

Iacob, Mihaela; Gherghina, Rodica; Crețan, Georgiana Camelia

Article

"Comparative (bio)economic systems" in terms of social responsibility:
The natural environment : between ideal capitalism, utopian socialism
and real-world interventionism

Amfiteatru Economic Journal

Provided in Cooperation with:

The Bucharest University of Economic Studies

Suggested Citation: Iacob, Mihaela; Gherghina, Rodica; Crețan, Georgiana Camelia (2019) :
"Comparative (bio)economic systems" in terms of social responsibility: The natural environment :
between ideal capitalism, utopian socialism and real-world interventionism, Amfiteatru Economic
Journal, ISSN 2247-9104, The Bucharest University of Economic Studies, Bucharest, Vol. 21, Iss. 52,
pp. 707-727,
<https://doi.org/10.24818/EA/2019/52/707>

This Version is available at:

<https://hdl.handle.net/10419/281470>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen
Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle
Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich
machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen
(insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten,
gelten abweichend von diesen Nutzungsbedingungen die in der dort
genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

*Documents in EconStor may be saved and copied for your personal
and scholarly purposes.*

*You are not to copy documents for public or commercial purposes, to
exhibit the documents publicly, to make them publicly available on the
internet, or to distribute or otherwise use the documents in public.*

*If the documents have been made available under an Open Content
Licence (especially Creative Commons Licences), you may exercise
further usage rights as specified in the indicated licence.*



<https://creativecommons.org/licenses/by/4.0/>

**„COMPARATIVE (BIO)ECONOMIC SYSTEMS”
IN TERMS OF SOCIAL RESPONSIBILITY:
THE NATURAL ENVIRONMENT – BETWEEN IDEAL CAPITALISM,
UTOPIAN SOCIALISM AND REAL-WORLD INTERVENTIONISM**

Mihaela Iacob^{1*}, Rodica Gherghina² and Georgiana Camelia Crețan³

¹⁾²⁾³⁾ *Bucharest University of Economic Studies, Bucharest, Romania*

Please cite this article as:

Iacob, M., Gherghina, R. and Crețan, G.C., 2019. “Comparative (Bio)Economic Systems” in Terms of Social Responsibility: The Natural Environment – Between Ideal Capitalism, Utopian Socialism and Real-World Interventionism. *Amfiteatru Economic*, 21(52), pp. 707-727.

DOI: 10.24818/EA/2019/52/707

Article History

Received: 20 February 2019

Revised: 2 June 2019

Accepted: 10 July 2019

Abstract

Comparative judgements related to economic systems (along with pending political ideologies) represent a subject of investigation that, at first glance, appertains to the “ABC” of social sciences, although the “literacy” of policy-makers, business officials, or public opinion reveals surprising understanding flaws. The academic environment – where there is a tacit consensus on the interdisciplinary character of such an approach, on the perpetual relevance within the various (sub)disciplines, and on the somewhat exhaustion of the subordinated debates – remains subtly divided on a series of theoretical delimitations or historical evidence. This article aims to highlight a (sub)domain of the comparative analysis regarding the economic systems in which the literature is not as polarized as it is rarefied: what roots and reverberations does “social responsibility” have within the main economic systems and where and how its “ecological sustainability” component manifests itself? The present research targets to critically and originally review, in a “bioeconomic” key, the way in which social responsibility underlying sustainability is perceived, penetrated and practiced within pure liberal capitalism / market economy, canonical socialism / command economy, and real-world interventionism / mixed economy, offering both a priori insights and empirical illustrations.

Key-words: social responsibility, bioeconomy, economic systems, capitalism, socialism, interventionism, sustainability.

JEL classification: M14, P50, Q56.

* Corresponding author, **Mihaela Iacob** – mihaela.iacob@fin.ase.ro

Introduction

The comparative study of *economic systems* is equally more than an attribute of an exclusivist cast of specialists in economic theory and more than an apanage of practitioners in the area of public authority or private business: we are talking about an exercise of *civic culture*. This is necessary to any individual who wishes to decipher the ways and “whys” in his country/jurisdiction – as in or in contrast to others – specific questions are being answered, questions that ultimately concern the soci(et)al coordination of activities regarding production and consumption of goods and services. *What is being produced? How is the good/service being produced? For whom (whose consumption) is the good/service being produced?* The answer to these elementary questions is obviously dependent on the set of values of the said society, which can unite, while also hierarchizing, precepts such as *freedom, efficiency, equity, growth, security, stability* or, more recently, *sustainability* (all with the adjective *economic*). The value sets/answers differ.

The world’s economies, at any moment in history, have been based, as a meta-mechanism of operation, on a system anchored prevalingly in *customary, coercive* or *contractual* relations (of production/exchange/distribution). In other words, seeing the arrangements in terms of *property rights*, they were either closer to the *free market* benchmark, adherent to *centralizing socialism* or mixtures of liberalism and etatism, known as *interventionism* or *mixed economy*. The political commitment to either of these possible institutional arrangements (along with the social attachment to them) explains the unequal palette of social-economic performances prosperity and order-wise, there being established, at least at a certain point, following the collapse of socialist-communist regimes, politically authoritarian and economically arbitrary, the thesis of market capitalism (pending liberal democracy) as the most durable/sustainable, even “final”, form of soci(et)al organization.

However, with the emergence of a dangerous plethora of ecosystem imbalances, economic systems are again audited. Ecology – the branch of biology concerned with the study of interactions between the living’s embodiments and their environment – became a new and powerful censor (or ally) of the “traditional economy” – accused of maximization myopia, ignorance of planetary metabolism, exhaustion, extinction, exertion of the (living) nature. As a single representative of the “conscious life”, *homo sapiens sapiens* seemed to be incapable of understanding and integrating “inter-generationally sustainably” the rest of the world into its economic mode of thinking and *ecosystemic* action; and the *economic systems* themselves, *in integrum*, with all their *in situ* varieties (differentiated between civilization blocks – Occidental/Oriental – or within them – Anglo-Saxon/Anglo-American, European-Continental, Nordic, Mediterranean), were sent back for critical analysing. However, there are still ambiguities regarding the links between the “inherent nature” of various economic systems and the ecological imbalances.

The present article aims, in the form of an original critical revision, to link together the *nature of the economic systems*, the meaning that the concept of *social responsibility* (legally codified) has within them and the expression of its *bioeconomic* component. The research is organized into three main parts, followed by appropriate conclusions.

- *The first part* is a revision of the literature, ordered on three pillars: contributions in the field of “comparative analysis of economic systems”, capturing concurrent visions on

their nature, aspects of conceptualization of “social responsibility” and, respectively, delimitation of the “bioeconomic paradigm”.

- *The second part* systematises, for each of the three economic systems identified as referential for the present paper (among the multiple perspectives enumerated in the literature), the defining features, the way in which social responsibility is assumed and applied, underlying its bioeconomic/ecological vein.

- *The third part* proposes as case study the corporate social responsibility (CSR) codes of key-companies listed on the Romanian stock exchange, identifying these codes as hybrid instruments of authentic volunteerism and legal coercion, a “mix” that rather weakens their social viability.

1. Revision of literature blocks

The economic increasing globalization brings about not only interdependencies among *actors* (be they state, corporate, inter-governmental or international non-governmental ones), but also among their *agendas* (in which the problems regarding the disruptive technologies merge with those regarding social inclusion and those regarding the environment, respectively). The integration of the activities with respect to *social responsibility* with those pertaining to the family of *bioeconomy* within the development strategies of *companies* represents a major concern. The process is turning more and more complex and delicate, being the effect of some critical changes within the corporate values, but also an expression of a lucrative alternative in creating long-term value for them.

The *sustainability* or *durability* of companies (with a terminological bias that favours the first term, that implies the humane teleological action, in comparison with the second one, that suggests a passive/objective/technological trait) and, respectively, the *corporate social responsibility* assumed by these within the “enlarged equation” of their action (given the context, it is also important to discriminate between the voluntary-inciting dimension of responsabilization and the authoritative-constraining one which appears by means of its norming/legal enactment) represent the concern of a vast literature. This grasps, still uneven among analyses, the effects that are generated both by their interactions, and at the crossroads with the resistance structure of the *economic system*.

1.1. Aspects of corporate social responsibility ...

In one of his numerous researches on this matter, Carroll (1977) refers to the social responsibility of a company which can be related to a few action directions: economic, legal, ethical and philanthropic. In his view, each company within an economic system is meant to produce goods and services that individuals desire, with the aim of getting profit. Carroll (1979) also considers that social responsibility is oriented towards managing the business in order to turn it profitable but, at the same time, the law, the ethical principles, and social aspects must be respected, while McWilliams and Siegel (2006) place CSR beyond the interests of the company and its legal obligations.

Kotler and Lee (2005) define social responsibility as “a commitment to improve community well-being through discretionary business practices and contributions of corporate resources”. When companies respect and integrate within their activity the

requirements of social responsibility, they become deeply imprinted into the memory of the community as being “socially responsible”.

One of the “uncanonical” but still influential visions belongs to Milton Friedman, who states that “the social responsibility of business is to increase its profits”. Given his way, “the business of business is business” (Friedman, 1962). In this context, the goal is to accumulate capital, together with maximizing the shareholders’ wealth and in accordance with the law. Friedman criticizes the involvement of social aspects into economic life. This does not rule out the orientation of a part of the profits towards human resources, economic assets, social capital, or goodwill, [considered] a durable form of capital (Hristea, 2011).

Without cursing profit for being the driving force of capitalistic market economy, the dominant perspective underlines the fact that CSR is “not about gaining profit no matter what, but gaining profit that is, at the same time, a social gain”, this being the reason why “CSR is a new type of morality, a socially inserted one” (Boşca and Georgescu, 2015).

At present, it is very popular the thesis according to which globalization leads to inequalities regarding wealth, environment deterioration and, at the same time, unfair practices in working process, such that all together represent endemic diseases of the process (Herrmann, 2004). Within the Green Paper report (2001) it is underlined competitiveness and profitability as long-term sustainability tools, these being the essential premises for the companies that accept social responsibility, and the correlation between the successes of the companies and social responsibility is presented as follows: “social responsibility and economic success lead to the sustainability of a company”.

As a consequence, social responsibility of a company aims towards that fair attitude of the society, which fulfils its mission, respects the values and involved parties and, at the same time, communicates and evaluates the impact of its activity (Duca and Gherghina, 2018). Moreover, a socially responsible attitude relies on durable investments into the community which hosts that activity.

1.2. ... at the junction with bioeconomic perspectives ...

Especially during the last decade, the national public policies changes have influenced the decisions of the companies, such that they be able to concentrate more and more onto *corporate social responsibility regarding the environment*. The concept “environmental CSR” is defined by Mazurkiewicz (2004) as being “the duty to cover the environmental implications of the company’s operations, products and facilities; eliminate waste and emissions; maximize the efficiency and productivity of its resources; and minimize practices that might adversely affect the enjoyment of the country’s resources by future generations”.

In this framework, we can state that social responsibility is an integrative part of the concept of *durable development* and is shaped by the contribution brought about by the company which is responsible for respecting the principles of sustainability. As such, the European Commission (2001) defined in the Green Book CSR as being the “concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis”, since a responsible behaviour leads to long-term success of the company. The CSR contribution to

regaining confidence into the business environment and to building an “intelligent, inclusive, and sustainable” economy is at stake.

Companies can make public these reports that correlate the information regarding the financial performance with that which refers to various aspects of sustainability and, widening the perspective accordingly, they incorporate problems that pertain to *bioeconomy*. For the purpose of standardizing the non-financial reporting, a significant role had the initiatives of Global Reporting Initiative (GRI). The reports display information about “the financial and non-financial performance”, informing “stakeholders on how the institution has acquired the resources and whether it used them economically, efficiently and effectively to achieve the objectives in their best interest, and, respectively, on the institutions degree of involvement in economic, social and environmental activities” (Ștefănescu and Tănase, 2016).

One expects from the companies not only economic performance, but also a social commitment regarding the incorporation of environmental policies and technologies. The responsibility for the environment has, as a “global foundation”, the UN Convention regarding the environment protection, the impact of the gas emission onto global warming, and the managing of exports of waste and reusable materials. It is expected from companies having activities that are specific to bioeconomy to take into account, when they present the non-financial information, the economic and social impact, the adoption and implementation of codes of social responsibility, contributing thus to the assimilation, by the companies, of the technologies specific to bioeconomy.

The bioeconomics’ “birth certificate” seems to be identified with Reinheimer’s paper (1913) which displays the way in which some organisms are spending their lives within the economy of nature. There are also other sources for the “terminological paternity of bioeconomics”, which state in a more concentrated and applied manner the importance of “an optimal biological solution to the issue of overfishing in economic terms”, sources inventoried, among others, in their paper of Tei, Chung and Săvoiu (2018).

For the “founder” of modern bioeconomics, Georgescu-Roegen (1971), bioeconomics is the science that analyses the activity of economy as a continuation of biologic evolution, using cultural and social means. In his famous book, *The Entropy Law and the Economic Process* (1971), fields like economics and ecology are mathematically founded and, at the same time, a decisive clarification between the two is conducted, by marking the urgent necessity of re-evaluating and reconciling them.

Throughout time, the portfolio of meanings for bioeconomics increased and continuously developed, gaining supplementary determinations and nuances.

A selective view into the rich literature in the field displays, for instance, several major topics and theses that individualize bioeconomics.

- The *knowledge-based* bioeconomy approach represents the way of implementing knowledge that derives from sciences about life and refers to creating products that come from biological resources that are ecologically obtained and that are sustainable (Aguilar et al., 2009). The aim is the complete and complex use of terrestrial and sea resources, both biological and renewable, by applying the results of research-development-innovation to food and forage production, and also to industrial and energy production.

- If we see bioeconomy as part of *circular economy*, the biological resources must maintain their value in the production chain, creator of economic value, by making sure that there are no unexploited resources. The planet seems to have reached the exhaustion point; it is scientifically and technically hyper-explored, and politically and economically hyper-exploited. A new boundary is looked for: that in which a unit of matter “reiteratively” satisfies a series of needs (Boulding, 1966; Braungart and McDonough, 2008).

- The concerns from the family of bioeconomy cannot be separated from those regarding the biotechnological solutions, be this the case of food or pharmacy industry. The field of biotechnologies is important for the development and consecration of bioeconomy, both the market reactions and the legal framework claiming from the companies in this field to identify and use as efficiently as possible ways of optimizing the activity and to increase competitiveness within such an avant-garde sector (Gârdan et al., 2008).

- At the same time, bioeconomy obviously needs a *multi-stakeholder framework* implementation, which brings together the efforts of private sector and public authorities, in which the academic environment also communicates through the rest of the channels of civil society. Defining new eco-entrepreneurial models (York and Venkataraman, 2010) and the development of public-private networks within fields that need great investments, like bio-refinery (McCormick, 2011), represent major concerns for emergent bioeconomy.

- Bioeconomy offers a huge potential for addressing societal challenges, thus gaining *security and strategic potencies*. The decision to implement the bioeconomy in all world countries is justified by a series of arguments referring not only to welfare, national security, for instance, within the food and public health sector (Saviotti, 2017), but also, using a wider meaning, to ensuring enough renewable raw-materials for basic national agricultural activities (Sillanpää and Ncibi, 2017).

1.3. ... within the framework of economic systemic perspectives

On the one hand, the economic literature has selected, over time, a main classification of economic systems, legitimating the handbook duality “capitalism vs. socialism” (Schumpeter, 1942; Hayek, 1944; Kornai, 2000; Kornai, 2016), but also adding up a series of intermediary configurations, which are mixed, hybrid, bearing various adjectives, depending on the identification of a main characteristic, representative for the respective system. On the other hand, if the economic systems represent ways individuals follow to ensure their needs within society or to socially coordinate the production and distribution of resources, we have the picture of an unquantifiable plethora of economic systems/models, as in the famous English saying “so many countries, so many customs”.

Despite the diversity of institutions and customs associated to economic activities, this richness of systems can be summarized following a few reference lines.

Heilbroner and Boettke (1992), for instance, provide a tripartite classification of economic systems:

- those based on the *principle of tradition* – the rewards or punishments come from the (dis)approval of the community, which judges using indestructible customs, the

coordination mechanism comes from the indurated habits that provide rigid benchmarks, thus being reliable within the community, but fragile against external challenges;

- those organized as *command structures* – here the power is concentrated and discretionary, providing burdens and privileges, having the possibility to easily gather huge amounts of resources meant to serve megalomaniac projects, of building or conquering, their fragility springing from public commitment, which is hard to get and hard to maintain;

- those in which the *market* is the coordinator – in this case, the distribution of both benefits and costs (and, furthermore, of profits and losses, respectively) does not belong to a single person or domineering group, but is based on productive competition, oriented towards the consumer, of an entrepreneurial nature, risk-bearing and alert.

Bradley and Donway (2010) propose a matrix starting from the formal order given in terms of property rights over resources and exerted effective control:

- when the property and control are private, we have *capitalism/free market*;
- when the property and control are public, we have *socialism*;
- when the property is private, but the control is public (by fiscality and regulations), we have *interventionism/mixed economy*/"the third way";
- when the property is public (of the ruling sovereign), but the control is private (of vassals aristocrats), we have *feudalism*.

Within the present study we choose a slightly different, clearer, classification, because no matter the variety of historical hypostases effectively existing or the purity (often idealistic or even utopian) of the supporting ideologies, it is the *societal order of property rights* that counts (Jora, Topan and Apăvăloaei, 2017):

- at first, there is the *free market* (also called capitalism or market economy, without a perfect synonymy), meaning the economic system in which production means/factors are owned by private individuals from society – this is an ideal order (not a perfect one), intellectually possible, but never found in a pure state in economic history; terminologically, there is a variety of denominations for the system, like "free market capitalism" (Rothbard, 2006), "laissez-faire capitalism" (Skousen, 2001), "unbounded capitalism" (Mises, 1966), "competitive capitalism" (Almond, 2006), "laissez-faire liberalism" (Schumpeter, 1991), "European liberalism" (vs. American) (Levy, 2004), "libertarianism" (Boaz and Crane, 1993) or "manchesterism" (Mises, 1966);

- then, there is *socialism*, system in which the production means are owned by the collectivity or state – it is intellectually impossible in a pure state, following the problems generated by adverse incentives and calculational chaos, system that is "possible" precisely due to the impurity of its application; there is Marxist-Leninist "communism" ("from each according to his ability, to each according to his needs!"), "centralized economic planning" (Nutter, 1976), "planned economy" (Mises, 1951), "market socialism" (Lange, 1998), "paternalist communitarianism" (Owen, 1907), "collectivism, cooperativism, fraternalism, and mutualism" (Wrong, 2000), "industrial democracy" (Dickman, 1987) or, regarding Yugoslavia, "titoism" (Rosser and Rosser, 2004);

- finally, *interventionism*, in between the two ideal/utopian states, with both private property (over some production factors) and public property (over other production

factors), the “society” (be it democratic or not) having, by means of the “state”, a strong influence concerning the disposition and usufruct of the first (through fiscality and regulations); there are also various terms used, like “the third way” (Giddens, 1998), “social market economy” (Erhard, 1958) or “crony capitalism” (Taber, 2015; Iliescu, 2003).

Next, we will display the ways *environmental social responsibility* fits the sets of founding values/ideological programs of the main political-economic systems (free market economy, socialism and interventionist-like “hybrids”, respectively) and then examine how it is *encoded* in nowadays corporate environment.

2. From ideology to ecology: consciousness and social conduct

“Environmental social responsibility” is a formula that, hurriedly read, as it often happens, brings a mental image *inappropriate* to reality and to solving its problems. This can be seen by contravening the current or historical “imagery”, system(at)ically associated with this syntagm, over the *common sense* upon which the order of civilization was built.

Firstly, it is not *society* the one that is not *responsible* towards the “environment”: the obligation to honour a social (moral/ethical/legal) commitment and to bear the consequences of failing to fulfil it is an act in which both sides of the *relationship* are *people* (therefore, as “subjects” of the social order), and not *people and things* (“objects”). Non-human objects are only the *object* of the inter-human relationship.

Then, the obligations (if they are real) are, ultimately, the responsibility of each human *individual*, before being eventually assumed *collectively* (i.e., corporate-wise), and only concern those who have assumed them (in a real manner) and only in relation to those to whom this was done (people, “community”); so, their ambiguity and amalgamation make the social order fragile.

The politico-economic systems that “humanity” has expressed as “value” or experienced in “fact” contain deviations from the elementary logic of personal and proportional responsibility, associated with the “ideal” of *society/market freedom*. But with all the imperfections of freedom, inherent to the human nature, the “alternative” seems far more imperfect (Jora, 2013; 2016).

2.1. Ideal capitalism of free market: ecological responsibility and ownership

In the logic of free market economy, based on *unrestricted* action arbitrarily and discretionarily of resources’ *owners*, under conditions of assumed *rarity*, but also of mutual *non-aggression*, environmental issues are again, ultimately, issues of *social coordination*. Likewise, the stake is the reconciliation of those individual or group plans that are mutually exclusive, by finding *righteousness* in undertaking a particular action, one that basically is wished to become effective. Attention, however: *efficiency* is, despite the persistence of neoclassical economists, a concept that *prolongs*, eventually, the pre-established *right* character of an action, and *does not certify (social) justice* (Rothbard, 1982).

More specifically, a pollution or environmental problem arises when the individual or group A and the individual or group B attempt simultaneously or intend to use the resource

X for purposes that cannot be simultaneously accomplished – “conflicting objectives” (Cordato, 2004). We, therefore, have to deal with a “conflict” (in terms of *private* property rights), and not so much with a “negative externality” (concept that, otherwise, ignores proprietary relations, but not accidentally used in the sphere of *public* property, falsely regarded as a supreme given in *environmental* issues). And such an “institutional” view has the gift of having significant “incentive” and “informational” consequences in the environmental economy.

If we were to limit ourselves only to pollution as a central environmental problem, there is in theory, as principle, but altogether used in practice (Block, 1998) a way to force private polluters to bear the social cost of their operations: bringing them to trial, forcing them to pay for all past damages and obtaining a court order prohibiting such invasions in the future. In other words, anyone who initiates an act of visible *aggression* against someone or someone else’s property must be strictly responsible for damages to the victim, even if that action is “reasonable” or accidental. For example, in the case of environment, aggression may take the form of deterioration in the air / drinking water / soil quality, etc.

Discomfort does not come from nowhere and goes to anywhere, but has a *source* and produces *victims* (because otherwise it would not be *claimed* by *someone* as a *problem* from the start). And, of course, not every “pollution” is incriminating by anyone, anytime, anyway: the damage must be produced to someone already installed in a particular region (you cannot suddenly settle next to a long-time built chimney and complain that you cannot breathe); the damage must be objective and measurable (not “injured feelings”), must be proved on the causality line as being caused specifically by the polluter (beyond any reasonable doubt); there must not be “superior”, “collective” responsibility, but strictly limited to the polluter.

The supporters of the free market economy – where the free market is the “active principle” of the real capitalist system, deeply hybridized with statist elements on which we will insist in the discussion regarding interventionism – believe that free enterprise is *also* the best means for the purpose of environmental protection.

The reason for environmental damage is rather the failure of the government to protect property rights (preclusion) along with other state actions that over-regulate private property or ban it completely (perpetration). Incentives and economic calculation arguments are also revealed.

The argument of sound incentives:

- Less polluting production processes are encouraged, from the available technological alternatives, because the internalisation of costs with personalized and proportionate compensation for each polluter is usually more onerous/penalizing than their “socialization”/“dispersion” within “industries”/“branches”/“sectors”.
- For the same reason, investing in clean technologies is encouraged, because in the long run they diminish the exposure to the risk of litigation and compensation – even if at present incomes can appear to be sufficiently high to cover the damages, those can increase in the future and expose companies to losses/insolvency/bankruptcy.
- At the same time, companies’ own investments in R&D and innovation can be stimulated, which can lead to original technological improvements (that can be patented) and consequently increase in both the competitiveness and the sustainability of a business.

- Equally, in addition to the specialized judicial system in solving such environmental problems, an environmental “forensic” industry can be developed, dedicated to the development of means and technical-scientific methods for the examination and interpretation of judicial evidence.

- Moreover, more attention will be paid to the location of production facilities potentially pollutant in the vicinity, which will be located in unpopulated areas.

- Finally, a genuine CSR component will be distinguished, which should not be confused with, but is a bonus to the compliance with the legislation protecting property.

The argument of information/prices:

- Establishing clear *private property rights* over (environmental) resources makes them *marketable*, giving them a *price*, so individuals or organizations can *calculate*, assessing the costs and benefits of different investment/business projects. Only setting cardinal monetary prices creates a common basis for comparisons.

- Furthermore, *profits* and *losses* (anticipated or already recorded) allow entrepreneurs to evaluate the results of their actions and see if what they produced has allowed people to meet the most urgent desires or only secondary needs (so, resources were wasted). Without the signal of profit and loss, rarity and utility remain hidden.

- “Property” (Mises, 1920), rather than “knowledge” (Hayek, 1945), *coordinates* the separate actions of different people. Technological knowledge, even documenting *all* possible combinations of physical production, does not substitute rational economic calculation. At the same time, the problem is not “arithmetic”, but “inter-subjectivity”.

- The property regime determines the types of knowledge that are sought after and which actually come to be actually used. People generally seek and use knowledge to help them better achieve their goals. With secure private property rights, such knowledge can be ranked, valorised, and productively valued.

- The owner (i.e., of an environmental resource) will normally use knowledge that helps him achieve his goals without interfering with someone else’s ability to do the same (interference that is expensive). Erroneous interactions will be eliminated through losses, and fraudulent incursions will be corrected by appropriate legal institutions.

Proponents of free market solutions (i.e., the Austrian School) propose, therefore, a proprietary alternative approach to the dominant paradigm of externalities and calculations decoupled from price. They recognize that although the delimitation of environmental resource ownership is not the easiest thing, it is logically coherent. They deny that it would be a utopian ideal, but only a politically unattractive solution, as history has illustrated it, whose ignorance transforms both socialist and statist hybrid solutions into wasteful economic experiments.

2.2. Scientific and utopian socialism: the exploitation of (environment and) man by man

Both Marx (1844) and Engels (1883), following his master, insisted that there is a somewhat metabolic interaction between man and earth, between man and non-anthropoc

nature (Foster and Clark, 2016). This metabolism had since begun to be distorted/disrupted by the “frenzied lines of industrial production”. The ruptures/alienations between humans and nature are getting amplified. For example, there is a rupture in the “circularity” of the relationship between humans and soil. Marx himself pointed out the process by which the soil loses its nutrients: nutrients in the form of vegetal wastes are eliminated in rivers that transport them to the sea, far from the place they come from, preventing the regeneration of soils. The economy-ecology analogy becomes a strong one: Marx points out that just as large industry and large industrial trade leave behind “labour waste” (unemployment) in the urban environment, so does industrial agriculture leave behind a land turned waste.

In order to put an end to the “contradiction between humanity and nature”, in Engels’ words, it is needed “something more than mere knowledge; it requires a complete revolution in our hitherto existing mode of production, and simultaneously a revolution in our whole contemporary social order” (Williams, 2010). The canon-theses of “scientific marxism” have long become history, though they recurrently appear to be “topical” (O’Connor, 1997; Burkett, 2009; Harvey, 2015; Haydock, 2017): (a) only by collectively owning land, together with the tools and processing machinery, and dedicating them to the satisfaction of social needs, will the simultaneous exploitation of nature and humanity end; (b) only then we can interact with nature according to a conscious plan, using accumulated scientific and technical knowledge to organize production and distribution on a completely new basis, establishing a more harmonious relationship between nature and humanity.

(Post-)Marx(ist)-inspired science is actually claiming here a kind of paternity with respect to environmental concerns. For example, the term “biosphere” – which brings together the entire open system that sustains life on Earth, which interacts with the atmosphere and energy from the Sun – was invented in the 1920s by a scientist from the Soviet Bolshevik government, Vladimir Vernadsky. He published in 1926 a work with this title – *The Biosphere* – “before Soviet science became intensely productivist, anti-ecological and, in some important and notorious episodes, anti-scientific” (Williams, 2010). Here, the *biosphere*, which includes all living and non-living material, but support for the former, was the “system”, the *human society*, an interactive “subsystem” of it, and the *economy*, a “sub-subsystem” (or a subsystem of human society), even if the critical one, through which society evolves. For capitalists it would be the opposite: economy is the system, and society and eventually the biosphere would be subsystems.

This implacable reversal, in the view of Marxist socialists, is guilty for the birth of the essential, capitalism-specific idea that the economy can expand “indefinitely”, and that the capitalist system is a “no limitation” system. That this contradicts the physical and biological laws of the universe, however, is an obvious fact (irrespective of the ideological benchmark perspectives, this discovery not being a revelation of the “scientific socialism”, despite the allegations in this regard). Marxists marched that they disclosed that the (capitalist) economy cannot function as a *perpetuum mobile*, impossibility certified by the first two laws of thermodynamics from the nineteenth century, while accusing the pro-capitalist economic theories that suggest a “system of beliefs” that suspend those laws in economics, even if it uses them in other spheres of scientific research. From here, the socialists claim, the erroneous idea of the apologists of capitalism that the economy remains independent of the laws of nature.

At present, the ecological and socialist movements appear to have rediscovered each other after the hard failure of command economies: the second one needs a re-legitimation through the former.

This alliance, not at all facile, is fuelled by political, syndicated, statist survival of the “class” (allegedly exploited, *de jure*) of (*de facto*) expropriators.

“Ecological socialism” (O’Connor, 1997) generally means a rational and ecologically sensitive society, based on the democratic control of production means and objects, information and so on, characterized by a high degree of socio-economic equality, peace and social justice, in which labour and land are “decoupled from the commodity status” and in which the exchange value is subsumed to the use value. “Socialist ecology” (O’Connor, 1997) represents, also broadly, a dialectical ecological science and socio-political practice that successfully combine the local and the central, the spontaneous and the planned, etc. – the premises of traditional anarchism and traditional socialism –, involving the development of a world class policy, against oppression and economic exploitation and against ecological degradation that would disproportionately hit precisely the working class.

On the one hand, the (“orthodox”) socialism and ecology seem contradictions in terms. The socialists are still seen as “productivists”, accusing ecology of being an ideology of austerity or a system of facilities for the middle class, and is dependent on “site-specificity” or “localism”; ecologists are seen as “antiprodutivists”, accusing socialism of promoting “unlimited growth” and that central planning rashly ignores “local peculiarities”. On the other hand, the (“opportunistic”) socialists however see an escape: redefining productivity. A society can achieve higher levels of productivity, they claim, through the reuse and recycling of materials; by reducing energy consumption and moving to work in reformed green cities; through the use of organic farming; by removing and saving labour and nature alike from the (capitalist, “damaging”) “marginal and mercantile” paradigm.

Trying to (opportunistically) reconcile the (principled) differences of vision between socialism and ecology, the artisans of this reconciliation argue that both causes and consequences, as well as solutions to most ecological problems are both national and international (namely, they refer equally to national economies and the global economy).

Therefore, they postulate, far from being incompatible, socialism and ecology could fit together for at least a few reasons, of which the more obvious would be:

- *Socialism needs ecology* since the latter emphasizes local specificity (at a time when “identities” must be honoured/served) and material reciprocity (“matter”/“energy” produce action-reactions and mutual transformations), through the central importance attached to material exchanges and within the natural environment, and between society and nature.

- *Ecology needs socialism* because the latter stresses the democratic planning and the key-role of social exchanges between human beings. The community/town/village cannot, in itself, effectively deal with the excesses/slippages of global capitalism and, much less, with the destructive dialectics installed between economic and ecological “crises”.

2.3. Real interventionism: nature, culture & (dis)coordination between state and market

The conventional approach to environmental issues and its specific public policies stem from the image of “market failures”, doubled by mechanisms that do not completely exclude its functioning principles, trying to find a mixed, hybrid, in other words, *interventionist* response (without degenerating into socialization and socialism). The instruments used are *environmental taxes, fees and charges, marketable (“pollution”) permits, deposit repayment schemes, environmentally motivated subsidies*, and also *voluntary approaches used to complement environmental policy* (a qualitative and quantitative inventory of them, for the developed world economies, is available in OECD’s Policy Instruments for the Environment (PINE), developed in part in cooperation with the European Environment Agency (EEA)).

In short, there are the following tools of the “ecological interventionism”:

- *Environmental taxes* are defined as any mandatory and unconditional payment to the government, levied on a taxable basis that is considered to be relevant to the environment, namely taxes that have a tax base with a proven, specific, negative environmental impact. Environmental taxes increase the costs of a polluting product, which tends to discourage production or consumption.

- *Fees/charges* are defined as mandatory payments to the government, levied more or less in proportion to the services provided. The main difference between “taxes” and “fees/charges” is the type of beneficiary: the latter are paid for government services directed to a particular beneficiary, while taxes are used to generate revenue to finance general or specific government expenditures.

- *Marketable (“pollution”) permits* are market instruments that provide an allowance or permit to engage in a potentially polluting activity. There are two main types: *cap-and-trade* (the total allowable volume is limited from the start) and *baseline-and-credit* (there is no general limit, but the reduction in pollution turns into credits to sell to those unable to reach the established pollution cap).

- *Deposit repayment systems* are market instruments that consist of a combination of product tax (deposit) and a subsidy for recycling or proper disposal (reimbursement), aimed at discouraging the illegal or inappropriate disposal of recyclable materials. They allow high collection rates and high quality of the collected material, making it possible to reuse the materials.

- *The subsidy* is considered environmentally motivated if it reduces directly or indirectly the use of something that has a proven, specific, negative impact on the environment. The database covers environmentally motivated subsidies, consisting of government payments to producers and/or preferential tax treatments, in order to influence production levels, prices or the remuneration of inputs.

- *Voluntary approaches* to environmental policy include all the voluntary tools by which firms or industries are committed to improving their environmental performance beyond what the law requires. These include agreements negotiated between a governmental authority and one or more private parties, as well as *environmental CSR*, located in a hybrid area between business volunteering and state incentives (or constraints).

Two observations, before proceeding to the CSR component:

- “Pigouvian” taxes (to internalize externalities) and marketable permits (for CO₂ or other greenhouse gas emissions) are clear improvements to “command and control” regulations, but come with their own institutional baggage. The “knowledge” and “calculation” issues (Cordato, 2004; Carden, 2013) are well-known, but there are other possible *unintended consequences* derived from these instruments: taxing CO₂, for example, will transfer production and consumption decisions from taxed margin to untaxed margins, generating, in parallel with the reduction of CO₂ emissions, the increase of even more hazardous gas emissions, such as methane.

- The objections to “emissions trading” schemes are more than just “how do you know how much to pollute before trading deficits/excesses?”. Finding the “correct” value of permissible emissions could require an endless process of “trial and error”, but the credibility of the political commitment remains a problem. What incentive is there for a government to specify a certain level of carbon emissions that will be allowed each year and then not to modify it in response to political pressure? Next, the information needed to know whether a particular regulation *really works* does not exist, and governments cannot discriminate between results obtained “thanks to” or “despite of” a particular public policy.

Characteristic to the perspective of the *mixed/interventionist capitalist economy* is the certification in the context of CSR of the adoption of a so-called *triple bottom line*. Its supporters appreciate that the success or ultimate health of a corporation can and must be measured not only through the traditional financial line, but also through social/ethical and environmental performance. But although the emphasis on environmental and social prerogatives may be an important element of a company’s brand identity, there are major issues in operationalizing this *triple bottom line*. We can know, for example, the percentage of office paper being recycled, the amount of (“green”) energy used by the company’s buildings and the percentage of employees driving hybrid cars. But even surpassing the question of whether they really represent unambiguous management of the environment, we do not have a way to turn this information into a coherent indicator of environmental performance. The “in-kind” calculation cannot be a reasonable alternative to the “monetary/financial” calculation.

The same problem arises when considering *trade-offs* between financial, social and environmental objectives. Even if we assume that companies can build consistent indices of their “non-financial” – social and environmental – “baselines”, there is no method to say whether a single unit reduction in the company’s “social line” is an acceptable price to pay for a two-unit improvement in the “environment line”, or if the company should sacrifice one million units of profit to improve its “social and environmental baselines” with a single unit. It is true that a company could use the market prices for recycled paper and energy to estimate the cost of reducing its recycling efforts to save energy, but this information also invariably translates into the “financial line”. Norman and MacDonald (2004) conclude in their critique to the *triple bottom line* that “what is sound about the idea of a triple bottom line is not [necessarily] novel, and ... what is novel about the idea is not [necessarily] sound”.

We end here the discussions up to this point on the free market and the order of private property (with their informational and incentive tools given by the free price system), on

socialism (and its allegations of reducing the alienation of man from nature and the abuse of nature by man) and on their statist modern reconciliation. The fact is that data reporting on “corporate citizenship” and “social responsibility”, legally encouraged/enforced, is a good way to attract customers, employees and shareholders, but the only consistent measure of a firm’s performance is the financial line. And there is no way to express together monetary, social and environmental units outside market freedom.

3. The natural environment and the business environment in Romania – a glance

In 2015, Romania, together with 192 UN countries, adopted the *2030 Agenda for sustainable development*, joining the 17 objectives of sustainable development, in order to create an equitable and inclusive society (Government Decision – HG no. 877/2018). The authors of the present paper conducted an analysis of the publicly available information regarding the CSR activities of companies listed at Bucharest Stock Exchange (BVB), meant to identify the actual stage of integrating the concept of *social responsibility / environmental social responsibility* within the strategy and/or activity of the large companies from the Romanian business environment.

The evaluation followed *three steps*:

- During *the first stage* of the analysis there were identified all BVB listed companies, for the following CAEN codes: Agriculture, forestry and fishery; Extracting industry; Processing industry – fabrication of basic and ordinary pharmaceuticals; Production and supply of electricity, heat, gas, hot water, and air conditioning; Water supply, sanitation, managing waste, decontamination, and Health and social assistance. The selection of CAEN codes took into account the relevance of the activities with respect to bioeconomy, either following the fact that, in production, the companies activating in these (sub)sectors hold a significant potential to produce harmful effects over the environment, or the fact that these use / have the possibility to use new technologies meant to optimize production, together with the improvement of the quality of the environment.

- *The second stage* represented the analysis of the data published on the web pages dedicated to each company, by using the following key-words: *social responsibility, CSR, quality, environment, sustainability, non-financial reporting, corporate governance*, but not limited to these. The analysis was meant to identify the transparency level and the degree of openness of the companies towards the local, regional or national community where they are activating and the interest companies show in promoting social responsibility, respectively. In our opinion, transparency plays an important part in ensuring the success of social responsibility / environmental social responsibility activities, given the fact that their success depends on the target public awareness related to these activities and to their effects. Thus, we can say that communication, as a part of social responsibility strategy of an organization, is a defining and fundamental element in reaching the goals of the strategy.

- *The third stage* of the analysis was dedicated to detailed verification of non-financial reports or of other data sources (as was the case) meant to serve the identification of the domains/dimensions of companies’ interest as related to social responsibility (according to ISO 26000: organizational governance, human rights, fair treatment of labour force, environment protection, business ethics, consumers’ rights, involvement into community development – health, education, etc.), the identification of the financial effort associated

with the intervention of the companies into the fields of interest, the (in)existence of a tradition/beginning in integrating the CSR activities.

The research was conducted on 23 Romanian companies, starting from the data published on their web pages, accessed between January and March 2019, respectively, starting from the 2016 and 2017 reports (such as: sustainability report, annual report regarding the situation of sponsorship, annual report, administrators’ report, annual report regarding the social responsibility actions of sponsorship/mecenat-nature, annual report of the board of directors, etc.). The classification of companies, following the field of activities, according to CAEN codes, was: Agriculture, forestry and fishing – seven companies; Extracting industry – eight companies; Processing industry – fabrication of basic and ordinary pharmaceuticals – three companies; Production and supply of electricity, heat, gas, hot water, and air conditioning – two companies; Water supply, sanitation, managing waste, decontamination – two companies, and Health and social assistance – one company.

The results of the undertaken analysis attest the existence of different approaches at the level of various sectors of activity, but also within the same sector of activity.

• ***Agriculture, forestry and fishery***

Among the 7 companies activating in this sector, only two mention, on their web pages, corporate governance (by attaching the corporate governance declarations), but none refers to social responsibility, CSR, sustainability, non-financial reporting. At the same time, it is noted a complete lack of transparency related to the certification of quality management (ISO 9001) or to a system of efficient environmental management (ISO 14001), respectively, to the environment policy promoted by the company or to a system of health and work security management (OHSAS 18001), or to the alignment of the company to a system of social responsibility, aimed to assist the organizations for supporting the contribution to sustainable development (ISO 26000); just one refers to the certification in the field of quality management. Therefore, at the sector’s level, we underline the company’s lack of transparency and interest in promoting the activities with an impact concerning social responsibility. At the same time, as a direct consequence of the lack of transparency in online, we cannot comment upon the field of interest of the domestic companies from Agriculture, forestry and fishery regarding social responsibility; the same goes for their financial effort for supporting one or more fields of interest related to CSR.

• ***Extractive industry***

Three out of the seven companies (from the eight listed, one was removed from the analysis due to the absence of CSR data from the web page) which were analysed created a distinct button on the main page, which was dedicated to CSR. The forth company mentions, in the form of public bulletins, its involvement into this type of activities, but without making visible the way in which social responsibility was integrated into the company’s strategy, respectively, the company’s manner of reporting the results; but at the level of the group of companies this company belongs to we notice an intense activity of non-financial reporting by means of annual reporting of sustainability. All seven analysed companies refer to the certification of quality management (ISO 9001), to a system of efficient environmental management (ISO 14001), respectively, to the environment policy promoted by the company, to a system of health and work security management (OHSAS 18001). Still, none

of them directly mentions the standard of social responsibility (ISO 26000); however, there are some references of it in other documents. Other two companies make no reference to social responsibility or corporate governance, limiting only to certification of above-mentioned quality systems. The seventh analysed company attaches its corporate governance bulletin to the section dedicated to investors.

• ***Processing industry – fabrication of basic and ordinary pharmaceuticals***

The three companies that activate in the field of pharmaceuticals production are present in the online space by means of web pages, where two of them have dedicated a distinct button to social responsibility, and the third has a distinct button dedicated to corporate governance, by which it can be easily identified the regulation of corporate governance applicable to the company. All of them hold certifications in the field of quality management (ISO 9001), environment (ISO 14001) and health and work security (OHSAS 18001). According to the corporate governance regulation, one of them declares interest only for environment protection, stating that it will issue a policy regarding social responsibility at the time it will consider that this has an impact onto the innovative character and social competitiveness. The second agent publishes only a list of the sponsorships from 2016 and 2017. The third company can be an adequate model, since it publishes the first non-financial report in 2017.

• ***Production and supply of electricity, heat, gas, hot water, and air conditioning***

The two companies activating in the field of production and supply of electricity, heat, gas, hot water, and air conditioning hold a certificate for the environment management (ISO 14001), respectively, in the field of health and work security (OHSAS 18001). Besides this, one holds a certificate for the management of information security, according to ISO 27001. Both companies pay special attention to transparency regarding the social responsibility activities they undertake, which seems obvious by creating a special button dedicated to corporate social responsibility on their web pages. Despite all these, none has elaborated a non-financial report, but only reports regarding sponsorships during 2016 and 2017. At the same time, just one of them leaves the impression it considers some projects regarding environment protection.

• ***Water supply, sanitation, managing waste, decontamination***

At the two companies from this category, after analysing their web pages, there is no clear concern for CSR.

• ***Health and social assistance***

The sole Romanian company from this industry whose actions are listed and traded on the Bucharest Stock Exchange holds a certificate for the systems of management in the field of quality management (ISO 9001), environment (ISO 14001), respectively, the field of health and work security (OHSAS 18001). The company ensures the visibility of the social responsibility code applicable starting with February 2017, within a space dedicated to the concept of corporate governance. Regarding the reporting of conducted activities, the company has chosen to present its own contribution within two chapters of the administrators' report, respectively, non-financial and corporate governance information. The 2017 report regarding the concept of CSR does not display any other contribution except that referring to the publishing of the Social Responsibility Code on the company's site.

Concluding remarks

The authors’ analysis highlights, at least at the level of the national economy, for the industries covered by the study, that the operationalization of the social responsibility concept becomes more visible for companies in the Extractive industry, the Processing industry – fabrication of basic and ordinary pharmaceuticals, and the Production and supply of electricity, heat, gas, hot water, and air conditioning, even if sometimes the activities catalogued by some of the analysed companies as activities in the area of social responsibility are in fact purely philanthropic. At the opposite end are the companies from Agriculture, forestry and fishery; Water supply, sanitation, managing waste, decontamination, and Health and social assistance, as the level of transparency of possible activities by these companies is very low, in most cases such activities not being communicated to the general public.

It is important to emphasize that it is precisely companies in industries with a major potential for pollution and environmental degradation (such as those in the fields of Electricity, heat, gas, hot water, and air conditioning) that do not direct their financial resources for actions with regard to social responsibility in the area of environmental protection. But there is a significant involvement of companies from the Extractive industry and Pharmaceutical industry in environmental responsibility projects. It is noticed that the involvement in environmental CSR projects consists mainly in equipment and research-innovation investments in order to reduce the consumption of resources and the environmental impact of the production processes. However, the “commitment to the environment” seems largely unconvincing.

The *superficial* causes can range from a simple erroneous communication strategy to a total lack of interest in assuming any responsibility from the company towards the environment or, at least, towards the community in which it is effectively involved. The *profound* causes may be related to the systemic design in which the state creates the impression that it is primarily responsible for the “common” environment, but also to the ambiguity of “private” responsibility of companies towards parties directly affected by their actions (in terms of private resources’ degradation). These should be considered before performing charitable/philanthropic actions, that make sense and have value only after the minimum of non-interference is strictly respected. We could say that environmental CSR is “in addition” to respecting the *natural environment* in the logic of the *natural law*.

Bibliography

- Aguilar, A., Bochereau, L. and Matthiessen, L., 2009. Biotechnology as the Engine for the Knowledge-Based Bio-Economy. *Biotechnology and Genetic Engineering Reviews*, 26(1), pp.371-388.
- Almond, G.A., 2006. *Ventures in Political Science: Narratives and Reflections*. Boulder: Lynne Rienner.
- Block, W., 1998. Environmentalism and Economic Freedom: The Case for Private Property Rights. *Journal of Business Ethics*, 17, pp.1887-1899.
- Boaz, D. and Crane, E.H., 1993. *Market Liberalism: A Paradigm for the 21st Century*. Washington: Cato Institute.

- Boşca, L.C. and Georgescu, S.D., 2015. CSR – From Economics to Law and Ethics. A Case and Three Approaches. *Proceedings of the 9th International Management Conference Management and Innovation for Competitive Advantage*. Bucharest, Romania, November 5th-6th, 2015. Bucharest: ASE.
- Boulding, K., 1966. The Economics of the Coming Spaceship Earth. [online] Available at: <<https://www.panarchy.org/boulding/spaceship.1966.html>> [Accessed 1 March 2019].
- Bradley, R.L. and Donway, R. 2010. Capitalism, Socialism, and “the Middle Way”. A Taxonomy. *The Independent Review*, 15(1), pp.71-87.
- Braungart, M. and McDonough, W., 2008. *Cradle to Cradle: Remaking the Way We Make Things*. New York: North Point Press.
- Burkett, P., 2009. *Marxism and Ecological Economics (Historical Materialism)*. Chicago: Haymarket Books.
- Carden, A., 2013. Economic Calculation in the Environmentalist Commonwealth. *The Quarterly Journal of Austrian Economics*, 16(1), pp.27-44.
- Carroll, A.B., (ed.), 1977. *Managing Corporate Social Responsibility*. Boston: Little, Brown.
- Carroll, A.B., 1979. A Three-Dimensional Conceptual Model of Corporate Social Performance. *Academy of Management Review*, 4(4), pp.497-505.
- Cordato, R., 2004. Toward an Austrian Theory of Environmental Economics. *The Quarterly Journal of Austrian Economics*, 7(1), pp.3-16.
- Dickman, H., 1987. *Industrial Democracy in America: Ideological Origins of National Labor Relations Policy*. Chicago: Open Court Publishing Company.
- Duca, I. and Gherghina, R., 2018. CSR Initiatives: An Opportunity for the Business Environment. In: I. Oncioiu (ed.), 2018. *Ethics and Decision-Making for Sustainable Business Practices*. Hershey: IGI Global. Ch. 2, pp.187-202.
- Engels, F., 1883. Notes and Fragments. *Dialectics of Nature*, pp.295-311. [online] Available at: <<https://www.marxists.org/archive/marx/works/1883/don/ch07g.htm>> [Accessed 6 December 2018].
- Erhard, L., 1958. *Prosperity through Competition*. New York: Frederick A. Praeger.
- European Commission, 2001. *366 Final Green Paper Promoting a European Framework for Corporate Social Responsibility – Green Paper*. Bruxeles: Office for Official Publications of the European Communities.
- Foster, J.B. and Clark, B., 2016. Marx’s Ecology and the Left. *Monthly Review*, 68(2), pp.1-25.
- Friedman, M., 1962. *Capitalism and Freedom*. Chicago: University of Chicago Press.
- Georgescu-Roegen, N., 1971. *The Entrophy Law and the Economics Process*. Cambridge: Harvard University Press.
- Giddens, A., 1998. *The Third Way: The Renewal of Social Democracy*. Cambridge: Polity Press.
- Harvey, D., 2015. Listen, Anarchist!. [online] Available at: <<http://davidharvey.org/2015/06/listen-anarchist-by-david-harvey/>> [Accessed 6 December 2018].
- Haydock, K., 2017. A Marxist Approach to Understanding Ecology. *Economic and Political Weekly*, 52(37), pp.83-88.
- Hayek, F., 1944. *The Road to Serfdom*. London: Routledge Press.
- Hayek, F., 1945. The Use of Knowledge in Society. *The American Economic Review*, 35(4), pp.519-530.
- Heilbroner, R.L. and Boettke, P.J., 1992. Economic Systems. In: *The New Encyclopaedia Britannica*, vol. 17. Londra: Encyclopædia Britannica Inc., pp.906-913.

- Herrmann, K.K., 2004. Corporate Social Responsibility and Sustainable Development: The European Union Initiative as a Case Study. *Indiana Journal of Global Legal Studies*, 11(2), pp.205-232.
- HG nr. 877/2018 privind adoptarea Strategiei Naționale pentru Dezvoltarea Durabilă a României 2030, *Monitorul Oficial* nr. 985 bis din 21 noiembrie 2018.
- Hristea, A.M., 2011. Responsabilitatea socială corporativă – între deziderat și realitate. *Economie teoretică și aplicată*, 10(563), pp.56-73.
- Iliescu, I., 1993. Realitatea TV (emisiunea „Vectorul Cristoiu”), 26 februarie 2003, ora 20:15. [pdf] Available at: <http://old.presidency.ro/pdf/date_arhiva/3591_ro.pdf> [Accessed 11 March 2019].
- Jora, O.D., 2013. *Avataruri ale corporației multinaționale. Exercițiu de analiză proprietariană*. București: Editura ASE.
- Jora, O.D., 2016. *Spiritualitate, materialitate și proprietate. Cultura mea, cultura ta, cultura noastră, cultura lor*. București: Editura ASE.
- Jora, O.D., Topan, M.V. and Apăvăloaie, M.A., 2017. Sisteme economice comparate. In: Hurduzeu, G. and Nicolescu, L. (eds.). *Relații economice internaționale: teorii, strategii, politici, instrumente și studii de caz*. București: Editura ASE.
- Kornai, J., 2000. What the Change of System from Socialism to Capitalism Does and Does Not Mean. *Journal of Economic Perspectives*, 14(1), pp.27-42.
- Kornai, J., 2016. The System Paradigm Revisited, Clarification and Additions in the Light of Experiences in the Post-Socialist Region. *Acta Oeconomica*, 66(4), pp.547-596.
- Kotler, P. and Lee, N., 2005. *Corporate Social Responsibility: Doing the Most Good for Your Company and Your Cause*. Hoboken: John Wiley & Sons.
- Levy, J.D., 2004. Activation through Thick and Thin: Progressive Strategies for Increasing Labor Force Participation. In: M.A. Levin and M.N. Shapiro (eds.). *Transatlantic Policymaking in an Age of Austerity: Diversity and Drift*. Washington: Georgetown University Press. pp.100-130.
- Marx, K., 1844. *Economic & Philosophic Manuscripts of 1844*. [pdf] Available at: <<https://www.marxists.org/archive/marx/works/download/pdf/Economic-Philosophic-Manuscripts-1844.pdf>> [Accessed 6 December 2018].
- Mazurkiewicz, P., 2004. *Corporate Environmental Responsibility: Is a Common CSR Framework Possible?*. Washington, DC: World Bank.
- McCormick, K., 2011. The Emerging Bio-Economy in Europe: Exploring the Key Governance Challenges. *World Renewable Energy Congress*, 8-13 May, 2011. Linköping, Sweden. [pdf] Available at: <http://www.ep.liu.se/ecp/057/vol10/005/ecp57vol10_005.pdf> [Accessed 2 February 2019].
- McWilliams, A., Siegel, S.D. and Wright, P.M., 2006. Corporate Social Responsibility: Strategic implications. *Journal of Management Studies*, 43(1), pp.1-18.
- Mises, L., [1920] 1990. *Economic Calculation in the Socialist Commonwealth*. Auburn, Alabama: Ludwig von Mises Institute.
- Mises, L., 1951. *Socialism: An Economic and Sociological Analysis*. New Haven: Yale University Press.
- Mises, L., 1966. *Human Action*. 3rd ed. Chicago: Contemporary Books.
- Norman, W. and MacDonald, C., 2004. Getting to the Bottom of “Triple Bottom Line”. *Business Ethics Quarterly*, 14(2), pp.243-262.
- Nutter, G.W., 1976. *Central Economic Planning: The Visible Hand*. Washington: AEI Press.

- O'Connor, J., 1997. Socialism and Ecology. In: J. O'Connor, *Natural Causes: Essays in Ecological Marxism*. New York: The Guilford Press. Ch.15.
- Reinheimer, H., 1913. *Evolution by Co-operation: A study in Bio-Economics*. New York: Dutton.
- Rosser, J.B. and Rosser, M.V. 2004. *Comparative Economics in a Transforming World Economy*. 2nd ed. Cambridge: MIT Press.
- Rothbard, M.N., 1982. Law, Property Rights, and Air Pollution. *Cato Journal*, 2(1), pp.55-99.
- Rothbard, M.N., 2006. *For a New Liberty: The Libertarian Manifesto*. Auburn, Alabama: Ludwig von Mises Institute.
- Saviotti, P.P., 2017. Structural Change, Knowledge and the Bioeconomy. In: S. Dabbert, I. Lewandowski, J. Weiss, A. Pyka (ed.), 2017. *Knowledge-Driven Developments in the Bioeconomy. Economic Complexity and Evolution*. Berlin: Springer.
- Schumpeter, J.A., 1942. *Capitalism, Socialism and Democracy*. New York: Harper & Brothers.
- Schumpeter, J.A., 1991. *The Economics and Sociology of Capitalism*. Princeton: Princeton University Press.
- Sillanpää, M. and Ncibi, C.M., 2017. *A Sustainable Bioeconomy: The Green Industrial Revolution*. Berlin: Springer.
- Skousen, M., 2001. *The Making of Modern Economics: The Lives and Ideas of the Great Thinkers*. Armonk: M.E. Sharpe.
- Ștefănescu, A. and Tănase, G.L., 2016. The Development of a Corporate Governance Assessment Model for the Romanian Public Sector. *Audit Financiar*, 14(143), pp.1227-1243.
- Taber, G.M., 2015. The Night I Invented Crony Capitalism. *Knowledge*, Wharton, 3 November. [online] Available at: <<http://knowledge.wharton.upenn.edu/article/the-night-i-invented-crony-capitalism>> [Accessed 11 March 2019].
- Williams, C., 2010. *Ecology and Socialism: Solutions to Capitalist Ecological Crisis*. Chicago: Haymarket Books.
- Wrong, D.H., 2000. Communitarianism, Human Nature, and the Spirit of the Times. In: E.W. Lehman (ed.). *Autonomy and Order: A Communitarian Anthology*. pp.23-36. Lanham, Md.: Rowman and Littlefield.
- York, J.G. and Venkataraman, S., 2010. The Entrepreneur-Environment Nexus: Uncertainty, Innovation, and Allocation. *Journal of Business Venturing*, 25, pp.449-463.