provide. Thanks to alternative distribution channels, the densities in the branches are reduced, and it helps the branches devote more time to their activities to be carried out within themselves. Thus, an effective expenditure of time is ensured (Coşkun, 2012, p.33-34).

Alternative service distribution channels are used for four purposes. These purposes are shopping, making payments at service points or points of sale for entertainment services and other retail activities, paying bills in return, providing insurance and tax transactions, and making payments for financial services.

Alternative distribution channels offer many opportunities to create advantages, such as providing services to customers' feet, building service areas that cannot be provided by traditional means, or increasing product diversity (Raza, 2010, p.1).

There are two main features in alternative service distribution channels, one of which is that it occurs electronically, and the second feature is that the transaction is almost as low as the accounting transactions or approval costs in the central recording systems (Demirel, 2017, p.22).

Due to the globalization of the world, the increasing trend of bank mergers, the effects of international competition in the sector with the intensification, and the reasons for the change in the economic conditions of the countries, banks have had to invest more in the field of the internet, due to the intense competition between banks, internet banking studies. It has managed to become one of the most critical marketing strategies used throughout banks to ensure that new customers of banks, as well as existing customers, can reach their banks whenever they want and receive service to maintain the assets and trade names of banks separately from space and

time and to provide banking activities twenty-four hours a day without interruption (Demirel, 2017, p.22).

1.9.1. Internet Banking

Internet banking is the distribution channel through which services can be provided from anywhere with a computer, telephone and internet connection without any time and space constraints (Altınışik, 2000, p.10).

Internet, which is accepted as an alternative distribution channel by banks, has become the essential alternative distribution channel used by banks as a result of the ability of people to connect to the phone or computer they use at any time and to shop on the internet whenever they want (Gökmen, 2013, p.73).

As a result of advanced technological advances in our country, it can be said that the banking system has recently risen to the level of developed countries. With the widespread use of the Internet and commercial activities mainly carried out over the Internet, there has been a rapid transition to internet banking (Tunay and Uzuner, 2001, p.301).

The widespread use of the Internet has caused significant changes in the banking sector and changed the conditions of competition. After ATM and telephone banking, considered the pioneers of electronic banking, internet banking has become a widespread alternative distribution channel (Onay and Özsöz, 2013, pp.187-188).

1.9.2. ATM Banking

ATMs are collection and payment tools banks use to withdraw or deposit money, primarily through the cards given to customers or through the mobile applications of banks (Dinçer, 2019, p.29). It is a device that allows customers to perform banking transactions at any time of the day without time constraints with the help of a card with a strip or chip on it and a password defined on the card (Yılmaz, 2020, p.13, cited from Buğdaycı).

The first ATM in the world was established in the UK in 1967 by Barclays Bank (Introna and Whittaker, 2005). In Türkiye, it was put into service for the first time in 1982 by İşbank under the name of "ATM". ATMs, used extensively to withdraw money at first, are now used in different areas thanks to the increasing variety of services (Yavuz, 2017, pp.66-67). ATMs are now used for services such as depositing money, making payments, transferring between accounts, getting information about accounts, and issuing traveler's cheques rather than withdrawing money (Işın, 2006, p.111). Thanks to the ATMs that started to be used in 1983, the costs of banking transactions have decreased significantly (Korkmaz and Gövdeli, 2005, p.2).

Financial institutions such as Bank Islam Brunei Darussalam (BIBD) in Asia Pacific and Ziraat Bank in Türkiye have adopted the new generation of ATMs. They have done some work on this. In 2011, Ziraat Bank used palm vein readers, which evaluate a person's palm vein patterns as personal identification data. It has created Europe's largest biometric ATM network (Francis, 2016, p.3).

1.9.3. Telephone Banking

Another alternative channel that has emerged with electronic banking is telephone banking. As in other channels, customers can perform transactions such as money transfers, bill payments, loan applications, and account control at any time of the day, thanks to their phones, without the need to go to any bank branch.

Thanks to telephone banking, customers save time and can easily carry out their banking transactions in any place whenever they have a business, which makes telephone banking attractive for customers (Yıldırım, 2006, p.94).

Telephone banking is a system that takes place with the help of a staff member over the phone or by giving commands to the computer only through the keys through the "Call Center". Telephone banking was first introduced in 1996 under the leadership of İşbank (Mikhaylichenko, 2015, pp.19-20).

With telephone banking, savings have been made in operating expenses, and speed and convenience have been provided in banking services. On the other hand, it has

also contributed to getting rid of costs such as spreading money machines, maintenance-repair, rent, and taxation (Işın, 2006, p.112).

Telephone banking, which is still used today, has not lost its effectiveness thanks to the fact that it saves time, does not have to carry out transactions such as sending documents and documents, and makes it possible to perform banking transactions 24/7 (Demirel, 2017, p.24).

1.10. ENVIRONMENTAL AND SOCIAL ISSUES IN THE BANKING SECTOR

Environmental and social issues in the banking sector are grouped under two main headings.

First, institutions strive to create products and services that will contribute positively to the environment in terms of environmental and social issues. In addition, they provide financing for investments related to renewable energy and energy efficiency that will contribute to the environment. Environmentally sensitive funds create environment-themed differences in housing and consumer loans (TBB, 2014).

Second, environmental and social risks are addressed while financing the project. Environmental issues are taken into account in the credit decision-making process. In addition, by creating a systematic structure, investments that will harm the environment are not financed without taking the necessary precautions and action plans (TBB, 2014).

Environmental risk for the banking sector is the direct or indirect reflection of the material risk the investor will face due to not taking the necessary precautions on environmental issues that may arise in the credited project to the financing bank. Even more critical than financial risk is the reputational risk that the bank will face due to the financing of investments that are not environmentally sensitive, and reputational risk is of greater importance than financial risks. When the project owner does not take environmental measures related to the financed investment, the

financing bank is exposed to reputational risk that is very difficult to define and measure (TSKB, 2014).

1.11. PERFORMANCE IN THE BANKING SECTOR

Menicucci and Paolucci (2016) examined data from 35 European banks by applying a GMM approach, where bank-specific and sector-specific variables were designed to influence bank performance positively. Similarly, Orazalin, Mahmood, and Lee (2016) analyzed 14 years of data from 105 banks in developed nations and found a positive relationship between bank deposits, credit quality, capital adequacy, and NIM. However, they noted that equity and managerial efficiency negatively affected NIM. These results were further supported by Djalilov and Piesse's (2016) study of 275 banks in advanced economies using FEM and REM models.

Some researchers argue that profitability sources significantly influence bank performance variables (Uralov, 2020, p.10). Liquidity is crucial in determining the banks' profit levels. Initially, liquidity hindered performance, but later studies have indicated a positive relationship between liquidity and bank performance.

All these studies are based on research focused on European banks, meaning their conclusions may not necessarily align with what one might expect from commercial banks in Türkiye. Meanwhile, panel data is believed to provide deeper insights into the interaction between bank performance and its determinants (Chowdhury, Haque & Masih, 2017, p.1519). Additionally, panel data models were developed to derive more accurate and reliable findings, reinforcing the value of FEM and REM models in this study (Djebali and Zaghdoudi, 2020, p.5).

Athanasoglou, Brissimis, and Delis (2008) emphasized the need to consider three categories of bank performance determinants. They argued that focusing on one category would inevitably lead to different outcomes. As a result, their research suggests that examining multiple categories can provide a better understanding of how these determinants impact the performance of banks in Türkiye.

Pascual, Trujillo-Ponce, and Cardone-Riportella (2013) suggested that empirical studies should be adapted to the current economic environment to capture relevant

structures accurately. The same research topic can yield different results when applied to bank contexts in developed economies (GOU).

However, analyzing Türkiye as an emerging market economy (EME) may produce distinct and significant outcomes. These considerations highlight the need for further research into bank performance within EMUs using various analytical tools beyond the GMM method. Conducting this research is crucial for fostering development, innovation, and financial stability.



2. SUSTAINABILITY

2.1. THE CONCEPT OF SUSTAINABILITY

Ecological deformations, which affect the future of all humanity, have become one of the main focal points of societies and businesses in recent years. In addition to bringing many environmental problems, ecological deformations cause obstacles to societies' access to resources. Since companies and all their stakeholders are directly connected to ecosystems, they need to make every effort to minimize activities that lead to ecological degradation and eliminate risks.

In the last 50 years, especially after the Industrial Revolution, extraordinary advances have been made in technology and industry, which also brought crucial problems. Rapid population growth, increasing industrialization, urbanization, endless demands of human beings, etc., have caused rapid depletion of scarce resources and issues, such as environmental pollution, climate change, depletion of water and energy resources, and a decrease in biodiversity (İstanbul Business Institute, 2020). Moreover, solid and toxic wastes, air pollution, ozone layer damage, drought, and climate change, which are examples of environmental pollution, have become "environmental problems" rather than "environmental pollution". Societies and decision-makers need to give particular importance to these problems. The reason for this is that natural resources cannot be replaced, and therefore, there is concern that the needs of human beings, who have unlimited needs, will not be met in the coming centuries (Yanık and Türker, 2012). As it is known, all living things in nature interact. Deterioration in one part of the whole also occurs in other branches. Therefore, immediately after any decline in the balance, economic and social components will also be affected.

As can be seen, the world is facing a major ecological disaster. Instead of predicting and preventing environmental degradation, if only preparing reports, holding meetings, and talking about it was possible, irreversible problems await human beings. The Millennium Ecosystem Assessment Synthesis Report reveals the

ecological situation that the earth will likely face soon. It lists the changes that have occurred and will occur in 24 essential ecosystem components. In the reports that include forest areas, clean water resources, biodiversity, and energy resources, it has been determined that 60% are degraded and tend to be depleted (Dyer, 2005; Millennium Ecosystem Assessment, 2021).

According to the relevant report, the increasing pressure on water resources in Africa with regional climate change dramatically increases the areas where cholera poses a threat. Correspondingly, the range of malaria-carrying mosquitoes may increase. In addition, the report states that the release of carbon into the atmosphere and the mixing of nitrogen-based fertilizers into the water pose severe risks for chronic diseases. In addition, increases in ultraviolet B radiation, ozone and other air pollution, and pollen production are predicted. It is possible to multiply the examples even more. From this point of view, the need and obligation to make decisions that will not cause the balance of the ecological system to deteriorate has arisen from individuals to businesses, from businesses to societies. This situation has necessitated the transition from understanding environmental protection to knowledge of sustainability. Therefore, from the reactive, national and government-driven environmental protection approach based on state-of-the-art solutions, the transition to an active, international, multi-criteria and stakeholder-oriented approach based on integrated solutions has been achieved (Finkbeiner et al., 2010, p.3310). This understanding has triggered the emergence of the concept of sustainability.

Man has interacted with the environment at every stage of his existence. Over time, this interaction's size has increased, and some risks have begun to occur. Excessive consumption triggered by the increasing population, unconscious agricultural policies, inefficient use of resources, unplanned urbanization, and greenhouse gas emissions have effectively increased the severity of the destruction in nature. In line with these developments, there has been an awareness that people's relationship with the environment is reciprocal, that the destruction of nature should be

prevented, that nature should be protected, and that human beings should be regulated by considering their relationship with the environment.

Sustainability describes the necessity of determining limits in the use of resources that do not have a re-formation process and the necessity of using resources with re-formation processes without wasting them. (Ceylan, 2010:16) Sustainability; "It is the ability to survive, to be continuous and to exist in the future" (Çamlıca & Akar, 2014, p.102). In general, sustainability is an element that draws the limits of the sustainability of an event or process without a time limit. Sustainability doesn't mean reducing people's quality of life; it's just changing their thinking. The essence of this change is to be a producing society instead of a consuming society, as well as a society that is in universal solidarity and knows its social responsibilities (Özmehmet, 2008, p.3).

After the 1970s, sustainability has become an essential agenda item worldwide. The approach of evaluating economic, social and environmental issues together, known as the Triple Bottom Line or triple pillar in the literature, has enabled the development of sustainability practices for investors and companies (Seyidova, 2021, p.46).

The concept of sustainability has come to the fore with the awareness of the necessity of meeting the needs of human beings and the survival of future generations. The Brundland report, published in 1987, is taken as the beginning of studies in sustainability. The report included the issues of increasing the effective use of natural resources to high levels, the development and widespread use of environmentally compatible technologies, and the prevention of the rapidly rising population.

Limiting the concept of sustainability is impossible because it can be used in many areas and evaluated in different dimensions. One of them is transforming financial products and services into an environmentally friendly structure, which is very important. Problems such as global warming, air and environmental pollution, climate change, and depletion of underground resources endanger scarce resources and have led to the search for new ways to finance the destruction in these areas.

At this point, the banking and finance sector, with the awareness of its role, has tended to encourage and fund investments that minimize or do not harm nature.

Following the importance of sustainability, the curiosity and interest in the work of companies in related fields and companies that produce environmentally friendly processes and policies have come to the forefront of investors' decision-making. It is seen that investors have started to make investment decisions by evaluating companies not only with their financial status reports but also with their environmental, social and governance situations, in other words, with their activities in sustainable areas.

Considering the extent of the destruction created in nature and the inadequacy of the measures, it is aimed to increase environmental awareness by following more effective and proactive environmental policies. For this purpose, in addition to individual awareness, sustainable policies for companies will ensure the continuity of sustainability in the global sense.

The reasons why the concept of sustainability, which has become mandatory against environmental hazards, has gained importance are as follows (TIS, 2022):

- Sustainability is the key to environmental health.
- Sustainability solves the world's energy and resources problem.
- Sustainability prevents species extinction.
- It brings sustainability, social inclusion and equality.
- Sustainability reduces costs and saves money.
- Sustainability creates business opportunities.
- The sustainability of a company is a marketing advantage.
- Sustainability fosters innovation.
- Sustainability ensures the survival of people.

With the globalizing trade network, the fact that companies have started to enter global markets has increased their sociological and environmental responsibilities. Companies must adopt sustainability principles at all stages of the procurement process. In addition to financial efficiency, sociological and environmental

activities and the value-creation process of responsibilities have started to affect investor decisions. The importance of information, trust and transparency has increased. As a result of adverse events such as natural disasters, epidemics, global warming, and climate change, companies are expected to be sensitive.

2.1.1. Environment and Sustainability Globally

The environment is the most crucial factor affecting the welfare of people living in the world and the economic development of countries. People are constantly in a mechanism that operates on continuing to develop, discover, progress and develop. Those who want to use the ability to develop this mechanism beneficially benefit all humanity and cause an increase in living standards, while those who use it in the opposite, useless direction causes irreversible damage to their environment. Many problems affecting the environment, such as irreversible air, water, and soil pollution caused by humans, decrease in living diversity, and deterioration of the ecological balance of the biosphere, have occurred and continue to occur (United Nations, 1972, p.3). The environment is where people have interacted since the beginning of human history and continue to live by making a good or bad contribution. Especially with industrialization, the damage caused by humans to the environment has started to increase rapidly. Chemical weapons developed as a result of the abuse of technology, leaving toxic wastes to nature, production of GMO products, excessive use of pesticides used in agriculture, increasing hybrid seeds and decreasing ancestral seeds are among the behaviors that threaten both the environment and human health (Tekin, 2013, p.238). As time progresses, the increasing world population and many problems brought by it bring with it more mass production and more destruction of natural resources.

When we look at the orthodox economic history, economic growth and the realization of this growth under any conditions constitute the main idea of economic policies. Mass production that came with the Industrial Revolution and the competition of countries with each other caused many environmental and social problems (Yıldız, 2021, p.9).

Considering that sustainable development has three pillars, economic, social and environmental, it is seen that throughout the development process of societies, only the economic pillar is given importance, leaving the social and environmental pillars in the background, and it is preferred to focus only on the economic dimension of development. The fact that the climate crisis has started to increase significantly, the depletion of the ozone layer and, as a result, the sunlight, which is the source of life, harms instead of benefiting, the diversity of living things decreases, the chemicals used pollute the air, soil and water, the irreversible damage of people to nature, and the realization of this damage only in the 20th century, has caused the measures to be taken to be delayed. The issue of the environment was mentioned for the first time in 1972 at the United Nations Conference on the Human Environment, and studies were started on the need to take urgent measures. Emphasis is now placed on economic development, which the environment and society support. As a result of ignoring the environment and only caring about economic development, it aims to reduce global problems and eliminate them over time.

Since there was no industrialization and environmental pollution brought by people in the early times of human history, it is seen that the concept of sustainability started to come to the fore as sustainable development alongside the concept of development after World War II. Our work will continue by mentioning the emergence of the sustainability concept in the global arena.

2.2. HISTORICAL DEVELOPMENT OF SUSTAINABILITY

2.2.1. The Club of Rome

It first started in 1965 when a group of people worried about the future of humanity and the planet gathered around similar thoughts. They drew attention to this issue with the report "The Limits of Growth", published in 1972 (The Club of Rome, 2022). The published report emphasized that the economy and the environment are interconnected by discussing irreparable environmental damage while ensuring economic development.

2.2.2. United Nations Conference on the Human Environment

In 1972, a conference was held in Stockholm, Sweden, attended by many different countries, where environmental problems were expressed worldwide for the first time. The conference participants adopted the Report of the United Nations Conference on the Human Environment and adopted principles for more conscious management of the environment by taking various decisions. The Report of the UN Conference on the Human Environment is also called the Stockholm Declaration. In this declaration, 26 principles have been prepared on what can be done for the environment from an international point of view. Establishing the United Nations Environment Program (UNEP) at the Stockholm Conference was among the most important results (United Nations, 1972). Another significant result is that June 5 of each year is accepted as World Environment Day.

Headquartered in Nairobi, Kenya, UNEP has 193 members. It is an organization that supports the global environment and sustainable development and continues its activities today. In the present day, it seeks to impose, not depleting, the future generation's resources while meeting the people's needs. At the Stockholm+50 meeting held in Sweden on 2-3 June 2022, it was concluded that it is the responsibility of people to have a healthier planet and that the Sustainable Development Goals should be implemented more effectively to solve problems such as climate change, biodiversity reduction, and pollution reduction (UNEP, 2022).

2.2.3. World Conservation Strategy (WCS)

The primary purpose of the World Conservation Strategy, published in 1980, is to protect the diversity and sustainability of living things (IUCN, 1980, p.6). It was prepared with the joint support of IUCN, UNEP and WWF organizations. The strategy is the basic idea of the Brundtland Report, which will be prepared later.

2.2.4. Our Common Future Report (Brundtland Report)

When the Our Common Future Report was published in 1987, the concept of sustainability was not limited to the environment. Still, it was based on adopting the understanding of sustainability in all areas of life, such as economic, social, cultural, etc. With this report, the concept of sustainable development started to be used instead of the concept of sustainability. The definition of sustainable development was made in the report as "development that meets today's needs without jeopardizing the possibilities of meeting the needs of future generations" (Şen, Kaya and Alpaslan, 2018, p.3-6). The most striking point in this definition is the need, and the vital part of meeting this need is to meet the resources of the generations that will come later.

Within the framework of the damage to the ozone layer as a result of the release of harmful chemicals in the world and the reduction of this damage, the Montreal Protocol on Substances Depleting the Ozone Layer was adopted in September 1987. It is the only agreement accepted by all United Nations member states (UN Environment Programme, 2022).

2.2.5. UN Conference on Environment and Development (UNCED)

In June 1992, the United Nations Conference on Environment and Development, also known as the Rio Conference, Earth Summit, was held in Rio de Janeiro, Brazil. As a result of the conference, the agenda 21 Global Action Plan and the Declaration of Principles for the Sustainable Management of Forests were adopted (United Nations, 2022). It came to the fore in 1992, and the United Nations Framework Convention on Climate Change (UNFCCC) was enacted in 1994. The framework agreement aims to support the fight against future climate change by reducing carbon dioxide and other greenhouse gas emissions to achieve the low carbon target.

2.2.6. Kyoto Protocol

It was adopted in December 1997 and entered into force in February 2005. The reason for its late entry into force is that the member countries have reached 55, and the total carbon dioxide gas emissions of these member countries must be at least 55% of the world's emissions. Countries participating in this protocol are expected to reduce carbon dioxide and other greenhouse gas emissions and bring them to the level of 1990. Projects related to reducing greenhouse gas emissions have been authorized to support the achievement of the set target (United Nations Climate Change, 2022).

2.2.7. UN Global Compact and UN Millennium Summit

The UN Global Compact is also called the United Nations Global Compact. It has emerged with the voluntary adoption of the determined principles by acting together for companies and organizations to create a sustainable and global economy. It consists of ten basic principles: giving importance to human rights, employers treating their employees equally and fairly, not employing child labor, combating corruption, and acting more sustainably by taking environmental measures. These ten basic principles are as follows (Global Compact Network Türkiye, 2022):

"Human Rights

Principle 1: Businesses should support, and respect proclaimed human rights.

Principle 2: Businesses should not be complicit in human rights violations. Labor Standards

Principle 3: Businesses should support employees' freedom of association and collective bargaining.

Principle 4: Forced and compulsory labor should be ended.

Principle 5: All forms of child labor should be abolished.

Principle 6: End discrimination in recruitment and placement

Environment

Principle 7: Businesses should support precautionary approaches to environmental issues.

Principle 8: Support activities and formations that will increase environmental responsibility.

Principle 9: Support the development and dissemination of environmentally friendly technologies.

Anti-Corruption

Principle 10: Businesses should fight corruption in all forms, including bribery and extortion."

It emerged in 1999 during the World Economic Forum meeting when Kofi Annan, the UN Secretary-General at the time, recommended it to the participating countries.

At the summit held at the headquarters of the United Nations in New York in September 2000, the United Nations Millennium Declaration determined eight targets to be achieved by 2015 and adopted with the participation of 189 member states, including Türkiye. Ending poverty and hunger, ensuring access to education at the primary school level, ensuring gender equality in society, reducing early child mortality, informing mothers and expectant mothers about health and improving their conditions, taking precautions against epidemics, giving importance to environmental sustainability and ensuring development by finding global partners constitute the content of the eight accepted goals (United Nations, 2000).

2.2.8. Rio+10 World Summit on Sustainable Development and Rio+20 United Nations Conference on Sustainable Development

Between 26 August and 4 September 2002, a declaration and implementation plan for environmentally sustainable development was adopted in Johannesburg, South Africa, which deals with issues such as water, agriculture, energy, fair income distribution, biodiversity, health, etc. (United Nations, 2002). Rio+10 Summit is

also used because it occurred ten years after the 1992 Rio Conference. From the Rio Conference to the World Summit on Sustainable Development, the issues of which decisions were taken regarding implementation and at what level were touched upon.

Twenty years after the Earth Summit in 1992, the UN World Conference on Sustainable Development was held in Rio de Janeiro in June 2012 with the slogan "The Future We Want". It is also called the Rio+20 Summit. Decisions have been made to both support and finance sustainable development (United Nations, 2012).

2.2.9. EU Green Deal

The "European Green Deal", which is the continuation of the EU's struggle and regulations on environmental pollution, global warming and climate change for many years, is also a continuation of the Paris Agreement. Within the framework of this agreement, the goal is to eliminate greenhouse gas emissions worldwide by 2050. This transformation should occur globally, especially in European countries (Şahin and Önder, 2021, p.196).

The Green Deal, created by the EU in 2019, is considered the realization of a strategic vision, and it is envisaged to create a completely climate-neutral development and economy model by 2050. While doing this, it is emphasized that society's welfare level and institutions' competitiveness should be increased over time. As a result of the EU's environmental initiatives and these efforts, it is seen that there was a significant reduction in greenhouse gas emissions between 1990 and 2018 (23%), while the expansion of the economy in the same period was around 61%. The most important reason for this positive recycling is the use of renewable energies and the encouragement and increase of this use. While the greenhouse gas emission rate, which is targeted to be reduced by 2050 in the Paris Agreement, is 40%, this rate has been updated to 55% in the EU Green Deal. To achieve this target, the EU plans to make investments of up to 260 billion Euros annually (Bektaş, 2021, pp.18-19).

The roadmap of the European Green Deal has been determined to ensure this transformation by abandoning the linear economy, which has been implemented for many years excluding the environment and replacing it with an environmentally friendly circular economy. The European Green Deal is seen as a significant step in achieving this transformation, and it is thought that it will support the restructuring of international trade according to the circular economy model (Yılmaz, 2022, p.28).

2.2.10. 2030 Sustainable Development Goals

Although the Millennium Development Goals were completed in the 2000s, they were developed until 2015 and transformed into Sustainable Development Goals. These targets brought together under 17 headings, have taken their place in the literature under the 2030 Goals. To achieve these goals, it has become necessary to handle the economic activities to be carried out with different approaches (Pezikoğlu, 2016, p.1392).

Sustainable development goals are expected to be adopted by 2030. It covers sustainable consumption and production issues, climate change, poverty reduction, combating inequality and injustice, economic growth and welfare, energy resources, and industrialization. Millennium Development Goals were created by adding the targets developed to combat poverty to the Sustainable Development Goals, which are committed to be fulfilled by 2015. These new goals are essentially an anti-poverty movement and a step towards the Agenda for Sustainable Development. The 2030 sustainable development goals have a comprehensive vision with 17 main headings and 169 sub-headings (Sustainability Development Goals, 2019; Ozbakir, 2016).

When we look at the 2030 sustainable development goals,

Goal 1. Ending poverty.

Goal 2. Ending hunger.

Goal 3: To increase people's welfare and ensure healthy lives.

Goal 4. To ensure quality education and its sustainability for all.

Goal 5. To ensure gender equality in societies.

Goal 6. Ensuring access to and sustainability of clean water for all.

Goal 7. Providing affordable and clean energy for all.

Goal 8. To ensure sustainable and inclusive economic development and full and productive employment and decent work.

Goal 9. Building resilient infrastructure, promoting sustainable and inclusive industrialization and new inventions.

Goal 10. Reducing inequalities within and between countries.

Goal 11. To make cities and human settlements inclusive, safe, solid and sustainable.

Goal 12. To ensure sustainable consumption and production.

Goal 13: Take urgent action to combat climate change and its impacts.

Goal 14. Protecting and sustainably using the oceans, seas and marine resources for sustainable development.

Goal 15. Protecting terrestrial ecosystems.

Goal 16. To ensure justice and peace between societies.

Goal 17. It is expressed as being able to build global partnerships for sustainable development. (Sustainability Development Goals, 2019).

Undoubtedly, each activity in the historical development processes of sustainable development listed above has enabled the issue of sustainability to be taken more seriously by profit-making enterprises, non-governmental organizations, regulatory institutions and government bodies, raised awareness and contributed to global sustainable development and sustainability reporting (Uyar, 2015, p.125).

2.3. FACTORS AFFECTING SUSTAINABILITY

When we look at the last few centuries of the world and the rapid development and change processes, the three main factors that are the most decisive in terms of environment and sustainability are: It is seen that there is a phenomenon of industrialization, population growth and urbanization. While the world population is increasing at an uncontrolled rate, the crowding of the cities has also increased, and industrialization has increased in parallel to respond to the increasing demands of this population. In total, both the environment has been seriously destroyed. Resources have come to the point of depletion. The technology developed in this process supported industrialization, and as the production volume increased, the society's consumption demand increased and diversified. Due to this mutual increase in supply and demand, resources have been used irresponsibly, ignoring that they are exhaustible (Bayar, 2016, p.22). It is known that the population increased rapidly in the post-Industrial Revolution period, and natural resources were destroyed by uncontrolled use. The natural cause of this has been large-scale environmental problems, and the seasons have begun to change as the world warms up. Since the trend is alarming, the search for solutions and measures has increased along with environmentalist discourses, and the concepts of "sustainable development", "clean energy", and "green marketing" have started to be voiced more frequently (Ünüvar et al., 2018, p.21).

People's consumption habits are still increasing gradually. Environmental pollution and ecological destruction caused by wastes due to this excessive consumption have also reached irreparable levels. At this point, ensuring the rational use of resources and the sustainability of the environment is necessary. When we look at the initiatives in this regard, it is noteworthy that they focus on efficient resource use, environmental protection, recycling, production, consumption and waste disposal processes and try to transition to a sustainable green economy for a sustainable world (Gülşen and Yenigün, 2020, p.1367).

The linear economy model, which gained effectiveness during the Industrial Revolution, lost its validity due to the increasing population, energy consumption,

and environmental problems that emerged from it. Instead of this model, which was seen as unsustainable, a return to the sustainable circular economy model began. This transformation is seen as inevitable in terms of the future of the world and resources, and the circular economy is considered an alternative economy model in this context. This model, which focuses on environmentally friendly practices such as efficient use of existing resources and recycling of wastes into the economy through recycling practices, is considered a requirement of sustainable development (Yılmaz, 2022, pp.20-21).

Environmental problems, which are a result of the classical linear economy model, have become more striking, especially in big cities, and it has been seen that continuing with this model will make the picture even more severe. The 18th and 19th centuries witnessed a significant decrease in agricultural activities due to the Industrial Revolution, the deterioration of agricultural structuring and the complete change in the understanding of production and consumption. Because, as of this period, many people engaged in agriculture in rural areas left their lands and migrated to big cities and became workers in the industrial sector. Over time, cities and factories were built on the agricultural lands (Yalçın and Negiz, 2020, p.29).

Today's people are standardized through a model that consumes without producing and whose consumption demand is increasing and diversifying day by day, and this situation is thought to be an imposition of the capitalist system. Today's consumption-oriented, non-productive people are fighting for existence in the face of an imposing, popular consumption culture. This situation, which negatively affects the growth of local economies, reshapes social structures in a hierarchy following the wishes of the capitalist system. When we look at the developed countries, it is seen that the consumption is much higher, and these countries are trying to meet this demand with the resources of less developed countries. Therefore, the distribution of resources in the world does not take place somewhat; while some countries consume extra in prosperity, some countries are constantly getting poorer (Kara, 2014, p.31).

2.4. MODELS, ELEMENTS, FRAMEWORK ON THE FIELD OF SUSTAINABILITY

2.4.1. Sustainability Models

Sustainability, a widely debated topic in politics and business, is a business strategy that enhances long-term shareholder value by seizing opportunities and managing risks across economic, environmental, and social dimensions (DJSI, 2018, p.6). Salzmann et al. (2005) state that corporate sustainability is a strategic and profit-driven corporate reaction to environmental and social challenges arising from an organization's primary and secondary activities.

Current trends in corporate sustainability underscore the increasing involvement of businesses in sustainability initiatives to promote sustainable development, a vital component of corporate strategy execution. The concept of sustainable development underscores the importance of economic growth, environmental stewardship, and social equality. Corporate sustainability strategies enhance management quality, corporate governance structures, human capital management, stakeholder relationships, environmental protection, and other qualitative and non-financial aspects such as corporate social responsibility. From this perspective, the corporate sustainable business model is considered a strategic investment offering businesses an additional competitive edge. Consequently, corporate sustainability is often regarded as a valuable asset for competitive businesses, potentially boosting their future performance and market position (Bibri, 2008, pp.57-58).

Some researchers describe sustainability as the environmental responsibility of an enterprise, frequently using the term "ecological sustainability" (Sharma and Henriques, 2005; Shrivastava, 1995). Conversely, other scholars argue that sustainability has evolved from a tri-dimensional reporting framework encompassing economic responsibility, social equity, and environmental aspects (Bansal, 2005, p.198). Jacques Schraven, president of the Dutch Employers' Association, offered a different view, stating that corporate sustainability is a context-specific process that a single standard cannot define. Thus, each business

must select the most suitable sustainability concept based on its mission and objectives. Additionally, a business must align its sustainability measures with its strategy in response to its operational context (Van Marrewijk, 2003, p.96).

In conclusion, corporate sustainability is an evolving management approach. It is an alternative to the traditional model that prioritizes business growth and profit maximization, focusing instead on environmental protection, social equity, sustainability, and economic development (Wilson, 2003). Schaefer (2004) notes that while the concept typically includes environmental, social, and economic components, environmental issues are more frequently highlighted than social ones.

2.4.2. Sustainability Framework

In the conventional business model, management faces numerous obstacles when trying to implement corporate sustainability strategies. The three-dimensional reporting approach brings environmental, social, and economic challenges. The environmental challenge focuses on enhancing the environmental efficiency of business operations, requiring businesses to minimize their ecological impact. The social challenge, meanwhile, deals with achieving positive social performance while respecting cultural diversity and meeting individual social needs. Lastly, the economic challenge is concerned with improving both eco-efficiency and socio-efficiency in relation to environmental and social management (Orlitzky, 2005, p.39).

In addition to these core challenges, businesses also encounter difficulties in integrating environmental, social, and economic dimensions, adopting a future-oriented mindset, and aligning with sustainable development principles. Moreover, they may have to employ trade-off strategies to adhere to a win-win approach. The integration of these three dimensions—environmental, social, and economic—presents the greatest challenge for management. Achieving successful integration requires a holistic perspective across all three areas. Given that corporate sustainability strategies produce long-term impacts, management must have a forward-thinking vision that takes into account future developments. Businesses

need to approach sustainability as a long-term endeavor to yield meaningful results for sustainable development (Munawaroh et al., 2018, pp.5-6).

To succeed in sustainability strategies, companies must adopt the trade-off principle. This balancing principle focuses on maximizing value across environmental, social, and economic dimensions, despite potential conflicts between these areas. Due to the complexity of sustainable development, businesses often face conflicts between environmental, social, and economic priorities, necessitating trade-offs to optimize overall performance. For instance, Eccles et al. (2013) suggest that developing sustainable strategies often requires balancing financial performance with sustainability, where improving one aspect may introduce costs to another. Thus, businesses should concentrate on the factors that most significantly influence their capacity to generate shareholder value while enhancing both financial and sustainable outcomes.

On the other hand, some researchers have expressed different opinions. For example, the fundamental nature of investment and return should not be a trade-off between social and financial interests but a value in which both social and financial interests coexist, with a "win-win paradigm" philosophy. In this direction, businesses must integrate sustainability strategies into their fundamental business models to achieve a win-win paradigm (Emerson, 2003, p.37-38).

As can be seen in Figure 4, it presents an integration challenge in combining the environmental and social management dimensions with traditional profit-centered business management. This integration challenge arises from combining three goals (environmental, social and economic) and satisfying them at the same time. Integrating the three pillars of sustainable development also requires the improvement of ecological efficiency, social effectiveness, eco-efficiency and socio-efficiency (Schaltegger and Burritt, 2005, p.192).

Figure 2.1 Challenges of Sustainability

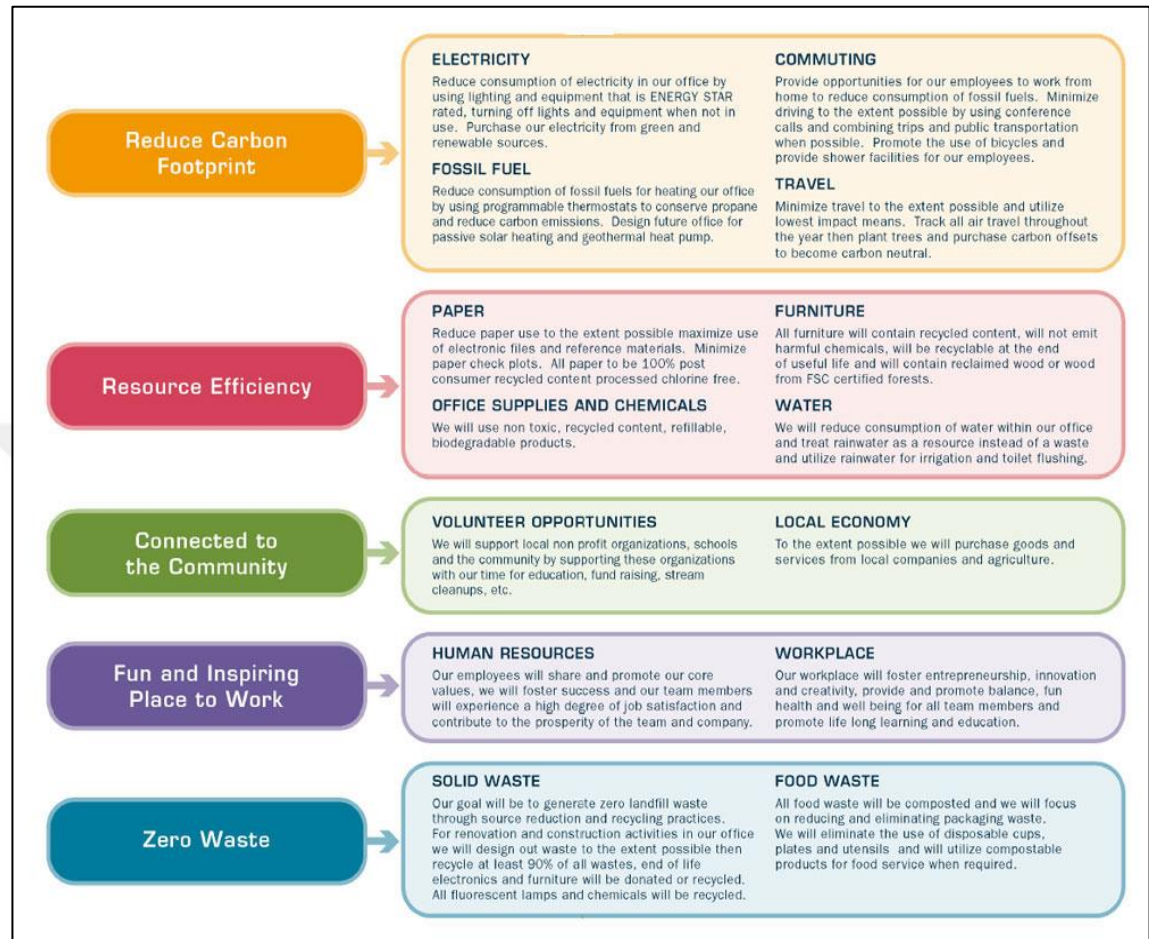


Source: Schaltegger & Burritt (2005)

2.4.3. Elements of Corporate Sustainability

Some elements must be considered and adopted to ensure corporate sustainability for businesses. These elements, which are described as the components of corporate sustainability, are grouped under four headings: "Sustainable Development", "Corporate Social Responsibility", "Stakeholder Theory", and "Corporate Accountability". As shown in Figure 1, corporate sustainability is associated with the sub-branches of economics, ecology, social equality, moral philosophy, strategic management and labor law. In addition, the contribution of each element to corporate sustainability was evaluated separately (Wilson, 2003, pp.1-2). The elements of corporate sustainability are shown in Figure 6 below.

Figure 2.2 Corporate Sustainability Elements



Source: Demirel, 2017, p.5.

2.4.4. Sustainable Development

Sustainable development contributes to corporate sustainability in two ways. First, it identifies areas that businesses should focus on for environmental, economic and social performance, which forms the basis of sustainable development. The second sets a common social goal for businesses, governments and civil society to work on environmental, social and economic sustainability issues (ISE, 2011, p.1; Wilson, 2003, p.2).

2.5. CORPORATE SOCIAL RESPONSIBILITY

Corporate social responsibility is of great importance in ensuring sustainable development and corporate sustainability and its effectiveness. Because the activities carried out by businesses within the scope of corporate social responsibility make significant contributions to the environment, society and economy (Engin and Akgöz, 2013, p.91).

Different definitions have been made regarding corporate social responsibility: In the document called "Green Paper" presented by the European Commission in 2001, "corporate social responsibility is defined as a concept that businesses integrate voluntarily into their environmental and social issues, activities and interactions with internal and external stakeholders" (Commission of the European Communities, 2001, p.4). According to the World Business Council of Sustainable Development, corporate social responsibility is a concept that increases the welfare of the enterprise stakeholders, contributes to sustainable development, and imposes responsibility on ethical behavior (WBCSD, 2000). This concept is expressed as the commitment of the enterprise to minimize all harmful effects on society and maximize the benefit of society in the long run (Mohr, Webb & Haris, 2001, p.47). Within the framework of these explanations, businesses should integrate sensitivity to moral values, social goals and programs into all decision-making processes and policies and continue their activities in this direction (Carroll, 1991, p.40).

Carroll stated that corporate social responsibility consists of four components: economic, legal, ethical, and philanthropic, and depicted these components with a pyramid. Accordingly, economic responsibility is at the bottom of the pyramid and forms the basis of the pyramid. In this part, the focus is constantly on profitability. The next step of the pyramid is legal responsibility, which requires businesses to comply with laws and regulations while focusing on profitability. Moral/ethical responsibility, which is in the third step, constantly interacts with legal responsibility. According to moral responsibility, businesses should do the right and fair thing, comply with legal responsibilities, and avoid situations that harm their stakeholders by complying with ethical rules. At the top of the pyramid is the

responsibility of philanthropy. In addition to fulfilling other responsibilities in the pyramid, this responsibility includes businesses being good corporate citizens, providing resources to the community, and improving the quality of life (Carroll, 1991, pp.40-42).

Corporate social responsibility supports corporate sustainability by revealing the ethical views of business managers on the reasons why they work to achieve sustainability goals for sustainable development (ISE, 2011, p.2).

2.5.1. Stakeholder Theory

R. Edward Freeman first popularized the concept of stakeholder theory in the book "Strategic Management: Stakeholder Approach" written in 1984. According to the author, a stakeholder is "a group and individual who can influence or influence the achievement of the business's goals" (Wilson, 2003, p.3). In this context, shareholders, customers, employees, government, suppliers, local governments, unions, non-governmental organizations and competing businesses are stakeholders (Preble, 2005, p.417, cited in Freeman, 1984). According to stakeholder theory, a business should consider the interests of all stakeholders instead of focusing only on the interests of shareholders. Thus, the business can create more value in the long run by providing a competitive advantage and keeping its relations with the external environment robust (Aksoy Hazır, 2018, p.26; Hillman and Keim, 2001, p.127).

2.5.2. Corporate Accountability

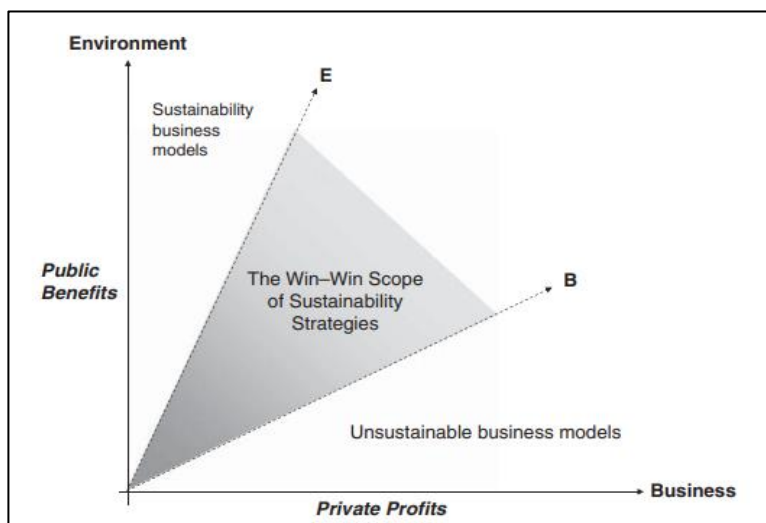
Corporate accountability is the presentation or reporting of the results and effects of the activities carried out by a business to achieve its goals to external stakeholders. Therefore, the business should consider that these activities may affect the external environment and be aware of its responsibility (Aras and Crowther, 2012, p.5).

Corporate accountability contributes to corporate sustainability by providing evidence of the reasons for reporting businesses' environmental, social and economic performance rather than financial performance (Wilson, 2003, p.5).

2.5.3. The Win-Win Paradigm of Sustainability

Most theoretical and empirical research on corporate sustainability operates within a win-win framework, emphasizing the link between corporate environmental and social performance and financial outcomes. This approach suggests that the economic, environmental, and social elements of corporate sustainability should align, with business management identifying opportunities where these goals can be pursued together (Hahn et al., 2010, p.218). Achieving corporate sustainability requires balancing all three dimensions—environmental, social, and economic. For instance, focusing solely on environmental or social concerns while neglecting financial objectives could result in failing to meet shareholder expectations and hinder economic value creation. Therefore, companies should adopt a win-win mindset (Orsato, 2009, p.13). This paradigm incorporates the goals of all three dimensions, ensuring that both internal and external stakeholders are satisfied while fostering a competitive strategy that generates economic value.

Figure 2.3 The Win-Win Domain of Sustainable Strategies



Source: Orsato (2009)

Figure 5 graphically illustrates the extent of corporate environmentalism. The vertical axis shows enterprises' measures for environmental protection that will be of public interest. The horizontal axis, on the other hand, represents actions that generate extraordinary profits, such as cost savings for the business resulting from reduced water consumption. Actions that provide more public benefits than private profits are closer to the upper 28 boundary of the cone, defined by the E line. In the opposite case, it is indicated by the B line at the bottom of the cone. The area between lines E and B defines the scope of corporate environmentalism, which has the potential to generate both public benefit and private profit, i.e. the win-win paradigm of sustainability strategies (Orsato, 2009, p.13).

2.6. CORPORATE SUSTAINABILITY CONCEPT

Until the late 1980s, business leaders often used the term 'sustainability' to refer to a company's ability to increase its earnings steadily. Corporate sustainability has emerged by taking this term one step further regarding content (Schaltegger et al., 2012, p.97). Today, corporate sustainability covers all dimensions of the business environment, including the business's social, economic and natural resource use (Adams et al., 2012, p.2). It has also been suggested that corporate sustainability is closely related to corporate social responsibility (Roca and Searcy, 2012, p.104).

According to Dyllick and Hockerts (2002), it is a corporate, social, and environmental sustainability mix. According to this concept, the strategies and principles developed by commercial enterprises to prevent environmental destruction in the production process ensure the long-term nature of the enterprises. Commercial enterprises are one of the most critical players in sustainable development as a part of complex commercial life, and the lack of this part makes it impossible to achieve sustainable development. All kinds of actions the enterprise takes affect the results of sustainability development (Kuşat, 2012, p.229).

Theoretically, the business has a strong reputation for sustainability, allowing it to have above-average profitability and maximize shareholder wealth. Corporate sustainability efforts also signal to capital markets and consumers the quality of the

business's products and services (Adams et al., 2012, p.4). Sustainable behavior adds value to the commercial environment and ensures good business sense. It is also a valuable tool for shaping the corporate image. It helps to evaluate the capabilities of the business and the activities it carries out (Aggarwal, 2013, p.62).

It has been mentioned in the previous paragraphs that corporate sustainability is an integral part of the concept of sustainability. However, researchers have disagreed on how corporate sustainability is defined in organizations. According to Milne et al. (2006), two thoughts on sustainability exist.

One of them is that sustainability is more dominant in the functionality line. When simplified, a business is a body, and a sustainability mission is an organ. According to Hart (1995) and Porter and Van der Linde (1995), sustainability is a win-win situation for both business and the environment, and there is a relationship of interest.

The second view, on the other hand, has a more critical and more radical structure. Changes within the organization must be faster, environmentally oriented and revolutionary. This view envisages the efficient distribution of natural resources and attaches importance to their fair distribution between the current and future generations. Researchers with this view are concerned about profit-oriented businesses because they argue that this approach is based on interest and leads to the destruction of nature (Milne et al., 2006, p.804).

Corporate sustainability is the adaptation of economic, environmental and social factors to company activities and decision-making processes to create long-term and lasting value for all company stakeholders (Aras et al., 2018). Therefore, while emphasizing the importance of corporate sustainability, growth and profitability, it also requires considering social goals such as protecting the environment, ensuring social justice and equality, and achieving economic development. In addition, for corporate sustainability to be successful in enterprises, external factors such as government, customers and society and internal factors such as management's perspective and employee training must adapt to the process (Alp et al., 2015).

Sustainability efforts and practices are laid out through publicly available reports. The so-called sustainability reports are created for companies to provide their internal and external stakeholders with a picture of the corporate structure and activities in economic, environmental and social dimensions. Sustainability reporting, triple performance reporting, corporate social responsibility reporting, and social responsibility reporting are synonymous (Aras et al., 2017; Roca and Searcy, 2012). Sustainability reporting, a type of non-financial reporting, can be seen as the responsibility to disclose and account to stakeholders about the organizational performance of the business. Sustainability reporting shows that businesses are more transparent and have achieved a higher level of accountability (Özçelik and Avcı Öztürk, 2014). Sustainability reports include quantitative and qualitative information on financial/economic, social/ethical, and environmental performance. However, it is not mandatory to publish sustainability reports. They are prepared voluntarily (Hu et al., 2011).

Sustainability reports are being published in developing countries, but awareness is limited. In recent years, some companies in Türkiye have started to include sustainability reports in their business strategies and report them according to the sustainability reporting principles of the Global Reporting Initiative (GRI) with names such as sustainability reports and corporate social responsibility reports. However, very few companies in Türkiye are seen preparing sustainability reports. In addition, while some companies' sustainability reports are based on GRI indicators, others are prepared in different ways (Özçelik and Avcı Öztürk, 2014). Recent studies have shown that industry-specific guidelines for identifying sustainability issues are essential to companies and that important issues that need to be communicated to stakeholders increase both the sustainability performance and reporting capabilities of companies (Eccles et al., 2015; Atkins and Maroun, 2015, Aras et al., 2017). In addition to these, the sustainability report expresses the positive and negative sustainability performances of companies while achieving their sustainability goals, providing companies with the adoption of sustainability activities and reporting their operational effects, maintaining and disseminating economic growth, increasing competitiveness, shareholder value, reputation,

corporate reputation, customer satisfaction and loyalty, brand value, employee protection, employee motivation. It provides benefits in terms of increase and cost savings. Thus, sustainability reporting provides a better understanding of risks and opportunities and reduces negative environmental, social and managerial impacts (Özçelik and Avcı Öztürk, 2014).

In the Turkish financial system, which is more bank-oriented than most Western countries, this situation causes the banking sector to be vital and dominate the financial sector. Since almost all of the financial sector's assets are managed by banks, the management structure of these institutions and their contribution to society are essential (Akdoğan et al., 2017). Achieving sustainability for banks occurs in four stages: defense banking, preventative banking, offensive banking, and sustainable banking. At the defense banking stage, banks concerned about profitability and growth prefer to be passive and see sustainability as a cost to avoid.

In the preventative banking phase, banks become aware of potential cost savings (energy and paper savings, etc.) in sustainable operations and consider sustainability in internal operations. In the aggressive banking phase, banks begin to see opportunities in the sustainable development process (such as sustainable financial products, new markets, and financing of sustainable energy) and consider sustainability in external and internal operations. In the sustainable banking phase, all operations of banks become sustainable and environmental; social and economic sustainability replaces maximum financial return (Özçelik and Avcı Öztürk, 2014).

Since banks are financial intermediaries in the economic system, the banking sector is one of the sectors that cause minor environmental damage compared to sectors such as petrochemicals, mining, etc. However, financial institutions, including banking, have direct and indirect environmental and social impacts. Direct effects are pretty insignificant compared to indirect effects. Waste generated by water, paper, energy consumption, etc., is among the direct effects of banks. Although it seems correct to say that the indirect effects of banks do not affect the environment, it is clear that the indirect effects are much more significant and more dangerous than the direct effects, considering that the users of financial products can harm the

environment and people as a result of the activities and investments they make with the loans they receive (Öner Kaya, 2010).

2.6.1. Dimensions of the Concept of Corporate Sustainability

Since the concept of sustainability has an extensive scope, it includes different approaches. For this reason, researchers specializing in environmental, economic or social fields have carried out studies focusing on different dimensions. It is possible to classify these studies into three primary dimensions. These are environmental sustainability, social sustainability, and economic sustainability.

2.6.1.1. Environmental Sustainability

Environmental sustainability aims to maintain the natural life system healthily. Clean air, clean water and clean soil are the primary natural resources. Although the capacities of natural resources are considered high, they are limited. Environmental sustainability also envisages natural resources' efficient use and continuity instead of depletion (Moldan et al., 2012, p.6). According to Morelli (2011), the environmental dimension of sustainability is the fulcrum of the economic and social dimensions. The formation of inadequate environmental conditions will cause society, a part of social sustainability, to be adversely affected. Likewise, economic sustainability depends on raw materials, energy, and environmental resources for the production process, and if there is insufficient, economic sustainability will not be possible.

The first focus of environmental sustainability is to protect human life. In this way, human capital will not lose its vitality. However, this mindset evolved as time passed, revealing that other living species should be protected. Because with the protection of living species, the basic needs of people and businesses can be met. The critical questions for environmental sustainability are more controversial: "How many other species is the human species willing to share the world with?" and "Should other species be allowed to disappear for the human species to gain more space and ensure its continuity?" Environmentally oriented-and human-

oriented researchers have discussed these questions, but no consensus has yet been reached (Goodland, 1995, p.7).

Another set of ideas from an environment-oriented perspective is broader in scope. From this point of view, the environmental sustainability model should always oppose legal formations and systems that create an environmental crisis for economic growth instead of supporting environmental development. Shareholders should have more say than stakeholders in the natural resource management of businesses and the next generation because stakeholders care about the success and reputation of the business. In addition, the environmental sustainability model envisages the application of lower discount rates on the sale of natural resources. In this way, the consumption of natural resources will be reduced and distributed more evenly to the next generation. Regarding products, businesses should produce or service in a way that leaves the most diminutive carbon footprint (Gouldson and Murphy, 1997, p.76; Hart, 1997, p.66; Jacobs, 1997, p.47).

At the same time, environmental sustainability, a dimension of corporate sustainability, is of great importance for the business. Businesses significantly impact the environment, whether it's just the lighting of the office buildings or, more importantly, the waste and emissions from their production processes. The business can reduce the damage caused by these impacts by reducing its ecological footprint through environmentally sustainable management (Bansal, 2005, p.199).

2.6.1.2. Social Sustainability

Social sustainability is the whole state and process of efforts to improve the quality of life of societies. Suppose social sustainability has not been realized or is in an effort not to be realized. Society members are at risk (McKenzie, 2004, p.12). The social aspects of sustainability are becoming increasingly important, and studies discussing social sustainability have started to be published in different fields, such as sociology (Ajmal, 2018, p.331).

The concept of social sustainability has first become a vital dimension with the increase in the poverty rate on a global scale. One of the most important reasons is

that most social capital cannot contribute to the country's economy. To explain this context more clearly, if a person cannot meet the necessary education, health and nutrition needs, he has a passive role in the country's economic development. For the individual to take an active role, it is expected that the country will respond strongly to the investments it makes. According to Goodland, investments in humanity for education, health and nutrition are the most critical factors that help create social sustainability (Goodland, 1995, p.3).

McKenzie (2004) stated that the only responsibility of countries and institutions that have adopted social sustainability is to meet basic needs. Some of these responsibilities are ensuring intergenerational equality, ensuring the politically active participation of citizens, ensuring that society and organizations feel this responsibility for the continuity of social sustainability in the future, and establishing mechanisms to define the strengths and needs of the society.

Corporate social sustainability refers specifically to large corporations with political and economic clout and secondly to the most vulnerable social groups. In addition to philanthropy, companies can fulfill an essential responsibility of social sustainability by developing new operations to help vulnerable segments of society (Sodhi and Tang, 2018, p.883). A key challenge for businesses interested in social sustainability is bridging the gap between their financial approach and long-term social goals (Ajmal, 2018, p.328). While dealing with this challenge, the company should fulfill its social responsibilities, such as safety, health, and working conditions in the workplace, as well as the welfare and happiness of the personnel (Hutchins and Sutherland, 2008, p.1621).

2.6.1.3. Economic Sustainability

Economic sustainability is achieving economic growth or profitability with the contribution of social and environmental sustainability. This dimension of sustainability gained more significant importance with the global crisis of 2008. Because of the global crisis, the fear of losing people's jobs and the financial impact on the government and businesses have increased (Choi and Ng, 2011, p.270).

Economic sustainability can be studied in microeconomic and macroeconomic terms. With its macroeconomic dimension, sustainability contributes to the growth of the country's economy. In the microeconomic dimension, the business provides profitability through environmental and social sustainability. To understand the impact of economic sustainability in microeconomic terms, the enterprise's financial performance, how the business manages its intangible assets, how it affects the country and the world economy, and how they manage environmental and social sustainability should be examined. It is necessary to take into account the profitability of the enterprise, its human capital and knowledge, its investments, the productivity of the labor force, its contributions to social development, its products and services, and its public policy (Tuppen and Zadek, 2000).

According to Doane and MacGillivray (2001), if a business cannot ensure its economic sustainability, it will reduce its survival life considerably to a minimum. In addition to this knowledge, if the business focuses its economic sustainability on the external environment instead of the internal environment, it can gain a more solid and long-term place in the market.

3. SUSTAINABILITY IN BANKING

3.1. THE CONCEPT OF SUSTAINABILITY AND FINANCIAL INSTITUTIONS

While a curve is observed towards consumption rather than production, it has been tried to indicate that financial institutions should take measures through global agreements and conferences.

The concept of sustainability in financial institutions can be expressed as finding strategic and profit-oriented solutions against economic, social and environmental factors while creating the activities of financial institutions (Salzman, Ionescu Somers and Steger, 2005, p.28).

Sustainability ensures financial institutions fulfill their corporate governance objectives and benefit from the most accurate implementation of investment activities (Artiah et al., 2010).

The concept of sustainability in terms of financial institutions refers to the evaluation of the environmental and social dimensions of economic expectations in an equal and directly proportional manner. The fact that financial institutions direct the economy has brought social and environmental responsibilities along with economic responsibilities. In addition, financial institutions have become responsible not only to their partners or external investors but also to all participating stakeholders. More than one reason that has arisen due to these responsibilities has revealed that financial institutions attach importance to sustainability in their management policies and targets. The reasons that draw attention in terms of the concept of sustainability are stated below;

- Environmental disasters arising from global climate changes and occurring on a global basis have made the activities of financial institutions more sensitive.

- The concept of "sustainability" has become a priority in trade and economic agreements at international levels.
- The concept of "sustainability" has started taking place in the context of international financial institutions' fund and loan disbursement conditions.
- Environmental, social and economic dimensions are included within financial institutions' supply chain management framework.
- Financial, environmental and social performance have become prioritized in capitalist investment decisions.
- Social and environmental sensitivities, the idea that financial institutions increase brand value and quality, have started to dominate in the management of organizations.

While financial institutions try to adapt to social conditions and requirements, they aim to reduce their cost of capital by considering risky events related to environmental, social and corporate governance. Financial institutions can proactively and more effectively manage the implementation of the concept of sustainability in the negative impacts they may encounter, facilitating their compliance with the conditions.

The positive aspects that financial institutions will provide with the concept of sustainability are as follows (Clikeman, 2004);

- To make it increasingly easier for financial institutions to monitor environmental and social hazards,
- Ensuring that organizations show their goals and objectives to senior management on social and environmental issues,
- Creating brand value and customer harmony over a long period and, therefore, increasing the market values of financial institutions,
- Creating an excellent and honest environment for internal and external participants in financial institutions,

3.2. SUSTAINABLE BANKING

Sustainable banking is also included in the literature as ethical or green banking. In this banking approach, banks adopt an approach based on the principles of sustainability, both as a commercial enterprise and as an institution that provides financing for the projects of other companies. In other words, banks support projects that use resources efficiently and provide low carbon emissions, taking into account social and environmental responsibility (Jeucken and Bouma, 1999, p.30).

Jeucken and Bouma illustrated the transition of banks from traditional operations to sustainable banking in four stages:

1. Defensive banking
2. Preventative banking
3. Offensive banking
4. Sustainable banking

Each stage builds upon the previous one; in other words, sustainable banking incorporates both the characteristics of defensive and aggressive banking. Banks are transitioning from an inner (defensive) layer to an outer (sustainable) layer.

Defense Banking Stage: At this initial phase, banks are generally inactive and may even resist or delay new environmental regulations that could harm their interests directly or indirectly. Environmental management is viewed as an avoidable cost, and opportunities for cost savings through energy efficiency are not considered.

Preventative Banking Stage: This stage differs from the previous one because it actively addresses potential environmental cost savings and eco-efficiencies. Preventative banking becomes essential due to government and NGO-imposed restrictions through legislation and social pressure. Banks at this stage integrate potential revenues, costs, and risks into their daily operations but focus only on internal processes such as environmental management and credit risk assessment.

Aggressive Banking Stage: In this phase, banks begin to develop and market environmentally friendly products, considering their external and internal activities

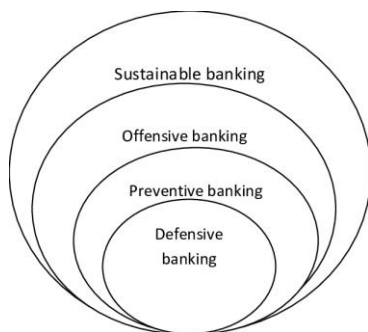
in an environmental context. These banks aim for continuous gains, but negative environmental costs are not fully incorporated into the pricing system.

Sustainable Banking Stage: At this final stage, banks adopt win-win solutions, even supporting projects with higher risks, lower returns, and more extended payback periods. The focus is on achieving the highest sustainable rate of return while remaining profitable in the long term rather than seeking the highest financial return (Jeucken and Bouma, 1999, p.30).

Sustainable financing ensures capital and risk management for environmentally friendly products, fostering economic prosperity and social justice (Forum for the Future, 2002). Sustainable banking involves offering products and services that consider their activities' environmental and social impacts (Bouma, Jeucken, and Klinkers, 2001). It supports customers in minimizing environmental impacts by identifying and managing the environmental and social consequences of financed projects.

Achieving sustainable development requires agreement from scientific, government, or civil initiatives and banks, which are crucial for sustainable development. The banking sector, which is recognized as one of the industries impacting the environment, must reconcile the importance of environmental issues. Financial institutions play a significant role in shaping international balances and ensuring macroeconomic stability, influencing the nature-human balance, human rights, and social justice (Thompson, 1998).

Figure 3.1 A typology of banking and sustainable development



Source: Jeunken, 2001

Advocacy Banking: This approach remains passive in sustainable development, prioritizing profitability and growth concerns. Environmental sustainability is viewed as a cost to be avoided.

Preventative Banking: This stage involves recognizing potential cost savings from sustainable practices (such as energy efficiency) but applying sustainability considerations only to internal processes.

Aggressive Banking: Banks begin to identify opportunities in new sustainable financial products and markets at this stage. They integrate sustainability into both their external and internal activities.

Sustainable Banking: In this phase, all bank activities are aligned with sustainability principles, replacing the goal of maximum financial return with a focus on environmental, social, and economic sustainability (Jeucken, 2001).

3.3. THE ROLE OF THE BANKING SECTOR IN ENVIRONMENTAL AND SOCIAL SUSTAINABILITY

The financial sector has two crucial roles in combating the global climate crisis and decarbonizing the economy for a more livable world, meeting the financing needs of businesses and individuals for this transformation in the transition to a green economy to combat the climate crisis. The second is to accelerate the transition process of businesses and individuals to the green economy thanks to the transformative power of banks in this process.

Banks have an active role, directly or indirectly, in ensuring environmental, social and economic sustainability at the local or global level in areas such as the welfare and health of the society, a clean environment, the protection of ecological balance and living species, the elimination of equality and income inequality, access to education and health services, etc.

The work carried out by platforms, institutions and organizations such as the UN Global Compact, the UN Global Development Goals, the World Economic Forum (WEF) - Davos meetings and decisions, the Financial Stability Board (FSB)

affiliated to the G20 platform, the Task Force on Climate-Related Financial Disclosures (TCFD) established by the FSB, the International Sustainability Standards Board (ISSB), the Network for Greening the Financial System (NGFS), the Task Force on Climate-Related Financial Risks (TCFR), The decisions it has taken and the declarations it has published have an essential role in the creation of environmental, social and economic sustainability frameworks in the financial sector on a global scale and in the development of standards (Mesutoğlu, 2018).

Since their establishment, banks have contributed to both social and economic sustainability. Providing commercial loans to businesses and investors and consumer loans to individuals also contributes to local and global economic and social sustainability by creating employment with the personnel they employ. In addition, their CSR activities contribute to social and environmental sustainability. To ensure environmental, social and economic sustainability on a global scale, the role of banks in the transition to a carbon-free economy has become much more effective and vital with the decisions taken and agreements signed by international official platforms, organizations and organizations for the financial sector. Restricting or stopping banks from lending to production methods, processes and investments that harm or will harm the environment and ecological balance, businesses that do not act following human rights, commercial activities that are contrary to the general morality of the society and adversely affect social life, etc., and facilitate the provision of loans for new investments, production methods and processes that do not harm the environment and nature, facilitate the life of the society and benefit the society, It shows how vital a role banks have in ensuring environmental, social and economic sustainability on a global scale.

According to OECD estimates, achieving the non-climate UN Sustainable Development Goals by 2030 requires more than US\$6 trillion to be invested annually in energy, water, transport and telecommunications infrastructure. When additional investment to stop global climate change is added to this figure, it is thought that the total annual investment will be around 7 trillion US dollars. The

annual investment amount is around USD 4 trillion, and the additional investment needed creates severe opportunities for the financial sector (BRSA, 2022).

Banks are used as an effective tool by the government in China, Bangladesh, South Africa, Brazil, and other EU countries to reduce the increased environmental problems in recent years. Establishing policies and standards regarding sustainability by states, establishing supervision and evaluation units, and introducing transparent reporting obligations to financial institutions make banks more effective in combating environmental, social and economic problems (Mesutoğlu, 2018).

3.4. CORPORATE SUSTAINABILITY PRACTICES IN BANKS

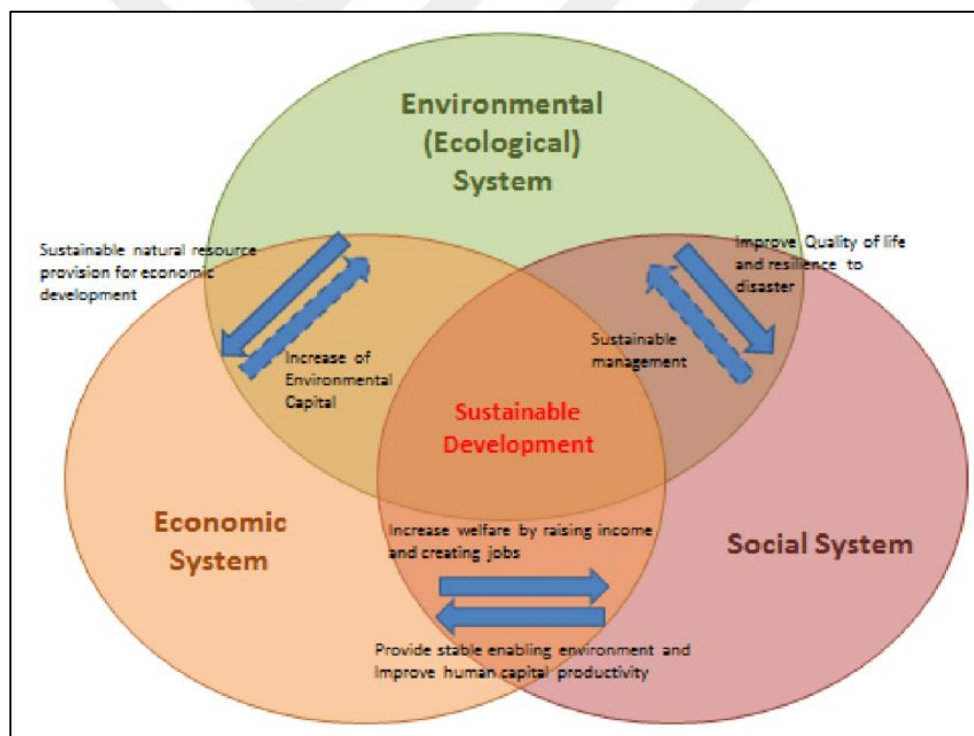
Sustainability is vital for all businesses because it is fundamental to the economy's steady growth. Apart from that, it is crucial for financial institutions. The economy is directly affected by the financial system and its functioning. Banks are one of the leading financial institutions that direct their savings to investments and significantly impact sustainable development. Therefore, the efficiency (good management and financial strength) of banks within the system is the main guarantee of the healthy growth of the real sector. In recent years, banks, which play an essential role in stable growth and sustainable development, have significantly increased their sensitivity to financing sustainable investments and raising awareness of their customers on this issue, compared to external sectors. In addition, while banks must direct their shareholders to their stakeholders, their prudent actions towards long-term goals in their decision-making processes have also become important in sustainable performance targets (Aras, 2018, p.48).

Financial institutions' social and environmental impacts consist of two branches: internal (direct) and external (indirect). The impact of the direct activities of financial institutions on the environment is relatively low compared to different sectors. Nevertheless, considering the size of the financial system, the amount of waste generated by the consumption of water, energy, paper, etc., cannot be neglected. It would not be wrong to say that the external activities of financial

institutions do not affect the environment - from a first-hand perspective. The products of financial institutions do not have a direct impact on the environment. For example, the direct impact of banks on the environment resulting from the consumption of electricity, paper, etc., is very insignificant compared to the indirect effect.

Nevertheless, the users of these financial products affect the environment and people with their products. Therefore, banks' investments, loans, and external financial products adversely affect the environment and people, albeit indirectly (Kaya, 2010, p.80).

Figure 3.2 Financial System in the Sustainable Development Process



Source: Kaya, 2010, p.80

From this, it can be understood that banks need to be more sensitive about financing sustainable investments and raising awareness of this issue among their customers. Apart from this, it has been observed that banks' sustainability reports have gained significant importance. (Aras et al., 2018, p.50). However, there is no standard for

reporting sustainability activities in Türkiye yet. Therefore, detailed and numerical data about the social responsibility activities of companies do not meet the expectations. Apart from that, since the sustainability reports published by the companies are not in a clear format, there are problems in harmonizing the data, which means it might be difficult to compare based on companies (Kaderli and Gündüz, 2014, p.620).

3.5. SUSTAINABLE BANKING AND ITS STAGES

The sustainable banking process is examined in four stages. These stages are;

- Advocacy banking,
- Preventative banking,
- Offensive banking and
- Sustainable banking.

Banks in the advocacy banking process do not play an active role in sustainable development, with ideas such as growth, development, profit, etc. They do not want to take on the costs of environmental sustainability.

In the preventative banking process, banks recognize the potential cost savings they can make with sustainable development.

Banks in the aggressive banking phase consider the concept of sustainability in their external and internal processes. In the sustainable banking phase, All activities and actions of banks are made sustainable (Kaya, 2010, pp.75-94).

3.6. THE IMPORTANCE OF SUSTAINABLE BANKING

Until recently, sustainable banking has not qualified as a banking practice. This situation is because there will be more environmental concerns in the future. First, banks' environmental activities attract their customers' attention differently.

Banks and financial institutions indirectly, if not directly, affect the environment. If banks do not take such initiatives, credit, legal, and reputational risks will constantly cause problems for banks.

Sustainable banking includes practices that consider all social and environmental factors and aim to use information communication technologies and banking processes by minimizing their impact on the environment. Using these practices in sustainable banking helps banks increase asset quality (Bal and Taşkırz, 2015, pp.74-81).

The banking sector offers many advantages for sustainability. Some of these can be listed as follows:

- Sustainable banking avoids using excess paper and uses transactions such as Internet banking, SMS banking, ATM banking, etc. The less paper is used, the fewer trees are cut down.
- Sustainable banks assimilate environmental standards for lending that will benefit future generations.
- Sustainable banks pay more attention to environmentally sensitive factors such as environmental gains; thus, loan interest rates are lower.
- Free electronic bill payment services,
- It is the opening of a sustainability account.

In terms of the above sustainable banking advantages, it has been observed that these banks have different spheres of influence.

The activities to be carried out by banks related to sustainable banking will also encourage other structures they are in contact with about sustainability.

3.7. DIFFERENCES BETWEEN SUSTAINABLE BANKING AND TRADITIONAL BANKING

Since the beginning of the twentieth century, traditional banking practices have lost their sustainable characteristics. Therefore, it necessitated the emergence of a new generation of sustainable banks. Unlike traditional banks, sustainable banks indicate to their customers where the deposits of individuals are evaluated and in

which field loans are given. Many of them periodically state this to their clients due to the issues of endless transparency, which is credited (Chaurasia, 2014, p.20).

Sustainable banks think investing in mixed financial instruments that commit to high returns and take too much risk will cause an international crisis, inequality and environmental problems. Therefore, investment in sustainable banking, unlike traditional banks, is generally based on long-term and non-fictional transactions. Traditional banks aim to increase market value, while sustainable banking aims to profit by adhering to social values (Dharwal and Agarwal, 2013, p.12).

Sustainable banks are more transparent compared to traditional banks. In sustainable banking, it is announced to which individuals the funds transferred to the system by the person who deposited money in the bank with the need to earn interest were given and why. Therefore, sensitive individuals with sustainable values can observe whether the bank complies with the credit principle. Although sustainable banks do not lack any difference from traditional banks, more importance is given to environmental/social issues in sustainable banking (Sarıkaya and Kara, 2007, p.226).

3.8. MEASURING SUSTAINABILITY PERFORMANCE

Their role in ensuring sustainable development for businesses and the benefits they provide have been discussed for a long time, and at the same time, multiple measurement tools have been developed to evaluate the sustainability performance of enterprises. While some of these measurement tools are based on eco-efficiency, in others, it is argued that if the benefit obtained by businesses using their resources exceeds the loss caused by their activities, positive value sustainability performance will be achieved. In addition to all these, sustainability indices have been developed by the world's leading stock exchanges to evaluate the enterprises' sustainability performance by the investors and give importance to them in financial investment analysis (Veleva and Ellenbeckerb., 2001, p.521).

3.8.1. Sustainability Measurement at the Macroeconomic Level

Sustainability performance measurement at the macroeconomic level is expressed as the benefit states provide to sustainable development and their economic activities. The measurement of sustainability performance is based on ensuring that the level of welfare per capita is stagnant and increasing to meet the needs of our current and future generations. In the measurement of the level of welfare per capita, the sustainability-oriented capital theory approach was adopted (Hicks, 1946, p.172). Below are the sustainability-oriented capital theory items. (Hartwick, 1977, pp.972-974).

1. Man-made capital: machines, tools, sub-superstructure means of production
2. Human capital: Knowledge, skills, experience and behaviors
3. Natural capital: Wind, solar (renewable), coal, oil (non-renewable).

3.8.2. Sustainability Measurement at the Microeconomic Level

Although sustainable development is seen as a national or global goal, increasing the benefit of sustainable development in the current economic conditions is among the goals of enterprises engaged in microeconomic activities. The benefits of enterprises to sustainable development are expressed as "corporate sustainability performance". Since it is included in enterprises' strategic and operational planning and is considered a competitive advantage, the actual contribution should be expressed in monetary form by associating it with economic performance (Aksoy, 2013).

3.8.3. Sustainability Measurement with Sustainable Added Value Approach

For a business to survive, it must be successful in economic, social and environmental dimensions to maintain its leading position in the market. Achieving these goals involves evaluating these three dimensions with the stakeholders' interests and determining how to adapt them to the enterprise's main activities.

Strategies to be created by considering economic, social and environmental reasons are based on creating competitive advantages in the field of sustainability and securing the business's existence in the long term (Aracı and Yüksel, 2016, pp.789-790).

3.8.4. Sustainability Measurement with Sustainability Index

Several regulations are being developed to guarantee the disclosure of the sustainability practices of publicly held enterprises, and efforts are being made to raise awareness about sustainability. Some of these are the addition of sustainability-related regulations to the rules of registration with the stock exchange, the provision of incentives to businesses that are successful in the field of sustainability, and the development of sustainability indices (Aksoy, 2013).

3.8.5. Literature Review of Multi-Criteria Decision-Making Method

To determine the economic situation of Türkiye in the European Union process and to reveal the applicability of multi-criteria decision-making methods with economic data, the economic performances of the European Union member and candidate countries and Türkiye were compared with the ELECTRE, PROMETHEE and TOPSIS methods and detailed information about the methods was given (Urfalıoğlu and Genç, 2013).

To evaluate the sustainability performances of banks in Türkiye, the Gray Relational Analysis technique was used to evaluate the economic, social and environmental performances of the banks from the sustainability reports of 2011 with the Gray Relational Analysis technique (Özçelik and Öztürk, 2014).

It was tried to determine how the reflections of the 2008 financial crisis on the TRNC banking sector directed the behaviors of the banking sector after the crisis with the Gray Relational Analysis technique as a result of the changes in financial ratios and banks (Kurnaz, Baş and Chestnut, 2018).

3.8.6. Multi-Criteria Decision Making

The multi-criteria decision-making method is one of the most comprehensive methods financial institutions use to compare and evaluate their economic performance in the globalizing world. Decision-making methods in which multiple alternatives and criteria are evaluated to compare economic performance are suitable for such comparisons. Multi-criteria decision-making methods have been stated as the most appropriate disciplines for using a multi-criteria structure for economic comparison, as they analyze by taking into account factors that are expressed in more than one independent and different ways (Urfalıoğlu and Genç, 2013).

It aims to design mathematical calculation tools and multi-criteria decision-making methods to find the best alternative. It proposes a methodology that addresses the most critical elements of the decision-making process and aims to provide reliable and accurate information to make an unbiased decision. These components include a predetermined goal achievable within the given constraints' framework. Constraints are criteria used to rank potential alternatives. An unbiased ranking of alternatives is based on selecting relevant criteria by a decision-maker with detailed knowledge of the subject (Şeker, 2018).

3.8.7. Evaluation of Sustainability Performance with Gray Relational Analysis

Today, we can state that in the world where globalization takes place, we can state that all of the funds that indirectly trigger the beneficial and unbeneficial effects on humanity, human rights and justice issues in the management of funds, international policies and macroeconomic order and stability in all of the same financial institutions are provided by financial institutions. For this reason, decisions made for the rungs of the financial order affect stable growth and all other sectors. A macro audience accepts that financial institutions significantly affect social and social sustainability (Öner Kaya, 2010, p.79).

Performance measurement allows financial institutions' managers to adapt to the changing environment. The sustainability performance of financial institutions is evaluated based on economic, social, and environmental performance. Economic performance includes the financial institution's annual financial report, investments in application development, and remuneration and benefits. Environmental performance includes the quantity of financial institutions in terms of their resources. Damage to energy, soil, water, and activities, air pollution, chemical waste, and sewage can be examples of financial institutions' resources.

The environmental performance of financial institutions is evaluated by their externalities and generally by their environmental footprint to society and the environment. Environmental performance assessment can be characterized as depleting natural resources, environmental pollution, energy, and wasted costs. Social performance encompasses financial institutions' activities, including employees' healthcare, security, cost of living salaries, non-discrimination, and education. Although assessing the social impact of financial institutions seems challenging, the economic and environmental performance assessment has progressed less. Today, financial institutions focus on philanthropic investments and increase labor activities (Goel, 2010, p.31-32; Hubbard, 2009, p.180; Szekely and Knirsch, 2005, p.4).

3.9. SUSTAINABLE BANKING PRACTICES

3.9.1. Retail Banking

Retail banking can be defined as the banking system that encompasses personal and commercial banking products for individuals and households. Products and services such as loans, mortgages, credit card services, traveler's cheques, bank transfers, overdraft protection, cash management, insurance, etc., are products and services in retail banking. (UNEP FI, 2007). The most distinctive feature distinguishing green loans from other loans is the provision of funds for projects that comply with the standards set by those who hold financial resources, such as the World Bank (Güler, Tufan, 2015, p.82). Banks offer low-cost loans to finance environmental

projects. The main sustainable products and services developed in retail banking are green mortgage loans, green auto loans, green credit cards, and green deposits.

Green housing loans are the financing required to restore old buildings based on the environmental thinking system or to construct a new building within the scope of environmental values. Sustainability is encouraged through loans with interest rates below the market interest rate to develop and support green quality construction, which reduces the carbon footprint in environmental terms, increases energy efficiency, and enables people who borrow from the bank for green housing financing to finance by emphasizing energy savings. The advantages of green housing loans can be listed as saving thousands of cash, high efficiency in the consumed household energy, increasing the value of green housing in the market, lower interest rates, and health and environmental benefits.

Green car loans finance individuals to buy cars that use alternative fuels that save fuel and are less environmentally damaging. It covers the models of cars that produce less waste. With the "goGreen" application, which has the most recognition, bank car loans have significantly increased. Many green car loans that provide below-market interest rates have increased in recent years, especially in Europe and Australia, to encourage the purchase of vehicles with low greenhouse gas intensity and high fuel efficiency rates (UNEP FI, 2007).

3.9.2. Corporate & Investment Banking

Corporate and investment banks provide financial services to large institutions, organizations, and companies. These are banks where complex banking products and services such as derivative transactions and foreign currency trading are used extensively in line with the demands of companies. Climate change presents an excellent opportunity for banks to diversify their investment and loan portfolios due to investment opportunities. The EBRD describes its green investments and projects in seven categories. These are energy efficiency, clean energy, water management, waste management, sustainable living, environmental services and

sustainable public transportation. It has been stated that making projects or investments in the relevant categories will contribute.

On the other hand, it recommends a drastic reduction of projects and investments in the production of fossil fuels and large fossil fuel consumption, electricity generation from nuclear power plants, projects and investments in which hazardous substances are present in the production and trade of products (Alfsen, 2013, pp.2-5). Asset securitization, a process in which companies' assets (corporate credit, credit card receivables, etc.) are converted into marketable securities and traded in the market, is another emerging transaction in corporate and investment banking.

Securitization is a risk-sharing arrangement for projects that protect the environment. Financial institutions offer customers the opportunity to transfer the risk to banks as a guarantor of the risk level. In ecological securitization, the suitability of financing natural infrastructure is tested concerning the sustainability of funding sources. In green mortgage loan-backed securities, mortgage loan packages are designed in buildings that meet environmental energy-use criteria (Kuloğlu, Öncel, 2015, pp.6-8).

On the other hand, project financing is the service department of banks allocated to environmentally friendly energy financing, and cooperation is made with governments to install environmentally friendly technologies in the country. The loans given in this context do not depend on the company's level of need. Still, the project's assets are taken as collateral depending on the contribution of the investment project. Energy, infrastructure/transportation, real estate projects, company acquisitions and asset purchases by banks are included in the scope of project financing.

Investment banking is one of the leading areas of banking. In investment banking, where fund management studies are carried out, social bonds and sustainability-related financial products create resources for a sustainable environment. The benefits provided to investors thanks to these exported products are financial, environmental, and social profits. Investment banking is gaining momentum, and its products and services are developing and diversifying.

Green indices can be defined as indices that take into account environmental opportunities and risks in the future. The most well-known in this field is the Global Green Economy Index (GGEI), which measures countries' green economy and sustainability performance. It has four dimensions: climate change and social equity, sector carbon reduction, markets and ESG investing, and environmental health (GGEI, 2022).

3.9.3. Asset Management

Asset management, one of the growing segments within the financial sector, has become one of banks' core businesses. Asset management provides clients financial advice on estate planning, mutual funds, tax, price reduction commissions, global private banking, and managed wealth programs. For example, by purchasing or investing in green fund shares in the Netherlands, customers receive tax deduction income and benefit from low interest rates on their investments. The Leu Prima Cat Bond fund is the world's first public disaster fund targeting climate-related natural disasters (Case Solutions, 2022).

Carbon Funds are issued to finance greenhouse gas reduction projects. Investors transfer money to the carbon fund by purchasing "emission reduction certificates" from existing emission reduction projects or investing in new climate-friendly opportunities. State-led carbon funds offer a good opportunity for the country to achieve the goals of the Kyoto Protocol (Kuloğlu & Öncel, 2015, p.10). By encouraging the establishment of sustainability-related investment funds, asset management companies can easily ensure that companies included in the scope of sustainability receive a share from the relevant funds.

The link between sustainability and asset management is unclear due to the assumption of separation between the social and business spheres. At the heart of the matter, the business model is the missing link between ESG and finance. Financial analysts strive to understand the long-term value drivers in the business model. ESG analysts, on the other hand, strive to understand the position on ESG issues, incentives and business models. Both groups of analysts overlook the critical

connection. The business model is at the crossroads of ESG and finance. Additionally, ESG analysis offers opportunities for high performance by leveraging market inefficiencies. It is a natural extension of fundamental capital analysis, which deals with a better understanding of the value factors of a company (Schoenmaker & Schramade, 2019).

3.9.4. Insurance

Insurance compensates for the damages and losses individuals and businesses may encounter if the risks are realized. On the other hand, sustainable insurance is the continuity of insurance and the minimum consumption of resources to ensure this continuity (Çağıl, 2019, p.195). In the case of the continuity of sustainable insurance, it is to positively impact third parties in the long term with the minor use of resources. According to the Insurance Working Group (IWG) established by UNEP FI on sustainable insurance, There are nine factors: microinsurance, climate change, recycling, internal efficiency, lifetime income, health, natural resources, emerging human-induced risks and environmental responsibility (UNEP-FI).

Insurance products and services have increased in variety depending on the types of risks. In the field of insurance, it is standardized by distinguishing between life and non-life. Non-life insurance, such as fire, accident, transportation, engineering, agriculture, and health insurance, is listed as ancillary accident and life insurance. Carbon insurance is incentivizing in the field of carbon emissions, but it is not sufficiently developed. For example, humanity's impact on climate change has developed emission reduction processes, primarily due to the warming caused by the use of fossil fuels. It is an insurance that covers the counterparty and delivery risks faced by EU allowances to ensure the carbon process is completed within a specific floor range.

3.10. BANKING SECTOR BASIC SUSTAINABILITY PRINCIPLES

3.10.1. Preventing Environmental and Social Risk from the Banking Sector

A financial risk situation may occur due to the inability to evaluate the banking sector financially. Due to this situation, the financial-economic sector and the risks that may arise regarding environmental and social aspects should be considered.

Environmental and social risks should be evaluated in the banking area, and precautions should be taken to eliminate them. The environmental and social impacts and risks arising from the investment project subject to this financing should be investigated. Precautions should be taken regarding financing in which the requested loan is invested. On the other hand, it is necessary to actively participate in the transition to carbon reduction (UMT Sustainability Report, 2014, p.7).

To prevent international environmental and social risks in banks' lending activities, banks have started to reflect the ISO 14001 Environmental Management Standard and ISO 14064 Greenhouse Gas Management Standards. The measures and policies to be implemented in the Sustainability Report and Borsa İstanbul (BIST) Sustainability Index are determined by each institution and bank according to itself. For example, in the form of banks supporting measures with projects and training focused on social and environmental risk (Escarus, 2016: 1). ISO 14001 Environmental Management Standards are the standards created to determine and implement strategies, assisting and guiding institutions as a precaution related to the environment of institutions and enterprises (Durmuş and Özer, 2004, p.4). ISO 14064 Greenhouse Gas Management Standards are used to inventory organizations by reporting them regularly to reduce greenhouse gas rates and correct, reduce and implement this problem (Kaplan, 2011, p.3).

If environmental and social risks are not considered, it is possible to lose customers; on the other hand, it has to see it as a responsibility because it has to keep a good relationship with its stakeholders and take measures to reduce the consumption of natural resources. Projects should be created, and risk assessments should be made

so that financial institutions, especially banks, can measure environmental and social risks and take precautions in lending, projects and all other alternatives (www.garanti.com.tr, 19.07.2017).

Banks need to take precautions regarding these risks so that they can conscientiously pay attention to the consumption of natural resources and not lose their environmentally friendly customers commercially. For this reason, banks should tend to reduce environmental and social risk by considering this situation while determining strategies and policies in general and making regular evaluations.

3.10.2. Human Rights, Employees and Society

Banks are essential in the financial sector and the sustainable development process. They have many positive and negative effects on employees, stakeholders, customers, and society. In this case, it is necessary to carry out studies that can operate in a way that will provide more benefits to sustainable development.

The issue of human rights refers to the fact that the state approaches all its citizens equally, avoiding discrimination and being transparent and accountable in rights and laws to reduce the risk in society and ensure sustainability (Moser, 2001, pp.9-10).

The logic of the banking sector under the heading of the basic sustainability principle is that just as the state mentioned above has rights and legal duties towards citizens, the same applies to companies, institutions, financial institutions, banks and other sectors. The issue of human rights is also an essential topic in banks, and the issues of equality, justice, transparency and accountability, which they have determined as their vision, remain important in the policies and strategies they have determined. Its connection with employees and society: These topics, which it determines and attaches importance to as a policy, are directly related to its impact on the employee and society (public, customer, etc.). In other words, it can be said that ethical banking principles are under the heading of fairness, which is one of the goals of sustainable development. It refers to the fact that the interest rates, rules,

vision, strategies and policies determined against the society are open to the public, transparent and accountable.

What banks want to provide is to create a modern business environment that respects human rights, tries to ensure social justice and equality in labor rights, and, within this framework, develops the opinion structures of all its stakeholders to take strict measures against bribery and corruption and to impose the most severe punishment in such situations. It is to follow a fair rewarding method that takes into account the contribution of the employee to success and motivates the employee (Türkiye İş Bankası Sustainability Report, 2014). Under the heading of human rights, it sets ethical values and strategic goals for the benefit of society by supporting foundations, associations and institutions that strive to create social benefit in matters such as cultural, artistic and sports activities as a social responsibility with a focus on "Society", which is one of the topics that banks address in their sustainability reports (Deniz Bank, 2017). One of the other topics is "employee" oriented; It is to provide an equal opportunity that reflects the knowledge and skills of the employees, stands within the framework of respect for the thoughts of the employees, has work satisfaction, provides the opportunity for individual progress, and increases motivation (www.turkiyefinans.com.tr, 25.07.2017).

3.10.3. Banking Sector and Customer Relationship in the Sustainable Development Process

Customer satisfaction is vital when we look at customer relations in the sustainable development process in the banking sector. While the existing customer is the main factor in ensuring the bank's profitability and achieving the banking targets, it can also support acquiring new customers (Özdemir, 2012, p.10).

Regarding all kinds of products and services they offer their customers, they provide accurate, complete, and timely information at every stage of the service relationship and in every subject by complying with the limitations specified in the legislation. Banks keep all kinds of information and documents related to customers

confidential and keep them carefully, except for persons and authorities expressly authorized by law to request information and documents. They are establishing a system to answer all kinds of questions of their customers arising from the services provided and notifying their customers of information about this service. It involves investigating the causes of customer complaints and taking the necessary measures to prevent the recurrence of justified complaints (nurolbank.com.tr, 19.07.2017). It can be seen that, first of all, banks exhibit customer-oriented working activities. The principles realized in the sustainable development process are as follows (Akbank Sustainability Report, 2015, p.54-55);

- In the first place, the banking sector is focused on providing products and services according to customer demands,
- During the sustainable development of the banking sector, it brings corporate finance-oriented solutions on an international scale in line with customer demands and needs,
- Implementing medium and long-term principles that take into account the society and public interest for customer rights and interests,
- It provides financial solutions focused on its customers' foreign and domestic activities, products, and services within commercial, SME, corporate, and individual fields.

3.10.4. Stakeholders & Communication

Groups called stakeholders in the banking sector are employees, customers, international financial institutions, media, non-governmental organizations, shareholders, and public institutions. The principles adopted in this field are (Halkbank Sustainable Development Report, 2015, pp.35-36; TSKB, 2012, p.15);

- It is the execution of a system that is answered by the management within the scope of the principle of equality to all problems that do not contain trade secrets and is in constant communication with the bank and its shareholders,

- To stay in touch with stakeholders uninterruptedly and continuously, to raise awareness and to try to create a sustainable development-oriented mindset,
- To ensure communication between stakeholders, customers and employees in integrity,
- To be focused on progress and development by providing innovation in existing products and services along with communication,
- To inform all stakeholders about the principles and objectives related to sustainability and to encourage these practices,
- Prepare and regularly submit sustainability reports within the scope of the Global Reporting Initiative (GRI) for all bank stakeholders.

3.11. SUSTAINABILITY ISSUES AND THEIR IMPACT ON BANKS

Banks respond to increasing energy demands with financing solutions for low-carbon technologies, ensuring business growth, innovation and sustainability. Key points to consider when creating or setting up sustainability governance structures include:

- Creating an easy-to-understand and easy-to-use structure to ensure maximum participation across the bank
- They ensure accountability through a sustainability committee at the bank's top, on the executive committee, or on the board to ensure that sustainability assessments are disseminated throughout the bank.
- Horizontally integrate sustainability responsibilities and activities into all departments of the bank.
- Identify critical locations for implementing and managing sustainability issues and ensure clarity of the roles of dedicated sustainability workers, if any. These teams serve as a central source of expertise at the bank, explain the scope of sustainability strategy and concerns, and provide research and advisory services.

- Promote the inclusion of sustainability practices and create incentive structures to prevent resistance to change.
- They are incorporating sustainability metrics into internal and external reporting.

3.12. SUSTAINABLE BANKING NETWORK

The Sustainable Banking Network (SBN) is a unique voluntary community of financial sector regulators and banking associations committed to ensuring sustainable finance from emerging markets in line with international good practices. The 38 member countries represent US\$43 trillion (85 per cent) of total banking assets in emerging markets. The idea of SBN emerged at the first International Green Credit Forum, hosted by the IFC and the China Banking Regulatory Commission, held in Beijing in May 2012 with the participation of banking regulators and associations from 10 countries, where the IFC requested that it facilitate a global knowledge network on sustainable banking. The network was launched in September 2012 (www.ifcglobal.com, Global Progress Report, 2019).

Figure 3.3 Sustainable Finance Initiatives and Sustainable Banking Network in Emerging Markets



Source: www.ifc.org, global progress report, 2019.

Countries with policies and principles on IFC and sustainable banking: Bangladesh, Brazil, Cambodia, China, Colombia, Ecuador, Georgia, Indonesia, Kenya, Mexico, Mongolia, Morocco, Nepal, Nigeria, Pakistan, Panama, Paraguay, Peru, South Africa, Sri Lanka, Türkiye, Vietnam. Countries that do not have policies and principles on IFC and sustainable banking: Argentina, Chile, Costa Rica, Dominican Republic, Egypt, Fiji, Ghana, Honduras, India, Iraq, Jordan, Kyrgyzstan, Laos, Philippines, Samoa, Thailand (Houérou, 2019).

SBA members have identified three critical components for implementing a sustainable finance framework. Each contributes in practical ways to financial stability and the enhancement of the competitiveness of local financial sectors:

- i) Strategic Alignment: Members found that national policies aligned with global best practices and international frameworks are more likely to be effective and attract international investment.
- ii) Climate and Green Finance: Climate is becoming increasingly popular to achieve national sustainability goals, leading to new financial products for environmental and social goals and innovations in the financial sector.
- iii) ESG Integration: Better management of ESG risks by banks contributes to financial stability and reduces credit risk.

3.13. SUSTAINABLE BANKING PRACTICES IN THE EUROPEAN UNION

There are 28 member states of the EU, but it cannot be said that member states have the same sensitivity to sustainable development and sustainable banking. Clean Energy Development Bank and Triodos Bank, operating in the Netherlands; GLS Bank, operating in Germany; Banca Etica, operating in Italy; and Merkur Cooperative Bank, operating in Denmark, were considered appropriate to be examined in the study because they are the leading banks in sustainable banking. The banks mentioned provide grants to hydroelectric power plants, wind farms, insulation projects in buildings, school projects, geothermal projects, health services, and low-interest loan support. Banks maintain environmental standards

through landfill gas recovery, digestion of organic waste and low carbon emissions. In addition, they carry out sustainability activities in their regions and underdeveloped countries (Council of European Development Bank, 2014).

Clean Energy Development Bank entered the sector in 2006 by partnering with the Dutch Development Bank (FMO). Since its founding, the Bank has been working on sustainable banking and financial intermediation, which is the subject of banking. It has been publishing sustainability reports since 2010. It supports many projects such as hydroelectric power plants, energy efficiency, electric vehicle production, and solar power plants to contribute to sustainable development. In 2013, the Bank provided 27% energy efficiency loans, 15% clean transportation loans, and 40% loans for hydroelectric power plant projects. With the hydroelectric power plant built in Nepal, 718.62MW of electricity was produced. In addition, in 2012, it distributed more than 10 thousand tree saplings to its stakeholders (CEDB, 2013).

Triodos Bank was launched in the Netherlands in 1980. Since 1993, it has opened branches in Spain, Belgium, England and Germany, respectively, after the Netherlands. The Bank publishes its activities on sustainable development in its annual reports and on its website under the environmental report. It has been carrying out sustainable banking activities since 1994. In particular, it prefers to invest in renewable energy, organic agriculture, education, health, art and culture projects or to lend projects within this scope. The Bank started its sustainability activities by reconstructing its office buildings. It uses energy-efficient lighting, heating and cooling technologies in buildings. It tends to save on printed paper, energy, and fossil fuel consumption in business trips. While the use of printed paper was 32% in 2012, this rate decreased to 29% in 2013. In 2009, paper consumption was 600 thousand CO₂ equivalent, while in 2013, it was 265 thousand CO₂ equivalent. In 2013, the Bank financed 376 energy and climate projects. In 2013, 49% of the Bank's loans were for the environment, 29% for social projects and health services, 15% for culture, arts and education projects, and 7% for private loans (Triodos Bank, 2009; Triodos Bank, 2012; Triodos Bank, 2013).

GLS Bank was the first bank established in Germany in 1974 to support social and ecological development. In 2009, it started to publish sustainability reports. In 1989, the first wind energy fund project was implemented. The Bank supports renewable energy. It establishes power plants by making use of solar energy. In 2010, it produced 10.2% of electricity. In 2013, it prepared a new project that produces electrical energy by using wind energy. Thirty-two thousand euros have been allocated from the donation fund for this project. To date, GLS Bank has financed 23,318 projects. 33.90% of these projects are energy, 18.04% are education, 18.00% are housing, 13.19% are nutrition, and 16.83% are social projects. It also works to save internal processes in its branches. In 2011, the Bank reduced its paper consumption from 20.86 tons of CO₂ equivalent in 2010 to 13.4 tons of CO₂ equivalent paper consumption. In 2010, the Bank's waste was 93.2 tons of CO₂ equivalent, while in 2011, it decreased to 62.8 tons of CO₂. In 2012, it was awarded the title of the most sustainable company in Germany for its work and achievements, and in 2013, it was awarded the most sustainable bank in Europe by the Financial Times and the International Finance Corporation (GLS Bank, 2012; GLS Bank, 2013).

Banca Etica was founded in 1999 in Italy. Since 2004, it has continued its sustainable banking activities and published sustainable development reports. It has carried out many projects to support sustainable development. Among the most important of these, its support for renewable energy projects to reduce CO₂ emissions and improve air quality is among them. Bank Etica's energy approach is based on three main lines. These include reducing consumption, protecting the environment, and improving social values. To support sustainable development in its internal processes, the Bank turns to paper savings in its branches. In addition, it has started to use public transportation for business trips and personnel services. Apart from this, it encourages using bicycles to reduce fossil fuel consumption. It has carried out a 3000 m² afforestation project in Rome. Another sustainable work of the bank is to prevent the garbage crisis. It ensures that garbage such as furniture, clothes, decoration products, and glassware are reproduced and offered for sale. The Bank offers job opportunities to people with disabilities to prevent social

exclusion. It has installed a storage system with a capacity of 4500 lt and 6000 lt to store rainwater. Since 2005, the Bank has provided financial support of 3,816 thousand euros by disbursing 212 social assistance loans (Banca Etica, 2011; Banca Etica, 2012; Banca Etica, 2013).

Merkur Cooperative Bank was established in Denmark in 1982. Sustainable development efforts have gained momentum after 2009. Since 2004, it has been publishing its annual reports, which include projects related to sustainable development. It supports sustainable development with projects such as providing housing, producing alternative energy, supporting green technology, providing free schools, providing kindergarten education, and providing financing loans (Merkur Cooperative Bank, 2012). In 2013, the Bank extended 30% of loans in the socio-cultural field and 40% in renewable energy and environment-related projects. In 2013, it provided low-interest loans to 1105 projects. In addition, it has turned to savings in electricity use in its branches. In 2012, electricity use was 78,970kwt; in 2013, this figure decreased to 76,688kwt (Merkur Cooperative Bank, 2013; Merkur Cooperative Bank, 2014).

3.13.1. Financial Sustainability

Since the most basic function of banks is financial intermediation, their most significant contribution to achieving sustainable development goals will also be in this field. In this context, the activities that we can primarily specify are as follows:

- Infrastructure project financing (Transportation, telecommunication, logistics, etc.)
- Renewable energy financing (Solar, wind, etc.)
- Financing support packages prepared for SMEs
- Funding sources allocated to strengthen the agricultural sector in the light of technological developments
- Training programs and grant support for entrepreneurs:
Lonca Entrepreneurship Center (Kuveyt Türk)
Albaraka Garaj (Albaraka Türk)

Workup Entrepreneurship Center (İşbank)

Startup Acceleration Program (Garanti BBVA)

- Green bond/sukuk issuances for environmental benefit:
Green bond issuance of 50 Million US dollars. (Yapı Kredi)
Green bond issuance of 50 Million US dollars. (İşbank)
Issuance of green bonds in the amount of 50 million US dollars.
(Garanti BBVA)
- Supporting equity financing instead of debt-based financing with venture capital funding:
Maxis Innovative Venture Capital (İşbank)
Teknogirişim Private Equity (Kuveyt Türk)
Fintech Venture Capital (Albaraka Turk)
- Through the Karz-ı Hasen product, participating banks can provide financing support to their customers in financial distress only when the principal is repaid, thus preventing financial vulnerabilities.

3.13.2. Social Sustainability

Among the activities of banks, we can evaluate corporate social responsibility projects, cultural and artistic activities, and transparent, egalitarian, and sensitive governance as a corporate culture under the heading of 'Social Capital'. We can specify the sample steps taken in line with this scope as follows:

- Corporate social responsibility projects (Providing support to education, health, social and cultural fields both with human resources and financially.)
- Culture, art and publishing activities:

Yapı Kredi Publications

Türkiye İş Bankası Culture Publications

Albaraka Culture, Art and Publishing

Kuveyt Turk Participation Bank Culture Publications

- Providing sign language training to branch personnel to strengthen communication with deaf and hard of hearing customers, designing user-friendly ATMs and branches for visually impaired customers, and developing various services and products to provide a comprehensive service to disabled citizens.

XTM Sign Language Project (Kuveyt Türk)

Implementation of a voice command system for visually impaired customers and an online chat application for deaf and hard of hearing customers on digital channels (Yapı Kredi)

- Establishing equality between men and women in all applicable areas, including employee employment and promotion procedures within the organization, and observing merit as a fundamental principle.
- Organizing both in-class and online training to improve the institution's personnel's work-related competencies and increase their awareness of social and environmental issues.
- Evaluation of penalty amounts received due to delay in credit card payments in social projects. Since participation banks operate based on interest-free finance, the amount of penalties received from customers is evaluated in social projects.

3.13.3. Environmental Sustainability

To create a positive impact against climate change, banks revise their credit evaluation processes, offer green products and services to their customers, and organize their corporate operational activities in a cost-effective and environmentally friendly manner. These are among the issues we can consider regarding environmental sustainability.

- Consideration of environmental risks in high-volume financing requests:

Banks that have signed the financing declaration prepared by the UN Global Compact Türkiye Network (Garanti BBVA, İşbank, Yapı Kredi) subject their financing requests of over USD 20 million to a particular evaluation.

- The headquarters campuses of the institutions have environmental certifications that meet international standards.

Türkiye Finans Headquarters Building (LEED Certificate)

Kuveyt Türk Banking and Life Base (BREEAM Certificate)

Albaraka Turk Headquarters Building (LEED Certificate)

İşbank Headquarters Building (BREEAM Certificate)

Yapı Kredi Headquarters Building (ISO 14064, ISO 14001)

- To be economical in paper consumption at institutions' headquarters, to minimize the carbon and water footprint, and to implement environmentally friendly activities such as zero waste projects.

Garanti Bank (Reporting has been done to the CDP Climate Change Program since 2009 and to the CDP Water Program since 2015.)

Yapı Kredi Bank (Reporting has been to the CDP Climate Change Program since 2016 and the CDP Water Program since 2018.)

Albaraka Turk Participation Bank (Reporting to the CDP Climate Change Program since 2019)

İşbank (CDP Climate Change Program has been reporting since 2019)

4. RESEARCH ON BANKING BUSINESSES IN THE BIST SUSTAINABILITY 25 INDEX

4.1. PURPOSE OF THE RESEARCH

The research aims to determine that according to the sustainability 25 index criteria defined by BIST, the current financial reports and sustainability disclosures of banking enterprises with high sustainability performance and, at the same time, large-scale and high liquid capability are included in the current financial reports and other reports related to sustainability disclosures (annual report, sustainability report, integrated report, integrated annual report, integrated sustainability report, sustainability principles compliance report, assurance audit report) to measure and evaluate the compliance of sustainable financial information disclosures with the presentation disclosures specified in the IFRS S1 and S2 Standards. The research aims to determine the trends that come to the fore in the reports related to the compliance and adequacy of the currently available sustainable financial information and sustainability-related disclosures with the relevant standards, deficiencies and the concept of sustainability.

4.2. SCOPE AND LIMITATIONS OF THE RESEARCH

The analysis unit of the research consists of the enterprises included in the BIST Sustainability 25 index as of 10.01.2023. These are three banking businesses with high sustainability performance and large-scale and high liquidity capability. According to the criteria of the Sustainability 25 index defined by BIST and published as of November 21, 2022, businesses included in this index must *have a general sustainability score of 70 or above, each primary heading grade must be 60 or above, and at least 8 of the category grades must be 50 or above*. The enterprises in the Sustainability 25 index were chosen as the analysis unit instead of the sustainability index in the research because these enterprises have a higher sustainability score and larger scales than the enterprises in the BIST sustainability index. At the same time, it is predicted that these enterprises will likely include

more sustainability-related data and disclosures in their financial and related reports due to their higher corporate value. The enterprises that comprise the research analysis unit are shown in Table 1 in order.

Table 4.1 BIST Sustainability 25 Index Enterprises

Business Code	Business name	Index code
AKBNK. E	AKBANK T. A.Ş.	XSD25
ISCTR. E	TURKIYE IS BANK INC.	XSD25
TSKB.E	TÜRKİYE SINAI KALKINMA BANKASI A.Ş.	XSD25

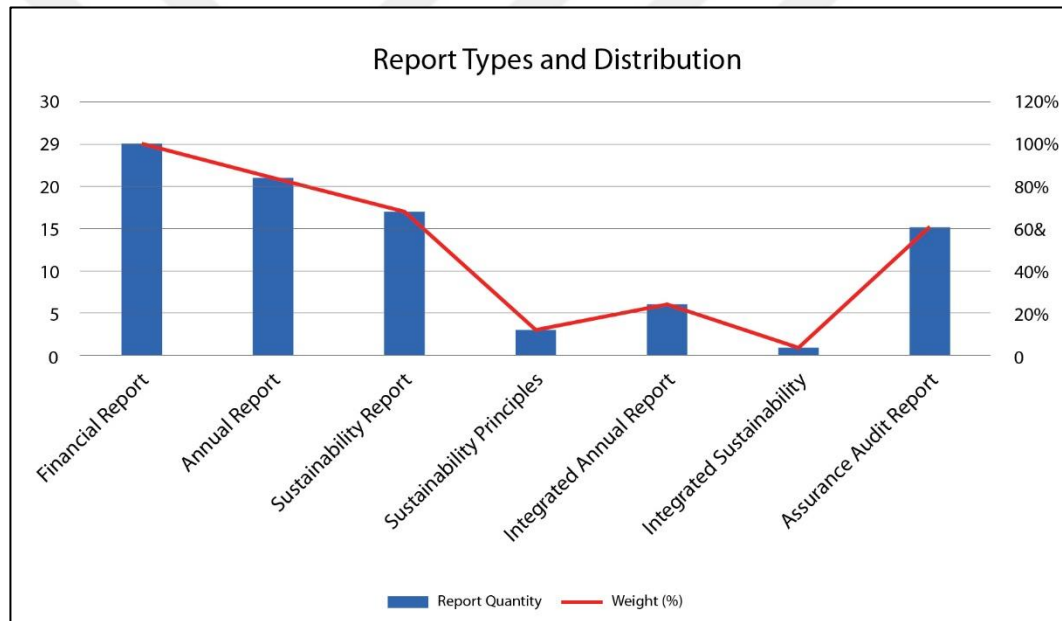
Source: <https://borsaistanbul.com/tr/sayfa/165/bist-surdurulebilirlik-endeksleri>

Archival data was used as the primary data source in the research, and the annual financial reports, annual reports, sustainability reports and assurance audit reports of the companies included in the BIST Sustainability 25 index dated 31.12.2021 were examined. According to the archival data examined, 88 reports, including 25 financial reports, 21 annual reports, six integrated annual reports, 17 sustainability reports, one integrated sustainability report, three sustainability principles compliance reports and 15 assurance audit reports, were examined. As a result of the research, it was determined that İşbank and TSKB published their annual reports under the name of integrated annual reports. It was determined that Akbank enterprise published two separate annual reports, namely the annual report and the integrated annual report. In addition, it has been observed that Ereğli Iron and Steel has published its sustainability report under the integrated sustainability report.

In contrast, Akbank Enterprise has published sustainability principles compliance reports in addition to the sustainability report on the KAP platform. For this reason, these reports (integrated annual report, integrated sustainability report and corporate sustainability principles compliance report), which are related to the research subject, are also included in the scope of the research. Of the three bank enterprises

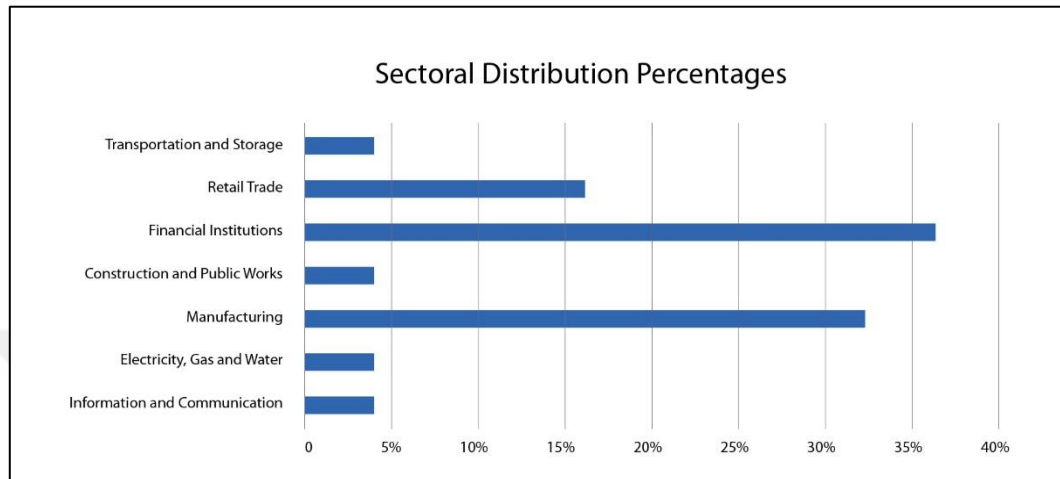
within the scope of the research, one (33%) has sustainability reports, and two (66%) have assurance audit reports. The assurance audit reports of the enterprises could be accessed through the sustainability reports or integrated activity reports of the same enterprises. Accordingly, the weight of sustainability reports with a limited assurance statement and report together with a sustainability report or integrated annual report, and therefore are found to have passed the assurance audit, is 71%. The numerical distributions and weights of the examined reports according to the report types are shown with the help of Figure 4.1. below;

Figure 4.1 Numerical Distribution and Weight of Reports by Report Types



The enterprises examined within the scope of the research operate in seven different sectors. Most of these enterprises (68%) are financial institutions and manufacturing enterprises. Accordingly, 36% of the enterprises examined are financial institutions, and 32% are manufacturing enterprises. Financial institutions include holdings, investment institutions and banks. Enterprises in the manufacturing sector manufacture basic metal industry, chemicals, pharmaceuticals, petroleum and rubber products, metal goods and clothing. The sector-based percentage distribution of the enterprises subject to the research is shown with the help of Chart 2 below.

Figure 4.2 Distribution of BIST Sustainability 25 Index Enterprises by Sectors



4.3. METHOD OF THE RESEARCH

In the study, the descriptive analysis method and content analysis method were used together. With descriptive analysis, the criteria examined within the scope of the research were expressed numerically and analyzed by summarizing them through tables. Within the scope of the content analysis study, the prominent qualitative features of sustainability reporting practices were determined. In addition, the research report prepared by ACCA and the University of Glasgow for the evaluation of the preparation processes of the enterprises for the S2 Standard was taken as a reference, and some of the research methods included in the report were adapted for this study.

The research first differentiated four main criteria (governance, strategy, risk management, criteria and targets) in the IFRS S1 and IFRS S2 Standards for sustainable financial information and climate-related disclosures. Accordingly, in the research, the governance criterion, which forms the basis of the other three criteria in the standards and is in the first place, was considered the essential criterion in sustainability reporting and was examined and analyzed by the

descriptive analysis method. The content analysis method was used to evaluate strategy, risk management, criteria and objectives criteria, which have more abstract features compared to governance. Some information (such as flexibility in strategy criteria and scenario analysis, etc.) will be clarified by the information provided by other IFRS Sustainability Disclosure Standards, which are expected to be published.

Governance is the first basic process outlined in the IFRS S1 and IFRS S2 Standards to monitor and manage sustainability and climate-related risks and opportunities and to develop governance processes, controls and procedures accordingly. It is essential for financial reporting users that the enterprises examined in the research disclose the information about the role of the governance body and business management in this process, which they have established to monitor and manage sustainability and climate-related risks and opportunities within the scope of the governance principle, appropriately and adequately. Within the scope of descriptive analysis, the governance criterion has been divided into eight sub-criteria, considering the governance requirements specified in the IFRS S1 and IFRS S2 Standards under the governance heading as the information enterprises must disclose regarding governance. The availability of each criterion was first examined through the sustainability reports of 3 enterprises. For businesses that do not have a sustainability report, annual reports and integrated annual reports are considered. Accordingly, each criterion found in the reports was scored as "1", and each criterion found to be absent was scored as "0". The total number of criteria determined to be present by each enterprise and scored as "1" was calculated by proportioning the total governance criteria to the total number of criteria. The sub-criteria examined within the scope of the governance criterion in the research are listed below.

Criterion-1: The existence of information on the governance body or bodies (these may include a board, committee or equivalent body responsible for senior management), as well as the oversight of sustainability and climate-related risks and opportunities, and the role of management in these processes,

Criterion-2: Specifying the authorized persons in the body or body responsible for the oversight of sustainability and climate-related risks and opportunities,

Criterion-3: Explaining how the body's responsibilities regarding sustainability and climate-related risks and opportunities are reflected in the entity's job description, board powers and other relevant policies,

Criterion-4: Explain how the body provides the appropriate skills and competencies available to oversee strategies designed to respond to sustainability and climate-related risks and opportunities,

Criterion 5: Specifying how and how often the body and its committees (audit, risk or other committees) are informed about sustainability and climate-related risks and opportunities,

Criterion- 6: Organs and committees; explain how they assess climate-related risks and opportunities while overseeing the business's strategy, decisions on key transactions, and risk management policies, including an assessment of choices that may be needed and a sensitivity analysis of uncertainty;

Criterion-7: Whether and how the relevant performance measures are included in the compensation policies; Adequate disclosure of how its bodies and committees set, supervise and monitor progress on significant sustainability and climate-related risks and opportunities;

Criterion-8: Adequate disclosure of management's role in assessing and managing sustainability and climate-related risks and opportunities, including whether it has been delegated to a specific position or committee at the management level and how oversight is exercised over that position or committee. This disclosure includes information on whether controls and procedures specific to managing sustainability-related risks and opportunities have been implemented and, if so, how they are integrated with other internal functions.

For Criterion 1, the existence of a body established to fulfil the duties of determining, executing, reviewing and improving the sustainability strategies, policies and targets of the enterprises in the fields of ESG and reporting to the

authorized board of the enterprise was investigated. In criterion 2, the authorized persons in the relevant body were examined. By examining the distribution of members of the sustainability bodies and committees of the enterprises, how social and environmental issues are reflected in the responsibilities of the board of directors is discussed within the scope of criterion 3. Criterion 4 measures how skills and competencies are acquired to assess sustainability and climate-related opportunities and oversee strategies designed to respond to risks. For this reason, within the scope of Criterion 4, it was investigated whether the bodies and committees responsible for the management of sustainability and climate-related opportunities and risks, whose existence was determined by Criterion 2, were supported by a separate expert committee or technical assistance team to help them gain the relevant skills and competencies and make decisions on critical issues, and whether such an expert committee pool or unit existed within the enterprise.

Bodies or committees should be informed about the risks and opportunities in ESG areas through meetings held in 2021. For the existence of criterion 5, the number and content of the relevant meetings were investigated through the reports.

With criterion 6, the observance of financial and non-financial risks within the scope of corporate risk management and the integration of risk management policies into sustainability and climate-related strategies were examined. Within the scope of corporate governance principles compliance reports, the reflections of sustainability and climate-related performances of enterprises on wage policies were discussed and fixed wages, fringe benefits, allowances and premiums were investigated in detail in the context of criterion 7.

Within the scope of Criterion 8, the existence of the audit committee for the periodic supervision of the functioning of the internal control systems of the enterprises and the internal audit activities was investigated, and whether a particular procedure regarding the management and control of risks and opportunities in the fields of ESG was applied within the scope of the duties of the relevant committee. In the internal audits, the existence of the systems and standards followed about the functioning of environmental management systems was investigated.

In the content analysis section, which constitutes the second part of the research, within the scope of the disclosure of sustainable financial information and climate-related information included in the IFRS S1 and S2 Standards, only a qualitative content evaluation study was carried out for the criteria of strategy, risk management, criteria and objectives. Accordingly, within the scope of the strategy criterion, the sustainability models of the enterprises and the way they reflect them in their business and strategies; prioritization and materiality risk matrices, which businesses call sustainability prioritization or materiality analysis within the scope of the risk criterion; Within the scope of the criteria and targets criterion, the ESG and sustainability performance indicators of the enterprises and the content of the assurance audit reports were examined and analyzed. In the content analysis study, first of all, the sustainability reports of the enterprises and the reports, frameworks and directives (such as sustainability principles compliance report, environmental and social risk framework, sustainability committee working principles directive, etc.) specified as reference in these reports, if any, were taken into consideration. On the other hand, the enterprises that do not have a sustainability report were examined in terms of the relevant criteria through their annual and integrated annual reports. Accordingly, a manual data set was created using the archival data in the sustainability reports and other related reports of the enterprises subject to the research. As a result of the content analysis studies, it was tried to determine the most common and least common sustainability disclosures in the messages of the management, the scope under which section these statements are included, the level or degree of importance defined for sustainability-related issues, whether other reports are referenced on sustainability-related disclosures, based on which issues sustainability-related disclosures are subject to assurance audits. It has been evaluated by comparison according to the specified requirements.

In addition, the annual financial reports of the enterprises subject to the research for the period under review were examined using a content analysis method regarding financial information disclosures related to sustainability. The reason is that the IFRS S1 Standard states that sustainability-related financial information must be disclosed in financial reports as part of enterprises' general-purpose financial

reporting. In contrast, management assessments are part of the general purpose of the enterprise's financial reporting. In this direction, in addition to the sustainability reports and other reports related to sustainability disclosures, it was tried to determine in which section or under which heading, on which subject and to what extent sustainability-related statements were included in the financial reports of the enterprises with the content analysis study carried out on their financial reports.

4.4. FINDINGS OF THE RESEARCH AND EVALUATION OF THE RESULTS

As a result of the descriptive analysis, which constitutes the first part of the research, the level of fulfillment of the disclosure requirements stipulated for the governance criterion in the IFRS S1 and IFRS S2 Standards and divided into eight sub-criteria was calculated and examined. As a result of the examination, it was observed that the disclosure results of the enterprises subject to the research regarding the governance criteria within the scope of IFRS S1 and IFRS S2 Standards were parallel. The biggest reason for this is that the committees or bodies responsible for managing sustainability risks and opportunities in all of the enterprises subject to the research are the same as the bodies that carry out climate-related studies, and similar studies are carried out on climate. The results obtained based on the enterprise regarding the governance criteria are summarized in Table 4.2 below.

Table 4.2 IFRS S1 and IFRS S2 Business-Based Governance Disclosures Scores and Percentages

Business code	Criterion-1	Criterion-2	Criterion-3	Criterion-4	Criterion-5	Criterion-6	Criterion-7	Criterion-8	Sum	Number of Criteria	Percentage (%)
AKBNK	1	1	1	0	1	1	1	0	6	8	75%
ISCTR	1	1	1	0	1	1	1	0	6	8	75%
TSKB	1	1	1	0	1	1	1	1	7	8	88%

When Table 4.2 is examined, it is seen that the compliance score with the governance criterion disclosure requirements for the enterprises subject to the research is at most 1 (88%) and at least 2 (75%). Among the enterprises within the scope of the study, the Industrial Development Bank of Türkiye & Türk A.Ş. was identified as the enterprise that met the requirements of the governance criteria at the highest level (88%). Accordingly, it can be concluded that these four entities are likely to be able to carry out the compliance process with the governance disclosure requirements stipulated by the IFRS S1 and IFRS S2 Standards more easily and quickly compared to other enterprises. In addition to the scores and percentages specified on a business basis in Table 4.2, the distribution of criterion-based scores and percentages is summarized with the help of Table 4.3 below.

Table 4.3 IFRS S1 and IFRS S2 Criterion-Based Governance Disclosures Scores and Percentages

Business code	Criterion-1	Criterion-2	Criterion-3	Criterion-4	Criterion-5	Criterion-6	Criterion-7	Criterion-8
AKBNK	1	1	1	0	1	1	1	0
ISCTR	1	1	1	0	1	1	1	0
TSKB	1	1	1	0	1	1	1	1
Sum	3	3	3	0	3	3	3	1
Weight (%)	100%	100%	100%	0%	100%	100%	100%	33%

When Table 4.3 is examined, it is seen that the criterion-1, criterion-2, criterion-3, criterion-5, criterion-6, and criterion-7 disclosure requirements, which are within the scope of governance disclosures, are fully fulfilled (100%) in all enterprises. Therefore, it can be said that criterion-1 and criterion-2 are the two main explanations the research companies have used most widely in their current sustainability reporting practices. When the sustainability reports of the enterprises and the other relevant reports of the enterprises that do not have a sustainability report include statements about sustainability and climate, it is seen that the body and bodies responsible for sustainability and climate-related statements, the scope and responsibilities of these bodies and the sustainability model are included in the management's message section.

Criterion-4, on the other hand, emerged as the least used (0%) governance explanation by businesses due to the research. While criterion-2 can be determined due to the bodies responsible for the management of sustainability and climate-related opportunities and risks in the current sustainability reporting practices of the enterprises subject to the research, there is no clear information on how these bodies have gained or will gain the skills and competencies they will need in the management of sustainability and climate-related opportunities and risks. Again, Table 3 shows that the utilization rate of the explanations required by criterion-8 is relatively lower (33%) compared to criterion-1, criterion-2, criterion-3, criterion-5, criterion-6 and criterion-7. Accordingly, it can be said that there is a need for the enterprises subject to the research to include detailed explanations to determine the existence of criterion-8 stipulated within the scope of IFRS S1 and IFRS S2 Standards in their sustainability reporting practices.

With the content analysis study, which constitutes the second part of the research, the level of compliance with the disclosure requirements of the strategy, risk management, *criteria and targets criteria* stipulated by the IFRS S1 and IFRS S2 Standards was qualitatively examined and evaluated. As a result of the content analysis studies carried out on the sustainability and related reports of the enterprises that are the subject of the research for the strategy criterion, it has been seen that all of the enterprises have created a sustainability model for sustainability and climate-related opportunities and risks that affect their business models, strategies, cash flows and financing and associated them with the United Nations Sustainable Development Goals (UN SDGs).

CONCLUSION

In conclusion, this thesis underscores the increasing importance of sustainability in the Turkish banking sector, particularly for banks listed on the BIST Sustainability 25 Index. As the global financial landscape prioritizes environmental, social, and governance (ESG) factors, Turkish banks are gradually incorporating these principles into their operations and strategies. This shift is crucial for long-term value creation and managing risks associated with climate change and social responsibility. The study highlights how Turkish banks are becoming key players in sustainable finance, driving initiatives aligning with national economic development goals and global sustainability targets.

The adaptation rates of banks like Akbank, Türkiye İş Bankası, and Türkiye Sınai Kalkınma Bankası (TSKB) to the International Financial Reporting Standards (IFRS) S1 and S2 show varying degrees of progress. Akbank and Türkiye İş Bankası, with an adaptation rate of around 80%, showed significant improvements in aligning their reporting with global sustainability standards. TSKB, one of Türkiye's most sustainability-focused banks, has also made impressive strides, with an adaptation rate nearing 90%. TSKB's focus on sustainable finance and environmental projects gives it a distinct advantage in meeting these international reporting standards.

While the adaptation rates of these banks vary, the overall trend reflects a positive movement towards greater sustainability integration in the Turkish banking sector. As more banks embrace ESG principles and comply with international reporting frameworks like IFRS, they are better positioned to enhance their resilience and competitiveness in the global financial market. As we advance, continuous improvements in transparency, governance, and risk management will be essential for these institutions to fully realize the benefits of sustainable finance, contributing to their financial performance and broader societal and environmental goals.

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