

# Economics for Sustainability

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When looked upon in traditional terms of international competitiveness and growth in gross domestic product (GDP), our economies may be performing well. But it is increasingly understood that this is not enough. Sometimes GDP growth goes together with environmental degradation. We hear about China and India, for instance, with growth rates of 8–9 per cent per year that are accompanied by worrying trends in environmental degradation. The success of one country in export markets may furthermore cause unemployment in other countries and increased exports may not even improve employment in the exporting country (as a result of improved labour productivity). Whatever the truth in specific countries, it has become clear for many of us that the performance of an economy has to be measured in multidimensional terms. Monetary indicators, such as GDP, exports, investments at the level of the national economy and monetary profits at the level of the business corporation are still of interest and relevant, but never enough. Limiting attention to monetary indicators can even be considered a dangerous strategy. It is like cutting off the branch one is sitting on by undermining the functioning of life-supporting systems for society at large.

This is where ‘sustainability’ has entered the scene as a broader idea of performance for the economy as a whole and for individuals and organizations at the micro level. Rather than focusing exclusively on economic growth, development has to become ‘sustainable’ according to a broad spectrum of indicators.

## **Sustainability as a contested concept**

One traditional idea in science is that all concepts should be clearly defined and indicators should be chosen so that they can be measured in an undisputable way. This is probably one reason among many behind the emphasis on monetary indicators in economics. While the ambition to define and measure in a clear way is reasonable, we should at the same time learn to deal with some concepts that are not so clear and not so easily measured. Relying exclusively on easily measurable indicators in relation to complex societal issues would be a mistake. As argued by William Connolly (1993) in his study of political discourse, we should live with some ‘contested concepts’ and – it can be added

– this can be a way of opening the door for new thinking. While Connolly pointed to concepts such as ‘politics’, ‘democracy’, ‘participation’, ‘power’, ‘freedom’, ‘legitimacy’ and ‘interest’, it is here argued that ‘sustainability’ can also belong to this category. Actually, sustainability is just one in a long list of ‘contested concepts’ that is discussed in the present book. I also speak about broader theoretical approaches, so-called ‘schools of thought’ or paradigms as being contested, arguing that there are more perspectives than one.

In public debate and even scientific discourse one can find competing interpretations of ‘sustainability’. As a scholar and citizen, I have preferences for specific ways of defining sustainability. Still, rather than excluding competing ideas from the beginning, I will deal with them and discuss more than one way of interpreting this term. Actually, an ideological power game is going on concerning the concept of sustainability and, as a social scientist, I find this power game interesting. Some politicians, established business actors and mainstream neoclassical economists may understand that apprehensions about climate change and other kinds of environmental degradation cannot easily be dismissed. However, there are those who vigorously defend a reliance on monetary indicators. In its simplest form this means that welfare in a society is connected with ‘sustained economic growth’ in GDP terms while success in business is a matter of ‘sustained monetary profits’. Such ‘monetary reductionism’ (in the sense of attempting to reduce everything to its monetary aspect), while being common, is not unchallenged. ‘Business as usual’ is only one possible interpretation and, as I see it, it departs from the intentions of the World Commission on Environment and Development (WCED, 1987), the commission that launched the vision of sustainable development.

### **The vision of sustainable development: A short history**

In 1972, a UN conference on the Human Environment was arranged in Stockholm. At this time, the relationship between human beings and the environment was not a new concern. Still, the Stockholm conference can be seen as one of the first systematic attempts to deal with the international dimensions of environmental degradation. Pollution problems, such as ‘acid rain’ and mercury contamination were among the many issues raised. Rachel Carson (1962), Barry Commoner (1971) and other natural scientists identified what is now referred to as unsustainable trends and the international community succeeded through the conference and along other paths to mitigate parts of the problems. Not only natural scientists but also economists, such as Ezra Mishan and Herman Daly, participated in the dialogue. Mishan’s early book *The Costs of Economic Growth* (1967) suggests that ideas about progress emphasized in economics have to be reconsidered.

In everyday life and in science we too often simplify things. For instance, many actors argue and even believe that progress is equal to economic growth. Mishan's arguments, and those of many others, suggest that progress cannot be measured in one-dimensional monetary terms. We have to accept a degree of complexity. A multidimensional idea of progress is preferable and the habit of reducing all kinds of impacts to one dimension, whether money or some other unit, is rather part of the problems faced. Environmental impacts should be described and considered in their own terms and the same is true of the social, health and cultural aspects now considered part of the sustainability concept.

Sustainable development became a catchphrase with the release of the Brundtland report (WCED, 1987). Before its release much of the discourse was about perceived threats to the environment and natural resources. It was argued that economists have to take ecosystems seriously. Some suggested a focus on 'qualitative growth' rather than exclusively pointing to the quantitative monetary aspect (Leipert, 1983). Ignacy Sachs coined the term 'eco-development' in the sense of ecological development (Sachs, 1976, 1984) and in Eastern Europe, Hristo Marinov (1984), among others, argued in favour of 'ecologization of the economy'. Reference was made to 'ecological imperatives for public policy', i.e. principles for decision-making primarily formulated in negative terms (non-degradation of the natural resource base in your own region, non-degradation in other regions, observing a precautionary principle, etc.) (Söderbaum, 1980, 1982a).

In addition to multidimensional thinking as a way of broadening perspectives and interpretations, sustainable development involves a related effort to 'extend horizons' by bringing in ethics and ideology in a more explicit way. The idea here is that individuals should not limit their horizons to self-interest in a narrow sense and to immediate impacts. This political commitment means that the individual, in thinking and values, should step away from self-interest only, to include 'otherness' in the sense of internalizing the interest of others (Söderbaum, 2005). Such 'otherness' may refer to:

- the present generation of other individuals in the 'home' region;
- the present generation of individuals in other regions and ultimately in the global community;
- future generations of individuals in the home region;
- future generations of individuals in other regions and ultimately in the global community;
- present and future non-human forms of life.

The list can be extended. We can care about old landscapes, buildings and other cultural artefacts. Thinking in ethical terms is a way of bringing in the social aspects of sustainable development. Again, the important thing is to

discuss social impacts in their own terms rather than in monetary terms. Welfare, poverty and human rights are multidimensional concepts and should not be reduced to some alleged monetary equivalent.

The above list may be perceived as overly idealistic – nobody can care about all other individuals in the home region and even less globally. Few of us would claim to consider all future generations in our decisions. The challenge is rather to get a feeling for the right direction and to get closer to sustainable development in a step-by-step fashion. We can ask ourselves, how can my lifestyle, in terms of market and non-market behaviour, be made more sustainable or less unsustainable? Similarly, actors in business corporations and other organizations, municipalities and national governments can broaden and extend their horizons in various ways. Policies and incentive systems formulated or designed by national governments can reflect visions of extended ethical horizons.

We all know that development patterns at the micro level – of individuals and organizations – or at the national and international levels are characterized by a lot of inertia and ‘path-dependence’. Changing one’s lifestyle with the purpose of reducing emissions of carbon dioxide (CO<sub>2</sub>), for instance, is not easily done. The Rio de Janeiro conference in 1992, through its Agenda 21, pointed to a strengthening of democracy as the way ahead. Some changes in development patterns always occur in one direction or other and the challenge, from a sustainability point of view, is to add to positive changes and reduce the frequency of negative ones.

## **A short history of economic ideas**

A critical question is whether we have an economic science that can constructively address sustainability problems of the kind indicated. Neoclassical economics (NE) is today the dominant paradigm in university departments of economics and in many other arenas where political dialogue takes place. What does ‘neoclassical’ stand for? Why this terminology? The prefix ‘neo-’ suggests that ‘neoclassical’ economists are the followers of ‘classical’ economists. The classical economists were active and dominant from the 18th century until about 1870, when the first generation of neoclassical economists entered the stage claiming some newness in their message.

Let us first broadly characterize the classical economists. Who were they? Textbooks in the history of economic ideas (for example Fusfeld, 1994) generally point to three people, Adam Smith, David Ricardo and Thomas Malthus. They were all broad-minded economists and philosophers who referred to their subject as ‘political economics’. Adam Smith, who previously had contributed to moral philosophy, wrote his book *An Inquiry into the Nature*

and *Causes of the Wealth of Nations* in 1776. Ricardo offered a theory about the claimed advantages of trade between nations and Malthus worried about the sufficiency of land (for food production) as a natural resource in relation to population growth.

Smith and Ricardo pointed to advantages of specialization or division of labour. These ideas even influenced the development pattern of science itself. Indeed, neoclassical economics from its very beginning, about 1870, is an example of this trend towards specialization. The idea was to get closer to a 'pure' science. Reference was made to 'economics' rather than 'political economics'. Neoclassical economists emphasized objectivity and value neutrality and wanted their discipline to be as close to physics as possible. Much like physics, they hoped to formulate universal principles and laws. This 'physics envy' made neoclassical economists emphasize analysis in terms of 'forces' (of supply and demand) leading to an 'equilibrium' and more generally, the use of a mathematical language.

So far, our story appears straightforward. First came the classical economists. Then the neoclassical economists emerged with the kind of economics that is still dominant in the Western world. This sounds, however, as if one paradigm is replacing the other and as if only one paradigm is regarded as valid at a time. In reality, tensions between different schools of thought in economics have always existed. One paradigm may be dominant but there have normally been competing views. Not all economists became enthusiastic about the claimed advances of Karl Menger, William Stanley Jevons, Léon Walras and others in the first generation of neoclassical economists. The German Historical School around 1850 and later the American institutionalists, with Thorstein Veblen, John R. Commons and Weslie Mitchell, followed a different path and understood economics in evolutionary terms (Dorfman et al, 1964; Fusfeld, 1994, pp95–99).

Among more recent institutional economists who took an interest in environmental and development issues are K. William Kapp (1950), the first modern ecological economist (see also Martinez-Alier, 1999), and Gunnar Myrdal (1972, 1978), one of the pioneers of holistic and interdisciplinary development studies. In spite of systematic discrimination of non-neoclassical economists at the universities, a number of competing organizations have been strengthened and institutionalized. Among associations for institutionalists, the US-based Association for Evolutionary Economics (AFEE) with the *Journal of Economic Issues*, and the European Association for Evolutionary Political Economy (EAEPE), with the more recent *Journal of Institutional Economics* (JOIE), can be mentioned.

This story is admittedly short but I will come back to the meaning of neoclassical economics and comparisons with institutional economics repeatedly. One more point deserves attention at this stage: I believe it was a serious

mistake by the neoclassical economists to abandon the label ‘political’. Neoclassical theory reflects a specific ideological and political orientation. Similarly, institutional economics and other competing schools of thought are specific in ideological terms. In fact, the reason why an economist prefers a specific paradigm or theoretical perspective is usually scientific *and* ideological.<sup>1</sup>

## Tenets of neoclassical economics

Since neoclassical economics will be scrutinized in the pages to follow, it is useful to first summarize several salient features of neoclassical economics. It is up to the reader to judge whether the neoclassical way of understanding the economy or economics is ideologically neutral or not.

NE is a relatively coherent theoretical perspective. Some of its fundamental assumptions can be described as follows:

- The actors considered in NE are ‘firms’ and ‘consumers’.
- Firms and consumers are related to each other through ‘markets’ for commodities (goods and services) and markets for ‘factors of production’ (labour, capital, natural resources).
- There is also a role for the ‘national government’ as a regulator of markets, to administer taxation and to make decisions about how tax income should be used.
- Markets (for commodities and factors of production) are understood mechanistically in terms of ‘supply’ and ‘demand’.
- The ‘economy’ consists of the mentioned actor categories and their market relationships.
- The interests of consumers (consumer preferences) and firms (monetary profit) are assumed to be given.
- Assumed self-interest is the starting point for the consumer’s and firm’s calculations of optimal behaviour.
- The consumer is assumed to be maximizing utility subject to a budget constraint and the firm is maximizing monetary profits (i.e. the difference between revenues and costs for each period).
- Decision-making is understood as systematic comparison of alternatives, observing the so-called ‘opportunity cost principle’. Reasoning in marginal terms is common: what will be the benefits and costs of producing (purchasing) one extra unit of a specific commodity?
- Efficiency at the national level is understood in terms of a monetary analysis of ‘costs’ and ‘benefits’, so-called cost–benefit analysis (CBA).
- GDP is regarded as the main indicator of the ‘health’ of an economy.

Environmental economics is essentially an extension of NE and follows the same logic. It is recognized that there are some environmental problems. They are connected with so-called ‘externalities’ (i.e. impacts on third parties, parties not being part of a market transaction). The idea is then that negative impacts on third parties should be internalized (to become part of the market transaction) and the ‘polluter pays principle’ (PPP) observed. When the market fails, this failure should then be corrected. It is similarly argued that governments may fail. For example, governments may financially support activities (of firms and consumers) that systematically contribute to the degradation of the environment.

The ‘physics envy’ aspect of neoclassical economics suggests additional features: first, NE relies heavily on positivism as a theory of science, and second, NE emphasizes mathematics as the language of presentation.

More recent advances in the theory of science are connected with the humanities and social sciences. These theories, such as social constructivism and hermeneutics, are largely neglected. The preference for presentation in mathematical terms is another self-imposed limitation to the approach.

In ideological terms, NE can be described as a specific market ideology, downplaying or excluding other market and non-market ideologies. In fact, NE plays an important role as a conceptual framework and ideology, legitimizing the present kind of market or corporate capitalism. One question is whether the ideology of market capitalism inherent in neoclassical economics will bring us in the direction of a sustainable economy or not (O’Connor, 1994). Is there another kind of ‘capitalism’ with a better chance of responding to the sustainability challenge?

## Neoclassical economics as narrative

To get a feeling for how things are related to each other, I will present neoclassical economics as a narrative:

*Life is essentially about consumption. The higher your income, the more you can consume. Your preferences for consumer goods and services are a private matter and you should choose the bundle of commodities that maximizes your utility.*

*The role of firms (business companies) is to produce goods and services for consumption. This should be done in ways that maximize monetary profits. No conflict of interest exists within the company and there should be no limit to the rights of firms to exploit natural resources and penetrate markets in all parts of the world. Profits can be accumulated to further strengthen the power position of the company and its shareholders.*

*The exchange of goods and services is mechanistically regulated in markets through the forces of supply and demand. Competition generally reduces prices so that consumers can buy more commodities for a given income, adding to their welfare.*

*The monetary value of commodities exchanged in the market in a country during a year, the GDP, will tell us about the happiness or welfare of the inhabitants of that country. The success of an economy can thus be measured in monetary terms (as increase in GDP compared with last year) and compared with the performance of other countries. Projects, programmes and policies can similarly be compared and evaluated in monetary terms using CBA, where the present value of each project can be estimated. Politicians need simple and clear indicators. People are used to and can understand the language of money.*

This story is simplified and points to negative features in a way that can be labelled cynical. But it nevertheless contains some of the main ideas or ways of thinking in neoclassical economics.

## **Recent demand for alternatives to neoclassical economics**

While neoclassical economics has been criticized over the years, it still holds a strong position. Among alternatives to neoclassicism, institutional economics will be emphasized in this book. There are also other schools of thought that question the dominance, if not monopoly, of the neoclassical paradigm at departments of economics all over the world. There is an Association for Social Economics with the *Review of Social Economy* as a first example. There is an International Association for Feminist Economists (IAFFE, [www.iaffe.org](http://www.iaffe.org)) with its journal *Feminist Economics* and contributions in this field may refer to 'neoclassical feminist economics' or 'non-neoclassical feminist economics' (see also Ferber and Nelson, 1993). In both cases, the assumed value or ideological orientation of women represents a starting point. The International Society for Ecological Economics (ISEE), with the journal *Ecological Economics*, is pluralistic (Norgaard, 1989) in the sense that non-neoclassical as well as neoclassical economists are members. This society must tread carefully to manage its delicate balance in a world of neoclassical dominance.

To get an overview of the many claimed alternatives to orthodoxy, the *Heterodox Economics Newsletter* ([www.heterodoxnews.com](http://www.heterodoxnews.com)) and the *Post-Autistic Economics Review* (PAER) can be interrogated ([www.paecon.net](http://www.paecon.net)). The latter review is a manifestation of a protest movement that began at French universities in 2000 (Fullbrook, 2003). Students questioned the 'autistic'

nature of lectures and textbooks in economics and asked for alternatives of a 'post-autistic' kind. The French minister of education initiated an investigation. Some professors of economics in different parts of the world responded to the call for change and have contributed in various ways, for instance in books edited by Edward Fullbrook (2003, 2004, 2007). It may be of interest to note that the book from 2003 has been translated into Chinese.<sup>2</sup>

Another recent sign of a crack in the neoclassical defence lines is a call for an 'economics for sustainability' by the German federal government and its Ministry of Education and Research. Neoclassical economics was judged 'inadequate' in relation to present sustainability challenges. One of the established neoclassical economics institutes, Deutsches Institut für Wirtschaftsforschung (DIW), Berlin, was asked to initiate a series of workshops to address the new challenge ([www.sustainabilityeconomics.de](http://www.sustainabilityeconomics.de)). Ecological economists with non-neoclassical worldviews participated to assess the state of 'sustainability economics'. In the UK, focusing on the role of economics, a Green Economics Institute ([www.greeneconomics.org.uk](http://www.greeneconomics.org.uk)) has been formed with a connected *International Journal of Green Economics* (IJGE).

In conclusion, it can be argued that there are many alternatives to neoclassical economics and that for some of the alternatives common features can be easily listed. Opening the door for pluralism at university departments of economics is a big challenge. The International Confederation of Associations for Pluralism in Economics (ICAPE) ([www.icape.org](http://www.icape.org)) is a society for this purpose.

## **A comparative and pluralistic approach**

The approach of the present book can be described as comparative in the sense that elements of institutional economics are systematically compared to corresponding elements of neoclassical economics. Alternatives to the neoclassical view of individuals, organizations, markets, international trade, progress in society, decision-making, social and institutional change processes, etc. will be given. Some readers may find this comparative analysis tiresome or unnecessary. They may welcome a positive message but feel that criticism should be limited or excluded.

Contrary to this view, I believe that criticism plays an essential role in the academy and in society at large. It is a way of learning. The kind of criticism voiced should here be seen as part of the pluralistic strategy. No paradigm or theoretical perspective can claim universal applicability, i.e. usefulness for all kinds of problems. Each paradigm or theoretical perspective may have something to offer and preference for one theoretical perspective over another is –

as we have seen – partly a matter of ideology. The thing to be criticized is rather pretensions for the monopoly of one particular paradigm.

Milton Friedman, one of the neoclassical economists, has written much about ‘freedom’ and refers to a kind of freedom in the market place for some categories of actors (Friedman and Friedman, 1980). A more fundamental freedom that is not part of Friedman’s ideological message is the ‘freedom of thought’. No single person or collective of economists can claim monopoly with respect to conceptual framework or a right to exclude other storylines about economics at universities. Furthermore, if economics is about ‘choice’, why should one accept dictatorship with respect to theoretical perspective?

Scientific development is not exclusively a competition between one clear-cut paradigm versus another. It is a more complex process where each theoretical perspective gradually changes and new mixtures or combinations of theoretical elements or perspectives emerge. Familiarity with more than one theoretical perspective will add to our understanding and opportunities for constructive research.

As a way of summarizing, it can be argued that ‘learning by comparison’ is a good idea at both the level of practice and when learning about and further developing conceptual frameworks and theories. In considering the purchase of a new bicycle, car or refrigerator, many of us compare the features of the product with something that we already know about, for example our present bicycle, car or refrigerator. Similarly, when ‘buying’ a new conceptual framework, it might be a good idea to compare the new framework with one that people are acquainted with.

## Notes

- 1 ‘Ideology’ is here used in a broad sense to refer to ideas about means–ends relationship and is not limited to established political ideologies, such as liberalism or social democracy.
- 2 Ecological economics and economics for sustainability in relation to China are discussed by Shi (2002a, 2002b).

### Further readings

Sustainability economics can be described as economics for sustainable development or economics for sustainability. It represents a broad interpretation of ecological economics where environmental and ecological variables and issues are basic but part of a multidimensional perspective. Social, cultural, health-related and monetary/financial aspects have to be integrated into the analysis. As indicated in the text, sustainable development as a concept and buzzword is

very much connected with the Brundtland report (WCED, 1987). One early ecological economics text that has been quite influential is *For the Common Good. Redirecting the Economy Toward Community, the Environment and a Sustainable Future* by Herman Daly and John Cobb (1989). Thomas Prugh, Robert Costanza and Herman Daly later wrote a textbook in ecological economics, *The Local Politics of Global Sustainability* (Prugh et al, 2000). For a multifaceted and historical account of social theories in relation to nature and environment, see *Environment and Social Theory* by John Barry (2007).

A second theme in this book concerns economics in more general terms. It is an attempt to develop institutional theory as an alternative to mainstream neoclassical economics and at the same time a plea for pluralism in economics. Among early critics of neoclassical economics, K. William Kapp and Gunnar Myrdal are mentioned in the main text with their books *The Social Costs of Private Enterprise* (1950) and *Against the Stream. Critical Essays on Economics* (1972), respectively. Both saw themselves as institutional economists.

For those not so well acquainted with neoclassical theory, a textbook in microeconomics is recommended. While texts in microeconomics are quite similar and can largely be regarded as homogeneous commodities, it should be observed that there is also some prudent criticism from within the mainstream. Amartya Sen's *On Ethics and Economics* (1987) is an example of this. He is critical of the almost exclusive reliance on an 'engineering tradition' where ethical aspects more or less disappear. He recommends a development path for economics where ethics is taken seriously.

## Question for discussion

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- Mainstream neoclassical economics has been described in Chapter 1 in an admittedly negative manner. This may be considered unfair but the idea is to uncover some of the essential assumptions behind the approach and thereby specific scientific and ideological features. Is neoclassical economics only about science and truth in a value-neutral sense or do you agree that ideology is involved? If the latter is the case – how can one deal with this understanding?