

**National approaches to measure
wealth and well-being in the context
of sustainable development**

ESDN Case Study No. 4

Nisida Gjoksi

ESDN Office Team

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Table of Contents

INTRODUCTION.....	3
AUSTRIA: MEASURING WELFARE AND WELL-BEING WITH SD INDICATORS	4
BELGIUM: MEASUREMENT ACTIVITIES AT THE NATIONAL AND SUB-NATIONAL LEVEL.....	7
FINLAND: FINDICATORS AND PROJECT ON “NEW DIMENSIONS FOR THE MEASUREMENT OF WELL-BEING”	9
FRANCE: FOLLOW-UP ACTIVITIES ON THE RECOMMENDATIONS OF THE STIGLITZ COMMISSION.....	11
GERMANY: NATIONAL WELFARE INDEX	13
CONCLUSION.....	16
REFERENCES	17

Introduction

The debate on the Gross Domestic Product (GDP) has been ongoing since some time: academic circles have questioned the appropriateness of GDP in measuring societal progress beyond economic growth already in the 1980s and 1990s. This concern has lately stepped from academic circles into the spot light of policy-making and public debates and seems to gain momentum through various initiatives at the national and international level. Many countries have been very active of further developing and expanding their sustainable development indicators (SDIs) with well-being indicators. Against this background, this ESDN Case Study aims to take stock of the various national activities on the measurement of societal progress which raise awareness on critical issues of the GDP indicator as a measure of well-being and societal progress.

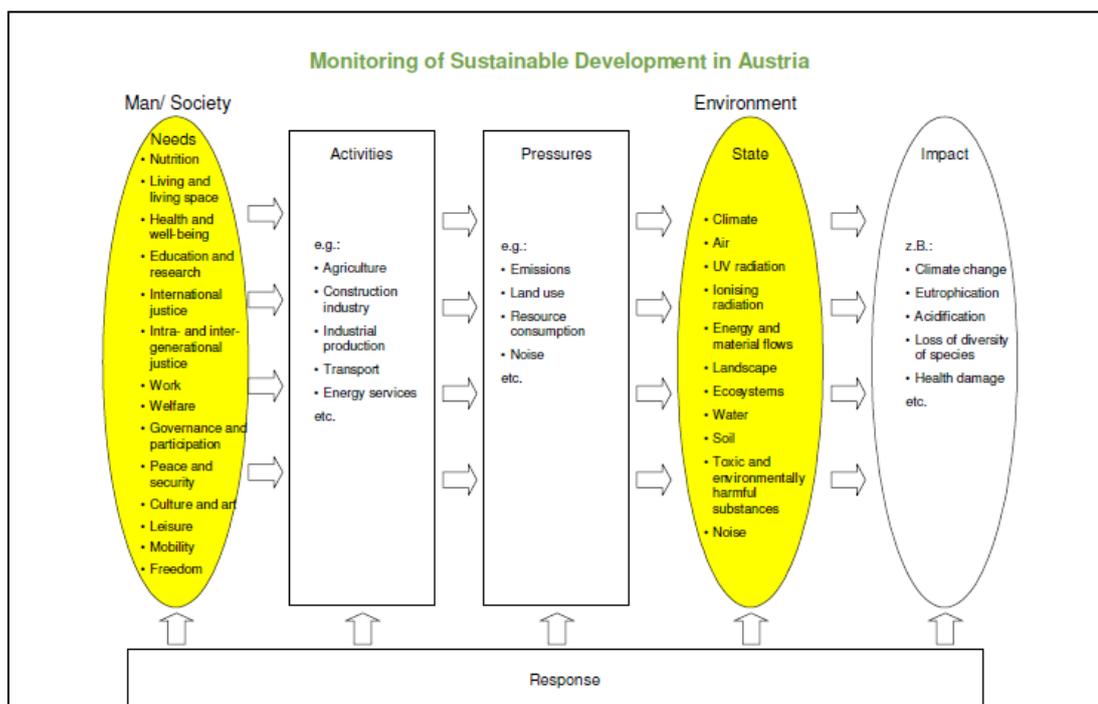
This following case study is divided in six chapters. The first five chapters outline the initiatives undertaken in five European countries, namely Austria, Belgium, Germany, Finland and France. The focus will be less on methodological and measurement approach towards well-being indicators, but more emphasis of on exploring. In the last concluding chapter, general issues as well as similarities and difference among the national initiative are described.

The ESDN Case Study No. 4 is drafted as a preparatory document for the 6th ESDN Workshop in Berlin on 2-3 December 2010. It serves as a first stocktaking of several national initiatives that aim to go 'beyond GDP'. The initiatives will be presented at the ESDN Workshop and discussed with the workshop participants.

Austria: Measuring welfare and well-being with SD indicators

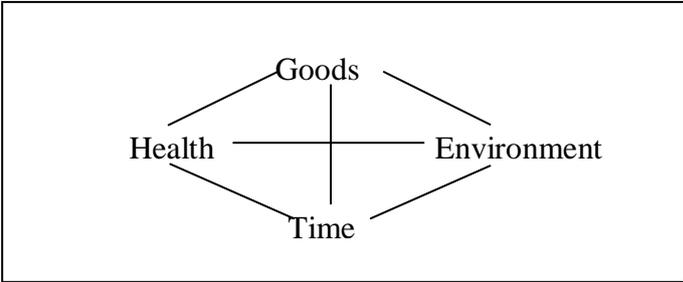
The first attempt of measuring wealth in Austria was undertaken in 2003 through the delivery of a study on monitoring the national sustainable development strategy (NSDS) in Austria. In this context, the first indicator set for monitoring the NSDS has been developed. Since 2006, a systemic approach based on the 2-sphere-model for monitoring sustainable development was recommended (see below). In the first phase, the themes were selected and then, through a participatory process, various SD indicators were selected per SD themes. The results of this process were 26 Headline-Indicators (please find the complete list [here](#)) and 56 differentiated indicators as well as the development of the 2-sphere model, presented in the report “Monitoring Sustainable Development in Austria” (Ministry of Environment, 2006). In 2007 and 2009, the indicator set was used for monitoring sustainable development in Austria.

Welfare, health and well-being are explicitly specified as domains in the 2-sphere model in the area “Man/Society” for measuring SD (see Graph 1 below). As mentioned above, the model was identified as a base model for monitoring SD and adapted to the requirements of Austria. It divides the monitoring area into two spheres: the Man/Society sphere and the Environment sphere: “(...) the 2-sphere model guarantees more systematic and comprehensive socioeconomic relevance [compared to the] trichotomy of the economic, social and ecological” (Ministry of Environment, 2006, 9). The target of merging economic and social aspects in the Man/Society sphere was to develop an integrated view of the socioeconomic system in order to point out the relations between economic and social phenomena and their impact on the environment. This model serves the purpose of “stocktaking of trends in all the theme areas of both spheres and recording correlations of effects in the Man/Society –Environment system” (Ministry of Environment, 2006, 12).



Graph 1: A two-sphere model for monitoring sustainable development in Austria (Ministry of Environment, 2006)

In this model, welfare is not only understood as conventional economic welfare, but also linked to other non-monetary aspects of human development (health, environment and time) ([click here](#)). Graphically, the welfare determining variables could be outlined as below.



Graph 2: Welfare determining variables (own analysis)

According to the indicators list in the monitoring report of 2006, welfare is measured through: (1) GDP per capita; (2) “Equivalised Household Income”; (3) “At-persistent-risk-of-poverty rate”; and (4) “Wealth in time”¹ (Ministry of Environment, 2006, 43-44). Welfare does not stand isolated in this systemic approach, but demonstrates relevance and interconnectedness with other indicators. Income distribution (“inequality in income distribution” and “gender specific income disparity”) was recognized to be a relevant theme for welfare. Natural capital is measured with indicators such as “energy consumption to GDP” and “material usage”. Other indicators of the Man-Society sphere relate to education and research, such as “youth education attainment 20-24” and “public expenditure on education R&D as % of GDP” are also linked to measurement of welfare (Ministry of Environment, 2006, 35-36).

According to the monitoring report, the challenges in developing a comprehensive indicator system are not only to define objectives for certain individual themes (“Wealth in time” in the theme area of “Welfare”) but also to address the relevant aspects in the formulation of objectives. The varying degrees to which the theme areas are covered by objectives affect the search of indicators. As pointed out in the monitoring report, a lack of indicators for many objectives of SD is observed in Austria. The process of improving the indicators is an “open-ended” one and requires a living social dialogue for continually addressing new themes in a participatory process (Ministry of Environment, 2006, 82).

The selection of indicators is not only based on “scientific-technically based measurement values” but also subjective data (self-reported experiences especially on themes such as time and leisure) (Ministry of Environment, 2006, 82). The distribution of objective and subjective data is, however, unequal in the themes, and efforts are undertaken to include more subjective measures in specific areas that can be measured only through “surveys whose contents are based on judgments of the appearance of people” (Ministry of Environment, 2006, 82).

¹ Wealth in time is a concept that is hard to grasp and that can only be rated subjectively. The data for the indicator might conceivably be based on analyses of questions connected with a survey on time expenditure or leisure activities. For example, it might be asked “Are you often under stress? Would you like to have more time for ...?”

The Ministry of the Environment in Austria has also conducted various projects to further develop and improve subjective indicators. The most recent one has been conducted in 2010 and analyzed the applicability of SDI in measuring not only sustainable development but also well-being in Austria. The SDIs proved to be useful for this and were further updated and complemented in the following fields: quality-of-life, satisfaction with living standards, satisfaction with work, criminality, subjective state of health, noise, work and family balance. A crucial contribution of this study is the analysis of the impact of the indicator “wealth in time” for well-being (Ministry of Environment, 2010). The latter analysis is one of the first attempts in Europe of measuring impact of time in well-being (e.g. impact of time pressure, stress, work-life balance).

Belgium: Measurement activities at the national and sub-national level

Belgium² has been very active in developing and using indicators for sustainable development. Following strong regional competences, also the Flemish, Walloon and Brussels regions are undertaking various activities at the Federal level.

On the federal level, the initiatives in development indicators for societal progress and well-being have been undertaken in various working groups from the Task Force Sustainable Development of the Federal Planning Bureau (FPB) and the Belgian Federal science policy office. The Task Force SD of the FPB has the main task to develop models and indicators to monitor SD in Belgium; societal progress is one of the strategic objectives. Therefore, it has also contributed to measuring the progress of society in the context of SD with its **fifth federal report on SD published in October 2009**. This report is published on a biannual basis and presents a table of 88 sustainable development indicators (SDI) illustrating to what extent living conditions in Belgium are heading towards strategic objectives of sustainable development (SOSD). The report also examines the choice of strategic objectives in the context of long-term visions on the evolution of society, the environment, the economy and government policies. In addition, by showing the diversity within and the interactions between the SDIs, the report intends to promote policy instruments which can accelerate achieving the SOSDs (please also see the [website of FPB](#)).

Based on these indicators, the report recognises the complexity of sustainable development and the difficult task to reduce it to one single indicator. Therefore, the fifth federal report recommends introducing synthetic indicators, additionally to the 88 indicators, following composite and aggregated indicators:

- Indicators based on satellite account systems: Environmental satellite accounts (ESA) should complement the conventional statistical accounts with environmental and information (FPB, 2009, 44-46). ESA can reflect the coupling or decoupling between GDP growth and environmental degradation;
- The Human Development Index considers the economic dimension (lately not GDP but Gross national income) and is used as a better measure of social progress, than the GDP;
- Ecological footprint (EF) and bio-capacity (BC) indicators should provide information on environmental flows and stocks, which GDP lacks completely. One of the strengths of the EF and BC is that several environmental issues are expressed in a single common unit, the global hectare (gha). The EF and BC do not, however, encompass all environmental issues and they cannot be interconnected with GDP.
- Indicators related to government spending on SD; Indicators on the implementation of SD plans.

² The information provided in this section is mainly based on the background information that was provided to us in November 2010 by Yanne Gossens, Policy Advisor International Environmental Policies, Flemish Government, Environment, Nature and Energy Department (International Environmental Policy Division).

None of these indicators, however, reflect a complete knowledge of human, natural and economic systems but they can contribute to measuring and debating social and environmental goals beyond economic growth in order to achieve sustainable change in society. The 5th federal report on SD argues that both synthetic indicators and a structured table of detailed indicators can be combined to measure better societal progress. Other efforts of the Task Force SD have been in studying the interactions between the environment and lifestyles³.

Furthermore, the Belgian Federal Science Policy Office is looking into theoretically sound and democratically legitimate **indicators of well-being in Belgium (WellBeBe)** within its Science for a Sustainable Development Programme (SSD). The aim is to construct an alternative indicator to GDP, based on a dynamical conception of well-being, which considers the individual in his whole life-cycle and which includes the notion of the social structure through the concept of “life chances”. Within this project, the team identifies SD as concept that guarantees that a minimum level of mutable characteristics (educations, health) of the individuals can be reached by every individual, whatever his/her immutable characteristics are (gender, place of birth, etc.) The work of this team is valued by Eurostat as being very relevant for further well-being research at the European level (Eurostat, 2010, 3).

³ In 2010 it has published two working papers on these issues, The first one focuses on the pressure of human activities on the environment, by analyzing the ecological footprint and bio-capacity in their potential within SD policy making (Zuhinen, 2010). The [second paper](#) focuses on the social-economic characteristics and the environmental pressures caused by household consumption.

Finland: Findicators and project on “new dimensions for the measurement of well-being”

Finland has actively participated in international cooperation aiming at the development of well-being indicators, for example, from the viewpoint of sustainable development. Moreover, the Prime Minister Office has also engaged in various projects for complementing GDP with other environmental and social indicators. These initiatives will be outlined shortly in this sub-section.

Finland has been very active in further developing SD indicators as a core element of their national SD strategy (NSDS). Through such indicators, the revised NSDS of 2006, [“Towards sustainable choices: A nationally and globally sustainable Finland”](#), has been continuously enhanced and the contents of target areas have become more concrete (Gjoksi, 2010). In context of the NSDS, 34 key indicators were approved in 2006, to assess whether the NSDS objectives could be achieved. Based on the latest NSDS assessment, finished in 2009, the indicator work for SD in Finland has received the best score (Gjoksi, 2010). The next revision of the target areas and the content of the NSDS are planned for the year 2011. The vision of the strategy is to “ensure well-being within the limits of the carrying capacity of nature globally and nationally” (see [leaflet](#)). In this vision, SD indicators are less facilitators for operative decision-making, but more measures that describe the state of sustainable development at the macro-level and by target area (Ministry of Environment,, 2009).

The model used for various indicators, ENVIMAT (environmental impacts of material flows caused by the Finnish economy), reflects the relationship between economic and environmental impacts. The objective of the [ENVIMAT project](#) (2006-2008) has been to create a tool with which the relationships between environmental impacts and economic effects, due to the use of natural resources in Finland, can be assessed. This project has concentrated on environmental impacts, even though the ENVIMAT model also enables the assessment of effects on added-value and employment in various sectors, and the products and services produced therein (Finish Ministry of the Environment, 2009: 8). This model primarily facilitates environmental policy planning. The Finnish National Commission on SD and the national inter-ministerial network on indicators are also further working on the development and enhancement of current indicators for the new strategy concept. While the ENVIMAT project provides useful information on environmental and economic impacts, the used SD indicators are least suitable for describing the social aspects of sustainable development. The indicators used are based on objective conditions and subjective experiences (e.g. indicator on service satisfaction of citizens). Well-being is then also linked to both crucial indicators of human development as household expenditure on services, life expectancy at birth, poverty, air quality and so on.

Not only the recent SDS assessment results confirm the need of indicators for a better reflection on social progress and well-being, but also the Prime Minister Office has initiated projects on complementing GDP with other indicators.

The first project, entitled **Findicator**, concentrates on providing up-to-date data on 100 indicators for social progress. In October 2009, the Prime Minister’s Office and Statistics Finland opened a web-based [Findicator](#) website that provided up-to-date statistics on

various sectors of society. The purpose of Findicator is to provide answers for the worldwide discussion on the need to establish well-being indicators which are more comprehensive than GDP. The Findicators are grouped thematically and by policy issue and are related to the government program. Each indicator provides up-to date information via tables and graphs. The list of indicators is mostly based on objective conditions and includes less subjective indicators.

The most recent project, ["New dimensions for the measurement of well-being"](#), examines the possibilities for formulating more comprehensive well-being metrics which will include not only economic key figures but, to a greater extent, indicators reflecting people's personal well-being and the state of the environment. In addition to new indicators, the project aims to put forward proposals for ways to genuinely integrate more comprehensive perspectives on well-being into public discussion and political decision-making. The term of the project will be from 1 October 2010 to 31 May 2011. The policy analysis unit at the Prime Minister's Office will be responsible for the project.

France: Follow-up activities on the recommendations of the Stiglitz Commission

The Stiglitz Commission report provided 12 recommendations on how to measure the economic performance in a complex economy by better reflecting the structural changes characterizing the evolution of the economies (Stiglitz et al., 2009). The recommendations were bundled around three topics:

Critical issues of GDP

Recommendation 1: When evaluating material well-being, look at income and consumption rather than production

Recommendation 2: Emphasise the household perspective

Recommendation 3: Consider income and consumption jointly with wealth

Recommendation 4: Give more prominence to the distribution of income, consumption wealth

Recommendation 5: Broaden income measures to non-market activities

Quality-of-life

Recommendation 6: Quality of life depends on people's objective conditions and capabilities. Steps should be taken to improve measures of people's health, education, personal activities and environmental conditions. In particular, substantial effort should be devoted to developing and implementing robust, reliable measures of social connections, political voice, and insecurity that can be shown to predict life satisfaction.

Recommendation 7: Quality-of-life indicators in all the dimensions covered should assess inequalities in a comprehensive way

Recommendation 8: Surveys should be designed to assess the links between various quality of- Life domains for each person, and this information should be used when designing policies in various fields

Recommendation 9: Statistical offices should provide the information needed to aggregate across quality-of-life dimensions, allowing the construction of different indexes.

Recommendation 10: Measures of both objective and subjective well-being provide key information about people's quality of life. Statistical offices should incorporate questions to capture people's life evaluations, hedonic experiences and priorities in their own survey.

Sustainable development and environment

Recommendation 11: Sustainability assessment requires a well-identified dashboard of indicators. The distinctive feature of the components of this dashboard should be that they are interpretable as variations of some underlying "stocks". A monetary index of sustainability has its place in such a dashboard but, under the current state of the art, it should remain essentially focused on economic aspects of sustainability.

Recommendation 12: The environmental aspects of sustainability deserve a separate follow up based on a well-chosen set of physical indicators. In particular there is a need for a clear indicator of our proximity to dangerous levels of environmental damage (such as associated with climate change or the depletion of fishing stocks.)

At the national level, the French President, Nicolas Sarkozy, has already called for an immediate **implementation of the recommendations of the Stiglitz Commission**. One year after the publication of the report, the French National Statistical Institute (INSEE) and the French General Commission on SD have developed specific efforts in implementing the

recommendations based on critical issues of GDP, quality-of-life and especially on the third part of the Stiglitz Commission report: measuring sustainable development and environment.

The first parts of the report's recommendations concern the emphasis of household perspective in the material living standards. INSEE has already integrated the inequalities of household income and consumption in national accounts by taking into consideration the social transfers of governments to households. Based on the integration of the household consumption in the national accounts, the CO₂ emissions resulting from the consumption could be better captured. The next steps based on the first five recommendations will be to further develop the household procurement per category as well the decomposition of wealth in households along five categories (Commissariat Général au Développement Durable, 2010).

Concerning the measurement of the subjective and objective condition for well-being, publications on the social perception of the environment, on the environmental risk perception, and on the objective conditions of population and buildings exposed to natural and environmental risks are already published. In the future, not only further subjective experiences but also the objective conditions of quality-of-life will be better measured.

Indeed, France has also further developed 15 key-indicators for SD, which are also associated with the new national sustainable development strategy (NSDS), "Towards a fair and green economy" for the time-period 2009-2013" (Gjoksi et al. 2010). These environmental SDIs use the "capital or stock approach" described in the Stiglitz Commission report, where changes in capital stocks determine the well-being and inform on increasing or decreasing levels of these stocks, which also provide information if the increase of the well-being today depletes the necessary stock for maintaining the level of well-being for future generations. Various indicators of the NSDS can be interpreted as variations of stocks (Recommendation 11); the material consumption per habitant, the carbon footprint of the final consumption, the evolution of the population of bird communities, etc. (Commissariat Général au Développement durable, 2010).

Besides the measurement of the economic part of sustainability which refers to whether countries are over consuming their economic wealth or not, the Stiglitz Commission recommended the development of environmental sustainability indicators. These should not be measured in monetary terms but in physical units (Recommendation 12). An attempt towards this direction in France has been the development of following indicators: (1) the carbon foot print for the final demand, (2) the collection of biodiversity footprint and ecological foot print (3) as well as material consumption data including imports. Additionally, indicators on material productivity (GDP/material consumption) might offer useful information on the trend of decoupling economic growth from environmental impact.

In 2010 and 2011, further steps are planned from INSEE and the General Commission for SD for measuring SD and welfare, including: (a) to develop the water footprint and the carbon footprint of final demand, (2) to better measure territorial indicators, and (3) to estimate the economic costs and benefits of biodiversity damage or protection.

Germany: National Welfare Index

An intensive discussion is taking place in Germany about the adequacy of GDP as a parameter of social welfare. The most recent initiative in this context is the development of a new indicator intended to be a complementary source of information to GDP, entitled “**National Welfare Index**” (NWI) (Diefenbacher and Ziehschank 2008a). The research project, was conducted by the FEST-Protestant Institute for inter-disciplinary research and FFU (Research centre for Environmental Policy), financed with the support of the German Federal Environmental Agency.

Welfare is understood not only as the welfare created in markets, but also wealth through non-market activities, such as education, health, prevention of criminality costs etc., thus considering societal welfare as the whole. The research on the NWI indicator is more strongly connected to the ecological economics framework and less to the well-being discussions on happiness or life satisfaction. However, as NWI ascribes a big role to the indicators on the pursuit of NSDSs, its new impulse “could lead to a better measurement of social progress but also stronger emphasis of qualitative aspects” (Diefenbacher and Ziehschank, 2008a, 5). As SD is a very complex concept, the measurement of such a complex concept is even more difficult than the welfare measurement, as it includes not only the *intra*-generational aspects of welfare but also the *inter*-generational (temporal) aspects of welfare. The temporal aspects of SD – maintaining the same level of current wealth or welfare for future generations (temporal context) – are not included in the welfare measurement of today (NWI). However, the study on NWI does not strictly separate the two concepts (sustainable development and welfare) from one another, and recommends integrating the NWI in the national concept of sustainable development (Diefenbacher and Ziehschank 2008).

The NWI is composed of 21 variables, taking account for welfare services neglected up-to date by GDP, such as non market services (e.g. voluntary work and domestic work), on the one hand, and environmental damage and the cost of compensation for environmental damages, on the other hand. These partial variables (see Table 1 below), are conceptually based on the “Index for Sustainable Economic Welfare”⁴ and on the approach of the “Genuine Progress Indicator”(GPI). These indicators adjust GDP by a series of monetized environmental and social factors⁵. The NWI would offer a monetized indicator to the GDP, by adjusting it with 9 ecological variables (variables 11-19), which include environmental aspects, six indicators of social factors and two economic ones (variables 20, 21).

⁴ ISEW = personal consumption + public non-defensive expenditures - private defensive expenditures + capital formation + services from domestic labor - costs of environmental degradation - depreciation of natural capital.

⁵ For more information on the strengths and weaknesses of these two indicators, please see the study prepared from the EU Parliament` Policy Department, Economic and Scientific Policy (2007): Alternative Progress Indicators to GDP as a means towards sustainable development.

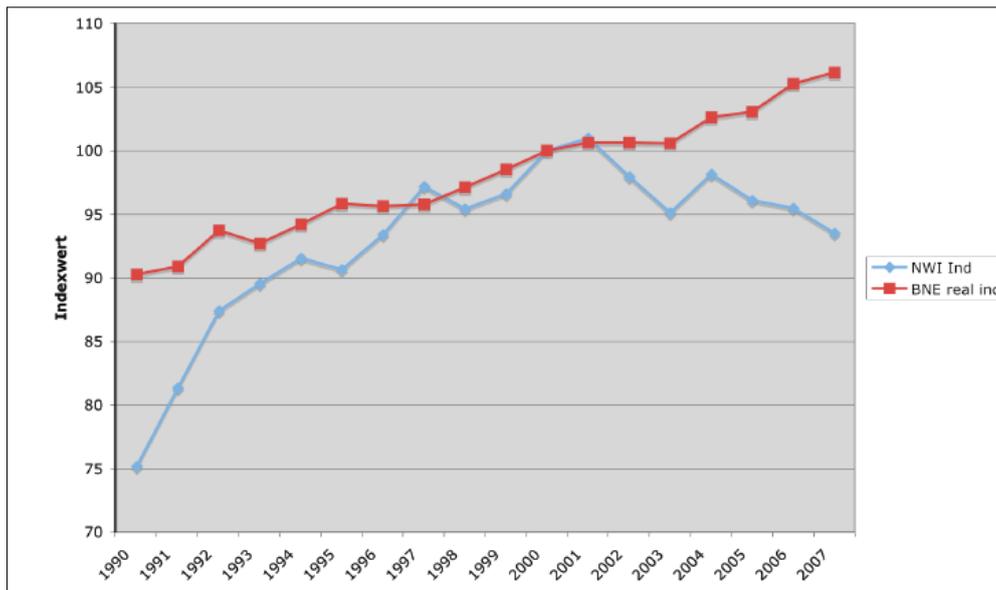
	Variables	Impact on the index	ISEW	GPI
1	Index of income distribution		X	X
2	Weighted consumer spending	+	X	X
3	Value of domestic work	+	X	X
4	Value of voluntary work	+		
5	Public spending on Health and Education	+	X	X
6	Consumer durables – cost / benefit	+ / --	X	X
7	Commuting between home and work	--	X	X
8	Cost of traffic accidents	--	X	X
9	Cost of crime	--		
10	Cost of alcohol-related diseases	--		
11	Social cost of compensation for environmental damages	--		X
12	Damages due to water pollution	--	X	X
13	Damages due to impacts on the soil	--		
14	Damages due to air pollution	--	X	X
15	Damages due to noise	--	X	X
16	Loss of wetland	--	X	X
17	Damages due to the loss of usable agricultural area	--	X	X
18	Substitution costs generated by the exploitation of non renewable resources	--	X	X
19	Damages due to CO ₂ emissions	--		X
20	Net change in the value of invested capital (excluding buildings)	+ / --	X	X
21	Changes in the capital account	+ / --	X	X

Table 1: Suggested variables for the National welfare Index (Diefenbacher and Zieschank 2008)

This new indicator, as a complementary welfare measurement for a country to GDP, might play a big role for the political debate in Germany as it opens up an opportunity to look not only at economic growth but at the welfare of a country, including crucial sources of wealth based on non-market activities, such as the values of social networks, civil society participation, the reduction of environmental damages and usage of renewable. The societal and political debate around the NWI might also then contribute to a shift in paradigm of what “sustainable growth” is and that progress should not only be measured quantitatively, through market activities, but also qualitatively (Diefenbacher and Ziehschank, 2008).

The diverging trends of GDI⁶ and NWI mean that although the economy can grow, welfare can diminish. The national welfare of a country is, therefore, not positively correlated to GDP. The NWI could provide a more differentiated picture of growth and progress than GDP, as it includes environmental and social dimensions, important to SD, by not replacing but complementing it (see Graph 3).

⁶ GDI is equal to GDP minus the balance of primary incomes with the rest of the world.



Graph 3: Gross Domestic Income and National Welfare Indicator in comparison (Diefenbacher & Zieschank, 2008)

The divergence between the two indicators of graph 3 is explained due to structural differences in the construction of GDI and NWI, since the respective calculations have been made on the basis of following different assumptions (Diefenbacher & Zieschank, 2008):

- Firstly, the starting parameter of NWI is private consumption weighted with an index of income distribution.
- Secondly, NWI considers that goods and services preserving the economy and society are produced by, but do not contribute primarily to the welfare of the people.
- Thirdly, subtractions due to negative external effects are so significant that they clearly overcome all positive effects added to the index, for instance in the field of voluntary work.

The NWI for Germany is now being further developed against the background of an intense international discussion about the contents dimensions of a sustainable social development.

Conclusion

All these national initiatives demonstrate that well-being measurement is developed in parallel to the SD indicators, which has already started several years ago. The engagement of the countries mentioned in this case study has been very active in defining indicators which best measure well-being and societal progress in the context of 'beyond GDP'.

The countries initiatives have recognized the weakness of the GDP for measuring overall societal progress, but also the impossibility and challenge to measure well-being or sustainable development with a single synthetic indicator. Therefore, they find it useful to use a broad indicator set on SD or well-being and use only some synthetic indicators alternatively to GDP for communication reasons. SD indicator sets and wellbeing indicator sets are developed separately in most of the countries. The welfare concept, deriving from economics, is being brought more in line with environmental and social progress by integrating indicators on income distribution, environmental pressure and private consumption. Regarding environmental issues, countries seem to increasingly use Ecological Footprint and the Carbon Footprint.

Austria and Belgium have supplemented their SD indicator set with other indicators and more subjective measures for measuring also well-being. A recent study in Austria has proved the appropriateness of SDIs in measuring not only welfare aspects but also well-being (Ministry of Environment, 2010). Belgium has recommended to add four synthetic indicators to their SDI set (environmental satellite accounts (ESA), Human Development Index, ecological footprint (EF) and bio-capacity (BC), Indicators related to government spending on SD). France has also developed recently an SDI set, including the recommendation of the Stiglitz Commission report and using "the capital based approach".

Finland is measuring environmental and economic aspects with its SDIs, but less so societal progress. Therefore, an indicator set, "Findicators", was developed in 2009. Moreover, various projects are planned for measuring well-being also based on self-reported experiences of individuals. France, by following the Stiglitz recommendations, bases its efforts on measuring well-being on subjective experiences of environmental risk or life-satisfaction

Innovative efforts in the light of welfare measurement or well-being have undertaken in Germany by developing the National Welfare Index (NWI), in Austria by establishing the indicator "wealth in time", and in Belgium by developing a framework for measuring well-being. The NWI should be distinguished from well-being indicators as it is more linked to the economic framework and less to subjective measurement on happiness and life-satisfaction. Welfare is expanded to not only capture economic wealth, but also to other domains, such as non-market activities, private consumption weighted with distributional effects and environmental pressures. The NWI is a monetised indicator which could be comparable to GDP. Its new impulse could lead to a better measurement of social progress but also to a stronger emphasis of qualitative aspects of the economy.

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