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### **THE IMPORTANCE OF SUSTAINABILITY**

In the light of the dramatic events of the 21st century, the main topic of management has become a wide spread of radical changes and their impact on people's lives. Today, we can see these changes: globalization, rapid change in information technology, management during the global financial crisis, outsourcing, e-business, knowledge management, global virtual teams and others. Though these changes people begin more frequently think about what will come in future. The great part of using technologies has a negative impact on the environment but the economy around the world is depends on them. People around the world become more serious about sustainability and, also, they concerned about future of humanity though many generations, respectively.

The essay focuses on the discussion of the concept of sustainability from an economic perspective. Firstly, the essay investigates the definition of sustainability and its components. Secondly, the essay compares two concepts of sustainability: weak and strong sustainability, moreover, the essay illustrates both conceptions with examples. Additionally, the essay summarizes key points and give predictions for future.

#### **The definition of sustainability**

For today there is no consensus on a single definition of the term of sustainability but all researchers are similar to the idea that the sustainability bases on three core dimensions (Beckerman & Wilfred 2001): environmental sustainability, economic sustainability, social sustainability (fig. 1).

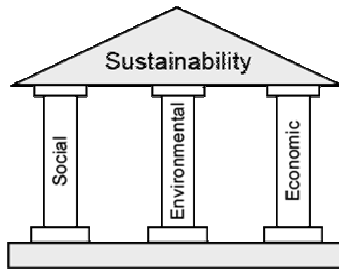


Figure 1. Sustainability

The fig. 1 demonstrates that all the dimension of sustainability must be sustainable. The first dimension is social that is presented by the ability of social system, for instance, a country, to function at a defined level of social wealth for undefined time (Heal 1998). The second one environmental maintains the rates of renewable and non-renewable recourses depletion that can continue indefinitely (Hartwick 2004). The third dimension is economic that means the ability of an economy to support a defined level of economic production for undefined time (Norton et al 2000). These dimensions not only have a very strong connection between each other, but also they have cross-influence on each other. According to Agras (1999) environmental dimension should be the top priority because everything that exists now is bases on natural recourses, for example, rock-oil.

However, general definition of sustainability refers to sustainable development. Herman Daly (1996), a widely respected ecological economist, defined sustainable development as development without growth beyond environmental limits. Also, sustainable development in all countries can be defined by GDP per capita (Bromley 2005). For example, the essay shows the table that presents GDP for some countries (table 1).

Table 1

GDP FOR SOME COUNTRIES

Country	Total Annual Target, %	Average GDP per Person
India	9	3,500
China	8	7,600
Vietnam	7	3,100
United States (implied target)	2	47,200
Japan	2	34,000
England	1,7	34,800

The table shows the large gap between the developed and developing nations, so the high growth rates are an effort to catch up in average GDP per capita. Here become a problem that GDP growth cannot be sustainable; there is nothing in average GDP per capita that allows the comparison to the goal of quality of life. The table 2 shows how far the world from economic sustainability.

Table 2

## GDP FOR SOME COUNTRIES

Country	Total Annual Target, %	Average GDP per Person	Percent Below Preferred Minimum Standard of Living Level, %
India	9	3,500	76
China	8	7,600	36
Vietnam	7	3,100	48
United States (implied target)	2	47,200	15
Japan	2	34,000	16
England or UK	1,7	34,800	14

The table 2 presents that for India, China, and Vietnam it is impossible to catch up with developed countries in terms of average GDP per capita and be sustainable with today's technologies. Additionally, the way to solve this problem is to insist on that the needs of developing countries will be served best by treating the environment as an integral dimension of development, rather than as an impediment.

Bottom line: Sustainability is the ability to continue a defined behavior indefinitely and it is based on three dimensions: social sustainability, environmental sustainability, economic sustainability. All of three dimensions have strong connections and they are cross-influenced to each other. The most prioritize dimension is environmental. GDP can be a criterion for economic sustainability; therefore, it is impossible to reach the economic sustainability in the world for today.

### **Strong and weak sustainability**

Sustainability has two key concepts: strong and weak sustainability. Strong sustainability is defined as the preservation of the integrity of all ecological systems in the biosphere (Crocker& Tschirhart 2006). The concept of strong sustainability is based on that all human life and activity occurs within the limitations of the biosphere where humankind lives involving the economy (2006). Besides, strong sustainability gives priority to ecological scale over economic efficiency. Under the strong sustainability implies minimum amounts of a number of different types of capital: economic, ecological, social that should be independently maintained in real physical/biological terms (Barbier 2007). The major motivation for the insistence has come from the recognition that natural recourses are essential inputs in economic production that cannot be substituted for by physical or human capital. For example, Bolivia, led by indigenous President Evo Morales, passed a Law for Mother Earth. The main idea of this is that the Earth is living and it has rights equal or greater than human beings. Besides, this law affirms the primacy of ecosystem health over economic growth. However, Bolivia is still heavily in-

volved in resource extraction and global trade but it entails a significant shift in values and economic priorities where human flourishing is a true goal of economic activity.

On the contrary, the concept of weak sustainability means the orientation on social equity and environmental protection regarded as subordinate to sustainable economic growth (Common 1996). This concept is focused on natural capital that can be used up as long as it is converted into manufactured capital of equal value (1996). For instance, a value of forest can be calculated if assume that all trees are cut down and turned into a paper of furniture. On the other hand, the forest provides a home for wildlife that provides food for hunters and place where everyone can enjoy the nature. Another interesting example of weak sustainability is the small Pacific island nation of Nauru (Gowdy&McDaniel 1999). On this island in 1900 was discovered one of the world's richest phosphate deposits. Today about 80 percent of the island is totally devastated, on the other side; Nauruans have had a high per capita income. A trust fund was about \$1 billion; therefore, interest from this trust fund should have insured a substantial and steady income and thus the economic sustainability of the island. Unfortunately, the Asian financial crisis and other factors, has wiped out most of the trust fund. Today the island is biologically impoverished and Nauruans economy is damaged.

Today governments of many countries try to find a way to decrease environmental contamination but environmental protection is still seen as a threat to economic growth. However, creating environmental policies in market based economics context can successfully convince business and government of the fundamental interconnections between healthy economies and healthy ecosystem.

### **Conclusion**

Today's economics is based on using natural resources. The essay defined sustainability as the ability to continue a defined behavior indefinitely. There are three core dimensions of sustainability: social, environmental, economic. All three dimensions have a strong influence to each other and the most essential one is environmental. Besides, the essay discussed two concepts of sustainability: strong and weak sustainability. Strong sustainability means the ability of an ecosystem to recover from disturbance and reestablish its stability and diversity, in contrast, weak sustainability is bases on active using natural resources for strong and stable economic growth. Both concepts are described in details and illustrated with examples. The essay main assumption is that a substitution of natural for manufactured capital may be one-way: once something is transformed into manufactured capital there is no way to return to the original situation. Governments of many countries try to create environmental policies that will help to reduce pollution and regulate using of natural resources.

## References

1. Agras J. A dynamic approach to the environmental Kuznets hypotheses // *Ecological Economics*. – 1999. – Vol. 28. – P. 267–278.
2. Barbier E. The Concept of Sustainable Economic Development // *Environmental Conservation*. – 2007. – Vol. 14. – P. 101–103.
3. Beckerman A. Sustainable Development: Is It a Useful Concept? / A. Beckerman, B. Wilfred // *Environmental Values*. – 2001. – Vol. 3. – P. 191–209.
4. Bromley W. Searching for Sustainability: The Poverty of Spontaneous Order // *Ecological Economics*. – 2005. – Vol. 24. – P. 231–240.
5. Common S. Beckerman and His Critics on Strong and Weak Sustainability: Confusing Concepts and Conditions // *Environmental Values*. – 1996. – Vol. 5. – P. 83–88.
6. Crocker T. Ecosystems, externalities and economics / T. Crocker, T. Tschirhart // *Environmental and Resource Economics*. – 2006. – Vol. 2. – P. 551–567.
7. Gowdy J. The Physical Destruction of Nauru: An Example of Weak Sustainability / J. Gowdy, A. McDaniel // *Land Economics*. – 1999. – Vol. 12. – P. 75–81.
8. Hartwick J. Substitution among exhaustible resources and intergenerational equity // *Review of Economic Studies*. – 2004. – Vol. 45. – P. 347–354.
9. Heal G. *Valuing the Future: Economic Theory and Sustainability* / G. Heal. – N. Y. : Columbia University Press, 1998.
10. Herman D. *Beyond Growth: The Economics of Sustainable Development* / D. Herman. – Prentice Hall, Frenchs Forest, NSW, 1996.
11. Norton, B. The evolution of preferences: why “sovereign” preferences may not lead to sustainable policies and what to do about it / B. Norton, R. Costanza, R. Bishop // *Ecological Economics*. – 2000. – Vol. 24. – P. 193–211.
12. URL: <http://www.guardian.co.uk/environment/2011/apr/10/bolivia-enshrines-natural-worlds-rights>.