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ECONOMIC SUSTAINABILITY IN INTERNATIONAL BUSINESS: PECULIARITIES, METHODS AND APPROACHES

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This article is intended as a contribution to the ongoing analysis of economic sustainability in international business. This study is presented with a view toward further understanding and agreement of the key concepts of sustainability. Approaches to sustainability are considered, important benchmarks and essential characteristics of sustainable development in international business are included. The article demonstrates how the concept of economic sustainability can be applied to the business level. The main ideas of the most widespread concepts on resource management are presented. Incorporation of ESG and financial factors in the concept of sustainable investing is considered. Emissions that are responsible for climate change, namely top emitters, key issues and figures are presented.

Keywords: economic sustainability, development, concepts, resource management, economic, social, government factors, emissions.

Fig.: 1. Tabl.: 2. Bibl.: 10.

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Отенко И. П. Экономическая устойчивость в области международного бизнеса: особенности, методы и подходы

В статье приведен анализ экономической устойчивости в международном бизнесе. Данное исследование проведено для обеспечения более глубокого понимания и согласования ключевых понятий устойчивости. Рассмотрены подходы к определению устойчивости, раскрыты важные критерии и основные характеристики устойчивого развития в международном бизнесе. В статье показано, как концепция экономической устойчивости может быть применена в бизнес-процессах. Рассмотрены основные идеи наиболее распространенных концепций устойчивости. Представлены данные относительно влияния отдельных стран на изменение окружающей среды. Определена роль социальных, управленческих факторов, факторов окружающей среды в инвестиционных процессах.

Ключевые слова: экономическая устойчивость, развитие, концепции, управление ресурсами, экономические, социальные, управленческие факторы, выбросы.

Рис.: 1. **Табл.:** 2. **Библ.:** 10.

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Отенко І. П. Економічна стійкість у галузі міжнародного бізнесу: особливості, методи та підходи

У статті наведено аналіз економічної стійкості в міжнародному бізнесі. Це дослідження проведено для забезпечення більш глибокого розуміння і узгодження ключових понять стійкості. Розглянуто підходи до визначення стійкості, розкрито важливі критерії і основні характеристики сталого розвитку в міжнародному бізнесі. У статті показано, як концепція економічної стійкості може бути застосована в бізнес-процесах. Розглянуто основні ідеї найбільш поширених концепцій стійкості. Наведено дані щодо впливу окремих країн на зміну навколишнього середовища. Визначено роль соціальних, управлінських факторів, факторів навколишнього середовища в інвестиційних процесах.

Ключові слова: економічна стійкість, розвиток, концепції, управління ресурсами, економічні, соціальні, управлінські фактори, викиди.

Рис.: 1. Табл.: 2. Бібл.: 10.

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On the one hand, the economic and social environment is changing in really profound ways and due to this fact neither managers nor investors often are not paying enough attention to the main drivers of changes, especially when it comes to sustainability.

On the other hand, the concept of sustainability is a wide approach everybody is talking about in a period when environmental problems caused by various human activities are requiring serious solutions. As it is well known, the concept found its roots in the United Nations' 1987 Brundtland Commission Report «Our Common Future» and even earlier in the 1980's World Conservation Strategy. Starting from a 'pure' ecologi-

cally based concept in the 1970s and in the World Conservation Strategy, it transformed very quickly into a more comprehensive socio-economic approach [1].

Sustainable development is determined as development that «meets the needs of the present without compromising the ability of future generations to meet their own needs».

To understand what the concept of sustainability means for international business, it's essential to look on the characteristics of this paradigm. Two main characteristics are:

«Sustainable development is people-centred in that it aims to improve the quality of human life and it is conservation-based in that it is conditioned by the need to respect

nature's ability to provide resources and life-support services. In this perspective, sustainable development means improving the quality of human life while living within the carrying capacity of supporting ecosystems».

Sustainable development is a normative concept that embodies standards of judgment and behaviour to be respected as the human community 'the society' seeks to satisfy its needs of survival and well-being [1; 8].

Among the many ways this concept has been defined, the simplest and most fundamental is: «the ability to sustain» or, put another way, «the capacity to endure». To endure socially, it is necessary to transform the markets – «both how we produce and consume, and the very ways in which we define and measure value and progress» [1; 8]. This is a big challenge, and not just for business and economics. It is a call for massive social, political, technological, cultural and behavioral transition.

Environmental and social issues as well as corporate governance are meant by sustainability. And it is impossible to ignore these issues because they positively correlate with future long-term returns.

Let's consider the environmental and social issues in international business first. Determinants of population ageing are among the most important problems to learn. Substant widespread population ageing is a process known as the «demographic transition» in which mortality and fertility decline on the regular basis. The report [9] involves the illustration of global trends in population ageing and provides us with a range of figures of the ageing process. The report clearly demonstrates that:

 population ageing is unprecedented, without parallel in human history – and the twenty-first century will witness even more rapid ageing than did the century just past;

- population ageing is pervasive, that is a global phenomenon affecting every human being although countries and regions are at rather different stages of this process, and the pace of change varies. Countries that started the process later will have less time to adjust;
- population ageing is enduring: we will not return to the young populations that our ancestors knew;
- population ageing has profound implications for many aspects of human life.

Consumption of natural resources is another factor to take into consideration.

A commonly used classification of natural resources includes the following types of resources [3]:

- non-renewable and non-recyclable resources, such as fossil fuels:
- non-renewable but recyclable resources, such as minerals:
- quickly renewable resources, such as fish;
- slowly renewable resources, such as forests;
- environmental resources, such as air, water and soil;
- flow resources, such as solar and wind energy.

A lot of schools on natural resource management have found and proposed a range of views, methods and strategies to lead society towards a sustainable use of natural resources, in scientific literature they are primarily known as «concepts on natural resource management». These concepts have different assumptions on how to evaluate the measure of sustainable resource use. These differences primarily affect the determination of the actual targets within resource management.

The main ideas of the most widespread concepts on resource management are presented in Table 1.

Table 1

The key features of commonly proposed concepts on resource management

Ecological Footprints	an accounting measure that seeks to illustrate humanity's use of, or claims on, nature. By comparing this with the availability of bio-productive land, both measured in hectares, the concept provides an indication of the sustainability of the present level of consumption
Environmental Space	the environmental space concept seeks to define maximum use rates on a global scale for a number of key resources. Based on such global limits, country specific targets for resource use are determined on the basis of the size of the population, reflecting also a goal of equal access to resources
Factor 4/10, Material Intensity per Service Unit, Total Material Requirements	all concepts based on the measurement of total material flows expressed in tonnes of material. These concepts aim at dematerialization of the economy. For example, Factor 4 represents a target of increasing resource efficiency by Factor 4 through doubling wealth and halving the resource use
Exergy	an energy-related concept that has been proposed as an alternative to aggregating resource and waste flows in tonnes, as the exergy of e.g. waste emissions would be better correlated with e.g. environmental harmfulness than a pure weight based measure
Compound savings rule	seeks to define maximum extraction rates for key non-renewable resources, primarily, hydrocarbons. These extraction rates have been determined so as the resource would never be fully depleted
Natural resource economics	provides a consistent framework for analysis of policies and interventions related to extraction and use of non-renewable and renewable resources. This includes determination of optimal extraction rates for various types of resources as well as analysis of the causes of inefficient management of natural resources
Genuine Savings (and the related Green National Product)	indicators of weak sustainability. The basis for human welfare is not only natural resources but rather the aggregate level of capital. The concept aims to provide means for tracking that the total level of capital (natural, human made, human and social capital) of society is non-declining

Source: B-ased on analysis in [3]

The reasons for these large differences among the targets proposed by the concepts are, among other things, caused by different assumptions on what sustainable resource use would require as well as different underlying views or goals in regard to how the question of equity should be addressed.

A common characteristic of a successful social feedback is the visible economic gains perceived by the governments, owners and managers. The mechanisms to ensure that such opportunities are perceived, even in the short-run, may vary significantly. As a rule they involve initial element-specific subsidies (payable before or after accomplishment of the tasks); repayable activity-specific loans; encouragement for resource mobilization, often by means of micro-credit schemes; and support for local demand-driven initiatives on effective resource management. Among the most important ways to get enhanced economic gains from natural assets is internalization of the benefits obtained as a result of efficient resource management.

Furthermore, emissions that are responsible for climate change keep increasing. Environmental scientists are trying to compare the extent of national responsibility for climate change. Most of all these involve current emissions – which can be measured in absolute figures or on a per capita basis – as well as historical emissions and the carbon footprint of consumption, including imported goods.

The simplest and most widespread method to compare the emissions of a particular country is to compose all the fossil fuels burned and cement produced in some particular country and convert that into CO_{γ} .

But the issue with concentrating merely on CO_2 from burning fossil fuels is that it doesn't take in consideration other greenhouse gases and non-fossil-fuel sources of CO_2 . Although the majority of greenhouse gas emissions are carbon dioxide,

non- CO_2 greenhouse gases such as methane, nitrous oxide, and fluorinated greenhouse gases contribute significantly to climate change. These greenhouse gases have more significant climate change effects than carbon dioxide on a per-ton basis, and many have greater short term impacts than CO_2 . In case these are included, the figures change significantly.

Of course, comparing nations can be misleading, with relation to vastly varied numbers and populations. In order to obtain a more precise picture, it's essential to evaluate emissions per person. In this dimension, the range is topped with small countries that have energy-intensive industries, however, the large developing countries are significantly less polluting.

Since carbon dioxide emitted to the atmosphere can be stored there for centuries, it is necessary to consider historical emissions. The profound problems of historical responsibility are among the main tensions while negotiating a global climate treaty. It's also important to find out the level of historical emissions per person, which changes things one more time.

Imported and exported goods bring a sort of complexity to the calculations. Many experts have opinions that focusing on the place of emissions' production is not right, because much of the emissions output of such countries as China are generated for making products that are finally consumed in richer countries. If emissions are assessed by means of consumption measures rather than production (that is, each country's exports are excluded from its footprint, and its imports added) the representatives in tables change again. This heads to probably the best measure of up-to-date responsibility for climate change: the resulting carbon footprint of the average citizen for every country.

Basing on the research compiled by [4], the top emitters according to different points are presented in Table 2.

Table 2
Emissions that are responsible for climate change: top emitters, key issues and figures

Key issues of approach	Figure	Top emitters with numbers
1	2	3
	Current CO ₂ emissions	1. China: 28.6 %
		2. US: 16.0 %
Composition of all the fossil fuels burned and cement produced in some particular country and converted into CO ₂		3. India: 5.8 %
		4. Russia: 5.4 %
		5. Japan: 3.7 %
		6. Germany: 2.4 %
		7. South Korea: 1.7 %
		8. Canada: 1.6 %
		9. Indonesia: 1.4 %
		10. Saudi Arabia: 1.4 %
	Greenhouse gas emissions	1. China: 16.4 %
		2. US: 15.7 %
Other greenhouse gases and non-fossil- fuel sources of CO ₂ are considered		3. Brazil: 6.5 %
		4. Indonesia: 4.6 %
Taci sources or es ₂ are considered		5. Russia: 4.6 %
		6. India: 4.2 %
		7. Japan: 3.1 %

End table 2

1	2	3
		8. Germany: 2.3 %
		9. Canada: 1.8 %
		10. Mexico: 1.6 %
		1. Qatar: 36.9 tonnes
		2. United States: 17.3 tonnes
		3. Australia: 17.0 tonnes
		4. Russia: 11.6 tonnes
	Emissions per capita	5. Germany: 9.3 tonnes
Evaluation of emissions per person		6. UK: 7.8 tonnes
		7. China: 5.4 tonnes
		8. World average: 4.5 tonnes
		9. India: 1.4 tonnes
		10. Africa average: 0.9 tonnes
		11. Ethiopia: 0.1 tonnes
		1. US: 28.8 %
	Historical emissions	2. China: 9.0 %
		3. Russia: 8.0 %
		4. Germany: 6.9 %
Year-by-year CO ₂ emissions from fossil		5. UK: 5.8 %
fuels and cement with gridded population		6. Japan: 3.87 %
data		7. France: 2.77 %
		8. India: 2.44 %
		9. Canada: 2.2 %
		10. Ukraine: 2.2 %
		1. Luxembourg: 1.429 tonnes
		2. UK: 1.127 tonnes
	Historical emissions per person	3. US: 1.126 tonnes
		4. Belgium: 1.026 tonnes
Evaluation of historical emissions per		5. Czech Republic: 1.006 tonnes
person		6. Germany: 987 tonnes
		7. Estonia: 877 tonnes
		8. Canada: 780 tonnes
		9. Kazakhstan: 682 tonnes
		10. Russia: 666 tonnes
	Consumption footprints	1. Belgium: 21.9 %
		2. United States of America: 20.2 %
		3. Ireland: 16.2 %
		4. Finland: 15.1 %
		5. Australia: 13.8 %
Each country's exports are excluded from		6. United Kingdom: 11.5 %
its footprint, and its imports added		7. China: 4.3 %
		8. Brazil: 2.1 %
		9. India: 1.3 %
		10. Nigeria: 0.5 %
		11. Malawi: 0.2 %
		1 1. IVIdIdWI: U.2 %

And, of course, there are economic issues. The framework of sustainable development has got increasing recognition, though it is a fresh idea for many chief executives. So far, this concept stays rather vague and hypothetical. Protecting the company's capital base is a well-recognized business approach. In their majority companies don't recklessly recognize the possibility of extending this notion to the world's natural and human resources. If sustainable development is to achieve its potential, it must be integrated into the planning and measurement systems of business enterprises. And for that to happen, the concept must be articulated in terms that are familiar to business leaders.

To achieve this transformation, we need the capacity of business to innovate and to execute, meeting market needs swiftly, effectively and on a global scale, to do this in a way that meets the needs of the present without compromising the ability of future generations to meet their own needs, and it's vital to work out new ways of doing business. The successful businesses of tomorrow will be those that lead and create value both inside and outside the walls of the company.

These considerations form the basis for the concept of sustainable investing. Namely, sustainable investing incorporates ESG factors (environment, social and governance) with financial factors into the investment process (Fig. 1).

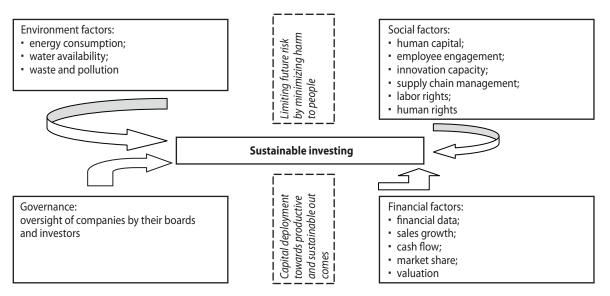


Fig. 1. Incorporation of ESG and financial factors in the concept of sustainable investing

Investopedia layouts the framework of the environmental, social and governance (ESG) criteria as a «set of standards for a company's operations that socially conscious investors use to screen investments. Environmental criteria looks at how a company performs as a steward of the natural environment. Social criteria examines how a company manages relationships with its employees, suppliers, customers and the communities where it operates. Governance deals with a company's leadership, executive pay, audits and internal controls, and shareholder rights» [5].

ESG factors can impact the long-term risk and return profile of investment portfolios. Investors who intend to buy securities that have been monitored for ESG criteria are expected to join through environmentally responsible endowments.

In view of governance, investors who operate according to ESG framework are interested in a company's punctual and transparent accounting and auditing approaches. Their goal is to control that all groups of shareholders have a capability to vote on strategic issues. They want to be armed with up-to-date information about methods used to avoid conflicts of interest when choosing the supervisory board. Moreover, they prefer to escape investing in companies that demonstrate disorderly conduct or use political or economic levers of power in order to get favorable treatment.

 $What \ constitutes \ an \ acceptable \ set \ of \ ESG \ criteria \ is \ subjective, \ but \ certain \ methodology \ has \ been \ already \ developed$

and justified. The European Federation of Financial Analysts Societies (EFFAS) with its defined areas for the reporting of ESG issues acts as an example. EFFAS includes 27 member societies, which represent even more than 14,000 investment professionals. Particularly, this organization worked out a set of Key Performance Indicators (KPIs) for use in financial analysis of the efficiency of corporate governance. EFFAS has named nine directions that can be applied to every industry [5]:

- energy efficiency;
- greenhouse gas emissions;
- personnel turnover;
- training and the level of personnel qualification;
- maturity of workforce;
- absenteeism rate;
- litigation threats;
- compliance to the legal norms;
- revenues from new products and services.

ESG has quickly become part of investment jargon to describe the performance of investment and fund portfolios on environmental, social and governance criteria and the quality of their performance against measurable ESG factors that are reported to shareholders. ESG analysis can provide insight into the long-term prospects of companies which allows mispricing opportunities to be identified. Investors can find new market opportunities with companies that place the management of ESG factors at the core of the business [6].

ESG representative body in Ukraine is Chartered Financial Analysts (CFA) Society of Investment Professionals that unites more than 200 representatives of the investment profession within the country. The organization is non-governmental, non-for-profit, run by volunteers and is part of the worldwide network of Chartered Financial Analysts (CFA) societies that are member societies of CFA Institute.

Enhancing of international co-operation and development of advanced methods of supervision for sustainable development are the matters of higher priority for CFA Society of Investment Professionals. The Society should take measures on improving the efficiency of international cooperation within business sector on the basis of ESG factors. Further research will be carried out in the direction of defining the possibilities and feasibility of ESG metrics implementation.

LITERATURE

- **1.** Lütteken A., Hagedorn K. Transformation and environment: Perspectives for Central and Eastern European countries, In G. H. Peters, G. C. van Kooten & G. A. A. Wossink, eds. Economics of agro-chemicals, Proceedings of a symposium of the International Association of Agricultural Economics, Wageningen, The Netherlands, 25th-27th April 1996, Aldershot, Hampshire, Ashgate, pp. 347-358.
- **2.** World Commission on Environment and Development. Our common future. Oxford: Oxford University Press, 1987.
- **3.** Zeeuw A. Resource Management: Do we need public policy? / A. Zeeuw. 2000.
- **4.** UNFCCC. 2012. United Nations Framework Convention on Climate Change Flexible GHG Data Queries. Online Database Accessed: Spring [Electronic resource]. Access mode : http://unfccc.int/di/FlexibleQueries/Setup.do
- **5.** Environmental, Social and Governance (ESG) Criteria // Investopedia [Electronic resource]. Access mode: http://www.investopedia.com/terms/e/environmental-social-and-governance-esg-criteria.asp
- **6.** Definition of ESG // Financial Times [Electronic resource]. Access mode: http://lexicon.ft.com/Term?term=ESG
- **7.** CFA Society Ukraine [Electronic resource]. Access mode: https://www.cfasociety.org/ukraine/Pages/default.aspx

- **8.** Hanna, S., Munasinghe, M. Property rights in a social and ecological context, Case study and design apllications, The Beijer International Institute of Ecological Economics and the World Bank, Washington D.C., 1995.
- **9.** United Nations, Department of Economic and Social Affairs, Population Division. World Population Ageing 2013.
- **10.** CFA Society of Investment Professionals [Electronic resource]. Access mode : https://www.cfasociety.org/ukraine/Pages/default.aspx

REFERENCES

"CFA Society Ukraine" https://www.cfasociety.org/ukraine/ Pages/default.aspx

"CFA Society of Investment Professionals" https://www.cfa-society.org/ukraine/Pages/default.aspx

"Definition of ESG" Financial Times. http://lexicon.ft.com/ Term?term=ESG

"Environmental, Social and Governance (ESG) Criteria" Investopedia. http://www.investopedia.com/terms/e/environmental-social-and-governance-esg-criteria.asp

Hanna, S., and Munasinghe, M.Property rights in a social and ecological context, Case study and design applications. Washington D.C.: The Beijer International Institute of Ecological Economics and the World Bank, 1995.

Lutteken, A., and Hagedorn, K. "Transformation and environment: Perspectives for Central and Eastern European countries" *Economics of agro-chemicals, Proceedings of a symposium of the International Association of Agricultural Economics.* Wageningen, The Netherlands; Aldershot, Hampshire, Ashgate, 1996. 347-358.

"UNFCCC. 2012. United Nations Framework Convention on Climate Change Flexible GHG Data Queries" http://unfccc.int/di/ FlexibleQueries/Setup.do

United Nations, Department of Economic and Social Affairs, Population Division. World Population Ageing, 2013.

World Commission on Environment and Development. Our common future. Oxford: Oxford University Press, 1987.

Zeeuw, A. deResource Management: Do we need public policy? 2000.