

Lessons Learned from Economic Crisis? Environmental and Ecological Economics in the Czech Republic

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Abstract: *This essay tries to describe the present state of environmental and ecological economics among the economic scholars from the Czech Republic. It is based on the assumption, that recent financial, debt and economic crisis was an opportunity to change the current growth paradigm. Brief introduction covering the history of the concept of sustainable development and current trends like “green” or “sustainable” growth is presented as well as selected moments from the recent Czech politics and economy. More attention is paid to the academic economics dealing with environmental issues. The results show that some academic departments employ the concept of environmental and resource economics, but only few scholars are interested in the ecological economics and critically assess the context of growth. The crisis obviously did not help to change the growth paradigm in the Czech academia, neither in the Czech politics. Wider variety of economic viewpoints towards the social, economic and environmental challenges could help to understand them more and to find better solutions.*

Key words: environment · growth · sustainable development · Czech Republic · environmental economics · ecological economics

JEL Classification: A13 · O44 · Q01 · Q50

1 Introduction

This paper aims to map the present state of economic academic research regarding the topic of sustainable development and economic growth in the Czech Republic. As I believe, the recent financial and economic crisis had a great potential to be a starting point for in-depth thinking about sustainable development, but vast majority of the Czech academics have not made use of this opportunity. The discussions which consider both social (including economic) and environmental issues and critically assess current economic system sometimes take place in environmentally or socially oriented departments or conferences, but usually not in economic colleges. In this essay, I focus mostly on the overview of economists and academic economics departments dealing somehow with the relationship of economic development and environmental issues. Minor attention is also paid to the governmental policies, political proclamations or discussions in newspapers. In the introduction to the main topic, very brief overview of chosen international environmental policy events since 1960's and the shift in selected economic theories are presented. As this essay combines an academic review of events, scholars and literature, and an evaluation from the ecological economics viewpoint, it is written in the singular form.

1.1 International environmental policy events

Global economic growth, which has increased the material quality of life of people in many countries, has also a lot of unintentional negative consequences. At least since the 1970's, United Nations and many Western countries pay attention to these negative consequences, e.g. water and air pollution, disturbance to ecological balance of biosphere and depletion of non-renewable resources (UNEP, 1972). National environmental protection legislation has been enacted since then in many states as well as various international declarations and agreements have been adopted. In 1987 the UN World Commission on Environment and Development issued the report commonly known as “Our Common Future” (WCED, 1987). Although the term “sustainable development” was not used for the first time in this report, it became famous since its release (Hopwood et al., 2005). The report defined sustainable development as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED, 1987, p. 41). The connection between economy and environment, and links between poverty, inequality and environmental degradation were stressed. It critically assessed the unsustainability of economic growth of many industrialized states. On the other hand the report argued that the growth in developing countries should be revived, but the growth in general should be less material and energy demanding and more equitable. Other more or less successful events and agreements followed, 1992 the Earth Summit in Rio de Janeiro, 1997 the Kyoto protocol (and other confer-

ence of parties of the United Nations Framework Convention on Climate Change), 2002 the Johannesburg Summit, and the recent Rio+20 conference in 2012.

1.2 Environmental and ecological economics

The dominant worldview of the Western society, as well as of the academic economics until 1970's could be named as "the Promethean view". This is the belief that the humans are able to solve any problems with their technology and knowledge (Dryzek in Hopwood et al., 2005). This belief together with the idea of humans' superiority above the nature could be linked already to the Renaissance and Enlightenment.

Depiction of environmental pollution (e.g. Carson, 1962) and oil crises in the 1970's was an important factor which attracted attention of social scientists to the environment. Milestone works, like *The Limits to Growth* (Meadows et al., 1972) or the transdisciplinary research focused on energy flow and systems theory inspired many economists.² The group of scholars who incorporated environment in their study soon diverged into two main approaches: environmental and natural resource economics, and ecological economics. Environmental economics is based on the neoclassical economics and the welfare economics. Environmental problems are often studied as externalities and through the market failure paradigm. The overall approach of environmental economy is anthropocentric. It is represented by William Nordhaus, Tom Tietenberg, David Pearce, just to mention some of the most known scholars (Cudlínová, 2012; Vejchodská, 2012).

Ecological economics accentuates the interconnection of economy and environment and employs more biocentric, ethically oriented approach (e. g. geographical and intergenerational equality). The authors often work with the term carrying capacity of biosphere or ecosystems. Authors representing ecological economics are (among many others) Herman Daly, Robert Costanza or Kenneth Boulding, who published his founding paper "The Economics of the Coming Spaceship Earth" already in 1966. To summarize the distinction between environmental and ecological economics Cudlínová says: "[Ecological economics] Does not search for optimal distribution and utilization of natural resources for the society [as environmental economics does], but searches for optimal dimension of economy, according to the planet's carrying capacity." (2012, p. 27) For more information on the environmental and ecological economics as well as free-market environmentalism³ see also Jílková and Slavíková (2009) or Vejchodská (2011).

2 Recent crisis and responses to it

It is not possible to portray the whole variety of reactions of international community to the global financial crisis in 2008 which led to an economic recession in many European countries. I would just like to illustrate few important points connected to the growth/development issues.⁴ As Sokolíčková and her colleagues showed (2012) in the years 2009/2010 European Union officials prioritized the economic problems to the environmental ones and stressed the concept of competitiveness and reviving of growth. In 2009 United Nations Environment Programme announced the new concept of "green economy" which had to help revive growth, make it more inclusive, less carbon dependent and less ecosystem-damaging (UNEP, 2009). Green economy was later defined as economy resulting in "improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities" (UNEP, 2011, p. 1). European Union now uses the term "sustainable growth" which should cover low-carbon competitive economy, protecting environment, reducing greenhouse gases emissions and developing new green technologies (EC, 2012). Reduction of carbon emissions, global competitiveness and new jobs in renewable energy sources are stressed.

In her critical assessment of green economy, Cudlínová (2012) argues that the above mentioned approaches are more similar to environmental than ecological economics and that they do not take the ecological context fully into account. "It is the slowdown of environmental devastation, not the fulfilment of new environmental paradigm." (p. 32) The green technologies are offered as a solution how to boost the growth and paint it with green colour. The fact, how easily the word "development" has been suppressed and how easily "growth" has become the main goal, prove that our current socio-economic system is growth-dependent and the growth paradigm is encrypted in our mind-sets.⁵

On the other hand, there are studies which suggest that beyond some threshold the economic growth itself does not automatically lead to growth of the well-being or quality of life (Max-Neef, 1995; Talberth et al., 2007). Other studies

² Similar shift occurred in the sociology and led to the establishment of environmental sociology as a distinct discipline (Dunlap and Catton, 1979).

³ One of the famous free-market environmentalism proponents is Julian Simon and his idea of human abilities and knowledge as an "ultimate resource" (Simon, 1981).

⁴ A lot of criticism towards financial markets and self-confidence of rational mathematical economics occurred (e.g. Taleb, 2010). Some scholars now pay more attention to the limits of our knowledge (e.g. Institute for New Economic Thinking). Nonetheless, the ecological context did not become the part of economic mainstream.

⁵ The crisis also revealed how growth-dependent are some of the Western economies due to the enormous debts of governments as well as households. Wackernagel (2012) interestingly connects the countries' financial and ecological debts.

proved that in affluent societies the subjective well-being increases with GDP growth, however, the sense of democracy and social tolerance are more important than the economic development itself (Inglehart et al., 2008).

3 Czech Republic case study

Until late 1989 Czechoslovakia was a communist state. During the post-socialist transition, the country (Czech Republic since 1993) adopted democratic institutions and became the EU member in 2004. The post-socialist specifics influenced also the acceptance of sustainable development concept and academic economics too.

3.1 Czech green growth or sustainable development policies⁶

After the 2010 parliament elections the government stressing the austerity and necessity of growth was established. Although there are some “green growth” events (increase of energy from renewables, governmental subsidies for house insulations) the overall political milieu is rather anti-environmental (anti-renewables campaign, proposed state energy and resources conceptions, problems at the Ministry of Environment). Dlouhá (2012) pointed to the lack of activity and strategies of the Czech government at the occasion of the United Nations Conference on Sustainable Development in Rio de Janeiro in 2012 (Rio+20)⁷ as well as the absence of activity concerned with the green economy topic. The only activities conceptually dealing with the green economy were arranged by the NGOs (e.g. the conference Green growth held in Prague, October 21, 2010) or by the academia (e.g. the green growth report edited by Havránek and Sidorov [2010]).

3.2 Environmental topics among Czech academic economists

There are few departments in the economic research and higher education institutions, where the environmental topics are investigated, and some important scholars work in non-economic departments too. We start this brief overview with the whole departments, namely with the Department of Environmental Economics, Faculty of Economics, University of Economics in Prague. Scholars from this department (e.g. Jiřina Jílková, Jan Slavík, Lenka Slavíková, Eliška Vejchodská, Ondřej Vojáček or ex-member Petr Šauer) deal mostly with the evaluation of environmental policy, like case studies of air pollution, waste management, water management or Local Agenda 21 (e.g. Šauer et al., 2008; Slavíková and Jílková, 2011). History and theory of environment and economics is also the topic of their study, usually in a descriptive manner (Jílková and Slavíková, 2009; Vejchodská, 2011), but critical assessment of neoclassical environmental economics is also applied (Slavík, 2007).

In the Charles University Environment Centre in Prague, a group of scholars focuses on the environmental economics, valuation of non-market goods and services (e.g. Melichar et al., 2012; Alberini et al., 2012), environmental indicators (e.g. Moldan et al., 2007; Havránek and Sidorov, 2011), socio-economic metabolism (Kovanda and Hák, 2011) and evaluation of environmental policy. To name some of them, Milan Ščasný or Jan Melichar focus on the financial valuation of non-market issues, Bedřich Moldan, Tomáš Hák or David Vačkář deal with the environmental indicators and ecosystem services. The Centre together with the University of Economics in Prague co-organised the 19th Annual Conference of the European Association of Environmental and Resource Economists on June 27–30, 2012. The Centre also co-organised (with the Czech Ministry of Environment) the seminar on alternative indicators on the Rio+20 conference.

At the Department of Structural Policy of the EU and Rural Development, Faculty of Economics, University of South Bohemia in České Budějovice, the environmental issues are area of interest of Eva Cudlínová and her colleagues. Some of their works focus on the regional management of landscape (e.g. Lapka and Cudlínová, 2007) or carbon footprint measuring (e.g. Vávra et al., 2012). However, the papers dealing with the critical evaluation of green economy (Cudlínová, 2012) or the concept of sustainable development (Lapka and Cudlínová, 2009) are more important from this essay's point of view.

The Department of Environmental Studies, Faculty of Social Studies, Masaryk University in Brno is the home institution of Naďa Johanisová and Eva Fraňková, who openly challenge the contemporary global economic system and focus mostly on the micro-level economic localisation, cooperatives and other community level alternatives, and degrowth (e.g. Johanisová, 2008; Fraňková and Johanisová, 2013; Johanisová et al., 2013). The department co-organised two recent events, which fit into the scope of ecological economics: seminars “Sustainability indicators and

⁶ Only few recent post-crisis events are mentioned. The history of sustainable development and green growth policy in the Czech Republic since 1989 (including issues like Kyoto protocol, governmental conceptions, renewable energy production, brown coal mining, etc.) will be a topic of separate study being prepared for publication in next year as a chapter in the monograph focused on the changes in Central Europe named “Current challenges of Central Europe?”

⁷ My personal experience from Czech preparatory conference for Rio+20 held in March 2012 in Prague supports this critical assessment. When the officials of the Ministry of Environment were asked for the official standpoint of the Ministry towards Rio+20 conference, they answered that the main objective of the Ministry is not to spend more money on the UN environmental institutions.

pathways towards steady state economics” and “Open space 2013 – To growth or not to growth?” held January 30–February 3, 2013 in Olomouc.

Environmental approaches towards economics are applied by the individuals in some other institutions. In the Department of Social Sciences, Faculty of Environment, Jan Evangelista Purkyně University in Ústí nad Labem, Josef Seják deals with the ecosystems services and their financial evaluation (e.g. Seják et al., 2012). The Department of Regional and Environmental Economics, Faculty of Economics, VŠB-Technical University of Ostrava focuses on various aspects of regional development. Marcella Šimíčková deals with environmental economics, environmental policy and sustainable development (e.g. Šimíčková, 2006). Simona Miškolci from the Department of Regional and Business Economics, Faculty of Regional Development and International Studies, Mendel University in Brno focuses mostly on the non-market evaluation of food issues and multifunctional agriculture (e.g. Miškolci, 2011). An interesting viewpoint is represented by Viktor Kulhavý, member of the Department of Corporate Economy, Faculty of Economics and Administration, Masaryk University in Brno, who investigates eco-innovations and their psychological aspects in business (e.g. Kulhavý, 2012).

There are some other authors who should be mentioned, due to their interesting viewpoints, despite the fact that they do not explicitly focus on the environmental issues. Lubomír Mlčoch from the Institute of Economic Studies, Faculty of Social Sciences,⁸ Charles University in Prague, connects economy, social and ethical issues and represents critique of some aspects of global liberal economy (e.g. Mlčoch 2007). Alumni of the Mlčoch’s institute, Tomáš Sedláček wrote a book named “Economics of Good and Evil” (2009) which became Czech bestseller and was later translated into many languages. The book shows the history of economic thinking from the ancient time to present and puts the economy and economics into the broader moral and social context.

To name at least one of the economists, who participate in the environmental and sustainability discussion with the viewpoint of free-market environmentalism, we can refer to Marek Loužek from Faculty of Economics, University of Economics in Prague (e.g. Loužek, 2013).

There are of course many other social scientists who participate in the research or discussion on the economic, social and environmental issues, for example: sociologist Jan Keller, political scientist Aleš Lisa, philosophers Václav Bělohorský, Josef Šmajš and Erazim Kohák, social ecologist Ivan Rynda or environmentalist Pavel Nováček. Many of these non-economic social scientist advocate for deeper sustainability and question current socio-economic development trends. For instance Pavel Nováček doubts about the sustainable development and presents idea of sustainable retreat (Nováček, 2012).

From time to time the growth became a topic of newspapers discussions or essays. To mention some examples, the discussion on the *Ihned* website (Jan Macháček, Tomáš Sedláček and others) focused on the social context of growth and the critique of boosting the growth at any cost (Sedláček et al., 2011). Another example of growth related article, is written from the kind of “ultimate resource” viewpoint, nevertheless argues that instead of growth, we should ask for “the best use of natural resources and development of human resources” (Libich, 2012). All in all, the environmental topic is usually not covered in its complexity in such discussions.

To summarize the (certainly incomplete) list of institutions and scholars, we can say that the environmental economics approach is prevalent among academics who deal with environmental issues, however there are some successful examples of ecological economics thinking. However, the vast majority of the economists are not interested in the environment in their research (implicitly probably feeling that the growth of the social complexity, technological development and GDP will solve the environmental problems or that the environmental problems are not part of social sciences).

4 Conclusions

Although the environmental economics and concepts of green or sustainable growth were sometimes criticized in the text, I would still like to acknowledge their contribution on the theoretical as well as practical level. I did not aim to criticize the concepts per se, rather the fact that they seem to be more environmentally oriented (sustainable) than they

⁸ The Faculty of Social Sciences consists of five institutes; the Institute of Economic Studies is the most productive regarding the quality of publications. In summer and fall of the year 2008, the academics as well as students discussed the proposal to change the name of the faculty to “Faculty of Social Sciences and Economy”. This act had to emphasize the role and quality of economic studies in the faculty. While the critics argued that it is a non-sense because economics is social science, proponents argued that economics differs from the rest of social science (Borovička, 2008; Kašpar, 2008). Then dean of the faculty (proponent of the change) argued that contemporary economics deals with the laws similar to physical principles, is defined by the mathematics and is more similar to biology than to sociology (Višek, 2008). Academic senate finally refused to change the name. The arguments of the proponents illustrate the self-confidence of some economists. The curiosity of the situation is stressed by the timing – year 2008. See Taleb (2010) for in-depth critique of this rational hard-science mathematical economics (mostly focused on the financial markets).

really are. It would also be a bit unfair to blame politicians too much (as this sometimes happens). In the interview focused on post-crisis experience, UK economist Adair Turner points to the fact that politicians often have to deal with immediate challenges, they must do it quickly within the current system and do not have time to keep distance and assess the complexity of the problem (Lindner and Turner, 2013). Nevertheless, there are people paid for keeping the distance and having enough time to go into the details and context – academics and researchers.

I believe that wide diversity of approaches is one of the requirements for in-depth discussion which can help to understand contemporary problems in a better way. It is questionable, whether the lack of ecological economics (and environmental in fact too) among the Czech economic institutions is kind of a bitter heritage of the early 1990's fast turnover from Marxism to neo-liberalism. However, quarter of the century filled with many examples of local as well as global environmental degradation (and some improvements) and economic fluctuations offered enough intellectual stimuli to extend the academic economics. Thus I argue for more green economy in the governmental policy and business, and more ecological economics in the academia in the Czech Republic. Of course, ecological economists do not offer solutions which will change our future in a moment. Nonetheless, the discussion about our goals and means, and the notion that present state of economy is not the natural relation or the end of history is important. So far, we did not make use of the great opportunity, offered by recent financial, debt and economic crises. Do we need to wait for future social crisis?

Apology

Since the space of this paper is limited and my knowledge of Czech academic economics as well as my ability to collect information about all of the academic institutions are limited too, I would like to apologize to all of the scholars who feel that they were incorrectly labelled (either being branded as too much or not enough environmental), to all people who think that they should be listed here but they are not and to all who are listed but they would not agree. I will be very happy if this paper would help to start some discussions of economists interested in environmental issues and I welcome any comment or criticism.

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