Beyond SNA - A Broader Approach to Well-Being

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(The views expressed in this paper are those of the author. They do not necessarily reflect the views of the German Federal Statistical Office.)

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- Draft -

1. Background

The report of the so-called Stiglitz-Sen-Fitoussi-Commission (SSFC) on economic performance and social progress,[1] published in Paris in September 2009 initiated worldwide discussions at different levels on how to measure social progress in a more comprehensive way and fostered the development of well-being indicators. According to the SSFC- report, the main issue is that Gross Domestic Product (GDP) is a very useful economic indicator but falls short of portraying social progress in a broader sense and the multidimensional aspects of quality of life.

GDP as a well-being or quality of life indicator is criticized because of various reasons: On one hand GDP excludes certain activities, like homework, parenting or volunteer work, which contribute in a positive way to the well-being of society. On the other hand the costs for the abatement of the negative implication of economic growth on the environment as well as on labour and general living conditions are omitted or even increase GDP. Furthermore it is criticized, that the non-material aspects of quality of life are not highlighted in a sufficient way.[2]

To overcome the restricted view on societal progress, the SSFC proposed to look at three pillars, i.e. economic, social and environmental progress and to use a dashboard of indicators to monitor progress in a broader sense. The SSFC-report initiated a variety of actions. The OECD-conferences on the progress of societies are an important example as well as particularly its how's life initiative. At European level the Commission communications on GDP and beyond and the sponsorship group on measuring progress, well-being and sustainable development have to be mentioned. But also at national level the general idea of measuring social progress in a broader sense was supported by various actions. Last but not least, the ongoing negotiations in the frame of the post-2015-agenda to define sustainable development goals (SDGs) at the level of United Nations may also be considered as closely linked.

This paper, after having provided a brief overview on international developments, highlights and compares a couple of indicators developed to measure social progress in Germany. This is followed by part 3, dealing on one hand with a possible statistical support for the process of determining appropriate well-being indicators and on the other hand with options for statistical support in monitoring well-being on a current basis. Finally, the question is raised how a future SNA could capture more well-being aspects.

[1] cf. Commission on the Measurement of Economic Performance and Social Progress (2009).
[2] cf. Fioramonti (2013).

2. Portraying Well-Being

2.1 Separate Indicators on Well-Being and Societal Progress

On the occasion of its 50th anniversary and only two years after the SFFC-Report the OECD published in 2011 the How's Life data set,[3] a dashboard of 22 indicators, highlighting the 11 dimensions of the domains material living conditions and quality of life. In its second publication of 2013 the OECD has slightly revised its set of well-being-indicators which now comprises 25 indicators shedding light on material living conditions (9 indicators to cover 3 dimensions) and on quality of life (16 indicators for 8 dimensions). "It includes dimensions that have a claim to be considered as universal – that is, relevant to people living in all societies[4]". For the indicators used to measure how is life this implies flexibility to reflect specific country conditions. The selection of the concrete OECD-indicators has been driven by a number of crucial criteria, e.g. capture well-being achievements at the individual or household level, measure well-being outcomes rather than inputs, enable disaggregation by different household groups. The How's Life data, in addition to figures and tables, are presented in a summary form using a kind of traffic light icons. Furthermore, the Better-Life-Index is an interactive web-tool so that users can set their own weights on the 11 dimensions and hence compare the well-being results using different weights.

Looking at the European Union, the Europe-2020-strategy for a smart, sustainable and inclusive growth was adopted in 2010, including targets to be achieved at European and at national level. "Progress toward the Europe-2020-strategy targets is monitored by means of eight headline indicators and three sub-indicators."[5] With regard to statistical improvements needed to bring forward the measurement of economic and social progress in a broader sense, a dedicated working group the so-called Sponsorship Group on Measuring Progress, Well-Being and Sustainable Development was erected. Its proposals covering the three domains a) quality of life, b) environmental sustainability and c) household income, consumption and wealth were adopted in November 2011 by the Director-Generals of the national statistical offices in the European Union. They cover about 50 concrete actions and development work needs to be carried out by 2020.

A well-known metrics at world level is the human development index (HDI) published annually by the United Nations Development Program (UNDP). The HDI is a composite indicator combining three pieces of information to grasp societal progress. Since the revision in 2009 these are health measured by life expectancy at birth, knowledge measured by mean years and expected years of schooling as well as living standard measured by GNI per capita (at purchasing power parities, PPP). To aggregate them each of three indicators is assigned the same weight and a geometric mean is compiled.[6] Many

[3] OECD (2011).
[4] Durand, Martine (2015), p. 8.
[5] Radermacher, Walter J. (2015), p. 19.
[6] UNDP (2010), p. 215.

other indicators have been proposed, like Genuine Saving Index, Ecological Footprint or World Happiness Index. But also at national level numerous activities to foster the idea of measuring social progress in a broader sense were and are carried out, partly by statistical offices and partly by academic researchers and research institutes[7].

2.2 Indicators to measure social progress in Germany

2.2.1 The Franco-German Dashboard

The French Council on Economic Analysis and the German Council of Economic Experts upon request of the Franco-German ministerial council published a report in December 2010 proposing a set of indicators to monitor economic, social and environmental developments. Based on the SSFC-report indicators are proposed following a three pillar approach, which distinguishes economic performance, quality of life and sustainability. The concrete 25 indicators are:[8]

a) economic performance (6):
   - GDP per capita
   - GDP per hours worked
   - Employment rate (15 – 64 years age group)
   - Net national income per capita
   - Final consumption expenditure per capita (including government consumption)
   - Distribution measure of net income per consumption unit (income quintile share ratio (S80/S20); internationally harmonized)

b) quality of life (7):
   - Health: Potential years of life lost
   - Education: Students (ISCED 1-6) aged between 15 and 24 years
   - Personal activities: Employees working on shift work
   - Political voice and governance: Voice and Accountability
   - Social connections and relationships: Frequency of time spent with people at sport, culture, communal organization
   - Environmental conditions: Urban population exposure to air pollution by particulate matter
   - Personal and economic insecurity: Not-at-risk-of-poverty rate

c) sustainability (12):
   - Private sector net fixed capital formation (% of GDP)
   - R&D investment (% of GDP)

[7] An overview is given in Annex 1 to Durand, Martine (2015).
[8] cf. German Council of Economic Experts and Council D‘ Analyse Economique (2010), p. 25.

- Cyclically adjusted fiscal balance (% of GDP)
- Fiscal sustainability gap S2
- Total private credit to GDP gap
- Real equity price gap
- Real property price gap
- Level of greenhouse gas emissions
- Greenhouse gas emissions per capita
- Resource productivity (GDP relative to non-renewable Domestic Material Input, DMI)
- Resource consumption (non-renewable Domestic Material Consumption – DMC, per capita)
- Biodiversity: (preliminary indicator bird index).

An interesting point is the increased number of indicators proposed to measure sustainability. As can be seen from the indicators, sustainability is understood in a broad sense and goes well beyond the usual understanding of sustainability. In addition to environmental sustainability, economic and financial aspects of sustainability are addressed as well.

2.2.2 National Welfare Index

The National Welfare Index (NWI) has been developed for Germany by two academic research institutes on behalf of the Federal Environment Agency in 2009 and updated in 2012.[9] The conceptual basis is the Index of Sustainable Economic Welfare (ISEW) proposed by Nordhaus and Tobin and the defensive cost approach.[10] The NWI is a single monetary indicator, which starts from inequality adjusted private consumption expenditure to which certain beneficial items are added and from which a couple of detrimental items are deducted. In the updated version of 2012 the following items enter:

Inequality adjusted private consumption expenditure

- plus -	- minus -
value of homework	cost of commuting and car accidents
value of voluntary work	cost of crime and of consumption of alcohol, tobacco and drugs
public expenditure for health	cost of pollution abatement
	environmental costs (air, water, soil and noise pollution)
public expenditure for education	loss of farmland
difference of service to expenditure on consumer durables	cost of depletion of non-renewable
	cost of greenhouse gas and nuclear energy use

= National Welfare Index

[9] Diefenbacher, Hans, Zieschank, Roland et al. (2009).
[10] Nordhaus, W.D. and Tobin, J. (1972).

Conceptually as well as politically an interesting feature is that national welfare can be increased by less inequality, by more private consumption, by more beneficial items, but also by a reduction of the detrimental/defensive costs. For Germany the NWI in the period 2000-2010 shows a decrease, whereas GDP increases. Only in 2009, the year when the global financial crises hit Germany, GDP decreased, whereas the NWI increased. According to the authors the latter is mainly due to a reduction in environmental costs in 2009.[11]

2.2.3 KfW-Sustainability Indicator

The Sustainability Indicator, produced since 2007 by the research unit of the public development banking group KfW, may be summarized as a single non-monetary indicator. After having been revised in 2010 and 2012 the indicator covers three dimensions, i.e. economy, environment and social exclusion; each dimension is highlighted by eight basic indicators. The development in the reporting year for each basic indicator is compared to a benchmark (usually derived from the ten preceding years). Subsequently these results are translated into a score system with five values (2, 1, 0, -1, -2), which allows to calculate the dimension value by arithmetic mean and thereafter the development of the sustainability indicator in total. The precise indicators used since the major revision in 2010 and 2012 are:[12]

a) economy (8):
   - Employment ratio (to population)
   - net fixed investment ratio (to GDP)
   - public and private education expenditure ratio (to GDP)
   - R&D ratio (to GDP)
   - private and public per capita consumption ratio (to population)
   - leisure time ratio (to occupied persons)
   - gross public debt ratio (to GDP)
   - gross private debt ratio (to GDP)

b) environment (8):
   - greenhouse gas emissions
   - share of renewable energy (in total energy consumption)
   - energy productivity
   - raw material productivity
   - built-up area and transport infrastructure expansion

[11] Diefenbacher, et al. (2013), p. 11.
[12] cf. KfW (2014), Concept Paper –KfW Sustainability indicator (in German).

- air pollution emission
- noise pollution by road traffic
- species diversity

c) social cohesion (8):
- low qualification ratio of 25 – 30 year old persons
- long-term unemployment ratio
- interest in political matters
- number of cancer and cardiovascular diseases
- number of crimes of violence and residence burglary theft
- gender pay gap
- foreigners unemployment gap
- official development assistance ratio (go GNI).

The KfW sustainability indicator shows a positive development of total sustainability for the years 2008 – 2013, with some minor ups and downs. According to the data for the three dimensions provided, economic sustainability and social cohesion show positive developments for the whole period, whereas environmental s sustainability is decreasing in 2012 and 2013.[13]

2.2.4 Prosperity Quintet

The prosperity Quintet has been developed in 2011 by a research institute, the Denkwerkzukunft headed by Prof. Miegel, and updated in 2014. The prosperity quintet covers the economic, social and ecological dimensions. The small dashboard of five indicators comprises the following indicators:[14]

- GDP per capita, to measure the material level of well-being
- 80/20–income ratio, to highlight the income distribution
- Social exclusion ratio, to grasp social cohesion
- Ecological footprint to biological capacity, indicating consumption of natural resources
- Public debt ratio, to measure financial stability.

For the dissemination of the data a spider web presentation is used, which allows to show and compare developments between different points in time. Comparing the longer-term development between 2001 and 2012 the report concludes:
"In comparison with 2001, however, prosperity in Germany declined, as it did in most other Western EU countries. The reasons for this were - ... – the rises in income inequality, the social exclusion rate and the public debt rate and the growth of the ecological footprint."[15]

[13] cf. KfW (2014), KfW Sustainability Indicator 2014 – Summary, p. 1.
[14] cf. Denkwerkzukunft (2014), p.1.

2.2.5 W^3-Indicators of the German Federal Parliament

The German Bundestag, i.e. the Federal Parliament, in December 2010 set the Study Commission on "Growth, Well-being and Quality of life – Paths to a Sustainable Economic Activity and Social Progress in the Social Market Economy". This Study Commission comprised 17 Members of Parliament and 17 experts, nominated according to the share of each parliamentary group. The mandate listed five topics and work was carried out by five project groups. Project group (PG) 2 was in charge of examining the feasibility to develop a holistic indicator of well-being and progress.[16] The final report of the Study Commission was adopted in June 2013 by the Bundestag just before the end of the 17th electoral term.

With regard to the work on well-being indicators, the results can briefly be summarized as follows: A first conclusion was to refrain from building a holistic single superindicator to measure social progress in a comprehensive way. Instead, the proposal is to rely on a restricted set of indicators to monitor well-being. Another conclusion was to broadly accept the well-established three pillar approach by highlighting separately the economic, the social/inclusive and the ecological dimensions (hence the name W^3-indicators). A further conclusion was to distinguish between key indicators on one hand and warning lights on the other. Warning lights or indicators are intended to focus on medium to larger term issues and would attract attention only in the case of crossing certain thresholds (also proposed by the Study Commission). The whole W^3-indicator set comprises 10 key indicators, 9 warning indicators and one reminder indicator, for which is was not possible to define a justified threshold: [17]

I. Economic well-being
   a) key indicators:
      - GDP
      - Income distribution
      - public debt ratio to GDP
   b) warning indicators:
      - net investment rate
      - wealth distribution
      - financial stability of the private sector
   c) reminder:
      - non-market output (homework etc).

II. Social well-being and inclusion

[15] cf. Denkwerkzukunft (2014) p. 9.
[16] Deutscher Bundestag (2010), p. 3.
[17] Deutscher Bundestag (2013) p.231 ff., particularly p. 275-6.

a) key indicators:
   - employment ratio
   - secondary-level II-education
   - life expectancy
   - freedom (World Bank Indicator)
b) warning indicators:
   - job quality (underemployment)
   - continued training
   - healthy life years

III. Environmental well-being

a) key indicators:
   - greenhouse gas national
   - nitrogen surplus national
   - biodiversity national
b) warning indicators:
   - greenhouse gas global
   - nitrogen surplus global
   - biodiversity global

In its majority resolution request accompanying the adoption of the final report of the Study Commission, the Federal Parliament concluded that the development of a set of indicators to measure well-being and progress had been a crucial task of the Study Commission and asked the Federal Government – inter alia – to charge the Federal Statistical Office with the publication of the indicators. This request has been included in the coalition treaty for the 18th electoral term together with an action plan "good life" to improve the quality of life in Germany.

2.2.6 A comparison and a dominant male

The indicators for Germany presented have been chosen deliberatively to show the range, but are not exhaustive. A comparison of the indicators developed to measure well-being in Germany shows various differences. A first question relates to the type of indicator, i.e. a single indicator or a dashboard. In case of a single indicator the aggregation and the aggregation procedure is another question closely related to the first one. But with regard to a dashboard the size may be distinctive. In any case an interesting point is the use of subjective indicators to complement the objective ones. Furthermore, indicators need not be treated equal, but may be differentiated to highlight certain priority dimensions. Moreover, the number of input variables / auxiliary indicators entering into the

calculation as well as the use of additional data may differ. The following table gives a brief overview over the main characteristics of the different indicators presented:

Main features of German well-being indicators

	Franco-German Indicators	National Welfare Index (NWI)	KfW-Sustainability Indicators	Prosperity Quintet	W^3-Indicators
Indicator type	dashboard	single	single	dashboard	dashboard
Aggregation	no	monetary	composite	no	no
No. of indicators displayed	25	1	1+3	5	20
No. of subjective indicators	-	-	-	1	3
All indicators equal	yes	yes	yes	yes	no
No. of auxiliary or additional indicators	-	20	24	-	3

A reason why there has not yet been a decision about which well-being indicator to use for policy purposes could be a dominant male. Since 2002 government follows a well-defined sustainability strategy. This strategy distinguished four areas, i.e. intergenerational equity, quality of life, social cohesion and international responsibility. To monitor sustainability a set of 38 indicators is used, which in addition to environmental data cover also economic, health, social and educational items. For each indicator a goal has been defined by the political level, mostly in a quantitative form, and for most indicators with a target year as well. To monitor sustainability a bi-annual indicator report is published by the Federal Statistical Office.[18] For a quick overview the achievement for each indicator is highlighted by using four weather symbols. In addition to the bi-annual indicator report, the federal government publishes every four years a progress report providing recent trends and achievements as well as presenting plans for future actions.[19] The German sustainability strategy has been reviewed recently by a group of international peers.[20]

3. Statistical support for defining and monitoring well-being

3.1 Specifying well-being factors and indicators

The specification of factors influencing well-being is a task going well beyond the statistical area. But statistics can support decision makers in various ways to find out about which factors matter and are

[18] cf. Federal Statistical Office (2014),
[19] cf. Federal German Government (2012).
[20] cf. German Council for Sustainability (2013)t. Sustainability Made in Germany: The second Review by a Group of International Peers.

relevant but also to provide evidence for a well-founded choice. In practice statisticians can support the specification of well-being factors by different activities.

3.1.1 Analyzing statistical data on well-being

As soon as a statistical survey on living conditions and satisfaction with life is available, statisticians may carry out studies on what are the drivers of life satisfaction. In Germany such a survey is the so-called socio-economic panel (SOEP) run by the German Economic Research Institute (DIW, Berlin) since many years[21]. The SOEP is an annual panel survey which started in the mid 1980 by (re-)°interviewing around 20 000 persons in about 11 000 households. As a possible input to the Franco-German dashboard, a study was carried out, to analyze the impact of 12 variables from the SOEP on life satisfaction and to explain the differences. Based on response by about 9 000 individuals for the years 1991-2008 and using the principal component factor method the main impact factors for life satisfaction are:[22]

- labour income,
- health satisfaction,
- economic worries,
- environmental worries.

A similar study applying regression analysis instead of factor analysis confirmed those findings.[23] More generally the results underline that both, hard economic factors like labour income (objective factors) and subjective factors like satisfaction with health seem statistically relevant to explain life satisfaction. However, it should be mentioned that such a statistical analysis does not provide causes but derives mathematical correlations.

3.1.2 Conducting public debates on well-being

Another possibility to find out about key areas that matter for the well-being of people is to conduct public debates. In order to develop relevant measures of national well-being and progress for the United Kingdom (UK), "the Office for National Statistics (ONS) undertook a national debate on 'what matters to you?' between November 26, 2010 and April 15, 2011"[24]. The ONS held 175 events across

[21] Cf. Wagner,Gert G, et al (2007); another example is the European Survey on Income and Living Conditions (EU-SILC) with covers life satisfaction 2013 by a special module.
[22] cf. Kassenboehmer and Schmidt (2011), p. 29.
[23] cf. Oltmanns et al. (2012):, p. 17.
[24] cf. Office for National Statistics (2011), p 2.

the country involving 7 250 people and a total of 34 000 responses (including online contributions). From this debate it was concluded that what matters most to British people is:[25]

- health,
- good connection with friends and family,
- job satisfaction and economic security,
- present and future conditions of the environment,
- education and training.

With regard to the representativity of the results, the ONS makes clear that "the results reflect the views of those who participated in the debate. It was not a statistical exercise and so findings are not necessarily representative of the UK population as a whole".[26] "Following the debate, ONS destilled the responses and proposed an initial set of domains and headlines measures of national well-being for a public consultation."[27] Ultimately this resulted in a list of 10 domains and 40 headline measures.

Interestingly the results from the national debate in UK and those from the analysis of a statistical survey in Germany correspond quite well, taking into account that in the German case the item connection with friends and family was not covered by the analysis. Such a correspondence cannot be expected for all countries in the world. According to the World Happiness Report 2013 the differences between world regions seem to be considerable.[28]

3.1.3 Advising decision makers on indicators

After the main drivers or key areas for well-being and social progress have been identified, the next step is to determine appropriate indicators to quantify them. This task concerns measurement, a core competency of statistical offices. Therefore decision makers are well-advised to benefit from the experience of statisticians. For instance, in the case of the German Parliament's Study Commission on growth, well-being, quality of life a representative from the Federal Statistical Office was asked to participate in the meetings of the group on well-being indicators, in addition to the academic experts. From their experience, statisticians can provide major contributions to measurement issues like:

- What are the most appropriate indicators to highlight a key area of well-being?
- What are the quality features of possible indicators, like coverage, reliability or timelines?
- Are the indicators internationally comparable and robust; what about time-series?
- What about subjective indicators (e.g. health self-assessment) to complement objective indicators?

[25] cf. Office for National Statistics (2011), p. 6.
[26] cf. Office for National Statistics (2011), p. 5.
[27] cf. Everett, Glenn (2015), p. 35.
[28] cf. Helliwel, Layard, Sachs (2013), figure 2.2.

Another important question in this respect relates to the aggregation level. The usual distinction is between a universal indicator (like GDP), a composite indicator (like the Human Development Index) and a dashboard (like the How's-Life-indicators). "Given that for these levels of aggregation different requirements apply on one hand and on the other hand the pros and cons may differ depending on the purpose, statistics can support a well-funded decision."[29] For the communication with the general public, a common proposal is to follow a small-is-beautiful-strategy and preferably use a single indicator to measure well-being and progress. But this comes at a price: To be able to build such a single indicator either items have to be monetized by using imputed prices to be able to add them or variables are given a weight so that they can be condensed to a single indicator. In addition, such a single indicator may not be very useful for designing evidence based policy measures.

In this context the Human Development Index (HDI) may be quoted as an example. This composite indicator consists of three completely different variables, which are weighted together. In 2009 the variables were amended as follows:

Variables until 2009	Variables after 2009
1. average life expectancy at birth	1. ditto
2. combined adult literacy and gross enrolment	2. expected and mean years of schooling.
3. GDP per capita (PPP)	3. GNI per capita (PPP)

In addition, the weighting method was changed from arithmetic to geometric mean. The crucial statistical question is in how far this methodological revision changed the country ranking. The following table shows the ranking from the 2010 Human Development Report (HDR) and in brackets the change of the country rank compared with the 2009 report. In both cases the data for 2005 were used to minimize a possible difference due to current revisions. For the ten highest developed countries the results are:

HDR 2010 (difference to HDR 2009)[30]	
1. Norway	(.)
2. Australia	(.)
3 New Zealand	(+17)
4. USA	(+9)
5. Ireland	(.)
6. Sweden	(.)
7.Iceland	(-4)
8. Canada	(-4)
9. Germany	(+12)
10. Netherlands	(-3).

[29] Hoffman-Müller, R. (2013): p. 478-left column (translated by the author).
[30] Cf. UNDP (2009), p. 167, and (2010), p. 148.

From a statistical point of view, two messages can be derived: On one hand the methodological amendments introduced with regard to the variables and weighting method did not change the rank for some countries. For other countries, however, the rank has changed so much, that the robustness and reliability of the HDI could be questioned.

3.2. Current reporting and monitoring

3.2.1 Current compilation and dissemination of indicators

When a political goal has been established, e.g. increase sustainability or avoid excessive public deficits, and a decision on the statistical indicators to quantify them taken, the measurement of their performance by compiling and disseminating the indicators is a crucial task. One possibility is that those in charge of the political goal compile and disseminate the respective data. However, in our experience from the German sustainability strategy as well as from the European excessive deficit procedure, the credibility of a political goal gains substantially, if the reporting on the development of the indicators is independent from the political level. Statistical offices working in accordance with the Fundamental Principles of Official Statistics,[31] including impartiality and professionalism, should be first choice for a current reporting. To further increase public attention and foster the idea of broader social progress, additional reports and discussions on a regular basis from government and/or scientific area would seem useful.

The use of a statistical indicator to monitor a political goal sometimes may imply questions from the political level about the quality of the data provided, particularly if targets are not met. To avoid such criticism, the methodology should be sound, up-to-date and in accordance with international statistical recommendations. In order to stay up-to-date, a regular review of the methodology used is required. An interesting case highlighting a possible methodological difficulty is income distribution by household groups in Germany.[32] The usual problem is, that the sum of the micro-data on income from household surveys (or from tax files) differs from the national accounts aggregate. To overcome this problem, a joint OECD-Eurostat task-force recommended a certain method to distribute the residuals by income type. In a test calculation this method was applied to German survey data on income. This test calculation revealed that for wages and salaries, pension income and other transfers the average income per household would change less than 10 %, but for the income category "self-employed income and property income" the average income per household would increase by more than 150 %. Given that this has a substantial impact on distribution ratios, it was decided to refrain from

[31] cf. Annex 1.
[32] cf. Braakmann, A., Schwahn, F. (2012).

disseminating such data and as first priority to elaborate on proposals to improve household survey data on income.

3.2.2 Indicator-based assessment

The role of statistics could further be enhanced when in addition to the current presentation of the indicators a brief assessment on the development (direction) is added to these data. This could for instance be done by using traffic lights pictograms i.e. green for development in good direction, yellow for unclear development and red for wrong direction of development. The precise interpretation what is meant by green, yellow and red needs to be defined by the political level, i.e. those who are responsible. This could be refined if the political level gives a quantified goal and as well the target year. As an example for the definition of thresholds for the indicator-based assessment, the weather symbols used in the German sustainability strategy can be quoted::[33]

The target value of the indicator has been achieved or the remaining "distance" to the target value would be covered by the target year (deviation less than 5 %), or a limiting value was met.

The indicator is developing in the right direction, but if the average annual trend continues unaltered there remains or will remain a gap of between 5 and 20 % to the target value by the target year.

The indicator is developing in the right direction, but if the average annual trend continues unaltered there remains or will remain a gap of more than 20 % to the target value by the target year.

The indicator has developed in the wrong direction and if the average annual trend continues unaltered, the distance to be covered to reach the target would become even greater, or a limiting value was not met.

But it should also be indicated, that such an assessment by statisticians may involve certain risks. Particularly where the direction of development is wrong or when a predefined target value for a given target year is missed, possibly just before an election, the role of a statistical office may be difficult. This is one reason for the adoption of the worldwide Fundamental Principles of Official Statistics, which should be included in any statistical law.

4 Some options for well-being in the SNA-Framework

The focus of the SNA and its aggregates is on measuring economic issues in a national perspective and based on market prices. Looking ahead at the next SNA, an important question is whether the existing macro-economic aggregates are sufficient for economic analyses and policy in the future. For

[33] Cf. Federal Statistical Office (2014), p.66.

instance, can it be assumed, that the distribution of income by household group or environmental developments are not relevant for economic analyses and policy? If such pieces of information are considered relevant, it would seem useful to examine how a future SNA could include them. Looking at the SNA reveals that different possibilities to include additional information are offered:

- memorandum item
- additional account
- supplementary table
- satellite account.

In the SNA a **memorandum item** is used to provide supplementary information to the core aggregates of the accounts. To start with, the production account of SNA 2008 shows not only gross value added but in addition capital consumption and net value added. More generally, the income concepts in different SNA- accounts are presented on a gross and as well on a net basis. Taking this as an example, a suggestion could be to add a distribution measure for disposable income, like the Gini-coefficient, the 80-20-ratio or the median, at the end of the secondary distribution account. Obviously, such distributional income measure requires robust and reliable micro-data to be able to highlight the distribution of disposable income properly. Moreover, with regard to environmental costs of production and consumption, would it be conceivable to show an environmentally adjusted disposable income?

Furthermore the SNA uses sometimes an **additional account** to show an important piece of information. As an example the use-of-adjusted-disposable-income-account may be quoted. This account shows actual disposable income and household actual final consumption expenditure by adding a part of collective consumption expenditure, i.e. actual consumption by individuals like free education or health care. Since the split between collective and individual consumption expenditure tends to vary substantially between countries, for international comparisons individual consumption is better reflected by household actual final consumption. From a conceptual point of view, such additional accounts seem to require that the total for the economy is not affected.

A **supplementary table** is another possibility to include certain additional pieces of information. A well-known example in this respect is table 17.10 of the SNA, providing a comprehensive overview over pension claims by type and showing the extent of pension schemes included in the core sequence of accounts. Given that certain payments to abate environmental damages are covered by the SNA core system, whereas others are not included, one might want to think of presenting the full environmental costs (possibly by type) using such a supplementary table in the future SNA.

A further approach to provide additional information is a so-called **satellite account**. As explained in chapter 29 of SNA-2008, "a satellite account is linked to, but distinct from, the central system"[34]. In the case of environment, a satellite account enables to combine monetary data with physical data and to identify the impacts of residuals polluting the air, soil or water. Another example mentioned is the satellite account for homework, parenting and volunteer labour.

To sum up, the SNA-2008 offers various possibilities to present additional information, at least as long as they are economy related (including valuation). On the other hand it is clear from the SFFC-report, that well-being is not determined by economic factors alone, but also by social aspects having an impact on the quality of life. With regard to this, the SNA-2008 states: "It is difficult to imagine an objective way in which factors such as these could be quantified and more difficult to imagine the usefulness of including them in a system designed primarily to facilitate economic analysis."[35] Therefore an alternative approach is to present well-being indicators separately and in addition to the macro-economic SNA-aggregates.

5. Conclusion

The paper addressed the many efforts made to develop appropriate indicators to monitor economic and social progress in a broader way. After a brief overview of activities at international level, examples from Germany are presented to highlight development at national level. On the basis of experience gained in Germany, part 3 elaborates on possible statistical support for, on one hand, the process of selecting indicators to measure well-being appropriately and on the other hand for the process of current reporting and monitoring. Going back to the GDP and beyond idea, finally possibilities are presented how to capture social progress more comprehensively in a future SNA.

[34] European Commission, United Nations et al (2008), para. 29.4.
[35] European Commission, United Nations et al (2008), para. 1.83.

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Annex 1

Fundamental Principles of Official Statistics

Preamble
The Statistical Commission,
- Bearing in mind that official statistical information is an essential basis for development in the economic, demographic, social and environmental fields and for mutual knowledge and trade among the States and peoples of the world.
- Bearing in mind that the essential trust of the public in official statistical information depends to a large extent on respect for the fundamental values an principles which are the basis of any society which seeks to understand itself and to respect the rights of its members.
- Bearing in mind that the quality of official statistics, and thus the quality of the information available to the Government, the
economy and the public depends largely on the cooperation of citizens, enterprises, and other respondents in providing appropriate and reliable data needed for necessary statistical compilations and on the cooperation between users and producers of statistics in order to meet users' needs.
- Recalling the efforts of governmental and non-governmental organizations active in statistics to establish standards and concepts to allow comparisons among countries,
- Recalling also the International Statistical Institute Declaration of Professional Ethics,
- Having expressed the opinion that resolution C (47), adopted by the Economic Commission for Europe on 15 April 1992, is of universal significance,
- Noting that, at its eighth session, held in Bangkok in November 1993, the Working Group of Statistical Experts, assigned by the Committee on Statistics of the Economic and Social Commission for Asia and the Pacific to examine the Fundamental Principles, had agreed in principle to the ECE version and had emphasized that those principles were applicable to all nations,
- Noting also that, at its eighth session, held at Addis Ababa in March 1994, the Joint Conference of African Planners, Statisticians and Demographers, considered that the Fundamental Principles of Official Statistics are of universal significance,
Adopts the present principles of official statistics:

Principle 1. *Official statistics provide an indispensable element in the information system of a democratic society, serving the Government, the economy and the public with data about the economic, demographic, social and environmental situation. To this end, official statistics that meet the test of practical utility are to be compiled and made available on an impartial basis byofficial statistical agencies to honor citizens' entitlement to public information.*

Principle 2. *To retain trust in official statistics, the statistical agencies need to decide according to strictly professional considerations, including scientific principles and professional ethics, on the methods and procedures for the collection, processing, storage and presentation of statistical data.*

Principle 3. *To facilitate a correct interpretation of the data, the statistical agencies are to present information according to scientific standards on the sources, methods and procedures of the statistics.*

Principle 4. *The statistical agencies are entitled to comment on erroneous interpretation and misuse of statistics.*

Principle 5. *Data for statistical purposes may be drawn from all types of sources, be they statistical surveys or administrative records. Statistical agencies are to choose the source with regard to quality, timeliness, costs and the burden on respondents.*

Principle 6. *Individual data collected by statistical agencies for statistical compilation, whether they refer to natural or legal persons, are to be strictly confidential and used exclusively for statistical purposes.*

Principle 7. *The laws, regulations and measures under which the statistical systems operate are to be made public.*

Principle 8. *Coordination among statistical agencies within countries is essential to achieve consistency and efficiency in the statistical system.*

Principle 9. *The use by statistical agencies in each country of international concepts, classifications and methods promotes theconsistency and efficiency of statistical systems at all official levels.*

Principle 10. *Bilateral and multilateral cooperation in statistics contributes to the improvement of systems of official statisticsin all countries.*

Internet-Download on 31-3-2015: *http://unstats.un.org/unsd/dnss/gp/fundprinciples.aspx*