

Economic Security in the Context of Sustainability

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Abstract

The economic security and sustainability are the biggest challenges in the crisis-hit world. Although there are many theories how to achieve economic security and sustainability but they are largely utopian, because they do not strongly build on economic fundament. The first part of the paper is presentation of sustainability an economic security concept. In the second part certain methods to measure both sustainability and economic security are presented. Later on the authors try to propose the common framework for sustainability an economic security measuring and monitoring.

Key words: sustainability, economic security.

Introduction

Although over 25 years ago, the Brundtland Commission's report "Our Common Future" defined the now widely accepted concept of sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland Commission, 1987) the researchers claim that economic analysis has been one of the weakest and least developed areas of broadly green/sustainable development thinking. For example, whatever analysis there is within the green political canon is largely utopian – usually based on an argument for the complete transformation of modern society and economy as the only way to deal with ecological catastrophe, an often linked to a critique of the socioeconomic failings of capitalism that echoed a broadly radical Marxist/socialist or anarchist analysis; or underdeveloped – due, in part, to the need to outline and develop other aspects of green political theory (Barry, 2007).

Barry (2007) suggests that "economic security" is the most important aspect of whole sustainability. Economic security is often defined in general terms "the degree to which individuals are protected against hardship-causing economic losses" (Hacker, Huber, Nichols, Rehm, Schlesinger, Valletta, Craig, 2012). But either sustainability or economic security could be analyzed from different perspectives for example: micro – individual persons, families; meso - enterprises, firms, business associations and macro - state, interstate relations, world.

The main challenge for the authors is to find common aspects of sustainability and economic security and define the framework and metrics that allow the analytics to monitor, diagnose and take some action in order to achieve all the desired values.

The first part of the paper is presentation of both sustainability an economic security concept. In the second part certain methods to measure both sustainability and economic security are presented. Later on the authors try to propose the common framework for sustainability an economic security measuring and monitoring.

The authors recognize sustainability as the ability of organization (public, private or non-profit) to sustain and improve despite the lack of stability of external, especially economic, factors.

Objects and Methods – Sustainability

Some of the researchers refer that sustainability has begun since 70th of XX century (Sarkis, Helms, Hervani, 2010) but when studying carefully the history of the world one could notice that people had been aware of the relationship between ecological, social and economic aspects of their life long time before the discussion about sustainability that went on 70th of XX century.

The Sumerian Epic of Gilgamesh from about 2500 B.C. describes the large cedar forests in the area of current southern Iraq. Gilgamesh mentions that the gods has punished the country with the fires for excision of forest. Finally the soil erosion and accumulation of salt in the soil have destroyed agriculture in that area. Than the Civilization has moved north to Babylonia and Assyria. Deforestation in these areas has also become the important factor that decided on fall of these civilizations. In about 250 B.C. the Indian emperor Ashoka of the Mauryan Dynasty has issued Edicts of Ashoka that are a collection of 33 inscriptions on the Pillars of Ashoka. Some of them refers to environmental protection. In ancient Greece and Rome whilst then kings, emperors, governors, senators, or prefects of those times drew up codes or rules of conducts. Also in nearly all monotheistic religions like Christianity, Krishna, Buddhism that were formed in Near East and India some indications relating to respect for social justice, and natural environment could be found (Wysokińska-Senkus, Senkus, 2013)

Later on in the 1612 Edward Coke and in 1622 the shareholders of the Dutch East India Company have criticized the corporations that their management acts contrary to, what is called now, social responsibility. Than in Henry Ford in his For Motor Company has act like "responsible businessman". He took care not only for the workers in the factory, but try to affect his worker's family situation mainly by monitoring the living conditions and alcohol. He understood that the worker who has insufficient living conditions would never generate profit for company. also in the middle of the 20th Owen D. Young and Gerard Swope, CEO from General Electric Company have started to build partnership with their workers and society. The enabling the workers into the decision making was confirmed by „Hawthorne Experiment" that was conducted by Elton Mayo. In 1927 the Dean of Harvard Business School, Wallace B. Donham in his address to the American Association of Collegiate Schools of Business "I have reached the

conclusion that the greatest need of a civilization such as ours, if it is to progress in an orderly evolution, is for socially-minded business men. I am convinced that this social need is the sole basis which justifies our ancient university (. . .) in entering upon business training” (Wysokińska-Senkus, Senkus, 2013). Also in 1929 during the address delivered at Northwestern University he told “Business started long centuries before the dawn of history, but business as we now know it is new – new in its broadening scope, new in its social significance. Business has not learned how to handle these changes, nor does it recognize the magnitude of its responsibilities for the future of civilization” (Wysokińska-Senkus, Senkus, 2013). It could be easily seen that the action taken by Henry Ford, Owen D. Young and Gerard Swope or the statements delivered by Wallace B. Donham refers to the social and economic aspect of current sustainability concept. In the reality only that *social actions* were undertaken that have delivered better long term profit at the end. In another words that had to be long term win-win strategy implemented. The example of Chrysler and General Motors have showed that “very profitable” conditions for workers that do not comply with economic condition of the whole corporation could result not only in corporation bankruptcy but also in the catastrophe of all local society like now could be seen in Detroit. The ecological aspects were not considered from the beginning of industrial revolution to the mid-60th of the XX century. Also from the 30th to mid-50th because of WWII and after the war restorations there is a silence about CSR or sustainability.

The term “corporate social responsibility” was not coined until 1953. Howard Bowen in his book, “Social Responsibilities of the Businessman” has used the term for the first time (Bowen, 1953). Since then CSR has been viewed in a wide variety aspect by the researchers. Maignan and Ferrell (2004) systematically have summarized the past conceptualizations into four main streams:

- first stream treats the CSR social obligation. According to Carroll (1979) social obligations are distinguished into (a) economic obligations (to be productive and economically viable), (b) legal and ethical obligations (adhere to the law and acknowledged social/cultural values and norms), and (c) philanthropic obligations (proactively giving back to society);
- second stream treats the CSR as stakeholder obligation. Freeman (1984) claims that business has obligations toward those who are directly or indirectly affected or are affected by the organization’s internal and/or external activities such as: (a) organizational (e.g. employees, customers, shareholders, suppliers), (b) community (e.g. local residents, special interest groups), (c) regulatory (e.g. municipalities, regulatory systems), and (d) media stakeholders. That view could also enable natural environment in the role of stakeholder;
- the third stream perceived CSR as ethics driven. That is, CSR accounts for a positive commitment to society. That approach provides normative criteria to evaluate the extent to which actual business practices can or cannot be considered as socially responsible (Jones 1995). Such ethics-driven assessment of CSR asserts the appropriateness of ethical policy on specific corporate activities independently of any social or stakeholder obligation (e.g. Donaldson and Preston 1995; Swanson 1995);
- last stream treats CSR as managerial processes. This approach has depicted CSR in terms of concrete organizational processes and often analyzed under the label of corporate social responsiveness with focus more on a pragmatic or strategic view of CSR; that is - how can an individual firm successfully manage CSR? Or how can CSR generate organizational benefits? CSR is viewed as an essential part in corporate strategy (Elkington, 1998; Porter and Kramer, 2006; The Economist, 2005); wherein integrating public interest and concerns into business planning and decision making allows a firm to better uphold their standings in the marketplace (Udomkit, 2013).

The book by John Elkington: “Cannibals with Forks: the Triple Bottom Line of 21st Century Business” is the first vision of integrating economic, social and ecologic aspects in the single concept. Than in 2003 the first edition of the AA1000 Assurance Standard was published inspired by John Elkington’s book. Also ISO in 2010 has published the ISO 26000:2010 „Guidance on social responsibility” standard that could help to introduce social responsibility and sustainability to the day to day activities of the companies.

Meanwhile Sustainability Accounting Standards Board (SASB), Global Reporting Initiative, International Integrated Reporting Council or Sustainable Stock Exchanges are launched and prepare their reporting standards, so currently one can name 5+ main sustainable reporting standards including Triple Bottom Line Reporting.

Along with CSR and sustainability the concept of “holistic management” by Allan Savory has begun to develop. the concept from the mid-50th of the XX century referred to the sustainable use of soil, water and financial resources that helps to achieve long term objectives. According to Savory (2013) managers of agricultural enterprises, according to the concept of holistic management, achieve good economic results while maintaining at-law and the development of the agrarian community. The same philosophy could be assigned to business.

The critics of different sustainability concepts claim that in the sustainability related concepts the significant emphasis is placed on ecological aspects but the economic aspects still have not been well developed (Barry, 2007).

The weakness of the economic fundamentals of the sustainability related concepts has been seen during the 2008+ financial crisis. Simply the concepts that had generated only costs with no profit for companies had been suspended. Simultaneously economic security has started to be more attentive to the researchers as the economic effect to sustainability concepts that are implemented in the practice.

Objects and Methods – Economic Security

The economic security is the complex idea that could be analyzed on the three main levels:

- micro level – person or household perspective;
- meso level – enterprise or regional perspective;
- macro level – countries or groups of countries;

Despite analytical levels the economic security in the sustainability perspective should mean the possibility to obtaining a theoretical Gaussian nature of the fluctuations in asymmetric Poisson distribution, in which it is possible to achieve a fair distribution of income with parallel efficient allocation of resources.

Without a doubt, the economic security, with its fundamental component financial security, should be, from the perspective of recent years, the most important concept and concern for the contemporary economy. Economic security is a crosscutting theme that will require extensive analysis and responsible policy - particularly economic. Economics explains individual behavior and economic events very well (after they have appeared), but the empirical and methodological economic forecasting is flawed, and even often there is a lack of reliable scientific basis, especially in the programming of the expected states (Legiędź, 2010).

Economic security is often defined in general terms as "the degree to which individuals are protected against economic hardship – causing losses". There are also specific definitions related to, specific areas. For example, The New York Women's Foundation defines the economic security of women and girls as the appropriate level of achievement of such factors as median earnings, unemployment, cash assistance, food stamps, supplemental security income. The National Governors Association, the notion of economic security for workers means workers increase resilience in four basic categories simultaneously: skills and adaptability, income and savings, health and wellness, mutual support and network (New York Women's Foundation, 2013). In the macro level "economic security" is defined as "relatively balanced endogenous and exogenous state of functioning of the national economy which present risk of imbalances is kept in a designated and acceptable (organizational and legal) standards and principles of the social intercourse" (Raczkowski, 2012). Another definition also relating to the macro level treats it as "the state of development of the national economic system, which ensures high efficiency of its operation - through the proper use of internal development factors and the ability to effectively resist the external pressure, which may lead to developmental disorders" (Stachowiak, 1994). Under some conditions the definitions could be applied to the meso and micro scale.

Boštjan Udovič claims that "economic security, as understood in the liberalist's framework, is economic security of interstate relations (markets) and economic security of individuals. Only individuals with their basic needs and requests can be promoters of common values and cosmopolitanism. Free markets and change are guarantees for economic and political stability, and security" (Udovič, 2006). To define the economic security he propose the *Structural approach to economic security*. The author proposes to identify crucial factors that are affected by economic insecurity. We can find six (seven) levels that are affected by economic (in) security and that react differently to threats: individual person, society/firm, state, interstate relations (international community), transnational relations, global relations (Udovič, 2006). The structural approach is presented on figure 1. The structural approach enables the model users to better recognize the relation of its components and introduce the process management that is nowadays the most effective tool to manage complex items (Senkus P., 2013).

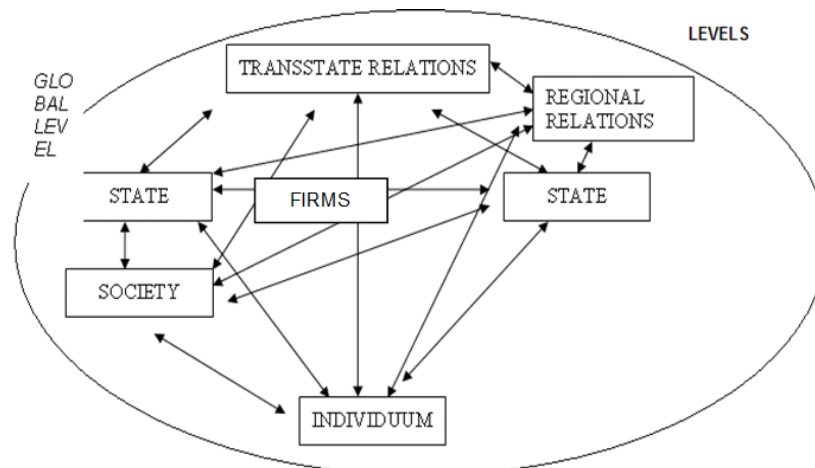


Figure 1. Levels in the economic security system

Source: Udovič, 2006.

The authors agree that the sustainability concept widely adopted result in state of economic security that would allow the individuals, enterprises or state or nation to take care more about environmental dimension of sustainability. There is no possibility to deliver effective environmental protection when the individual, enterprise or state or nation would feel insecure in the economic terms.

Peter Drucker wrote: "What gets measured gets managed" (Davenport, 2010), so in order to build economic security and develop the sustainability dimensions there is the need to identify critical indicators on each level to

monitor them or to monitor them or control them directly. The process of identification the critical factor was based on literature review and professional experience of the authors. The main light motive in searching for the critical indicators was to at least balance all expenses and profits from applying the practices related to certain sustainability dimensions in the three identified levels.

Some results of the research carried out from 2011-2013 by Wysokińska-Senkus A. and Senkus P. on the sample of 180 companies with implemented QMS, EMS, OHSAS were also used as the source for the sustainability and economic security measures on meso level.

Results and discussion

The econometric approach to model and measure economic security

Raczkowski (2012) propose the approach to model and measure economic security that could be applied in the context sustainable development. In that approach economic security can best be reflected both in terms of economic, environmental, and social with the economic curve symmetrical induction curve of economic security (the curve of economic security – CES) – Figure 2.

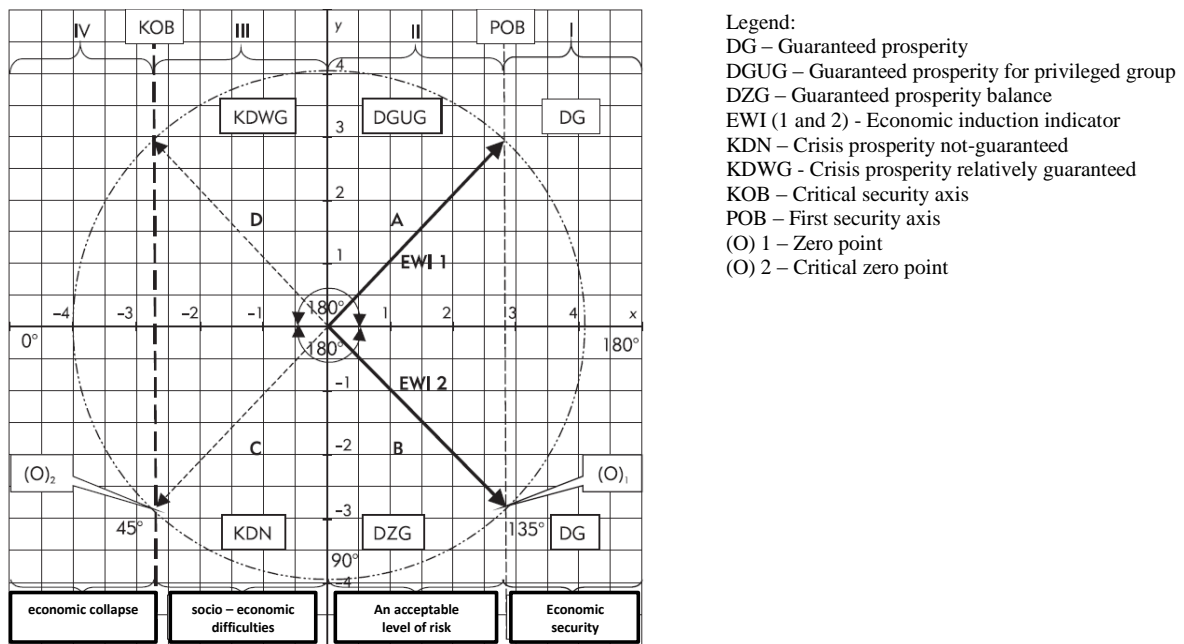


Figure 2. **The symmetrical induction curve of the national economic security**
 Source: K. Raczkowski (2012), p. 116.

"The main element of the symmetrical induction curve of the national economic security that is presented on the Cartesian coordinate system is "Economic induction indicator" EW1/EI1 (1 and 2). That is a type of inductive indicator that measures with a symmetric tilt the x-axis index of economic national security in the range of 180° - 0°. The more the curve bends down towards the 0° proximal direction, across sector subsequent sectors (I, II, III, IV), the degree of economic insecurity is greater. Indications are represented multivalent generalizations, especially fuzzy logic –that allows as many intermediate values as is necessary for a more precise mapping of economic national security. Potentiation of the EW1 is carried out through the use of evaluated and scenario-based genetic algorithms, which automatically search for the best solutions among the alternatives. The symmetric operation of EW1 is a kind of synchronicity, associated with semantic and causal representation of the economic national security in purely economic dimension and non-economic. Angular excursion of the EW1 1 (moving counterclockwise) causes the same deflection angle of the EW1 2 (moving in the direction of clockwise) - and vice versa" (Raczkowski, 2012). Because of that EW1 1 indicator from the perspective of sustainability is a reference to the economic dimension of sustainability on the macro level (also the mechanism could be applied to micro level - individuals, households and meso level - especially businesses). EW1 2 refers to the environmental and social dimensions of sustainability.

"The close relationship between EW1 1 and EW1 2 means that it is impossible for example, to raise the level of level of economic security, measured by EW1 1, by the volume of economic growth achieved, when the volume is not confirmed in the economic activities of the government and the citizens of the country in the non-economic EW1 2 area. That linkage forces the need to embrace efficient resource allocation based on long term multi-dimensional programs and scenarios for the future; not just ad hoc expectations and short-sighted aspirations" (Raczkowski, 2012). The same mechanism could be applied to enterprises. The enterprises could not index business profits without spending adequate investment in environmental protection and social dimension - related to the economic activity.

The factor approach to measure economic security

Boštjan Udovič (2006) proposes to identify how economic security is guaranteed and discover the ways for avoiding economic insecurity the critical factors on the three major levels has to be identified: macro, meso and micro. He proposes the factors that are presented in the table 1.

The critical factors are basically the indicators of the economic security growth. The identification of critical factors allow to assign the that metrics that could be monitored and programed.

Table 1. Divisions of economic security factors

	Macro factors	Meso factors	Micro factors
Crucial factor	State, interstate relations, world	Enterprises, firms, business associations	Individual persons, families, societies
Crucial factors	<ul style="list-style-type: none"> • Stability of the state markets, • Free trade, • Competition, • Sustainable development, • GDP growth, • Productivity, • Low inflation rates, • Low unemployment rates, • Stable exchange rates, • Balance of payments equilibrium, • Indebtedness, • Stable “endowment” with production factors (oil, gas ...), • Avoiding and reacting to speculative attacks, • Solving problems connected with drugs using, trafficking and criminal groups. 	<ul style="list-style-type: none"> • Stability of state macroeconomic environment, • Innovation, new inventions, • Marketing, • Solvency and financial discipline, • Flexibility, • Stable “endowment” with production factors, • Technology diffusion, • Flexibility of administration, • Stable exchange rates, • Lean production, • Ethical dilemmas, • Knowledge, • Minimising black market production. 	<ul style="list-style-type: none"> • Stability of state macroeconomic environment • Food, water, shelter stability, • Lodging, • Job security, stability, • Stable and “fair” wages, • Trust in institutions, • Minimising (absolute and relative) poverty, • Minimising social exclusion (maximise individual reputation), • Education, • Minimising phobias and various –isms, • Degetoising, free movement of individuals, • Avoiding the “magic circle” of living standards and employment.

Source: B. Udovič (2006).

Measuring the sustainability on macro scale – the most sustainable countries in the world

Following Michael Porter’s thesis that countries, like companies, compete in international markets for their fair share of the world markets (Grant, 1991) some measures typically used to enterprises could be used to countries. The same assumption adopt Robeco and RobecoSAM’s in their methodology based on Brundtland Commission’s definition of sustainability. The company recognizes that a country’s ability to safeguard the needs of its future generations extends beyond the protection of the environment and encompasses a range of social, economic and governance factors. In addition to evaluating a country’s access to and management of its natural resources, Robeco and RobecoSAM’s research considers a number of social factors such as investments in education, and governance factors such as aging policies. Such factors are frequently overlooked by investors, have indirect but long-term impacts on the country’s risk profile, and are often embedded in the social and institutional structures of a country (RobecoSAM, 2013).

Figure 3 provides an overview of the type of criteria selected for analysis and the general structure of the Country by RobecoSAM. Sustainability Ranking framework methodology is based on:

- Sub-indicator - Sub-indicators provide granular detail on a range of broad factors, or indicators. For instance, within the energy indicator, the company looks at the energy intensity required to produce a specific amount of GDP, the country’s use of renewable energy sources and energy imports. Such detailed information enhances the country analysis.
- Indicator - In order to make the broad range of distinct data comparable, data for each indicator is converted into a relative score on a scale from 1 to 10, with 10 being the highest. This is done through a normalization process based on z-scores, whereby scores are assigned to each indicator based on its average and standard deviation within the distribution of data points. Each indicator is assigned a weight of 5%, 10% or 15%, reflecting the consultants view on its potential impact on a country’s risk profile. The weighting scheme is reviewed twice a year, based on the results of statistical analysis. Indicator weights within each dimension add up to the total dimension weight.
- Dimension Indicators are grouped into one of the three dimensions: Environmental, Social or Governance. Each dimension weight is the sum of the indicator weights within the respective dimension.
- Total Score = Country Sustainability Ranking - Each country receives a total score ranging from 1 to 10, with 10 being the highest. Each country score can be viewed as a rating for an individual country, determining its rank among all the countries that have been assessed. Country sustainability data is treated on a relative basis ensuring methodological consistency with credit ratings, which are in effect rankings (RobecoSAM, 2013).

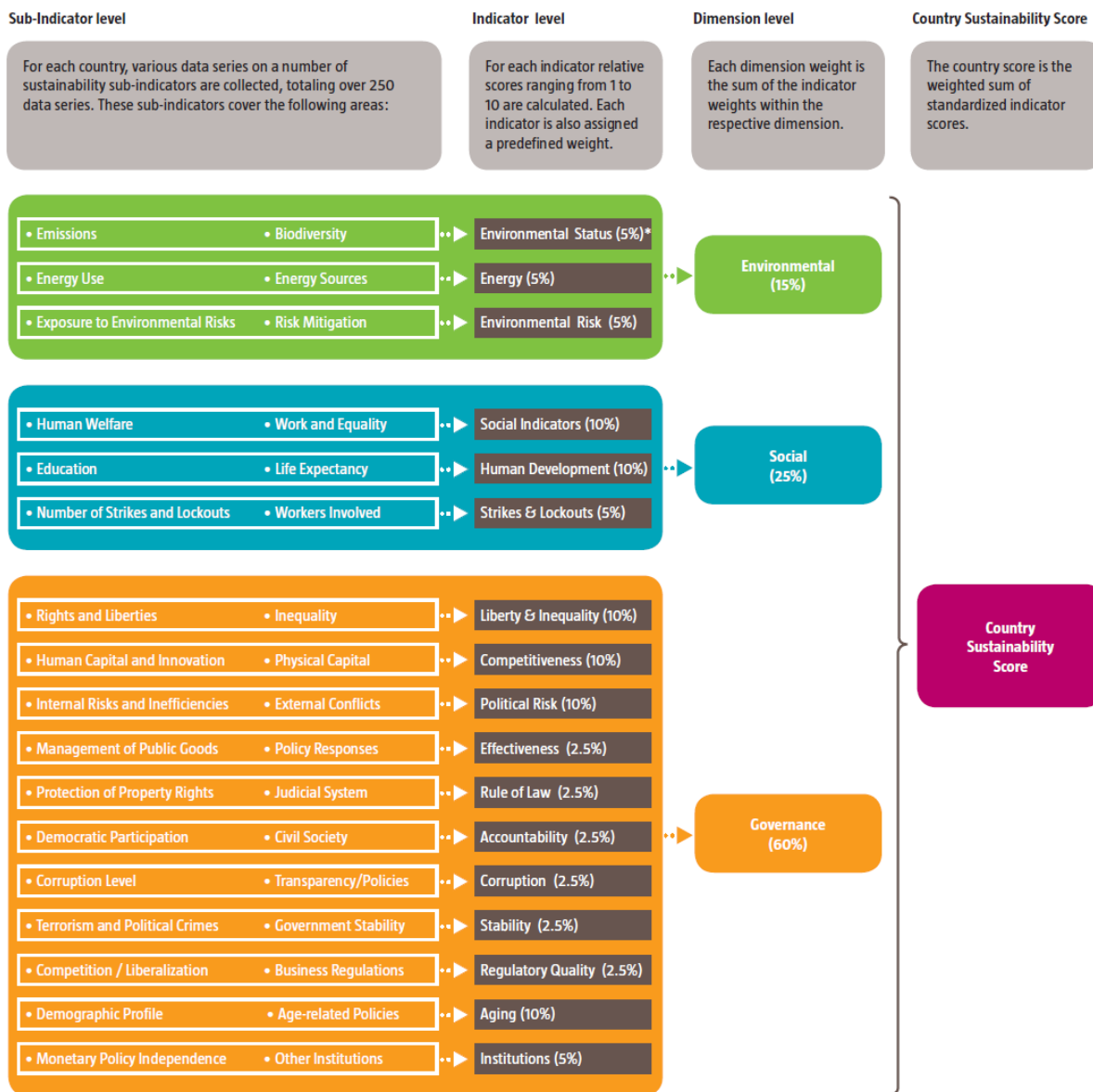


Figure 3. Structure of the country sustainability ranking framework
Source: RobecoSAM (2013).

Based on the methodology the most sustainable countries in the world are Sweden, Australia and Switzerland (fig. 4).

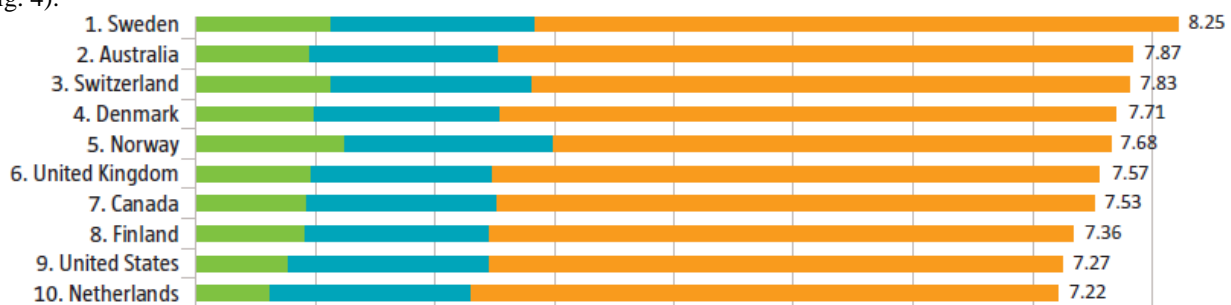


Figure 4. Country sustainability scores and rankings
Source: RobecoSAM (2013).

Measuring the sustainability on meso scale – the most sustainable companies in the world

The MIT Sloan Management Review with The Boston Consulting Group or Corporate Knights or KPMG with RobecoSAM are monitoring the sustainability conditions of the corporations. Unfortunately all of them refer their rankings to big companies (Corporate Knights – at least 2 Billion USD capitalization). Also all of the ranking providers agree that the company is sustainable if can generate profits on “green” investments.

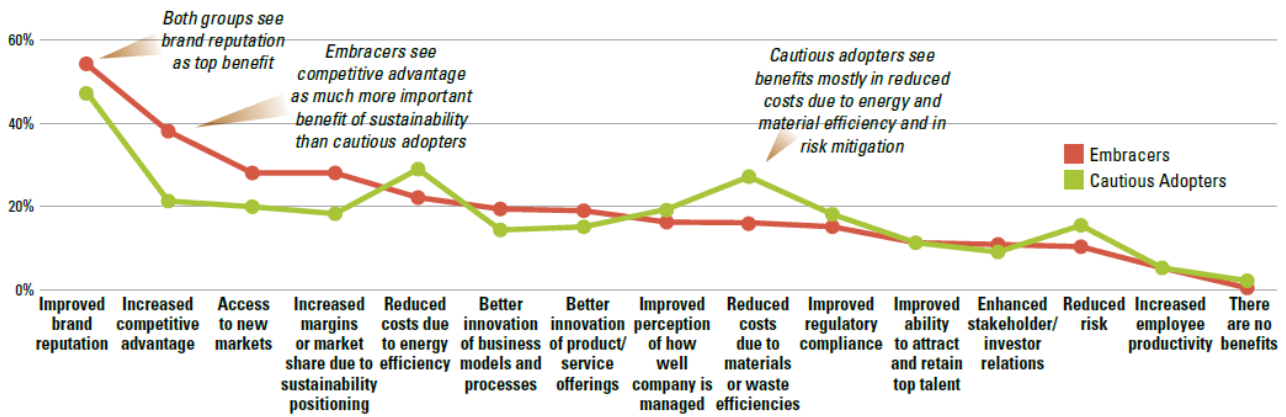


Figure 5. Benefits of sustainability adoption
 Source: MIT Sloan Management Review with The Boston Consulting Group (2010).

The Sustainability Yearbook 2013 by KPMG with RobecoSAM provides for example the information on EBITDA vs external environmental cost that could be treated like the benchmark data for those who want to adopt the sustainability concept (Fig. 5). MIT Sloan Management Review with The Boston Consulting Group ranking provides also the list of the advantages that could appear when the sustainability concept is adopted, the list could be also used for benchmarking (Fig. 4).

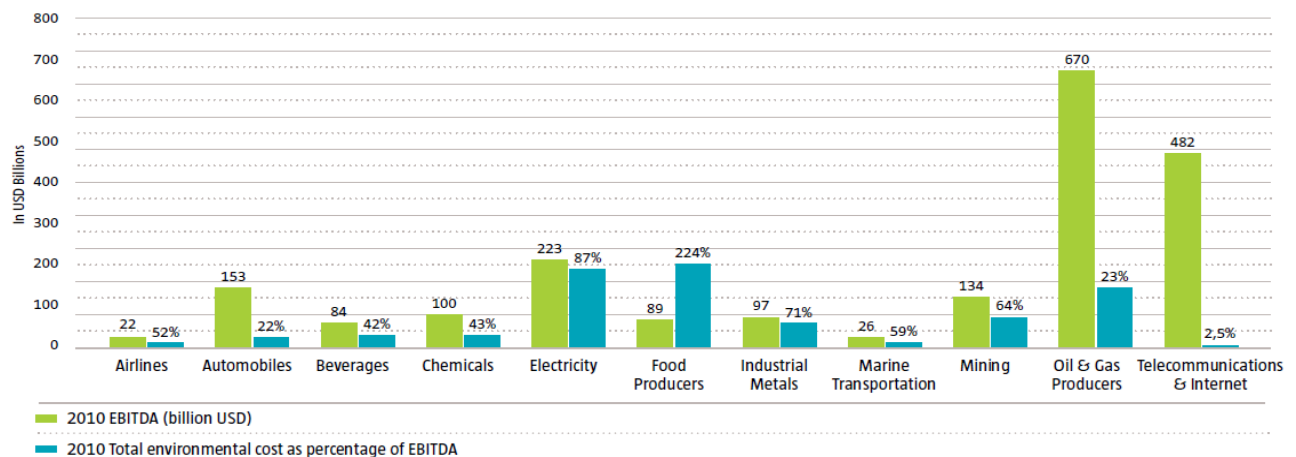


Figure 6: EBITDA vs external environmental cost
 Source: RobecoSAM (2013).

The most sustainable companies according to KPMG with RobecoSAM latest ranking are Adidas AG, Air France-KLM and Akzo Nobel NV (RobecoSAM 2013).

Critical measures for sustainability and economic security

The authors agree that both sustainability and economic security are very closely related, because for example if the company has insecure economic position will never spend money on social or environmental activities. Also other mechanism: sometimes the companies after big ecological and social scandals are forced to redesign their management systems that would protect them from possible lawsuits and penalties. That also results in incising the economic security of the company in the long term perspective.

When trying to find critical measures for sustainability and economic security the assumption has to be made that all the effects are most important in the long term perspective. For example the company could fire the most skilled workers in order to boost their short term profit, but by that turn the company loses their competitive advantage and is one step closer to bankruptcy.

Another assumption has also to be made. Every organization that wants to managed their resources effectively has to implement the management style that allows to control resource allocation, the degree of achievement of the objectives not only after the project but continuously. Such styles are related to Project Management, Program Management or Business process Management (more: Senkus, 2013).

After very careful analysis of the most important sustainability rankings the conclusion that has to be made is that always the long term outputs of "sustainable investments" has to be greater than inputs. Either input or output has to be carefully analyzed and take under consideration all their tangible and intangible elements such as for example: employee engagement, innovation and stakeholder appeal.

The authors agree that although the macro – national level seems to be very important in fact the enterprises are generating "tax money" and jobs that decide on appropriate level economic security and adoption of sustainability. That is why the meso level should be carefully monitored by government.

Based on literature review, results of the research carried out from 2011-2013 by Wysokińska-Senkus Aneta and Senkus Piotr on the sample of 180 companies with implemented QMS, EMS, OHSAS and the authors experience in business practice the set of critical measures is proposed (Tab. 2).

Table 2. Proposed economic security and sustainability measures and factors

No.	Measure / Factor	Condition expected	Description
<i>Macro Scale – National Level</i>			
1.	Expenditure effectiveness	Output – Input ≥ 0	If economic, environmental, or social investments are carried as the projects it is easy to measure effectiveness on every stage and compare it to plan or benchmark data. Intangible output and alternative costs should also be taken under consideration.
2.	Energy diversity	Source diversification Import diversification	One of the conditions of economic security and sustainability on macro level is the energy diversification. The energy should come not only from different sources but also from different directions if energy is imported.
3.	Risk management plans	Social, economic, ecological risk management	The government should not only carry out the strategic forecasting, but also should prepare risk plans in the event of the occurrence of the certain risk, like for example demographic situation, unemployment etc.
4.	Human Welfare Index	The index should be benchmarked to other countries	The index should be benchmarked against the index in the leader countries.
5.	Work and Equality	The index should be benchmarked to other countries	The index should be benchmarked against the index in the leader countries.
6.	Life Expectancy	The index should be benchmarked to other countries	The index should be benchmarked against the index in the leader countries.
7.	Education	The index should be benchmarked to other countries	The index should be benchmarked against the index in the leader countries.
8.	Unemployment structure	Structural unemployment should be kept low	The unemployment structure is very important factor for sustainability and economic security. High level of structural unemployment makes huge risk of unsustainability and economic insecurity.
9.	Public debt	Low as possible	The trends of public debt also should be monitored.
10.	Waste management	Recycling rate	When there is high rate of recycling there is low level of environment contamination.
<i>Meso Scale – Enterprise Level</i>			
1.	Expenditure effectiveness	Output – Input ≥ 0	If economic, environmental, or social investments are carried as the projects it is easy to measure effectiveness on every stage and compare it to plan or benchmark data. Intangible output and alternative costs should also be taken under consideration.
2.	Waste management	Recycling rate	When there is high rate of recycling there is low level of environment contamination.
3.	Employee involvement	Balance	Employee have to have their impact on enterprise strategy. But too much employee power without relation to economic condition of the company could cause the company or even whole region bankruptcy like It could be seen on the GE or Detroit example.
4.	Efficiency increase	Progress in efficiency	Every management system requires continuous improvement. That improvement has to be monitored and measured.
5.	Cash flow	As high as possible	High cash flow means that enterprise has enough money to invest in environmental and social aspects.

Source: own study.

The above list is of course open and discussable but one has to remember if would be too many factors or measures there would be ease to lose control on them. In practice only five to six strategic factors are important in building and achieving the company or state strategy.

Conclusions

Sustainability will be a strategic theme beyond the recession. Although it will continue being justified on efficiency agendas, it will increasingly be justified to meet stakeholder expectations, to build trust and compliance, and to manage risk related to the business's reputation (GARTNER, 2009).

Economic security and sustainability should be carefully managed on the macro (national) level, where the government policy and actions in three: economic, social and environmental dimensions should not only be conducted simultaneously, but should result with real value, encouraging businesses and individuals to implement a framework of sustainable development. Indeed, if this condition is not met, the entrepreneurs will identified sustainable development, as a stop standing in the way of maximizing profits and will not be interested in the voluntary implementation of sustainability concepts. The implementation of the sustainability concepts that does not provide the real value on the meso level would result with in competitiveness of the enterprises in the medium term and would lead them to bankruptcy in the long term

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