Sustainability Dilemmas of our EU-Accession

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SUMMARY

The principle of sustainable development was formulated in the Amsterdam Treaty as a basic principle of the European Union in 1997. The issues of sustainable economic development and social welfare are being formulated as conflicting aims from time to time during the Hungarian accession process to the European Union, as well.
We can set a real aim that the economic growth should serve for the aims of sustainability during the accession.

INTRODUCTION

The connection between economic growth and welfare has been engaged the attention of economists from the beginning of economics. From Adam Smith economists assume that although people generally do not intend to promote the public interest and work only for their own profit, there is an invisible hand that guides individuals to act for an end that was not part of their intent. We assume that market forces acting as an invisible hand guide the market towards the common good.
In the 20s of the 20th century Pigou however pointed out that the market is unable to handle external effects, therefore externalities lead to common bad instead of common good by distorting the mechanisms of demand and supply.
Not only scientist and green movements are looking for solutions of the conflict of growth and welfare-improving development, the discussion has started on international political and economical fora as well.
In 1983 the UN General Assembly requested Norwegian prime minister Ms Gro Harlem Bruntland to prepare a comprehensive program to mark the directions of necessary changes.
The World Commission on Environment and Development published its report entitled Our Common Future in 1987, stating principles and requirements necessary to preserve the world for future generations. These principles have become well-known as the principles of sustainable development worldwide.
Sustainable development is a complex process, which meets the needs of the present without compromising the ability of future generations to meet their own needs. The idiom means sustainable economic, ecological and social development. The ecological system, natural capital can be substituted with economic capital only in a very limited way.
Donella and Denis Meadows call the society sustainable if it is "one that can persist over generations, one that is far-seeing enough, flexible enough, and wise enough not to undermine either its physical or social systems of support."
A basic element and message of sustainable development is to treat the needs of future generations equally as those of today's generation. In order to implement this principle of intergenerational equity, a serious and consequently implemented ethical decision is needed. The legal frameworks are not elaborated even within countries. (Initiatives toward this direction have started recently in Hungary and it is a subject of debate, how members of future generations could become subjects of law.)

1. SUSTAINABLE DEVELOPMENT AS A GOAL OF THE EUROPEAN UNION

The European Union devoted serious attention to the implementation of sustainable development even at its earlier levels of development. Its 5th Environmental Action Program (1992-2001), "Toward Sustainability", included the main concept of the program in its title.
The goal of sustainable development had remained only a goal included in the Environmental Action Program until 1997. The sign of the Amsterdam Treaty in 1997 brought an important change from the point of view of sustainability. The Amsterdam Treaty – which modified the Treaty on the European Union (signed in Maasticht in 1992) and the treaties of the European Communities – was signed on 2 October 1997. By modifying Paragraph B of the Preamble, it has become a goal of the European Union to promote economic and social development not

only considering environmental effects, but also the principle of sustainable development. Article 2 of the Treaty of Roma has been modified in a similar way which states that the European Community's goal is, among others, the promotion of harmonic, balanced and sustainable development of economic activities, high-level environmental protection and the improvement of environmental quality.

Including high-level environmental protection and improvement of the environmental quality among the goals of the Community indicates further improvement of the Community's environmental policy. By these modifications it has become a defined goal of the EU to improve its environmental policy in order to improve the quality of the environment as well. This requirement does not apply only for environmental policy but also for other policy fields of the Community.

2. THE ACHIEVEMENT OF SUSTAINABILITY GOALS

The European Communities started its first Environmental Action Program after the first Environmental World Conference held in Stockholm and had finished its fifth action program by the millennium. The assessments of the state of the environment and prospects for the following ten years included in these action programs are not prosperous.

The general environmental state of the European Union had not significantly improved by the millennium, and it had become worse in some areas. The main barrier of environmental improvement is believed to be the non-sustainable development of main economic sectors. Experts say that most of the main challenges stated in the Fifth Environmental Action Program remain actual in the present century. Table 1 shows the present state of the environment in the European Union and prospects for 2010 or longer. As we can see in the table there is an obvious positive change only in the case of pressure on ozone layer. Future pressure, state and impact data are usually less favorable or only slightly better.

Taking all these into consideration, it is understandable why EU decision-makers consider the environmental state and policy of the accession countries in a rather critical way.

What is the situation in Hungary with the environment? Is the distrust from the side of old EU Member States justified and we have only deficiencies or does Hungary also have some environmental goods which could be a gain for the EU after our accession?

Table 1. Environmental problems in the European Union 2000-2010

Pressure		*Environmental problems*	*State and impact*	
Present	*Future*		*Present*	*Future*
⇨	⇩	Greenhouse gas effect and climate change	⇩	⇩
⇧	⇨	Stratospheric ozone	⇩	⇨
⇨	⇩	Hazardous materials	⇨	?
⇨	⇨	Air pollution	⇨	⇨
⇨	⇨	Water usage	⇨	⇨
⇩	⇩	Soil contamination	⇩	?
⇨	⇩	Waste	⇩	⇩
⇨	?	Environmental and technological risk	⇨	?
⇨	?	Genetically modified organizations	?	-
⇩	⇩	Biodiversity	⇨	?
⇨	⇨	Environmental health	⇩	?
⇨	⇨	Urban areas	⇨	⇨
⇩	⇩	Coastal and marine ecosystems	⇩	?
⇩	?	Rural areas	⇩	-
⇩	?	Mountain areas	⇩	-
⇧	Positive development			
⇨	Positive development but insufficient			
⇩	Negative trend			
-	No qualitative data			
?	Uncertain (expert estimates only)			

Our major deficiency is the low level of sewage treatment. We have received the longest derogation for this problem (until 2015) and this is the requirement we can meet the most expensively (more than 1000 billion Forints according to present calculations). (Other problem areas include urban air pollution etc.)

Our strengths include nature conservation and biodiversity. (This strength of the accession countries is highlighted in the Sixth Environmental Action Program as well.)

During the accession process the harmonization of law was suitably delivered, but the implementation system is not strong enough.

Environmental protection is less important in the value system of the society comparing to other economic and social problems in Hungary than in the old EU Member States. This difference in its own can trigger some anxiety among EU citizens.

3. THE MEASUREMENT OF SUSTAINABILITY

As it is known, macro-indicators measuring economic performance (GDP, GNP) are not able to measure sustainability and welfare. These indicators have not been developed to measure welfare actually. Nevertheless several politicians and analysts treat these indicators as measures of welfare, and it is a source of problem.

GDP and GNP are not proper indicators of common good because:

1. National accounts do not indicate changes of environmental quality and resource depletion. The Gross Domestic Product reflects changes of productive capital by calculating with investments and amortization but it neglects natural capital changes.
2. GDP does not calculate with environmental services among incomes however they may influence the quality of life. Natural services that reduce emission abatement costs also remain hidden (e.g. natural self-cleaning capacity). This is misleading because these services influence production cost and thereby product prices and the GDP. Natural capital produces however non-market services beside the above-mentioned services and these are more valuable – according to reliable estimates – than its market services.
3. Several environmental costs increase the GDP. The costs of the so-called end-of-pipe methods (contrary to preventive environmental policy) are usually calculated. This means double counting of polluting economic activities: both their GDP increment and the abatement costs will increase the GDP.
4. Preventive environmental policy, reduction of material and energy usage will decrease the GDP. In this case welfare can be increased while the GDP will become lower.

The first new type macro-indicator called Index of Net Economic Welfare (NEW) was developed by W. Nordhaus and J. Tobin. The following, widely used indicator was the Index of Sustainable Economic Welfare (ISEW), and calculations have been made for several countries (e.g. the USA, Great Britain, Austria). Table 2. contains the components of GPI, column "impact" indicating whether the component's impacts are positive or negative. Several components have different impact on GPI and GDP.

Table 2. The components of GPI

Component	*Impact*
Personal Consumption	+
Income Distribution	+ (low income differences) or –
Value of Housework and Parenting	+
Value of Volunteer Work	+
Services of Consumer Durables	+
Services of Highways and Streets	+
Cost of Crime	-
Cost of Family Breakdown	-
Loss of Leisure Time	-
Cost of Underemployment	-
Cost of Commuting	-
Cost of Household Pollution Abatement	-
Cost of Automobile Accidents	-
Cost of Water Pollution	-
Cost of Air Pollution	-
Cost of Noise Pollution	-
Loss of Wetlands	-
Loss of Farmland	-
Depletion of Nonrenewable Resources	-
Cost of Long-term Environmental Damage	-
Cost of Ozone Depletion	-
Loss of Old-Growth Forests	-
Net Capital Investment	+/-
Net Foreign Lending or Borrowing	+/-

In 1999 in the framework of a research project I had the opportunity to overview the changes of GPI in Hungary. GPI calculation has started: we suggested a statistical system supporting GPI measurement and calculated GPI changes during the 1990s for some components.

We drew the following conclusions by analyzing Hungarian data.

Components with high negative impacts were:

- ➢ Personal income weighted with income distribution
- ➢ Cost of crime
- ➢ Cost of long-term environmental damage

The increase of income differences intensified the negative impact of lower personal incomes due to the long recession period in the 90s (also reflected in the GDP).

The statistical system does not support the calculation of cost of crime. We could see, however, that the number of crimes had grown, and private costs of crime prevention increased sevenfold between 1993 and 1997.

Other significant long-term environmental damages include the costs of GHG and discounted environmental costs of nuclear energy production. (Because of "traditionally" low energy efficiency.) Present impacts of these components are slight, but according to the principle of sustainability they are still important because devolving these costs on future generations will compromise their opportunities.

Therefore it is very important to develop effective implementation strategies of international agreements on this area.

Components with medium negative impact were:

- Cost of unemployment
- Environmental damages

The cost of unemployment depends on the unemployment rate and the length of unemployment periods. There is an additional cost: the cost of health problems because of unemployment identified recently and also present in Hungary.

We could make detailed calculations for the cost of air pollution from environmental damages. The economic recession in the 90s – as an "environmental bonus" – could not compensate for pollution costs, according to our calculations, because of long-term environmental damages originating usually from the past. These long-term environmental pollutions (waste, soil, and groundwater) are the most serious ones and remediation costs will fall to the future generations compromising the principle and practice of sustainable development. These effects will presumably be different depending on the region and social status. It would be important from the point of view of our EU-accession to continue these calculations and develop a statistical system supporting data collection. Although EU evaluates its member states and accession counties with the help of a GDP-based indicator system, it would be useful to represent our development path by using new macro-indicators as well.

4. SUSTAINABLE DEVELOPMENT AND GROWTH

The terms "sustainable development" and "sustainable growth" are often used as synonyms in everyday political and scientific discussion. In the framework of this article we cannot describe in detail why "sustainable growth" is impossible. (The American ecological economist H. Daly published a great essay on this topic entitled "Sustainable Growth: An Impossibility Theorem".)

It could be a realistic goal to set a development plan for a region for a limited time period. We have to consider environmental, sustainability aspects in this case, too. Tibor Erdős states in his essay, "Some Theoretical and Practical Problems of Sustainable Economic Development" about our growth potential during the EU-accession: "The costs of our accession are high, especially in the fields of environmental protection, traffic system, border-check system and public administration development. Further costs include the costs of agricultural development, law harmonization and satisfying other obligations. Some costs are attached to strict deadlines e.g. environmental costs and the development of border-check system. Environmental costs and the cost of traffic development alone would be as high as 6000 billion Forints, according to preliminary calculations, which is around 50% of Hungary's GDP in 1999. It is possible that the need for external sources will increase significantly and it is a question whether this can regularly be covered by capital flow that does not generate facilities. If the answer is "no", then the already reached 4-5% GDP growth can not be sustained without the real growth of liabilities."

In my opinion high environmental related costs of our EU accession – that may slow down the speed of economic growth in Hungary – originate from ecological limits and therefore it is reasonable to calculate with these costs when analyzing long-term growth potential.

It is important to highlight again that we should always analyze changes of social welfare by means of sustainability indicators when studying growth potential and economic growth.

It was important to overview these sustainability questions because it could be a realistic goal for Hungary from the point of view of sustainability to improve sustainability potential and welfare, together with a GDP growth higher than the EU average.

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Összefoglaló

A fenntartható fejlődés, mint az Európai Unió alapelve az Amszterdami Szerződésben került megfogalmazásra 1997-ben. A fenntartható gazdasági fejlődés és a társadalmi jólét mindig is ellentmondásos célként jelentek meg Magyarország Európai Unióhoz való csatlakozása során is. Valódi célként fogalmazható meg a csatlakozás során egy olyan gazdasági növekedés elérése, amely a fenntarthatóságot szolgálja.

Резюме

Постоянное развитие, как один из главных критериев Европейского Союза было сформулированно в Амстердамском договоре в 1997 году. Поддержание экономического развития и общественного благосостояния всегда было противоречивой целью при присоединении Венгрии к Европейскому Союзу. Настоящей целью Венгрии при присоединении, было достижение такого экономического роста, который служит постоянному поддержанию развития.