



# Chasing Progress

Beyond measuring  
economic growth

The power of well-being

1

# Every society clings to a myth by which it lives; ours is the myth of economic progress.

That's why the year-on-year performance of the Gross Domestic Product (GDP) continues to dominate national policy and fascinate the media. But a new composite Measure of Domestic Progress (MDP) – designed to factor in the environmental and social costs of growth – highlights how far off-track we might be in our relentless pursuit of GDP (Figure 1). The results are salutary:

- GDP has soared in the last 50 years; but MDP has struggled to take off at all.
- The divergence is especially transparent over the last 30 years: GDP increased by 80 per cent, but MDP fell sharply during the 1980s and has not yet regained its 1976 peak.
- In spite of improvements in air and water quality, environmental costs have risen by 300 per cent in the last half century (Figure 3).
- Social costs have risen 600 per cent in the same period with a staggering 13-fold increase in the costs of crime and a four-fold increase in the costs of family breakdown (Figure 4).
- The Labour Government has so far failed to curb income inequality which rose by a factor of seven during the last 50 years.
- MDP bears a closer resemblance to life-satisfaction data – which has not risen for 30 years (Figure 5) – than it does to GDP.
- The 'hidden' costs of future climate change and resource depletion constitute a continuing threat to long-term economic stability.

In short, the persistent divergence of MDP from GDP raises difficult questions for the Government's Sustainable Development Strategy, and casts serious doubts on the myth of economic progress.

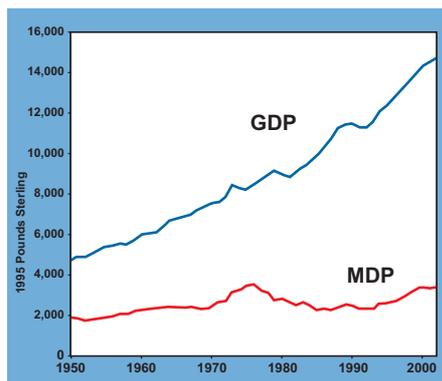


Figure 1: MDP v GDP in the UK:1950-2002

## Growth is on track...

There's little doubt about it: We are living in an age of unprecedented economic prosperity. The national income has tripled, in real terms, in the course of only half a century. We are three times better off than our grandparents were and it shows. Higher incomes, warmer homes, wider choice, better communications, faster cars, newer gadgets: these are the windfalls from an extraordinary surge in consumer spending over the last few decades. And like the election theme song on which this Government came to power, it really does seem like 'things can only get better'.

## ...but what about quality of life?

But as everyone from Mahatma Gandhi to cult pop-group the Black-eyed Peas (and even Tony Blair) has pointed out, more isn't always better. Too much food makes the nation obese. Burgeoning traffic leaves the roads congested. More guns make our streets unsafe. Endless choice leaves us hurried and harried. Mountains of waste leave our tips overflowing. Burning too much carbon threatens our climate. Excessive commercialism erodes social value and strips our lives of meaning. No one can deny that we're witnessing an extraordinary period of economic prosperity. But

sustained growth is not the same thing as sustainable growth, even in economic terms. And when it comes to environmental and social well-being, it isn't growth so much as the quality of our lives and the health of our environment that counts. The Labour Government has explicitly recognised this. In the foreword to the UK's Strategy for Sustainable Development, entitled quite simply *A Better Quality of Life*, Tony Blair acknowledged:

*'We have failed to see how our economy, our environment and our society are all one. And that delivering the best possible quality of life for us all means more than concentrating solely on economic growth..'*

The report argues that 'achieving a better quality of life, now and for generations to come' means meeting four simultaneous objectives:

- Social progress that meets the needs of everyone.
- Effective protection of the environment.
- Prudent use of natural resources.
- Maintenance of high and stable levels of economic growth and employment.

Each of these objectives is challenging in its own right. This Government came to power, in part at least, because the Tories failed to deliver on key social goals and left whole sections of the community out of the growth bonanza. Moreover, failures to protect the global climate, the ozone layer, water quality in our rivers and air quality in our cities have haunted successive governments for decades.

So how are we to set about achieving these demanding goals? Are they even achievable simultaneously? This is the enormous challenge of sustainable development in the 21st Century, and it's far from having been overcome.

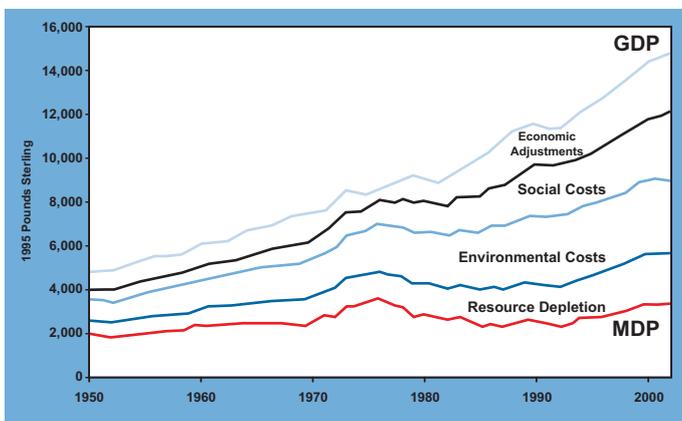


Figure 2: Components of the UK MDP

### Measuring progress

It is scarcely news, of course, that GDP is not a very good measure of progress. Even in the 1960s, the late Senator Robert Kennedy warned that the GDP:

*'is indifferent to the decency of our factories and the safety of streets alike. It does not include the beauty of our poetry or the strength of our marriages, the intelligence of our public debate or the integrity of our public officials. The [GDP] measures neither our wit nor our courage, neither our wisdom nor our learning, neither our compassion nor our devotion to our country. It measures everything, in short, except that which makes life worthwhile.'*

Economists and politicians alike have been slow to accept this indictment, and the relentless pursuit of GDP has been a defining characteristic of UK politics over the last 50 years. That's why the Government's Strategy for Sustainable Development represents such a profound departure from conventional thinking. But having accepted, as Labour did, that growth by itself will not deliver quality of life, the question remains: how do we measure our progress towards this more elusive goal?

One approach is to adjust existing measures of growth to account for a variety of costs and benefits not usually factored into them. As a step in this direction, **nef** (the new economics foundation) has calculated a new 'Measure of Domestic Progress' (MDP), designed to reflect our progress towards sustainable development by including economic progress, environmental costs, resource depletion and social factors in a single composite measure (see *What is MDP*). Combined together these contributions provide a powerful indication of trends over time in relation to the Government's sustainability objectives.

But the results of the exercise make for uncomfortable reading. The following key statistics illustrate a growing divergence between GDP and MDP over the last half century:

- GDP per capita has tripled since 1950, but MDP has not yet doubled.
- GDP rose by 80 per cent since 1975 alone: but MDP fell consistently during the 1980s and has struggled to return to its mid-1970s peak.
- The average growth rate in MDP was barely half that of GDP over the last 50 years.
- Environmental costs have increased by 300 per cent since 1950; and social costs by 600 per cent.
- MDP has staged something of a revival in the last decade, growing faster than GDP at times but progress appears to have faltered over the last two years of the study.

When it comes to assessing our progress towards the Government's sustainability objectives, the MDP is a potentially useful tool because it is possible to unpack the composite index into different sustainability factors. Figure 2 shows a series of adjustments subtracted in turn from GDP to arrive at the MDP index. This analysis reveals that social costs, environmental costs and resource depletion have all played a significant part in depressing the index below the GDP measure.

### Cleaner and greener?

Most striking of these effects is the role played by environmental costs. For long periods of time, these constitute the single largest adjustment to the measure. But how does this square with government claims that our factories are more efficient than they used to be, our rivers cleaner, and our cities greener? As Figure 3 illustrates, these claims are partly true. In fact, environmental policies put in place from the 1970s onwards, however unpopular they may have been at

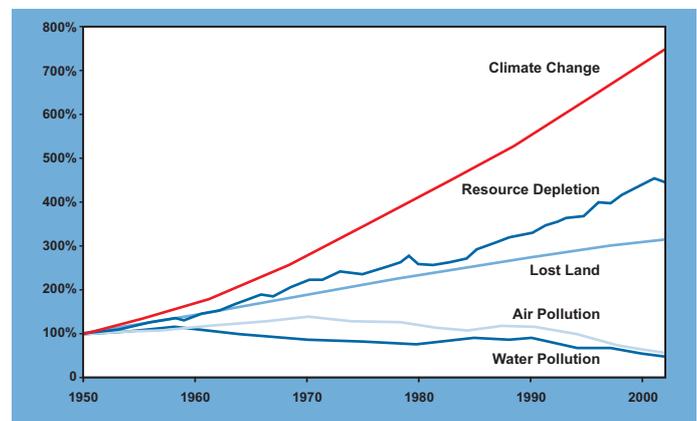


Figure 3: Environmental costs of progress

the time, have had a key role in reducing levels of polluting emissions into the atmosphere and into rivers. And as a result air pollution and water pollution costs have declined by around 50 per cent since the early 1990s.

But there is little room for complacency here. These important gains are over-shadowed by other more intractable costs: the slow loss of productive rural land and natural habitats, the continuing depletion of mineral resources, and the rising 'hidden' costs of climate change.

These hidden costs are different from many of the other costs included in the MDP: we do not feel their impact now. The brunt of these costs will be borne by future generations. Recent policies to combat climate change will reduce the rate at which these future costs accumulate. But our cumulative debt to future generations now stands 650 per cent higher today than it was in 1950 – even though it has been 'discounted' here to take into account the fact that the costs fall mainly in the future.

Our current attitude towards these future costs is a bit like taking out an endowment policy to pay off a mortgage and then forgetting to pay the premiums. As each year passes, the amount we ought to be putting aside to make the eventual repayment just goes on getting bigger. One day it will be too late; the mortgage company will repossess the property. And at some point the costs of climate change may derail economic stability altogether.

### Lost in translation?

So what about social progress? Are we any more successful in our pursuit of this objective? Undeniably, we have seen signs of social

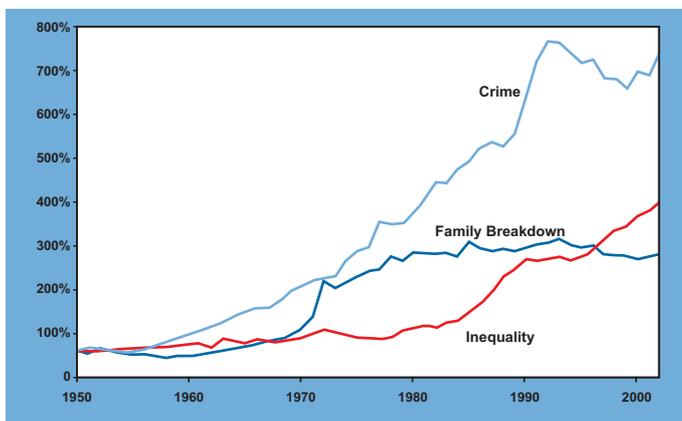


Figure 4: Social costs of progress

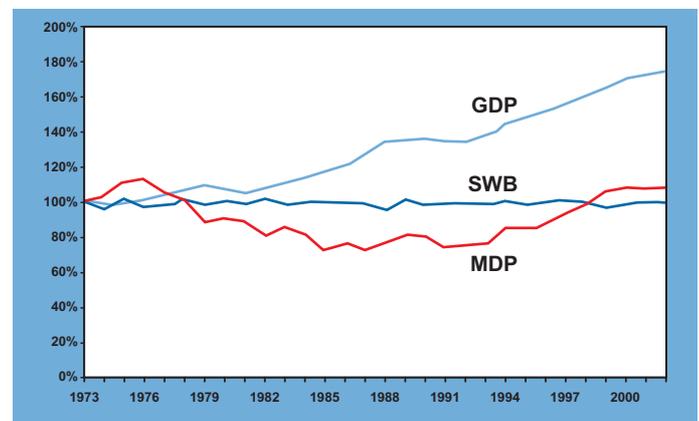


Figure 5: SWB, GDP and MDP in the UK: 1973-2002

improvement over the last few decades. Aside from the higher average standard of living that economic growth delivers, longevity has increased slightly and unemployment has fallen since the mid-1970s.

Paradoxically, however, for a ruling party founded in social ideals and committed to reducing social exclusion, the story is not unequivocally positive. Crime, inequality and the costs of family breakdown (Figure 4) have all grown dramatically over the period. And in spite of manifesto commitments to be 'tough on crime and tough on the causes of crime' and to protect vulnerable families and communities, the years of Labour rule have not yet managed to turn this trend around.

To be fair, some efforts were made. The Cabinet Office Social Exclusion Unit, for example, has put out report after report aimed at reducing poverty, and tackling inequalities in access to important basic services. But the sad truth is that the loss in collective well-being associated with the unequal distribution of our incomes has increased by 600 per cent over the period and shows no immediate signs of abating under Labour rule.

Even this trend is dwarfed, however, by the 13-fold increase in crime over the last 50 years. And here the pattern is even more worrying. Crime peaked in 1992 and costs then fell consistently for seven years in a row. But after this brief respite, they began to rise again sharply, mainly as a result of a disturbing increase in violent crimes.

Some kind of social progress is noticeable in relation to family stability. The divorce rate peaked in 1993, albeit at a level that was five

and half times the divorce rate in 1950. In the subsequent decade, it appeared to stabilise and even fall slightly, leading to a decline in the social and psychological costs associated with family breakdown. But even here, the last couple of years have witnessed a worrying reversal of the previous positive trend.

So what became of those Labour pledges? Is it just that more time is needed before the impacts of policies already in place begin to take effect? Is it that the manifesto commitments were nothing more than 'sound and fury', signifying nothing in terms of real progress? Or is it possible that something even more insidious is happening?

### Chasing progress

Could it be that economic growth, and our unquestioned allegiance to it, blind us to the social and environmental implications of protecting and promoting it? To create more and more growth we need more and more consumption. To achieve more and more consumption, we need to keep buying more and more stuff. But what if more and more stuff doesn't lead to happy families and fulfilling lives?

This is precisely the suggestion that arises from yet another important set of data. Quantitative measures of subjective well-being (SWB) or 'life-satisfaction' have shown precious little movement over the last 30 years (Figure 5), prompting some to speculate that the pursuit of social progress is a little like trying to run up the down-escalator. Or like the Red Queen in Lewis Carroll's classic *Through the Looking Glass*: we're running faster and faster; but we seem to end up in exactly the same place.

Could it even be that the institutional structure of growth creation is incompatible with key dimensions of social progress? Forty years ago, the economist Simon Kuznets proposed that rising income inequality was an inevitable consequence of the early stages of economic growth. He predicted, however, that beyond a certain stage, inequality would begin to fall again. The only trouble is it clearly hasn't; and perhaps it simply can't.

Bolstering the economic miracle of the last 50 years now appears to require continued access to cheap credit, low taxation levels, and the whipping up of material desires in the increasingly affluent middle classes. But what happens when cheap credit encourages bad debt? What happens when low taxation restricts the public purse? And what happens when unbridled materialism leads to the gradual erosion of social values?

There is, in the current climate, no real alternative to economic growth that doesn't involve the risk of even greater hardships for the most vulnerable in our society. And yet, perhaps what the history of the last 50 years is telling us is that we have to start thinking the unthinkable. The myth of economic growth is frayed at the edges and the promise of social and environmental progress is one of the first casualties of its dereliction.

### Beyond the mirage

Every society has a cultural myth by which it lives; ours is the myth of economic progress. So long as the national income continues to rise, we feel safe in assuming not just that we are doing well, but that we are living better than our parents or our grandparents did; that we are progressing – not just as individuals but as a society.

In all probability most of us feel some comfort in that belief. And why shouldn't we? One of the roles of cultural myth is to furnish us with a sense of meaning and provide continuity in our lives. But a society that allows itself to be steered by a faulty myth risks foundering on the shores of harsh reality. This is the danger that the MDP is pointing us towards: economic growth is running unacceptable environmental risks, doesn't guarantee social progress, and isn't even making us any happier.

**nef** is not alone in highlighting this issue. A recent Cabinet Office report on life-satisfaction alerted the Government to the well-being paradox: life-satisfaction is resolutely static in spite of continuing economic growth. Last year the Sustainable Development Commission (SDC) urged the Government to abandon single-minded pursuit of growth and 're-define prosperity'. And as this briefing goes to press, the tiny kingdom of Bhutan in the Himalayas is hosting an international conference to operationalise its own concept of 'gross national happiness' (GNH) in place of GDP.

But what exactly can we do beyond highlighting the issue? A clear starting point would be to reformulate the sustainability objectives (as the SDC proposes), and in particular to tease apart the objective of maintaining full employment (which is clearly desirable) from that of pursuing growth (which is problematic at best). In addition, there are numerous avenues for improving social progress and promoting environmental protection which need not conflict with economic goals, including:

- *Reducing income inequalities and improving access to basic services.*
- *Promoting social cohesion by supporting local community development.*
- *Speeding up the transition to a low-carbon society.*
- *Developing a long-term strategy for the protection of rural land.*
- *Re-evaluating the impact of government policy signals on personal and social well-being and on community values.*
- *Encouraging and promoting pro-social and pro-environmental consumer behaviour.*
- *Establishing a protected 'environmental futures' fund to guard against the future costs of climate change.*

Perhaps most importantly, there is a clear need to engage in a longer-term debate about the pursuit of national well-being, and to devise new ways of promoting and measuring social progress. This may or may not entail developing our own concept of GNH as Bhutan is doing. But if a country of barely two million people who have never witnessed the level of economic prosperity enjoyed by the affluent West is prepared to engage so creatively with the subject of human well-being, then perhaps it is time that we did.

### Acknowledgements

*This briefing note has been prepared by Tim Jackson, an Associate of nef (the new economics foundation) and Professor of Sustainable Development at the University of Surrey. It is based on numerical analyses carried out by the author and colleagues at the Centre for Environmental Strategy in the University of Surrey. The author is particularly grateful for help with data collection and collation from Phil Sinclair and Nic Marks, and for editorial inputs from Hetan Shah, Andrea Westall, Nic Marks and Andrew Simms. nef would like to thank the Environmental Research Trust for the funding which made this work possible.*

### What is MDP?

The MDP is one way of approaching the difficult question: how can we measure our progress towards an improved quality of life? There are three main approaches to this problem.

The Government's answer has been to establish a set of 147 separate indicators, measuring things like adult numeracy and literacy, social investment as a percentage of GDP, crime levels, river quality, populations of wild birds, and so on, as well as the GDP itself. Recognising that such a huge set of indicators is unwieldy, the Government has selected 15 'headline indicators' from the larger set to represent different aspects of its four strategic objectives. But even 15 indicators can present potentially confusing messages to policy-makers. What does it mean if seven of the indicators go upwards, and eight go downwards? Is this better or worse than the case in which eight go upwards and seven go downwards? Does it depend on which go up and which go down? And how does our recent performance (the indicator set is after all only a few years old) compare with longer term trends over the last 50 years?

A second approach is to measure various dimensions of subjective well-being (SWB) such as life-satisfaction or happiness (Figure 5). This is a useful and valid way of assessing some aspects of social progress. In particular, it can provide us with a psychological 'snapshot' of the nation's 'mood' at any one time. Extended measures of well-being, incorporating different psychological goals such as life fulfilment or personal development and accounting for broader social or environmental factors show considerable

promise for the future. **nef** is actively engaged in developing this agenda.

A third approach is to construct 'adjusted' economic indicators. The MDP falls into this third category. Adjusted economic indicators provide a single performance index by adapting conventional economic measures such as GDP or consumer expenditure to include social and environmental costs and benefits that normally lie outside the accounting framework. A variety of attempts have been made to construct such indicators over the last 20 years. These include Nordhaus and Tobin's Measure of Economic Welfare, Daly and Cobb's Index of Sustainable Economic Welfare (ISEW), and the Genuine Progress Indicator (GPI) developed by the US-based lobby group Redefining Progress. The MDP is modelled closely on these developments and in particular on earlier work by the author and his colleagues to define a UK ISEW. Several additional developments have been incorporated into this new measure and we have re-labelled it MDP rather than ISEW or GPI because we do not believe that a rising MDP either guarantees sustainability or ensures 'genuine' progress.

Like the earlier measures, MDP takes as its basis consumer expenditure in the UK. It then adjusts this basis to account for a series of different factors which affect domestic progress towards sustainable development. The key differences between MDP and GDP are that in the MDP:

*Continued overleaf*

- Spending to offset social and environmental costs (defensive expenditure) is taken out.
- Longer-term environmental damage and the depreciation of natural capital are accounted for.
- A number of economic adjustments associated with ensuring prudent investment and trade balances are made.
- Changes in the distribution of income are accounted for, reflecting the fact that an additional pound in the pocket means more to the poor than to the rich.
- A value for household labour is included.

Key differences between MDP and the ISEW are the inclusion in MDP of the costs of crime and family breakdown, and some adjustments to the methodologies used to account for climate change and resource depletion, in response to criticisms of the earlier work.

Although based on economic assumptions and widely available statistical data sets, the MDP is not a rigorously defined economic measure. Neither can it provide a robust reflection of quantitative changes in each of the 147 indicators of sustainable development selected by the Government. It is certainly not a guarantee that Britain is on course for a sustainable future.

However, it does offer insights that cannot be gleaned from a disparate indicator set. In particular, it is clear that the MDP does reflect the influence of policies designed to affect social progress, economic growth, environmental protection and prudent use of natural resources. In doing so, it allows us to present a systematic assessment of domestic progress towards sustainable development over a long period of time, and to compare this against GDP.

### Components of the UK MDP

Type	Indicator	Influence on MDP
Economic indicators	Consumer expenditure	+ve
	Value of services from domestic labour	+ve
	Public (non-defensive) expenditures on health and education	+ve
	Difference between expenditures on and service flow from consumer durables	-ve
	Net capital growth	mainly +ve
	Net international position	mainly -ve
Social costs	Effects of inequality in the distribution of incomes	-ve
	Defensive private expenditures on health and education	-ve
	Costs of commuting	-ve
	Costs of car accidents	-ve
	Costs of noise nuisance	-ve
	Costs of crime	-ve
	Costs of family breakdown	-ve
Environmental costs	Costs of personal pollution control	-ve
	Costs of air pollution	-ve
	Costs of water pollution	-ve
	Estimated costs of climate change	-ve
	Costs of ozone depletion	-ve
Prudent use of natural resources	Loss of natural habitats	-ve
	Loss of farmlands	-ve
	Depletion of finite natural resources	-ve