CONCEPTUAL FRAMEWORK FOR VALUATION OF EXTERNALITIES IN THE CONTEXT OF CORPORATE ACCOUNTABILITY – A LITERATURE REVIEW

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Abstract

This paper reviews the literature that forms the basis for future research on a framework for valuation of externalities. This paper aims to show that current financial reporting systems have omitted one of the main sources of value to the firm, the one that comes from the social licence to operate. Local and national communities provide infrastructure, social support, and an educated work force, while the global community grants the permission to use environmental amenities. Most of these scarce resources are provided to the firm free of cost and, as a result, are not recorded anywhere in the financial accounts of the firm. By redefining corporate value in the context of sustainability through the conceptual framework of a balance sheet, this article proposes to show that a new accountability framework provides strong ethical incentives for accountability. This paper proposes direct valuation and formal accounting of externalities on the corporate balance sheet, with an offsetting appraisal of the social licence to operate for the corporation, thus creating a meaningful and integrated basis for accountability. It is argued that externalities must be included into an accountability framework due to the demands of global ethics, corporate strategic imperative and pragmatic collaboration. The inclusion of externalities and the social licence to operate into the corporate value creation framework redefines the greater role that business has in solving environmental and social problems through innovation and the creativity of business enterprise.

Keywords

Corporate Accountability, Externalities, Social Licence to Operate, Corporate Social Responsibility (CSR), Creating Shared Value (CSV), Balance Sheet
1. Introduction

Corporate accountability matters. It plays an important role in the provision of basic needs of our society, the quality of our living planet, the level of trust in businesses and the creation of a sense of shared meaning and common purpose. The context of corporate accountability has changed dramatically in the last 20 years. The human kind is consuming planetary resources faster than the ecosystems’ ability to regenerate, poverty is becoming more widespread, trusted financial institutions have failed us, our governments have less fiscal and social capital to fix problems and traditional macro-economic solutions of consumption-led growth seem less plausible.

Indeed, there seems to be a general consensus that we have not made any substantial progress and, in addition, there is apparently no generally agreed corporate accountability framework (Gray, 2006; Vilanova et al., 2009; Hahn and Figge, 2011). Businesses, civil society and governments require a shared, holistic and fact based decision-making framework to formulate decisions to resolve trade-offs, typically involving economic prosperity, social equity and environmental sustainability. Whilst a more sustainable and equitable accountability framework can be conceptualised, the implementation of any such social contract will require a ‘system-wide reset’.

The evolution of various stages of corporate accountability can be traced: from accounting standards, to added responsibility for boards in corporate governance, triple-bottom line reporting, non-financial KPI reporting and disclosure statements, integrated sustainability reporting and, finally, calls for social accounting. Many scholars, however, see these evolving standards as an inadequate response to meaningful accountability. In recent times, there is a growing chorus of critical voices from scholars demanding a more considered effort to meet our sustainability challenges (Zadek, 1998; Mathews 2000, 2008; Gray, 2006, 2007; Cooper and Owen, 2007; Hahn and Figge, 2011; Meyer and Kirby, 2010). In addition, a number of multi-stakeholder professional organisations and practitioners have been engaged in refining the Corporate Social Responsibility reporting frameworks (Global Reporting Initiative (GRI), The Economics of Ecosystems and Biodiversity (TEEB), The Tomorrow’s Company,
2. Literature Review

The objective of this article is to review the literature and provide support for future research on the framework for valuation of externalities in the context of corporate accountability. My future research project proposes a direct valuation of and formal accounting of externalities to redefine corporate value. This is defined as the minimum standard for a meaningful and integrated corporate accountability in the context of sustainability. This article intends to establish a theoretical basis and justification in the literature for direct valuation and formal accounting of externalities on the corporate balance sheet.

The three main areas of literature that are relevant to my research are sustainability, corporate accountability and corporate valuation. The focus in this paper is to analyse how externalities have been conceptualised and applied in corporate valuation. Sustainability reporting and social accounting literature informs my research on the conceptualisation and valuation of externalities. Corporate strategy and governance literature is reviewed to provide the basis for the call for a new corporate accountability framework.


A classical definition of externalities is provided by the OECD: ‘Externalities refer to situations when the effect of production or consumption of goods and services imposes costs or benefits on others which are not reflected in the prices charged for the goods and services being provided’ (Khemani and Shapiro, 1998). This definition highlights the challenge of including externalities in the corporate value creation framework. Generally, for the firm in such a situation, some resources are free of cost and limitless; at the same time, these very same resources are imposing a cost on other stakeholders, collectively defined as “society”. A number of attempts to evaluate externalities appear in the literature public policy analysis,
professional research projects as well as in research conducted by companies seeking to 
establish legitimacy.

The EU’s Review of Externalities Database (RED), lists a large number of studies that 
try to estimate the external cost calculated using a life-cycle perspective. In this review 
of externalities, which covers over 1250 studies, the following techniques are used to value 
externalities: market price, hedonic price, revealed preference, as well as the travel cost and 
contingency valuation methods. In addition, the following valuation approaches are employed 
to estimate externalities; benefits transfer from a single study, benefits transferred from meta 
analysis, direct valuation, use of economic models, cost of injury, cost of replacement, cost of 
repair, control cost, damage cost, abatement cost, willingness to pay (WTP), willingness to 
accept, and years of life saved. Research on the cost impact of externalities has a key role to 
play in providing the tools and quantitative data to support public policies however very little 
effort has been made to include externalities into the value of the firm.

The UN Principles for Responsible Investment and Carbon Disclosure Project (CDP) are two 
important initiatives to facilitate the integration of external costs in the broader financial 
analysis and investment decisions. While the UNPRI, the CDP and many other professional 
initiatives have highlighted the importance of environmental and social cost, there is no 
requirement to include externalities in the corporate valuation framework. A recent research 
project, by the European Academy for Business in Society (EABIS), notes that a number of 
obstacles remains for investors and companies in accepting environmental and social costs 
(EABIS, 2009).

In the last two decades, the corporate response to externalities has seen a number of non-
financial reporting and disclosure frameworks. The GRI is the most popular reporting 
framework that is currently used by 527 companies in 46 countries (GRI, 2010). The GRI G3 
Guidelines is a voluntary disclosure framework that is used by mostly large corporations. It 
is designed for incremental adaptation and continual improvement by corporations towards 
sustainable reporting. A number of scholars have been critical of the GRI and Accounting for 
Sustainability frameworks (Gray, 2006; McElroy et al., 2007; Reynolds and Yuthas, 2008). 
CSR Discloser statements and KPIs have not resulted in meaningful change in corporate
behaviour and there is some concern that the current voluntary and incremental governance structure may not provide improvement commensurate with the urgency and gravity of the social and environmental problems. This view provides the departure point for my future research.

4. Sustainability Reporting – and business as usual

Research on sustainability reporting frameworks goes back to the early 1980s, starting with Mathews (1984, 2000, 2008); Gray (1992, 2006, 2007); Milne (1991); Elkington (1994, 1999); Milne and Gray (2008); Schaltegger (2008); Söderholm and Sundqvist (2000); Lamberton (2005); Amaeshi (2010); and Hahn and Figge, (2011). This domain of research, grouped under the umbrella of social accounting, is also now starting to be used in multi-stakeholder accountability frameworks. Social accounting, however has failed to be widely adopted in mainstream financial reporting. Both the IASB and FASB have failed to advance any meaningful changes to financial reporting to incorporate any of the popular KPIs and valuation of externalities. The discussion of new standards on the emissions trading scheme project were deferred in November 2010 when the IASB decided to re-prioritise their agenda.

Some scholars note that the valuation of externalities is critical to the sustainable use of all resources as markets operate in specific ways that are based on measuring and valuing performance (P&L and Cash-flow) and positions (Balance Sheet) in monetary terms. This is the ‘dominant logic’ argument put forward by Amaeshi (2010) on the financial market. Amaeshi challenges the view that corporate social governance and financial management share the ‘same underpinning logic’, which is commonly assumed in the literature. Amaeshi cites Crouch (2006), that ‘CSR is a voluntary corporate minimisation of negative externalities and maximisation of positive externalities’. It is disappointing to note that, after more than 20 years of considerable efforts by researchers, NGOs, civil society and some business leaders, the business community has not accepted the need to broaden the corporate valuation framework. The delay in implementing accountability framework continues, while waiting for the definitive business case for CSR initiatives, which could deliver no financial and legal downside to businesses.
5. Valuation of Externalities – a balance sheet approach to corporate accountability and reporting

This section outlines a conceptual development of environmental, social and human balance sheet schedules, which forms the basis for my research. In the literature, there are several important academic contributions to build upon. The balance sheet is a key model for financial reporting, used globally, and accepted by all major stakeholders as the prime reporting document that represents the financial position of the firm. In the current accounting standards, an asset is the cornerstone “element” while liabilities are defined as negative assets (IASB, 2010). Income and expenses are defined, with a reference to assets and liabilities, to provide a framework for measuring past performance. This paper proposes a balance sheet model that uses the framework proposed by Mathews (2008). The key elements of this framework are that business and society have entered into a social contract, which entitles stakeholders to receive financial information; this contract, is a comprehensive account of the firm, in three separate statements reporting the economic, social and environmental position which, when put together, make up the annual report of the entity. Stakeholders are defined as all members of society who have rights to information consistent with the ASSC 1975 report. Regulation and audit processes would be required establish the social and environmental position statements (Mathews, 2008).

While Mathews (2008) suggests the creation of an environmental and a social balance sheet, this article proposes a human balance sheet, an additional statement which would capture the human capital of the firm. The inclusion of human capital is consistent with concept of organisational culture that is defined as the relationship between corporations and their internal stakeholders, particularly employees (Aras and Crowther, 2007). Strategically, the value of people is well recognised in concepts such as key core competencies (Prahalad and Hamel, 1990); however, to date, this ‘asset’ has not been recognised.

I. Pricing externalities – why the society and not the market
For a number of externalities, by definition, there is no market and, hence, no market price to value these externalities. This paper proposes that, where there is no market price, an administrative price (Ayoo and Horbulyk, 2008) is established to value these externalities. Using an administrative price, there is an opportunity to include not only the supply cost common to both economic theory and accounting concepts but also to include a premium that reflects the opportunity costs, costs to future users, costs over time and costs on a integrated global basis. The administrative price is determined through discussion and social debate on the cost that society places upon the use of scarce resources on a permanent basis. This could be an alternative method to discover society’s willingness-to-pay (WTP), which is widely used in social and environmental cost-benefit studies, as noted in the RED studies above. However there are ethical problems associated with using the WTP approach to social pricing Söderholm and Sundqvist (2000). The authors note that, in neo-classical economics, the “fundamental philosophical position is that the net utility (benefits over costs) from the consequences of an action determines whether that action is right or wrong...however, the valuation of externalities, in many cases, is likely to be based on a deontological or rights-based approach to decision making”. This view is supported by Sagoff (1994) as he notes that, “individuals have two distinct roles: they act both as consumers, with private preferences, and as citizens, with public preferences”. Administrative pricing allows society to be directly involved in these critical decisions on the use and/or preservation, for future, generations of our most scarce resources. This social and political interaction is essential to the proper functioning of markets and would make the broader society a true stakeholder, thus bringing social legitimacy for corporations.

This paper proposes to use an administrative price, to be determined by society. The alternative experiment, by the European Union (EU), to establish a new market for carbon in order to determine a market price for emissions, has seen a dramatically fluctuating price in response to the underlying economic activity. This price instability makes it impossible to expect a business to invest in new technology when future costs and benefits are not quantifiable.

II. Contra entry – a system wide reset button
The creation of a social licence to operate as a contra entry to the cost of externalities on the corporation’s balance sheet instantaneously recognises the systemic failure to account for externalities and grants a new asset to offset this mistake. In this way, this proposal allows for a way forward for collaborative governance (Zadek, 2006). This contra entry to the value of the externality represents the cost to society from the negative impact of this externality (or the positive impact, where there is public good or spill-over benefits) which the society provides to the firm in the form of a social licence to operate. The formal accounting of externalities onto the corporate balance sheet needs to be transparent and clearly demonstrate the imperative for strategic action on the part of the organisation, as well as the level of obligation to the society inherent in the current business model. These can have the format of individual balance sheet schedules to capture the environmental, social and human capital of the corporation (Mathews 2008).

Creating contra entry on the corporate balance sheet, equal to the value of the externality in the form of the social licence to operate, could represent a valid approach to the mutual acceptance of both the a priori rights of the firm and societal demands for greater engagement from the business world in sustainable development. In doing so, it also locks in the common interest of both the firm and society to find sustainable development paths.

6. Managing the Transition – social partnership between business and the community

An important consideration in creating an effective corporate accountability framework is managing the transition from the current business model. To accommodate this transition, this paper proposes the introduction of a system of tax benefits which is made available to the firm based upon the depreciation of the social licence to operate asset. There are two key elements to creating a transmission between the environmental, social and human balance sheet schedules to the financial balance sheet. The first element is that the social licence to operate has a finite life so that it depreciates over time, requiring a constant effort on the part of the corporation to renew and grow this particular asset. This is consistent with Jackson’s
(2009) views that, like any asset, the ecological and social assets require a continuing investment and that, for too long, the society has allowed the sweating of these assets. The second element is a taxation system, which interacts with the depreciation expense, creating a fiscal flow to link to the financial results of the firm. This is a common feature in most market based fiscal systems and has been widely used by governments to direct investment in particular industries and activities considered to be desirable and of national interest.

This article proposes two separate tax offsets: a social value offset and multiplier value offset. The social value offset is a tax benefit available to the company that is based on society’s assessment of the benefits to social, environmental and human development outcomes. The second tax benefit is a multiplier value tax offset which is equal to the value that society places on the overall contribution of the firm, including providing employment and the value of its goods and services. The concept of the economic multiplier, which measures the secondary effects of the firm’s activity, is an effective measure of the overall economic contribution of a firm to the economy and can be used to determine the tax benefit given to the firm. In this way, firms that provide local employment and support local suppliers will be considered favourably in the discussion for the determination of the multiplier tax offset value.

7. The case for a new Accountability Framework

The creation of a new accountability framework, with a direct valuation and formal accounting of externalities on the corporate balance sheet and an offsetting appraisal of the social licence to operate, is supported in the literature. It is argued that externalities must be included into a corporate accountability framework due to the demands of global ethics, corporate strategic imperatives and pragmatic collaborations.

I. The call for a global ethic – a view from nowhere
The demand for a global ethic, while being the most important reason for a meaningful and an integrated corporate accountability, is the most difficult to articulate clearly. Here is an attempt to construct this argument using a recent paper presented by Michael Ignatieff at the Carnegie Council for Ethics in International Affairs (2011). Ignatieff defines global ethic as:

_I take a global ethic, in the singular, to mean an ethics whose object of moral concern is one world, one world in which all human beings are entitled to equal moral concern, in which all of us have a common responsibility to a single habitat, the only home we've got._

This view has a clear concern for distributive justice and sustainability of the planet and Ignatieff urges all of us to begin our discussions from this ethical starting point. This perspective, which he describes as “the view from nowhere”, that is independent of “views from somewhere” that we all have as a result of “partialities and interests that are grounded in family, community, ethnicity, economic position, and, above all, the nation we belong to” (Ignatieff, 2011). Applying this view of global ethic to valuation and formal accounting of externalities, this paper proposes that the acceptance of the environmental, social and human balance sheet schedules bring this “view from nowhere” to reality in business ethics. The accounting of externalities in this way can be seen as independent of the historical cost concept, free from the economic definitional issues, un-hinged from legal responsibility excuses, spared from CSR legitimacy imperatives and above the political debate on the role of governments.

II. _The call from strategic imperative - a measure of shared value creation_

Heal (2005), focuses on social cost allowing him to see externalities and market failures as a source of value. This new conceptualisation of externalities does not need to explain away the impact of externalities but brings it to the centre of business strategy and value creation. As a generalised conclusion, firms can create shareholder value and resolve market failures by focusing not on “private cost”, and trying to explain this, but recognising “social cost” as a source of value. From these case studies it is also clear that strategically picking specific CSR initiatives and implementing them in a holistic way, taking into account all stakeholders’ views can be the critical difference between the extraordinary success and the demise of a firm, as there can be no short-cut solutions for corporate accountability.
Meyer and Kirby (2010), specifically call for corporate accountability for externalities and see this as “unavoidable”. The valuation and formal accounting of externalities, as a basis of corporate accountability, has to be considered in terms of the strategic imperative of the firm and its ability to create long-term value. The concept of CSV provides a very useful strategic framework for firms to analyse their value chain in order to discover new markets and products; increase productivity in the extended supply chain and consider opportunities to leverage suppliers and competitors to create solutions for global problems (Porter and Kramer, 2011). However, current financial and non-financial reporting systems do not recognise and report this value creation. Valuation and formal accounting of externalities, with a contra asset to record the social licence to operate could provide a measure of the potential “shared value” specific to the firm and provide for a measure of progress in achieving these shared goals. This framework could provide legitimacy for management action and create an explicit link between the financial value of the firm and its activities in both broader society and the environment. This form of social accounting could engage all stakeholders informing the mutual interest and interdependent nature of the collaborative process of creating shared value.

III. The role of business in sustainability and sustainable development – why the firm and not the state

While it is possible to argue and demonstrate the need for a new corporate accountability framework, both from a theoretical literature review and from practical observation of the growing social, environmental and economic issues in the everyday life of a growing majority of the people in our communities, it is more difficult to envisage a clear path to implementing changes that are necessary to address these intractable global problems.

In the search for potential frameworks to implement, it is instructive to review a major effort to improve corporate responsibility for human rights by The United Nations Special Representative (UNSG) on Transnational Corporations and Human Rights, John Ruggie (2008). There are a number of insights that can be drawn from this framework for human rights that can be equally applied to accountability for externalities. Returning to my proposal, the valuation, formal accounting and separate reporting of externalities is seen as
creating a form of “due diligence” (Ruggie, 2008) to recognise the unaccounted for assets and liabilities. This is the minimum standard of accountability which will require legislative enforcement so that companies are required to discover and report upon the key externalities of their operations. This recognition of the external liability and offsetting social asset provides information to all stakeholders about their mutual interest and interdependence, thus setting a platform for “collaborative governance” (Zadek, 2006). This is the minimum standard required for a new corporate accountability that is both meaningful and integrated into the dominant logic of our market economy (Amaeshi, 2010).

8. Conclusions, limitations and further research

Monetary valuation of externalities and social licence to operate into the corporate value creation framework, re-defines the greater role that business has in solving environmental and social problems through innovation and the creativity of business enterprise. Valuation and formal accounting of externalities, with a contra asset to record the social licence to operate, creates powerful incentives for the company to innovate in its attempt to improve the total value of the firm. The fact that these assets and liabilities are recorded on the firm’s environmental, social and human balance sheet schedules would create potentially powerful financial incentives for collaborative action.

Mathews (2008) provides strong theoretical support for a balance sheet approach to valuation of externalities. Meyer and Kirby (2010), specifically call for corporate accountability for externalities and see this as “unavoidable”. This view is consistent with Jackson (2009) that, like any asset, the ecological and social assets requires continuing investment and that, for too long, the society has allowed the sweating of these assets. Ayoo and Horbulyk (2008) support the use of administrative pricing for externalities. It is argued that externalities must be included into a corporate accountability framework due to the demands of global ethics (Ignatieff, 2011), corporate strategic imperatives (Porter and Kramer, 2010) and pragmatic collaborations (Ruggie, 2008).
The hereto invisible value of ecological, social and public goods on the balance sheet has diverted our attention from the need to invest in these assets in order to maintain their viability (Jackson, 2009). Recording such important assets and liabilities has the potential to focus the creative energy of the business community to solving global environmental and social problems and, at the same time, create value for the company involved. At a scaled up level, this redefined role of business and a new focus on innovation, together with investment in all assets which maintain an ecological, social and community life, could provide an alternative to the consumer-led growth model that we have come to depend upon. In this sense, the corporate valuation framework is not fully developed and this should be the objective of further research.
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