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Decision-making in relation to health and environment: Toward sustainability economics

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The challenge of sustainable development suggests that economics is defined as "multidimensional management of resources in a democratic society. A "sustainability economics" is needed which differs from mainstream neoclassical theory and method. Individuals are understood as "political economic persons" and organizations as "political economic organizations" guided by an "ideological orientation" or "mission." Markets are interpreted in network terms and decision making as a "matching" process. Positional Analysis is advocated as approach to investments at the societal level for example in roads and energy systems. It is argued that the proposed conceptual framework adds to our dialogue about policies for sustainability. In a democracy, radical institutional change need to be considered in attempts to make development of our political economic system sustainable rather than unsustainable.

KEYWORDS

sustainable development, sustainability economics, political economics, political economic person, political economic organization, democracy, ideological orientation, multiple-stage decision process

Introduction

The present political economic system locally, nationally and globally is unsustainable in some respects. Climate change, pollution of land, air and water, and loss of biodiversity are examples. When health is concerned, we are witnessing a pandemic with severe consequences.

Mainstream neoclassical economics plays a role of contributing to make the present political economic system legitimate. At issue is now if we should encourage the social construction of new kinds of economics in our attempts to make development sustainable. A "sustainability economics" or "ecological economics" is here considered as alternative or complement to neoclassical economics.

Ecological economics has developed into a research tradition of its own since the early 1990s (Costanza, 1991). A large number of articles have been published in *Ecological Economics*, the transdisciplinary journal of the International Society for Ecological Economics. While all ecological economists are concerned about sustainable development, the advocated approaches may differ. The author of this article is a representative of one of these schools (Söderbaum, 2000).

The concept of "paradigm" can be understood as theoretical perspective. The ambition can be to explain and predict processes and is then connected with the idea of "paradigm-shift" (Kuhn, 1970), where one paradigm may replace another. But in the present study, paradigm rather stands for social construction of a conceptual framework for problem-solving purposes. Paradigms in this sense may be complementary to each other and coexist. "Paradigm coexistence" then becomes a relevant concept at a transdisciplinary and disciplinary level. In the present case, the proposal for a new conceptual framework starts with a definition of economics and continues with how individuals, organizations, markets, decision-making etcetera can be understood.

Elements of neoclassical theory and method

In neoclassical theory and method, "economics" is defined as "efficient allocation of scarce resources." Two kinds of agents are considered: individuals as "consumers" maximizing utility, subject to a monetary budget constraint, and organizations as "firms" maximizing profits in monetary terms. Individuals and organizations are connected and interact in markets which are understood mechanistically in terms of supply and demand. Investments in infrastructure, such as roads and energy systems are evaluated in monetary terms through Cost-Benefit Analysis (CBA). Government intervention in markets is understood mechanistically. Growth of the economy in monetary GDP-terms is regarded as the main objective which in turn is expected to increase employment, another objective at the national level.

At issue is now if an economics with sustainable development (rather than economic growth) as its main purpose can be constructed. How will it differ from the mainstream paradigm?

Features of sustainable development

"Sustainable development" became a key phrase in public debate through the so called Brundtland report, "Our Common Future," where it is argued that:

> Humanity has the ability to make development sustainable – to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs (World Commission on Environment Development., 1987, p. 8).

A first characteristic of sustainable development is that it is *inclusive* in the sense of concern for future generations and people living in other parts of the word. Our lifestyles and institutional framework today should not irreversibly degrade living conditions for future generations, nationally and globally.

A second characteristic of sustainable development is that it is *multidimensional*. In 2015 United Nations sanctioned no less than 17 Sustainable Development Goals (SDGs) with sub-targets and a 2030 Agenda for change (United Nations, 2015). Although GDP-growth as a traditional goal is still there (number 8 of the 17 SDGs), the 2030 Agenda can be regarded as a clear move away from monetary concepts and analysis toward multidimensional thinking. Neoclassical theory and method focus on the monetary dimension and recommends aggregation of all impacts in monetary terms, where all kinds of impacts can be traded against each other. This "monetary reductionism" and "trade-off philosophy" is here criticized. Non-monetary impacts should be understood and illuminated in their own terms.

A third characteristic of sustainable development is that it is *democracy oriented*. A transformation from present kind of unsustainable development toward sustainable development is not only a technical matter for economics as a science. It is also about needed change in ideological orientation of actors in the economy and society. Sustainable development, defined in a specific way, is an ideological orientation that differs from neoliberalism with profits in business and economic growth as the main objectives.

Economics can then be alternatively defined as:

> "Multidimensional management of resources in democratic societies where the expected interests of future generations are taken seriously".

Neoclassical economics in relation to sustainable development

How does mainstream neoclassical economics relate to the mentioned features of sustainable development? Neoclassical economics is not *inclusive* in the sense of attempts to consider future generations and people living in other parts of the world. The emphasis is on self-interest of various actors and mechanistic ideas about equilibrium at specific points in time. Discounting is used in CBA as a way of relating future impacts to the present situation. A positive discount rate means that future impacts are devalued and reduced in importance when compared with early impacts. This is a specific way of dealing with the future among all possibilities.

Neoclassical economics does not emphasize *multidimensional* analysis but rather recommends a simplification by transforming non-monetary impacts of various kinds to their alleged monetary equivalents. This is a way of arriving at an optimal solution. But to arrive at an optimal solution, you need to refer to a specific ideology, which is the idea of correct prices (usually derived from existing markets) built into CBA. Bringing in a version of sustainable development as ideology into analysis means that the CBA

solution is replaced by conclusions of a conditional kind where the ranking of alternatives becomes a matter of each ideological orientation considered. This is where democracy enters the scene.

How does neoclassical economics deal with *democracy*? When consulting neoclassical textbooks published by US authors, such as Mankiw and Taylor (2011), "democracy" is neither in Glossary, nor the Index. When looking for "ideology" the same observation can be made. It is not there. The idea seems to be that democracy and ideology belong to some other discipline such as political science. But economics is a "political" science. Reference should correctly be made to "political economics" and "political economy" which was the language used until about 1870 when the neoclassical period started.

The illusion of value-neutrality

Neoclassical economists tend to see their paradigm, and parts of it, for example Cost-Benefit Analysis (CBA), as neutral. This is an illusion according to Von Egan-Krieger (2014) and also the position of Gunnar Myrdal as institutional economist:

> Valuations are always with us. Disinterested research there has never been and can never be. Prior to answers there must be questions. There can be no view except from a viewpoint. In the questions raised and the viewpoint chosen, valuations are implied.

> Our valuations determine our approaches to a problem, the definition of concepts, the choice of models, the selection of observations, the presentation of conclusions – in fact the whole pursuit of a study from beginning to end (Myrdal, 1978, p. 778–779).

I agree completely with Myrdal although I prefer to refer to "ideology" and "ideological orientation" rather than values or valuation. Each conceptual framework and each paradigm in economics is specific not only in scientific terms but at the same time in ideological and political terms. Cost-Benefit Analysis as part of neoclassical economics for example, is closely related to economic growth ideology in GDP-terms.

Some neoclassical economists tend to deny the existence of competing theories and methods arguing that ideology and democracy is of little interest since "there is no alternative." But just as there are many ideological orientations among politicians and other actors in a society, it becomes more realistic to expect more than one paradigm in economics (Söderbaum, 2020, 2021). Sustainable development as ideological orientation and the conceptual framework of "sustainability economics" is just one among alternatives to neoclassical theory and method.

In any society there are accepted ways of viewing and measuring. As economists we can refer to accepted accounting systems at the level of organizations and nations. But when confronted with new challenges, such as sustainable development as ideological orientation, the acceptance and legitimacy of specific conceptual frameworks or measuring systems may be gradually reduced.

In conclusion then research and education in economics is always influenced by the engagement and ideological orientation of economists whether orthodox or heterodox. Economics is always political economics. Value neutrality is an illusion. These days, democracy is threatened in some parts of the world. If we as economists take democracy seriously and attempt to strengthen democracy at local, national and global levels rather than weaken it, then this may affect development in various parts of the world. Today we have a situation where neoclassical economics is regarded as applicable also in dictatorships.

Conceptual framework for sustainability economics

Political economic person

If economics is political economics and individuals are acting in a democratic society, then the individual can be understood as a "political economic person" (PEP) and actor guided by her "ideological orientation" (Söderbaum, 2000). The individual is understood in socio-psychological and cultural terms with concepts such as role, relationship, identity, perception, cognition, affection, dissonance. Behavior is not limited to markets and mechanistic responses to governmental intervention in markets but includes a potential for the individual to formulate her ideological orientation and act accordingly. Responsibility becomes an issue as well as other ethical concerns in the immediate as well as global context.

It may be argued that the concepts of "ideology" or "ideological orientation" appear a bit strange in relation to economics. It is true that the word ideology is avoided by neoclassical economists (except sometimes when it is used in a negative context). But it is possible to identify single well-known economists who refer to ideology in a constructive sense.

In her early book "Economic Philosophy," Robinson (1962, p. 1) observed that there is a similarity between mainstream economics in each epoch and the ruling ideology in public affairs. North (1992, p. 23) was perhaps the first economist to attempt a definition of "ideology" in his book about institutions and institutional change. More recently Thomas Piketty has proposed the following definition:

> I use "ideology" in a positive and constructive sense to refer to a set of a priori plausible ideas and discourses describing how society should be structured. An ideology has social, economic and political dimensions. It is an attempt to respond to a broad set of questions concerning

> the desirable or ideal organization of society. Given the complexity of the issues, it should be obvious that no ideology can ever command full and total assent: ideological conflict and disagreement are inherent in the very notion of ideology. Nevertheless, every society must attempt to answer questions about how it should be organized, usually on the basis of its own historical experience but sometimes also on the experiences of other societies. Individuals will usually also feel called on to form opinions of their own on these fundamental existential issues, however vague or unsatisfactory they may be (Piketty, 2020, p. 3–4).

When compared with Piketty's definition, I use ideology and ideological orientation in a broader sense as means-ends relationships. It is about "fundamental existential issues" as mentioned by Piletty, but also relevant in commonplace situations. We need an economics also for everyday decision making. While there are stable elements in an actor's ideological orientation there is also variability depending on context or situation.

Political economic organization

Much like individuals, organizations can be regarded as operating in a political and democratic context. Reference can be made to "political economic organizations" (PEOs) as actors guided by their ideological orientation or "mission." Political economic organizations are not limited to business corporations – "firms" in neoclassical vocabulary – but include governmental organizations and non-governmental organizations (NGOs). Greenpeace exemplifies an organization of the NGO or non-profit character (Bode, 2018). A university is a PEO with missions that have their own characteristics.

The limitation to "firms" in neoclassical theory is therefore an ideological commitment that excludes many kinds of organizations. And in the case of firms, the limitation to monetary profits is another ideological commitment. Neoclassical theory does not go well with Corporate Social Responsibility (CSR), "fair trade" and other certification schemes which cannot necessarily be dismissed as Greenwashing.

Relationships and networks

Interaction between PEPs and PEOs can be understood in non-market and market terms. Neoclassical mechanistic ideas about supply and demand are a way of interpreting markets but perhaps not so useful in relation to sustainability issues (because of the fixation to self-interest or other narrow interests). Relationships between PEPs and PEOs are instead understood in network terms where the ideological orientation and mission of each actor becomes relevant.

In a non-market relationship or market transaction, actor A may bother about the interests of other actors B, C and D being part of a network. Each actor may compete with some actors but cooperate with other actors. In the case of business corporations, it is clear that "No Business is an Island" as is the title of a book recommending thinking in terms of relationship and network (Håkansson and Snehota, 2017). There are supply chains of cooperating actors and competition may take place between networks rather than single firms (Ford, 1990).

At issue is how PEPs and PEOs can contribute to a sustainable society. To what extent can they be conducive to the achievement of sustainable development goals related to health and the environment? Can markets be "concerned" (Geiger et al., 2014) in the sense of systematic consideration of non-monetary impacts and ethical issues, as is implied by concepts such as "fair trade" or "ecological farming"?

Decision making as "matching"

In neoclassical theory and method, decision-making is understood as "rational". It is about one-dimensional optimal solutions in mathematical terms. Any uncertainty refers to specific probabilities of specific outcomes. The reality of decision-making at the micro and macro levels is however multifaceted. More complex ideas about organizational behavior was presented by Herbert Simon in his early book "Administrative Behavior" (Simon, 1947). The costs of preparing decisions and other considerations suggested reference to "satisfactory" outcomes rather than optimal outcomes. Reference was made to "limited rationality" and a "logic of appropriateness" (March and Olsen, 1989, p. 23–26; March, 1994, p. 58).

How do political economic persons and political economic organizations make decisions? The idea is close to the mentioned "logic of appropriateness" but rather one of decision making as "matching" between the ideological orientation (mission) of an actor and the expected multidimensional impact profile of each alternative considered. Ideological orientation as well as impact profile may be complete and certain, or fragmentary and uncertain. Rather than speaking of "appropriateness," reference can be made to "compatibility" and even in digital terms to "pattern recognition." Our actor compares her ideological orientation as a "desired pattern" with the "expected pattern" of impacts in the case a specific alternative is chosen.

Positional Analysis as alternative to CBA

When approaches to decision making, for example investments in infrastructure such as roads and energy systems

TABLE 1 Categories of approaches to decision-making and sustainability assessment.

	Ethically/ ideologically closed	Ethically/ ideologically open
Highly aggregated	"a"	"b"
Highly disaggregated	"c"	"d"

Source: Söderbaum (2008a, p. 1472).

TABLE 2 Categories of indicators (impacts) for sustainability monitoring and assessment.

	Flows (referring to periods of time)	Positions (referring to points in time)
Monetary	"e"	"f"
Non-monetary	"g"	"h"

Source: Söderbaum (2008b, p.1471).

are concerned, neoclassical economists recommend Cost-Benefit Analysis (CBA). Once more their position seems to be that "there is no alternative." But CBA has already been dismissed as not compatible with democracy. And there are alternatives. In Table 1, a distinction has been made between approaches or methods that are "highly aggregated" and those that are "highly disaggregated" and another distinction between approaches that are "ethically/ideologically" closed or open.

CBA belongs to the "a" category, highly aggregated and ethically/ideologically closed. It can be described as reductionism in monetary as well as ideological terms. Among alternatives to CBA, I will here focus on "Positional Analysis" (PA), a method that rather belongs to the highly disaggregated ethically/ideologically open category "d." The idea of producing a single figure as optimal solution is abandoned in favor of a many-sided illumination of relevant ideological orientations, alternatives of choice and expected impacts. Conclusions then will be conditional in relation to each ideological orientation considered[1].

Positional Analysis has been described elsewhere (Söderbaum, 2008a,b, 2018; Brown et al., 2017). "Positional thinking" as part of PA will be commented upon here since it is fundamental to sustainability issues and analysis. In Table 2, a distinction is made between indicators (impacts) that are monetary and non-monetary and another distinction between those that are expressed as flows or positions.

1 The classification scheme of Table 1 can be used for methods other than CBA and PA. Environmental Impact Statement (EIS) for example is essentially a disaggregated approach. It is limited in scope, however, focusing only on one kind of impact. When compared with CBA, EIS is ethically-ideologically open rather than closed. Similarly, there may be Social Impact and Health Impact Statements (SIS and HIS).

It is true that development that is described as "sustainable" can refer to monetary as well as non-monetary indicators. Economic growth in GDP-terms or profits in business can be regarded as sustainable or not sustainable. In both cases we are referring to "monetary flows" (category "e" in Table 2). Also "monetary positions" (category "f") can be relevant when judging the sustainability of a nation or organization. Assets and debts are expressed as monetary states or positions in the sense of referring to a point in time. Bankruptcy as a possibility in business is not easily reversed.

Many actors are indoctrinated in, and cognitively limited to, monetary thinking and economists at the university bear some responsibility for this. But the recent debate about sustainable development is rather about non-monetary indicators and impacts. Sustainable development then stands for an ambition in decision making to avoid irreversible degradation of living conditions for future generations and people living in other parts of the world. Even the risk of irreversible degradation can be regarded as unsustainable. How do we measure "irreversible degradation of ecosystems or natural resources"? I suggest measurement in non-monetary terms, particularly in non-monetary, positional terms, as changes from one point in time to another. Climate change and reduction of agricultural land as a result of construction of houses or roads in a local or national community are examples.

A multiple stage decision process

In the case of CBA and other methods, the analyst is focusing on one decision situation and the paths of impacts that follow the implementation of each alternative. Reference to irreversibility (and other forms of inertia) means that we move away from the idea of focusing on one decision situation to a multiple stage decision process. We are not only considering a decision today but also possible future decision situations. Will it be possible to return to the original position for example in the case that such a move becomes desirable at a future point in time?

The idea of a multiple stage decision process has some similarities with a game of chess. Each move is definite and irreversible, and results are indicated by the pattern of positions of the chessmen at each point in time. Each move opens and forecloses options for the future. When driving a car (or going for a walk) decisions are made in multiple stages and the geographical position changes all the time. This is a kind of "path dependence" where irreversibility may become an issue.

Decision-trees can be used to illustrate options and the changes in positions that follow (Söderbaum, 2017, p. 29–44). Unlike decision trees in game theory, the outcome of a specific move is described as non-monetary and monetary positions rather than as one "payoff" figure. Construction of a road on agricultural land can for practical purposes be seen as irreversible and there is a possibility that some politicians

and other actors in the future will regret this particular land-use change.

In the fields of environment and health, there are numerous examples of impacts that are irreversible or difficult to reverse. When disturbed, ecosystems may be resilient in the sense of returning to something similar to the original position. The health status or position of human beings may similarly heal. But as we all know there are limits of the ecosystems and humans to recover.

Construction of houses and roads may lead to loss in biodiversity. Mining activities normally lead to pollution of land and water. Plastics may accumulate in lakes, the oceans and in fish, potentially otherwise useful for human consumption. Discharge of CO_2 is estimated to lead to irreversible climate change and facilities for production of nuclear energy are risky and lead to storage of various radioactive materials which is not easily handled. Future generations may regret our decisions today – to the extent that they get access to information about the existence of radioactive stored material. Our conclusion then is that there are many cases of exploitation of natural resources or of injuries to humans that are difficult to reverse or irreversible.

Illumination of conflicts of interest

Another feature of Positional Analysis is the attempt to make conflicts of interest visible for decision makers and others concerned. In a democratic society, many ideological orientations are normally represented, one of which may be dominant at a particular point in time. Sustainable development can be understood as one among ideological orientations and many politicians and other actors are aware of commitments to sustainability at the UN-level, nationally or locally. But to change patterns of thought and behavior in response to the sustainability challenge is often difficult. There is inertia of a cognitive and emotional kind. Many actors and powerful networks have since long internalized the values of economic growth in GDP-terms and profits in business. They may duly refer to sustainability in ways that by other actors can be referred to as "Greenwashing" or they may look for a compromise involving some mitigation measures to reduce negative health and environmental impacts of an irreversible kind.

In a decision situation with three ideological orientations B, C and D and three alternatives of choice A1, A2 and A3, it is assumed that B emphasizes sustainable development while D stands for traditional ideas of GDP-growth and monetary profits in business. C stands for a compromise between sustainability and traditional monetary values. Let us further assume that A1 matches ideological orientation B quite well while A3 is reasonably compatible with ideological orientation D. A2 is a compromise between B and D. In this simplified case, each ideological orientation suggests a specific order of preference as in Table 3.

TABLE 3 Compatibility between specific ideological orientation and specific alternatives of choice.

Ideological orientation	A1	A2	A3
B	1	2	3
C	2	1	2
D	3	2	1

The role of the analyst in PA differs from that of traditional ideas of expertness. He or she should illuminate the decision situation in a many-sided way. There is no single correct ideological orientation but rather conflicts of interest between advocates of different orientations. This is where democracy enters the scene. Each politician or other actor is faced with different ideological orientations and expected to respect them. "Listening to many voices" is a signum of democracy. Rather than being excluded at an early stage, sustainability as ideological orientation and alternatives compatible with sustainability are seriously considered in analysis.

The analyst herself may have specific preferences that can influence the way analysis is carried out, but the imperative of "many-sidedness" is supposed to reduce possibilities of manipulation. All actors, politicians included, should however be ready for a dialogue about ideological orientations and alternatives. Each actor should be responsible for her views and arguments.

It should also be made clear that analysis of the kind presented in Table 3 is always tentative and can be reconsidered. Some actors will find their ideological orientation not so well represented and some actors may prefer consideration of additional alternatives of choice. It is still believed that this kind of analysis is helpful for many and contributes to a strengthening of democracy[2].

Monitoring systems

It is recommended that monitoring systems are disaggregated and there is no easy way of pointing to an index or one-dimensional figure. Each nation, each municipality and each organization need to develop its own system and

2 What is presented here can perhaps be described as a limited version of Positional Analysis. Among additional elements, systems analysis and activity-interest analysis can be mentioned (Söderbaum, 2017). Systems thinking is helpful at an early stage of the study to identify the systems of different kinds that will be differently affected depending on alternative chosen in the specific decision situation. Similarly, activities of different kinds that will be affected can be identified. And for each activity a goal-direction can be assumed which in turn suggests a preference order from the point of view of each activity.

relevant indicators may change as a result of cooperation with other actors and research and development activities. The mentioned UN Sustainable Development Goals is a possible starting point. In the case of Sweden there is a system of 16 "environmental quality objectives" that are followed up each year with respect to improvements or deterioration. These are: Reduced climate impact, Clean air, Natural acidification only, A non-toxic environment, A protective ozone layer, Safe radiation environment, Zero eutrophication, Flourishing lakes and streams, Good quality groundwater, A balanced marine environment, flourishing areas and archipelagos, Thriving wetlands, Sustainable forests, A varied agricultural landscape, A magnificent mountain landscape, Good built environment and A rich diversity of plant and animal life. There are sub-targets for each goal and performance is followed up periodically. So far, deterioration has played the dominant role [Naturvårdsverket (Sweden's Environmental Protection Agency)., 2022].

Policies for sustainability

Something can be achieved within the scope of the mainstream neoclassical economics approach to sustainable development. Focus is on government intervention in markets through taxes, charges, tariffs and even construction of new markets (as in the case of the European Union trading system for CO_2 pollution permits). Also, prohibitions and so called "lockdown" policies are considered where individuals and organizations are looked upon as mechanistic entities, comparable to billiard balls (Clark, 2002, p. 6–7).

The picture is modified when referring to the present political economics (or ecological economics) perspective. PEPs and PEOs are potentially responsible actors in a democratic society with their own ideological orientation (mission) and their own policies. They may follow governmental recommendations thereby improving the intended result or they may prefer to counteract governmental policies.

The impacts of sustainability policies are evaluated through disaggregated indicator systems where goals related to health and environment play a role. Positional thinking is recommended for indicator systems referring to health as well as environment. Often the two kinds of goals are interrelated. The reasons to reduce environmental pollution are often part of a desire to protect the health of individuals affected.

The perspective advocated here can be referred to as "institutional ecological economics." "Institutional" stands for the importance of "institution" as a concept but also for the idea that "radical institutional change" needs to be considered in relation to the challenge of sustainable development. Examples of policy to change the institutional framework and political economic system will here be indicated.

Consideration of radical institutional change

The concept of institution is understood as "habits of thought" and "habits of behavior." It is about regularities in thinking and behavioral patterns and about the justification and legitimacy of such thinking and behavioral patterns for a group of actors.

At a particular point in time there are many established thinking and behavioral patterns. A kind of conflict or competition takes place between actors referring to different cognitive, emotional and behavioral patterns. Actors with their ideological orientation (mission) or agenda are part of the scene or arena and may influence development in specific directions. In relation to sustainability issues, there are many attempts to change the institutional framework through new laws and new certification schemes. "Fair trade" and "Corporate Social Responsibility" (CSR) are two examples.

Attempts to influence the institutional framework or political economic system may start with a formulation of problems. K. William Kapp among institutional economists argued as follows:

> Thus, a system of decision-making, operating in accordance with the principle of investment for profit, cannot be expected to proceed in any other way but to try to reduce its costs whenever possible by shifting them to the shoulders of others or to society at large (Kapp, 1970, p. 18).

The joint stock company is one of the most important institutions in our present economies and societies. It can be modified by certification schemes, such as the mentioned CSR, but the power position of business corporations in society may make people reluctant to ask for major institutional change. But in a democratic society, also change in the political economic system can be discussed and I will here suggest thinking and behavior in accordance with Extended Social Responsibility (ESR) ideas rather than the Limited liability doctrine (Ltd). The "Community Interest Company" in UK is an example of this.

Specific kinds of economics play a role in making thinking habits and behavioral habits legitimate. If present performance of our political economic system is unsustainable in important respects, then the role of mainstream neoclassical economics cannot be neglected. Pluralism in economics education and research becomes an issue (Dereniowska et al., 2017).

I will here point to a specific institution essentially controlled by neoclassical economists, the Bank of Sweden Price in Economics in Memory of Alfred Nobel." In my judgment this award has played the role in recent years of strengthening the monopoly of neoclassical economics at university departments of economics in different parts of the world. Fortunately, along other lines, varieties of heterodox economics are also advancing. We are back to the idea of building new institutions

more in line with sustainability. Should we refer to Extended Social Responsibility (ESR) organizations also in the case of universities?

Health and environment

Occupational health and other health issues are closely connected with environmental issues. Our interest in climate change, biodiversity loss, pollution of land, air and water can partly be related to our concern for the health status of the human population locally and globally. Health and environment are brought together in the mentioned United Nations 17 SDGs. Goal number 3 is entitled "Ensure healthy lives and promote wellbeing for all at all ages." There are 13 sub-targets for this goal.

A holistic view of "economics" is recommended where impacts on health and environment are regarded as no less "economic" than monetary or financial impacts. Irreversibility is an issue for both health and environmental impacts. Positional Analysis is recommended for investments in health as well as environmental protection.

Health and environment also go together when it comes to policies for sustainability. Actors in the economy are regarded as responsible actors. Individuals and organizations are not just billiard balls or other mechanistic entities that can be manipulated with "lockdown" policies or in other ways. The recent COVID-19 experience tells us that individuals (organizations) can be looked upon as policymakers (cf. Political Economic Persons, Political Economic Organizations) who can contribute as part of a successful management strategy.

In each organization there is a choice of ideological orientation or mission concerning occupational health policy and sustainability polices more generally. The policy should be openly discussed and declared. If decisions are taken exclusively based on monetary calculation, this should be made clear to stakeholders or those concerned.

A key role is played by those involved in university education in economics and management science. Actors in these university departments need to move away from monetary reductionism and other narrow perspectives to pluralism where scientific as well as ideological elements are part of the dialogue.

Concluding comments

Neoclassical economics has become an "institution" as defined above and many economists as "political economic persons" defend this paradigm, including its ideological tendencies. But if present development is unsustainable then protecting the present neoclassical monopoly is hardly a defensible strategy. Research and education in economics need to be pluralist. And if we believe in democracy, democracy need to be part of, and be established within university departments of economics.

It should finally be remembered that sustainable development, or sustainability, is a challenge not only in scientific but also in ideological terms. Focus on economic growth, profits in business and employment are no longer enough. It too often removes us from the need to tackle other sustainability issues. Politicians and all of us need to bring in environment and health seriously into the ideological debate. Otherwise, we continue with growth in GDP-terms and employment as the first priorities.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Author contributions

The author confirms being the sole contributor of this work and has approved it for publication.

Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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References

Bode, T. (2018). *Die Diktatur der Konzerne. Wie Globale Unternehmen uns Schaden und Die Demokratie Zerstören*. Frankfurt am Main: S. Fischer Verlag.

Brown, J., Söderbaum, P., and Dereniowska, M. (2017). *Positional Analysis for Sustainable Development. Reconsidering Policy, Economics and Accounting*. London: Routledge. doi: 10.1093/acrefore/9780190846626.013.305

Clark, M. E. (2002). *In Search of Human Nature*. London: Routledge.

Costanza, R., ed. (1991). *Ecological Economics. The Science and Management of Sustainability*. New York, NY: Columbia University Press.

Dereniowska, M., Brown, J., and Söderbaum, P. (2017). "Sustainability, ethics and democracy. A pluralistic approach to the navigation of disagreements," in *Positional Analysis for Sustainable Development: Reconsidering Policy, Economics and Accounting* (London: Routledge), 79–103. doi: 10.4324/9781315206769-7

Ford, D. (ed) (1990). *Understanding Business Markets. Interaction, Relationships, Networks*. London: Academic Press.

Geiger, S., Harrison, D., Kjellberg, H., and Mallard, A. (eds) (2014). *Concerned* Markets. *Economic Ordering for Multiple Values*. Cheltenham: Edward Elgar Publishing. doi: 10.4337/9781782549758

Håkansson, H., and Snehota, I. (eds) (2017). *No Business is an Island. Making sense of the Interactive Business World*. Bingley: Emerald Publishing. doi: 10.1108/9781787145498

Kapp, K. W. (1970). Environmental disruption: general issues and methodological problems. *Soc. Sci. Inf.* 9, 15–32. doi: 10.1177/053901847000900403

Kuhn, T. S. (1970). *The Structure of Scientific Revolutions*, 2nd ed. Chicago, IL: University of Chicago Press.

Mankiw, N. G., and Taylor, M. P. (2011). *Economics*, 2nd ed. Andower: Cengage Learning EMEA.

March, J. G. (1994). *A Primer on Decision Making. How Decisions Happen*. New York, NY: The Free Press.

March, J. G., and Olsen, J. P. (1989). *Rediscovering Institutions. The Organizational Basis of Politics*. New York, NY: The Free Press.

Myrdal, G. (1978). Institutional economics. *J. Econ. Issues* 12, 771–783. doi: 10.1080/00213624.1978.11503577

Naturvårdsverket (Sweden's Environmental Protection Agency) (2022). *Sweden's Environmental Quality Objectives*. Available online at: https://www.naturvardsverket.se/en/environmental-work/environmental-objectives (accessed May 14, 2022).

North, D. C. (1992). *Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.

Piketty, T. (2020). *Capital and Ideology*. Cambridge, MA: Harvard University Press. doi: 10.4159/9780674245075

Robinson, J. (1962). *Economic Philosophy*. London: C. A. Watts & Co.

Simon, H. (1947). *Administrative Behavior*. New York, NY: Macmillan.

Söderbaum, P. (2000). *Ecological Economics. A Political Economics Approach to Environment and Development*. London: Earthscan.

Söderbaum, P. (2008a). *Understanding Sustainability Economics. Towards Pluralism in Economics*. London: Routledge.

Söderbaum, P. (2008b). 10th anniversary focus: from mainstream 'environmental economics' to 'sustainability economics'. On the need for new thinking. *J. Environ. Monit.* 10, 1467–1475. doi: 10.1039/b811379n

Söderbaum, P. (2017). Positional analysis as approach to decision-making, accounting and democracy," in *Positional Analysis for Sustainable Development*, eds J. Brown, P. Soderbaum, M. Dereniowska, Vol. 4, 29–44. (2017). doi: 10.4324/9781315206769-4

Söderbaum, P. (2018). *Economics, Ideological Orientation and Democracy for Sustainable Development,* 2nd ed. Bristol: World Economics Association BOOK SERIES.

Söderbaum, P. (2020). One paradigm or many? *Toward a Democracy-Oriented Economics,* WEA Commentaries (World Economics Association), Vol. 10, p. 7.

Söderbaum, P. (2021). *Each Paradigm in Economics is a Scientific and Ideological Paradigm*. WEA Commentaries (World Economics Association), Vol. 11, p. 9–10.

United Nations (2015). *Transforming Our World. The 2030 Agenda for Sustainable Development*. Available online at: sdgs.un.org/2030Agenda (accessed May 14, 2022).

Von Egan-Krieger, T. (2014). *Die Illusion wertfreier Ökonomie. Eine Unterrsuchung der Normativität Heterodoxer Theorien*. Frankfurt am Main: Campus Verlag.

World Commission on Environment and Development. (1987). *Our Common Future*. Oxford: Oxford University Press.