SREČA KOT ALTERNATIVNA MERA BLAGINJE V DRUŽBI IN TRAJNOSTNI RAZVOJ

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POVZETEK

Evropska in ostala razvita gospodarstva skušajo v čimvečji meri uveljaviti oziroma vpeljati model trajnostnega razvoja odkar ga je v osemdesetih letih prejšnjega stoletja kot pojem uvedla t.i. Bruntlandova komisija. Da bi gospodarstva lahko uspešno prešla na model trajnostnega razvoja, je potrebno vzpostaviti ustrezen sistem merjenja. Gospodarski (in ne trajnostni) razvoj danes še vedno merimo s pomočjo BDP. Zaradi pomanjkljivosti in kritik obstoječega načina merjenja družbene razvitosti in hitrosti razvoja, katerega temeljni kazalec je BDP (npr. Stiglitz et al., 2009; Talberth et al., 2007), so bili razviti številni alternativni indikatorji. Kot možna alternativa se v teoretični in empirični literaturi pojavlja tudi ekonomska analiza sreče. Glede na to, da je gospodarski razvoj oziroma model dolgoročnega razvoja pravzaprav določen s preferencami družbe, menimo, da je analiza določljivk sreče odlična priložnost za: (1) merjenje zrelosti družbe za prehod na sonaraven model razvoja in (2) za samo merjenje blaginje v takšnem modelu. V članku opozorimo na temeljne napake kazalca BDP in njegovo (ne)skladnost z idejo sonaravnega razvoja. Nato predstavimo model sreče in opišemo z njim povezane metodološke izzive. S tem utemeljimo tudi alternativo klasičnemu merjenju 'blaginje', to je merjenju s pomočjo BDP.

Ključne besede: ekonomska analiza sreče, BDP, trajnostni razvoj

HAPPINESS AS AN ALTERNATIVE TO GDP AND A MEASURE OF SUSTAINABLE DEVELOPMENT

ABSTRACT

European and other developed economies have been trying to implement a model of sustainable development since the 1980s when the Brundtland Commission first introduced the idea of sustainable development. In order to successfully implement it, a suitable measure has to be developed and embraced. GDP has often been criticized as a measure of sustainable development, not only for the fact that it does not measure well-being, but also because it does not include many important elements, such as e.g. environmental damages (see e.g. Stiglitz et al., 2009; Talberth et al., 2007). Economics of happiness thus emerged as a possible alternative. Given that the general direction of economic and institutional development in the society is determined with the preferences of its members, we believe that the analysis of happiness provides a very good foundation for: (1) the measurement of society's readiness to embrace the idea of sustainable development and (2) the measurement of well-being. In the paper we first critically analyze GDP in terms of its suitability to measure well-being and to be used in a model of sustainable development. As an alternative, the model of happiness is then proposed and its methodological challenges described. Thereby, an alternative to classical measurement of well-being (i.e. GDP) is put forward for practical implementation.

Key words: economics of happiness, GDP, sustainable development

1. INTRODUCTION

In 1983 the United Nations founded a World Commission on Environment and Development, which started examining the relationship between economic development and environmental problems. A Commission headed by Gro Brundtland, soon to be popularly named "the Brundtland Commission", issued a famous 1987 report which defined the concept of sustainable development in these words: "Humanity has the ability to make development sustainable -- to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987, p. 8).

The definition of sustainable development has two major focuses: (1) social dimension and reduction of poverty and (2) environmental dimension. The Report (1987, pp. 25-26) states that "poverty is not an evil in itself, but sustainable development requires meeting the basic needs of all and extending to all the opportunity to fulfil their aspirations for better life. A world in which poverty is endemic will always be prone to ecological and other catastrophes. (…) Yet, in the end sustainable development is not a fixed state of harmony, but rather a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change are made consistent with the future as well as present needs." Sustainable development as a concept thus closely links the desire for the development of a harmonious society aimed at higher welfare, social cohesion and environmental protection.

One of the primary concerns in economic science is the problem of measurement. How should societies measure sustainable development or the wealth of nations, which also accounts for the sustainability problem? The standard approach to measuring the relative performance of countries is GDP per capita or GDP per capita in purchasing power parity, whose standardized measurement started to develop prior to the Second World War and is being constantly improved by the United Nations. GDP is also considered as the primary source of information about the well-being of individuals and the wealth of nations. Nonetheless, gross domestic product has long been criticized for many shortcomings stemming from its focus on production. The critiques further emphasise its lack of social issues inclusion and lack of environmental focus, although the environmental accounts are also being proposed.

Recent developments, especially the rapid climate deterioration, further exacerbated the question of sustainable development and the problem of measuring the "wealth of nations". At least two aspects should be considered: should the wealth of nations be measured by the actual (physical) wealth (in other words through production), or should it incorporate well-being?

Frey and Stutzer (2002) propose the subjective happiness measurement with the environmental dimension as one of the possible alternatives to measuring well-being of people in any given economy. Economic analysis of happiness claims individual happiness to depend on three dimensions: economic, social and individual. As such it offers a theoretical foundation for measuring ecological dimension, social cohesion, safety, and many other soft issues, which are all determinants of sustainability.

In the paper we first discuss the main theoretical concepts. We then present the pros and cons of GDP's use as a measure of sustainable development and show why happiness should be used as an alternative measure and how could we deal with its measurement in practice.

2. DISCUSSION OF THE MAIN CONCEPTS

2.1. The concept of sustainable development

In the 1980s the Brundtland Commission introduced the idea of sustainable development. Sustainable development is defined as such type of development which provides for the current generation but does not limit the ability of the future generations to cover their needs. It is also defined as environmentally friendly, more socially acceptable (guaranteeing equality) and a facilitator of the long-term economic growth and development (The Brundtland Report, 1987).

Table 1: Definition of sustainable development

What do we want to sustain?		What do we want to develop?
Nature Land Biodiversity Ecosystems		**People** Children Life expectancy Education Equality Equal opportunities
Support to life on Earth Services of the eco-systems Resources Environment	**HOW LONG?**	**Economy** Wealth Production sectors Consumption
Society Cultures Groups Different locations on the planet		**Society** Institutions Social capital Countries Regions

Source: Our Common Journey: A Transition Toward Sustainability, 1999, p. 24.

There are three major components of sustainable development: environmental, economic and social. Sustainable development is often considered primarily in terms of solving ecological problems, but the concept is actually much broader (Table 1). Environmental component is focused on sustaining the nature (land, biodiversity and ecosystems). The nature offers support to life on Earth and its quality directly impacts the quality of life of its inhabitants. Most obviously, the planet provides resources for our lives (water, air, different materials such as metal or wood, etc.). Eco-systems also provide services such as natural air and water cleansing, pest destruction, etc. Sustainability does not by default exclude development. It is actually based on the concept of economic development, taking increased wealth, production and consumption into account, but in such a manner that the sustainability of the environment

is not limited. The concept of sustainable development also stresses the importance of developing the society and improving the general population's quality of life. However, quality of life is not necessarily directly linked to the wealth of a nation. Therefore, the often used approximation of a living standard in a country with its per capita GDP is quite problematic.

2.2.   The concept of Gross Domestic Product (GDP)

Standardized approach to measuring economic activity has been used since the Second World War. A System of National Accounts (SNA) has been set up with international efforts and the help of the United Nations Statistical Division. According to the United Nations Statistical Division (2010) the purpose of the System of National Accounts is to ensure a "comprehensive conceptual and accounting framework" for the analysis and evaluation of economic performance.

The beginnings of the SNA development go back to 1928, when the Committee of Statistical Experts decided that some guidance in the field of economic activity measurement would be useful. In 1939 the Committee included the topic into its programme. After a few years (due to the Second World War interruption), the activities and discussions resumed (Measurement of national income and the construction of national accounts, 1947) and in 1947 the report on the Measurement of national income and the construction of national accounts was published. The standardized approach to measuring economic activity was developed, which also ensured the much desired international comparability. The System of national accounts and supporting tables was finally published in 1953. It provides a thorough explanation of the methodology and terminology, and provide standardized tables for data presentation. The 1953 SNA was revised in 1960 and 1964 to include feedback from the user countries and to ensure consistency with the Balance of payments accounts (IMF) (http://unstats.un.org/unsd/nationalaccount/hsna.asp).

In 1968 a new SNA system was prepared by elaborating and extending the existing system (primarily by adding input-output accounts and balance sheets), focusing on constant prices estimations and trying to bring the SNA and Material Product System closer together, which was achieved by clarifying conceptual differences and by extending the definitions so as to improve comparability.

In 1993 a new system of national accounts was accepted, developed jointly by the United Nations, World Bank, OECD, EU, and the IMF. It provides the "most comprehensive macroeconomic standard, it also serves also as the main reference point for statistical standards of related statistics such as the balance of payments, financial and government finance statistics" (About the system of national accounts, 1993). The development of the 1993 SNA also took into consideration the new characteristics of the market economy and the increased global interactions. In 2008 the 1993 SNA was revised in order to account for the changes in economic environment, new development in methodological research and also to further adapt to the needs of its users (System of national accounts, 2008, p. xivii).

Gross domestic product is, according to SNA 2008 (p. 34), defined as " the sum of gross value added of all resident producer units plus that part (possibly the total) of taxes on products, less subsidies on products, that is not included in the valuation of output. Next, GDP

is also equal to the sum of the final uses of goods and services (all uses except intermediate consumption) measured at purchasers' prices, less the value of imports of goods and services. Finally, GDP is also equal to the sum of primary incomes distributed by resident producer units." As such, GDP leans towards accounting for the more "solid" measurement of economic activity, based on transactions.

Consequently, GDP is a measure of production, of economic activity, with the solid and easy to measure foundation. But as such, the concept encounters many problems when used as a measure of well-being in the economy and when dealing with sustainable development. Even if embraced as a sustainability measure, it can only be accepted as a partial indicator. To measure sustainability as a whole, a new concept must be introduced. Economic analysis of happiness provides a viable alternative.

2.3. The concept of happiness

The concept of happiness was introduced into economic by Richard Easterlin who discussed the factors contributing to happiness in 1974 with his paper "Does Economic Growth Improve the Human Lot? Some Empirical Evidence." Based on an examination of data around the world, Easterlin (1974) found out that there is no link between the level of economic development and overall happiness of state inhabitants; individual happiness appears to be the same across poor and rich countries.

This is called the **macro level of happiness research** - comparison of happiness and economic growth in each country. The most important finding of macro happiness research can be summarized as follows: if happiness and income are compared at any point in time, those with more income are, on average, happier than those with less. But if income goes up over the life cycle, happiness does not go up (Easterlin, 2004).

That way the so-called "Easterlin paradox" was formulated: income and happiness are not necessarily strictly positively correlated. Explanation of the paradox was that material well-being (level of wealth) is not considered in absolute terms (amount of goods owned) but rather in relative terms (what goods people want to have).

It took almost 20 years for this approach and idea to gain the followers (Easterlin paradox also has opponents who try to reassess it, for discussions see Stevenson and Wolfers, 2008). Significant interest about subjective well-being and happiness was raised in the late 1990s when economists (e.g. B. Frey, A. Stutzer, D.Kahneman, J.Gardner, A.J.Oswald, R.E.Lane, R. Layard, A. Clark and many others) began to pay attention to the various questions and issues raised by Easterlin's study and publish papers and present results of empirical analyses of happiness (see e.g. Coyne and Boettke, 2006). As a consequence, happiness became an issue of major economic interest; and economics of happiness or happynomics (happiness + economics) was born.

Happynomics is an approach to assessing welfare by combining the techniques typically used by economists with those more commonly used by psychologists (Graham, 2005). Moreover, it highlights the role of non-income factors that affect happiness which is more than just a function of increased spending power. The main focus of the economics of happiness is to

understand the interconnection between economic outcomes and the resulting happiness of economic actors (Coyne and Boettke, 2006).

Achieving individual and societal happiness is not easy, either from sociological, physiological, medical or economic perspective. Nevertheless, terms like happiness, (life) satisfaction, (economic/subjective) well-being, living conditions and others are usually used interchangeably in the literature. However, it would seem that happiness is more connected with a single person's situation: it can be understood as pleasure, satisfaction and well-doing. Happiness has the same meaning as subjective, personal or individual well-being. On the other hand, well-being indicates a broader term at the state level, material and economic nation wealth and wellfare, and refers to the prosperity of the country. Stiglitz et al. (2009) argue that well-being is a multidimensional phenomenon based on a set of key dimensions that should be considered simultaneously: material living standards (income, consumption and wealth), health, education, personal activities including work, political voice and governance, social connections and relationships, environment (present and future conditions), insecurity (of an economic as well as physical nature).

An attempt to reach a viable compromise can be found in the Deutsche Bank Research (Bergheim, 2006) that provides very good and easily understandable overview of relations among happiness, (individual) living conditions, economic well-being and GDP (see Figure 2 later in this text). Although it is difficult to quantify and to aggregate all these elements, their mere inclusion indicates that it might be worthwhile for those who determine the priorities of economic policy to evaluate and monitor them.

3. GDP AS A MEASURE OF SUSTAINABLE DEVELOPMENT: PROS AND CONS

Gross domestic product or GDP has often been criticized for being a poor welfare measure, although it is often used as a primary comparative indicator in cross-country comparisons. The SNA 2008 (pp.12-13) itself points to this fact and adds that there are several conventions that argue against using the GDP as a welfare measure. The primary considerations pointed to by the SNA (2008, pp.12-13) are:

1. **Qualifications to treating expenditure as a measure of welfare.** In a market economy, the prices are used to indicate the change in the consumption. However, the change in the volume of consumption does not necessarily indicate the change in welfare. Also, an increase in consumption of, for example, food by someone extremely poor and the same increase of food consumption by someone not poor do not have the same welfare impact. However, the SNA cannot make this distinction.

2. **Unpaid services and their relationship with welfare**. The services produced and consumed by households are not part of GDP, except for the imputed rents and any payments that are made to domestic staff. Also, labour services to non-profit organizations are not included. All these elements add to the welfare.

3. **The impact of external events on welfare.** The SNA 2008 provides an example of an extremely cold winter with influenza epidemic. The consumption of many goods would increase, leading to higher GDP. But in fact, the welfare might be deteriorated.

4. **The impact of externalities.** Some activities lead to a deterioration of welfare, but their impact is not captured in GDP. If a factory pollutes the environment and lowers the welfare, this will not be reflected in GDP, unless there is some severance payment made. Similarly, costs of noise reduction will lower GDP but increase welfare.

5. **Noneconomic impacts.** Welfare depends not only on monetary (economic) factors, but also on personal circumstances, family, health and many other elements. Of course, these do not figure in the GDP equation.

Besides these shortcomings several other criticisms were raised. Stiglitz et al. (2009) report on the measurement of economic performance and social welfare. They claim that "GDP mainly measures *market* production, though it has often been treated as if it were a measure of economic well-being" (Stiglitz et al., 2009, p. 21). They believe that GDP has established itself so well as a measure of economic activity because it is easy to measure activity through prices. Unfortunately, several problems exist with prices: (1) prices for some goods and services (e.g. government services, health care, child care) do not exist or they might differ from societal perception, (2) quality of products changes and it is often hard to capture that impact in prices, although it has huge impact on welfare, (3) there is also the problem of sale over the internet and in discount stores, where the same product might be available at a lower price, (4) relative prices often do not reflect the actual valuation of goods, since in some cases, consumers have very few or no alternatives.

The creators of the Genuine Progress Indicator (GPI) also mention several other problems with GDP (Genuine Progress Indicator, 2010):

1. GDP does not account for the income distribution, although it is very important (also in economic theory) for the welfare of individuals and the society;

2. GDP takes crime, divorce and even natural disasters as an addition to GDP, since they require a lot of expenditure (legal fees, damages to property, and other);

3. GDP does not account for the services in the household and volunteer work, since the unpaid services are not accounted for;

4. Higher education is not fully considered, since GDP fails to acknowledge the benefits of a more educated population at large;

5. GDP does not take into consideration resource depletion, although depleting forests, resources etc. will impact the life of both current and future generations;

6. GDP does not take into account the impact of pollution and long term environmental damages; pollution might even be accounted for in a positive way (cost of cleaning after the oil spill in the Gulf of Mexico add to GDP, for example);

7. GDP o takes defensive expenditures (medical costs, cost of repair, commuting costs, …) as an addition to GDP, while actually these expenses try to compensate for the loss of welfare;

8. GDP does not account for the life-span of consumption durables. It accounts for purchasing them, but does not take into consideration the loss of welfare when they start to wear out;

9. It is also important to consider the dependence on foreign assets in a country (loans, FDI), since these allow 'living above one's own means', which GDP does not;

10. Finally, life rhythm has significantly changed. GDP does not account for the deterioration of welfare due to less leisure time.

Similar arguments are also listed in the European Union's "Beyond the GDP" initiative. The initiative in its report (GDP and beyond, 2009, p. 10) states that GDP is "a powerful tool and widely accepted indicator for measuring short to medium term fluctuations in economic activity". Despite its many shortcomings, it is nonetheless still the best measure of how the economy is performing. Unfortunately, GDP is not good for measuring long term economic and social progress, and it is also not adjusted for the problems of environmental change, resource efficiency and social inclusion. Therefore, the report suggests that GDP should be complemented with other measures to incorporate the information on variables that crucially define peoples' welfare.

The SNA already partially tackled the listed problems. In 2003 a System of integrated environmental and economic accounting was prepared as a joint programme by the UN, IMF, World Bank, EU and OECD. The report (Towards the revised System of integrated environmental and economic accounting, 2003, p. 1 – hereafter SEEA, 2003) recognizes that in the past, the awareness of the general population about the environmental problems has been growing: the fact that human economic activity affects the quality of life of individuals since it affects the quality of the environment and the services the environment can provide to the population: the basic roles in life support (air, water, land), the provision of materials, energy to produce services, absorption of human waste etc. is now recognised.

The SEEA 2003 attempts to incorporate many aspects of criticism into the creation of an environmentally adjusted GDP. For long, the services of the nature were in many aspects considered as 'free'. The SEEA 2003 is an important step forward. First of all, the SEEA 2003 starts with a set of definitions, classifications in order to provide a solid start to the adjusted calculation and the standardized inclusion of nature's services to the national accounts.

The SEEA (Towards the revised System of integrated environmental and economic accounting, 2003, p. 27) are the satellite accounts to the national accounts system and they comprise of four accounts. In the first category of accounts, the SEEA considers physical data and relates flows of materials and energy and incorporates them into the input-output framework of SNA. It also considers the monetary valuation problems, which is especially important. The second part considers the existing elements of SNA related to environment and examines, how it would be possible to make them more specific (environmental protection, resource management, environmental taxes, permits). The third part accounts for environmental assets, their measurement and valuation (for example, and discusses how to measure the value of timber stock). Last, the question of how to integrate the two approaches is considered. The SEEA suggests three types of adjustment: for depletion, for defensive

expenditures, and for degradation. But there is no summarized suggestion of adjusted accounts, or a new formula for calculating adjusted GDP with all of the mentioned improvements. Nonetheless, the report offers enough support to countries so that they could calculate an adjusted GDP.

Currently, the 2003 SEEA are being revised and improved to ensure their broader applicability. According to the UN Statistical Division (Towards the revised SEEA, 2010) **"the revised SEEA will be the statistical standard for environmental-economic accounting, it will provide an internationally agreed set of recommendations expressed in terms of concepts, definitions, classifications, accounting rules and standard tables in order to obtain international comparability of environmental-economic accounts and related statistics."**

The UN Committee of Experts on Environmental-Economic Accounting (2010) has three tasks: (1) to further promote environmental-economic accounting and related statistics, (2) to develop the SEEA to an international statistical standard and to (3) stimulate the implementation of the SEEA in countries. In order for these goals to be achieved, further methodological development and harmonization will be required.

4. HAPPINESS AS AN ALTERNATIVE TO GDP AND AS A MEASURE OF SUSTAINABLE DEVELOPMENT

GDP limitations in measuring well-being necessitated the emergence of new methods and measures which are known as alternative measures of development and include numerous non-economic factors. Since the early 1990s a lot of alternative indicators have been developed in order to achieve goals of sustainable development. Proof of alternative measures growth is given in A Survey of Composite Indices Measuring Country Performance made by the United Nation Development Programme (UNDP). The survey identifies country indices that rank performance in a diverse set of issues including competitiveness, governance, social aspects, human rights, the environment, security and globalization, amongst others. Although this study is not dealing only with indices trying to complement GDP, it represents extremely valuable contribution in a sense of calculating and briefly explaining a number of indices in the world (see Figure 1). The quantity of indices has been accelerating since 1990 (the study update 2008 examines 178 indices in total) with a large number of institutions elaborating on such indices (Bandura, 2008).

Figure 1: Growth in the number of indices measuring country performance
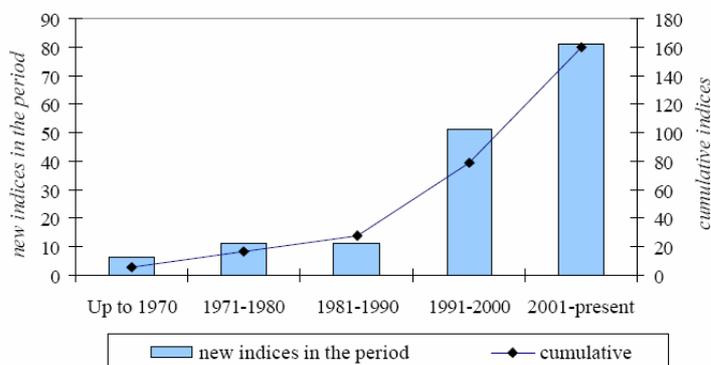
Source: Bandura, UNDP, 2006.

A number of alternative and complementary indicators that have been developed within a last decades to compensate for the limitations of GDP seems endless. Here we list some of the most used and most popular ones: The Measure of Economic Welfare (MEW), The Economic Aspects of Welfare (EAW), The Index of Social Progress (ISP), The Happiness Index, The Index of Sustainable Economic Welfare (ISEW), The Human Development Index (HDI), The Genuine Progress Indicator (GPI), The Millennium Development Goals (MDGs), The Ecological Footprint (EF), The Quality of Life Index (QoLI), Total Wealth and Genuine Savings Indicator (GSI), The Happy Planet Index (HPI), and the Gross National Happiness (GNH).

In 1972 MEW was developed by Nordhaus and Tobin who made some imputations for the value of leisure and the depreciation of natural capital. Zoltas proposed EAW in 1981. Three years later ISP was made and updated in 1997 for the Weighted Index of Social Progress (WISP). The Happiness Index developed by Veenhoven provides rankings of Average Happiness, Happy Life Years, Equality of Happiness and Inequality Adjusted Happiness and is published in World Database of Happiness. Economic indicator ISEW was proposed by Daly and Cobb in 1989 and updated in 1994. One of the most widely known measures (used to judge the performance of economies) is HDI developed in 1990 and published every year by the United Nations (UN). The GPI was created in 1995 by Redefining Progress as an alternative to the GDP and it enables policymakers at the national, state, regional, or local level to measure how well their citizens are doing both economically and socially (Talberth et al., 2007). Eight MDGs were established in 2000 by UN and promoted in the UN Millennium Declaration (UNDP reports on MDGs can be found on http://www.undp.org/mdg/reports.shtml, see as well Jayasuriya and Wodon, 2003). The World Wildlife Fund and the Global Footprint Network made EF in 2000 to measure the consumption of renewable natural resources by a human population (see e.g. Wu and Liang, 2009). The Economist Intelligence Unit developed QoLI that links the results of subjective life-satisfaction surveys to the objective determinants of quality of life. To assess national sustainability, the World Bank devised GSI in 2005 (see e.g. Ferreira and Vincent, 2005.). The New Economics Foundation developed in 2006 the HPI that combines environmental impact with human well-being to measure the environmental efficiency with which people live long and happy lives (see e.g. Campus and Porcu, 2010). The Centre for Bhutanese Studies has introduced the concept of GNH in 2008 to replace GDP as a measure of national progress (see e.g. Di Tellaa and MacCulloch, 2008, Bates, 2009).

Differences between alternative indices relate mostly to the major interest of their constituting elements (like happiness, ecological concerns, welfare, etc.). Alternatives that challenge traditional economic indicators can be grouped in different ways, for example: by the type of organization that constructed them, by the area they cover, by the groups of users, etc.

Dill (2009) differentiates among:

1. indices which are primarily economic indicators;
2. indices measuring education, happiness, society development, rule of law and human rights;
3. indices adding and covering ecological aspects.

Schepelmann et al. (2010) also propose a three-group typology:

1. indicators "adjusting" GDP (including environmental and social factors expressed in monetary terms, e.g. MEW, ISEW, GPI);
2. indicators "replacing" GDP (these try to assess well-being more directly, for example by assessing average satisfaction, e.g. HDI, EF, HPI);
3. indicators "supplementing" GDP (complementing GDP with additional environmental and/or social information, e.g. MDGs).

The well-known concept of GDP is the starting point of Figure 2. Capital consumption, income going to foreigners, and production of items that cause damage (e.g. pollution) are subtracted. What is then left of GDP is the starting point for measurement of economic well-being which is a broader concept, but still restricted to material aspects. It is influenced by parts of GDP, by non-market activity, the value of leisure and wealth. Unemployment and income inequality tend to reduce economic well-being and have negative impact. Here it is important to note that well-being also has some non-economic dimensions and aspects, the so-called (individual) living conditions: good health and education, life expectancy, clean environment and safe streets all contribute to individuals' overall well-being.

Figure 2: The many elements of happiness and well-being
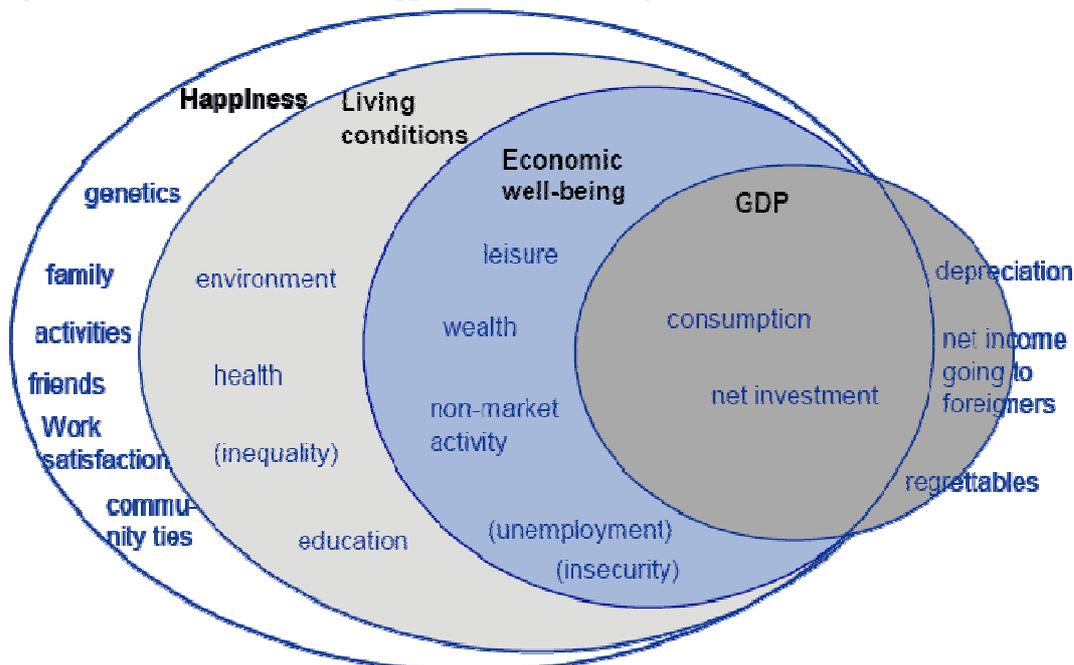
Note: Brackets indicate negative impact.

Source: Bergheim, Deutsche Bank Research, 2006.

The happiness concept is presented as the biggest cycle capturing all previous concepts in addition to family and friends, activities, genetics, work satisfaction and more.

This is in line with Frey in Stutzer (2002) who identified three dimensions of happiness: demographic and personal characteristics, economic factors as well as social and institutional factors. That way the concept of happiness or subjective well-being really encompasses all aspects of human life (Conceicao and Bandura, 2008). This view of happiness is connected with so called **microeconomic approach to happiness research** that usually implies subjective measures: asking people to report on their happiness and life satisfaction (Conceicao and Bandura, 2008). The importance of such research is reflected in the discovery of happiness determinants which should be important inputs for policymakers in a number of areas, such as public finance (government expenditure and taxation), welfare policy and labor law (Coyne and Boettke, 2006). "Another reason why happiness is of interest to economists is the effect of institutional conditions, such as the quality of governance and the size of social capital, on individual well-being" (Frey and Stutzer, 2002, p. 3). Consequently, analysis of happiness, inter alia, represents an alternative for measurement of economic activity and can be used as a good and relevant indicator. Having a measure of national success in terms of some appropriate measure of happiness is very important (Ng, 2008).

All these issue taken into account, the next big question is **how to approach the evaluation of happiness?** A questionnaire survey of the general population seems to be the most appropriate way.

The aim of the survey is to discover the most important happiness determinants as well as their impact on subjective well-being, i.e. to investigate the relative importance of microeconomic variables. People are asked to assess general importance of happiness factors as well as their satisfaction with health, job, freedom, friendship, family, religion, tradition, nation, trust, love, leisure time, colleagues, and so on. Complementing these data is a large section with socio-demographic variables to enable comparative analysis across gender, age groups, income groups, different levels of education, different groups of occupations, etc.

The empirical model is based on contributions by Poudthavee (2007) and many others. The starting point of the model is the subjective well-being of individuals (SWB), which is influenced by a number of factors: economic, personal and demographic, and, finally, political (i.e. wider social circumstances). The subjective well-being function can be defined as:

$$W_i = W_i(E_i, P_i, S_i)$$

where W denotes well-being of individual i, E the economic circumstances of individual i, P personal and demographic situation and S the social circumstances in which the individual lives.

A typical micro-econometric happiness equation has the standard form:

$$W_{it} = \alpha + \beta X_i + \varepsilon_{it},$$

where W is the reported well-being of individual i in time t, and X is a vector of socio-demographic and socio-economic characteristics hypothesized to affect well-being. The error term captures unobserved characteristics and measurement errors.

To evaluate the importance of different variables for happiness, micro-econometric methods should be used which present researchers with several important challenges. We only list a few:

1. The use of ordinal measurement scales with all their well-documented weaknesses (Ograjenšek, 2007).

2. The inherent subjectivity of survey methodology (measurement instrument bias, interviewer bias, respondent bias, etc.).

3. The role of unobserved elements that co-determine the level of happiness, for example personal characteristics: some people are simply born happier.

4. The issue of endogeneity and the direction of causality which are both important when dealing with longitudinal data (demonstrated in questions such as "does marriage make people happy or is it predominantly happier people who get married").

These and other methodological as well as analytical challenges have to be considered and systematically dealt with. Additionally, within the context of happiness, the values required to support sustainable development have to be determined both at the individual and societal level.

5. THE FUTURE OF RESEARCH ON HAPPINESS

Happiness research generates many important policy implications; above all that economic growth should not be the primary goal of economic policy but its sustainability - capacity of an economy to maintain the (subjective) well-being of its population over time.

Politicians and statesmen often emphasize the importance of GDP growth and consider it to be the major goal of their country and population (this follows the line of thought "if GDP is high, everything will be good"). However, empirical research shows that while the USA have the highest GDP, they do not have the happiest population. On the other hand there is Denmark, which has been boasting the happiest nation worldwide for several years in a row. Denmark's success is rooted in the so-called Nordic Social Model which is characterized by high social benefits, high civil participation, social transfers, "flexicurity model", a dominant role played by the non-profit organizations, civilian society, voluntary sector, new government role etc. So there is obviously something hidden behind GDP that needs to receive attention of national governments. This is of special importance if long-term sustainability becomes (as it should) the primary societal goal.

In this case happiness research can provide what GDP cannot: knowledge about what is important to people in order to be happy and satisfied with their lives: better social conditions, greater trust and confidence in the administrative apparatus, civil involvement, basic human rights, better health system, gender equality, etc. These are all issues that need to be taken into consideration in the process of political decision-making.

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