Volume **11** / 2023 ISSN 2344-102X
Issue 2 / **June** 2023 ISSN-L 2344-102X

SUSTAINABILITY IN TURBULENT BUSINESS ENVIRONMENTS: FROM PHILOSOPHY TO PRACTICE

Rozalia KICSI
"Ştefan cel Mare" University of Suceava, Romania
rozaliak@usm.ro
Denisa CHIFAN
"Ştefan cel Mare" University of Suceava, Romania
University of Beira Interior, Portugal
chifan.denisa@yahoo.com

Abstract
Sustainability has emerged on the intellectual horizon first as a conception and then as a full concept in its own right, now challenged by the complexity and dynamism of a world shaped by transformations in technology, economic policies, industrial structures, economic theory, the knowledge needed to govern and lead, and economic issues. The concept and philosophy of sustainability has its origins in the environmental movement; long before the term was used in the context of human-nature interactions, environmentalists insisted on the imperative to understand more deeply the long-term consequences of intense human activity almost single-mindedly oriented towards the ideal of growth and development. The literature increasingly calls for a paradigm shift in terms of the multi-objective role that business organizations are embracing, with some of these objectives transcending the economic context. Over the last decades, various categories of organizations have become conscious and have increasingly accepted that they are also called upon to play a social role. In this context, sustainability is turning into one of the main business philosophies and practices in the 21st century.

Keywords: *sustainability; business organization; chaotics; growth; development*.

JEL Classification: *O20; Q01; Q56*

I. Introduction

Sometimes elevated to the level of an ideology, sustainability has entered the horizon of theoretical reflection first as a conception and then as a self-contained construct. However, it is still a seemingly elusive concept, seeking to define its own physiognomy while at the same time being challenged by the complexity and dynamism of a world shaped by interdependence, globalization, velocity and complexity. The concept and philosophy of sustainability is rooted in the environmental movement; long before this term was used in the context of interactions between human beings and nature, environmentalists insisted on the imperative to understand more deeply the long-term consequences of intense human activity, almost fiercely oriented towards the pursuit of growth and development. Since the early post-war decades, works of great merit in their force of questioning have raised concerns about the dual relationship between humans and their physical environment. Attempts to answer these questions spawned the theory of the limits of growth and the question of the transition to a global equilibrium (Kicsi, 2023).

Almost in tandem, also in the early post-war decades, an era of discontinuity began to be discussed, an era shaped by transformations in technology, in economic policies, in industrial structures, in economic theory, in the knowledge required to govern and lead, and in economic matters. This new economic habitat is volatile and disruptive, patterned by spasms and convulsions leading to synchronized fragility and ephemerality of the economy. Phrases such as chaos and turbulence have largely emerged to portray a new normal in the business environment in which enterprises have been operating since the 1980s. The Great Recession of 2008 questioned the ability of the modern capitalist system to provide certainty about socio-economic growth and welfare. The crisis generated by the Covid-19 pandemic exacerbated the vulnerability of the world's major economies, which became less able to absorb shocks. The metaphor of the kinetic corporation depicts a state of affairs that is increasingly objective, as companies are, by force of circumstance, in a continuous process of reorganization, redesign and redefinition.

These trends, coupled with the widely debated issue of the limits of growth, have launched a series of questions about the idea of prosperity as a steady expansion of material well-being. The old paradigms seem to have exhausted the possibilities of answering the questions raised by the new contexts. A fundamental perspective has opened up in the landscape of sustainability issues: what does prosperity mean in a world framed by social and ecological limits? The need for a paradigm shift is also being discussed in terms of the role of multi-objective

DOI: 10.4316/EJAFB.2023.1127

Volume **11** / 2023 ISSN 2344-102X
Issue 2 / **June** 2023 ISSN-L 2344-102X

entities that business organizations are embracing more and more; some of these objectives transcend the economic sphere (Kicsi, 2023).

In this context, where does sustainability fall within the theory and practice of business organizations?

II. Sustainability from vision to concept

Since the 1950s and up to the present day, the word sustainability has been referred to more and more extensively in the media and in academic literature; it has been echoed by a variety of opinion leaders, associations, foundations, etc., sometimes with slightly different meanings.

Yet what is at the heart of this word? A thematic register, comprehensive in the problematic it raises, which struggles to define its own physiognomy and at the same time faces an avalanche of challenges and crises arising from the complexity and dynamism of a globalized world. Some would even see sustainability as the prevailing ideology of our times, expressing a range of beliefs and principles that guide the organization of economic and social life (Thiele, 2016). It entered the horizon of intellectual reflection first as a conception and later as a stand-alone construct. However, the term has not yet acquired a clear, widely accepted and recognized meaning, as evidenced by the diversity of its intellectual roots dating back to the 1950s in discussions of demographic change, resource use, environmental pressures, etc. However, each of these schools of thought has had its contribution to the development of this area of scientific knowledge as we know it today. Also, each of them were almost fully developed even before the term entered the academic lexicon and common parlance (Kidd, 1992). The conceptual fundamentals of sustainability sometimes hide the practical problems that sustainability approaches/decision-makers have to face (Portney, 2015).

The philosophy and the concept of sustainability belong unequivocally to the environmental movement. Long before the concept was used in the context of interactions between humans and nature, environmentalists have insisted on the danger posed by the lack of a deep understanding of the long-term consequences of human activity, especially those related to development, which could lead to disaster (Kidd, 1992). While there are obviously a variety of understandings of sustainability, the key topics that emerge focus on (Brown et al., 1987; Portney, 2015; Thiele, 2016):

- sustaining continued human life on Earth;
- the long-term preservation of the biological resource base and productivity of agricultural systems;
- stable human populations;
- limited growth economies;
- an important role for small size and self-sufficiency;
- the continuing quality of the environment and ecological systems.

In the following table we shall resume the fundamentals of sustainability as a philosophy/conception, as stated and discussed by Brown et al. (1987) and Kidd (1992).

Table 1. Synopsis of conceptual background and core themes in the register of sustainability

Fundamentals/roots/ perspectives	Focus areas/themes	Fundamentals/roots/ perspectives	Focus areas/themes
	(Brown et al., 1987)		**(Kidd, 1992)**
Sustainable biological resource use	Maximum sustainable yield is understood as the exploitation of a resource for maximum continuous production, consistent with the preservation of a constant renewable stock (this view is applicable to biological resources, which are considered to be naturally self-renewable).	*Ecological/carrying capacity*	A particular ecosystem can support a maximum number of a certain species and exceeding this maximum will trigger a series of events that will lower the population to or below the maximum level. From the initial focus on the predominantly material/physical aspects that define carrying capacity, interest has also shifted to issues such as the equity of economic systems, the role of social and cultural particularities, and technology as factors that affect carrying capacity.
Sustainable agriculture	The focus is gradually shifting from the short-term goal of maximizing production to an	*Resource/ Environment*	Higher living standards require intensive use of

DOI: 10.4316/EJAFB.2023.1127

Volume **11** / 2023 ISSN 2344-102X
Issue 2 / **June** 2023 ISSN-L 2344-102X

Fundamentals/roots/ perspectives	Focus areas/themes	Fundamentals/roots/ perspectives	Focus areas/themes
	approach that also considers the long-term continuum of production. Sustainable agriculture must preserve the land resource base without degrading it, and at the same time be economically viable and socially acceptable.		physical resources. Despite technological progress, people consume more resources than they create. As physical resources are depleted, their costs will rise, making it unprofitable to use them for additional production. A recurrence of this cycle will lead to a stagnation of industrial boom and the limits of growth.
Carrying capacity	Carrying capacity is a concept used in population biology to describe the maximum population size that the environment can permanently support. Maximum carrying capacity is the maximum allowable population size that, although theoretically sustainable, is living on the edge and is vulnerable to even small changes in the environment. Optimal carrying capacity, obviously lower than maximum, refers to the desirable population size that is less vulnerable to environmental disturbances. The concept generates reconsiderations from a national and global perspective as a result of the complex interaction between economic and social factors. On a global scale, carrying capacity is limited.	*Biosphere*	Human activity can degrade the whole planet. The Earth is rapidly becoming a closed system *("spaceman" economy/closed economy*). It underlines the moral obligation of each generation to respect the needs of future generations.
Sustainable energy	The concept of energy sustainability is discussed in terms of renewable energy and unlimited/inexhaustible energy, and in the context of the necessary transition from current depletable energy sources (based on fossil fuel consumption) to renewable or virtually unlimited sources.	*Critique of technology*	Technology has dehumanizing effects/ disruptive on systems and individuals. Non-discriminatory export of technology from industrialized countries to less developed countries has pernicious consequences. Development projects fail to consider the full environmental implications of technological innovation.
Sustainable society and sustainable economy	A sustainable society is one that is self-sufficient and less vulnerable to external forces. Its drivers are crop regulation, efficient energy use and transition to renewable energy, soil and water preservation, constant, dispersed population with a less abundant lifestyle. Such a society is built on an architecture of values in which individualism and human selfishness are replaced by empathy, compassion and a spirit of justice for all. This vision calls into question the social and physical limits of growth.	*No growth-slow growth*	The unprecedented acceleration of economic growth has fostered and demanded new values, attitudes and human costs that raise questions about the validity of growth as society's ultimate goal. Continuing economic growth indefinitely is physically impossible. An economy without growth can promote higher ethical values/ideals and social goals.
Sustainable development/eco development	Sustainable development is a development strategy that manages all assets (natural and human as well as financial and physical	*Ecodevelopment*	Development requires harmonizing economic and social objectives with sound

DOI: 10.4316/EJAFB.2023.1127

Volume **11** / 2023 ISSN 2344-102X
Issue 2 / **June** 2023 ISSN-L 2344-102X

Fundamentals/roots/ perspectives	Focus areas/themes	Fundamentals/roots/ perspectives	Focus areas/themes
	resources) to increase wealth and well-being, integrating appropriate/healthy environmental management.		environmental management in a spirit of solidarity with future generations. It underlines the importance of normative values in development.

Source: adapted according to Brown et al. (1987) și Kidd (1992)

After the Second World War, a number of influential papers raised questions about the Earth's capability to sustain its rapid population growth. Worthy of merit for its power of questioning, the work of William Vogt (1948), *The Road to Survival*, questions the dual relationship between man and his physical environment, pointing out that "one of the strangest gaps in human cultural development is the absence of understanding" of this relationship (p. 47). Every human being is dependent on the environment in which he or she lives and, in turn, impacts this environment to a greater or lesser extent. This relationship is extremely volatile and can change from one moment to the next under the conditioning of human actions. The common denominator, however, is the relationship between the size of human populations and the natural resources necessary for life (such as soil, water, plants and animals). In this context, we find at Vogt (1948, p. 16) a simplified bio-equation of carrying capacity as the result of the ratio between biotic potential and environmental resilience. In the same vein, Samuel Ordway Jr. (1956) advances a theory of the limits of growth that prefigures the work of Meadows et al. (1972). He starts from the observation that if permanent peace prevailed and the rest of the non-Communist countries achieved the same standard of living as the US, the global need for materials/raw materials would multiply six fold. In this material resource issue, the threat does not come from absolute scarcity, but lies in the insidious rise in costs that can undermine the rising standard of living (in the US, according to the author) and thus damage the dynamic quality of American capitalism and undermine the economic foundations of national security. Ordway characterizes as delusional and obsessive the aspiration of mankind to an ever-higher standard of living, showing that in modern society the predominant religion has become economic growth (Ordway, 1956, p. 990), but with what material and spiritual cost to the nation? He builds the theory of the limits of growth founded on two core premises, namely:

- people's living standards are constantly rising, with an ever more massive use of physical resources;
- despite technological progress, each year we consume more capital resources than we create.

If this cycle continues long enough, the resource base will be depleted so that the increasing costs will make its use in additional production unprofitable, causing industrial expansion to cease and the limits of growth to be reached. Ordway is skeptical that imports or technology can prevent the limits to growth being reached precisely because the developed world consumes about 20 times more than the developing world (referring to the situation in the 1950s) and the underdeveloped world is also on a growth path. In this context, the question "Can prosperity be sustained?" seems more than logical. The answer appears to Ordway (1956, p. 994) to be simple: '...the only way to avoid reaching these limits is essentially to give up consuming more resources each year than nature and man together can create'.

In the 1960s and 1970s, amid frustration with the operations of big business and big government, but also as an apparent reaction to the material wealth of the time, the lack of morality and the social impact of the Vietnam War, the environmental movement gained momentum (Kidd, 1992). This was the context in which, in 1972, in a seminal work, (Meadows et al., 1972) bring the idea of a sustainable future and a sustainable global economic system free from the danger of sudden and uncontrollable collapse to the forefront of intellectual discourse. The study on which the well-known report *The Limits to Growth* was grounded led, among other things, to the conclusion that if current trends in world population growth, industrialization, food production and resource depletion continue, the limits to growth will be reached within the next 100 years. The solution argued by the report's authors lies in the transition from growth to global equilibrium.

The conceptual origin of this theory of the limits of growth is found in Jay W. Forrester's World Dynamic, first published in 1971 (Forrester, 1973), which incorporates the findings and conclusions of several studies on the dynamic structure of social systems and extends mathematical models from relatively simple systems, such as cities or industrial enterprises, to complex systems. He suggests that science and technology are no longer frontiers of human endeavor/action and that the next frontier, no less facile than the development of science and technology, will be the opening up to understanding the complex nature and dynamics of our social systems as important boundaries of growth beyond those physical. In the model depicted by Forrester, growth is a positive feedback process in which population produces more population and industrialization produces more industrialization; this process will continue until the antagonistic forces become strong enough to stop it. The three major antagonistic forces are physical pressure (which can directly inhibit growth through the effects of food scarcity, pollution, energy depletion and space scarcity), social pressure (which can directly alter growth by disrupting vulnerable industrial structures, political decision-making, and direct destruction in the case of war and civil conflict) and

DOI: 10.4316/EJAFB.2023.1127

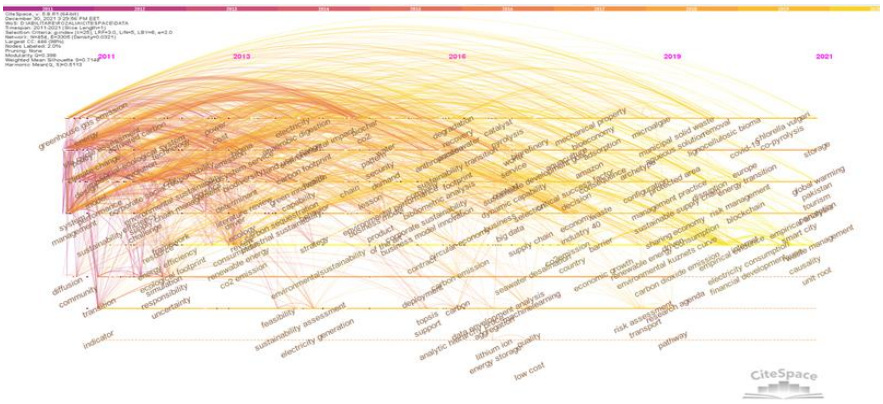
Volume **11** / 2023 ISSN 2344-102X
Issue 2 / **June** 2023 ISSN-L 2344-102X

self-control (which has its roots in the ethical and legal values and social structures of society). Viewed from this perspective, self-control appears to be triggered by both physical and social pressures. If physical stress is alleviated by technological advancement, population and industrialization can grow until the entire burden of limiting growth is shifted onto social stress. Therefore, the greater the dependence on technology, the more vulnerable social structures appear to be to disruption. Social stress means loss of freedom and trust, more extensive conflicts among citizens and governments, more bitter antagonisms between social groups, etc. Both works can be unequivocally qualified as true insights into sustainability, but the word as such was not actually used. It is only Ignacy Sachs (1977), with the term eco-development which points to an approach of development by harmonizing economic and social goals with sound ecological management in a spirit of solidarity with future generations, who builds the rationale for the explicit use of the word sustainable/sustainability.

Advancing research on this topic, Meadows et al. (1992) later discuss a sustainable system and sustainability as *the next revolution*, following the first two, agriculture and industry. According to Meadows et al. (1992), a sustainability revolution can yield enormous gains as well as losses and, if it occurs, it will be organic and evolutionary, arising from the combined vision, understanding, experimentation and action of billions of people, organizations and countries. The idea of a sustainable economic system is taken up and developed further, with the emphasis on the qualitative dimension of development, rather than physical expansion (Meadows et al., 2009). As Meadows et al. (2009) highlight, a sustainable world would require rules, laws, standards, limits, social arrangements and constraints for companies and individuals.

Over time, such topics of reflection have sparked substantial interest in academic communities, an interest that has been translated into a considerable body of literature, based on numerous research studies and papers in which the seemingly elusive concept of sustainability incorporates a wide range of meanings. However, most approaches have linked sustainability to reduced negative environmental impact and paid less attention to its economic and social dimensions, as illustrated in the figure below.

Figure 1. Evolution of knowledge coverage in the thematic field of *sustainability* as depicted by keywords in the most cited WoS papers



Top 52 Keywords with the Strongest Citation Bursts

Keywords	Year	Strength	Begin	End	2011 - 2021
vulnerability	2011	5.26	2011	2015	
resilience	2011	5.23	2011	2013	
flow	2011	3.51	2011	2015	
model	2011	2.94	2011	2013	
environment	2011	2.84	2011	2013	
environmental management	2011	5.08	2012	2017	
uncertainty	2011	2.82	2012	2015	
framework	2011	2.77	2012	2013	
city	2011	2.71	2012	2016	
decision making	2011	2.62	2012	2017	
social-ecological system	2011	2.53	2012	2017	
land use	2011	8	2013	2017	
literature review	2011	5.82	2013	2017	
ecosystem service	2011	4.22	2013	2017	
determinant	2011	4.21	2013	2015	
cost	2011	2.57	2013	2016	
knowledge	2011	4.58	2014	2017	
energy	2011	4.37	2014	2015	
biodiversity	2011	3.65	2014	2017	
electricity	2011	3.33	2014	2018	
capability	2011	2.53	2014	2016	
strategy	2011	2.49	2014	2015	
environmental impact	2011	4.03	2015	2016	
of the art	2011	2.95	2015	2017	
electric vehicle	2011	2.75	2015	2016	
attitude	2011	2.7	2015	2017	
pattern	2011	2.64	2015	2017	
demand	2011	2.59	2015	2018	
conservation	2011	4.76	2016	2017	
sustainability transition	2011	3.89	2016	2018	
analytic hierarchy proce	2011	3.11	2016	2018	
anthropocene	2011	3.03	2016	2017	
food security	2011	2.75	2016	2018	
world	2011	3.28	2017	2018	
reverse logistics	2011	2.78	2017	2019	
review	2011	2.78	2017	2019	
circular economy	2011	4.71	2018	2021	
barrier	2011	4.02	2018	2021	
evolution	2011	3.34	2018	2019	
waste	2011	3.03	2018	2021	
biodiesel production	2011	3.01	2018	2019	
decision	2011	3.01	2018	2019	
ecology	2011	2.81	2018	2019	
economy	2011	2.69	2018	2021	
adsorption	2011	2.69	2018	2021	
transition	2011	2.62	2018	2019	
pathway	2011	4.24	2019	2021	
carbon dioxide emission	2011	3.83	2019	2021	
municipal solid waste	2011	3.32	2019	2021	
aqueous solution	2011	3.32	2019	2021	
business model	2011	3.08	2019	2021	
environmental kuznets curve	2011	2.8	2019	2021	

Source: Developed by the authors with CiteSpace software

NOTE: The data (1317 highly cited papers) was retrieved from the Web of Science Core Collection, on the topic "Sustainability", after refinement according to document type (Articles or Review Articles), Web of Science Index

DOI: 10.4316/EJAFB.2023.1127

Volume **11** / 2023 ISSN 2344-102X
Issue 2 / **June** 2023 ISSN-L 2344-102X

(SCI-EXPANDED), Web of Science Categories (Environmental Sciences, Green Sustainable Science Technology, Engineering Environmental, Energy Fuels, Environmental Studies, Multidisciplinary Sciences, Operations Research Management Science, Ecology, Economics, Management, Business etc.).

As we can observe from the distribution of keywords, since 2010 the thematic focus in the knowledge area delimited by the topic sustainability keeps pointed towards environment and ecology; in fact, most of the highly cited papers in WoS fall under the categories *Environmental Sciences* and *Green Sustainable Science Technology*, without precluding inter or trans - disciplinary approaches. For example, the citation frequency of some keywords shows that during 2011-2015 many researches were questioning vulnerability and resilience, environmental management, environmental impact, energy, knowledge. It is only after 2016 that a more obvious trend is beginning to emerge towards connecting the issue of sustainability with the economy and business (we are referring here to the topic of sustainability and not sustainable development), but these connections are mainly to the circular economy (Kicsi, 2023).

III. Sustainability as an expression of the interplay between the economic and social roles of business organizations

The environment in which business organizations now operate, whether small and medium-sized enterprises or large enterprises, is becoming increasingly dynamic and more challenging. Beyond the particularities that shape the national business environment compared to the international one, it is clear that pronounced turmoil (chaotics) has become the normal status of markets and industries (Kotler & Caslione, 2009/2009). The idea of chaotics captures the complex reality of the contemporary business environment in which sources of pressure are continually multiplying and diversifying. This is all the more so because technological progress is the catalyst for the rapid propagation of all transformations in a society; with the market constantly in flux, business organizations are constantly having to adapt, to reconceive their management strategies and their exclusively economic vision. The metaphor of the kinetic corporation depicts an ever more objective state of affairs, as companies are, by the force of circumstance, in a continuous process of reorganization, redesign and redefinition (Toffler, 1973; Toffler, 1983).

Insightful concerns about the role of corporations in society are noteworthy in the work of Peter Drucker. In most of his writings, whether directly or indirectly stated, Drucker remains faithful to the belief that the social dimension assures companies' survival in business, since companies exist in a society and in an economy. Drucker insists that the business organization "is a creature of a society and an economy" and society or the economy can end its existence overnight; at the same time, the enterprise exists as long as society and the economy see it as fulfilling a necessary, useful and productive role (Drucker, 2001). However, he believes that a firm's first social responsibility is to make enough profit to cover the costs of the future; if this responsibility is not met, no other social responsibility can be met. This is because ”decaying businesses in a decaying economy are unlikely to be good neighbors, good employers, or socially responsible in any way” (Drucker, 2011). Beyond that, the most appropriate social responsibility of a business organization is to turn a social problem into an economic opportunity, into economic benefits, into productive capacity, into human skills, into well-paid jobs and wealth (Drucker, 2011).

Today, the sustainability context reveals a multidimensional and interconnected nature in terms of ecological resources, social concerns and economic realities (Cieślak et al., 2018), reflecting a more integrated approach and a widening of research beyond the words *green* and *competitiveness* (Büyüközkan & Karabulut, 2018). Although, over the years, many studies have followed other approaches to describe the relationship between business organizations and society, corporate sustainability has established itself as one of the most widely used concepts explaining the relationship between sustainable development and the activities of business organizations (Figge & Hahn, 2004; Lourenço et al., 2012; Jung et al., 2018).

The intellectual grounds of the thematic area linking sustainability with business organizations could be traced by exploring the scientific corpus available in the Web of Science Core Collection. On the results of the search by topic "sustainability" and "business*" we have employed several criteria of refinement as follows: type of documents (articles and reviews), research area (Business, Economics, Environmental Sciences, Ecology, Development Studies, Operations Research Management Science and Social Issues), WoS categories (Environmental Sciences, Environmental Studies, Management, Business, Economics, Business Finance, Sociology, Ethics, Development Studies), WoS index (SSCI), highly cited and hot papers. This approach revealed 219 leading papers in the thematic area surveyed. Based on the bibliographical references on which these papers are based, an overview of the intellectual foundations of this area of knowledge can be drawn (Figure 2) (Kicsi, 2023).

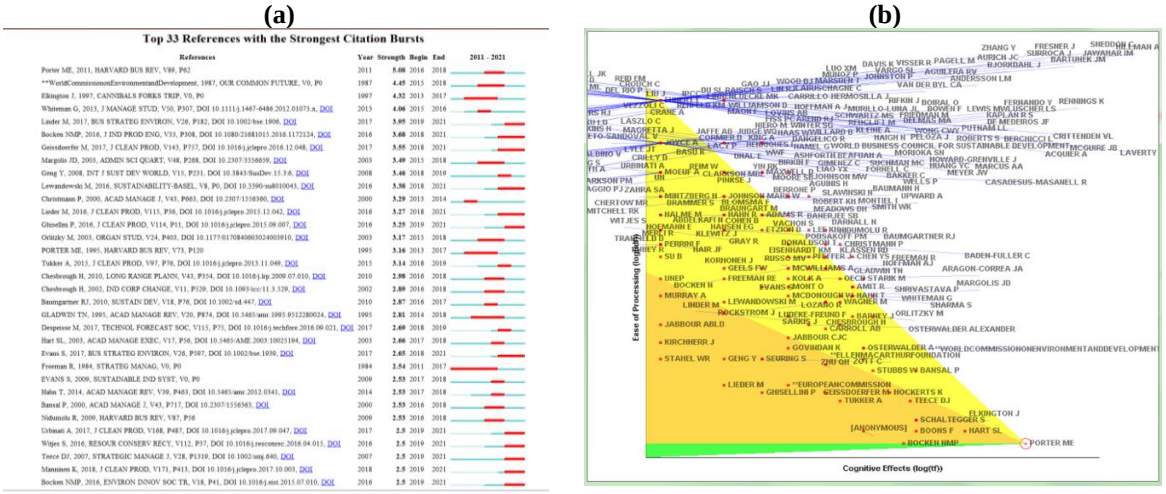
DOI: 10.4316/EJAFB.2023.1127

Volume **11** / 2023
Issue 2 / **June** 2023

ISSN 2344-102X
ISSN-L 2344-102X

Figure 2. Conceptual fundamentals of the thematic area *sustainability - business organizations*

(a) **(b)**



Source: Developed by the authors with CiteSpace software

Both the diagram which shows the bibliographic references with the highest citation frequency (a) and the Pennant diagram (b) rank the work of Porter & Kramer (2011), *Creating Shared Value*, as a seminal paper in the contemporary scientific landscape. It is often cited along with several other works which, although of lower specificity, are highly relevant to the field because they advance a number of key concepts that underpin subsequent scientific discourse, namely *triple bottom line* (Elkington, 1999), *sustainable value* (Hart & Milstein, 2003), *(sustainable) enterprise performance* (Teece, 2007).

Elkington (1999) discusses seven dimensions/revolutions of a sustainable future that businesses cannot ignore since they are far more complex than the usual approach to the environmental revolution in terms of demographic trends, global warming, biodiversity, collapsing fish stocks or land contamination. These revolutions, which at some point interfere, are the deep currents that are triggering the surface turbulence in today's global environment. The first revolution concerns the market and shifts the paradigm from conformity to competition; businesses will operate in markets that are much more open to competition, both domestic and international, and the upcoming economic turmoil will have transformative effects on the world and the business environment, which will become much more fluid (thixotropic) absorbing companies and even industries. The second revolution, with its focus on values, shifts the emphasis from hard to soft and is driven by the global shift in human and societal values. Although people in general (including business people) take values for granted, they are the products of the most powerful programming to which each individual has been exposed (Hofstede et al., 2010). As they are shifting with the succession of generations, companies and business environments can become thixotropic, and companies that have historically felt on solid ground may find their world disrupted. In the third revolution, the focus is on transparency, with the emphasis shifting from opaque to open; in such a context, companies' philosophies, priorities, commitments and operations will be under constant international scrutiny. The process itself is also shaped by radical transformations in value systems and information technologies. The next revolution is related to the technology lifecycle and is driving a paradigm shift in business from product to function, in direct conjunction with the transparency revolution. Companies are challenged to be responsible for the implications of their industrial or agricultural operations at the first links of the value chain, for their products in transit, in use and, increasingly, for what happens after the useful life of these products has ended. This revolution is accompanied by a change in the traditional view of acceptability of products at the point of sale by shifting the focus increasingly on their performance from the moment of design to the next moment of design (e.g., from raw material extraction to recycling/disposal). Such refinement naturally transforms key elements of R&D and design processes. The fifth revolution adjusts the paternity of partnership from subversion to symbiosis, dramatically accelerating the dynamics of the emergence of new forms of collaboration among business companies, but also among them and other important actors in society and the economy (such as, for example, non-governmental organizations, campaign groups, etc.). Also in this context, companies are seeking to develop long-term strategies that are congruent with the new triple bottom line force configurations. The sixth revolution focuses on time and, in the context of the sustainability agenda which calls for an extended perspective over decades and generations, creates a new paradigm in the light of which we view and understand time, i.e. from "wider" to "longer". Last but not least, corporate governance becomes a revolution that, under the imperatives of sustainability, translates the focus from exclusionary to inclusive, in the sense that it involves a broader category of stakeholders than the conventional relationship among managers, directors and owners; at the same time, it imposes a more complex and integrated vision of financial-accounting communication in companies.

DOI: 10.4316/EJAFB.2023.1127

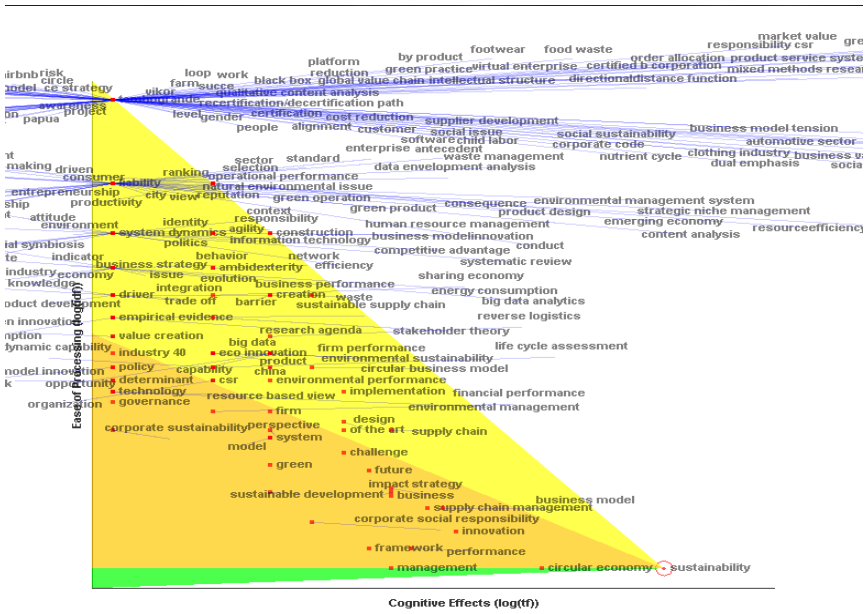
Volume **11** / 2023 ISSN 2344-102X
Issue 2 / **June** 2023 ISSN-L 2344-102X

In the early 2000s, as the issue of sustainability was increasingly re-emerging on the agenda of scientific inquiry and political discourse, Hart & Milstein (2003) hypostatize sustainability at the firm level, starting from the premise that, although consensus on terminology was tending to take root, there was still much controversy among managers about the specific meaning and motivation of sustainability in business organizations. The lenses from which managers viewed sustainability in the socio-economic climate of the period ranged from the morally imperative to the legally normative; frequently, sustainability was perceived as a cost of staying in business, with few firms sensing the latent opportunities associated with this business philosophy (e.g., the possibility of reducing costs and even increasing revenues and market share through innovation). The authors describe the sustainable enterprise in the light of the views previously expressed by Elkington through the triple bottom line framework, emphasizing the role of such an enterprise in creating economic, social and environmental benefits. What they call sustainable value creation for the firm is essentially understood as a process of reconciling the principles of sustainable enterprise with the objective of increasing shareholder value. The framework through which Hart & Milstein (2003) conceptualize this process is the outcome of the juxtaposition of two dimensions recognized as sources of creative tension for firms. One dimension captures the tensions arising from the need to achieve short-term results without compromising future growth prospects. The other dimension is associated with the need to develop and protect internal organizational competencies and skills (or, in other words, to protect the technological core) while integrating new insights and knowledge from outside, thereby keeping the firm open even to disruptive models and technologies. Sustainable value creation results by integrating sustainability forces/principles with business practices and strategies on each dimension.

With the resource-based theory of the firm in focus, Teece (2007) addresses the nature and micro-foundations of capabilities needed to sustain superior firm performance in the dynamic business environment. He argues that sustainable competitive advantage requires firms operating in such a dynamic business environment, open to global competition and typified by dispersed organizational and geographical sources of innovation and production, to possess not only difficult-to-replicate assets but also unique and difficult-to-replicate dynamic capabilities. These dynamic capabilities are particularly important for the performance of multinational companies in business environments shaped by certain features. The dynamic business environment, in Teece's view, is open to international trade and fully exposed to the opportunities and threats arising from rapid technological transformations, which in turn are systemic because more inventions must be combined to produce goods and services that meet consumer needs. The dynamic business environment is also marked by a paradox in that, on the one hand, there are well-developed global markets for the exchange of products and services as well as components and, on the other hand, markets where technological and managerial know-how is exchanged are underdeveloped. In other words, the traditional drivers of business success (ownership of tangible assets, cost control, stock control, etc.) are no longer sufficient to support sustainable performance especially in large sectors of the global economy and in particular in high-tech sectors.

The analysis of the keywords suggests the same conclusion as previously, i.e. that in the thematic area delimited by the topic *sustainability - business* the scientific focus is aimed at the circular economy (figure 3).

Figure 3. Pennant diagram for keywords (topic *sustainability - business*)



Source: Developed by the authors with CiteSpace software

DOI: 10.4316/EJAFB.2023.1127

Volume **11** / 2023 ISSN 2344-102X
Issue 2 / **June** 2023 ISSN-L 2344-102X

The seminal concept in this case, sustainability, is frequently cited together with that of circular economy and management, suggesting that, from the focus of business organizations today, the scientific background is primarily circular economy. There is, however, a trend towards more specificity in research, reflected in the connection among sustainability and innovation, CSR, corporate sustainability, technology, as well as sustainability and (sustainable) value chains, eco-innovation, value creation, business performance, productivity, environmental performance, suggesting, as mentioned above, a more integrated approach.

The main conceptual frameworks outlined relatively recently in the literature describing the conditions, characteristics and indicators of sustainability are the Triple Bottom Line, The Natural Step, the Ecological Footprint, and Graedel and Klee's method to calculate sustainable emissions and resource usage (Marshall & Toffel, 2005). The first conceptual framework is developed on the need to balance economic, social and ecological goals, while the following three frameworks are built around the need to measure and reduce negative consequences on natural assets as a condition of human well-being.

The corporate sustainability vision from a business organization lens assumes that if a firm pursues sustainability goals it could increase its future value; in other words, integrating corporate responsibility principles into business practice generates both benefits for society and benefits for companies, whether SMEs or large companies (Țigu et al., 2016). In this sense, the relationship that emerges between corporate sustainability performance (CSP) and corporate financial performance (FP) is eloquent (Jung et al., 2018). Moreover, commitment to actions that promote sustainable development is seen as a source of competitive advantage. In their influential paper, Porter & Kramer (2011) refine the argument by introducing the concept of shared value, which, unlike CSR seen by the authors as having limited business connectivity, is an essential constituent sequence of profitability and competitive position of business organizations. Creating shared value (CSV), as described by Porter & Kramer, is the next evolution of capitalism.

However, a comprehensive theory has not yet been developed in the literature to explain all nuances of the relationship between CSP and PF. An integrated framework often used is the instrumental stakeholder theory developed by Jones (Jones, 1995); in the light of this theory, certain types of CSP are expressions of attempts to establish trusting and cooperative relationships with firms/stakeholders and should be positively correlated with companies' financial performance. CSP would then be defined in terms of contractual relationships rather than particular behavior. In other words, from the stakeholder theory lens, CSP is evaluated in terms of the ability of business organizations to satisfy the requirements of their stakeholders; at some level, firms must satisfy stakeholder requirements as an unavoidable cost of business success (Ruf et al., 2001). The resource-based perspective complements the stakeholder theory in attempting to explore the relationship between CSP and the performance of business organizations. In Barney's (1991) view, firm resources include all assets, capabilities, organizational processes, firm attributes, information, knowledge, etc. under the control of a company that enable that company to design and implement strategies to create value and improve its efficiency and effectiveness. To sustain competitive advantage, a business organization's resources must be valuable, scarce, imperfectly imitable, and cannot be used as strategic substitutes for those resources that are valuable but neither scarce nor imperfectly imitable (Barney, 1991). Essentially, the convergence of the two theoretical streams suggests that CSP can benefit by improving stakeholder relations, creating sustainable competitive advantages, and enhancing company reputation, which will be reflected in a positive impact of CSP on PF (Jung et al., 2018). According to Artiach et al. (2010), a firm's decision to invest in sustainable actions is influenced by stakeholders; if stakeholders control critical resources for the firm, then firms are more likely to respond to those stakeholders' demands. The nature of the firm's response to stakeholder pressures will depend on its strategic positioning and financial performance. Thus, in periods of low profitability and high debt, financial stakeholders will take priority over social pressures; on the other hand, economic performance will impact the degree to which firms will allocate financial resources to costly sustainable actions.

In order to assess the sustainability of companies, it is important to examine the performance indicators on which specific tools such as the environmental budget, the environmental performance evaluation system, environmental monitoring and the balance sheet are based. The application of these approaches requires the implementation of a sustainability control system that operates in parallel with the management control system even in situations where pressure from social and legislative factors might pose barriers that are difficult to remove (Socoliuc et al., 2020). Due to its multidimensional nature, sustainability thus becomes a practice that cannot be captured by a singular feature. The integration of this concept into business practice is directly reflected in the relationship between CSP (corporate social performance) and FP (financial performance). The strong connection between CSP and FP is an important driver for sustainable competitive advantage. In other words, companies learn to run their businesses valuing both their economic and social roles (Socoliuc et al., 2020).

IV. Concluding considerations

Since the 1980s, the literature has been arguing for a paradigm shift in the role of business organizations as multi-purpose entities, some of which transcend the economic sphere. In other words, over the last three decades,

DOI: 10.4316/EJAFB.2023.1127

Volume **11** / 2023 ISSN 2344-102X
Issue 2 / **June** 2023 ISSN-L 2344-102X

various categories of firms/companies have become increasingly aware and willing to accept that every business organization also plays a social role. In this context, sustainability is becoming one of the main business philosophies and practices in the 21st century; to paraphrase Malraux, we could even suggest that the 21st century will be sustainable, or else it may not be anymore. This is particularly so from 2010 to the present, as the Great Recession, the rise of China as the world's second economic power, and the economic rise of other countries have led to new dilemmas, questions and paradoxes about how firms should proceed in order to gain and/or strengthen their competitive advantage in various international markets. It is quite obvious that all reputable companies, regardless of their country of origin or the industries in which they operate, can no longer today conceive and publicly declare strategies that disregard the sustainability of social systems and the preservation of life on Earth.

Drawing on the intellectual foundations of sustainability, several possible implications of integrating this philosophy into the practice of business organizations can be concluded.

Biological resources are and will be finite. Businesses need to be aware of this and choose to exploit knowledge as an unlimited resource. At the same time, firms must be aware of the need to build medium- and long-term development strategies and offer labor-intensive products/services. On a global scale, the capacity to support economic activities is finite; dozens of immediate implications arise for all managers with expertise and imagination. The so-called 4R industries (reduce, reuse, recycle, and regenerate) have become more relevant today than ever before for millions of businesses globally.

Today, the values to which social groups adhere, both employees in organizations and consumers, have become essential. It is vital that every significant firm in any market should fully recognize and acknowledge the social limits of economic growth. Although social/organizational values were not initially included among the foundations of sustainability, such values have begun to play a crucial role in the ”sustainabilisation” of capitalism, including implications for the hypothesis of building a moral capitalism, especially as the business environment becomes increasingly turbulent. We have previously noted that, in the context of sustainability, the focus shifts from hard values (anchored in the material sphere) to soft values (anchored in the sphere of trust, ethics, etc.). Of course, the relationship between soft values and the economic performance of firms/companies is difficult to pin down, as it manifests itself differently at the macro- and micro-economic scale. Although remarkable progress has been made in the economics of growth and development, the literature is still struggling to explain and provide robust conclusions on the interplay between the socio-cultural and economic dimensions of life. In general, there is a consensus that education at the level of a large social group determines a certain type of culture and this, in turn, affects the economic dimension of life. Ideas that a few decades ago seemed well grounded have returned to the horizon of relativizing questioning. The economy of impermanence and the complex fragility that is increasingly discussed in various literatures is shaping a habitat in which human behavior and economic behavior are governed by different rules and constraints than a few decades ago.

Sustainable development has become equally important today for countries, nations, companies, other types of organizations, etc. because an integrative vision of the goals of social groups is essential. For more than two centuries of capitalism's development (since the Industrial Revolution in 1776), technology and organization have been two key drivers of economic growth. Today, firms are finding that they need to 'humanize' some equipment, robots or other disruptive technologies if they are to achieve long-term economic benefits. Sometimes, strategies of more moderate growth in a firm's operations (lower profits today) can prove to be unexpectedly successful in the longer term, as Japanese companies did in the 1970s and 1980s.

More recently, the socio-economic context caused by Covid-19 at global level seems to pose new dilemmas for individuals, organizations and countries. In this new economic habitat, vulnerability has sharpened, requiring reconceptualisations of business models, management practices and, not least, of the traditional paradigm of development of the liberal capitalist welfare model.

References

1. Artiach, T., Lee, D., Nelson, D., & Walker, J. (2010). The determinants of corporate sustainability performance. *Accounting & Finance*, *50*(1), 31–51. https://doi.org/10.1111/j.1467-629X.2009.00315.x
2. Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 99–120.
3. Brown, B. J., Hanson, M. E., Liverman, D. M., & Merideth, R. W. (1987). Global sustainability: Toward definition. *Environmental Management*, *11*(6), 713–719. https://doi.org/10.1007/BF01867238
4. Büyüközkan, G., & Karabulut, Y. (2018). Sustainability performance evaluation: Literature review and future directions. *Journal of Environmental Management*, *217*, 253–267. https://doi.org/10.1016/j.jenvman.2018.03.064
5. Cieślak, I., Pawlewicz, K., & Pawlewicz, A. (2018). Sustainable Development in Polish Regions: A Shift-Share Analysis. *Polish Journal of Environmental Studies*, *28*(2), 565–575. https://doi.org/10.15244/pjoes/85206
6. Drucker, P. F. (2001). *The essential Drucker: Selections from the management works of Peter F. Drucker*. PerfectBound.
7. Drucker, P. F. (2011). *The Frontiers of Management* ((first published in 1987)). Routledge.
8. Elkington, J. (1999). *Cannibals with forks: The triple bottom line of 21st century business*. Capstone.
9. Figge, F., & Hahn, T. (2004). Sustainable Value Added—Measuring corporate contributions to sustainability beyond eco-efficiency. *Ecological Economics*, *48*(2), 173–187. https://doi.org/10.1016/j.ecolecon.2003.08.005
10. Forrester, Jay. W. (1973). *World Dynamics*. Wright-Allen Press.
11. Hart, S. L., & Milstein, M. B. (2003). Creating sustainable value. *Academy of Management Executive*, 15.

DOI: 10.4316/EJAFB.2023.1127

Volume **11** / 2023 ISSN 2344-102X
Issue 2 / **June** 2023 ISSN-L 2344-102X

12. Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations: Software of the mind ; intercultural cooperation and its importance for survival* (Rev. and expanded 3. ed). McGraw-Hill.
13. Jones, T. M. (1995). Instrumental Stakeholder Theory: A Synthesis of Ethics and Economics. *The Academy of Management Review*, *20*(2), 404. https://doi.org/10.2307/258852
14. Jung, S., Nam, C., Yang, D.-H., & Kim, S. (2018). Does Corporate Sustainability Performance Increase Corporate Financial Performance? Focusing on the Information and Communication Technology Industry in Korea: Corporate sustainability and financial performance. *Sustainable Development*, *26*(3), 243–254. https://doi.org/10.1002/sd.1698
15. Kicsi, R. (2023). *Ipostaze ale sustenabilității în contextul unui mediu de afaceri turbulent: Paradigme, controverse și provocări*. Teză de abilitare. Ștefan cel Mare University of Suceava.
16. Kidd, C. V. (1992). The evolution of sustainability. *Journal of Agricultural and Environmental Ethics*, *5*(1), 1–26. https://doi.org/10.1007/BF01965413
17. Kotler, P., & Caslione, J. A. (2009). *Chaotics: Management și marketing în era turbulențelor* (S. Nistor, Trad.). Publica. (Original work published 2009)
18. Lourenço, I. C., Branco, M. C., Curto, J. D., & Eugénio, T. (2012). How Does the Market Value Corporate Sustainability Performance? *Journal of Business Ethics*, *108*(4), 417–428. https://doi.org/10.1007/s10551-011-1102-8
19. Marshall, J. D., & Toffel, M. W. (2005). Framing the Elusive Concept of Sustainability: A Sustainability Hierarchy. *Environmental Science & Technology*, *39*(3), 673–682. https://doi.org/10.1021/es040394k
20. Meadows, D. H., Meadows, D. L., & Randers, J. (1992). *Beyond the limits: Confronting global collapse, envisioning a sustainable future*. Chelsea Green Pub. Co.
21. Meadows, D. H., Meadows, D. L., Randers, J., & Behrens III, W. EW. (1972). *The Limits to Growth*. Universe Books.
22. Meadows, D. H., Randers, J., & Meadows, D. L. (2009). *The limits to growth: The 30-year update* (Reprint). Earthscan.
23. Ordway, S. H. (1956). Possible Limits of Raw-Material Consumption. În *Man's role in changing the face of the Earth* (pp. 987–1009). University of Chicago Press.
24. Porter, M. E., & Kramer, M. R. (2011). The Big Idea: Creating Shared Value. *Harvard Business Review, January-February*.
25. Portney, K. E. (2015). *Sustainability*. London, England : The MIT Press.
26. Ruf, B. M., Muralidhar, K., Brown, R. M., Janney, J. J., & Paul, K. (2001). An Empirical Investigation of the Relationship Between Change in Corporate Social Performance and Financial Performance: A Stakeholder Theory Perspective. *Journal of Business Ethics*, *32*(2), 143–156. https://doi.org/10.1023/A:1010786912118
27. Sachs, I. (1977). Eco-Development: Meeting Human Needs. *India International Centre Quarterly*, *4*(4), 337–350.
28. Socoliuc, M., Grosu, V., Cosmulese, G., & Kicsi, R. (2020). Determinants of Sustainable Performance and Convergence with EU Agenda 2030: The Case of Romanian Forest Enterprises. *Polish Journal of Environmental Studies*, *29*(3), 2339–2353. https://doi.org/10.15244/pjoes/110757
29. Teece, D. J. (2007). Explicating Dynamic Capabilities: The Nature and Microfoundations of (Sustainable) Enterprise Performance. *Strategic Management Journal*, *28*(13), 1319–1350.
30. Thiele, L. P. (2016). *Sustainability*. Polity Press.
31. Toffler, A. (1973). *Șocul viitorului*. Editura Politică.
32. Toffler, A. (1983). *Al treilea val*. Editura Politică.
33. Țigu, G., Popescu, D., & Hornoiu, R. I. (2016). Corporate Social Responsibility – an European Approach through the Tourism SME's Perspectives. *Amfiteatru Economic*, *18*(10), 16.
34. Vogt, W. (1948). *Road to survival*. William Sloane Associates, Inc.

DOI: 10.4316/EJAFB.2023.1127