



Shaping Sustainable Economies – Holistic Strategies and Principles

A society acts sustainably if it ensures the long-term stability and productivity of ecological, sociopolitical and economic systems. In the past, issues of sustainability were typically handled separately, neglecting individual measures' effects on other elements implied by a comprehensive conception of sustainability. The challenge ahead is to develop a holistic strategy for sustainable economic activity that takes into account interdependencies between the various aspects of sustainability, and does not seek to solve problems of sustainability at other aspects' expense.

Focus



The concept of sustainability must be understood comprehensively. Along with its environmental aspects, it includes social and economic sustainability.

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1. Sustainability – conceptual clarification

The concept of sustainability is multifaceted. The so-called Brundtland Report of 1987 defined it in extremely broad terms: “Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (United Nations 1987: 54).

Originally, “sustainability” referred primarily to *environmental* sustainability, in the sense that current generations would nurture and protect the natural environment so as to leave it intact for subsequent generations. Environmental sustainability should be comprehensively understood, entailing the preservation of biological diversity, the preservation of natural resources (both renewable and non-renewable) and climate protection, among other aspects.

In recent years, however, the view that sustainability should be conceived as extending beyond the environmental sphere to include social and economic sustainability has gained currency. *Social sustainability* refers primarily to social development that enables all members of society to participate in social life. This participation includes all areas of life – thus, political and cultural life as well as work life, participation in lifelong learning, access to health care and voluntary activities. *Economic sustainability* refers to an economic system that preserves the bases of the production

of material and immaterial wealth over the long term, and which enables subsequent generations to have a prosperous life. Along with the natural basis of all human production processes (ecological sustainability), this includes the preservation of human labor and material production facilities. Social sustainability is a precondition for economic sustainability, as societal processes of value creation based on an organized division of labor become increasingly difficult in a society subject to centrifugal forces.

This broad conception of sustainability also implies the goals of participatory and intergenerational justice. Participatory justice means that each individual, within the context of his or her own personal freedom, has the ability to pursue a self-determined life and engage in broad societal participation. The goal of intergenerational justice demands that opportunities for individual self-realization are assured, but not at the expense of present or future generations (see Boecker and Schraad-Tischler 2012: 33-43).

All three aspects of sustainability will face enormous challenges in the coming decades as a result of global economic and societal developments. The consequences of these developments may be regionally diverse, but will affect the world as a whole.

A society acts sustainably when its economic and societal order is arranged so as to assure the long-term stability and performance of environmental, sociopolitical and economic systems.

2. Challenges to environmental sustainability

Core challenges in the area of environmental sustainability arise from the fact that contemporary lifestyles place excess demands on nature and natural resources. The combination of population growth and economic growth (including changes in consumption patterns as wealth increases) has led to sharp increases in the global demand for most natural resources – despite substantial improvements in energy efficiency in some areas.

A key consequence of higher resource consumption is higher emission of CO₂ and other greenhouse gases, leading in turn to a rise in the average global temperature and an acceleration of climate change. In the process, the consequences of climate change are also exacerbated: glaciers melt, leading to a rise in sea level; the risk of floods rises; water resources are diminished, impairing drinking water supplies; and the incidence of extreme weather events (heat waves, droughts, storms, floods) rises, along with associated losses of human and animal life, productive facilities, infrastructure and other assets. Other effects may include a worldwide deterioration in health conditions, climate-induced migratory movements, and the further extinction of plant and animal species.

The growing demands on nature can also lead to an increasing scarcity of natural resources, the consequences of which can be illustrated using water as an example. Water shortages lead to agricultural crop failures, which lead in turn to food scarcities and famines. Too little water or the consumption of contaminated water leads in addition to disease or even to death. In the industrial sector, water scarcities lead

to production shortfalls. In electricity generation, for example, insufficient supplies of cooling water require reductions in production, leading in turn to power shortages. All this renders the underlying resource increasingly valuable, and because it is so essential to human existence, increases the risk of conflict. For the moment, water shortages remain a phenomenon primarily affecting the less developed economies. However, in recent years even European atomic power plants have had to reduce production due to prolonged drought.

If a growing world population with rising per capita material wealth and increasingly resource-intensive consumption patterns seek to consume the earth's resources as in the past, global resource exhaustion will soon result. This despoiling of the planet will saddle future generations with enormous consequential costs, while destroying the basis for our lives in the middle and long term.

3. Challenges to social sustainability

Globalization and economic growth have in the past increased wealth worldwide, increased employment, reduced absolute poverty and thus improved social cohesion overall. However, other contemporaneous trends have undermined social sustainability.

In recent decades, globalization and international competitive pressures associated with technical progress have increased skill requirements within the workforce. At the same time, low-skilled jobs have been replaced by the use of machines. As a result, the relative demand for skilled labor has grown, and that for lower-skilled people has fallen. Thus, wages for highly skilled workers have risen, while those for the low-skilled have fallen, or have risen less than has been the case for skilled labor. This development will continue to mark the decades to come. In the past, developed states have compensated for diverging gross incomes primarily through transfer payments. However, this approach will be less financially feasible in the future. Two key factors are responsible for this: the financial repercussions of the global financial and economic crisis, and the societal aging that will become more pronounced in all developed economies in coming decades.

Stimulus packages and bailouts for banks and businesses implemented in the course of the financial and economic crisis have sharply increased state expenditures in nearly all developed economies, leading to a rapid increase in sovereign debt. This has reduced states' financial flexibility, and thus their political maneuvering room. If states can no longer act to redress growing income disparities as they have in the

past, these inequalities will grow. This in turn is likely to exacerbate social tensions. And if, as a result of rising debt, the state is required to expend an ever-greater share of its budget on interest payments, this will constrain its ability to make investments in education. Private financing of education as a supplement to state funding may thus gain in importance, but this also increases the risk of exclusion within the educational system. A similar argument applies to other sectors such as health care, culture and public infrastructure.

In developed societies, moreover, a change in the population's age structure is expected due to lower birthrates and rising life expectancies. This will result in significant challenges for social security systems, as an ever-decreasing number of contributors to the system will have to support rising claims for social security benefits, particularly in the area of pensions. Increases in the percentage of the population that is no longer employed lead either to a rise in social security contribution rates or a decrease in benefit levels, with any rise in contribution rates having negative effects on the labor market. Thus, it can be assumed that social security benefit levels will sink, which can lead to social tensions. For this reason, it is to be feared that citizens' social participation opportunities will develop very differently, compromising social sustainability.

4. Challenges to economic sustainability

Over the past decades worldwide economic growth has been associated with many positive effects. Alongside an increase in material prosperity have come improvements in living conditions and health, a rise in life expectancy, and an increase in education levels, to name but a few examples. For developing countries in particular, globalization has meant a unique opportunity to improve their level of development and raise peoples' living standards.

However, globalization's economic developments have also been associated with trends that undermine economic sustainability. Among other consequences, the worldwide division of labor and worldwide trade flows associated with globalization have led to strongly increasing competitive pressure for producers. To ensure international competitiveness, producers must therefore seek to consistently reduce their production costs. Increases in productivity through investments in education and equipment can have this effect, but other means adopted to this end can include wage reductions, working hour increases and perpetually falling social standards. The consequences of this strategy include the expansion of the low-wage sector and an increase in social inequality (a contravention of social sustainability), an increase in actual hours worked, and an intensification and compression of work processes. Other strategies for reducing costs include a shift of costs to the general public – in the form of increased environmental pollution, for example – and an increase in the utilization of raw material reserves. In the process, all the above-noted consequences of climate change are accelerated.

Sustainable economic development also has a global dimension, which relates to the economic development of all national economies. Though globalization has increased material wealth worldwide in recent decades, this wealth is distributed very unequally. In 2010, per capita GDP (as measured in U.S. dollar purchasing power parity terms) varied significantly between individual economies. In Luxembourg and Qatar, this figure was more than \$80,000, while in Burundi, Liberia and the Democratic Republic of Congo, it was less than \$425 (International Monetary Fund 2011).

In a study examining the next phase of globalization through 2030, the World Bank warned that although a general rise in income can be assumed, these gains in wealth will be very unevenly distributed. The study also noted the potential for growing income inequalities between countries (World Bank 2007: xvi-xvii).

The widening of this gap should be prevented for reasons even beyond that of justice (social sustainability). Increasing economic imbalances have a number of negative social consequences. For example, they can lead to growing discontent and radicalization. If this were to lead to a disturbance in the international division of labor, it could also disrupt the exports of developed industrialized countries. Enlightened self-interest should thus drive these countries to commit themselves to stronger economic convergence.

5. Sociopolitical challenges

The coming decade's expected developmental trends will undermine environmental, economic and social sustainability to a considerable degree. Making matters worse, all three problems of sustainability are mutually reinforcing: Contravention of environmental sustainability through overexploitation of nature undermines the foundations of material production processes, and thus violates the conditions for economic sustainability. In the absence of a sustainable production of material wealth, unemployment and all its consequent social problems result. At the same time, the foundations of state finances collapse, so that state transfer payments aimed at redressing social inequalities can no longer be afforded. Economic and social tensions then make it increasingly difficult to push through political reforms that might be necessary to restore environmental sustainability, for example – and the vicious cycle thus continues.

If these sustainability problems are not solved promptly and globally, the negative developments outlined here may reinforce one another, and ultimately threaten to destroy the foundations of a prosperous life. Options for activity aimed at breaking this vicious cycle must take such interdependencies into account. The primary problem with approaches to date is that individual issues of sustainability have generally been treated separately, neglecting individual measures' effects on other elements implied by a comprehensive conception of sustainability. A policy that might seek to reduce unemployment through an increase in resource-intensive economic growth serves the goal of economic sustainability only in the short term. In the medium and long term, however, this strategy represents a contraven-

tion of environmental sustainability, which in turn undermines economic sustainability. Using environmental taxes to increase the cost of natural resource consumption holds a similar potential for conflict. This incentive for a lifestyle grounded in resource conservation is essential if the necessary transition to a sustainable economic system is to be made. At the same time, this can make resource-intensive consumer goods such as long-distance travel or private automobile use prohibitively expensive for low-income groups. The concomitant exclusion of these people from certain consumer activities can lead to social tensions, straining social sustainability. These conflicting goals or dilemmas can ultimately be solved only in the context of a democratically legitimate process of negotiation that includes all those involved (see Boecker and Schraadt-Tischler 2012: 46).

The challenge for policy worldwide, therefore, is to find an overall solution that takes into account the interdependencies between the different aspects of sustainability, and to develop a coherent strategy under which individual sustainability problems are not simply solved at the expense of other aspects. To this end, a variety of starting points present themselves (for more detail, see Bertelsmann Stiftung 2012):

- The basis for successful handling of the challenges of global megatrends lies in knowledge of the causes, mechanisms and interactions of these trends. Today, this knowledge exists at best as rough conjectures. Exploration of these interactions must be intensified, as they are usually simply ignored or underestimated.

- Long-term thinking is becoming increasingly important for sustainable economic activity. In this respect, the institutional establishment of a policy council focused on the long term would be important. Examples could include something along the model of the Netherlands' Central Planning Bureau (CPB), or the creation of an Ombudsman for the Rights of Future Generations similar to that in Israel.
- Greenhouse gases, environmental pollution and speculative bubbles do not respect national borders. Global challenges must therefore be tackled together and require the worldwide cooperation of all stakeholders. This requires a strengthening of coordination and consultation mechanisms at the international and supranational levels.

The aim of this holistic strategy is the establishment of a sustainable economic and social system. Paul Ekins of University College London describes sustainable economic activity or the economic growth thus implied with the help of four principles: "Borrow systematically only to invest, not to consume. Keep money sound: control inflation, public borrowing, trade deficits, indebtedness. Establish transparent accounting systems that give realistic asset values. Maintain or increase stocks of capital (manufactured, human, social, natural)" (Ekins, 2009).

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Policy Brief 2012/01: Modern Labor Market Policy

(Only available in German)

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