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Financial sustainability and derivatives: a theoretical approach

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Abstract. This paper analyses the theoretical issues of financial sustainability on several levels. First of all, the variety of definitions of sustainability is discussed. After that, the concept of financial sustainability is clarified and the main elements of financial sustainability are indicated. Finally, the map of financial sustainability concepts is presented and three main approaches to financial sustainability (at international, national, and company levels) are identified. In addition, the relationship between the application of financial derivatives and a company's financial sustainability is briefly discussed.

Keywords. Sustainability, sustainable finance, risk management, derivatives

1. Introduction

Sustainability is a widely used concept, applied in different industries. Ben-Eli (2018) arguesthat the concept of sustainability has lost its meaning in recent years. One gets the impressionthat it has become a modern buzzword that is used everywhere, not even necessarily accordingto its intended purpose (Ben-Eli, 2018). In society, there are many different types andinterpretations of this concept, which can be aimed at finance, ecology, education, etc. Whendiscussing the concept of sustainability in the fields of finance and economics, it is usuallyassociated with the desire to keep companies or institutions stable, profitable, active, etc. However, sustainable finance and its concept should not be limited to monetary relationships.This raises the need to clarify the concept of sustainability in finance, identify the main elementsof financial sustainability and summarize the diversity of approaches to financial sustainability.

Thus, in Section 2, this paper analyzes the concept of sustainability. In Section 3, the main components of financial sustainability are presented. In Section 4, three main perspectives of sustainable finance are discussed. And finally, taking into account one of the financial sustainability perspectives analyzed, in Section 5, the role of derivatives in ensuring a company's financial sustainability is briefly discussed. Finally, the conclusions as well as directions for future research are discussed.

2. The definition of financial sustainability

To consistently and comprehensively reveal the concept and essence of financial sustainability,it is first of all important to examine the definition of sustainability itself.

It could be stated that sustainability is a complex concept that, depending on the approach and perspective, is treated ambiguously in the scientific literature. Scientific sources (for example, Barbosa et al. (2020), Bocken et al. (2019), Fonseca et al. (2020), Migliorelli (2021), Oprean-Stan et al. (2020)) provide a variety of terms related to sustainability such as (i) sustainable development, (ii) sustainable growth, (iii) sustainable business, (iv) sustainable management, (v) sustainable finance, etc. Each term reflects a different, unique perspective of sustainability; and also can be analyzed using different approaches.

For example, according to the most prominent definition of sustainable development (as provided in Brundtland Report (1987)), there are the following elements of sustainable development: (i) first of all, humanity has the opportunity to ensure sustainable development that meets the present needs of the mankind, and also does not compromise the ability of future generations to meet their own needs; (ii) second, the sustainable development shouldn't be understood as a fixed state of harmony, contrary, it is a process of change, during which the use of resources, directions of investment, technology development and other institutional changes must be compatible with both current and future needs; (iii) third, this process is complex and requires painful and complicated decisions from its participants; (iv) finally, the political will should also contribute to sustainable development (Brundtland Report, 1987). On the other hand, Vogt and Weber (2019) state that sustainable development must be understood as the process of searching, learning, and shaping the present and future of active and innovative human activities on Earth and in outer space (Vogt and Weber, 2019). Jusuf et al. (2020) state that the concept of sustainability can be simply defined as the balance between the economic, social, and environmental performance of an organization; and companies use the concept of sustainability as a guideline to conduct their business activities in a way that minimizes negative environmental impacts.

3. The main components of sustainable finance

The concept of financial sustainability is very often associated with economics and finance, thus the concept of sustainable finance (together with synonyms such as financial health, long- term financial performance, financial longevity, etc.) is becoming more and more frequently mentioned and examined.

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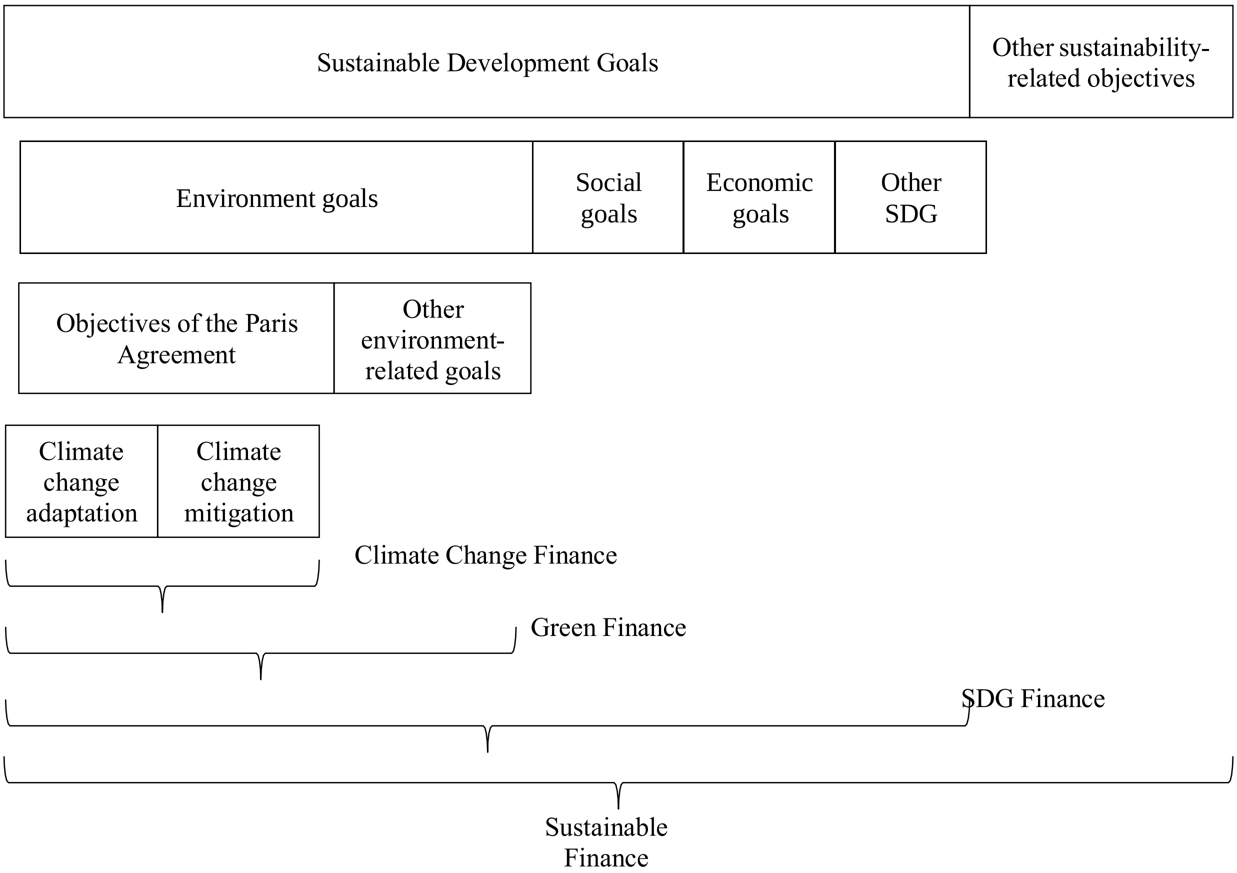
Figure 1. Sustainable finance: classification and main components



Source: compiled by the authors according to Migliorelli (2021)

Scientific sources (for example, Osazefua Imhanzenobe, (2020), Zabolotnyy and Wasilewski (2019), Ha (2020), Migliorelli (2021) and others) provide a variety of definitions of financial sustainability. In general, it can be said that financial sustainability is a broad concept that covers many areas, which are illustrated in Figure 1.

Zabolotnyy and Wasilewski (2019) define the financial sustainability of a company as theability to create value for owners and ensure the continuity of operations in the long term, usingan optimal combination of investment and financing sources (Zabolotnyy and Wasilewski, 2019). At the same time, according to Ha (2020), financial sustainability refers to the ability of institutions to cover their operating and financing costs, loan provisions, and capital expenditure from operating income (Ha, 2020). There is also an opinion that the concept of financial sustainability is inversely related to financial risk and distress and the components of financial sustainability include long-term returns and sustainable growth (Osazefua Imhanzenobe, 2020). However, Migliorelli (2021) presents a critical view and states that the definition of sustainable finance does not exist at all; and until now, financial institutions and other entities tend to create definitions according to their fundamental motives, which has naturally led to the proliferation of heterogeneous terminology (Migliorelli, 2021).

4. Three perspectives of the financial sustainability concept

Next to what has already been discussed, it should be noted that sustainable finance is not onlyabout the monetary relations and cash flows in companies; it also includes the approach to the solution of environmental, social, and economic problems and other goals of sustainable development (hereinafter referred to as SDGs).

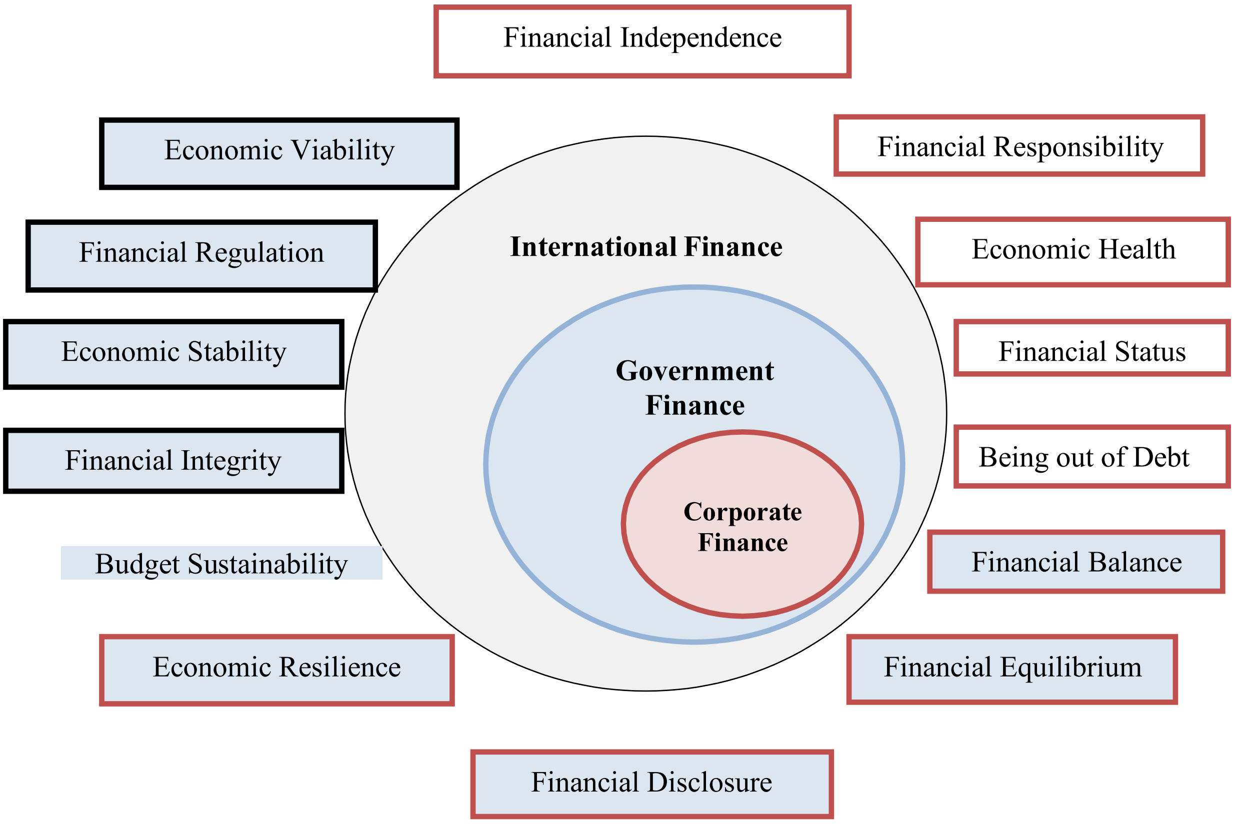
In 2015 The United Nations General Assembly adopted 17 Sustainable Development Goals, the main objective of which is to promote the organizational implementation and integration of sustainability, as well as to meet the current and future needs of stakeholders and ensure a better and more sustainable future for all, by balancing economic, social and environmental development (Fonseca et al., 2020).

Current trends indicate that the SDGs implementation process may be delayed due to many socio-economic difficulties and obstacles. According to Filho et al. (2020) and co-authors, COVID-19 has threatened to undermine the opportunities provided by the SDGs, such as the fight against poverty and hunger; therefore it is particularly important to continue working towards the implementation of the SDGs, so as not to jeopardize the progress achieved so far. SDGs measures can restore the quality of life and solve many problems related to lack of water, food, or poor health care conditions (Filho et al., 2020).

First of all, the environmental goals are reflected in green finance. Green finance engages traditional capital markets in the development and distribution of a variety of financial products and services that deliver a return on investment and has no negative impact on the environment. Promoting green finance on a large and economically viable scale helps ensure that green investments are prioritized over “business-as-usual” securities that do not use sustainable growth models (Lee, 2020). Secondly, climate-change-related finance is defined by the goals of the Paris Agreement as this document sets the conditions for keeping the 21st-century global temperature rise to below 2°C (above pre-industrial levels) and financing low-carbon, climate-resilient global development (United Nations Climate Change, 2015). This and other goals mentioned in the agreement aim at mitigating climate change and adapting to changing environmental and climatic conditions.

Finally, the analysis of recent efforts in the field suggests that sustainable finance can be analyzed from three different perspectives: international, national (macro), and company’s (micro) as it is shown in Figure 2.

Figure 1. Map of financial sustainability concept according three different perspectives



*black bracket – international perspective; blue bracket – national perspective, orange bracket – company‘s perspective

Source: compiled by the authors.

After examining the opinions of the researchers mentioned before, it can be concluded that the concept of financial sustainability is analyzed and discussed very widely and from different perspectives, from a narrow perception (at the company's level) to the broad one (at the international level). The financial sustainability concept map (Figure 2) also shows that each term can be assigned to several areas (overlap).

To sum up, it can be stated that sustainability is a multifaceted concept, the perception of which can be formed depending on the representative of the branch of science that will use it. In a narrow sense, financial sustainability, according to the authors, means the ability of entities to manage cash flows in such a way that the company or institution is liquid and able to fulfill its obligations and ensure steady growth in the long term. In a broad sense, financial sustainability focuses on the implementation of the SDGs, the promotion of green finance, and the fulfillment of the objectives of the Paris Convention.

Therefore, ensuring sustainability can have different meanings for various entities: the company, the investor, and the state. Based on this it is important to ensure the appropriate legal environment both at the national and international levels. Further, the financial sustainability at the company's level is discussed in a way how it can be ensured using financial derivatives.

5. Derivatives as one of the measures to ensure a company's financial sustainability

Financial derivatives being the instruments that allow managing (hedging) the risk related to unexpected movements in the market (Sobti (2020), Wan and Fan (2021), can also play an important role in ensuring a company's financial sustainability.

For example, Bachiller et al. (2021) argue that the use of derivatives in the company has a significant positive effect on its value. Bessler et al. (2019) claim that there is a relationship between a company's value and the application of derivatives for hedging foreign exchange risk. Prabha et al. (2014) point out that derivatives positively affect a company's value, however, this effect can be seen only during periods of crisis and recession. On the other hand, some authors (for example, Firmansyah and Purnama (2020)) still tend to think that application derivatives are not related to the company's value. This allows summarizing, that the evidence on the role of derivatives on financial sustainability is still not unambiguous enough, which raises the need for further empirical research.

6. Conclusions

In a narrow sense, financial sustainability means the ability of entities to manage cash flows in such a way that the company or institution is liquid and able to fulfill its obligations and ensure steady growth in the long term. In a broad sense, financial sustainability focuses on the implementation of the SDGs, the promotion of green finance, and the fulfillment of the objectives of the Paris Convention.

Financial sustainability is analyzed from different perspectives, from a narrow perception (at the company level) to the broad one (at the international level). Therefore, ensuring sustainability can have different meanings for various entities: the company, the investor, and the state.

Financial derivatives being the instruments that allow managing (hedging) the risk can also play an important role in ensuring a company's financial sustainability. However, the empirical evidence on the role of derivatives on financial sustainability is not unambiguous enough, which raises the need for further empirical research.

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