

4

Creating National Accounts of Well-Being:

A parallel process to GNH

Nic Marks

As the Royal Government of Bhutan seeks to operationalise the inspirational concept of Gross National Happiness into robust and reliable indicators, it is worth keeping in mind that they are not alone in this quest to find more meaningful measures of societal progress. There is a burgeoning international movement questioning the utility of economic indicators and exploring what it might mean to capture true measures of well-being, not simply material wealth.

In January 2008, the French President Nicholas Sarkozy recruited Nobel-Prize-winning economists Joseph Stiglitz and Amartya Sen together with French economist Jean-Paul Fitoussi to form a special commission on the measurement of economic performance and social progress. Outlining the scope of their work they state:

There is a huge distance between standard measures of important socio economic variables like growth, inflation, inequalities etc...and widespread perceptions...Our statistical apparatus, which may have served us well in a not too distant past, is in need of serious revisions.
(Stiglitz, Sen and Fitoussi, 2008)

The dismal state of Europe's 'widespread perceptions' is verified by the finding from the European Social Survey that in 2006 - which we would perhaps now regard as the peak of the economic boom years of the decade - 61 per cent of its inhabitants felt that for most people in their country life was getting worse. The situation was even starker in France itself, where more than 8 in 10

people (84 per cent) felt that life was getting worse for their fellow citizens (European Social Survey, 2006).

The establishment of the French commission is not an isolated case of a government paying attention to the idea that current measures of national performance are seriously defective. There is a gathering momentum behind calls from academics, policy-makers and the public for governments to measure well-being as part of their national accounting systems.

In 2004 and 2005 there were calls from both **nef**, in its well-being manifesto (Marks and Shah 2004), and from the prominent UK economist Richard Layard, for governments to monitor the well-being of their citizens. Layard's highly influential book *Happiness* argued that the economic model of human nature used by policy-makers is 'far too limited' and that '[h]appiness should become the goal of policy, and the progress of national happiness should be measured and analysed as closely as the growth of GNP' (Layard 2005). In the US leading psychologists Professors Ed Diener and Martin Seligman argued that policy decisions 'should be more heavily influenced by issues relating to well-being' and that '[p]eriodic, systematic assessment of well-being will offer policy-makers a much stronger set of findings to use in policy-making decisions' (Diener and Seligman 2004). Their call has been closely echoed by Nobel Prize winner Daniel Kahneman and colleagues (Kahneman, Krueger, Schkade, Schwarz and Stone, 2004) and is further developed in a forthcoming book *Well-being and Public Policy* (Diener, Lucas, Schimmack, and Helliwell, 2009), which makes a forceful and detailed case for subjective indicators of well-being to aid the policy process.

There is also considerable support among the public for governments to use broader measures of progress. A UK poll found 81 per cent of people supported the idea that government's prime objective should be the 'greatest happiness' rather than the 'greatest wealth' (BBC 2006). Similarly, an international survey

found that three-quarters of respondents believed that health, social and environmental statistics were as important as economic ones and should be used to measure national progress (Ethical Market Media, 2007). There is growing interest in alternative indicators such as the still-developing ecological footprint, which has had so great an influence that the expression 'footprint' has entered popular usage. Measures deriving from well-being research have also become widely known through international studies such as the World Values Survey and **nef's** own Happy Planet Index (Marks, Abdallah, Simms and Thompson, 2006), . The crisis in the global finance system in 2008 has only added to the groundswell of opinion that the direction of society has been led off course by traditional indicators, and that the need for alternatives is now urgent.

These expert and public views have been mirrored by a growing number of policy and government initiatives which have given an ever-more prominent role to well-being.

Although yet to devise systematic ways of capturing the well-being of citizens, the UK Government has been a leader in stimulating discourse about well-being and its measurement into the policy mainstream. This was initiated by the 2000 The UK Local Government Act which gave all local authorities the power to promote social, economic and environmental well-being in their areas. In 2002 the UK Prime Minister's Strategy Unit published a paper entitled *Life Satisfaction: the state of knowledge and implications for government* (Donovan and Halpern 2002) and in 2005 the UK's Sustainable Development Strategy, *Securing the Future*, committed the Government to exploring policy implications of wellbeing research (HM Government 2005). This was followed up when they published provisional national indicators associated with well-being as part of its sustainable development indicator set, drawing together a cluster of existing measures and new survey data on subjective well-being (Defra 2007). In addition there was an influential local government White

Paper: Strong and Prosperous Communities which defined a new place-shaping role for local government and its partners as 'the creative use of powers and influence to promote the general well-being of a community and its citizens' (Lyon 2007). And in 2007 a new duty (which in UK legal parlance is a stronger requirement than merely a 'power to') on English schools to promote the well-being of their pupils came into force. Later in the year the Office for National Statistics published a paper outlining its work on measuring societal well-being, floating the possibility that extensions to the current national accounts 'might eventually add up to a system of national wellbeing accounts' (Allin 2007).

In 2008 the momentum continued to build with The UK Government's Foresight Review on Mental Capital and Well-being releasing its findings from a two-year investigation, concluding that government policies 'need to nurture the mental capital and wellbeing in the wider population, so that everyone can flourish in their lives' (Foresight 2008). The report called for the 'radical step' of the development of an 'over-arching mental capital and wellbeing measure akin to the Communities and Local Government's (CLG) Index of Multiple Deprivation' to be explored. Finally, and perhaps most surprising, the HM Treasury in the UK published a working paper on Developments in the Economics of Well-being (Lepper 2008) which suggested the role of the Government is to achieve an appropriate balance between policies that promote well-being and policies that maintain economic incentives to support innovation and growth. Whilst raising concerns about intervening explicitly to influence well-being, in relation to measurement it concludes: 'Well-being - both subjective and objective - is an important issue. It provides a new framework with which to measure progress and analyse policy, providing new evidence for policy-makers to assess how material welfare affects well-being.'

All of this action by governmental departments was mirrored by some political interest with the UK Conservative Party's Quality

of Life Policy Group (Conservatives 2007) calling for action across eight key policy areas, including well-being, stating ‘...we believe now is the time for the UK to agree upon a more reliable indicator of progress than GDP, and to use it as the basis for policy-making’. In 2008 Jo Swinson, a Liberal Democrat MP (member of parliament), submitted an Early Day Motion to the UK House of Commons urging ‘the Government to both endorse and participate in the French study, with the aim of improving the well-being, not simply the wealth, of all people in the UK’ (Swinson 2008). This may be followed up by the setting up of an all party parliamentary commission on happiness and well-being in 2009, though at the time of press this has not been confirmed.

The interest at an international level has also been growing with the inter-governmental Organisation for Economic Co-operation and Development (OECD) hosting an international conference in Istanbul in 2007 on Measuring the Progress of Societies (as part of a broader programme of work) where participants affirmed a ‘commitment to measuring and fostering the progress of societies in all their dimensions’ and urged the development of data to help form ‘a shared view of societal well-being and its evolution over time’ (OECD 2007). Additionally the 2007 Europe-wide Beyond GDP conference included an opening address from the President of the European Commission, José Manuel Barroso, who calls for ‘the sort of breakthrough that we saw in the 1930s, a breakthrough that adapts GDP, or complements it with indicators that are better suited to our needs today, and the challenges we face today’ (Barroso 2007). More specifically on well-being the Statistical Office of the European Communities, Eurostat, has funded research to review the merits and shortcomings of existing examples of indicators related to well-being, to examine the feasibility of selected indicators at EU level, and to make recommendations for the most promising approaches for an indicator of well-being at an EU level.

To further these debates, we at the *centre for well-being* at **nef** (the new economics foundation) published in January 2009 a new report National Accounts of Well-being: bringing real wealth onto the balance sheet (Michaelson, Abdallah, Steuer, Thompson and Marks 2009). The report presents a radical, robust proposal to guide the direction of modern societies and the lives of people who live in them. It demonstrates why national governments should directly measure people's subjective well-being: their experiences, feelings and perceptions of how their lives are going. It calls for these measures to be collected on a regular, systematic basis and published as National Accounts of Well-being. The measures are needed because the economic indicators which governments currently rely on tell us little about the relative success or failure of countries in supporting a good life for their citizens.

The report builds on the insights, more than seventy-five years ago, of the original architects of systems of national accounts who were clear that welfare could not be inferred from measures of national income alone. They were careful to document the range of factors national accounts failed to capture such as the unpaid work of households, the distribution of income and the depletion of resources (Kuznets 1934). Yet initial hopes for the development of better indicators of welfare were fast derailed. The demands of wartime prioritised maximising the productive capacity of the economy over other consideration, at just the time when the accounting frameworks themselves were being refined and improved. The size of the economy - as defined by Gross Domestic Product - was quickly seized on as a convenient measure of national achievement. In the aftermath of the Second World War, overall productivity became firmly entrenched as the key hallmark of a country's overall success and widely interpreted as a proxy for societal progress, with damaging consequences for people and the planet.

Advances in the measurement of well-being means that now we can reclaim the true purpose of national accounts as initially conceived and shift towards more meaningful measures of progress and policy effectiveness which capture the real wealth of people's lived experience.

As we enter a period of increasing economic, social and environmental uncertainty, this need becomes ever greater and more urgent. A myopic obsession with growing the economy has meant that we have tended to ignore its negative impacts on our well-being such as longer working hours and rising levels of indebtedness. It has created an economic system which has systematically squeezed out opportunities for individuals, families and communities to make choices and pursue activities which play a role in promoting positive well-being and human flourishing. All this is underpinned by a fiscal system which, as recent events have exposed, has run out of control. Add to this the fact that the model we have been following - of unending economic growth - is taking us beyond our environmental limits and the case for very different measures of human progress and policy evaluation become compelling,

National accounting indicators such as Gross Domestic Product (GDP) have only ever revealed a very narrow view of human welfare. Worse, they have obscured other vital parts of the economy: the core economy of family, neighbourhood, community and society, and the natural economy of the biosphere, our oceans forests and fields. We now need to shift towards more meaningful measures of progress which capture the richness of people's lived experience. Do so and we also create a far more effective tool with which to guide policy.

The report aims to fundamentally re-evaluate orthodox ideas of what we should collectively value, and hence what we should measure. It lays out a framework for developing National Accounts of Well-being to provide:

- A new way of assessing societal progress. National Accounts of Well-being, by explicitly capturing how people feel and experience their lives, help to redefine our notions of national progress, success and what we value as a society.
- A cross-cutting and more informative approach to policy-making. The challenges now facing policy-makers, including the 'triple crunch' of financial crisis, climate change and oil price shocks, are unprecedented. Silo working has long been criticised; now – when the need for systemic change is clear and present – it must be overcome. National Accounts of Well-being – by capturing population well-being across areas of traditional policy-making, and looking beyond narrow, efficiency-driven economic indicators – provide policy-makers with a better chance of understanding the real impact of their decisions on people's lives.
- Better engagement between national governments and the public. By resonating with what people care about, National Accounts of Well-being provide opportunities for national governments to reconnect with their citizens and, in doing so, to address the democratic deficit now facing many European nations.

nef's framework for national accounts of well-being

Well-being is most usefully thought of as the dynamic process that gives people a sense of how their lives are going through the interaction between their circumstances, activities and psychological resources or 'mental capital'. Whilst a combination of objective and subjective factors are important for assessing well-being, it is the subjective dimensions which have, to date, been lacking in any assessment by national governments. National Accounts of Well-being address this gap.

The challenge is to match the multiplicity and dynamism of what constitutes and contributes to people's well-being with what gets

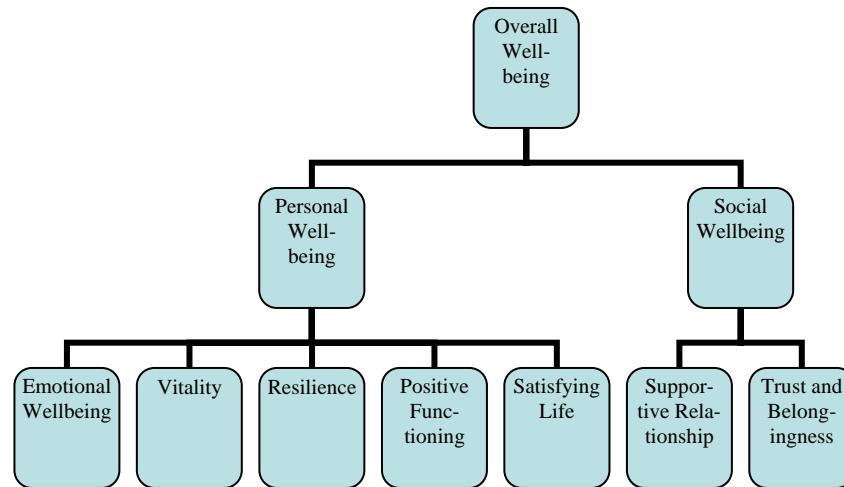
measured. Our recommended framework for National Accounts of Well-being is therefore based on capturing:

- More than life satisfaction. Understanding subjective well-being as a multifaceted, dynamic combination of different factors has important implications for the way in which it is measured. This requires indicators which look beyond single item questions and capture more than simply life satisfaction.
- Personal and social dimensions. Research shows that a crucial factor in affecting the quality of people's experience of life is the strength of their relationships with others. Our approach, therefore, advocates a national accounting system which measures the social dimension of well-being (in terms of individuals' subjective reports about how they feel they relate to others) as well as the personal dimension.
- Feelings, functioning and psychological resources. The traditional focus on happiness and life satisfaction measures in well-being research has often led to an identification of well-being with experiencing good feelings and making positive judgements about how life is going. Our framework for National Accounts of Well-being moves beyond that to also measure how well people are doing, in terms of their functioning and the realisation of their potential. Psychological resources, such as resilience, should also be included in any national accounts framework and reflect growing recognition of 'mental capital' as a key component of well-being.

These elements have been incorporated to produce empirical findings from a working model of National Accounts of Well-being. The findings are compiled from data collected in a major 2006/2007 European cross-national survey through a detailed module of well-being questions, designed by the University of Cambridge, **nef** and other partners (Huppert, Marks, Clark, Siegrist, Stutzer, Vitterso and Wahrendorf, 2008). This represents

the most comprehensive dataset on subjective well-being for any nation to date.

Figure 1: Indicator Structure



Our working model (see figure 1) is built on two headline measures which capture personal well-being and social well-being, reflecting crucial aspects of how people experience their lives. Personal well-being is broken down into five main components with a number of subcomponents: emotional well-being (positive feelings and absence of negative feelings); satisfying life; vitality; resilience and self-esteem (self-esteem, optimism and resilience); and positive functioning (which covers autonomy, competence, engagement, and meaning and purpose). Social well-being is made up of two main components: supportive relationships, and trust and belonging.

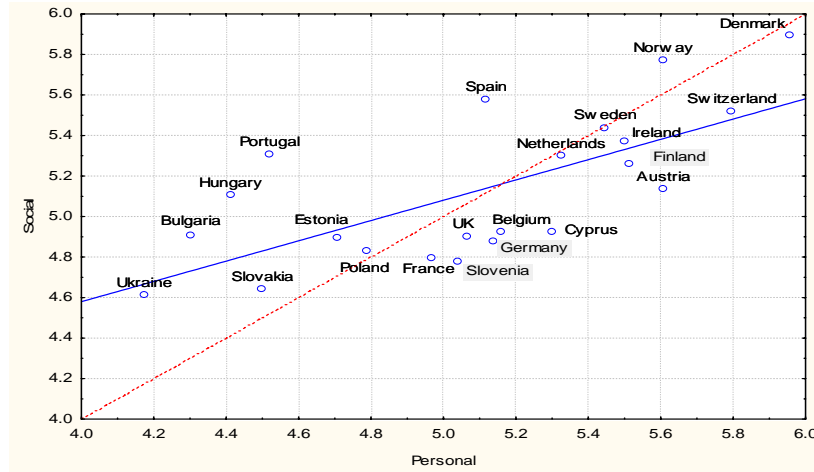
To enable analysis of how different nations are faring in relation to their well-being, indicators were created by standardising and transforming the data so that all results are presented on 0-10 scales, with a score of 5 always representing the average score across the 22 European countries included in the dataset.

Findings from our working model

nef's National Accounts of Well-being reveal some surprising results in the picture of the relative progress of European countries. Thus, whilst Denmark retains its oft-cited position as having the highest levels of well-being in Europe, other rankings of countries on personal and social well-being deviate from what might be expected. Sweden, for example, so often singled out to be praised for its policy success is within the top five nations on social well-being, but does not feature as one of the highest performers regarding the personal well-being of its citizens.

The findings reveal that countries with high levels of personal well-being do not necessarily have high levels of social well-being, and *vice versa* - see fig 2. Denmark and Ukraine display unusual stability in coming at the very top and very bottom, respectively, of rankings based on both personal and social well-being scores. In between them, all but two of the other twenty countries change positions. It is striking, for example, that all the Central and Eastern European countries except Slovenia have higher scores for social than for personal well-being and the Iberian nations Portugal and Spain have considerably greater average levels of social well-being than personal well-being. A key task for policy-makers highlighted by this finding is therefore one of identifying the economic, social, and political structures in these countries which succeed in promoting the elements of social well-being beyond the levels expected from examining personal well-being.

Fig 2: Personal and Social Well-being in Europe



Solid line shows best fit line for personal and social well-being correlation ($r=0.55$)

Dashed line indicates notional position of countries scoring equally on personal and social well-being

In order to understand the constituents of well-being more fully, we developed diagrams - *Well-being Profiles* - which display the character of well-being for a particular country or group. These allow the different components of well-being to be examined and implications for policy-makers drawn out.

Comparing Well-being Profiles helps to uncover differences in countries which are similar on other measures of national welfare. For example, Finland and France have very similar levels of GDP per capita and have the same score on the UN's Human Development Index (which combines measures of GDP, life expectancy and knowledge and education), but France ranks substantially below Finland on both personal and social well-being. Finland's Well-being Profile shows it coming only slightly above average on all components of well-being, apart from the

emotional well-being – *negative feelings* and *satisfying life* components, where its performance is substantially above average. A similar pattern can in fact be seen in the Well-being Profiles of each of the Scandinavian countries. France's Well-being Profile, on the other hand, presents a much more consistent picture, with scores close to the average on all well-being components, and none that are particularly high or low. Well-being Profiles therefore provide a clear picture of how policy to bolster population well-being in each country might need either to be closely targeted on particular components, or aimed at improving well-being more generally.

Further important policy-relevant findings come from examining well-being within specific national contexts, and from looking at the relationship between the objective circumstances of people's lives and their well-being:

Within the UK, clear differences emerged in the character of people's well-being between population groups. The Well-being Profiles of the youngest and oldest age groups in the UK reveal some striking differences in their well-being composition and levels with particular disparity for the *trust and belonging* component, with a very low score for the youngest age group and a high score for the oldest. A question for UK policy-makers is therefore whether they should specifically aim to build feelings of trust and belonging among young people, or understanding that these feelings change through the life course, target their resources elsewhere?

Fig 3: France and Finland's Well-being Profiles

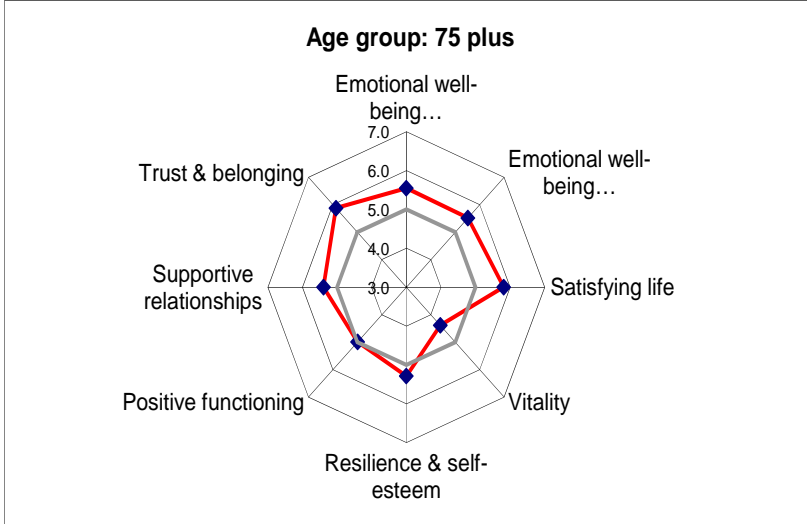
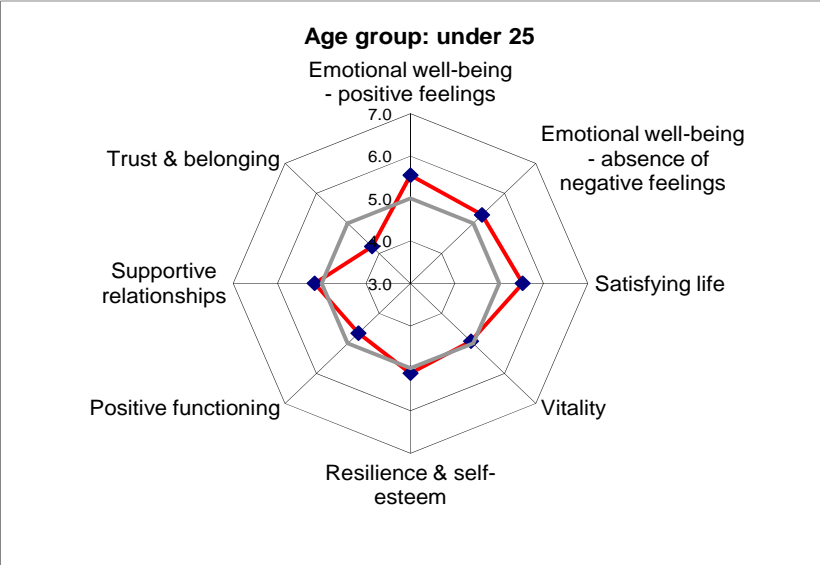
Country		Emotional well-being - positive feelings	Emotional well-being - absence of	Satisfying life	Vitality	Resilience & self-esteem	Positive functioning	Supportive relationships	Trust & belonging
DK	Denmark	5.8	6.7	6.7	5.4	5.52	6.13	6.02	5.87
CH	Switzerland	5.9	5.7	6.3	5.7	5.53	5.63	5.44	5.60
NO	Norway	5.6	6.7	5.9	5.6	5.13	5.53	5.52	5.98
IE	Ireland	5.8	6.1	5.7	5.4	5.34	5.32	5.28	5.45
AT	Austria	5.4	5.4	5.9	5.7	5.44	5.55	5.04	5.21
SE	Sweden	5.3	6.2	6.0	5.3	5.12	5.29	5.23	5.61
FI	Finland	5.3	7.1	6.1	5.4	4.91	5.40	5.09	5.39
NL	Netherlands	5.6	5.6	5.5	5.3	4.96	5.36	5.41	5.25
ES	Spain	5.3	5.0	5.5	4.9	5.21	4.77	5.84	5.45
CY	Cyprus	5.3	5.4	5.4	5.5	5.48	4.86	4.89	4.95
BE	Belgium	5.4	5.2	5.4	5.1	4.77	5.19	4.97	4.88
DE	Germany	4.6	5.4	5.1	5.2	5.38	5.09	4.74	4.97
GB	UK	5.4	5.4	5.4	4.8	4.95	4.88	5.15	4.73
SI	Slovenia	5.2	5.1	5.1	5.2	4.97	4.85	4.69	4.83
FR	France	5.3	5.0	4.9	5.1	4.71	5.01	4.77	4.81
PL	Poland	4.6	4.4	4.8	5.0	4.84	4.80	4.92	4.76
EE	Estonia	4.5	4.4	4.5	5.0	4.67	4.92	4.91	4.88
PT	Portugal	4.5	4.2	4.2	4.4	4.92	4.67	5.57	5.16
HU	Hungary	4.4	3.2	4.1	4.4	4.56	5.19	4.43	5.62
SK	Slovakia	4.6	3.9	4.3	4.7	4.44	4.76	4.63	4.62
BG	Bulgaria	3.6	4.1	3.3	4.9	4.72	4.89	5.27	4.67
UA	Ukraine	4.2	3.8	3.2	4.5	4.60	4.70	4.39	4.74
	Overall	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0

Fig 3: continues...

Country		Social progress	Personal	Social	WBI	Life Satisfaction	relations	Family relations	Close links
DK	Denmark	7.0	6.0	5.9	5.9	8.5	6.02	5.8	6.2
CH	Switzerland	5.7	5.8	5.5	5.7	8.1	5.44	4.9	5.8
NO	Norway	6.9	5.6	5.8	5.7	7.8	5.52	5.0	5.9
IE	Ireland	7.0	5.5	5.4	5.5	7.6	5.28	5.2	5.3
AT	Austria	6.5	5.6	5.1	5.5	7.7	5.04	4.3	5.6
SE	Sweden	6.4	5.4	5.4	5.4	7.9	5.23	4.7	5.6
FI	Finland	6.5	5.5	5.3	5.4	8.1	5.09	4.5	5.5
NL	Netherlands	6.2	5.3	5.3	5.3	7.6	5.41	4.9	5.7
ES	Spain	6.0	5.1	5.6	5.3	7.5	5.84	5.9	5.8
CY	Cyprus	5.9	5.3	4.9	5.2	7.5	4.89	5.0	4.8
BE	Belgium	5.2	5.2	4.9	5.1	7.4	4.97	4.8	5.1
DE	Germany	4.7	5.1	4.9	5.1	6.9	4.74	4.3	5.1
GB	UK	5.7	5.1	4.9	5.0	7.2	5.15	4.7	5.5
SI	Slovenia	5.1	5.0	4.8	5.0	7.1	4.69	5.0	4.5
FR	France	3.8	5.0	4.8	4.9	6.4	4.77	5.3	4.5
PL	Poland	4.6	4.8	4.8	4.8	6.8	4.92	5.9	4.4
EE	Estonia	6.1	4.7	4.9	4.8	6.6	4.91	5.2	4.7
PT	Portugal	4.1	4.5	5.3	4.8	5.6	5.57	5.8	5.4
HU	Hungary	4.4	4.4	5.1	4.6	5.5	4.43	5.0	4.1
SK	Slovakia	5.4	4.5	4.6	4.5	6.2	4.63	5.3	4.2
BG	Bulgaria	3.4	4.3	4.9	4.5	5.0	5.27	5.9	4.9
UA	Ukraine	3.8	4.2	4.6	4.3	4.6	4.39	5.1	4.0
	Overall	5.0	5.0	5.0			5.0	5.0	5.0

Fig 4: UK Well-being Profiles by Age

	15-24	25-34	35-49	50-64	65-74	75+
Emotional well-being - positive feelings	5.547871	5.231639	5.228777	5.403938	5.804191	5.546356
Emotional well-being - absence of negative feelings	5.279938	5.23987	5.400865	5.510835	5.633968	5.515258
Satisfying life	5.52946	5.183453	5.279931	5.273007	5.637329	5.813052
Vitality	4.93025	4.842116	4.880937	4.776544	4.563977	4.388309
Resilience & self-esteem	5.119498	4.956986	4.854139	4.806812	5.014414	5.287346
Positive functioning	4.661987	4.815459	4.777345	5.050255	5.110803	4.991207
Supportive relationships	5.163157	5.15931	4.922471	5.181451	5.530343	5.394302
Trust & belonging	4.226123	4.290969	4.512135	4.960845	5.369591	5.874567
ZSOCIAL	4.614992	4.651215	4.692144	5.046954	5.415802	5.660406
ZWBI	4.952451	4.885021	4.904048	5.056067	5.266195	5.340788



The relationship between the conditions of people's lives and their subjective experiences of life is complex and demands a textured assessment of well-being to be fully understood. by encouraging intrinsic values, trust in institutions and participation in local activities.

Where do we go from here?

So The Royal Government of Bhutan are not alone in recognising the need for, and calling for, a new approach. Creating a new systems of Gross National Happiness indicators or National Accounts of Well-being, however, are an ambitious and significant undertakings that will ultimately require extensive co-operation between the governments involved, academics, citizens and many others.

A number of key recommendations are identified in the report to stimulate further debate and action. Most of these are centred on what the national governments might do in Europe but there are parallels for the Royal Government of Bhutan as well.

Actions for national governments

- Make manifesto commitments to National Accounts of Well-being.
- Task national statistical offices to measure well-being.
- Measure and act on well-being within the broader context of societal and environmental sustainability.

Developing global, regional and local momentum

- Encourage the European Parliament and European Commission to take a leading role
- Work with the OECD's global project on 'measuring the progress of societies' and other such international initiatives.
- Promote greater dialogue between international, national and local actors in the development of well-being accounts.

Achieving broad engagement across society

- Mobilise public support in order to exert political pressure and to stimulate debate about the role of well-being measures in matters of national policy, greater mobilisation of the public is required.
- Stimulate further exploration, analysis and dialogue about both the early findings and potential structure of National Accounts of Well-being.

The ideas outlined in this paper regarding GNH and the development of National Accounts of Well-being speak to the very heart of what it is we value as a society, calling for a fundamental rethink about our notions of progress and a transformation in the way in which we plan, deliver and evaluate policies which aim to improve people's lives.

In Europe we now have compelling evidence to show that our current economic model and economic accounting frameworks are hugely limited, and that a shift to measuring success in terms of well-being is not only desirable, but necessary, if societies are to truly flourish. We, at the centre for well-being at **nef** are optimistic that European policy makers are finally beginning to notice this lack and will start to focus on how best to create new frameworks that start to measure what really matters to citizens – their well-being. But this paper must end on a note of caution in that it is vital to be aware that measurement itself is not enough to transform societies, for genuine change to happen the measures must be placed at the very heart of the policy making process.

This paper is based upon the full report: National Accounts of Well-being: bringing real wealth onto the balance sheet. Available to download free at the website (www.nationalaccountsofwellbeing.org).

References

- Allin, P. (2007). Measuring societal wellbeing. *Economic & Labour Market Review*, 1: 46–52.
- Conservative Party Quality of Life Policy Group (2007). *Blueprint for a Green Economy*.
- Barroso, JMD. (2007). 'Beyond GDP – Opening speech' Beyond GDP Conference, Brussels, 19 November 2007. Speech transcript available from <http://www.beyond-gdp.eu/>
- BBC (2006). Data from a poll carried out by GfK NOP in 2006 on behalf of the BBC, reported at http://news.bbc.co.uk/1/hi/programmes/happiness_formula/4771908.stm
- Defra (2007). *Sustainable Development Indicators in Your Pocket*. London: Defra.
- Diener, E. and Seligman, MEP (2004). Beyond money: Toward an economy of well-being. *Psychological Science in the Public Interest* 5, 1–31.
- Diener, E., Lucas, RE., Schimmack, U., and Helliwell, J. (2009 in press). *Well-Being for Public Policy* (Oxford: Oxford University Press).
- Donovan, N., and Halpern, D. (2002). *Life Satisfaction: the state of knowledge and the implications for government* (London: Prime Minister's Strategy Unit)
- Ethical Market Media (2007). *Survey carried out in Australia, Brazil, Canada, France, Germany, the UK, India, Italy, Kenya and Russia by GlobeScan Incorporated for Ethical Markets Media between June and August 2007*. http://www.globescan.com/news_archives/emm_beyondgdp.htm
- European Social Survey (2006). *Round Three: Special module on Personal and Social Well-being*: Full data available at www.europeansocialsurvey.org
- Foresight Mental Capital and Wellbeing Project (2008). *Final Project report*. London: The Government Office for Science.

- HM Government (2005). *Securing the Future: Delivering UK Sustainable Development Strategy*. Norwich: The Stationary Office.
- Huppert, FA., Marks, N., Clark, A., Siegrist, J., Stutzer, A., Vitterso, J. and Wahrendorf, M. (2008). *Measuring Well-being Across Europe: Description of the ESS Well-being Module and Preliminary Findings*. PSE Working Papers 2008-40, PSE (Ecole normale supérieure).
<http://www.springerlink.com/content/m71q66m3030344w8/>
- Kahneman, D., Krueger, A., Schkade, D., Schwarz, N., and Stone, A. (2004). A survey method for characterizing daily life experience: The day reconstruction method. *Science* 306: 1776–1780.
- Kuznets, S. (1934). 'National Income 1929–1932'. 73rd US Congress, 2nd session, Senate document No. 124, p 7.
- Layard R (2005) *Happiness: Lessons from a new science*. London: Allen Lane.
- Lepper, J. and McAndrew, S. (2008). *Developments in the economics of well-being*. London: HMSO.
- Lyons, M. (2007). Lyons inquiry into the future of local government. *Place-shaping: a Shared Ambition for the Future of Local Government*. London.
- Marks, N. and Shah, H. (2004). *A well-being manifesto for a flourishing society*. London: nef.
- Marks, N. Abdallah, S., Simms, A., and Thompson, S. (2006). *The (un)Happy Planet Index: An index of human well-being and environmental impact*. London: nef. www.happyplanetindex.org
- Michaelson, J., Abdallah, S., Steuer, N., Thompson, S., and Marks, N. (2009). *National Accounts of Well-being* (London: nef)
- OECD (2007). From the proceedings of the Second OECD Forum on Statistics, Knowledge and Policy: Special theme: *Measuring and Fostering the Progress of Societies*, Istanbul, June 2007. Full declaration and other materials available from www.oecd.org/progress

- Stiglitz, J., Sen, A., and Fitoussi, J-P. (2008). Issues paper - Commission on the Measurement of Economic Performance and Social Progress. <http://www.stiglitz-sen-fitoussi.fr/en/index.htm>
- Swinson, J. (2008). *Early Day Motion 731*. <http://edmi.parliament.uk/EDMi/EDMDetails.aspx?EDMID=34888&SESSION=891>

