Agriculture's Multifunctionality, Sustainability, and Social Responsibility

Werner Hediger,

Swiss College of Agriculture SHL, Zollikofen, Switzerland

Paper prepared for presentation

at the 82nd annual conference of the Agricultural Economics Society (AES) at the Royal Agricultural College, Cirencester, Gloucestershire, UK, 31st March – 2nd April 2008

Abstract:

We investigate the question whethr the concept of corporate social responsibility (CSR) could be used to replace or complement those of multifunctionality and sustainability in the agri-food sector. It shows that the double role of citizens as tax payers and customers requests and allows us to directly link the problems of governance and stakeholder society in an intertemporal framework of total value maximisation and sustainable development. Thus, the concept of CSR provides a link between the views on agriculture's multifunctionality and sustainability. Moreover, the fact that some actors in a vertical market, such as the agri-food chain, can exercise market power and absorb tax money and resource rents enforces the need of a broader perspective which involves concern about addresses the social responsibilities and performance of all actors along this value chain.

JEL classification: D62, D63, Q01, Q18

Keywords: agricultural policy, multifunctionality, sustainability, social responsibility, market power.

Address for correspondence:

Dr. Werner Hediger,

Swiss College of Agriculture SHL, Laenggasse 85, 3052 Zollikofen, Switzerland

eMail: werner.hediger@shl.bfh.ch

1 Introduction

Multifunctionality and sustainability became crucial concepts in agricultural policy debates since the late 1980s. The former describes the fact that, beyond its primary function of supplying food and fibre, agriculture provides various benefits to society in the environmental and socio-economic realms. It is used by various countries as an argument for continued government support to agriculture; a position which is frequently supported with the additional line of reasoning that a multifunctional agriculture constitutes a path to sustainable development (cf. Caron et al., 2008). This is logically derived from the fact that the various functions of agriculture can be related to the three dimensions of sustainable development in the social, economic and ecological domains, respectively.

According to the OECD (2001a), for instance, multifunctionality is a characteristic of the production process that can have implications for achieving multiple societal goals. In contrast, sustainable development is a normative principle, which implies a continuous evaluation of tradeoffs across the various system goals (Barbier, 1987). and that is not restricted to agriculture and rural development. Accordingly, the multiple functions and roles of agriculture in our societies must be seen from a broader systems perspective that integrates agricultural production with the entire agri-food chain and citizens concerns about the social and environmental impacts of the agri-food system. In other words, the economic, social and environmental performance of the various actors along the entire value chain, from the producers to the consumers, must be considered.

On the company level, this is related to the concept of corporate social responsibility (CSR) that has a long tradition in the business ethics and management literature and that has gained new momentum in recent years. It is high on the policy agenda of the OECD and numerous national governments (OECD, 2001b) and increasingly considered in the business world. Most importantly, CSR has been promoted by the World Business Council for Sustainable Development (WBCSD) as an integral part of sustainable development and defined as the commitment of business to contribute to sustainable economic development (Holme and Watts, 2000). Accordingly, CSR is a business approach which directly serves the goals of sustainable development and thus must pay attention to the same social, ecological and economic concerns as mentioned above.

From this perspective, the question arises about the relationship between the three concepts of multifunctionality, sustainability and corporate social responsibility, and whether the latter

can be usefully adapted such as to replace the concepts of multifunctionality and sustainability in the agri-food sector and in agricultural policy debates:

- Can the concept of CSR effectively been applied to agriculture in order to replace the concept of multifunctionality and to provide a new basis for analysing and discussing the role of agriculture and governmental support to farmers?
- Can such a shift of paradigm help to ease the debate about the role(s) of agriculture in society and bring it to a new analytical ground?

In this article, we investigate the above questions and consider the adaptation of the CSR concept to replace or complement those of multifunctionality and sustainability as guiding principles for agricultural policy and business along the agri-food chain.

In section 2, we briefly review the concepts of multifunctionality and sustainability from an economics perspective. This reveals, on the one side, the welfare economic aspects that are associated with the positive and negative externalities and, on the other side, those associated with the distribution effects of agricultural activities and policy. Furthermore, we elucidate the capital theoretic aspects that are crucial for the evaluation of agriculture's multifunctionality from a sustainable development perspective.

In section 3, we introduce the concept of corporate social responsibility (CSR). The latter is generally defined as a program of action where a firm's objective is to maximize its profits and, at the same time, to contribute to the improvement of social welfare. This involves joint consideration of two important sources of market imperfection: externalities and distributive fairness. These are generally regarded as major threats to a company's reputation capital, and thus of corporate value in the long run. Accordingly, economists see the role of CSR as a means to anticipate and minimize conflicts between corporations and society. In other words, CSR can help to improve corporate profits and guard against reputational risks.

Building on this background, analogies between the concepts of multifunctionality, sustainability and CSR are explored in section 4. Given the above key questions, the concept of social responsibility is particularly regarded in the light of public expectations and government support to farmers, and under consideration of different degrees of power along the agri-food chain. The first issue is directly related to the concept of multifunctionality as a policy-related principle. However, from a CSR perspective, it is important to bear in mind that citizens interact with the agri-food chain on both ends. On one side, citizens are tax payers who, in a democratic system, can directly or indirectly decide about government support to agriculture. Thus, citizens have, to a certain extent, a similar role as shareholders in

a corporate enterprise. They "invest" (tax money) in the "corporation" (the agri-food chain), decide about the "(corporate) objectives", and expect a return in form of "the multifunctional benefits of agriculture". On the other side, as customers who buy the products of agriculture and face the externalities of agricultural activity, citizens are classical stakeholders. However, in these roles, they do, in general, not have direct interaction with the farmers, but with retailers at the end of the agri-food chain and government agencies who transfer tax money to the farmers, which, depending on market power, can be absorbed to some extent by other actors in the agri-food chain. As a consequence, the resulting distribution of income may deviate from the intention behind the provision of public support to farmers, which presumably involves allocative as well as distributive motives.

In this light, the vertical markets of the agri-food sector constitute a highly interesting field of application of the concept of corporate social responsibility and contribute to advancing the economics of CSR in an analytically rigorous way. Moreover, the concept of CSR can provide an enhanced analytical basis for the evaluation of the social performance of agriculture and the agri-food chain. From this perspective, the aim of the paper is to present and discuss the idea of applying the concept of social responsibility of business in order to replace or complement the concept of multifunctionality and hopefully contribute to a more enlightened policy debate.

2 Multifunctionality and sustainability

Originally formulated as principles of forest management, the concepts of multifunctionality and sustainability emphasise the vulnerability of ecosystems and the multiple benefits that can be sustained through adequate resource management. Accordingly, they have been adopted in various forms in the resource economics literature and translated into more general policy principles. On the one hand, promoted by the WCED (1987), sustainable development has been established by the United Nations Conference on Environment and Development (UNCED) as the guiding policy principle for social and economic development. On the other hand, propagated by the European Union and a group of rather small food-importing countries (including Austria, Switzerland, Norway, Japan and Korea), multifunctionality emerged as an argument for including domestic concerns about agriculture and rural development in the negotiations of the World Trade Organization (WTO) on agriculture.

It has been furthermore adopted as a policy principle by OECD Agriculture Ministers in 1998, recognising that beyond its primary function of supplying food and fibre, agriculture can also provide a wide range of environmental benefits, such as

- recreational amenities and aesthetic values of the rural landscape,
- non-use values of biodiversity and habitat protection,
- intrinsic values of ecosystem, watershed, and resource functions,

and socio-economic benefits, like

- food security, food safety, and animal welfare,
- rural employment and the viability of rural areas, as well as
- cultural heritage.

This constitutes a set of non-market benefits that constitute potential sources of market failure and provide theoretical arguments for governmental intervention in the agricultural sector (see also Gardner, 1977; OECD, 2001a, 2003). First, positive and negative externalities associated with agricultural activities constitute an efficiency-based argument for the establishment of policy instruments and institutional arrangements to internalise the external costs and benefits. Second, the existence of welfare economic aspects associated with the distribution effects of agricultural activities and policy constitutes an additional argument for government intervention through regulation and transfer payments. In both cases, the amount and direction of payments, if any, depends on the assignment of property rights and policy entitlements (cf. Bromley and Hodge, 1990; Bromley, 2000; Hediger and Lehmann, 2007) and ultimately on the analytical framework applied.

The general approach of modern welfare economics involves the assessment and internalisation of flows of benefits and disutilities attributed to agricultural activities. However, in a long-term and capital theoretic context, which is particularly relevant for sustainable development, this is no longer sufficient, neither for benefit assessment nor for policy design. Rather, the effects of agricultural activity upon the various compartments of economic, environmental and social capital must be identified and evaluated from an intertemporal perspective of social welfare maximisation and an integrated systems perspective. This combines the short-term perspective of instantaneous externalities with the evaluation of stocks and involves analogies with green national and sustainability accounting (cf. Hartwick, 2001; Hamilton and Atkinson, 2006), which is particularly relevant when it comes to the joint consideration of environmental and socio-economic effects of agriculture.

A capital-theoretic approach is fundamental to the examination of the relationships between agriculture's multifunctionality and its contribution to sustainable development. It particularly provides an analytical framework which, as requested by Caron et al. (2008), would make it possible to interpret the relationships between the multiple functions of agriculture, their combination and contribution to social and economic development and to link the various functions in a comprehensive way while taking into account impacts on resources, markets and social welfare in an intertemporal and spatial context. From this perspective, sustainable development provides the normative framework to study and evaluate the multiple functions and activities of agriculture, which is an integral and often declining part of a local economy. Hence, changes in rural employment and viability must be evaluated from an integrated sustainability perspective of territorial development, rather than restricted to the roles of agriculture.

The crucial issues are the development of social welfare in a given area or country as a whole, and the contribution of the entire agricultural sector to social welfare and the various system goals. This view and assessment cannot be restricted to agriculture as a primary production system. Rather, it must also encompass the entire agri-food chain with its impacts on the social, economic and environmental systems, and thus on future development prospects and social well-being. In other words, the economic, social and environmental performance of the various actors along the entire value chain, from the producers to the consumers, must be considered. On the company level, this is related to the concept of corporate social responsibility (CSR), which is regarded in the subsequent section.

3 Corporate social responsibility – the role of business in society

The debate about the roles and responsibilities of business in society has tradition in the business ethics and management literature (cf. Carroll, 1999; Vogel, 2005), but only entered the economics literature in recent years (cf. Hediger, 2007). Driven by the fact that concerns about the roles of business in society have reached the agendas of international organisations, national governments and world business leaders, theoretical and empirical work on corporate social responsibility by economists has been attracted in recent years (e.g., McWilliams and Siegel, 2001; Tirole, 2001, 2006; Baron, 2001, 2007; Baron and Diermeier, 2007; Beltratti, 2005; Graff Zivin and Small, 2005; Heal, 2005, Paton and Siegel, 2005; Portney, 2005; Besley and Ghatak, 2007; Hediger, 2007).

In an important contribution of the World Business Council for Sustainable Development, Holme and Watts (2000) generally defined corporate social responsibility (CSR) as "the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of live of the workforce". They further emphasise that "CSR is no longer seen to represent an unproductive cost or resource burden, but, increasingly, as a means of enhancing reputation and credibility among stakeholders". Accordingly, CSR represents "the human face of the highly competitive world of commerce" and of globalization. In other words, it constitutes "the commitment of business to contribute to sustainable economic development" (WBCSD, 2002). This position is also supported by the OECD (2001b), which comprehends CSR as the "business's contribution to sustainable development", and emphasises that corporate behaviour must not only ensure returns to shareholders, wages to employees, and products and services to consumers, but also respond to societal and environmental concerns and values.

Altogether, this implicates a shift from the pure shareholder perspective of maximizing profits and corporate value towards a broader concept of multiple stakeholder concerns and values. From an analytical point of view, the overall task is thus to integrate these distinct objectives into accounting and decision making at the firm or corporate level. This is most adequately expressed by Beltratti's (2005) conclusion that "socially responsible firms do try to maximize profits but at the same time try to improve the welfare of other stakeholders." In this sense, CSR involves an extension of the mere profit and value maximization framework of the firm to also include concern for the well-being of other stakeholders or the welfare of society at large. From a theoretical perspective, this can be related to the concept of Pareto improvement (Hediger, 2007), which in a strict sense would require that a company must maximize its corporate value without reducing the well-being of any individual in the society. Following Heal (2005), this requires companies to address two important sources of market imperfection: externalities and distributive fairness. He points out that "almost all conflicts between corporations and society can be traced to one of these two sources - either discrepancies between private and social costs and benefits, or different perceptions of what is fair." Consequently, Heal regards CSR being "a programme of actions to reduce externalized costs and to avoid distributional conflicts."

On this basis, Heal concludes that "CSR can play a valuable role in ensuring that the invisible hand acts." Moreover, he emphasizes that "markets produce outcomes that are efficient but not necessarily fair" and draws attention to the prospective role of CSR in anticipating and minimizing distributional conflicts before they flare up. However, the issue is not for

companies to replace the government in distribution and social policy. Rather, they are advised to carefully act in their own interest. Furthermore, Heal (2005) and Hediger (2007) point out the role of CSR in anticipating and minimising conflicts between corporations, on one side, and society and its representatives, on the other. Consequently, CSR can help "to improve corporate profits and guard against reputational risks" (Heal, 2005). However, it is not in general efficient that a company fully eliminates its negative externalities and achieves compliance with the above constraint of non-declining individual well-being. Rather, the inclusion of reputation in the calculus of long-term profit maximization should result in an optimal outcome from the company's perspective, which is a compromise between the two extremes of CSR (or "stakeholder society"), on the one hand, and mere shareholder value maximization, on the other (Hediger, 2007).

Starting from a corporate governance point of view, Tirole (2001, 2006) accentuates the need of designing incentives to managers "so as to align them with the sum of the stakeholders' surpluses rather than just the equityholders' surplus." He particularly criticises the neglect of the role of managers as a party with specific interests in the shareholder-stakeholder conflict, and points out that "governments may be the ultimate stakeholder-society organizations, since they are instructed to balance the welfares of many different interest groups". This invokes the question about sharing responsibilities between government agencies and corporate entities in handling the above mentioned problems of internalising externalities and coping with distributional conflicts, which is a challenge for so-called private-public partnership. It could furthermore be regarded as an option for sustainable agriculture and rural development policy, and thus to replace or complement the concepts of multifunctionality and sustainability as guiding policy principles.

4 Agricultural policy and the agri-food chain in the light of CSR

Despite the fact that the concepts of multifunctionality and corporate social responsibility have totally different origins, they share a common feature that is important from a welfare economic perspective. These are concerns about externalities and distributional issues that are associated with economic activities by farmers, on the one hand, and general business companies, on the other. The major differences, however, are related to the presumptions about who has to take responsibility for internalising externalities and coping with distributional problems, two traditional domains of government policy – at least in the Pigouvian tradition.

On the one hand, the argument of agriculture's multifunctionality is used to justify government support to farmers, and to spend tax money for that purpose. On the other hand, multinational companies and increasingly small and medium sized enterprises (SMEs) are expected to do good to society and the environment beyond their primary task of providing marketable goods and services and generating income to their owners, and beyond what is required by law (McWilliams and Siegel, 2001). This particularly involves public expectations about socially and environmentally friendly production methods, and thus ways to minimize negative externalities. Companies risk to be blamed by NGOs or mass media if they do not behave in an adequate way (see Heal, 2005, for examples), which can negatively effect their reputation and financial performance.

Moreover, large retailers and trade companies also face the threat of being attacked for the behaviour of their suppliers. As a consequence, they increasingly give this pressure to their suppliers and primary producers, who have to apply socially and environmentally sound production methods, otherwise they would be out of business or get a lower price for their products. Thus, farmers and other suppliers along the agri-food chain get also involved and thus indirectly face the challenge of corporate social responsibility. Making use of labels and certification agencies, retailers can control the fulfilment of some predefined production standards by their suppliers. This strategy most likely minimizes negative externalities and the potential of distributional conflicts, and can thus, following Heal (2005), be regarded as a CSR program. In other words, large retailers and trade companies can use their market position and market power to enforce socially responsible behaviour along the agri-food chain for their own interest; that is, as a means of minimizing heir own repuational risks that might be caused by their suppliers but would curtail their own market shares and corporate value.

This logic coincides to a certain extent with the OECD's (2005) recommendation to explore non-governmental options for the provision of agriculture's non-commodity outputs (positive externalities) and the reduction of its negative externalities through the use of market mechanisms and the promotion of private transactions and voluntary approaches. Examples include the merchandising of attributes of a multifunctional agriculture through labels and market price premiums, which consumers are willing to pay for products from socially and environmentally-friendly production methods, as well as agritourism and manure trading schemes that help farmers to increase their income in different ways. Given the potentially higher income to farmers, the advantage of the solutions envisaged by the OECD may involve a lower level of government intervention and a lowering of the associated budget position, compared to the current situation in many countries. As a consequence farmers enhance the

net social benefits in the social and environmental realms and deliberate tax revenues for other purposes or reduce the overall tax burden, while pursuing their intimate objective of maximising profits, or income.

The above mentioned effect of lowering the tax burden brings us to another important issue of social responsibility, which is often neglected in the debates about agriculture's multifunctionality. This is the double role of citizens as final consumers who purchase agricultural products and as tax payers. In other words, citizens interact with the agri-food chain on both ends.

The CSR perspective in this context involves the fact that citizens are classical stakeholders in their role as customers who buy the products of agriculture and who face the externalities of agricultural activity. Moreover, in a democratic system, they can directly or indirectly decide about government support to agriculture. Thus, citizens have, to a certain extent, a similar role as shareholders in a corporate enterprise. They "invest" (tax money) in the "corporation" (the agri-food chain), receive some rights to decide about the "(corporate) objectives", and expect a return in form of "the multifunctional benefits of agriculture". Accordingly, from a citizens' perspective, we have a problem of "(corporate) governance" that results from the separation of "investors" (tax payers) and control (farmers and government agencies). However, this is different from the standard problem of (private) investors in corporate enterprises, since citizens and tax payers do not expect a financial return on their investment in agriculture. Rather, they expect some immaterial benefits in from of rural amenities, healthy environment, and some socio-economic characteristics that are usually attributed to a multifunctional agriculture, as well as an efficient use of tax money by the public authorities.

The governance problem is then to provide incentives to both farmers and government officials to not only maximize their own profits (income) but – in analogy to the corporate value of firms – also to maximize the total value of agriculture, which is determined by the various assets (man-made and natural capital stocks) of the agricultural production system and its rural environment (including social and cultural capital). This solution of the governance problem is directly related to the objective of sustainable development which, from an economics perspective, aims at maximising and maintaining to total value of capital. Moreover, it is compatible with Jensen's (2001) concept of "enlightened value maximisation" that evaluates tradeoffs across different constituencies, and Tirole's (2001) request of an "enlarged fiduciary duty" as an attempt to make management accountable for the welfare of stakeholders. Adapted from Beltratti's (2005) interpretation of CSR, this implicates that

socially responsible farmers do try to maximize their profits but at the same time try to improve the welfare of other stakeholders (citizens). In short, solving the governance problem of multifunctional agriculture directly integrates the CSR problem and contributes to the objective of sustainable development.

This is facilitated by the double role of citizens as tax payers and customers. However, in these roles, they do not, in general, have direct contact and interaction with the farmers, but with retailers at the end of the agri-food chain and with government agencies which transfer tax money to the farmers. When granted as area payments, these transfers increase the land rent and – apart of effects on the extensive margin – are allocation neutral with respect to yield and variable inputs per area. Thus, area payments could theoretically be used as a vehicle of income transfer to farmers. However, depending on market power, this additional rent can be absorbed by other actors in the agri-food chain. ¹

This situation particularly complicates the governance problem for two main reasons. First, we do not have a single enterprise with an integrated production system, as in the Walrasian model. Rather, we have a system with multiple separations of "ownership" and control – and thus a multiple principle-agent problem – in a vertical market. This further relates to the second facet of the problem, since some players in the agri-food chain may exercise market power and absorb tax money and resource rents. As a consequence, the resulting distribution of income may deviate from the citizens' intention behind the provision of public support to farmers, which presumably involves both allocation and distribution motives. More precisely, the exertion of market power may result in a reduction of the farmers' economic welfare as well as the well-being of other citizens who, to a certain extent, must be benevolent, since they approve and agree in granting transfer payments to farmers.

As a consequence, the absorption of the above rents by down-stream companies of the agrifood chain does not in general satisfy the requirements of corporate social responsibility, unless these companies generate other social benefits that overcompensate the negative effects on farmers' and other stakeholders' welfare. Thus, from a public policy perspective, the exertion of market power is an important issue which is overlooked with agricultural policy and government support to farmers based on the sole argument of agriculture's multifunctionality. In contrast, the concept of corporate social responsibility could provide a useful approach to widen the above perspective and regard the overall performance of the

¹ Various studies, such as those of Mc Corriston et al. (2001), Mc Corriston (2002) and Lloyd et al. (2006), underline the importance of market power in agricultural and food markets.

agri-food system in the light of public expectations, government support to farmers, market power in the agri-food chain, social welfare, and sustainable development.

5 Conclusion

In this article, we explore the relationship between the concepts of multifunctionality, sustainability and corporate social responsibility (CSR), and the question whether the latter could be used to replace or complement the concepts of multifunctionality and sustainability as guiding principles for agricultural policy. It shows that the CSR concept implicates a wider perspective that allows us to consider the entire agri-food chain from primary production to the final consumers. It further shows that the latter have a double role as customers and tax payers, which directly links the problems of governance and stakeholder concerns in an intertemporal framework of total value maximisation and sustainable development.

Thus, the concept of CSR could help us to complete the link between the views of multifunctionality and sustainability, or sustainable development. It can further provide a new basis for analysing and discussing the role of agriculture and governmental support to farmers from a broader systems perspective that encompasses the social, ecological and economic dimensions of agricultural production and rural development as well as the industrial and welfare economic aspects of the vertical separation and market structures along the agri-food chain. In other words, the concept of CSR allows us to take an integrated perspective of the overall agri-food production system, which implicates a shift of paradigm from sectoral policy and agricultural support to a more comprehensive approach of territorial development and industrial organisation. This does not only require careful examination of agriculture's immediate roles and impacts upon its natural and socio-economic environment (the issue of multifunctionality), but also calls for an improved understanding of interactions and the role of market power along the entire agri-food chain.

From this perspective, the vertical markets of the agri-food sector constitute a highly interesting field of application of the concept of corporate social responsibility and contribute to advancing the economics of CSR in an analytically rigorous way. Moreover, the concept of CSR can provide an enhanced analytical basis for the evaluation of the social performance of agriculture and the agri-food chain that is conceptually related to the capital-theoretic foundation of sustainable development.

References

- Barbier, E.B. (1987) "The Concept of Sustainable Economic Development", *Environmental Conservation*, **14**(2): 101-110.
- Baron, D.P. (2001) "Private Politics, Corporate Social Responsibility, and Integrated Strategy", *Journal of Economics and Management Strategy*, **10**(1): 7-45.
- Baron, D.P. (2007) "Corporate Social Responsibility and Social Entrepreneurship", *Journal of Economics and Management Strategy*, **16**(3): 683-717.
- Baron, D.P., and D. Diermeier (2007) "Strategic Activism and Nonmarket Strategy", *Journal of Economics and Management Strategy*, **16**(3): 773-792.
- Beltratti, A. (2005) "The Complementarity between Corporate Governance and Corporate Social Responsibility", *The Geneva Papers on Risk and Insurance Issues and Practice*, **30**(3): 373-386.
- Besley, T., and M. Ghatak (2007) "Retailing public goods: The economics of corporate social responsibility", *Journal of Public Economics*, **91**: 1645-1663.
- Bromley, D.W. (2000) "Can Agriculture Become an Environmental Asset?", World Economics, 1(3): 127-139.
- Bromley, D.W., and I. Hodge (1990) "Private property rights and presumptive policy entitlements: reconsidering the premise of rural policy", *European Review of Agricultural Economics*, **17**: 197-214.
- Caron, P., E. Reig, D. Roep, W. Hediger, T. Le Cotty, D. Barthélemy, A. Hadynska, J. Hadynski, H. Oostindie, E. Sabourin (2008) "Multifunctionality: refocusing a spreading, loose and fashionable concept for looking at sustainability?", *International Journal of Agricultural Resources, Governance and Ecology* (forthcoming).
- Carroll, A.B. (1999) "Corporate Social Responsibility: Evolution of a Definitional Construct", *Business and Society*, **38**(3): 268-295.
- Gardner, B.D. (1977) "The Economics of Agricultural Land Preservation", *American Journal of Agricultural Economics*, **59**: 1027-1036.
- Graff Zivin, J., and A. Small (2005) "A Modigliani-Miller Theory of Atruistic Corporate Social Responsibility", *Topics in Economic Analysis and Policy*, **5**(1): Article 10.
- Hamilton, K., and G. Atkinson (2006) Wealth, Welfare, and Sustainability: Advances in Measuring Sustainable Development, Cheltenham, UK: Edward Elgar.
- Hartwick, J.M. (2001) "National Accounting with Natural and other Types of Capital", *Environmental and Resource Economics*, **19**(4): 329-341.
- Heal, G. (2005) "Corporate Social Responsibility: An Economic and Financial Framework", The Geneva Papers on Risk and Insurance – Issues and Practice, **30**(3): 387-409.
- Hediger, W. (2007) "Framing corporate social responsibility and contribution to sustainable development", *CCRS Working Paper Series*, No. 02/07, Center for Corporate Responsibility and Sustainability at the University of Zurich.
- Hediger, W., and B. Lehmann (2007) "Multifunctional Agriculture and the Preservation of Environmental Benefits", *Swiss Journal of Economics and Statistics*, **143**(4): 449-470.
- Holme, R., and P. Watts (2000) *Corporate social responsibility: making good business sense*, World Business Council for Sustainable development, Conches-Geneva, Switzerland.

- Jensen, M.C. (2001) "Value Maximization, Stakeholder Theory, and the Corporate Objective Function", *Journal of Applied Corporate Finance*, **14**(3): 8-21.
- Lloyd, T.A., S. McCorriston, C.W. Morgan, and A.J. Rayner (2006) "Food Scares, Market Power and Price Transmission: The UK BSE Crisis", *European Review of Agricultural Economics*, **33**(2): 119-147.
- McCorriston, S. (2002) "Why Should Imperfect Competition Matter to Agricultural Economists?", *European Review of Agricultural Economics*, **29**(3): 349-371.
- McCorriston, S., C.W. Morgan, and A.J. Rayner (2001) "Price Transmission: The Interaction between Market Power and Returns to Scale", *European Review of Agricultural Economics*, **28**(2): 143-159.
- McWilliams, A., and D. Siegel (2001) "Corporate Social Responsibility: A Theory of the Firm Perspective", *Academy of Management Review*, **26**(1): 117-127.
- OECD (2001a), Multifunctionality: towards an analytical framework, Organisation for Economic Co-operation and Development, Paris: OECD Publishing.
- OECD (2001b), *Corporate Social Responsibility: Partners for Progress*, Organisation for Economic Co-operation and Development, Paris: OECD Publishing.
- OECD (2003), Multifunctionality: the policy implications, Organisation for Economic Cooperation and Development, Paris: OECD Publishing.
- OECD (2005), *Multifunctionality in Agriculture: What role for Private Initiatives?*, Organisation for Economic Co-operation and Development, Paris: OECD Publishing.
- Paton, D., and D.S. Siegel (2005) "The economics of corporate social responsibility: an overview of the special issue", *Structural Change and Economic Dynamics*, **16**(3): 309-311.
- Portney, P.R. (2005) "Corporate Social Responsibility: An Economic and Public Policy Perspective", in: B.L. Hay, R.N. Stavins, and R.H.K. Vietor (Eds), *Environmental Protection and the Social Responsibility of Firms: Perspectives from Law, Economics, and Business*, Washington, DC: Resources for the Future; pp. 107-131.
- Tirole, J. (2001) "Corporate Governance", Econometrica, 69(1): 1-35.
- Tirole, J. (2006) *The Theory of Corporate Finance*, Princeton and Oxford: Princeton University Press.
- Vogel, D. (2005) The Market for Virtue: The Potential and Limits of Corporate Social Responsibility, Washington, DC: Brookings Institution Press.
- WBCSD (2002) Corporate Social Responsibility: The WBCSD's journey, World Business Council for Sustainable Development, Conches-Geneva, Switzerland.
- WCED (1987), *Our Common Future*, World Commission on Environment and Development, Oxford and New York: Oxford University Press.