Factors Affecting the GRI Disclosures in the Annual Reports of Australian State Government Departments

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Abstract

Purpose:
Growing concern over the environmental impact of climate change and carbon tax has increased demand for public disclosure on how government departments are fulfilling their social and environmental obligations. The purpose of this study is to identify what factors influence Australian State government departments in their reporting of social and environmental information. The Global Reporting Initiative (GRI) Public Sector Supplement (2005) document is used as the globally accepted benchmark for sustainability reporting.

Design Methodology:
This study is based on a content analysis of fifty major state government departments 2010 annual reports. The dependent variable is an aggregate of the fifteen GRI public sector items and the independent variables (factors influencing disclosure) include: jurisdiction; political party; and size. The data is analysed using descriptive statistics, univariate analysis and multiple regressions.

Findings:
The findings reveal a very high level (84.2%) reporting of the fifteen key GRI items. Institutional theory tenets are supported in that coercive, mimetic and normative isomorphic pressures impact on transparency levels. The transparency levels of state government department reporting are influenced by size, jurisdictions (such as the State of Victoria) and politics (Labour-government controlled states provide higher levels of communication).

Originality:
This study is unique in that there is little research in the area as social and environmental reporting remains voluntary in Australia. Now that the carbon tax has successfully passed through Parliament, the findings of this study are more important and thus understanding the factors influencing communication of such information will help formulate future government policy.

Key Words: Australia, public sector, institutional theory, Global Reporting Initiative, sustainability.
1. Introduction

The world is on the edge of a possible eco-system collapse because of its mistreatment of nature due to human activities. The visible signs of global warming have become so overwhelming that countries, their government, non-government organisations (NGOs), various stakeholders and individuals have made the environment their concern.

Environmental problems that affect our world include global warming, air pollution and acid rain, water pollution and oil spills, species extinction, deforestation, as well as natural disasters such as floods, landslides and earthquakes. Many factors were claimed to have played a significant role in contributing to these problems. Researchers blamed, among others, the population growth, pollution from industrial activities, over-exploitation of animals through hunting, trapping or fishing, conversion of forest land to agriculture, settlements and industry and unsustainable development (Panda 2010). The most prominent of these environmental problems is the emission of greenhouse gas (GHG) in the atmosphere which is believed to be the main cause of climate change (di Norcia 2008). The main contributors to carbon dioxide emissions are Europe, the United States, China, India and Russia (Levy and Bernotat 2007).

The Australian Government shares these concerns with the world and has recently successfully passed legislation for the implementation of a carbon tax. State government departments are moving towards implementing sustainability reporting (Keating 2002, Jigsaw services, 2004). However, there are few reporting guidelines to assist State government in undertaking sustainability reporting towards trust and transparency. Leading the way forward towards transparency and trust is the Global Reporting Initiative (GRI).

The GRI has created earth’s most broadly adopted framework for sustainability reporting. The Global Reporting Initiative (GRI) has made major contributions toward reporting that reflects more transparent economies (GRI, 2011b). The Global Reporting Initiative (GRI) is the best known framework for voluntarily reporting of environmental and social performance by business and other organisations worldwide (Brown et al. 2009). Through three iterations so far (and counting) the Sustainability Reporting Guidelines assist organizations to offer valuable, transparent information on their economic, their environmental, and their social welfare performance. The initial vision was to motivate organizational disclosures that would become as comparable and frequent as financial disclosures, and that the expanded disclosures would become equally important to the success of organizations (GRI, 2011b). This paper focuses on the public sector protocols evolved by the GRI in 2005.

There has been relatively little research into reporting of social and environmental reporting in public sector departments of these matters. Despite its relevance for the public sector, sustainability accounting has yet to receive extensive research attention (Ball and Grubnic 2007).

Ball and Grubnic (2007, p243) argue that: “Internationally, the public sector accounts for some 40% of all economic activity”. Society has an expectation that governments will manage public resources in a sustainable manner. Ball and Grubnic
(2007) assert that governments will manage their public resources in a sustainable manner and that public sector organisations have far greater responsibilities for sustainable development than the corporate sector.

The key research question is “What factors explain Australian State Government Departments use of global reporting initiative indicators disclosed in their annual reports?"

This paper is important for several reasons: First, it helps develop a better understanding of what sustainability reporting means. There is an increase in public sector departments adopting sustainability reporting but there is no consensus on how sustainability reporting should be conducted, nor a common shared framework to adopt (Garengo et al. 2005). The majority of prior research into sustainability reporting has examined disclosure in corporate annual reports (Parker 2005). Evidence on the success of Australian state government departments communicating sustainability information using GRI guideline indicators enriches the understanding of sustainability reporting practices using such a globally-known benchmark in both the internal and broader institutional contexts within which government organisations operate. Second, GRI is an important, effective tool that is a living, evolving process that can be used to improve organizational strategy, formulate action plans, evaluate progress, and aid continuous improvement efforts. Many organizations see GRI as an important element in their risk management commitments and a key platform for establishing dialogue with multiple stakeholders. The rapid adoption of GRI worldwide signals the emergence of sustainability reporting as an integrated element and factor of standard management practice for many successful organizations. Third, a major contribution of this research is that it provides an understanding of factors influencing the use of the GRI guidelines which, in turn, could be used to formulate future government1 policy. Finally, the empirical evidence from Australian State Government departments will lead to further research in other settings – locally and globally.

The paper is structured as follows: Section 2 provides background information on the global reporting initiative (GRI) and a literature review of institutional theory. Section 3 presents the research method and reports the results. The final section provides conclusions and highlights key implications.

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1 Legislation in Australia requires State government departments to include in their annual reports a section detailing the environmental performance of their department as well as their department’s contribution to ecological sustainable development (ESD) Lynch, B. 2010. 'An Examination of Environmental Reporting by Australian State Government Departments.' Accounting Forum, 34, 32-45.. In addition, some state governments have additional reporting requirements. For example, in Victoria all government departments are required to report on waste, energy, water use and other measures Lynch, B. 2010. 'An Examination of Environmental Reporting by Australian State Government Departments.' Accounting Forum, 34, 32-45..
2. Literature Review

This section reviews the importance of the Global Reporting Initiative (GRI) and voluntary sustainability reporting to State government departments. This is followed by insights from related relevant literature and its application to institutional theory tenets of coercive isomorphism, mimetic isomorphism and normative isomorphism.

2.1 Global Reporting Initiative (GRI) Public Sector Framework

According to Adams and Frost (2007), the international guidelines for sustainability performance measures most commonly used by Australian companies are specified in the Global Reporting Initiative (GRI). The GRI is the global standard for triple bottom line (TBL) reporting and provides a framework for sustainability reporting. According to the GRI guidelines, sustainability reporting is an organisation’s public account of its economic, environmental and social performance in relation to its operations, products and service (Global Reporting Initiative 2011b).

The GRI reporting guidelines are organized into two Principles (Report Content and Report Quality) and two Guidance Elements (also Report Content and Report Quality). There are three standard disclosures (Profile—Strategy and Governance; Management Approach—Issue Management/Goals/Targets; and Performance Indicators—comparison facts related to economic/environmental/social performance). The end result of using this step by step approach is a ‘Focused Sustainability Report’. The guidelines are supplemented by Protocols (techniques to create indicator values) and Sector Supplements (details for specific organizational sectors such as electric utilities, mining and metals, NGOs, etc.) (GRI, 2011a). This paper solely focuses on the GRI (2005) ‘public sector’ protocols.

Over time, the entire initiative has expanded far beyond its Boston, USA beginnings. Although five GRI “focal points” were established to better align the process with the needs of various stakeholder communities (Brazil, China, India, Australia, USA), the past two years have seen the most respondents to an annual survey of report reactions by readers and issuers to have come from Spain (2009) and Brazil (2010). The fact that so many from both developed and developing countries participate in the concept provides evidence that it is not just a passing fad.

The GRI started only fourteen years ago by two U.S. Non-Profit organizations (Ceres and the Tellus Institute) working with the United Nations Environment Program (GRI, 2011b). The first draft of the Reporting Guidelines was generated in 1999 and then issued in 2000. A new, so-called second generation set of guidelines appeared in 2002, and the current third generation (G3) guidelines were issued in 2006. This progression highlights and reinforces one of the key concepts subsumed within the sustainability construct: the idea of intentional continuous improvement (Global Reporting Initiative 2011b).

The GRI mission is to develop and disseminate globally applicable Sustainability Reporting Guidelines (Global Reporting Initiative 2011b). The voluntary nature of the guidelines means that organisations have flexibility in
deciding what non-financial information to disclose. The guidelines are designed to be suitable for reporting organisations with varying degrees of complexity. Because of this flexibility, it can be expected that there will be considerable diversity of reporting practices and this can hamper comparability (Global Reporting Initiative 2011b). As it is a practice that is developing and evolving, sustainability reporting does not have established, generally accepted rules and regulations. Over time, however, there should be progress towards acceptable sustainability reporting practices (Lynch 2010).

The GRI Public Sector Supplement (2005) contains indicators grouped under five categories including organisational profile, public policies and implementation measures, expenditures, procurement and administrative efficiency (Global Reporting Initiative 2011b). This supplement was created to enhance transparency for all public sector entities, a vitally important yet under-researched sector for all economies. Whilst there is wide-scale acceptance of these guidelines, Ball and Grubnic (2007) argue that the Supplement does not give enough attention to the issue of policy responsibilities and impacts.

Public Sector organisations would be expected to face greater pressure to disclose information than the private sector organisations due to their larger, more diverse group of stakeholders and involuntary nature of funding (Mucciarone 2010). The GRI Supplement encourages public sector stakeholder engagement and therefore the challenge for Australian state government departments is to identify the information required by different stakeholders and then comprehensively report that information.

Since the introduction of the GRI in 2005, there has been an increase of academic research exploring the state of sustainability accounting and reporting practices; trends in sustainability reporting; and influences on sustainability reporting in the Australian public sector organisations. Guthrie and Farneti, (2008) explored social and environmental disclosures in the seven public sector organisations including one federal government department, one state government department, three local government organisations and two state public organisations. The study revealed that these organisations cherry picked the GRI indicators they wished to disclose and their reports lacked complete disclosure on social, environmental and economic impacts or organisational activities. Sciulli, (2009) examined sustainability disclosures in Australian local councils in six coastal regions. He found similar findings to Guthrie and Farneti (2008) including an overall low level of disclosure on sustainability issues in these councils and recognised stakeholder needs as an influence for disclosure on social and environmental issues.

Guthrie and Farneti (2009) undertook in-depth interviews across seven different public sector agencies in Australia. The agencies comprised of one federal government department, one state government department, three local councils and two state public organisations. The interviews were undertaken to identify such issues as the reason for sustainability reporting in annual reports, how the agencies communicated sustainability issues, difficulties associated with GRI and who carried responsibility within the organisation for sustainability reporting. The study focused on why organisation report on sustainability issues rather than what they report on. The results found that sustainability reports were mainly directed towards internal
stakeholders, however the annual report was a key communication devise for external users.

Guthrie and Farneti (2009) found that public sector agencies used the GRI had an international reputation which enhanced its legitimacy (Guthrie and Farneti, 2009). Lastly; the authors found that most disclosures were non-monetary only 8% of disclosures were monetary) and narrative in nature. Only 32 percent of the GRI elements were used by the agencies suggesting that the organisations were only selecting items which they thought were relevant (Guthrie and Farneti, 2009). Therefore, there is potential for the guidelines\(^2\) to be used in a biased way which could contradict any obligations to meet stakeholders information needs (Lynch 2010).

There is currently no regulation in Australia stating that state government departments must report according to the GRI. Therefore, the aim of this study is to investigate what factors influence the disclosure of GRI guidelines by Australian State Government departments. Through the use of a content analysis of the 2009/2010 annual reports, the findings of this study also signal whether reporting practices have changed since the introduction of the GRI guidelines.

2.2 Accountability in the Public Sector and Influence of ‘Riding Tigers’

Accountability is a commonly accepted objective of public sector annual reporting. Gray, Owens and, Adams (1996, p38) define accountability as “the duty to provide an account (by no means a financial account) or reckoning of those actions for which one is held responsible. Sinclair (1995, p221) states that accountability is “a responsibility for actions stating that accountability entails a relationship in which people are required to explain and take some responsibility for their actions”.

Arguably, accountability responsibilities of governments far exceed those of business corporations (Lynch 2010). Barton (2005, p143) comments that: “governments as agents of citizens are required to account for their decisions and activities as well as their performance in substantial detail”. There is an expectation that governments are more transparent and open in their actions than companies in the private sector (, Lynch 2010).

According to the GRI Sector Supplement for Public Agencies ()()(2005, p7), “public agencies also have a major impact on national and global progress towards sustainable development. Given their size and influence, public agencies are expected to lead by example in reporting publicly and transparently on their activities to promote sustainability”. A study by Herbohn and Griffiths (2009) advocated the need for a universal approach to sustainability reporting, adding weight to the need for government leadership and also international collaboration.

Advice towards generating more transparent economies (GRI, 2011a) is offered in a survey project done for the GRI with leadership by Volars Executive Chairman John Elkington and support from DOW chemical, Novo Nordisk, SAP and

\(^2\) The GRI has attempted to address some of the limitations discussed above with the release of new guidelines (G3) in late 2006. The main goal of the G3 is to make reporting routine and comparable Global Reporting Initiative 2006. ‘G3, Public Comment.’ Boston, GRI.
Sustainability. The idea was to look out to 2020 and identify the future trends that would shape, propel and guide greater transparency and accountability in “extra financial” reporting. Six major trends came into focus that were organised into the “Tigers” agenda of Traceability, Integrated Reporting, Government Leadership, Environmental Boundaries, Ratings and Rankings, and Shadow Economies.

The constructs driving this vision of a Transparent Economy include the fact that for the first time, this latest year’s survey found that trust and transparency are as important to corporate reputation as the quality of products and services (GRI, 2011a). Other key factors are to transform internal reporting systems and concomitant decision making, thus providing innovative new forms of performance management and the idea that accountability and transparency are underpinning of truly sustainable markets (GRI, 2011a). The overall goal is a more, just and transparent long term sustainable economy. Recently, the Harvard Business Review cover story trumpets “leadership in age of transparency” (GRI, 2011a, p3.) concluding that:

“Consumers know everything about your company, not just its carbon emissions but its countless other invisible efforts on the globe”.

The suggestion is that the constant exposure to real time information on entities, their products, information on companies, their products, supply chain and customers are used by connected people when deciding which company to work for, invest in, or buy from.

One of the key elements is ‘Trust’. Richard Edlerman, CEO of Edelman Ltd, says trust is a key driver in establishing reputation. “Trust is now an essential line of business to be developed and delivered”.

Given that the years of the Tiger came from a Chinese historical heritage. It could be posited that if China embraces more open markets and transparent transactions reporting, more pressure on the rest of the world will follow suit. GRI hopes to push forward solutions to the six major challenges of their ’Tigers’ agenda, advancing and expanding the transparent economy by orders of magnitude.

First, the concept of ‘Traceability’ involves providing real and verified information related to each step in the production side of the entity. The labour issue problems of Nike and the melamine in milk issues in China are highly visible examples. Such performance does not build trust. The old days of providing a rosy service only are over.

The second item, Integrated Reporting, follows several leading organisations that combined sustainability reporting with usual financial reporting and ongoing company mass communications. An example of Integrated Reporting from Price Waterhouse Coopers includes: a) enhanced market analysis and insight, b) long term strategy deliberations, C) behavioural triangle delineation d) business model functioning, and e) re engineering of performance measurement and communication.

The third influencing factor is ‘Government’. Not only can governments model transparency, but they can move to promote participation and collaboration at all levels of the population. Governmental disclosure can establish the necessity for social impact data impact actors the board.
The fourth ‘tiger’ area is Environmental Boundaries. These include boundary items identified by the Stockholm Resilience Centre such as: climate change/costal, stratospheric ozone, land use change, use of fresh water, auditification of the oceans, phosphorous and nitrogen increase to the oceans and biosphere atmospheric loading via aerosols and pollution due to ode less chemicals. 80% of the GRI community see the area as genuinely important for reporting.

The fifth area, “Rating and Ranking is linked to the trend that 80% of the Global Fortune 250 including corporate responsibility information in their annual 2008 reporting. This is a huge increase since the 50% figure from 2005. These trends imply that there are evolving business values related to corporate responsibility (GRI, 2011, p34).

The final ‘tiger’ item is the construct ‘Shadow Economies’. This represents the illicit trade that occurs worldwide and more prevalent in some countries (such as Russia). The illegal trade expands from drugs to guns to migrants to money laundering to counterfeiting and may make up 20% of a country’s economy (GRI, 2011, p37). Such a high level of undisclosed transactions undermines the quality of external reporting.

The key argument with the six ‘tigers’ is that traditional reporting has at least partially failed. Such transparency weaknesses can severely damage critical aspects of social and political capital – Trust. This lead to the argument that the world needs to embrace more openness in private and public sector which could restore confidence in organisational reporting at all levels.

These ‘tigers’ pressure points are linked to the institutional theory tenets: The coercive isomorphic tigers are ‘government leadership’ and ‘traceability’. The mimetic isomorphic tigers are ‘integrated reporting’, ‘environmental boundaries’ and ‘rating and rankings’. The final tiger ‘shadow economies’ is located within normative isomorphism. These pressures points are linked with institutional theory in the following sub-section discussion.

2.3 Institutional Theory Tenets

Institutional theory contends that organisations operate in a manner consistent with societal norms, values and assumptions about what constitutes acceptable behaviour (Oliver 1991). Institutional theory has been used to explain the adoption of generally accepted accounting principles for external financial reporting by public sector entities (Carpenter and Feroz 2001).

An example of strong institutional pressure in a government organisation is in not-for-profit hospitals. Kirshnan and Yetman (2010) argue that hospitals operate in environments that impose substantial institutional pressures not only on their technical activities, but also on their managerial activities related to administration and obtaining of resources. Additional institutional pressures in not for profits arise as a result of their multidimensional objective functions, restrictions on the distribution of surplus and undefined ownership. An additional complicating factor in not for profits hospitals is that one set of institutional pressures may conflict with other sets of pressure. Not-for-profit hospitals are expected to be economically efficient and reduce
costs, yet they have institutional constraints on pursuing opportunities that increase economic value (Eldenburg and Krishnan 2003). For example, a not-for-profit hospital may not be able to cut back on services to the poor and uninsured, even though this may be financially beneficial (Krishnan and Yetman 2010).

Bebbington, Higgins and Frame (2009) use an institutional theory framework to analyse why organisations initiated sustainable development reporting. The authors find that a wide range of regulative, normative and cognitive influences combine with organisational dynamics contribute to sustainable reporting. Regulative influences such as laws and regulation influence disclosure practices because of the threat of penalty for non-compliance. Normative elements influence values and norms, and managers pursue various course of actions because of societal obligations and expectations (Bebbington et al. 2009). Cognitive influences are subtle and complex, whereby activities are enacted in a manner that is generally accepted (Bebbington et al. 2009). The authors feel that when these influences combine, isomorphism and homogenization occurs. Carpenter and Feroz (2001) state because of isomorphic pressures organisations become increasingly homogenous and conform to the expectations of the wider institutional environment.

Bebbington, Higgins and Frame (2009) argue that sustainability reporting are embodied throughout organisations by means of three institutional pressures: regulative (coercive), cognitive (mimetic) and normative.

2.3.1 Coercive Isomorphism

“Government Leadership”, the first ‘riding tiger’, exerts coercive pressure. The Global Reporting Initiative (2011a) states that governments now need to regulate to force higher levels of market transparency. A survey of the GRI community noted that seventy eight percent consider greater government involvement in transparency and sustainability as important (Global Reporting Initiative 2011a). Further as highlighted by the GRI, government departments must get involved and report wider benchmarks and targets for sustainability development. Thus, governments may increasingly exert coercive pressure on their departments to increase their transparency of social and environmental information.

Lynch (2010, p36) comments that: “Public Sector organisations would be expected to face greater pressure to disclose information than private sector organisations. This is due to their larger, more diverse group of stakeholders”. The GRI Supplement encourages public sector engagement and therefore the challenge is to identify the information required by different stakeholders and then comprehensively report that information (Lynch 2010). The Global Reporting Initiative (2011a) identifies the second ‘riding tiger’ as “Traceability”. Traceability is linked to the future of reporting in the following ways: First, stakeholders will expect to see reporting entities providing greater coverage of how they are managing traceability through their supply chains, second, they will be interested to see comparisons of how a given organisation is performing in his field in terms of its competitors, but third, and most importantly, traceability is part of a radically new transparency for enterprises (Global Reporting Initiative 2011a). Thus transparency can be seen to improve due to coercive pressures in institutional theory.
Gibson and Guthrie (1995) examine annual reports from Australian public and private sector organisations and compared them with environmental disclosures made by overseas organisations. Quantified information is far more frequently disclosed by the private sector. Based on international surveys, Australian organisations have more disclosure but US companies provide more financial and quantitative data. Burritt and Welsh (1997) analyse environmental disclosures by Australian commonwealth entities (budget and non-budget), over a ten year period from 1984 to 1993. The authors find that total environmental disclosures increase over time and that budget entities report a greater volume of environmental disclosures however Burritt and Welsh (1997) argue that environmental accountability disclosure in the public sector is poor and public sector organisations do not provide information in a form which enables the assessment of comparative environmental performance over time. Burritt and Welsh (1997) conclude that regulatory institutions can be seen as coercive pressure in institutional theory (Di Maggio and Powell 1983).

Coercive isomorphism is proxied by a size measure. Size can be linked as a factor that may influence the GRI indicators used by Australian state government departments. Size is relevant as it relates to the ability and capacity of an organisation to collect information, retain knowledge and to use it to report on performance measurement. Larger organisations are known to have a far greater capacity to provide data, information and facts about performance measurement (Garengo et al. 2005). The most common reasons negatively impacting small organisations include limited resources, both financial and human, and weaker long term planning (Rosair and Taylor 2000, Gibson and Guthrie 1995). Transparency mirrors the political cost hypothesis of Watts and Zimmerman (1986) that entities subjected to a greater amount of scrutiny are more likely to disclose information than those subjected to less scrutiny. This result is supported by the Mucciarone (2010) study which finds a significant positive relationship between size of Australian State government departments and extent of performance indicator dissemination by those departments. A large state government department may draw greater scrutiny from various constituent parties if it fails to voluntarily disclose enough information related to accountability (Mucciarone 2010). Thus, the larger the size of the state department is an indicator of the relative impact of coercive isomorphism on the propensity of Australian state departments to disclose more GRI guideline indicators. Size is measured as a state department’s total revenue.

2.3.2 Mimetic Isomorphism

Mimetic isomorphism is exhibited through the rules that form reality and are linked to the cognitive and socially constructed side of human behaviour (Eldenburg and Krishnan 2003). DiMaggio and Powell (1983) suggest that mimetic behaviour occurs as a reaction to uncertainty. Their results reflect that – in the case of the public sector organisations studied – coercive pressures lead to goal ambiguity and an uncertain political environment, which in turn creates mimetic behaviour. In order to favourably influence public opinions, political decision-makers attempt to streamline the public sector organisations with a more externally focused service orientation model, inspired by the private sector (Scott 2001). This development, according to Caemmerer and Marck (2009) results in two major isomorphic pressures for public sector organisations: the assimilation of its service delivery processes with private
sector practices, and the homogenisation of their service effectiveness and efficiency with other public sector organisations.

The Global Reporting Initiative (2011a) identifies a third tiger – “Integrated Reporting”, stating:

“More and more companies are publishing voluntary Corporate Social Responsibility or Sustainability reports to supplement their annual reports which contain the financial statements that every listed company must file. In most cases there is very little linkage between the information published in these separate reports. To have a real impact, these separate reports needs to be integrated with each other, thereby demonstrating that the company has a sustainable strategy based on a commitment to corporate social responsibility that is contributing to a sustainable society that takes into accounts the needs of all stakeholders”.

As it is still voluntary for public sector organisations to disclose sustainability information in their annual reports, and the only guidance available to the departments are the GRI (2005) Public Sector Supplement. It is anticipated that Australian State departments will mimic each other in the disclosure of GRI guideline indicators in their annual reports. A survey of the GRI community notes 59% consider that such an integration of economic, social and environmental accounting and reporting into a single set of indicators and single annual report is very important.

The fourth tiger identified by the Global Reporting Initiative (2011a) exerting mimetic pressure is “Environmental Boundaries”. The GRI emphasises the strong connection of environmental boundaries so that crossing one boundary may seriously threaten the ability to stay within a safe level of the others (Global Reporting Initiative 2011a). 80% of the GRI community see greater efforts to aggregate total environmental impacts reported by nations, industrialised sectors, companies and other key actors as being important to aggregate environmental information.

The fifth tiger exerting mimetic pressures is ‘Rating and Ranking. The Global Reporting Initiative (2011a) asserts that more needs to be done to spur competition around sustainability reporting. A survey of the GRI community shows that seventy eight percent believe that mainstreaming regular ranking and rating surveys of the sustainability performance of major organisations is important. This result implies that at least some reporting entities are happy to report information rather than wanting to be pressured towards sustainable development (Global Reporting Initiative 2011a). Thus, Australian state departments are pressured to initiate or mimic sustainability policies of other states to keep up in competition for higher rating and rankings.

Public sector organisations therefore emerge as even more central actors propelling other organisations towards convergence in a subsequent institutional account (Baum and Oliver 1991). DiMaggio and Powell (1983) recognize the centrality of state-driven isomorphism. The results in the Frumkin and Galaskiewicz (2004) study generates further evidence that state government departments’ exposure to mimetic pressure makes them more like traditional bureaucracies. Based on this
past literature Mimetic isomorphism is measured in this study by a jurisdictional categorical proxy. Each state department entity is classified as being in one of the five main land Australian states.

2.3.3 Normative Isomorphism

Normative pressures arise from prescriptions, social sanctions, and norms imposed by customers, donors, and other community members (Krishnan and Yetman 2010). In exchange for appearing to conform to such normative institutional pressures, the not-for-profit organisations obtain rewards, such as increased legitimacy (Meyer and Rowan 1977). This increased legitimacy can benefit not-for-profit organisations by allowing it to appeal to its stakeholders for more resources and subjecting it to lower regulatory and behavioural scrutiny by internal and external constituents (Scott 2001). Organisations that maintain institutional legitimacy also enjoy higher survival rates in the presence of environmental threats (Baum and Oliver 1991).

Institutional theory considers regulations as a form of institutional pressure because it serves to codify widely held beliefs (Krishnan and Yetman 2010). Regulation has a role – setting, monitoring, and sanctioning functions and influences the flow of government resources to the organisation (Rueff and Scott 1998). Regulation establishes the expectations and rules, allows the regulators to monitor the firm’s conformity to such rules, and provides sanctions and punishments if necessary (Rueff and Scott 1998). Conformance to regulatory rules requires organisational accountability and reliability in reporting in exchange for resources (D’Aunno et al. 2000). However, regulative pressures not only operate exclusively via coercion and formal laws and codes, but also may operate informally and rely on cultural-cognitive and normative pressures rather than punitive measures (Scott 2001).

Malloy (2003, p10) comments that normative isomorphism is best illustrated in professional organisations; as personnel from different organisations draw together and standardise their credentials and practices, their autonomous organisations (such as hospitals, or universities or fire departments) inevitably come to resemble one another. Malloy (2003) clarifies that normative isomorphism for government agencies can mean: 1) either conforming to the behavioural standard of the professional public service, such as neutrality, hierarchy and professional demeanour, or 2) following the norms and values of social movements such as extensive consulting activities and consensus decision making.

The final sixth ‘tiger’ identified by the Global Reporting Initiative (2011a) that exerts normative pressures is ‘Shadow Economies’. The environmental threats discussed above included in this GRI riding tiger is related to issues such as illegal waste dumping activities. For instance, a survey of the GRI community states that seventy four percent consider illegal waste dumping activities as an important environmental threat.

The external political environment of public organisations may have a significant impact on behaviour and performance (Guthrie and Farneti 2009) performance measurement in particular (De Lancer and Holzer 2001). Yang and Hsieh (2007) argue that the political environment can affect organisations by influencing the level of support the organisation can get from the environment and
that political support is dynamic (i.e. their political support fluctuates when there are changes in the government holding power). These changes affect the adoption and effectiveness of performance measures because political support helps departments obtain external resources which is important for effective public management (Yang and Hsieh 2007).

Traditionally in Australia, Labour governments are better known for implementing social and environmental friendly policies and are more aligned with the Australian Greens Party philosophies. Whereas, Liberal governments are known as being more ‘big-business’ friendly and opponents of extensive governmental regulation on environmental and social issues (Australian Department of Foreign Affairs and Trade 2011). Therefore, the political party in power may well influence the level of state department reporting of GRI guideline indicators. As a proxy for normative isomorphism, political influence is measured as a dichotomous categorical score depending on whether the Labour (traditionally more social activists and environmental supporters) or Liberal (historically more socially and environmental conservative) government is in power during the relevant time period.

3. Data Analysis

To analysis the level of GRI transparency this study examines ten major state government departments in each of the five major Australian states during the 2009/2010 year. The ten key departments selected are: Health, Education, Premiers’ Office, Treasury, Police, Office of the Auditor-General, Environment, Housing, Planning and Transport. These departments were selected for two main reasons: 1) they are politically sensitive due to their visibility and size. 2) They also report on crucially important issues for each state. The year 2009/2010 annual reports was selected as this is the year that was the ending of the global financial crisis (GFC).

The disclosure of GRI indicators is measured by the total number of GRI indicators (there are fifteen GRI indicators in the GRI public sector supplement) provided by Australian State Government Departments in their 2009/2010 annual reports. The fifteen GRI indicators are presented in Table 1.

The institutional theory argument would be that coercive isomorphism, mimetic isomorphism and normative isomorphism may explain disclosure. These tenets are proxied by the three predictor variables: total revenue (size), state/jurisdiction location, and Labour/Liberal government in power (political influence) respectively. The institutional theory argument would be that coercive isomorphism, mimetic isomorphism and normative isomorphism may explain disclosure. These tenets are proxied by the three predictor variables: total revenue (size), state/jurisdiction location, and Labour/Liberal government in power (political influence) respectively. Two economic and one temporal variable are also introduced in the empirical analysis to control for each department’s varying financial

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3 This sample encompasses over 95% of the Australian population. Four Australian jurisdictions are not included in the sample. Tasmania (the sixth and final state) as well as the three territories (Australian Capital Territories, Northern Territories and the Australian Antarctica Territories). Their respective state/territory departments are fundamentally organised differently, therefore, direct comparisons to the other mainland state departments would be misleading.
characteristics. Economic-based factors are the presence of the state governments’ surplus/deficit and the level of borrowings by the entity. The temporal variable controls for the time period by comparing the GRI communication levels on Australian State government departments. Surplus/deficit is both dichotomously measured respectively. Leverage is calculated as the percentage of total liabilities divided by total revenue for each state government entity. The measurement of all variables utilised in this study is presented in Table 2.

Table 1: GRI Reporting in Government Agencies

<table>
<thead>
<tr>
<th>Category</th>
<th>Item code</th>
<th>Sector Supplement Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational Profile</td>
<td>PA1</td>
<td>Describe the relationship to other governments or public authorities and the position of the agency within its immediate governmental structures.</td>
</tr>
<tr>
<td>Public Policies and Implementation Measures</td>
<td>PA2</td>
<td>State the definition of sustainable development used by the public agency, and identifies any statements or principles adopted to guide sustainable development policies.</td>
</tr>
<tr>
<td></td>
<td>PA3</td>
<td>Identify the aspects for which the organization has established sustainable development policies.</td>
</tr>
<tr>
<td></td>
<td>PA4</td>
<td>Identify the specific goals of the organization for the each aspects listed in PA3</td>
</tr>
<tr>
<td></td>
<td>PA5</td>
<td>Describe the process by which the aspects and goals in both PA3 and PA4 were set.</td>
</tr>
<tr>
<td></td>
<td>PA6</td>
<td>For each goal, provide the following information: Implementation measures; Results of relevant assessments of the effectiveness of those measures before they are implemented; State targets and key indicators used to monitor progress, with a focus on outcomes; Description of progress with respect to goals and targets in the reporting periods, including results of key indicators; Actions to ensure continuous improvement towards reaching the public agency’s goals and targets; and Post-implementation assessment and targets for next time period.</td>
</tr>
<tr>
<td></td>
<td>PA7</td>
<td>Describe the role of and engagement with stakeholders with respect to the items disclosed in PA6.</td>
</tr>
<tr>
<td>Expenditures</td>
<td>PA8</td>
<td>Gross expenditures broken down by type of payment.</td>
</tr>
<tr>
<td></td>
<td>PA9</td>
<td>Gross expenditures broken down by financial classification.</td>
</tr>
<tr>
<td></td>
<td>PA10</td>
<td>Capital expenditures by financial classification.</td>
</tr>
<tr>
<td></td>
<td>PA11</td>
<td>Describe procurement policy of the public agency as relates to sustainable development.</td>
</tr>
<tr>
<td></td>
<td>PA12</td>
<td>Describe economic, environmental and social criteria that apply to expenditures and financial commitments.</td>
</tr>
<tr>
<td>Procurement</td>
<td>PA13</td>
<td>Describe linkages between the public agency’s procurement practices and its public policy priorities.</td>
</tr>
<tr>
<td></td>
<td>PA14</td>
<td>Percentage of the total value of goods purchased that were registered with voluntary environmental or social labels and/or certification programs, broken down by type.</td>
</tr>
<tr>
<td>Administrative Efficiency</td>
<td>PA15</td>
<td>Describe the results of assessments of the efficiency and effectiveness of services provided by the public agency, including the actions taken to achieve improvements in service delivery.</td>
</tr>
</tbody>
</table>

Legend: The items are adapted from the 2005 GRI Sector Supplement for Public Agencies Pilot Version 1.0. For each item of PA1-PA15, entity $j$ is scored one [1] if it discloses the item in the entity’s annual report and/or the discrete sustainability report (if any); otherwise entity $j$ is scored zero [0] for the item.
Table 2: GRI disclosure and predictor variables description

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variable</strong></td>
<td></td>
</tr>
<tr>
<td>$GRI_{j,t}$</td>
<td>Aggregate GRI Public Agencies Sector Supplement score for entity $j$ in time period $t$ based on the total sum awarded per item of the fifteen [15] possible points, expressed as a proportion of the total possible score.</td>
</tr>
<tr>
<td><strong>Independent Variables</strong></td>
<td></td>
</tr>
<tr>
<td>$LogTR_{j,t}$</td>
<td>Log arithmetic transformation of the total revenues (expressed in AUD$) of entity $j$ as at the end of time period $t$.</td>
</tr>
<tr>
<td>$PolInf_{j,t}$</td>
<td>Indicator variable where entity $j$ is assigned a value of one [1] if Labour party forms the state government, zero [0] otherwise.</td>
</tr>
<tr>
<td>$StateWA_{j,t}$</td>
<td>An indicator variable where entity $j$ is assigned one [1] if it is a state department in Western Australia for time period $t$, zero [0] otherwise.</td>
</tr>
<tr>
<td>$StateNSW_{j,t}$</td>
<td>An indicator variable where entity $j$ is assigned one [1] if it is a state department in New South Wales for time period $t$, zero [0] otherwise.</td>
</tr>
<tr>
<td>$StateVIC_{j,t}$</td>
<td>An indicator variable where entity $j$ is assigned one [1] if it is a state department in Victoria for time period $t$, zero [0] otherwise.</td>
</tr>
<tr>
<td>$StateSA_{j,t}$</td>
<td>An indicator variable where entity $j$ is assigned one [1] if it is a state department in South Australia for time period $t$, zero [0] otherwise.</td>
</tr>
<tr>
<td>$StateQLD_{j,t}$</td>
<td>An indicator variable where entity $j$ is assigned one [1] if it is a state department in Queensland for time period $t$, zero [0] otherwise.</td>
</tr>
<tr>
<td><strong>Control Variables</strong></td>
<td></td>
</tr>
<tr>
<td>$SurpCt_{j,t}$</td>
<td>Indicator variable where entity $j$ is assigned a value of one [1] if it reports a surplus for the time period $t$, zero [0] otherwise.</td>
</tr>
<tr>
<td>$Lev_{j,t}$</td>
<td>The proportion of total liabilities of entity $j$ as at the end of time period $t$ to the total assets of entity $j$ as at the end of time period $t$.</td>
</tr>
</tbody>
</table>

The data in Table 3 provides univariate analysis of GRI reporting to the categories of political influence, surplus/deficit and time period. State departments in ‘Labour’ states disclose higher reporting levels (85.3% to 75.4%) than Liberal’. Similarly, departments in surplus have higher transparency than those in deficit (86.2% to 80.9%). However, none of these categories are statistically significantly different (see t-tests in Table 3).
Table 3: Descriptive statistics

<table>
<thead>
<tr>
<th>Statistics Year</th>
<th>n</th>
<th>GRI$_{jt}$</th>
<th>LogTR$_{jt}$</th>
<th>Surplus$_{jt}$</th>
<th>Lev$_{jt}$</th>
<th>TA$_{jt}$</th>
<th>TRev$_{jt}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium 2009/2010</td>
<td>100</td>
<td>0.867</td>
<td>8.364</td>
<td>2,000,500</td>
<td>0.301</td>
<td>632,051,500</td>
<td>234,526,000</td>
</tr>
<tr>
<td>St Dev 2009/2010</td>
<td>100</td>
<td>0.156</td>
<td>1.066</td>
<td>334,694,118</td>
<td>0.318</td>
<td>7,400,203,458</td>
<td>2,647,499,094</td>
</tr>
<tr>
<td>Min 2009/2010</td>
<td>100</td>
<td>0.333</td>
<td>4.398</td>
<td>-3,011,902,000</td>
<td>0.012</td>
<td>3,164,000</td>
<td>25,000</td>
</tr>
<tr>
<td>Max 2009/2010</td>
<td>100</td>
<td>1.000</td>
<td>10.092</td>
<td>665,400,000</td>
<td>1.275</td>
<td>49,013,960,000</td>
<td>12,359,200,000</td>
</tr>
</tbody>
</table>

Legend: $Surplus_{jt} = \text{The total amount of surplus of entity } j \text{ as at the end of time period } t (\text{expressed in AUD$}); TA_{jt} = \text{the total assets of entity } j \text{ as at the end of time period } t (\text{expressed in AUD$}); TRev_{jt} = \text{the total revenue of entity } j \text{ as at the end of time period } t (\text{expressed in AUD$}); \text{See Table 1 for definitions of the remaining variables. Std Dev = Standard Deviation; Min = Minimum; Max = Maximum.}$

Correlations matrices in Tables 4 reveal positive directionality between GRI-style disclosures with size and a surplus but a negative directionality with leverage. It also shows low levels of correlation between all the predictor variables, lessening concerns about multicollinearity in the multiple regression analysis.

Table 4: Univariate Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>Mean GRI$_{jt}$</th>
<th>Mean diff. t-statistic</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PolInf$_{jt}$</td>
<td>Pooled</td>
<td>Liberal</td>
<td>10</td>
<td>0.740</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Labour</td>
<td>90</td>
<td>0.853</td>
</tr>
<tr>
<td>SurpCtit</td>
<td>Pooled</td>
<td>Deficit</td>
<td>38</td>
<td>0.809</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Surplus</td>
<td>62</td>
<td>0.862</td>
</tr>
</tbody>
</table>

Legend: * significant at the 0.01 confidence level. See Table 1 for definitions of the variables. Mean diff. = Mean difference.

Table 5 multiple regression results show that size (coercive isomorphism) (measured by total revenue) is a strong predictor. Consistent with the institutional argument for coercive isomorphic pressures, larger state departments report far higher levels of activities. The mimetic isomorphism factor of state/jurisdiction shows that there are clear state jurisdictional differences. The state of Victoria averaged 93.3% disclosure whilst the other states have lower 81.3%-82.3% reporting. Mimetic pressures from institutional theory may be coming into play. The normative isomorphic pressure political influence provides evidence that Labour states have high GRI transparency (85.3%) compared to Liberal states (74%).
### Table 5: Multiple Regression Analysis

<table>
<thead>
<tr>
<th></th>
<th>Column GRI</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$</td>
<td>$t$-stat</td>
<td>$p$-value</td>
</tr>
<tr>
<td>(Constant)</td>
<td>0.020</td>
<td>0.122</td>
<td>0.903</td>
</tr>
<tr>
<td>LogTR$_{jt}$</td>
<td>0.071</td>
<td>4.489</td>
<td>0.000 *</td>
</tr>
<tr>
<td>StateWA$_{jt}$</td>
<td>0.156</td>
<td>2.783</td>
<td>0.007 *</td>
</tr>
<tr>
<td>StateNSW$_{jt}$</td>
<td>0.076</td>
<td>1.690</td>
<td>0.095 ***</td>
</tr>
<tr>
<td>StateVIC$_{jt}$</td>
<td>0.102</td>
<td>2.410</td>
<td>0.018 **</td>
</tr>
<tr>
<td>StateSA$_{jt}$</td>
<td>0.076</td>
<td>1.611</td>
<td>0.111</td>
</tr>
<tr>
<td>SurpCt$_{jt}$</td>
<td>0.016</td>
<td>0.530</td>
<td>0.597</td>
</tr>
<tr>
<td>Lev$_{jt}$</td>
<td>-0.031</td>
<td>-0.578</td>
<td>0.565</td>
</tr>
<tr>
<td>PolInf$_{jt}$</td>
<td>0.173</td>
<td>2.611</td>
<td>0.011 **</td>
</tr>
<tr>
<td>Adjusted-R2</td>
<td></td>
<td>0.277</td>
<td></td>
</tr>
<tr>
<td>F-Statistic</td>
<td></td>
<td>5.209</td>
<td></td>
</tr>
<tr>
<td>p-value</td>
<td></td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>n</td>
<td></td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Legend: Column I regression equation: \( GRI_{jt} = \alpha_j + \beta_1 \log\text{TR}_{jt} + \beta_2 \text{StateWA}_{jt} + \beta_3 \text{StateNSW}_{jt} + \beta_4 \text{StateVIC}_{jt} + \beta_5 \text{StateSA}_{jt} + \beta_6 \text{SurpCt}_{jt} + \beta_7 \text{Lev}_{jt} + \epsilon_j \). Column II regression equation: \( GRI_{jt} = \alpha_j + \beta_1 \log\text{TR}_{jt} + \beta_2 \text{StateWA}_{jt} + \beta_3 \text{StateNSW}_{jt} + \beta_4 \text{StateVIC}_{jt} + \beta_5 \text{StateSA}_{jt} + \beta_6 \text{SurpCt}_{jt} + \beta_7 \text{Lev}_{jt} + \beta_8 \text{PolInf}_{jt} + \epsilon_j \). Column III regression equation: \( GRI_{jt} = \alpha_j + \beta_1 \log\text{TR}_{jt} + \beta_2 \text{StateWA}_{jt} + \beta_3 \text{StateNSW}_{jt} + \beta_4 \text{StateVIC}_{jt} + \beta_5 \text{StateSA}_{jt} + \beta_6 \text{SurpCt}_{jt} + \beta_7 \text{Lev}_{jt} + \beta_8 \text{PolInf}_{jt} + \epsilon_j \). For all regression equations, the reference category for State is StateQLD$_{jt}$. See Table 1 for definitions of all variables. *, **, *** significant at the 0.01, 0.05 and 0.10 confidence levels respectively.

One possible explanation for Victoria having the highest level of disclosure over the other states is that in 2005 the then Bracks led labour government in Victoria launched Victoria’s Environmental Sustainability Framework (ESF) with the aim that all government departments and agencies include ESF directions into business and operational planning (Victorian Government, 2011). During the early stages of the Global Financial Crisis (GFC), an independent audit was conducted by the Victorian Commissioner for Environmental Sustainability which found a two percent reduction in energy consumption in government offices, a decrease of five percent in greenhouse gas emissions from the government’s car fleet and an increase in the take up of environmental sustainable fleet management practices (Victorian Government, 2011).

Additional detailed analysis reveals other notable trends (see Figure 1).
A complete breakdown of the level of reported transparency by the Australian state departments of all fifteen GRI items is then provided in Figure 1. This shows very high levels of reporting by 12 of the 15 items with lesser disclosure of procurement policy (PA11), economic/environmental/social criteria (PA 12) and especial registration/certification registration (PA14).

4. Implications and Conclusion

The key research question addressed in this paper is what predictive factors of Australian state government departments’ influence the disclosure of GRI items in Australian State Government department’s 2009/2010 annual report. To provide answers, this study evaluates the affect of isomorphic pressures on the transparency of reporting by fifty Australian State government departments for the five mainland
states using the globally-accepted Global Reporting Initiative Public Sector Supplement (2005) document as the benchmark.

The findings reveal that Australian state departments’ surpluses fell, but debt levels are also reduced whilst overall size of departments increased. Communication is outstanding with a very high level (84.2%) reporting of the key fifteen GRI items. The state of Victoria entities as well as ‘Education’ ‘Health’ and ‘Transport’ have the highest levels of reporting.

Institutional theory tenets are supported in the argument that coercive (search for legitimacy), mimetic (copying), and normative (professionalism) isomorphic pressures impact on transparency levels. Larger state departments, certain jurisdictions (such as the State of Victoria) and Labour-government controlled states provide higher levels of communication. These findings nicely link to the ‘six tigers’ highlighted by the GRI. Coercive isomorphic tigers are ‘government leadership’ and ‘traceability’. The mimetic isomorphic tigers are ‘integrated reporting’, ‘environmental boundaries’ and ‘rating and rankings’. The final tiger ‘shadow economies’ is consistent with normative isomorphism. These ‘tiger’ pressures points are linked with institutional theory impacting and influencing transparent reporting.

Several key implications emerge from these findings. First, the GRI Public Sector Supplement is advocated as an important benchmark to evolve a common shared framework to better understand sustainability reporting. Second, increased transparency by public sector entities helps us better comprehend the scope and breadth of their activities especially across changing economic times. Third, these findings enhance understanding of factors influencing the level of communication; this can be used to formulate future government policy. Finally, future research is advocated to further explore these issues for all levels of government (local, state, federal) as well as comparative global analysis.
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