

# **Social Contagion and the Institutionalisation of GRI-based Sustainability Reporting Practices**

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## **Abstract**

**Purpose:** This study investigates the adoption and diffusion of global reporting initiative (GRI)-based sustainability reporting practices within the global financial services sector.

**Design/methodology/approach:** The approach draws on the sociological construct of social contagion theory to explain the drivers of diffusion of GRI-based sustainability reporting. Based on a longitudinal study of GRI adoption over a period from 2000 to 2016, thematic content analysis of sustainability reports and media articles was used to refine information gathered that related to nature and spread of GRI-based sustainability practices within the global financial services sector.

**Findings:** This study finds that the early adopters of GRI-based sustainability reporting and the accompanying media attention influenced the institutional diffusion of GRI-based reporting in the financial services sector. This growth was isomorphic as companies copied best practice models to reduce uncertainty and maintain legitimacy.

**Originality:** This paper focuses on the institutional diffusion of sustainability reporting practices within the global financial sector. It explores the notion of social contagion as an institutional dynamic in order to understand the drivers for the adoption and diffusion of GRI based sustainability reporting across national borders. In doing so, the study contributes to the accounting literature on diffusion of innovations in reporting practice, but also, more generally, to the field of diffusion of new ideas in organisations using the unique approach of social contagion theory.

## **Keywords:**

GRI, corporate social responsibility (CSR), social contagion, financial services, diffusion, reporting innovation, sustainability reporting

## 1 Introduction

Since the late 1990s, the adoption of sustainability reporting<sup>2</sup> has become an important feature of the company reporting process. In 1999, 37% of the largest 250 global companies issued some form of a sustainability report (Kolk, 2004). This had increased to 96% of these companies by 2020 (KPMG). Since its inception in 1999, the Global Reporting Initiative (GRI) has become the dominant global standard aiming to encourage transparency and make corporate sustainability reports comparable (Brown *et al.*, 2009a). While adoption of GRI-based sustainability reporting is well researched (Brown *et al.*, 2009b; Guthrie and Parker, 2017; Islam *et al.*, 2016), the increasing diffusion and institutionalisation of this type of reporting remains under-investigated. While prior research has provided a number of insights into the uptake and spread of innovative business practices, much of this has utilised the lens of new institutional theory to explain the phenomena (Adhikari *et al.*, 2013; Ax and Greve, 2017; DiMaggio and Powell, 1983). What is largely missing from the literature, is an explanation of the large scale and rapid adoption of innovative business practices such as GRI-based reporting practices internationally. Given this gap in our knowledge, this paper uses social contagion theory (SCT) (Burt, 1987, 1999) to investigate the extent and logic of diffusion of GRI-based sustainability reporting within the global financial sector.

The paper uses the financial services sector as a case study to provide an empirical context to explain the role of social contagion in institutionalising and increasing the uptake of GRI-based sustainability reporting. The financial services sector was chosen because of its critical role in ensuring the survival of sustainable businesses, promoting sustainable development and in influencing the nature of economic growth within countries and regions (Jeucken, 2010). Financial services impact on all three components of the GRI framework: economic, social and

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<sup>2</sup> Throughout this paper, the term sustainability reporting refers to all aspects and manner of corporate social responsibility (CSR), sustainability and environmental reporting.

environmental sustainability, and are therefore an ideal sector for this exploratory study. The sector's actions are highly visible attracting scrutiny by stakeholders and the broader community (Buggan, 2012). In addition, in recognition of the pivotal role of the financial services sector in the sustainable development of economies, it was the first sector to warrant its own specific sector GRI guidelines in 2008 (GRI, 2012).

Applying SCT (Burt, 1987, 1999) and based on a longitudinal study of the adoption of GRI guidelines by financial sector companies over a period from 2000 to 2016, we find GRI-based sustainability reporting by early adopters (thought leaders) and the accompanying media attention have positively influenced its continued adoption. We argue that the diffusion of information can be explained by SCT. Accordingly, we focus on two factors influencing adoption and diffusion of GRI sustainability reporting namely the actions of early adopters and favourable coverage of GRI adoption by mass media. Mass media encourages positive perceptions of GRI standards in providing authoritative resources on sustainability reporting and transparency (Joannides and Miller, 2011); proxies for stakeholders' attention (Haque and Islam, 2015); and it stimulates firms to adopt sustainability reporting (Deegan *et al.*, 2002; Hoefer and Green Jr, 2016). Later, uptake of such practices is argued to be isomorphic as the actions of early and median adopters in introducing the new managerial fashion encourages non-adopters to copy this practice.

We contribute to the disclosure literature by highlighting the role of SCT in explaining the adoption, diffusion and institutionalisation of GRI-based sustainability reporting internationally within the financial sector. The absence of any mandatory requirements for GRI-based reporting until 2011<sup>3</sup> means that adoption of GRI-based sustainability reporting was voluntary, and the information about this new innovation diffused through processes like

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<sup>3</sup> In Sweden the government passed a legislation asking state-owned corporations to report their CSR using GRI guidelines in 2011

social contagion. We argue that SCT provides a nuanced insight by defining the process of initial adoption and subsequent diffusion which then leads to institutionalisation of sustainability reporting. Drawing on SCT, this paper contributes to the understanding of how GRI, has become institutionalised as a reporting norm. It extends the understanding of the process of diffusion of new reporting innovations and how they may spread globally.

The paper proceeds as follows: the next section considers the key prior research focusing on GRI and diffusion of innovations. Section 3 develops a theoretical framework for understanding the diffusion of innovations. The following sections provide an explanation of the research method and an analysis of how social contagion affects the trends in the adoption of GRI reporting. The final section summarises the findings, highlights the contributions and limitations of research.

## **2 Sustainability reporting, GRI and diffusion of innovations: related prior research**

The growing trend of sustainability reporting has been the subject of considerable academic inquiry both in terms of the nature of the sustainability activity reported and the motivations for reporting (Bebbington *et al.*, 2008; Guthrie and Parker, 2017; Islam *et al.*, 2016). Established in response to the ecological disaster of the Exxon Valdez oil spill in 1989, GRI's roots grew within in not for profit organisations such as the Coalition for Environmentally Responsible Economies (CERES), the Tellus Institute, and the UN Environment programme (Bebbington, 1999; GRI, 2012). GRI brought together global leaders, industry actors, NGO activists and academics to create the first global framework for sustainability reporting based on multi-stakeholder consensus (GRI, 2012; Islam *et al.*, 2016). GRI became one of the most prominent and authoritative global organisations providing sustainability reporting guidelines by the end of the 2000s (Brown *et al.*, 2009a). The uptake of GRI standards has increased exponentially (GRI, 2017). There is a recognition amongst the

wider stakeholder community (including news media) that GRI standards provide the authoritative resources on the world's leading practices and knowledge in sustainability reporting and transparency (Joannides and Miller, 2011). As our investigation of GRI-based sustainability reporting practices relates to the diffusion of GRI as an innovation, it is important to provide a brief overview of relevant prior research on the diffusion of innovations.

The literature on the adoption and diffusion of innovation offers diverse explanations for the introduction and spread of new business practices. Two lines of argument dominated early studies. The first followed an economic rationalist approach where adoption was driven by efficiency criteria and performance outcomes (Kennedy and Fiss, 2009; Strang and Macy, 2001). The second explanation draws on sociological narratives and new institutional theory to argue that adoption and diffusion are influenced by institutional pressures: firms will adopt new management practices when they perceive they benefit their standing and legitimacy (Kennedy and Fiss, 2009; Tolbert and Zucker, 1983). In line with the first and the second explanations, Tolbert and Zucker (1983) developed a two-stage model: in the first stage, the early adoption of new practices is driven by economic imperatives, that is the drive for better performance outcomes and in the second or later stage, the subsequent adoptions occur as innovation becomes institutionalised and perceived as a necessary business practice which substantiates their legitimacy.

The two-stage model has been criticised for oversimplifying the institutional process (Ax and Greve, 2017). Critiques of the model have prompted further research which has extended theoretical explanations in this area. For example, Love and Cebon (2008) linked adoption to organizational culture but indicated that this link weakened over time. Its influence was strongest amongst early adopters but lessened over time as the innovation became institutionalized. Kennedy and Fiss (2009) put forward a reconsideration of the two-stage

model and argued that economic and social motivations are not mutually exclusive and both motives influence the actions of early and late adopters. Ax and Greve (2017) added to the debate by developing a model which builds on the work of Love and Cebon (2008) and, Kennedy and Fiss (2009). They argued that in the early stages of adoption an innovation will be perceived as an opportunity. In later stages, it will be recognised as a way to avoid losses. Similarly, Hoefler and Green Jr (2016) argued that managers and decision-makers debate the merits or otherwise of any new management innovation (hereafter reporting innovation) and its suitability prior to adopting it. They stated that it is this process of argument and debate that influences the ultimate adoption of the new fashion. Thus, it is clear that diffusion of information of innovation results in its adoption only if there is “compatibility between the organisational culture and the values and beliefs embedded in [fashions] and the adopters may be motivated to adopt based on expected economic and social gains and losses” (Ax and Greve, 2017, p. 59). In essence, we argue the early adoption of new practices tend to become institutionalised and perceived as a necessary business practice propelled by the desire to conform with broader stakeholder expectations.

The prior literature provides useful insights into the motivations for the adoption of innovative business practices. However, it is less clear on the actual adoption and diffusion mechanisms. Abrahamson (1996) and Rogers (2010) emphasised adoption and diffusion as elements of institutional practices and we find this relevant for our research. Abrahamson (1996), in particular, acknowledges that there is little understanding of the process of diffusion. Jackson and Lapsley (2003) point out that a crucial element in the process is internal and external networks. However, while networks may be facilitators of localised diffusion within industries, regions or countries they do not necessarily explain the uptake of innovation across multiple borders. In this respect, the process of ‘expansion diffusion’ is more applicable. Bjørnenak

(1997) describes expansion diffusion as a process where the total number of adopters grows over time. The way in which this occurs is primarily through contagion.

An important facilitator of diffusion or contagion is the media. Abrahamson (1996) points out that mass media, academic literature and business schools have a role to play in the diffusion of innovations. The role of the media is also acknowledged by Love and Cebon (2008) in discussing how a field-level consensus develops, suggest that early adopters spread knowledge of ‘success stories’ either directly or through the media. Likewise, Fincham and Roslender (2004) point to the role of various media in spreading the word. The argument put forward in our paper is that it is the media which facilitates the spread of information that encourages the contagion process.

The uptake of GRI-based sustainability reporting increased over time from 2000 to 2016 (see Table I). Based on this trend, we set a theoretical proposition that the contagion process was entrenched and encouraged the diffusion of GRI-based sustainability reporting practices. This trend provides the platform for the development of the following research questions which will be addressed in this paper. The financial services sector is used as the focus of our study to answer the following questions.

- 1) Does social contagion influence the diffusion of GRI guidelines through media exposure?
- 2) How does GRI-based sustainability reporting become institutionalised and spread throughout a particular sector?

In respect to the second question, the relationship between adoption and uptake is assumed to be as follows: Early adopters, who for a variety of reasons, see benefits from GRI-based sustainability reporting start to implement this practice. As the innovation becomes more widely recognised and

respected, it becomes institutionalised and extensively adopted by median adopters as a normal business practice. In the final stage, uptake is encouraged as the isomorphic response spreads across the firms internationally (Shabana *et al.*, 2017).

The thrust of the research questions allows us to complete the puzzle of *how* information about particular innovations spreads, further developing the theory of dissemination of accounting innovations proposed by Abrahamson (1996). Overall, the study contributes to the accounting literature on diffusion of innovations in reporting practice. More generally, it provides understandings on the diffusion of new ideas in organisations using the unique approach of SCT.

### **3 Development of the Theoretical Framework: Social Contagion**

Much of the social and environmental accounting literature has focussed on the theoretical constructs that assist in providing frameworks to understand the impetus to adopt sustainability practices including disclosures. Legitimacy theory (Adams *et al.*, 1998; Bebbington *et al.*, 2008), institutional theory (de Villiers and Alexander, 2014; Islam and McPhail, 2011), and stakeholder theory (Islam and Deegan, 2008) are all used to provide insights into adoption. However, there remains a lacuna in the understanding of the processes encouraging the spread or the diffusion of sustainability information or disclosures by corporations. While prior accounting research focussed on the diffusion of particular accounting practices, it did not consider social contagion as a factor. Accordingly, we use SCT (Burt, 1987, 1999) to underpin our research.

Social contagion seeks to explain how new ideas and innovations are diffused through social structures that link people/enterprises together and how this information is transmitted within such structures (Burt, 1987). Structural equivalence works as a network mechanism promoting the diffusion of information and innovation via social contagion (Burt, 1987). Structural

equivalence uses secondhand sources such as media, corporate reporting and industry networks rather than direct contact between the two parties. The diffusion of knowledge and the subsequent adoption of particular practices is the result of conformity to the prevailing codes of conduct between parties that operate in similar environments. Structural equivalence suggests that since structurally equivalent actors have identical relations with other players in the structured networks, indirect information sources (such as the media, and published sustainability & annual reports) and comparative processes, institutional players adopt similar types of behaviours (Harkola and Greve, 1995). Galaskiewicz and Burt (1991) found evidence of contagion that occurred primarily through structural equivalence. Abrahamson and Rosenkopf (1997) stated that the structure of social networks through which adopters find out about fashion determines the ultimate adoption of such fashion. These networks are a major source of information for organisations (Hamilton and Tschopp, 2012). This research uses structural equivalence as the network mechanism promoting contagion in the adoption of GRI standards.

In explaining the process of social contagion, (Burt, 1987, p. 1317) divided his study population into three groups. The first one-third of the population adopting new practices were classified as “early adopters”, followed by “median adopters” and late adopters”. Early adopters were considered to be “thought/ opinion leaders”. They were held to be the brokers carrying information across various members of the group, akin to network entrepreneurs (Burt, 1999). We argue that social contagion encourages the diffusion of GRI information through indirect information sources or business networks, mass media, and corporate reporting media (Galaskiewicz and Burt, 1991; Harkola and Greve, 1995). This is followed by institutionalisation of GRI through continued media exposure and promotional initiatives. Finally, late adopters mimic the institutionalised practice of GRI-based sustainability reporting.

In line with SCT, we have developed a framework (Figure 1) which describes institutional adoption and diffusion of GRI-based sustainability reporting. Figure 1 (Panel A) illustrates the role of social contagion in the diffusion of information and subsequent institutionalisation and uptake of sustainability reporting innovations via isomorphism. Early adopters, in particular, primarily motivated by stakeholder legitimacy or broader community expectations appear as key players initiating social contagion in the diffusion of GRI based sustainability reporting practices.

**INSERT FIGURE 1 HERE**

Figure 1 (Panel B) indicates the role of mass media, corporate reporting media and promotional activities in facilitating the uptake of sustainability reporting i.e. social contagion by structural equivalence. Haque and Islam (2015) contend that media attention shapes sustainability disclosure and enhances corporate responsiveness. Media exposure alerted firms to the actions of competitors in an untraceable public forum. It also exposed the negative impacts of non-compliance, highlighting the issue of reputational risk. The introduction of new concepts/processes, (in this case, GRI reporting, adopted by the thought leaders and early adopters) is publicised in their annual reports, sustainability reports, websites and media releases. GRI provides a database of sustainability reports that adopt their reporting protocols. Relevant stakeholders notice the release of GRI information in these publications. In addition, the media independently report on sustainability reporting and GRI. In this study, the number of media reports are considered to be a proxy for measuring the impact of media. They provide the second-hand sources of information or structural equivalence required for contagion (Abrahamson, 1996; Deegan *et al.*, 2002; DiMaggio and Powell, 1983).

The use of GRI standards for sustainability reporting by early adopters outlined in their annual reports and in the mass media is seen as a source of the initial social contagion (see for example

Yekini *et al.*, 2017). Median adopters are then influenced by initial reports of the new practice itself, and details of the actions of early adopters described in reports and the media. Enhanced socio-political awareness of new best practice reporting standards encourages its institutionalisation (Brown *et al.*, 2009a; Brown *et al.*, 2009b; KPMG, 2008). Governments and other institutions may also learn about new practices through social contagion, and encourage firms to adopt new innovations. These forces mature into the gradual institutionalisation of this new practice, increasing the pressure on corporations to adopt GRI. Green Jr (2004, p. 653) states that once “the discursive justifications used to rationalise a new practice are accepted and taken for granted, the practice becomes institutionalised”. Dillard *et al.* (2004, p. 509) state “isomorphism refers to the adaptation of an institutional practice by an organisation”. Late adopters then take on this new institutionalised standard by mimetic isomorphism. This process occurs because managers and other decision-makers succumb to social pressure from their peers and other institutions (de Villiers and Alexander, 2014; Haque and Islam, 2015). Abrahamson and Rosenkopf (1997) call this the “bandwagon effect”, a positive feedback loop that increases the total number of adopters creating stronger bandwagon pressures. As a result of contagion and institutionalisation, GRI reports come to be considered as normal and appropriate reporting behaviour. This allows us to state our theoretical expectation that social contagion and institutionalisation respectively facilitated the diffusion and uptake of information about GRI standards for CSR reporting.

#### **4 Research Method**

The data was collected in a two-step process. First, all 951 financial services sector companies complying with GRI guidelines and producing a sustainability report between 2000 and 2016 were identified from the GRI database. The data was collated according to six regions and classified according to the phase of adoption using Burt’s (1987) three categories: early adopters (2000-2005), median adopters (2006-2011) and late adopters (2012-2016). The time

period 2000-2016 was chosen to allow for sufficient lag between the introduction of the new innovation i.e. GRI in 2000, media coverage and the development of an observable influence. Following existing research (Deegan *et al.*, 2002; Haque and Islam, 2015) we allocated the periods retrospectively based on the growth curve of GRI-based reporting. The slow uptake in the initial phase was categorised as the “early adopters” phase and rapid growth in numbers of complying organisations was taken as the “median adopter” phase and so on. We used content analysis (Krippendorff, 2004; Neundorf, 2002) to examine 135 published annual and sustainability reports in the early adoption phase (2000-05) for any references to GRI. The published corporate reports were manually coded to capture the recurrent features and patterns about benefits, scope and logic for using GRI (Braun *et al.*, 2014).

The second step was to collect data on information diffusion through the mass media. We employed the Factiva<sup>4</sup> database in English across all regions for each year in the early, median and late adoption period and used the number of articles with any references to GRI within all news sources as a proxy for information diffusion through mass media (Dow Jones, 2016). ‘Global reporting initiative’ and ‘GRI’ were used as the keywords in the Factiva search. We interpreted the media reports and the publication of sustainability reports as sources of contagion as they form part of the external environment within which corporations operate (Abrahamson, 1996). We conducted Spearman’s rank-order correlation to establish the relationship between firms’ GRI diffusion and adoption by correlating the number of published corporate reports and media attention on GRI initiatives for each stage and region. Since both GRI reports and media coverage are increasing over time, we repeated the correlation analysis with lagged corporate publications by one year to address the causality issue.

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<sup>4</sup> Factiva is an international news database that provides access to the latest business and industry news including newspapers, continuously updated newswires from Dow Jones and Reuters, and The Associated Press, as well as journals and magazines, websites, blogs, and multimedia.

## **5 Results - Social Contagion and the Institutionalisation of GRI**

We commence our analysis by highlighting the association between media attention and financial services companies' adoption of GRI-based sustainability reporting. Table II shows the correlation between the financial services sector adoption of GRI-based reporting and media articles over the period from 2000 to 2016 (correlation is significant at 1 per cent level of significance both without and with a one-year time lag across all regions (considering companies' adoption of GRI lags behind media attention by one year). The significant relationship between media attention and GRI adoption across all regions suggests that both media reporting and GRI itself have had contagion effects on the subsequent diffusion of GRI. These results support the findings of Adhikari *et al.* (2013) suggesting that political, cultural and historical contextual underpinnings influence the adoption of new innovations. In the correlation analysis, we have not quantitatively accounted for GRI promotional efforts, environmental externalities and consistency of reporting which may have influenced both media coverage and GRI-based reports. While our correlation analysis is important, we use this as the base for qualitative content analysis to provide a deeper understanding of the diffusion of GRI-based sustainability reporting practices within the financial services sector.

In the next section, we analyse how social contagion influences the diffusion of GRI by early adopters and then the institutionalisation of GRI reporting through uptake by median adopters and subsequent mimetic behaviour by late adopters. This is diagrammatically presented in the framework (Figure I, Panel B).

**INSERT TABLE I AND II HERE**

## 5.1 Early adopters (2000-05)

### 5.1.1 Diffusion of GRI guidelines by early adopters through corporate publications

In the year 2000, the first year of the introduction of GRI guidelines, there were only four GRI compliant sustainability reports, including one each in Japan and Canada and two in the Netherlands. The GRI compliant reports increased from 4 in 2000 to 61 in 2005 producing a total of 135 sustainability reports in the early phase (Table I). These early adopters included many large influential companies across the globe such as Citigroup, Calvert (USA); ING, Rabobank (Europe); ANZ, NAB, Westpac (Australia); and Daiwa (Japan). Early adopters reported positively on the aims and expected outcomes around the use of GRI. For instance, Citigroup stated in its 2002 Citizenship Report the reason for using GRI guidelines “...to enhance the quality, rigor, and utility of sustainability reports [and] provide a framework for responsible business conduct in the rapidly changing global economy” (Citigroup, 2002, p. 6).

Table III provides a snapshot of the language used by early adopters to justify the logic used to adopt GRI guidelines. It shows how GRI reporting was evolving from a simple mention of GRI guidelines by Nikko Cordial in 2000 to benefits of GRI by Caja Navarra in 2004, to strong advocacy for these guidelines, inspiring other to follow, by Calvert, 2004. Some other companies used GRI to demonstrate their commitment to transparency and accountability for economic social and environmental performance e.g. “*This report is based on the GRI framework, the global standard for reporting on issues of concern to stakeholders*” (National Australia Bank, 2004) and “*This Report has been prepared in accordance with the GRI, and constitutes a balanced presentation of the economic, environmental and social performance of our organization*” in Caja Navarra, 2004.

**INSERT TABLE III HERE**

We argue that early adopters saw GRI reporting as a device for demonstrating a positive image of their companies in three ways: First, they were seen as progressive and prepared to adopt new reporting tools. Second, GRI facilitated the publicising of a company's commitment to transparency, accountability and best practice. Third, it was a method of conveying to stakeholders that they were receptive to engaging with community concerns. It was a means of indicating specific commitments to environmental, human rights and labour issues (Brown *et al.*, 2009a). The early GRI reports provided a well-defined pathway for median and later adopters to replicate in their attempt to respond to environmental uncertainty and risk. Early adopters played an important role in showing how GRI reporting could promote positive perceptions of company actions and reduce external environmental uncertainty. The convincing language and advocacy in early adopters' GRI reports can be argued to be one of the factors favourably impacting the uptake of GRI guidelines and numbers of GRI-based reports increased extensively. Green Jr (2004, p. 653) provides support for this argument in stating that discourse shapes decisions about adoption and diffusion of business practices. These reports were widely available and reported by the media as a step in the right direction (see for example Kantaria, 2002). Other studies confirm how social and learning networks of firms facilitated the diffusion of corporate social responsibility measures through SCT (de Villiers and Alexander, 2014; Hamilton and Tschopp, 2012).

### *5.1.2 Diffusion of GRI guidelines through media coverage during early adoption*

The growth in media reporting of GRI related matters is indicated in Table IV. Media coverage of GRI increased across all regions in this period leading to its diffusion. Table IV indicates that in the year 2000, North America had the highest number of media articles (19) of a total of 36. In 2002, Europe had 57, Asia 14, North America 46 and Oceania 18 and Africa 11 media articles on GRI. Latin America had none until the end of the first stage. Although the early adopters may be self-driven by legitimacy or stakeholder pressures in their decisions to use

GRI reporting for the first time, our significant correlation results show the positive impact of media on lagged corporate reporting ( $R=+.399$ ,  $p=.016$  in Table II),

#### **INSERT TABLE IV HERE**

Burt (1987) recognises the role of media as a powerful source of secondary information. This is confirmed by our data that suggests that the media played an important role in providing a conduit that facilitated the diffusion of GRI reporting. Media encouraged uptake in the early adopters' structured networks. This group operated in a similar institutional environment and had comparative concerns and internal controls (Fincham and Roslender, 2004; Harkola and Greve, 1995). They also had legitimacy and reputational risks (Deegan *et al.*, 2002; Islam *et al.*, 2016). It acted as a channel which concurrently informed and was informed by reporting processes and informal dialogue (Deegan *et al.*, 2002; Haque and Islam, 2015; Joannides and Miller, 2011) within early adopters networks. In this respect, the media's role in promoting uptake may be twofold. First, the positive highlighting of the adoption of GRI by opinion leaders (early adopters) has the potential to create expectations amongst stakeholders that non-compliant companies follow the lead taken by others (Shabana *et al.*, 2017). Media pressures were crucial in corporate sustainable development reporting (Deegan *et al.*, 2002; Haque and Islam, 2015; Joannides and Miller, 2011). Second, when companies are subjected to adverse media attention associated with socially irresponsible practices, such as investments that result in ecological and environmental damage, they face a crisis of legitimacy and reputational risk (Deegan *et al.*, 2002). In response to these threats, and to repair the damage to their legitimacy, many companies adopt the best practice models such as GRI. As Islam *et al.* (2016, p. 301) state:

*“From a moral legitimacy perspective, the use of the GRI guidelines establishes the need to commit to ethical behaviour and to maintain high standards of public integrity. The belief is*

*that if organisations seek to conform to the expectations of the GRI, then they will adopt disclosure practices in line with the GRI and its standards of sustainability.”*

Articles about GRI and early adopters appeared in media publicising its increased uptake. For instance, Citibank’s activities were reported very positively in media (see for example Business Wire, 2002) and received high media attention (Gettler, 2005). The Financial Times stated, “*Among the CEO list of top 50 companies, fully two-fifths are GRI reporters*” (Ligteringen, 2003). Media promoted GRI as the standard for sustainability reporting contributing to the normative isomorphism and pressure for companies who had not yet adopted GRI. For example, the *Financial News* commented, “*Companies should use the GRI framework for their sustainability the disclosures....It provides a standard for disclosing company performance on issues such as the environment, workplace practices and community involvement*” (Bingham, 2004).

GRI held conferences in Europe, Asia, USA and Japan promoting ethical conduct at the same time advertising its own reporting standards (GRI, 2012; Nikkei Weekly, 2004). Further, in Australia, The Association of Chartered Certified Accountants advocated that the Australian Securities and Investments Commission follow the work of the GRI. The *Australian Financial Review* reported this development “*The GRI is leading the debate in this area and work it is doing on issues such as triple bottom line reporting is world-leading*” (Fenton-Jones, 2003). Similarly, American media was already reporting on companies compliant with GRI (see for example PR Newswire, 2000), and challenging its’ financial institutions to comply with GRI standards as early as 2002. South African media reported a push by the Securities Exchange for listed companies to use GRI (Temkin, 2003). In addition, the world summit on sustainable development in Johannesburg cited GRI in the official implementation plan (United Nations, 2002, p. 9) as a pathway to sustainable development providing further media exposure (Kelly, 2003) and political imprimatur to the GRI.

## 5.2 Median adopters (2006-11)

### 5.2.1 Institutionalisation of GRI through continued media attention and adoption by median adopters

Following early adopters, median adopters started to use and acknowledge the authority of GRI guidelines in their sustainability reports. For example, Swisscanto stated: *“The GRI guidelines are considered to be the international standard in the area of sustainability reporting”* (2010, p. 10). Between 2006 and 2011, 1,194 sustainability reports were published using GRI guidelines, a nearly ninefold increase compared to the first period (Table I). Thus, by 2011, there was a critical mass of financial services companies using GRI standards resulting in the institutionalisation of this process (see Green Jr, 2004 for discussion of institutionalisation). The KPMG annual survey on sustainability reported that of the top 250 global firms reporting on sustainability, 75% used GRI guidelines (KPMG, 2008).

By 2006, the media was calling GRI the best practice standard *“there is no regulatory driver for corporate social responsibility reporting; the GRI is the closest thing to standards...”* another step towards institutionalisation. Also *“the GRI has no power to enforce its standards, .... More than 2000 companies, governments, and the United Nations were involved in planning the new guidelines, making them the de-facto standard”* (Sterling, 2006). Increased media reporting promoted knowledge around GRI which encouraged the institutionalisation of the GRI in this period. A significant positive correlation between sustainability reports and media attention both with and without one-year time lag respectively supports progress in institutionalisation of GRI ( $R=+.517$ ,  $p=.001$  and  $R=+.473$ ,  $p=.004$ , see Table II). Sustainability reporting literature suggests that GRI had started to take hold and was becoming

the dominant sustainability reporting standard around the world (see for example Brown *et al.*, 2009a; Searcy and Buslovich, 2014).

### 5.2.2 Institutionalisation of GRI through (media) promotional initiatives

Promotional initiatives by GRI also encouraged the increasing uptake of GRI and through this the institutionalisation of GRI-based reporting. Assuming the media captures most of the significant GRI promotional activities, major events in sustainability reporting have been mapped. In terms of GRI initiatives, it was found that the timeline for notable increases in media reports after 2008 followed many major events. First, there was the *GRI Release of Financial Services Guidelines in 2008* (GRI, 2012). Second, GRI's 2nd *Global Conference on Sustainability and Transparency* entitled, "Sustainability Reporting Today: The Readers' Verdict," in 2008 attracted over 1000 participants from 58 countries and 148 speakers. The *Amsterdam Global Conference on Sustainability and Transparency* followed in 2010, attracting more than 1200 international delegates (GRI, 2010). The GRI suggested that by 2015, all large and medium-sized companies in the OECD and emerging economies should be made to report on 'comply or explain' basis. The UN Global Compact in 2010 and the UN guiding principles on business and human rights (Article 225 of the Grenelle Act) in 2011 recommended the use of GRI guidelines. Similarly, other developments included, the *National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business* in India, 2009 and The European Union strategy on CSR, 2011-14. These initiatives provide a plausible explanation for the increased use of the GRI guidelines that fostered further institutionalisation of GRI in the median period. During 2007-11, significant global events, including the global financial crisis, may have resulted in increased scrutiny of financial companies. This would have no doubt pressured the sample companies to act upon the GRI knowledge they had already received through social contagion networks. However, it is impossible to separate the impact of other such externalities on the uptake of GRI.

### 5.3 Late adopters (2012-16)

#### 5.3.1 Isomorphic adoption by late adopters

The institutionalisation of GRI in median period encouraged isomorphic adoption (Dillard *et al.*, 2004) of GRI reporting by late adopters. This is evident in the continued increase in sustainability reports between 2012-16 prepared using GRI (Table I). As more corporations used GRI guidelines for reporting, others may feel compelled to mimic the practice (Searcy and Buslovich, 2014). Other research also acknowledges that mimetic isomorphism increases adoption of sustainability practices (Shabana *et al.*, 2017) once institutionalised.

At the same time, growth in media coverage dropped considerably. There was no significant correlation in corporate GRI reports and media attention in the late adoption period indicating that the media did not influence GRI uptake anymore ( $R=+.326$ ,  $p=.078$ , see Table II). This is not dissimilar to previous “diffusion” studies which reported an S-shaped logistic curve of uptake with an initial slow rise, then rapid upslope and then slow rise (Rogers, 2010). The slower growth in the media reports from 2012 onwards may be explained by the fact that GRI standards, more than a decade after its inception, were no longer new and novel. By this stage, even the media may have accepted GRI standards as best practice and did not regard new companies using GRI as generally newsworthy; similar to the findings of Rogers (2010). Even academic media indicated that the majority of companies reported on sustainability reporting using GRI guidelines acknowledging the pre-eminence of this consistent standard (BCCC, 2016; Weber *et al.*, 2016). Thus, the role of contagion via diffusion declined in this period.

## 6 Concluding Comments

The study uses social contagion theory to explain the diffusion of GRI-based sustainability reporting practices using the financial services sector as a research setting. We find that contagion took hold in the early period of institutionalisation of GRI-based reporting practices (2000-2005) as media attention of the GRI related actions influenced early adopters or thought leaders.

The increasing diffusion of GRI reporting was encouraged by the expanding coverage by mass media, positive reports by early adopters, the growing number of GRI conferences and the recommendations of regulatory bodies (such as the OECD Principles of Corporate Governance 2004). Institutionalisation occurred as firms became increasingly aware of GRI reporting and began to accept it as a normal and legitimate business practice (Shabana *et al.*, 2017; Tolbert and Zucker, 1983). In the late period (2012-2016), institutionalisation inspired further uptake as late adopters felt media pressure to copy the actions of prior adopters. As Shabana *et al.* (2017) found in their study, the cost of not participating is acknowledged. Companies adopt the practice because it has become the norm and not to do so may impact negatively on public perceptions of the company. This is particularly important in the finance sector where public trust is essential for the growth of a business.

The findings highlighted above confirm our theoretical expectation that social contagion facilitated the diffusion of information about GRI standards for sustainability reporting and encouraged its adoption on a large scale. Our study has research implications in contributing to the body of knowledge surrounding the diffusion of sustainability reporting and innovations. It extends the literature on institutionalisation and sustainability reporting by explaining how the adoption of new innovations and business practices may occur rapidly across various jurisdictions. We advance the theoretical understanding that once an innovation is

institutionalised, the role of contagion by secondary sources of knowledge is reduced. It highlights the role of the media as a key facilitator providing the link between early and later adopters. It advances the understanding of diffusion by going beyond the organizational level of analysis to consider the process across borders and international boundaries where the players may not be in geographic proximity. It fills a gap in the existing body of diffusion of innovations literature, providing a nuanced explanation of the process of spread of knowledge about new innovations.

In addition to research implications, the results of this research have implications for business and policymaking. Firstly, this knowledge may be of practical use to managers and policymakers in future consideration of the introduction of further innovative practices, informing the methods by which information about new innovations can be diffused rapidly. In this respect, the use of SCT provides a framework with which the widespread adoption of new innovations can be understood, planned and encouraged by the policymakers or managers. Secondly, it provides a clearer understanding of the diffusion of new innovations. Specifically, it is a function of different forces working in the background which have a varied impact during different phases of the diffusion process. Structural equivalence through media attention is important in early and median phase, however, it tends to be less effective in later phases once innovation becomes institutionalised. Managers can focus more on promotional initiatives in the median period to achieve better adoption outcomes. Policymakers can plan to target the introduction of new innovations selectively in the beginning to encourage positive media attention and to promote acceptance by the wide target audience in the following phases. The above understanding can also facilitate resources planning and allocation during different phases of the diffusion process. These implications also apply to the work of standard setters who may wish to encourage wide adoption of new reporting standards and guidelines.

It is acknowledged that there are limitations to this research. The notion of social contagion via structural equivalence using media as a proxy may not fully capture all the sources of secondary information that influenced the spread of GRI-based reporting as there are no methods to measure the spread of kerbside consultations, undocumented discussions between peers and impact of all informal diffusion corporate decision making. It is argued that there are no better alternatives to measure the effect of the actions of the early adopters or the media attention they generated on the broader institutional framework of society. Given such limitations, we triangulated the data from the sustainability reports, GRI sources and news media. We call for further research to investigate the linkages between sustainability reporting practice and the role of government in an understanding of the social contagion process in both financial and non-financial sectors as in most countries sustainability reporting remains voluntary and not mandated. There is also a need to corroborate our findings by applying SCT to other managerial and accounting innovations to see if they do follow the same pattern of contagion. Furthermore, it will be interesting to investigate the network maps of firm managers and CEOs who carry their innovation experiences and learning from one company to another.

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**Table I-Number of sustainability reports by financial services firms by regions.**

<b>Adoption Phase</b>	<b>Year</b>	<b>Asia</b>	<b>Europe</b>	<b>Latin America &amp; the Caribbean</b>	<b>Northern America</b>	<b>Oceania</b>	<b>Africa</b>	<b>Total</b>
<b>Early</b>	2000	1	2	0	1	0	0	4
	2001	1	9	0	1	0	0	11
	2002	2	4	0	1	2	0	9
	2003	1	7	0	2	1	3	14
	2004	1	20	1	3	4	7	36
	2005	1	41	3	4	6	6	61
<b>Total (2000-2005)</b>		<b>7</b>	<b>83</b>	<b>4</b>	<b>12</b>	<b>13</b>	<b>16</b>	<b>135</b>
<b>Median</b>	2006	5	54	6	9	9	7	90
	2007	11	74	10	10	8	6	119
	2008	19	96	16	19	8	12	170
	2009	32	103	22	18	10	12	197
	2010	48	136	46	24	11	12	277
	2011	68	159	48	31	12	23	341
<b>Total (2006-2011)</b>		<b>183</b>	<b>622</b>	<b>148</b>	<b>111</b>	<b>58</b>	<b>72</b>	<b>1194</b>
<b>Late</b>	2012	76	164	71	36	11	25	383
	2013	116	181	83	38	14	25	457
	2014	130	189	88	42	15	28	492
	2015	169	209	117	45	13	25	578
	2016	170	203	109	38	12	25	587
	<b>Total (2012-2016)</b>		<b>661</b>	<b>946</b>	<b>468</b>	<b>199</b>	<b>65</b>	<b>128</b>

Source: Collated from the GRI Reports List 2017

Note: These reports are prepared according to GRI guidelines

**Table II: Correlation between adoption of GRI guidelines by financial sector companies and media attention towards GRI.**

Stage/Regions	Correlation between financial sector sustainability reports and media attention towards GRI	
	Without time lag	With one-year time lag
Early adopters	R=+.320 (p=.057)	R=+.399** (p=.016)
Median adopters	R=+.517*** (p=.001)	R=+.473*** (p=.004)
Late adopters	R=+.313 (p=.092)	R=+.326 (p=.078)
Asia	R=+.864*** (p=.000)	R=+.877*** (p=.000)
Europe	R=+.736*** (p=.001)	R=+.760*** (p=.001)
Latin America	R=+.603*** (p=.010)	R=+.588** (p=.017)
North America	R=+.857*** (p=.000)	R=+.919*** (p=.000)
Oceania	R=+.726*** (p=.001)	R=+.777*** (p=.001)
Africa	R=+.786*** (p=.000)	R=+.854*** (p=.000)
Total	R=+.851*** (p=.000)	R=+.888*** (p=.000)

\*\*\* Correlation significant at the 0.01 level (2-tailed). \*\* Significant at 0.05 level (2-tailed)

**Table III: A Snapshot of the Language of Early Adopter Reports 2000-2005.**

<b>Year</b>	<b>Company</b>	<b>Report name</b>	<b>Narratives</b>
2000	Nikko Cordial	<i>Sustainability Report 2000</i>	<i>This report was prepared in accordance with the proposed sustainability reporting guidelines of the GRI (pg. 2-3)</i>
2002	Citi group	<i>Citizenship Report 2002</i>	<i>GRI guidelines enhance the quality, rigor, and utility of sustainability reports [and] provide a framework for responsible business conduct in the rapidly changing global economy (pg. 6)</i>
2002	VanCity	Accountability Report 2000-01	<i>The GRI in June 2000, launched its sustainability reporting guidelines for voluntary use by organizations reporting on their economic, environmental, and social performance. Many companies have already used the GRI Guidelines as a basis for reporting. (pg. 53)</i>
2002	Westpac Banking Corporation	Social Impact Report 2002	<i>This report is one of the first to conform to the new Sustainability Reporting Guidelines developed within the GRI framework. (pg. 24)</i>
2004	National Australia Bank (NAB)	<i>Corporate Social Responsibility Report 2004</i>	<i>This report is based on the GRI framework, the global standard for reporting on issues of concern to stakeholders, and is a tangible demonstration that we will be open, honest, transparent and accountable (pg. 19)</i>
2004	Banco Santander Spain	Corporate Social Responsibility Report 2003	<i>This Report is prepared in accordance with GRI, which provided the most advanced international guidelines information on this matter (pg. 5)</i>
2004	BBVA	Informe Anual de Reponsabilidad Corporativa (IARC 2003)	<i>BBVA publishes details of its annual report on corporate social responsibility) in line with the recommendations of what it believes is the leading authority in this area: the GRI, (pg. 9)</i>
2004	Caixa Galicia	CSR Report 2003	<i>Caixa Galicia has taken consideration in the preparation of this report in 2003, the principles and emanating contents of the GRI, opting for a progressive adaptation to all its parameters. (pg. 18)</i>

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2004	Caja Navarra	Memoria de Responsabilidad Social 2004	<i>This Report has been prepared in accordance with the Guide 2002 GRI, and constitutes a balanced presentation of the economic, environmental and social performance of our organization. (pg. 13)</i>
2004	Calvert	Corporate Sustainability Report 2004	<i>In recent years, Calvert has come to believe that increased social and environmental disclosure is best captured by sustainability reporting that is conducted in accordance with the GRI Guidelines. We have been supportive of the GRI initiative from the start and, in fact, have called upon many companies whose shares we own to issue sustainability reports utilizing the GRI Guidelines.</i>  <i>We believe our Sustainability Report utilizing the GRI Guidelines will help us to better identify and communicate our progress in implementing these principles. (pg. 4)</i>
2004	DKV Seguro	Informe de Sostenibilidad 2003	<i>This model (GRI) annual report is based on the triple economic, social, and environmental results and concepts of transparency, reliability and comparability. (pg. 5)</i>
2005	HSBC group	HSBC Corporate Social Responsibility Report 2004	<i>The GRI is a set of guidelines for sustainability reporting that is supported by a number of our institutional investors and is increasingly being adopted by leading companies. We acknowledge the initiative's value in aiding transparency.</i>
2005	Royal Bank of Canada (RBC)	Corporate Responsibility Report 2004	<i>We support the work of the GRI in its efforts to provide a common language for transparent reporting.</i>

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Source: Selected companies, CSR and Sustainability Reports 2000-2005.

**Table IV Number of media articles focusing attention on GRI by regions.**

<b>Year</b>	<b>Asia</b>	<b>Europe</b>	<b>Latin America</b>	<b>North America</b>	<b>Oceania</b>	<b>Africa</b>	<b>Total</b>
2000	6	9	0	19	2	0	36
2001	5	15	1	27	4	2	54
2002	14	57	0	46	18	11	146
2003	12	51	0	38	21	20	142
2004	19	38	0	52	7	5	121
2005	26	38	0	75	14	5	158
<b>Total (2000-2005)</b>	<b>82</b>	<b>208</b>	<b>1</b>	<b>257</b>	<b>66</b>	<b>43</b>	<b>657</b>
2006	33	50	1	65	30	3	182
2007	51	54	3	127	56	5	296
2008	42	54	9	121	52	8	286
2009	77	202	17	193	74	17	580
2010	303	519	106	547	348	36	1859
2011	289	591	113	576	430	22	2021
<b>Total (2006-2011)</b>	<b>795</b>	<b>1470</b>	<b>249</b>	<b>1629</b>	<b>990</b>	<b>91</b>	<b>5224</b>
2012	224	274	2	262	96	46	904
2013	267	239	0	386	62	30	984
2014	187	127	4	285	48	28	679
2015	281	145	8	222	66	55	777
2016	261	134	7	188	51	32	673
<b>Total (2012-2016)</b>	<b>1220</b>	<b>919</b>	<b>21</b>	<b>1343</b>	<b>323</b>	<b>191</b>	<b>4017</b>

Source: Collated from Factiva database

**Figure I: Social Contagion and Institutionalisation of GRI-based sustainability reporting**

**PANEL A** 

Motivation	Introduction of Accounting /Reporting Innovation	Diffusion through social contagion	Adoption and Institutionalisation	Uptake through isomorphism
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**PANEL B** 

Standard for sustainability reporting (1997)	GRI guidelines (1999)	Diffusion through GRI compliant sustainability reporting by early (influential) adopters Media attention 2000-2005 (structural equivalence)	Extensive adoption by median adopters and mass media coverage Promotional initiatives 2006-2011	Uptake by late adopters through mimetic pressures 2012-2016
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Based on Abrahamson, 1991, 1996; Brown *et al.*, 2009; Burt, 1987, 1999; Dillard *et al.*, 2004; DiMaggio and Powell, 1983; Green Jr, 2004