Overview

Corporate social responsibility (CSR) is the business world’s commitment and contribution to sustainable development (OECD, 2001; WBCSD, 2002). It is particularly understood as “the way firms integrate their values, culture, decision making, strategy and operations in a transparent and accountable manner” (Government of Canada, 2006) and as a program where firms “decide voluntarily to contribute to a better society and cleaner environment” (European Commission, 2001). Accordingly, socially responsible firms must not only ensure returns to shareholders, wages to employees, and products and services to consumers. They also respond to societal concerns and values regarding the social, economic and environmental development of the system we are living in. This implicates a shift away from the pure shareholder perspective of maximizing profits and corporate value to a broader understanding of operation that encompasses various conflicting goals and multi stakeholder concerns. In other words, CSR implicates a welfare perspective of corporate behaviour that aims at internalizing external costs and avoiding distributional conflicts on a voluntary basis (Arrow, 1973; Heal, 2005; Hediger, 2010; McWilliams and Siegel, 2001).

Moreover, measuring a firm’s CSR performance requires a translation of the normative concept of sustainable development (WCED, 1987) to the corporate level, such as to ensure that current decisions and activities do not jeopardize future generations in satisfying their own needs and wants. As pointed out by the European Commission (2001), this does not make obsolete regulation and legislation about social rights and environmental standards. Rather, CSR calls for shared responsibility between government (or the regulator) and private actors. This directly applies to the management of water resources, which is generally regarded as shared responsibility of public and private actors, and thus to hydropower investments and operations. That latter are likewise influenced by market developments and by the prevailing institutional framework in different countries (cf. Glachant et al., 2015). Accordingly, the CSR of hydropower companies must be evaluated and implemented in the concrete context of their economic, institutional and geographical spheres.

Methods

Building on a welfare-economic perspective of sustainable development (Hediger, 2000) and a Paretean view of the firm (Hediger, 2010), we present an analytical framework to link the concepts of sustainable development and CSR, and adjust this to the specific requirements of evaluating the CSR performance of hydropower companies in Alpine regions.

Given the most fundamental understanding of CSR as a program where firms act such as to maximize profits (or, from a long-run perspective, corporate value) and at the same time to improve the welfare of other stakeholders (Beltratti, 2005; Hediger, 2010), we formalize CSR as a constrained optimization problem of Pareto improvement and capital accumulation. This allows us to assess the opportunity cost of a firm’s voluntary or enforced commitment to improve the well-being of other people; i.e., social welfare at large. The latter involves an impact assessment of the firm’s activity – e.g., a hydropower plant – on the social, economic and environmental systems and the determination of accounting prices to weigh those changes form a societal perspective. Recognizing the economic and political importance of hydropower in many mountain regions and the importance of “community values” in situations where a “community” is concerned with its current and future well-being (Toman et al., 1998), we further propose a stakeholder process for the external evaluation of hydropower plants and to improve the social acceptance of such projects.

Finally, taking into account the institutional arrangements of energy policy and water rights, we extend the above approach to specifically address distributional and fiscal aspects along with the issues of water rights, resource rents and governance. This is particularly important if we analyse projects of hydropower companies with shared private and public ownership; that is, if external stakeholders are also sensitive shareholders who furthermore grant the company the right to operate.
Results
We present a formal approach that integrates the corporate and societal perspectives to the evaluation of hydropower projects in the short and long term. Building on a welfare-economic and capital-theoretic approach, we bring the concept of CSR on a solid foundation within economic theory. Formally, we define the overall value of a company’s contribution to society as consisting of (a) the internal value of the overall profit prospects from a shareholder perspective and (b) the external value of its direct and indirect contribution to society from a community and sustainable development perspective. The latter implies externally determined accounting prices that must, in principle, express individual preferences, community values and risk premiums for the anticipation of potentially irreversible changes (critical limits) at the boundaries of the opportunity space for sustainable development.

By extending this approach to the institutional aspects, we also provide an analytical framework to support the review of the current charges and taxes (including resource rents) that are imposed on hydropower companies. Moreover, by addressing these issues, we enter the spheres of corporate and public governance, which widens our perspective to include institutional and management aspects of corporate responsibility at large.

Conclusions
Hydropower activities must increasingly be evaluated from a sustainable development perspective. The same is true for the companies in this business. Corporate social responsibility (CSR) is the principle that is frequently applied for this purpose, though there exists no conceptual and theoretical basis that is common to the various approaches. With this work, we fill into this gap and provide a formal approach that integrates the corporate and societal perspectives of hydropower activities from a welfare-economic and capital theoretic perspective. Altogether, this shall support better informed decision making on both corporate and policy levels.

References