

WHY WE NEED CARBON PRICING

A SOCIAL AND ENVIRONMENTAL ACCOUNTING PERSPECTIVE

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This paper justifies a need for carbon pricing through the academic social and environmental accounting perspective. An analytical approach is taken whereby current developments in carbon pricing are linked to the academic literature on social and environmental accounting. A need for carbon pricing is justified through a middle of the road social and environmental accounting research perspective and the notion of accountability.

The paper has both research and practitioner implications. Academic work on social and environmental accounting has relevance for contemporary developments such as carbon pricing. Carbon pricing is integral in internalising externalities and there is vast support for this process, including academic support. Practitioners can use social and environmental accounting research to justify carbon pricing, thereby providing further credence to their arguments. This study is one of the first studies to link social and environmental accounting research to carbon pricing and suggests that such research has practical relevance.

INTRODUCTION

The seriousness of climate change as highlighted by recent scientific (IPCC, 2007, 2010), economic (Stern, 2006, 2009, Garnaut, 2010) and political (Gore, 2006, 2009) evidence has led to an increasing emphasis on the need to price carbon pollution (carbon pricing). The debate over carbon pricing has been dominated by an economic business case perspective on one hand and a radical green perspective on the other. This paper argues for carbon pricing through the social and environmental accounting literature with a focus on the middle of the road perspective and a need for accountability. It is suggested that carbon pricing mechanisms such as an emissions trading scheme and a carbon tax enable the vision of social and environmental accounting proponents to be realised.

CARBON PRICING

The Kyoto Protocol of 1997 (UN, 1998) is the first global agreement to set greenhouse/carbon emission reduction targets for countries. It has been ratified by all major countries with the exception of the United States. Australia is one of the recent nations to ratify this protocol in 2007 (Commonwealth of Australia, 2007). Carbon Pricing and Carbon Offsetting have been recommended as the key approaches that countries could use to reduce their emissions levels (UN, 1998).

Carbon Pricing is essentially an attempt to internalise carbon pollution, which has in the past been treated as an externality. Under the Kyoto Protocol, an emission trading scheme (ETS) (CPA Australia, 2008) has been recommended as a primary carbon pricing mechanism. This mechanism involves setting a cap for pollution levels which is formalised through the issue of a limited number of pollution permits. A market system is setup whereby these permits can be bought and sold. Organisations with high carbon pollution levels exceeding their existing permit levels need to buy extra permits whereas those organisations able to reduce their emissions below their existing permits can sell these permits. An ETS not only creates a market-based exchange system but also encourages the development of renewable and carbon reduction technologies.

An ETS was first established in the US in the 1990s as a means of reducing sulphur dioxide emissions which caused Acid Rain (Johnston et al, 2008). This scheme was very successful as it led to a massive reduction in sulphur dioxide emissions. However, the US is yet to have a similar scheme for carbon pollution even though several states are taking a lead in setting up

such a scheme. The most widely known ETS is in the European Union (EU) which has been functional since 2005 (European Communities, 2007). Currently, the second phase of implementation is underway with more industries and greenhouse gases being covered under this stage of implementation.

Carbon Offsetting is another mechanism whereby organisations that are unable to lower their carbon pollution levels could offset their emissions through investments in mechanisms/projects in other areas that reduce emissions. Under the Kyoto Protocol, offsetting can take place in a developing or underdeveloped nation (referred to as Cleaner Development Mechanism) or another developed nation (referred to as Joint Implementation initiative) (UN, 1998).

AN ETS is not the only carbon pricing mechanism. A carbon tax is a simpler version of carbon pricing whereby a flat tax is imposed on the carbon-intensive organisations. Whilst this is a more direct approach for controlling and reducing carbon pollution levels, it does not encourage the market to operate independently and set carbon pricing.

Australia is one of the major developed nations to pass a carbon tax legislation, with the tax being operational from 1 July 2012 (Commonwealth of Australia, 2011). This tax will be imposed on only 500 of the largest polluters in Australia, with the mining and manufacturing industries being the most affected. The carbon price has been set at \$23 per tonne of carbon dioxide (or carbon dioxide equivalent) with a 2.5 per cent increase in subsequent years. Initially, trade exposed industries such as steel and aluminium will be compensated while nine of out 10 households are expected to be better off through tax cuts and pension increases.

Under the carbon tax, it is expected that 159 million tonnes of carbon will be removed from the atmosphere per year (Commonwealth of Australia 2011). This is said to be an equivalent of removing 45 million cars from roads. The Australia Commonwealth Government intends to convert this carbon tax to a fully functioning ETS after three years.

The introduction of carbon pricing mechanisms has been subject to rigorous debate, with concerns over the impact on the economy and jobs coming from the right, while emphasis on preservation of the natural environment in light of our planet's precarious situation has come from the left. This has especially

been the case in Australia where the conservative side of politics has vehemently opposed the introduction of the carbon tax. On the other hand, the Green Party initially rejected the Australian government's proposed ETS as it was felt that proposed emissions cuts were modest and the compensation to high-polluting companies was deemed excessive. However, they did engage recently with the minority Australian government and independent members of parliament to bring about the carbon tax.

In a number of countries, protection for trade exposed industries in the initial phases of the carbon pricing introduction has been used to mitigate the sudden shock to these industries caused by carbon pricing. For instance, the EUETS saw the issue of free pollution permits to a large number of industries (Hopwood, 2009, Mackenzie, 2009). However, the European experience suggests that such incentives can adversely impact the smooth functioning of the carbon market with unintended and undesirable consequences (Hopwood, 2009; MacKenzie, 2009). Some firms were given more free permits than they needed, described as a case of 'rather than polluters having to pay ... polluters have been paid' (Hopwood, 2009, p. 435). Moreover, accounting for the free permits was problematic, with firms passing the 'opportunity cost' of freely given permits in the price charged to customers (Hopwood, 2009). The overall effect of such actions was that there was a drastic reduction in the carbon price that generates low cost pollution (Mackenzie, 2009).

ENTER SOCIAL AND ENVIRONMENTAL ACCOUNTING

The link between accounting and sustainability issues is not new, becoming prominent through the social accounting and environmental accounting movements of the 1980s and 1990s (Gray, 2002). In contemporary times, social and environmental accounting is a respected area of research (Parker, 2005, 2011) with extensive literature devoted to the management and reporting of sustainability issues by both the private and public sector (Adams and Larrinaga-Gonzalez, 2007). More recently, the global concern over climate change has led to an emphasis on carbon accounting (Bebbington and Larrinaga-Gonzalez, 2008).

The social and environmental accounting literature has centred around three major theoretical perspectives whilst the notion of accountability has provided the overarching framework for the need for the involvement of accounting in social and environmental issues. These issues are discussed next.

In the social and environmental accounting literature, the managerialist, critical and middle-of-the-road perspectives (Gray & Collison, 2002) have often been used to differentiate the various theoretical paradigms for research. The managerialist school of thought is based on neoclassical economics. Positive accounting theory and agency theory (economic theories) and capital market (decision usefulness) theories are prominent in this approach (Gray et al., 1995). Managerialist literature emphasises the business case for being environmentally responsible, with the expectation that this positivist approach will enhance shareholder value (Gray & Collison, 2002).

Critical theory arguments are grounded in a political economy perspective (Gray et al., 1995, 1996). When viewed from a political economy context, social and environmental accounting serves as a tool for constructing, sustaining and legitimising economic and political arrangements, institutions and ideologies that ultimately contribute to the corporation's private interests (Cooper & Sherer, 1984). The critical theory paradigm for social and environmental accounting is primarily based on Marxist (Tinker, 1985; Tinker et al., 1991) and Habermasian perspectives (Puxty, 1986, 1991). Additionally, Parker (2005) also identifies eco-feminism (Cooper, 1992; Andrew, 2000), deep green ecology (Maunders & Burritt, 1991; Gray, 1992; Andrew, 2000) and the work of Lehman, which draws upon Rawls' theory of justice (Lehman, 1995, 1999, 2001), as critical perspectives for social and environmental accounting. Simply put, the critical approach advocates a radical change to current practices and requires fundamental changes to businesses in order for the serious consideration of social and environmental issues to emerge.

The middle-of-the-road approach lies between the managerialist and critical perspectives and suggests that while businesses have contributed to environmental problems, they equally have a social responsibility to resolve these issues (Gray et al, 1988, Gray & Collison, 2002). This paradigm acknowledges that present practices are far from perfect but encourages working within the confines of the current systems in order to affect positive change. This approach emphasises engagement with all stakeholder groups with a general consensus to be reached. The notion of accountability provides the foundations for the middle of the road approach.

Gray et al. (1996, p. 38) define accountability within the social and environmental accounting context as "... the duty to provide an account (by no means a

financial account) or reckoning of those actions for which one is held responsible". Accountability involves responsibility to undertake actions and to provide an account of these actions. Buhr (2001) suggests that accountability involves an account-giver (individual to individual, individual within organisation or organisation within society) who provides reasons and an account, a recipient who demands the account and holds the account-giver responsible, and a relationship between these two which determines what actions are to be accounted for.

Accountability is distinct from decision usefulness (Gray et al, 1991) with emphasis on account-givers being accountable to a broader range of stakeholders (recipients) and on responsible corporate behaviour (especially in regard to the environment where responsibility extends to both current and future generations). In contrast, decision usefulness focuses on demand for information by parties such as investors and creditors (primarily financial stakeholders) for their future decision making purposes. Accordingly, the decision usefulness criteria can be criticised on the basis of it serving the needs of the more 'powerful' constituents and restricting measurement merely to financial matters (see for instance, Laughlin and Puxty, 1981, 1983).

Cooper and Owen (2007) envision a more radical concept of accountability. They suggest that in addition to providing an account, one must be held to account. Current voluntary social and environmental accountability practices have focused extensively on providing an account and this has led to limited attention being given to the holding of an organisation to account. Similarly, Gray (2001, p. 11) posits that accountability places society at the heart of the analysis and questions the legitimacy of an organisation's actions, or perhaps even its right to exist.

CARBON PRICING AND SOCIAL AND ENVIRONMENTAL ACCOUNTING

The need for carbon pricing can be justified through the social and environmental accounting literature. It is argued that carbon pricing is an approach advocated by the middle of the road perspective whereby focus is on moderation and changing a system by remaining within the system. Rather than merely looking at the business case scenario through exclusive emphasis on the economy and jobs (managerialist arguments) or proposing a radical overhaul of current systems that have provided the foundations for business development over centuries

(critical theorists), emphasis is on taking a measured approach toward combating climate change. This paper does not imply that managerial or critical attitudes are not valid. These perspectives raise a number of issues that need to be addressed. For instance, there is no doubt that our environmental problems are severe and that business as usual is not desirable (critical arguments). Moreover, the economy needs a gradual transformation to carbon pricing rather than a sudden jolt (managerialist views). However, it is suggested that while acknowledging these perspectives, a middle of the road approach encompassing dialogue and engagement is essential as the way forward in designing carbon pricing policies to reduce our growing pollution and impacts.

The history of the environmental movement (see, for example, Beder, 1996) has illustrated that the earlier movements of the 1960s and 1970s which advocated radical changes to human and organisational behaviour was not successful. The second wave of the environmental movement which led to the emergence of the notion of sustainable development (Commission for the Future, 1987) has been more successful in placing the environmental agenda as part of mainstream business activity. This approach has had more success because it implies that environmental protection and development can be complementary. Hence, managerialist and critical arguments should go hand in hand rather than being diametrically opposed to one another and this is possible through the middle of the road perspective.

It is essential for carbon intensive corporations to show leadership and respond to climate change at an earlier stage rather than to lag behind global developments with the hope that the effects on future business viability as a result of extreme environmental conditions would be minimal. Porter & Reinhardt (2007) argue that businesses should take a strategic and pre-emptive approach to climate change. They argue that climate change is more than a corporate social responsibility issue, it is a business issue which must be considered seriously in order for corporations to remain competitive in a future characterised by environmental problems and increasing environmental regulation. Similarly, Hoffman (2007) states that 'if businesses are not at the table, they at least need to be on the menu' — suggesting that instead of lobbying against carbon pricing measures, businesses need to engage with governments and the broader community as advocated by the middle of the road approach if they are to have a role in the environmental policy debate.

The notion of accountability can also be realised through the implementation of carbon pricing. As discussed in the previous section, current practices are far from perfect with some authors questioning whether the planet is safe in the hands of business (Gray and Bebbington, 2000). The voluntary aspect of social and environmental accounting does not enable corporations to be held to account. However, with carbon pricing, organisations are held to account over their carbon pollution and this enables stakeholders to be informed about organisational impacts.

As argued by Unerman & O'Dwyer (2007), enforcement mechanisms (such as carbon pricing) enable organisations to manage their long-term risks and portray to stakeholders their accountability over social and environmental issues. The authors draw upon the work of Ulrich Beck to suggest that in a risk averse society, specific requirements imposed on corporations can be beneficial to them. Thus, unlike voluntary social and environmental accounting, managing and reporting carbon emissions as a result of carbon pricing requirements would have more credibility in a risk averse society. Damages to corporate reputation through incidents such as, for example, OK Tedi, James Hardie and even the recent BP oil spill in the Gulf of Mexico, would have been minimised if enforcement mechanisms were stringent and prevented such incidents from occurring in the first place. Therefore, in line with Unerman and O'Dwyer, this paper contends that risk and uncertainty arising from climate change can be effectively managed through enforcement mechanisms such as carbon pricing which have the effect of holding corporations to account.

Carbon pricing therefore enables the radical notion of accountability as envisaged by Owen and colleagues to be realised. The power asymmetry between corporations and stakeholders (Cooper and Owen, 2007) can be reduced through this mechanism. Organisations are compelled to provide an account of their carbon emissions and are held to account by governments as a representative of other stakeholders. Corporate engagement with stakeholders (middle of the road approach) could lead to a better understanding of accountability needs and cause changes in the business as usual attitude to carbon emissions. It is also possible for stakeholders to use counter accounts (Gallhofer et al, 2006) if they are not satisfied with the account provided by corporations and therefore, further hold a corporations to account.

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