

## 1.0 Introduction

The purchase, use and disposal of products and services each has an effect on the natural environment and the social fabric of the community. Whereas individual consumers buy, organisations across all sectors procure goods and services on a far greater scale, exerting an 'increasingly powerful influence on the economy and society' (Green et al. 2000:207). Collectively and individually, organisations are in a commanding position to contribute towards the sustainable use of resources through their procurement choices. The amount of spending allocated to organisational procurement, especially in large organisations including multinational corporations and governments, is substantial (Callender & Matthews 2003).

This paper aims to explore possible theoretical scaffolds through which to understand the adoption of sustainable procurement, hence addressing the theoretical deficiencies highlighted in the literature. We draw from the field of management studies as suggested by Sarkis et al. 2011; Seuring & Muller 2008, examining two leading theories on why business organisations behave as they do. Firstly we look to institutional theory, a highly influential framework in terms of explaining shifts to corporate sustainability. On this view, organisations take up positions on sustainability due to normative or other external pressures (Matten & Moon 2008; Yang & Rivers 2009) can provide an explanation for why organisations shift towards sustainable purchasing practices. Secondly, we examine the possibility that internal capabilities, as suggested by resource-based view (RBV) of the firm, can illuminate why organisations make particular strategic decisions such as around sustainable procurement. This view holds that firms can have capabilities in the form of organisational and human resources that enable them to obtain a competitive advantage in certain external or market conditions (eg Aragon-Correa and Sharma, 2003; Sharma, 2009). Although institutional theory has to date dominated the literature on drivers to sustainable business, an increasing interest in the role that organisational structures and processes linked to human resource management (HRM) can play in driving the successful implementation of sustainability in individual firms prompts us to into an additional exploration of the impact of strategic HRM and capability development on purchasing and supply chains (Jabbour & Santos 2008).

The paper that follows is divided into four sections. First, we summarize the extant literature on sustainable purchasing as it rests in the broader field of sustainable supply chain management (Kraljic 1983). Second, we give an overview of institutional theory and put forward three propositions to explore their applicability to sustainable procurement adoption. We test these

propositions against empirical evidence provided in the extant literature. In the third section we explore suggestions based in the resource-based view of the firm in light of empirical evidence in recent literature. The paper concludes by identifying the benefits and limitations of each theory in explaining organisational shifts to sustainable procurement and suggests a model which is largely informed by the institutional viewpoint but complemented by understandings drawn from the natural resource based view, a version of the RBV that is particularly relevant to sustainable management. Suggestions are made for further research.

## **1.2 Sustainable procurement, a background**

The literature on sustainable procurement nests within the wider literature of sustainable supply chain management (SSCM). Initially most scholarly interest was placed on waste reduction with key areas including resource reduction, product reuse and recycling (Carter & Carter 1998; Carter & Dresner 2001; Carter & Ellram 1998; Min & Galle 1997) and the implications of greener purchasing and source reduction strategies including recycling, reuse and waste elimination for overall environmental performance (Min & Galle 1997), green operations and environmentally conscious manufacturing (Sarkis & Rasheed 1995). Some writers, however, expanded away from a sole emphasis on waste to develop the concept of closed loop supply chains (Sarkis 2001b), reverse logistics (Carter & Ellram 1998; Stock 1992). Keindorfer et al. (2005) suggest closed loop systems deliver dual rewards through savings from redundant labor-intensive product recovery programs as well as gains for sustainability in reducing waste and resources associated with virgin materials. This is part of a more holistic understanding of sustainable procurement that has emerged in the literature (Preuss 2009; Seuring & Müller 2008; Seuring et al. 2008). From a purely 'green' focus, interest is now shifting to an approach that looks to performance according to the triple bottom line (Pagell, Wu & Wasserman 2010; Seuring & Müller 2008) underpinned by the wider concepts of corporate sustainability and corporate social responsibility (CSR).

## **1.3 Limitations to theory**

Early examples of sustainable procurement included the Body Shop International and the hardware chain B&Q (Green, Morton & New 1996; Lamming & Hampson 1996; Wycherley 1999) and clearly SSCM is growing in importance as an area of management focus. However, despite widening evidence of the growing importance of SSCM in practice, there is little theoretical understanding of what drives organisations to implement sustainable procurement. Authors of environmental purchasing studies have long labeled theoretical progress as exploratory (Carter & Ellram 1998) and formative (Bowen et al. 2001; Sarkis 2001a; Zsidisin & Siferd 2001), suggesting more academic work is required (Green, Morton & New 2000). Zsidisin & Siferd (2001) suggested 'integration of established theories into environmental purchasing research is needed'. Immature

theory was again raised by Kleindorfer et al. (2005: 489), asserting that ‘we are only beginning to understand and map the territory for sustainable operations management’. Seuring and Muller (2008: 1706) conclude ‘that a theoretical background is often missing’ and suggest examination from a strategic management perspective. So while the overall body of literature in this area has grown rapidly, scholars have continued to highlight the lack of accompanying theoretical development (Pagell, Wu & Wasserman 2010).

## **2.0 Applying an institutional theory lens**

Acknowledging these theoretical shortcomings, we look firstly to applying a institutional theory (DiMaggio & Powell 1983; Meyer & Rowan 1999) lens to examine the adoption of sustainable procurement. As noted above, sustainable purchasing is now seen as a matter of strategic partnering (Mann et al, 2010) and appropriate theory needs to consider adoption from the perspective of interactions with a wide range of stakeholders encompassing multiple dimensions (Krause, Vachon & Klassen 2009). While transactional cost economics and the natural resource based view of the firm have been usefully applied by Pagell et al (2010) to understand the emergence of sustainable supply chain practices, in our view such approaches have limitations in addressing the complex and multidimensional aspects of sustainable procurement (Carter & Jennings 2004). A number of authors have already applied the management theories in the framework and combinations of them to organisational studies centred on sustainability and CSR (eg Sarkis, Zhu & Lai 2011). Husted and Allen’s (2006) survey based approach has strongly indicated the importance of institutional pressures rather than strategic analysis is driving CSR decision making. As Brammer et al. (2012: 7) argue, institutional theory allows for a better understanding of the ‘diversity and dynamics’ of CSR, a point supported by a number of scholars (eg Campbell, 2007; Matten & Moon, 2008). Institutional theory (DiMaggio & Powell 1983) has been applied to explain explicit and implicit CSR (Campbell 2007; Matten & Moon 2008), ecologically sustainable organisations (Jennings & Zandbergen 1995) and environmentally legitimate firms (Bansal & Clelland 2004). The considerable overlap between corporate social responsibility (CSR) and SSCM which causes us to suggest that institutional theory may also be useful as an approach to understanding sustainable procurement adoption. Moreover, as Brammer et al (2012) point out, taking an institutional lens widens our approach to the study of a particular area of organisational behavior or performance - a point very relevant to sustainable procurement, a highly interdisciplinary area of study, as exemplified by the disciplinary scope of this journal.

## **2.1 Introduction to institutional theory and propositions**

Before applying institutional theory to sustainable procurement we first give a brief outline of institutional theory and its relevance to the sustainable procurement and supply chain literature and application to theory development. In our view, this theory provides some explanation of the

mechanisms and programs that spread sustainable procurement across organisational groups as it looks to explain homogenisation amongst organisational types and why organisations mimic others in the quest for legitimacy. Consequently institutional theory can also be used to elucidate the proliferation of sustainable procurement across organisations. In the next section we provide a brief outline of institutional theory.

The concepts behind institutional theory originate with Meyer and Rowan (1977). However, the seminal authors who shaped and refined the notion of mimesis in organisations, or in other words, the tendencies of organisations to mimic each other, were DiMaggio and Powell (1983) and their three key concepts are most frequently referenced by authors applying this theory. Meyer and Rowan (1977: 340) explain institutionalised organisations by stating that ‘organisations are driven to incorporate the practices and procedures defined by prevailing rationalized concepts of organisational work and institutionalized society’ and ‘Organisations that do so influence their legitimacy and their survival prospects, independent of the immediate efficacy of the acquired practices and procedures’. The result is isomorphism, defined as the ‘constraining process that forces one unit of a population to resemble other units that face the same environmental pressures’ (DiMaggio & Powell 1983:149). The three key constructs are:

1. Coercive isomorphism, defined as that form of isomorphism that stems from political influence and the problem of legitimacy.
2. Mimetic isomorphism resulting from standard responses to uncertainty
3. Normative isomorphism associated with professionalization.

. DiMaggio and Powell (1983) state that institutional isomorphic change occurs through three mechanisms: Against these three domains we put forward three propositions to explore their applicability to explain sustainable procurement adoption.

‘Coercive isomorphism’ results from both formal and informal pressures exerted on organisations by other organisations on which they are dependent and by the cultural expectations of wider society in which they are embedded and function (DiMaggio & Powell 1983). For example, customers, governments and non-government organisations can push firms towards sustainability and social responsibility initiatives (Wolf, 2013). Coercive pressures may be felt as force, such as regulatory imposts, like product take-back legislation for electronic and electrical equipment (European Union 2002) or as invitations to join in collusion, such as public purchasing programs. Organisations will comply with such pressure exerted through rules or laws, whether formal or informal, as a matter of expedience (Scott 1995). Walton et al. (1998) suggest that environmental

issues are being embedded in an organisation's strategy due to the regulatory conditions and accountability. Campbell (2007) proposes that corporations are more likely to act in socially responsible ways the more they encounter strong state regulation, collective industrial self-regulation, NGOs and other independent organisations that monitor them, and a normative institutional environment that encourages socially responsible behavior (Campbell 2007). Supplier relationships could also be strong forms of isomorphic coercion. Aside from regulation and government programs, coercive isomorphism could also be channeled through supplier relationships, where procuring organisations place contractual requirements on suppliers as part of the contracting process, as standardized conditions (Callender & Matthews 2003). This brief review of the literature leads us to the following:

*Proposition One: Sustainable procurement adoption can be explained through coercive isomorphism*

'Mimetic isomorphism' occurs when organisations model themselves on other organisations in times of uncertainty, such as poorly understood or ambiguous goals. The modeled organisation may be unaware of the modeling or may have no desire to be copied; it merely serves as a convenient source of practices that the borrowing organisation may use (DiMaggio & Powell 1983). What is seen as 'orthodox' is taken up by organisations either weaker or less certain in their policies in a particular area. Voluntary instruments and supplier codes centred on sustainability are structures through which mimetic isomorphism that could have a moderating effect on the adoption of sustainable procurement. Alliances and networks supporting adoption could also encourage organisations to adopt mimetic sustainable purchasing practices. Hence there also seems to be some support in the literature for *Proposition Two: Mimetic isomorphism can be applied to explain sustainable procurement adoption*

Isomorphic changes in organisations are also delivered through 'normative pressures'. These pressures derive from educational or other institutions that establish professional norms reinforced by professional networks. For example, in our case of sustainable procurement, educational institutions as well as professional bodies and associations could assist the spread of sustainable procurement through normative pressures, hence we draw *Proposition Three: Sustainable procurement adoption can be explained through normative pressures*

## **2.2 Empirical evidence**

In the following section, we examine the propositions through a critical analysis of their application to sustainable procurement as empirically evidenced in the extant literature. This analysis is summarised in Table 1.

### *Proposition One*

*Sustainable procurement adoption can be explained through coercive isomorphism*

There is evidence that several coercive instruments and mechanisms influence the spread of sustainable procurement. In addition to legislation (Porter & Van der Linde 1995), CSR policies and frameworks aimed at improving sustainability performance in organisations within a sector have led to the spread sustainability. Another means of enforcing sustainability is down the supply chain from the procurer to the supplier, by imposing sustainability standards as part of the contracting process. These three coercive mechanisms, namely regulation, public procurement policies and programs and supplier assessment programs are discussed below.

### *Regulation*

Min and Galle (2001) found organisations that take environmental regulatory compliance more seriously were likely to be undertaking green purchasing. Zhu and Sarkis (2007: 4352) found ‘manufacturers facing higher regulatory pressures tend to better implement green purchasing and investment recovery’. Contradicting these findings however, Carter and Jennings (2004) have shown that government regulation was not a significant driver of sustainable procurement (Carter & Jennings 2004).

### *Public procurement policies and programs*

Government procurement programs have the potential to be important sources of isomorphism stimulating mimetic behavior within and potentially across sectors outside government (Erdmenger 2003; Green, Morton & New 1996). As national governments adopt sustainable procurement programs they provide impetus for other levels of government and other sectors including corporations to mimic these programs and processes and spread sustainable procurement. Coercive directives such as mandatory government green purchasing policies are frequently modeled by other sectors as a result of mimetic behavior.

### *Supplier assessment programs*

Supplier assessment programs have contributed to the greening of suppliers (Rao 2002, 2005; Rao & Holt 2005) and the spread of corporate social responsibility by coercive isomorphic pressures (DiMaggio & Powell 1983). Noci (1997) argued that supply chain management is the most advanced stage of green management and recommends identifying supplier environmental performance indicators and formally measuring and selecting suppliers. (Preuss 2005: 129) noted that ‘if supply chain managers were serious about the environmental performance of their company and its products then environmental credentials of suppliers should emerge as one criterion to influence supplier selection’. Suppliers are evaluated and accredited through rating systems as part of a sustainable purchasing policy to determine sustainability performance (Green, Morton & New 1998; New, Green & Morton 2002; Noci 1997) and customized to individual sectors and procurement initiatives (Rimington, Carlton Smith & Hawkins 2006).

As part of the supplier assessment process, organisations typically require suppliers to attain third party certification accreditation to various codes and standards including the ISO 9001 series for quality management. Environmental management assurances are now becoming frequent and in some cases are mandatory (Darnell, Jolley & Handfield 2008). (Matten & Moon 2008) claim compliance with environmental standards, including ISO 14000 and Eco-Management and Audit Scheme (EMAS), applied through the supply chain imposes coercive isomorphism on a range of organisations. Imposing sustainability requirements on suppliers has implications down the supply chain to suppliers’ suppliers and subsequent tiers (Preuss 2005b) and ultimately these are likely to become minimum organisational standards.

In the absence of regulation, the coercive forces placed on suppliers through assessment programs appear to be the most powerful of three mechanisms to spread sustainability through sustainable procurement. It is becoming commonplace for large corporations to instigate supplier assessment programs (Walmart 2012)).

While many authors claim that regulation is a conventional path to sustainability and innovation (Beise & Rennings 2005) supply chain coercion (Matten & Moon 2008) is another way to examine the spread of sustainable procurement is through mimetic behavior as a source of organisational legitimisation.

In summary, there is some support for Proposition One in the literature that indicates sustainable procurement adoption can indeed be explained through coercive isomorphism predominantly through the influence of regulation, public procurement policies and programs and supplier assessment programs.

## *Proposition Two*

### *Sustainable procurement adoption can be explained through mimetic isomorphism*

As discussed, institutional theory is increasingly being used to describe the spread of corporate sustainability (Aguilera & Jackson 2003; Campbell 2007; Jennings & Zandbergen 1995) and some of these themes overlap with the introduction of sustainable procurement programs (Zhu & Sarkis 2007). Organisational sustainable procurement can be spread by mimetic tendencies through frameworks, systems, programs and alliances.

#### *Voluntary Frameworks*

Voluntary programs and systems do appear to act in tandem with coercive instruments to spread the introduction of sustainable procurement. There are several voluntary frameworks and systems that appear to encourage organisations to implement CSR. Increased self regulation and voluntary initiatives, instruments and reporting frameworks such as the Global Reporting Initiative (GRI) have contributed to homogeneity in organisational forms (Matten & Moon 2008). Several authors have highlighted codes of practice for ethical sourcing including the Base Code of the Ethical Trading Initiative (ETI), International Labour Organisation (ILO) conventions and SA 8000 (Blowfield 2003; Preuss 2009; Roberts 2003). These types of codes are one mechanism used by companies to guarantee that products purchased meet specific environmental and social standards (Roberts 2003).

By adopting these voluntary instruments organisations differentiate themselves from their peers and as part of this process frequently review their procurement activities for alignment with CSR objectives. Preuss (2009: 739) found that ‘most organisations instigated an ethical sourcing code for competitive advantage as a differentiation strategy’. Adoption of frameworks and instruments are also used as conformance criteria in supplier assessment programs. Sharma (2000: 691) found ‘that in an industry subject to strong institutional pressures, companies do exercise strategic choice by undertaking voluntary environmental strategies that go beyond conformance to environmental regulations and common industry practices’. Through mimetic tendencies organisations in the same industry sector adopt similar codes and systems, which precipitate sustainable procurement adoption as a framework condition.

#### *Environmental Management Systems*

Environmental management systems (EMS) are other forms of mimetic isomorphism (Delmas & Montes-Sancho 2011). Before adopting sustainability frameworks, organisations frequently implement a corporate EMS as a compliance standard and a verification of a commitment to



environmental sustainability. The introduction of the European Union's EMAS and the International Standards Organisation's (ISO) 14000 series have been an influencing factors in environmental policies, indicating preferences for green products and suppliers (Green, Morton & New 1996; Handfield, Sroufe & Walton 2005; Klassen & Angell 1998; Rao 2005; Sarkis 2001a, 2001b; Walton, Handfield & Melnyk 1998). Several authors coined the phrase total quality environmental management and variations to combine environment and quality management systems (Hart 1995; Lamming & Hampson 1996; Shrivastava 1995). Chen (2005) found that environmental purchasing is an effective tool in controlling pollution externalities and provides a positive effect on the implementation of ISO 14001 environmental management and to green purchasing into the framework. Linking stakeholder and institutional theory, Roberts (2003: 163) found 'that companies are more likely to implement codes if external stakeholder pressure to do so is strong and external concerns are related to the company's core business and environmental strategy'. Based on these studies it can be deduced that the institutionalization of environmental management systems as a minimum corporate standard of performance results in a growth of environmental purchasing.

#### *Sustainability programs and alliances*

Mimetic tendencies leading to the adoption of sustainable procurement amongst organisations are disseminated by sustainability programs and alliances. As part of the path towards corporate responsibility organisations are frequently made aware of their procurement and supply chain responsibilities through these instruments. Matten and Moon (2008) cite mimetic processes, including membership of business alliances such as the United Nations Global Compact and Dow Jones Sustainability Index, which seek to institutionalize practices across member organisations and alliances with government networks to foster sustainable business practices. The value of these collaborative forms of mimetic isomorphism is that they are frequently facilitated by third parties, NGOs or government to assist organisations that may be competitors and peers to change to more sustainable practices including procurement.

In summary, there is some evidence in the literature that mimetic isomorphism can influence organisations to adopt sustainable frameworks and practices such as sustainable procurement as a form of legitimacy amongst their peers, which in turn makes organisations audit their purchasing policies and procedures for compliance. As part of this process, alliances and networks facilitated by third parties can support the introduction of sustainable procurement.

Hence Proposition Two is supported in that sustainable procurement adoption can be explained through mimetic isomorphism by the influence of voluntary frameworks, management systems and sustainability programs and alliances.

*Proposition Three*

*Sustainable procurement adoption can be explained through normative pressures*

Based on key precepts of institutional theory, sustainability can also be diffused through educational and professional network influences that establish standards of organisational practices embedded in educational institutions and augmented by professional networks and trade associations (Campbell 2007; Cooper, Frank & Kemp 1997). In a study of manufacturing firms, Preuss (2005b) notes the role of industry associations, such as the Institute of Supply Management (ISM) in the US and the Charter Institute of Purchasing and Supply (CIPS) in the UK in disseminating information and promoting awareness of environmental issues around supply chain issues. A key driving force here is social obligation (Scott 1995). Informal institutions as well as more formal institutions have been shown to question and appraise moral or ethical understandings of what is appropriate behavior in terms of social responsibility and mental models rather than formal rules that are claimed to be more effective in this regard (Platje 2008). For example, other mechanisms at work derive from the ability of the information based instruments that underpin professionalization to effect stakeholder perceptions through making social and environmental lifecycle costs more transparent and hence encouraging firms to make choices, driven by moral or ethical choice principles that reach beyond direct economic impacts (United Nations Industrial Development Organisation 2011). For example, various accountancy professional associations such as the Chartered Institute of Management Accountants are now embracing sustainability in their educational programs.

However, clearly many and potentially conflicting factors underpin the concept of normative factors as they are applied to the broad concepts of sustainability and sustainable development. For example, based on their empirical work, Perez-Batres et al. (2011) claim that only normative and mimetic mechanisms are linked to sustainable development initiative take up. On the other hand, there is some evidence from wider studies of drivers of sustainability-related initiatives in developing countries that normative forces are not strong and that only coercive mechanisms have an effect (See Amran & Haniffa 2011).

Proposition Three is partially supported. While there is some literature supporting coercive and mimetic isomorphic tendencies to explain the proliferation of sustainable procurement there is less to support the influence of normative pressures, due in part to the gap in the literature, which presents an opening for future studies.

Insert Table 1

### **3.1 Successive Institutional forces**

The previous section demonstrated how each of the three forces of institutional theory can be applied to explain the adoption of sustainable procurement. Table I presents a model illustrating the interplay of coercive, mimetic and normative isomorphic forces in the adoption of sustainable procurement. We propose that one of these three forces acts as the instigating force leading the way for the continuation of other isomorphic forces that contribute to further adoption.

Regulation is the most dominant form of coercive isomorphism leading to sustainable procurement adoption. This occurs when organisations in a sector or across several sectors are mandated to meet their legislative obligation, which has the potential to lead to industry homogenization. When large public organisations introduce sustainable purchasing programs it has the ability to transform markets, because of the scale of government procurement and the number of supplier organisations involved. Across all industry sectors purchasing organisations impose sustainability criteria on their suppliers as a coercive isomorphic force. While sustainable supplier programs impose sustainability along the supply chain through coercive forces, these obligations may also lead to sustainable procurement adoption in supplier organisations and their industry peers as a result of mimetic isomorphism. An example of this is the Wal-Mart's Supplier Sustainability Assessment (Walmart 2012).

As organisations across an industry sector adopt voluntary frameworks, management systems and join sustainability programs sustainability standards are passed on to their suppliers and can be explained by coercive isomorphism. Voluntary frameworks such as the Carbon Disclosure Project, United Nations Global Compact give organisations a framework to introduce and manage sustainability, which frequently initiates peer organisations to adopt these frameworks and can be explained by mimetic isomorphism. As organisations across industry sectors adopt sustainability they often impose sustainability requirements on their suppliers encouraging them to adopt these frameworks. Minimum sustainability supplier requirements are imposed on suppliers to these organisations as a form of coercive isomorphism. Systems such as ISO 14001 and EMAS detail supplier and product conformance to environmental standards. Sustainability alliances may also

have customized programs for member organisations assisting them introduce sustainable purchasing such as Forum for the Future in the UK. Member organisations will subsequently pass on sustainability along their supply chain in the form of coercive isomorphism.

Professional networks and educational institutions are the conduit for dissemination of information and expertise about sustainable procurement. These professional associations support introduction through specialist training and customized organisational programs, for example the programs provided by the Chartered Institute of Purchasing and Supply, UK. Individuals participating in these education programs have the knowledge to introduce sustainable procurement programs in their own organisations. As a consequence, this has the potential to influence peer organisations in the same sector to introduce sustainable procurement, as part of mimetic isomorphism and in turn introduce supplier assessment programs. While professional networks are frequently directed at the individual the spread of span of influence of an industry association is wider and targeted. Examples are the widespread chemicals industry code of conduct, Responsible Care, a requisite for membership of chemicals associations across the world.

While we argue that the dynamic interplay between different isomorphic forces may cause organisations to engage in sustainable procurement and SSCM, we recognize that changes in organisational behavior can also be driven by internal factors and that there can also be interplay between internal and exogenous actors and forces. In the next section we explore the suggestion that the RBV is useful in understanding how and why organisations may take up environmental and sustainability initiatives such as SSCM and by implication, sustainable procurement.

### **3. Resource-based view**

The RBV of the firm has been highly influential in terms of analyzing strategic management. It is based on the argument that dynamic and unique capabilities may enable a firm to generate competitive advantage in the face of external changes or constraints in the business environment (Barney et al 2001). In contrast to the institutional lens, applying this approach leads to the argument that the firm's engagement with SSCM may relate to internal structures and processes associated with certain capabilities.

This view is supported by findings from very recent empirical research indicating that successful firm performance in terms of sustainability is not only dependent upon addressing the demands of external stakeholders but that firms need to develop an ability to integrate employees into their sustainability initiatives (Wolf, 2013). Researchers have shown that deep management involvement and employee motivation and participation are linked to success in implementing environmental

initiatives that are successful in delivering environmental as well as competitive advantage outcomes (Brio, Fernandez and Junquera, 2011).

Although the picture is somewhat qualified for small to medium sized enterprises because shortages of time, money and other resources appear as an impediment to engaging with sustainability (Lewis & Cassells, 2010), there is now a considerable body of evidence that social interactions within organisations impact on organisational outcomes, such as engaging in SSCM. For example, Delmas and Pekovic's work (2013) based on an employer- employee survey of 5220 firms reveals that adoption of environmental standards, associated with increased employee training and interpersonal contacts, is linked to improved labor productivity. Sammalisto and Brown (2008) also found that training is a key factor in implementing environmental management systems and that it can change the behavior and attitudes of managers. Overall, there is empirical evidence that development of internal capabilities can influence directions such as SSCM.

In comparing external and internal drivers, other studies have shown that implementing an environmental management system, dependent on certain capabilities, is associated with driving a firm towards process innovations but that product innovations result from external drivers such as eco-labelling (Wagner, 2008). Also illustrating the complex factors impacting upon organisational behaviors around sustainability, Gadenne et al's (2009) research comparing influence of various stakeholders indicates that while legislation heightens environmental awareness and may drive some changes in behavior, it leaves much to be desired in terms of enhancing management awareness of how to implement the business case for sustainability engagement. Drawing from Robertson and Barling's work (2013) we would argue that the successful implementation of sustainability initiatives in business and in their supply chains is dependent upon leader's sustainability-specific norms and behaviours, particularly related to their capabilities in terms of transformational leadership.

#### **4. Conclusions and suggestions for further research**

In summary we argue both institutional and RBV theory have potential as a way of explaining the promulgation of SSCM and sustainable procurement. Indeed, in line with recent interest in the dynamic processes that shape ongoing transformation of organisational fields rather than the isomorphic forces that stabilize them (van Wijk et al, 2013), we suggest that further research is needed to understand how the actions and associated capabilities of both internal and externally acting entrepreneurs can shape change towards SSCM. As Paulraj (2011) points out, factors such as ecoentrepreneurship and other internal capabilities can impact on adoption of sustainable procurement and internal process based drivers also need to be considered (Mann et al, 2010).

Importantly the fact that institutional effects are on both suppliers and purchasers lead us to suggest that any model for sustainable procurement cannot ignore the importance of what Hart (1995) terms the natural resource based view (NRBV). This theory posits that manufacturers of sustainable products will differentiate themselves against their competitors by applying product stewardship principles based on environmental approaches such as a life cycle assessment approach, design for the environment, supplier take-back, extended producer responsibility and design for disassembly, leading to improved financial performance. On this view, the competitive advantage for green products might be achieved through competitive pre-emption (Hart 1995). Institutional theory has also been combined with NRBV in sustainable development studies (Bansal 2005).

So while institutional theory as originally espoused (DiMaggio & Powell 1983; Meyer & Rowan 1999) addresses some of the theoretical shortcomings identified by key scholars of SSCM, our analysis has highlighted that there are still avenues to be explored in order to fully support this approach . We also place the caveat that sustainability evidence gathering in attempting to develop support for any theoretical approach is notoriously difficult – what to measure in terms of the institutional impacts , for instance, and what boundaries to set around such a diffuse and contested term as sustainability and its implications for management (Krause, Vachon & Klassen 2009).

The contribution of this paper is to provide extensions of institutional theory and of RBV that give researchers a scaffold for organizing their further research on sustainable procurement and supply chain management and to feed more broadly into other sub domains of corporate sustainability and CSR.

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