

# Value Added as part of Sustainability Reporting: Reporting on Distributional Fairness or Obfuscation?

Axel Haller<sup>1</sup> · Chris J. van Staden<sup>2</sup> · Cristina Landis<sup>1</sup>

Received: 2 January 2016 / Accepted: 21 September 2016 / Published online: 8 October 2016  
© Springer Science+Business Media Dordrecht 2016

**Abstract** Distributional fairness of corporate distributions is an important social issue linked to accounting for equality. Value added and the information contained in the value added statement can conceptually be regarded as a reflection of how the company is managed for all stakeholders. We investigate value added information published in sustainability reports to determine if the information provided is useful for assessing distributional fairness between stakeholders. We find that the value added information disclosed lack conciseness, comparability and understandability. The divergence is considerable and the explanations of the disclosed information so limited that the usefulness of the value added disclosures must be questioned. Our results suggest several obfuscating techniques in the disclosure of value added information, including disclosing information that is conceptually compromised, resulting in comparability issues and disclosing information that can't be verified by reconciling back to the financial statements. Our findings have clear ethical and moral implications as they stress the societal issue of distributional fairness. It seems that companies are either reluctant to provide value added information that is useful, or deliberately use value added disclosures to

obfuscate. Information reflecting distributional fairness is therefore compromised.

**Keywords** Distributional fairness · Value added · Value added statement · CSR reporting · EVG&D · GRI

## Introduction

Inequality has been an ongoing social issue and recently Tweedie and Hazelton (2015, p. 113) argue that 'inequality in resource distribution is conceptually central to social accounting but has been on the periphery of social accounting research'. In order to investigate and discuss this topic it is essential to define the resources that are looked at and find adequate measures that help to assess the level of equality. One measurement concept that has a long tradition in this context is value added because it represents the monetary economic contribution of an entity to society, which is the wealth generated and distributed by an economic entity (Lehmann 1954; Rutherford 1977). Disclosing how this wealth is shared between different stakeholder groups is the focus of the information contained in value added statements. The value added statement (VAS) reveals the components of economic wealth creation and distribution and therefore how the company is managed for the benefit of all stakeholders (Shaoul 1998) (i.e. does the created wealth go mainly to powerful and already wealthy stakeholders, see Piketty 2014). Value added information shows the fairness of the distribution of value (wealth) created among contributing stakeholders and this has ethical and moral implications.

Value added information can therefore be seen to be playing an important role in accountability to a range of stakeholders in particular with regard to the distribution of

---

✉ Chris J. van Staden  
chris.vanstaden@aut.ac.nz

Axel Haller  
Axel.haller@wiwi.uni-regensburg.de

Cristina Landis  
Cristina.Landis@wiwi.uni-regensburg.de

<sup>1</sup> University of Regensburg, Regensburg, Germany

<sup>2</sup> Department of Accounting, AUT University, Auckland, New Zealand

the wealth created among the contributing stakeholders. However, the distributional component of value added is often controversial and manipulated by companies to convey certain messages (see for example, Van Staden 2003; Shaoul 1998).<sup>1</sup> With regards to the disclosure of wealth distribution, value added puts the business activities of an entity in a societal context (see for example, Burchell et al. 1985; Reichmann and Lange 1981; Maunders 1985; Meek and Gray 1988).<sup>2</sup> Hence, value added can be considered as an appropriate indicator of the economic as well as social role of a company within society (ASSC 1975; Burchell et al. 1985; Haller 1997). For this reason value added information has often been a key component of the various corporate social responsibility reporting concepts that have developed over the last century in different countries (e.g. Meek and Gray 1988; Haller 1997; Catturi 2004; Aldama and Zicari 2012; Haller and Van Staden 2014; GRI 2011a, 2013).<sup>3</sup> Furthermore, value added information can provide a more comprehensive understanding of corporate value creation concepts such as ‘public value’ (Moore 1995), ‘shared value’ (Porter and Kramer 2011) and ‘integrated thinking’<sup>4</sup> (IIRC 2013) as well as linking corporate and societal value creation (KPMG 2014).

In the context of corporate reporting (contrary to its role in economics) value added and its structured calculation and presentation in the form of a VAS have been linked to the prevalence of particular socio-political conditions i.e. strong labour unions and a labour government, the status of management deteriorated in favour of trade unionists, and

<sup>1</sup> For example, Van Staden (2003) when referring to the South African situation before and after the end of apartheid suggests: “The VAS can therefore be used to downplay the importance of profit and to demonstrate at the same time how much value added was taken up by employees in the form of salaries and wages and by the government in the form of taxes” (p. 239).

<sup>2</sup> In this study we **do not** refer to the concept of value added as intended in the context of the ‘shareholder value approach’, that is the creation of wealth for investors. According to the shareholder value approach, value added is the present value of future cash flows flowing to investors, i.e. economic value added (EVA<sup>TM</sup>), (see, for example, Rappaport 1986).

<sup>3</sup> Corporate social responsibility reflects the contribution of a company to a sustainable society. Over time many terms have been used when referring to reporting in this area, for example, social and environmental reporting, triple bottom line reporting, corporate social responsibility (CSR) reporting and sustainability reporting. We use the terms sustainability reporting and CSR reporting as synonyms in this paper.

<sup>4</sup> The International Integrated Reporting Council (IIRC) characterizes integrated thinking as “taking into account the connectivity and interdependencies between the range of factors that affect an organization’s ability to create value over time” (IIRC, 2013, p. 2). Haller and Van Staden (2014) show that the value added statement has the potential to serve as a practical and effective reporting instrument for Integrated Reporting.

profit and its associated connotations appeared problematic (i.e. Morley 1978; Burchell et al. 1985; Riahi-Belkaoui 1992; Van Staden 1998, 2003; Larrinaga 2001). Public concern about the social role, function and responsibility of companies in society, including concerns about the fairness with which various stakeholders, particularly labour, has been treated, has been an important condition for interest in value added (Burchell et al. 1985; Pong and Mitchell 2005). This is related to the basic essence and content of value added. On the one hand, it reflects the macro-economic performance of an entity and therefore its contribution to the national product of a country (Maunders 1985), and on the other hand value added represents the sum of the distributions (incomes) that flow from the entity to its major stakeholders.

Against this background and the increased international, political and societal emphasis on the social role and responsibility of business entities over the last years, we revisit the concept of value added and its application in corporate social responsibility (CSR) reporting.<sup>5</sup> Our main contribution is to determine whether the value added information reported is useful to reveal the distributional fairness of the value distributions among stakeholders. We do this by analysing the disclosure quality (i.e. consistency, comparability, understandability and verifiability) and thereby transparency of corporate disclosures about value distributions among contributing stakeholders. Furthermore, we provide the first empirical international cross-country comparative study for more than 30 years (after McLeay 1983) that investigates the use, application and presentation of value added information in corporate (responsibility) reporting. During these 30 years, CSR issues and reporting on them have become very important. While there are still no internationally accepted regulations and standards with regards to value added, the Global Reporting Initiative (GRI) guidelines include a value added indicator.<sup>6</sup> Revisiting value added at this stage is therefore important. By including the value added disclosure proposed by the GRI, we also contribute to the limited research to date that analyse the usefulness of GRI-based corporate disclosures in general by assessing their comparability, consistency and reliability (see for example, Talbot and Boiral 2016; Boiral and Henri 2015; Leong

<sup>5</sup> Corporate responsibility reporting in the form of CSR and sustainability reports have been increasing internationally over the last decade (KPMG 2015). In most countries the reporting remains largely voluntary in that there are no obligations to report nor requirements for report content.

<sup>6</sup> The GRI is arguably currently the most comprehensive set of guidelines in the area and is followed by most companies presenting sustainability reports (72 % in the KPMG survey, KPMG 2015), representing a large proportion of the largest companies in the world. The indicator ‘Direct Economic Value Generated and Distributed’ (EVG&D) represents a particular version of the value added concept.

et al. 2014; Mudd 2008). We show that despite having high application levels and being externally assured, published value added information do not consistently follow the GRI guidelines. This is consistent with other findings in the literature and supports existing concerns as to the application of GRI guidelines in practice.

The paper is organized as follows. We first discuss and explain the value added concept and its adequacy for social reporting. We then provide a motivation from the literature and theory for disclosure and disclosure quality. The different application models of value added follow. We then discuss the method and present the results of the empirical survey of value added disclosures in sustainability reports. Finally we present our conclusions and discuss these.

### The Concept of Value Added and its Role as a Social Disclosure

The concept of value added has its roots in macroeconomics (see for example, Schäfer 1951; Cox 1979; Basu 1992). It has been used by developed countries to measure the creation of national wealth, the gross domestic product (Rutherford 1977; Schreuder 1979). Transferred to an enterprise, value added is a measure of its residual return which is generated through the utilization of its productive capacity, e.g. labour and capital in the broad classical sense. It represents the contribution of an enterprise to the nation's domestic product and reveals the extent to which the company is able to enhance the value of bought-in products and services through its own operations (Rutherford 1977, p. 216). Value added can therefore be described as the value created by the activities of an economic enterprise, which is the enterprise's contribution to societal wealth creation (Van Staden 2003). It can generally be defined in two ways as follows (Cox 1979; Renshall et al. 1979; Meyer-Merz 1985):

$$\begin{aligned} \text{VA} &= \text{O} - \text{I} \text{ (indirect method or 'subtractive method')} \text{ or} \\ \text{VA} &= \text{RE} + \text{RG} + \text{RCP} + \text{NAWC} \\ &\text{(direct method or 'additive method')}; \end{aligned}$$

where VA = Value Added, O = Outputs, I = Inputs, RE = remuneration of employees, RG = remuneration of government, RCP = remuneration of capital providers, NAWC = not appropriated wealth creation (i.e. retained, not distributed parts of the value added).

The first equation represents the wealth created by the entity (i.e. 'production side of value added') and the second equation shows how this is distributed to stakeholders (i.e. 'distribution side of value added'). These equations reveal the duality of the value added concept, which suggests that value added has an entity focused 'performance aspect' and

a stakeholder focused 'social aspect'. The performance aspect, expressed by the indirect method of value added calculation, shows the value creation side. The social aspect shows the distribution of the wealth created among major stakeholders by adding the remuneration of the productive factor labour and capital as well as the community, represented by the public sector (government) (see Rutherford 1977). This view of value added positions the economic activity of an enterprise within its social context (McLeay 1983; Haller 1997).

Research from the last 30 years suggests that the structured presentation of value added in a VAS provides incremental information content and thus helps shareholders and other stakeholders in various decision-making contexts (see for example, Bao and Bao 1989; Deegan and Hallam 1991; Bahnson and Bradbury 1993; Karpik and Riahi-Belkaoui 1990; Riahi-Belkaoui 1992, 1993, 1996a, b; Riahi-Belkaoui and Fekrat 1994; Riahi-Belkaoui and Picur 1994a, b; Van Staden 1998, 1999a; Stainbank 2009; Haller and Van Staden 2014; Machado et al. 2015). These results provide evidence of the role of value added information as a useful measure in decision making and it is therefore intriguing that value added has not become a key part of corporate reporting. The reason might be its characteristic to reveal the wealth distribution between labour and capital (representing the major economic factors), which is highly political and controversial (Shaoul 1998; Van Staden 2003). In addition it stands in direct conflict with the shareholder value approach that has been dominant since the 1980s and that limits all corporate activities to the maximization of shareholders' wealth, where the remuneration of other factors are seen as wealth decreases (or costs) for the shareholders (e.g. Rappaport 1986).

Value added has the capacity to link the economic and social dimensions of corporate activities because it shows that the level of stakeholders' income is directly determined by the productive value creation of the economic entities. As societal wealth is a major determinant of the social conditions within a society, value added represents a social and economic indicator at the same time. These two dimensions of value added (social and economic) correspond with two of the three aspects of the triple bottom line reporting concept (Elkington 1998). Furthermore, the VAS emphasizes that the generation of wealth in an enterprise is the result of the collective effort of all its stakeholders, i.e. capital providers, employees, the government and society (ASSC 1975; Morley 1979; Burchell et al. 1985).

In a societal and moral context, the disclosure of the amount of value added distributed to different stakeholder groups in a VAS is highly relevant information because it reveals how a company values (in monetary terms) the specific contributions of different stakeholders (Shaoul 1998) and helps stakeholders and other users of

the information to make fairness assessments according to their individual moral views and values. This aspect is crucial as there is often a moral and ethical trade-off between the amounts distributed to each group. Increasing, for example, the benefits of employees, decreases the proportion of value added available for other groups. How value added is distributed by a company shows which stakeholder interests have been considered and to what extent (Shaoul 1998).<sup>7</sup> Furthermore, by disclosing information on its contribution to society, the company can demonstrate how it fulfils its role as a corporate citizen (see for example, Carrol 1998) and that in performing its actions, which societal interests have been considered.

The income distribution characteristic of value added can make an important contribution to the recent discussion about the role of social accounting for equality. Tweedie and Hazelton (2015) have argued that applying concepts from Piketty's *Capital in the Twenty-First Century* (Piketty 2014) can be used to study income equality as an agenda in social accounting. Particularly they argue a role for social accounting to 'investigate the *mechanisms* that could link public concerns over economic inequity to real changes in wealth and income distribution, especially at the organisational level' (p. 117). They point out that the accounting data that is currently (required to be) published are inadequate to allow workers and ordinary citizens to form an opinion about corporate decision making. There is therefore a real need for transparency, particularly with regard to the distribution of value created.

While there have been an ongoing argument in the literature that value added is an important social as well as economic measure within corporate social responsibility reporting (see for example, Burchell et al. 1985; Van Staden 2003; Cahan and Van Staden 2009; Zeghal and Maaoulou 2010; Aldama and Zicari 2012; Haller and Van Staden 2014), we extend this argument to suggest that the VAS is very suitable to reveal distributional fairness. In order to play this role, it is necessary that the information provided in value added statements meets high standards of disclosure quality. We aim to investigate whether the value added information disclosed in corporate social reports has the disclosure quality to meaningfully reveal distributional fairness.

## The Motivation for Disclosure and Disclosure Quality

In the CSR research many theories have been put forward to explain why companies would voluntarily disclose CSR information. The most popular theory used is legitimacy theory which generally suggests that CSR reports tend to be used as a legitimizing tool to reduce social pressures and limit criticisms from external stakeholders (see for example, Dowling and Pfeffer 1975; Deegan 2002; Cho and Patten 2007; De Villiers and Van Staden 2011; Talbot and Boiral 2016). Legitimizing strategies vary (i.e. Cho et al. 2012; Deegan 2002; Boiral 2013) and it is not clear which strategy is being followed and if the company is committed to being accountable on CSR issues or subsuming the ideals of accountability and transparency to commercial motivations (Owen et al. 2000). Accountability to stakeholders will be the preference of external stakeholders as this will imply a truthful account on that which the company is accountable for (Gray et al. 1996, 2014; Owen et al. 2000), while some of the legitimizing strategies are aimed at changing perceptions about the company and its CSR performance. For example, CSR reporting could be used as promotional and public relation tools while studies point to the impression management role of these disclosures (Hooghiemstra 2000; Talbot and Boiral 2016, Cho et al. 2012) in order to project a more favourable image of CSR performance. Furthermore Cho et al. (2015) suggest that the reporting could be seen as engaging in hypocrisy developing facades, thereby limiting the prospects of CSR reporting evolving into substantive disclosures while Cho et al. (2010) show that companies use various techniques to obfuscate their poor (CSR) performance. Boiral (2013, p. 1061) found that 'sustainability reports can be viewed as simulacra that camouflage real sustainable-development problems, presenting an idealized version of company situations'. Whether CSR disclosures are therefore substantive and done with an accountability objective in mind or whether it is symbolic and aimed at obfuscating reality is therefore opaque (see also, Van Staden and Hooks 2007).

One accepted approach to assess the quality of, and intentional reasoning behind, disclosed information is the evaluation of whether it complies with the "qualitative characteristics" or "guiding principles" that are part of frameworks and guidelines that have been developed for global use by leading institutions that intend to give guidance in corporate financial and CSR reporting, such as the IASB's Conceptual Framework (IASB 2010), the GRI guidelines (GRI 2013), the IIRC Framework (IIRC 2013) and the Framework of the Climate Disclosure Standards Board (CDSB 2015). These frameworks and guidelines postulate among others (like relevance, materiality,

<sup>7</sup> The evaluation of the relative income portion of each group and therefore the 'fairness assessment' is a moral and/or political issue and depends very much on societal systems, situations and value judgements.



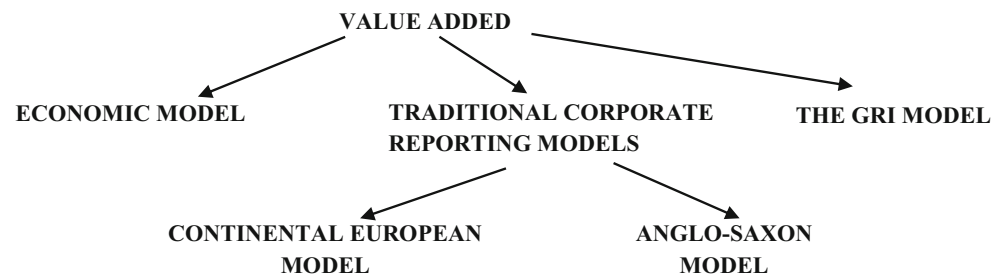
completeness, etc.) that comparability (as well as consistency over time), verifiability and understandability are characteristics that determine the quality and therefore the usefulness of the information (financial and non-financial) provided. This means that financial as well as non-financial information disclosed in corporate reports should at least be verifiable (in order to be reliable) and comparable across companies and consistent over time. In addition the users of the data should be able to understand the content of the information, thus the information should be clear and concise. Therefore, these characteristics can be used to assess the usefulness of information included in corporate reports (financial as well as CSR reports), which means in general that the data provided help users to evaluate the behaviour of the management (accountability and stewardship) and/or to make better decisions related to the company (Christensen 2010). Each of the frameworks and guidelines have a specific range of users (stakeholders) in mind. While (for example) the IASB focuses primarily on investors (IASB 2010), the GRI focuses on a broad range of stakeholders and requires a large variety of financial and non-financial information (including social and environmental information) suitable for a broad range of stakeholders (see GRI 2013).

In terms of CSR reporting, in general, it is often difficult to apply these characteristics to the information as it is often qualitative or in different measurement units. It can also very seldom be reconciled back to other audited financial reports and therefore it is difficult to determine the quality of CSR reporting. Indeed Owen et al. (2000, p. 91) when discussing social audits observe that ‘the development of quantitative indicators for social performance constitutes a necessary initial step in the much broader process of determining standards for social audit, with a view to improving credibility and comparability of information’. Furthermore there are studies that have investigated the quality of CSR reporting and found that CSR reporting, even that done in terms of the GRI guidelines, are not comparable and therefore not very useful. For example, Talbot and Boiral (2016) compared the quality of climate information disclosed by companies with A or A + GRI application levels over a 5-year period and find significant non-compliance with the GRI standards. Boiral and Henri (2015) analyse the interfirm comparability of 92 GRI indicators over 12 sustainability reports and found that these are generally not comparable due to different measurement scales. Mudd (2008), using a sample of the largest mining companies in the world, find inconsistent reporting on water in terms of the GRI indicators and claims that it is difficult to trust the data (p. 143). This result was also confirmed by Leong et al. (2014) in a case study of the water disclosures of four Australian mines. The results of these studies seem to suggest that

disclosures, even following guidelines such as the GRI, are not transparent, comparable and verifiable.

In contrast to the more general aspects of CSR reporting, our focus on value added and income distribution gives us the opportunity to make the usefulness assessments on the basis of the above-mentioned characteristics because the information is generally financial and can be reconciled back to other (audited) financial statements, most notably, the income statement. We have already made the point that the income distribution aspect of value added is highly political and controversial (Shaoul 1998; Van Staden 2003). Companies may therefore try to obfuscate this information by not reporting in terms of the GRI or other recognized value added models and by not providing the opportunity to reconcile the information back to the primary financial statements. Following Talbot and Boiral (2016) and Sullivan and Gouldson (2012), we argue that the variety of methodologies employed could make it impossible to verify, compare and understand the data disclosed, which reduces the usefulness of the information provided. Applied to value added information, this is related to the variety of models employed that could make comparison impossible and thereby compromise the usefulness of the information. Furthermore there could be issues with the verifiability of the information, this has also been raised as an issue with Carbon Disclosure Project (CDP) information (Andrew and Cortese 2011). Sullivan and Gouldson (2012) propose that disclosures (about climate change) should be linked to information about financial performance in mainstream financial reports to improve relevance and verifiability. Applied to value added information this will entail being able to reconcile the value added information back to the published and audited income statement. Taken together, these characteristics will show whether the value added information reflects a fair representation of the distribution of income among various stakeholder groups (and thereby allows individual or societal fairness assessments) or an idealized or symbolic version of value distribution. In other words, value added information that is not comparable, verifiable and understandable will not be useful for assessing the distributional fairness of the distributions among the stakeholders.

Our argument is therefore that if the information is useful (i.e. meet the qualities and characteristics of useful information) that will enable stakeholders and users to make distributional fairness assessments and will then be helpful in the debates on equality and inequality of income/value distribution. However, if the information does not meet the qualitative characteristics of useful data, it may have been disclosed to present an idealized version of the distribution of value for legitimating reasons and thereby obfuscate the reality of the distributions

**Fig. 1** The value added models

made and will not reflect the distributional fairness in a meaningful way.

## Value Added Models

While the concept of value added is well argued and comprehensible, the inclusion and valuation of specific components in the value added calculation is not standardized. This has led to the development of different approaches to value added calculation over the last century, which we refer to as value added models. The models differ in how they define the components and evaluate them in the indirect (subtractive) and/or direct (additive) calculation methods. This is mainly due to cultural and/or accounting specific characteristics (for earlier analysis, see Morley 1978; Rutherford 1978; McLeay 1983; Haller 1997; Van Staden 1999b). As Fig. 1 shows, the models include the economic model, two models related to corporate reporting and more recently, the GRI model.

The short explanation of the different models aims to provide some insights into the different approaches used to calculate and present value added information in order to provide some perspective for the empirical analysis of the value added information provided in CSR reports.

### The Economic Model

The economic model is related to macroeconomics and the way the gross domestic product of a country is determined. In this regard there is international consensus on how the macro-economic measure of value added should be calculated. This is due to the activities of the United Nations (UN) and the Organization for the Economic Development (OECD) that from the early 1950s have worked to improve the comparability of national accounts in order to get useful information on internationally converging economies and markets (Haller 1997).<sup>8</sup> The value added of all the economic entities within a country measures the value created

<sup>8</sup> The UN ‘System of National accounts’ (SNA) was first issued in 1952 and twice updated, the last time in 2008 with the cooperation of the European Commission, the OECD, and the International Monetary Fund.

by production of that particular country (Haller 1997; UN 2008).

### The Continental European Model

The academic interest in value added as a measure of corporate performance has a long history in Continental Europe, where in the 1930s in Germany, academics like Nicklisch and Lehmann developed corporate performance measures like ‘Betriebsertrag’ (corporate earnings) and ‘Wertschöpfung’ (value added) in order to express the economic and income generation role of a company in society (Haller 1997). The issue of value added became fashionable in corporate reporting in various parts of Continental Europe during the 1970s. At that time the value added concept was discussed and value added statements were published by companies in Germany (McLeay 1983; Schreuder 1979; Haller 1997), and also in the Netherlands, France, Denmark, Switzerland and Italy (Gray and Maunders 1980; Haller and Stolowy 1998).

The societal role of companies was discussed intensively at the time and there were strong, often political, suggestions that companies should not only disclose data which are relevant not only for investors but also for other stakeholders, especially for employees. The VAS was regarded as one of the major instruments of ‘social accounting’ (see for example, Arbeitskreis ‘Das Unternehmen in der Gesellschaft’ 1975; Schreuder 1979; Reichmann and Lange 1981; Maunders 1985; Meek and Gray 1988). During the 1970s, the German Working Group ‘Das Unternehmen in der Gesellschaft’ (literally translated ‘The Company within Society’) developed a value added model to be adopted in social reporting, which became a kind of benchmark in Germany. According to this model, the VAS should be based on the items and figures of the profit and loss statement that had to be presented in those days according to the nature of expenses format.<sup>9</sup> The value added is accruals based and it is computed by

<sup>9</sup> In terms of IAS 1.99 there are two formats for presenting the income statement, the nature of expenses format and the cost of sales format. Under IFRS both formats are allowed; nowadays in the EU both formats are allowed. In those days in Germany, only the nature of expenses format was legally allowed.

deducting from the production value of goods and services the cost of bought-in goods and services related to the production value. Furthermore, value added is calculated on a net basis, meaning that depreciation and amortization is deducted from value added (Haller 1997). The corporate as well as academic interest in value added reporting and value added as an accounting measure declined in most countries in Continental Europe during the 1980s and the 1990s (Haller 1997). Reasons for this might be the very strong focus of accounting and corporate reporting on shareholders and investors due to the broad acceptance of the shareholder value approach in business and the increased importance of capital markets to finance corporate expansion strategies during the mid-1980s and in particular the 1990s.

The only country in Continental Europe where an increasing interest in value added as an adequate corporate performance measure has continued since the 1970s until today is Italy (see for example, Gabrovec Mei 1995, 1999). This is directly linked to the growing debate on social reporting that has started during this period (see for example, Catturi 2004; Montrone 2000; Congiu 2009).<sup>10</sup> The academic discussion has strongly influenced the activities of some working groups, founded at the end of the 1990s with the task of defining the main contents of a social report. Among them the ‘Gruppo di studio per il bilancio sociale’ (GBS) (literally translated ‘Study group for the social balance sheet’), which in 2001 issued the GBS standards for social reporting (GBS 2013) and the Italian bank association which issued special guidelines for the banking sector. According to both sets of guidelines, a social report should include a VAS, for which a specific model is suggested (Campedelli 2005; Orlandini 2008). According to this, the value added calculation is based on a reclassification of the profit and loss statement (presented according to the nature of expense format) and includes operating, non-operating and extraordinary items. Therefore, it is production based and primarily on a historical cost valuation base. The result is the global value added (‘valore aggiunto globale’) which can be calculated on a gross or a net basis.<sup>11</sup>

To summarize, although there is not an absolute identity between countries (and companies), the Continental European model of VAS, that is historically represented primarily by the German concept and currently the Italian one, is based on the accrual concept, it has a production-based performance measure, it includes other income (rent, interest income, etc.) and it is on a net basis, meaning that

depreciation/amortization is deducted as an input cost (McLeay 1983; Haller 1997; Montrone 2000).

### The Anglo-Saxon Model

The Anglo-Saxon model of value added has its origin in ‘The Corporate Report’ (ASSC 1975), a discussion paper of the British Accounting Standards Steering Committee (ASSC), which suggested the publication of a VAS amongst other reforms (Gray and Maunders 1980).<sup>12</sup> Empirical research showed that from 1977 onwards an increasing number of UK companies published a VAS as part of their annual reports (and/or employee reports), see for example, Morley (1979), Rutherford (1980) and Gray and Maunders (1980). The research of Burchell et al. (1985) indicates that the incidence of publication in the UK reached a climax in 1980, but started declining after that. An explanation for the rise and fall of the interest for value added in UK can be attributed to the presence of a particular favourable socio-political context, which at the end of the 1970s changed (Burchell et al. 1985).<sup>13</sup>

The British value added discussion in the 1970s and 1980s has had quite an impact on accounting practice and academic discussion in other regions of the world, especially Africa and Asia.<sup>14</sup> There, during the 1980s the British value added model has developed into a well-appreciated instrument for financial and/or social reporting (e.g. Struckmann 1989; Stainbank 1992; MacFarlane 1993). In contrast to what happened in the UK, the interest in the VAS in South Africa has not disappeared. It started with the publication of The Corporate Report in 1975 (Van Staden 2003) but it remained popular, even though value added disclosures were never mandated (see for example, Stainbank 1992; Van Staden 1998, 2003). Recent research points out the difficulties of comparability of South African value added statements, due to the existence of broad differences in the items included in the calculation (Arangies et al. 2008).

<sup>12</sup> Before ‘The Corporate Report’, value added had another period of significance in UK. Value added appeared in British company reporting at the end of 1940s and remained until the early 1950s (Burchell et al. 1985). Moreover, in 1954 in another English-speaking country, the USA, Suojanen suggested the value added concept for income measurement, as a way for management to fulfil their accounting duty to the various interest (stakeholder) groups (Suojanen 1954).

<sup>13</sup> For further explanations of the disappearance of VA in Britain, see Pong and Mitchell (2005).

<sup>14</sup> Even in the USA, where accounting practice and academia have largely ignored the publication of the VAS, the concept of value added is not at all unknown. It had been proposed in the literature as an appropriate performance measure for financial reporting purposes (see for example, Suojanen 1954; Enthoven 1980, 1985; Riahi-Belkaoui 1992, 1993, 1996a, 1996b; Riahi-Belkaoui and Picur 1994a, 1994b; Bao and Bao, 1996).

<sup>10</sup> For previous contributions on value added in Italy, see for example, De Dominicis (1976).

<sup>11</sup> For an academic analysis of global value added, see for example, Gabrovec Mei (1995) and Montrone (2000).

In the Anglo-Saxon literature, value added is computed by deducting the cost of bought-in goods and services from sales revenue (ASSC 1975; Morley 1978; Riahi-Belkaoui 1992; Van Staden 2003). Although there are differences between countries and companies, it can be stated that the Anglo-Saxon concept of value added is an accruals-based, gross value added (meaning without deducting depreciation and amortization—depreciation is then treated as a distribution, part of ‘retained for the future’) that uses a sales or revenues basis for the performance component (McLeay 1983, p. 44–5). On the distribution side, the income portion of the government is mostly restricted to taxes.

This approach to value added is very similar to the one followed in South America, where during the last decade the interest in the VAS has been rising. The presentation of a VAS is mandated in Brazil as part of financial statements since 2008 (Conselho Federal de Contabilidade 2008; Machado et al. 2015). Moreover, there have been proposals in other Latin-American countries to standardize the VAS presentation (Aldama and Zicari 2012).

### The GRI Model

Following the role of value added as a social indicator, it is not surprising that the GRI included the value added concept, albeit in a particular specification, as a core indicator in the GRI sustainability reporting guidelines.<sup>15</sup> The so-called ‘direct economic value generated and distributed’ (EVG&D) is the first economic indicator (EC1) in these guidelines.<sup>16</sup> To achieve high levels of comparability, all indicators are defined in the ‘Indicator Protocols’ (GRI 2011a). In the third generation of the guidelines (G3 and G3.1) EVG&D is labelled as a ‘core indicator’ that means that it is ‘generally applicable [...] and assumed to be material for most organizations. An organization should report on [this] unless [it is] deemed not material on the basis of the Reporting Principles’ (GRI 2011a, p. 7). According to the Indicator Protocols, EVG&D includes revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments (GRI 2011b, p. 4). The calculation of the EVG&D should be

based on data from the audited financial statements or from internally audited management accounts. Moreover, an accruals basis calculation is explicitly recommended, although a cash basis is accepted when justifiable (GRI 2011b, p. 4).

It is obvious that this indicator derives from the traditional concept of value added, not the least because the GRI states explicitly that EVG&D can ‘[...] provide a basic indication of how the organization has created wealth for stakeholders [...] and [...] a useful picture of the direct monetary value added [...]’ (GRI 2011b, p. 4). However, there are some differences between the GRI’s version of value added and the traditional reporting models. First, ‘operating costs’ (defined as ‘payments made outside the reporting organization for materials, product components, facilities, and services purchased’) are interpreted as income of suppliers and others and are thus seen as part of the wealth distribution and not as an input factor. Therefore, according to the GRI, the ‘economic value generated’ represents only revenues, which include net sales, revenue from financial investments such as interest on financial loans, dividends from shareholdings, royalties and direct income generated from assets such as property rental and revenues from the sale of physical and intangible assets. The GRI model represents a sales-based gross value added that focuses on the distribution aspect of wealth generated and that therefore regards suppliers of goods and services also as participating stakeholders. Thus, it stresses the income generation for stakeholders. This focus is different to all the other value added models explained above. The definition of EVG&D results from the particular overall function of this measure that is explicitly stated by the GRI. It should provide a ‘useful picture of the direct monetary value added to local economies’ and help ‘to better assess the local economic impact’ (GRI 2011b, p. 4). This function implies the interpretation of the operating costs as created wealth for the (local) economies because these costs represent income (wealth created) for the suppliers of the goods and services.

The bridging function between the economic and social aspects of value creation of the EVG&D concept becomes obvious not only because of its focus on the stakeholders’ income (wealth) generation and distribution aspect, but also because of the presence of the item ‘community investment’ on the distribution side, which is not included in traditional value added models. Furthermore, the GRI encourages companies to disclose payments to governments on a per country basis (segmentation according to IFRS 8) and mentions explicitly a link to a social indicator (SO6)<sup>17</sup> defined and explained further in the protocol (GRI

<sup>15</sup> For further information about the GRI and its Framework see [www.globalreporting.org](http://www.globalreporting.org).

<sup>16</sup> This is so for all the versions of the GRI guidelines that were developed so far, i.e. G1–G4. The fourth generation (G4) of the GRI guidelines was released in May 2013. Companies are allowed to use the previous versions of the guidelines (G3 and G3.1) until December 2015. The G3 and G3.1 guidelines were in place at the time of our research. For this reason our description is based on the G3.1 and G3 versions of the guidelines. The definition of VA (i.e. the EC1 indicator) and the calculation proposed by the new G4 version does not differ from the G3 and G3.1 versions.

<sup>17</sup> SO6 requires the total value of financial and in-kind contributions to political parties, politicians and related institutions to be disclosed by country.



2011b, p. 4). The difference between the economic value generated and the economic value distributed should also be disclosed as a separate item, called 'economic value retained'. This embraces components such as depreciation and amortization, other accruals and retained earnings, etc. The GRI model therefore shows value creation and distribution among a wider range of stakeholder of the company than the traditional models and can be regarded as a less production oriented and a more distribution oriented and holistic stakeholder approach. It is therefore suitable to disclose the income distribution aspect and enables users to assess distributional fairness.

The main characteristics of the two traditional corporate reporting models and the GRI model are summarized in Table 1.

## Method

We select our sample from the database of the GRI, because this is the most comprehensive international database related to CSR reporting. We select all the companies included in the database from four countries, Germany, Italy, the UK and South Africa at a particular point in time, which was 31 January 2013.<sup>18</sup> There are two reasons for the selection of these four countries. The first is the experience with, and acceptance of, value added reporting in these countries historically and/or currently, as explained in part 4 of the paper. The second is that these countries represent the two major models according to which corporate reporting is categorized in international accounting research (see for example, Walton et al. 2003). Germany and Italy are representatives of the so-called Continental European model of accounting and the UK and South Africa of the Anglo-Saxon model. This gives us the opportunity to find out whether there are reporting model specific differences in the reporting practice of value added, as reported in other areas of corporate reporting (e.g. Nobes and Parker 2016).

Selecting our sample in this way we end up with 70 German companies, 33 Italian companies, 48 UK companies and 40 South African companies.

We obtain the CSR reports of these companies from the GRI database or from the company website. We use researchers with considerable experience in value added information and value added statements to hand collect and analyse the value added information published by the companies in our sample. We analyse the information in

terms of the characteristics of the value added information as determined from the extensive value added literature (see the Appendix for a selection of this literature) and the characteristics of useful information as discussed in part 3 above, including the format of the information, the model used and the verifiability of the information. We also collected data on each of the companies in our sample (i.e. size, industry, ownership type and listing status) as well as data on the report type, GRI application levels and assurance levels in order to better understand the institutional and governance settings of the sample companies. All these data are provided in the GRI database.

We use a comparative analysis (i.e. between companies and countries) to analyse our results and to determine if the information is indeed useful by meeting the qualitative characteristics we determined in part 3 (which are comparability, verifiability and understandability).

## Results of the Empirical Analysis

### Characteristics of the Sample Companies: Table 2

Most of the entities in the sample (82–90 %) are described as either large or multinational companies (MNEs) in the GRI database (Panel A).<sup>19</sup> In terms of ownership (Panel B), most companies in the sample are private companies (81–88 %) defined by the GRI as 'a business organization owned either by a non-governmental organization or by a number of stakeholders'. Furthermore, most of the companies are listed on a stock exchange (Panel C) (58–83 %). An industry sector analysis shows that the UK and German companies are from 21 and 28 industries, respectively while the Italian and South African companies are from 16 and 17 industries, respectively. A wide range of industries are therefore represented by the companies in the sample. Most companies in Germany (14 %) and South Africa (25 %) are from the Financial Services industry while most companies in Italy (27 %) and the UK (12.5 %) are from the Energy and Energy Utilities industries. Financial Services is also high in these countries (Italy 15 %, UK 10 %). An interesting observation is that the companies in the GRI database are not dominated by high (environmental) impact companies, while the literature suggests that high impact companies more often make CSR disclosures (e.g. Deegan and Gordon 1996; Neu et al. 1998; Patten 2002).

<sup>18</sup> The GRI Sustainability Disclosure Database was developed over the last 10 years by the GRI with the support of its data partners (including KPMG). It offers users access to all types of sustainability information disclosed by organizations. At 31 January 2013 the database consisted of 12,643 reports of 4978 organizations.

<sup>19</sup> The GRI defines a large company as having more than 250 employees and turnover (revenue) of more than €50 million or net assets of more than €43 million. MNEs have similar size criteria, but are also represented on various continents. SME is defined as less than 250 employees and turnover of less than €50 million or net assets of less than €43 million.

**Table 1** Main characteristics of the traditional corporate reporting models and the GRI model

	Continental European model	Anglo-Saxon model	The GRI model
Output definition	Total performance including change in inventories and other income	Sales revenues	Sales revenues and other income
Input definition	Bought-in materials and services for goods produced (including depreciation)	Bought-in materials and services for goods sold (excluding depreciation)	No input items
	Value added (net)	Value added (gross)	Value added
Distribution items	Employees, capital providers, government, value added retained	Employees, capital providers, government, value added retained (including depreciation)	Suppliers, employees, capital providers, government, community investments, value added retained

**Table 2** Company descriptive information

	Germany		Italy		UK		South Africa	
	Nr	Perc (%)	Nr	Perc (%)	Nr	Perc (%)	Nr	Perc (%)
<i>Panel A—size</i>								
MNE	19	27.14	5	15.15	16	33.33	2	5.00
Large	39	55.71	22	66.67	27	56.25	32	80.00
SME	8	11.43	6	18.18	3	6.25	3	7.50
Not Indicated	4	5.71	0	0.00	2	4.17	3	7.50
<i>Panel B—type</i>								
Private	58	82.86	29	87.88	39	81.25	34	85.00
Subsidiary	4	5.71	2	6.06	1	2.08	1	2.50
State Owned	1	1.43	1	3.03	3	6.25	2	5.00
Not indicated	7	10.00	1	3.03	5	10.42	3	7.50
<i>Panel C—listing status</i>								
Listed	41	58.57	19	57.58	29	60.42	33	82.50
Not listed	21	30.00	11	33.33	17	35.42	3	7.50
Not Indicated	8	11.43	3	9.09	2	4.17	4	10.00

### Characteristics of the Sample Reports: Table 3

The sample companies reported using GRI3 and GRI3.1 in their most recent reports (see Panel A). As already mentioned, both versions of the guidelines require the EVD&G as a core indicator. While there are some country differences with regard to the application levels of the guidelines<sup>20</sup> (for example, South African companies generally

have lower application levels than the European companies) most companies in the sample have application levels in the A and B range, and a significant proportion had this independently confirmed; there are again country differences here with the UK and Germany generally having lower confirmation levels (see Panel B).

With regard to the application-level check<sup>21</sup> (see Panel C) GRI checking appears to be more popular in Europe, and particularly Continental Europe, than in Africa. In South Africa, third party-checked reports were far more

<sup>20</sup> According to GRI3 and GRI3.1 companies are encouraged to indicate the level of application of the GRI guidelines in their reports, using one of the three categories A, B or C, related to the degree of compliance with the guidelines, where A is the highest and C the lowest level of compliance. If the application level has been independently confirmed, the company may add a '+' to the application level. Thus A+ indicates a report as having a high compliance with GRI and this has been independently confirmed (see GRI 2013, p.5). This is no longer required by the G4 version (GRI 2013, p. 11).

<sup>21</sup> There are two ways of independent confirmation of the compliance level. This can be done either by the GRI (called 'GRI-checked') or by a third party (called 'third-party-checked'). If none of the two is done, the classification is called 'self declared'. The GRI Application-Level Check confirms that a sustainability report has the required set and number of disclosures to meet the organization's self-declared application level.

**Table 3** CSR report characteristics

	Germany		Italy		UK		South Africa	
<i>Panel A</i>								
Number of companies	70		33		48		40	
Reporting type								
GRI3	42	60.00 %	12	36.36 %	26	54.17 %	11	27.50 %
GRI3.1	28	40.00 %	21	63.64 %	22	45.83 %	29	72.50 %
	Nr	Perc (%)	Nr	Perc (%)	Nr	Perc (%)	Nr	Perc (%)
<i>Panel B—GRI application</i>								
Level								
A+/A	28	40.00	19	57.58	16	33.34	6	15.00
B+/B	27	38.57	8	24.24	20	41.66	21	52.50
C+/C	13	18.57	6	18.18	11	22.92	8	20.00
Level not indicated	2	2.86	0	0.00	1	2.08	5	12.50
<i>PANEL C—application-level confirmation</i>								
GRI-checked	42	60.00	23	69.70	18	37.50	4	10.00
Third party checked	3	4.29	7	21.21	6	12.50	16	40.00
Self-declared	23	32.86	3	9.09	22	45.83	13	32.50
Not indicated	2	2.86	0	0.00	2	4.17	7	17.50
<i>Panel D—external assurance</i>								
External assurance	28	40.00	19	57.58	24	50.00	22	55.00
By accountant	21	75.00	17	89.47	13	54.17	15	68.18
By other	7	25.00	2	10.53	11	45.83	7	31.82

popular than in Europe. However, taken together, the application levels checked by outside parties reached levels from 50% (UK and South Africa) to 91% in Italy.

Panel D of Table 3 reveals the incidence of external assurance of the reports that ranges from 40 % in Germany to 58 % in Italy. However, the level and the comprehensiveness of the assurance, which can differ considerably (see the relevant international accountancy standards ISAE 3000 and AA1000AS), are not indicated in the database. Except for Germany, approximately half the reports were external assured. Accountants (accounting and auditing firms) did 54 % of the assurance in the UK; this rises to 68 % in South Africa, 75 % in Germany and 89 % in Italy. Italian companies therefore have the highest level of external assurance and also the highest level of assurance performed by accounting firms. Furthermore, among the accounting assurance providers the big-4 accounting firms (Deloitte, EY, KPMG and PWC) play a major role and did between 50 and 72 % of the assurance assignments in the various countries.

The point of this part of our analysis is to show that the companies in our sample have high GRI application levels, mostly checked by a third party and have high levels of assurance by prominent assurers. The companies are also large listed companies and multi-nationals. One would therefore expect these companies to report their value creation measures in accordance with the GRI Guidelines

or at least with characteristics of useful information and thus information that is consistent, comparable and verifiable.

### Characteristics of Value Added Information Provided: Tables 4 and 5

We structure our analysis of the value added information provided in CSR reports in three major categories. The first category is the incidence and format of value added disclosures. Panel A of Table 4 reveals that the disclosure of value added information is the most common in Italy (94 %), followed by South Africa (50 %), Germany (27 %) and UK (25 %). It is clear that, even though this is required by the GRI, value added information is not a given in sustainability reports. In light of the background and the conceptual explanations discussed, this finding is very surprising. Due to, first, the fact that EC1 is classified as a core indicator and therefore has high relevance according to the GRI (see above), and second, the high GRI application levels and the high incidence of assurance, it could be expected that in all countries the disclosure rate would be as high as in Italy.<sup>22</sup>

<sup>22</sup> A possible reason for the high incidence in Italy, could be the result of the guidelines on social reporting issued by the working group called 'gruppo bilancio sociale' (GBS) which—as mentioned in part 4.2—suggest that social reporting should include a value added statement. The calculation and structure that a VAS should have is also discussed.

**Table 4** Incidence and format of value added information

	Germany		Italy		UK		South Africa	
<i>Panel A—incidence</i>								
Value added information provided	19	27.14 %	31	93.94 %	12	25.00 %	20	50.00 %
No Value Added information	51	72.86 %	2	6.06 %	36	75.00 %	20	50.00 %
<i>Panel B—term used</i>								
Value added	11	57.89 %	15	48.39 %	6	50.00 %	16	80.00 %
EVG&D	8	42.11 %	15	48.39 %	5	41.67 %	1	5.00 %
Economic value added	0	0.00 %	1	3.23 %	1	8.33 %	3	15.00 %
<i>Panel C—Format</i>								
Value added figure	1	5.26 %	0	0.00 %	4	33.33 %	0	0.00 %
Figure and chart	1	5.26 %	1	3.23 %	0	0.00 %	1	5.00 %
Figure, chart and verbal description	5	26.32 %	0	0.00 %	3	25.00 %	1	5.00 %
Verbal description and chart	1	5.26 %	1	3.23 %	0	0.00 %	0	0.00 %
VAS only	6	31.58 %	5	16.13 %	1	8.33 %	6	30.00 %
VAS and chart	0	0.00 %	3	9.68 %	1	8.33 %	5	25.00 %
VAS and verbal description	4	21.05 %	8	25.81 %	2	16.67 %	5	25.00 %
VAS, chart and verbal description	1	5.26 %	13	41.94 %	1	8.33 %	2	10.00 %

**Table 5** Content of value added information

	Germany		Italy		UK		South Africa	
<i>Panel A—form of value added information</i>								
Distribution side	6	33.33 %	5	16.13 %	2	25.00 %	3	15.00 %
Production side	0	0.00 %	0	0.00 %	0	0.00 %	0	0.00 %
Both	12	66.67 %	26	83.87 %	6	75.00 %	17	85.00 %
<i>Panel B—model</i>								
GRI definition	5	26.32 %	13	41.94 %	6	50.00 %	1	5.00 %
Output definition								
Sales based	8	42.11 %	15	48.39 %	7	58.33 %	17	85.00 %
Cash based	0	0.00 %	0	0.00 %	1	8.33 %	0	0.00 %
Production based	6	31.58 %	10	32.26 %	0	0.00 %	0	0.00 %
Indeterminable	3	15.79 %	5	16.13 %	4	33.33 %	3	15.00 %
Treatment of depreciation/amortization								
Gross value added	4	21.05 %	23	74.19 %	0	0.00 %	14	70.00 %
Net value added	10	52.63 %	6	19.35 %	2	16.67 %	0	0.00 %
Indeterminable	3	15.79 %	2	6.45 %	10	83.33 %	5	25.00 %
<i>Panel C—Reconciling value added information to the statement of profit or loss disclosures</i>								
Traceable	3	15.79 %	0	0.00 %	0	0.00 %	0	0.00 %
Partially traceable	12	63.16 %	17	54.84 %	9	75.00 %	18	90.00 %
Not traceable	1	5.26 %	2	6.45 %	4	33.33 %	2	10.00 %
Profit and loss statement not available	3	15.79 %	12	38.71 %	0	0.00 %	0	0.00 %

As all the entities are not listed companies, the financial statements and therefore profit and loss statements are not always publicly available

Although, the GRI guidelines propose the use of the term EVG&D (for EC1), companies most often use the traditional term of value added in all countries (Germany 57 %, the UK 50 % and in South Africa 80 %, whereas in Italy the usage of the terms is more balanced)—see Panel B of Table 4. Panel C gives insights into the variety of disclosure formats of the value added information. In line with

the findings of previous empirical studies (see studies in Appendix B), our analysis reveals that the sample companies often use more than one communication instrument, such as numerical calculation, charts and/or verbal description. In order to gain a picture of the practices adopted, we differentiate eight categories of disclosure format as shown in Panel C. They range from the less



detailed (disclosure of a figure) to the most voluminous (the VAS combined with a chart and a verbal description of the items included in the calculation). It is worth noting that the disclosure formats of the companies within any category in Panel C can differ in detail, e.g. charts can have different forms or include more or less detail, or verbal descriptions can explain in more or less detail the calculation of value added.

Companies in Germany, Italy and South Africa base their value added communication on value added statements that are often accompanied by verbal descriptions. Although the incidence of reporting value added information is low in some countries, it appears that those that do report prefer using a VAS. This is not valid for UK, the results show that in contrast with the past, the disclosure of information on value added in a VAS is not the favourite option, 58.33 % of the companies adopted disclosure alternatives that embrace just the value added figure (with or without additional disclosure). Another common practice (German companies 26 % and UK companies 25 %) consists of providing the value added figure together with a verbal description of the calculation method used and thus of the items included/excluded in value added together with related charts. However, there are considerable variations in the content of the description and thus in the level of detail of information provided. Overall, the results in Panel C depict that there is considerable variance in the format of value added reporting, but that value added calculation in the form of the VAS dominates (apart from the UK). The most detailed format, which combines the VAS with a distribution chart and some additional verbal description, is the most popular format among Italian companies (42 %).

Whether the value added statements disclosed by the companies represent both aspects of value added, i.e. the performance/production side and social/distribution side, or only one of them is shown in Panel A of Table 5. Past empirical research indicates that some companies used to disclose only the distribution side of the VAS (Schneider 1985; Tonkin 1989). The distinction presented in our analysis includes all the above-mentioned value added disclosure practices. In the category 'distribution side' are included both companies that have a VAS with only the distribution side as well as companies that provide information on value added distribution by means of charts or verbal explanations. Our analysis shows that most of the companies disclose both aspects (production and distribution) of value added (from 66, 67 % in Germany to 85 % in South Africa), however disclosures that only represent the distribution aspect of value added also exist, in particular by German companies (33 %) and UK companies (25 %). Furthermore it is clear that none of the sample companies disclosed only information regarding the production side.

Panel B in Table 5 deals with the approach adopted for the value added calculation and presentation and is therefore related to the explanations in part 4 of the paper. Our analysis shows that companies do not primarily follow the GRI guidelines, in particular not in South Africa, with an application rate of only 5 %, and in Germany, where the application rate is only 26 %. The GRI definition is applied the most in the UK (50 %) and Italy (41 %). Looking at the output definition it appears that South African (85%) and UK (58%) companies have a sales-based value added calculation (often including other income components), and thus comply with the Anglo-Saxon model. Contrary to this, while 31 % of the German and 32 % of the Italian firms apply the Continental European model of a production-based value added, 42 % German and 48 % Italian companies use a sales-based measure, which is primarily because of the number of companies that apply the GRI value added model (that is sales based). In some of the analysed cases it was not possible to identify the output measure. These are included in the 'indeterminable' category, many UK companies fall into this category as the output measure was not explained by the reporting company.

The next aspect considered in the analysis is whether depreciation/amortization is deducted from value added (net value added) or whether it is treated as a component of the distribution side (gross value added). The presentation of a net value added is common among German companies, which often used a production-based output measure. This result complies with the traditional Continental European value added model which was in the past broadly adopted in Germany. Also, South African companies stick to their Anglo-Saxon value added tradition and treat depreciation/amortization as a distribution component, often included in the item 'value added retained'.<sup>23</sup> In contrast to Germany, Italy shows a high percentage of gross value added measures, which includes companies with sales-based value added disclosures as well as some with production-based ones. The combination of production-based output with gross value added complies with the model proposed in Italy by the GBS. The analysis of the UK disclosures gave a surprising result. In 83 % of the reports it is not clear how the company treats the depreciation/amortization. The rest, in contrast to the Anglo-Saxon tradition, uses net value added.

Connected with the usage of the different terms/expressions used in value added disclosures (see Panel B in Table 5) it must be noted that companies do not use terms that are conceptually related with the particular models. Taking a closer look at the disclosures reveals that the

<sup>23</sup> It is worth noting that the number of sales-based VA occurrences does not comply with the number of net-based ones because in some cases it was not possible to determine the output measure or to assess how depreciation/amortization have been treated.

terms used do not necessarily comply with the models and presentation formats applied.

In addition to this terminological and conceptual clutter, very often the numbers provided cannot be traced back to the statement of profit or loss in the corresponding annual reports. As Table 5 Panel C reveals, we were only able to retrace the value added calculation to the statement of profit or loss for three German companies. For most of the companies only some of the value added components disclosed could be aligned to figures in the related statement of profit or loss. The rate of non-alignment with the profit or loss statement was the highest among the UK companies with 33 %. We argue that if value added disclosures provide neither explanations for the content and the measurement of the components of the calculation, nor a reconciliation to the figures included in the other financial statements, the information value, if there is any, is very low, due to a lack of verifiability of the figures disclosed.

## Discussion

We did our empirical analysis to determine if value added information presented in published CSR reports is useful and informative to assess the distributional fairness of these companies with regards to their wealth created. In part 3 we argued that consistence, comparability and verifiability are characteristics that determine the quality and therefore understandability and usefulness of the information disclosed. We find that relatively few companies provide value added information in their CSR reports in Germany and the UK. This fact is particularly intriguing because EVG&D is a core GRI indicator that should be presented 'unless [it is] deemed not material on the basis of the Reporting Principles' (GRI 2011a, p. 7). It is hardly comprehensible that this could be the case for the sample companies that are mainly large and publicly traded. This result also contrasts with the fact that all the sample countries have a long tradition of dealing with value added information in corporate reporting. This finding aligns with our arguments that companies may not want to give information on value added and thus the (in)equality of distributions between stakeholders.

In terms of qualitative characteristics, in particular consistency, comparability and reliability, we find that there is considerable variety in the application of value added models and the reporting practice observed. In this respect, our findings are similar to studies in the literature over the last 40 years. However, it seems that the divergence of models used within one country is even larger than before (e.g. McLeay 1983), despite existence of country-specific models of value added and international guidance in this regard by the GRI. Furthermore, we find that a multitude of different communication types and tools

are used by the sample companies, which range from the less detailed value added figures to the more voluminous VASs with distribution charts and verbal descriptions of the calculation method. In addition, the detail of the information provided and the issues disclosed vary considerably between companies and within and between countries. Also, value added information is often not provided in a conceptually sound manner. While the first shortcomings impact the comparability and reliability of the information provided, the later harm the relevance of the information, because this characteristic is strongly linked to the application of clear and generally agreed on concepts of calculation and presentation.

In terms of the verifiability (and therefore credibility) of the information presented, we find that this is impaired by the fact that the figures disclosed in the VAS cannot easily be reconciled with the figures disclosed in the financial statements, in particular the statement of profit or loss. In addition the quantitative components of the items included in calculating value added are seldom explicitly presented. This is while a considerable number of reports were GRI-checked and/or had third party assurance and the majority had A- or B-level GRI compliance.

Our analysis of the value added information provided by companies in our sample shows that this information is not provided in a consistent, comparable and verifiable manner which raises questions with regards to the usefulness of the information for any purpose, but particularly for the purpose of revealing (in)equality of distributions among stakeholders.

## Conclusions

We set out to determine whether value added information reported is useful for different stakeholders to assess the distributional fairness of the economic wealth distributions among stakeholders and can therefore contribute to the discussion about income equality as an aspect of the societal role of companies. From the literature we determined that value added and its computation in a VAS provides an appropriate basis for assessing the distributional (in)equality of the value distributions made by a company. Subsequently we argued that the usefulness of value added information provided in CSR reports depend on whether the qualitative characteristics of consistency, verifiability, comparability and understandability of information are met. Our results show that the value added information disclosed in sustainability reports are much more limited than what we expected and argued for based on its relevance. Furthermore, the value added information disclosed lacks conceptual conciseness and clearness, verifiability, comparability and therefore usefulness. Our

results therefore suggest several obfuscating techniques in the disclosure of value added information, these are: not disclosing; disclosing information that is conceptually compromised (i.e. does not fit into the proposed model or comply with the relevant GRI guideline) resulting in comparability issues; disclosing information in different formats resulting in disclosures that are not consistent and comparable and disclosing information that can't be verified by reconciling back to the (audited) income statement for the year. We observe this despite the long history of value added, the fact that there is now a clear GRI definition for the measure, high GRI application levels reported, and a considerable number of reports assured by external institutions and/or checked by the GRI.

The divergence of the models and formats applied is considerable and the explanations of the disclosed information so limited that in most cases the qualitative characteristics investigated are not met and therefore the usefulness of the value added disclosures must be questioned following the Talbot and Boiral (2016) and Sullivan and Gouldson (2012) arguments. This result is intriguing against the background that value added appears to be an adequate and conceptually sound economic and social performance measure that fits well within the concept of social responsibility and sustainability and the compelling argument of relevance that stakeholders could use value added information to make assessments about the distributional fairness of the corporate approach to wealth distribution (see for example, Matten and Crane 2005; Carroll 1998; Shaoul 1998; Cahan and Van Staden 2009). In the light of these arguments, we suggest that there is an ethical and moral aspect to revealing the distribution of the value added among stakeholders in a consistent, verifiable, comparable and understandable manner. According to our findings it seems that companies are either reluctant to provide value added information in this manner or deliberately use value added disclosures to obfuscate. Information reflecting distributional fairness is therefore compromised.

Comparable, verifiable and understandable information about the wealth distribution within a company is relevant for all stakeholders to assess the distributional fairness as a material aspect of the societal role of companies. Value added (or EVG&D, or something similar) should be an indicator that is required in all CSR reports. The link with the macro-economic calculation highlights the societal component of the micro economic income distribution practice of a particular company and would therefore help to assess the distributional fairness of income distributions at a national societal context. This type of disclosure would be useful for the debate on fairness and equality as suggested by Hazelton and Tweedy (2015) and Piketty (2014). However, at this stage, value added disclosures in CSR

reports seem to be more an obfuscation than useful corporate transparency of the economic and societal wealth (distribution) function of companies.

### Implications for Practice and Policy

Generalizing the results of our study by relating it to sustainability reporting according to the GRI framework provides evidence that helps to evaluate the authority of the GRI and the resulting compliance level. There is only a limited number of empirical studies addressing the application of the GRI and the relevance, reliability and/or comparability of the resulting reports. Our results suggest that while the GRI guidelines are widely accepted in general, the level of compliance with particular definitions of indicators (in our case the EVG&D) seems to be low across and also within countries. This lack of compliance, comparability, and verifiability (and thus information usefulness) of the data provided, due to a lack of enforceability, has a strong mitigating effect on the GRI's guidelines and the reputation of sustainability reporting in general. This was also found in other studies (e.g. Talbot and Boiral 2016; Boiral and Henri 2015; Leong et al. 2014; Mudd 2008).

Furthermore, high-stated levels of compliance with the GRI guidelines (self-declared or third party checked) and independent assurance do not necessarily reflect that a report complies with all or the most substantive disclosure rules and/or definitions of indicators in the GRI guidelines, and/or that the report provides a sufficient level of supplementary information to overcome this deficiency. These considerations have a high current relevance for large European public interest entities (PIEs) and the users of their reports, because, due to the EU Directive (2014/95/EU), they will be legally required to present CSR indicators to a larger extent in their corporate reports. In this directive the EU regulator does not give any detailed guidance on which indicators should be presented and how they should be calculated. Instead, it refers to the guidelines of the GRI and other organizations (EU 2014, para. 9). According to the findings of our study, it is questionable whether such an unspecified expansion of reporting requirements is able to lead to the intended enhancement of the usefulness of corporate disclosure with regard to sustainability matters for the stakeholders.

### Implications for Research

Our findings suggest the following venues of further research. On the one hand normative considerations on how the situation could be changed to a more satisfying one could be developed. Here, apart from enforcement, the following considerations seem to be fruitful. First of all,

academia has to (re)investigate more intensively the concept of value added and develop further conceptual and normative arguments for it to be a social and economic indicator. Besides other aspects, the relevance of distributional fairness for social stability, for the motivation of employees, for the relationship with trade unions and the overall reputation of an entity needs to be researched in order to reveal the importance of the distribution aspect and related information of value added. In addition, the level of compliance could be raised by developing conceptually sound authoritative and binding norms that define the required measures clearly, so that they can also easily be enforced and assured (as Owen et al 2000 have already argued). On the other hand empirical studies (archival or by questionnaires or surveys) could be carried out in order to find out what might be the reasons for the unsatisfying current reporting status quo with regard to the application of the GRI guidelines in general and/or of the first economic indicator EVG&D in particular. Another strand could be the investigation of whether assurance services provided on CSR reports increase the quality of information provided, which could foster an enforcement argument.

To improve the usefulness of the information on distributional fairness, a clearly defined model of value added calculation that meets the information needs of the stakeholders in an optimized way and therefore raises the usefulness of the value added figures presented should be developed. In this respect one attempt was recently made with regards to value added information in Integrated Reports (see Haller and Van Staden 2014). However, this attempt is still too general and needs further specification. In particular it seems to be worthwhile to link the measurement and definition of the corporate value added

calculation with one that is uniformly applied on an international basis in macroeconomics (i.e. the economic model described in part 4.1). This would on the one hand more effectively represent the (macro) economic role of a company and its contribution to society, and on the other hand provide additional information that is not included in the financial statements, particularly on the distribution of the value added between stakeholders.

As already pointed out, our findings confirm the results of other studies with regard to the lack of compliance with the GRI guidelines. However, there are also published sustainability reports that do not use the GRI guidelines. It would be interesting to investigate these reports with regard to our qualitative characteristics in general and to the value added (distribution) disclosures in particular and compare the findings with those from the GRI reports. This could for example show whether the GRI guidance results in at least some measures of higher quality information than if other norms are used.

**Acknowledgments** We would like to thank participants and commentators at the Asia Pacific Interdisciplinary Research in Accounting (APIRA) conference in Kobe 2013, the Center for Social and Environmental Accounting Research Australasian (ACSEAR) conference in Hamilton 2013, the Annual European Accounting Association (EAA) conference in Talin 2014, and the International Association for Accounting Education and Research (IAAER) Conference in Florence in 2014, as well as seminar participants at Deakin University and the University of South Australia for their useful comments.

## Appendix

See Table 6.

**Table 6** Selection of empirical studies on the publication and characteristics of value added statements

Author	Country	Sample	Object	Results
Rutherford (1980)	UK	190 UK 'The Times 1000'	Annual reports 1975–1978	Sales-based, gross value added Three distribution components Different contents in subtractive/additive side Majority present a statement, not a chart
Gray and Maunders (1980)	UK	455 Publicly traded companies ('The Times 1000')	Annual reports 1977–1978	Sales-based, gross value added Three distribution components Differences in the contents of subtractive/additive side
McLeay (1983)	18 Countries	200 Major publicly traded companies	Annual reports 1979	Country differences (e.g. UK vs Germany) Company differences
Tonkin (1989)	World survey	65 North American 100 European 35 other countries	Published accounts 1987	Different solutions The majority calculate Gross value added and exclude other income and extraordinary income. A few companies present a value added chart



**Table 6** continued

Author	Country	Sample	Object	Results
Haller (1997)	7 Countries	All publicly traded companies: 100 German, 100 French, 100 British, 80 US, 20 Australian, 30 Singaporean, 50 Japanese	Annual Report 1993	Disappearance of VAS in UK. Country differences (Anglo-Saxon countries vs Germany). Company differences (additive/subtractive method). Relevance of VAS in Singapore. Not relevant in the US.
Ianniello (2008)	Italy	176 publicly traded companies (1992–1993) and 193 publicly traded companies (2003–2005)	Financial statements 1992–1993 and 2003–2005	VAS is rarely part of financial statements
Arangies et al. (2008)	South Africa	Companies that published a VAS between 1976 and 2005 in SA (3415 companies in total, on average 120 per year)	VAS 1976–2005	Value added statements in South Africa are not comparable

## References

- Aldama, P. L., & Zicari, A. (2012). Value-added reporting as a tool for sustainability: A Latin American experience. *Corporate Governance*, 12(4), 185–498.
- Andrew, J., & Cortese, C. (2011). Accounting for climate change and the self-regulation of carbon disclosures. *Accounting Forum*, 35(3), 130–138.
- Arangies, G., Mlambo, C., Hamman, W. D., & Steyn-Bruwer, B. W. (2008). The value-added statement: An appeal for standardization. *Management Dynamics*, 17(1), 31–43.
- Arbeitskreis 'Das Unternehmen in der Gesellschaft'. (1975). Das Unternehmen in der Gesellschaft. *Der Betrieb*, 28(5), 161–173.
- ASSC. (1975). *The corporate report: Accounting standards steering committee*. London: The Institute of Chartered Accountants in England and Wales.
- Bahnson, P.R., & Bradbury, M.E. (1993). Value added statements and classification patterns of financial ratios. In *Working Paper*, University of Auckland, Auckland.
- Bao, B. H., & Bao, D. H. (1989). An empirical investigation of the association between productivity and firm value. *Journal of Business Finance & Accounting*, 16(5), 699–717.
- Bao, B., & Bao, D. (1996). The time series behavior and predictive-ability results of annual value added data. *Journal of Business Finance and Accounting*, 23(3), 449–460.
- Basu, A. K. (1992). Value added as a measure of business performance. *Indian Journal of Accounting*, XXIII(2), 13–29.
- Boiral, O. (2013). Sustainability reports as simulacra? A counter-account of A and A + GRI reports. *Accounting, Auditing & Accountability Journal*, 26(7), 1036–1071.
- Boiral, O., & Henri, J. F. (2015). Is sustainability performance comparable? *Business & Society*. doi:10.1177/0007650315576134.
- Burchell, S., Clubb, C., & Hopwood, A. G. (1985). Accounting in its social context: Towards a history of value added in the United Kingdom. *Accounting, Organizations and Society*, 10(4), 381–413.
- Cahan, S. F., & Van Staden, C. J. (2009). Black economic empowerment, legitimacy and accounting disclosures: Evidence from post-apartheid South Africa. *Accounting & Finance*, 49(1), 37–58.
- Campedelli, B. (2005). *Reporting aziendale e sostenibilità. I nuovi orizzonti del bilancio sociale*. Milano: Francoangeli.
- Carroll, A. B. (1998). The four faces of corporate citizenship. *Business and Society Review*, 100(1), 1–7.
- Catturi, G. (2004). *La determinazione e la rilevazione del valore creato* (Vol. II). Padova: Vita aziendale e simbologia contabile, CEDAM.
- Cho, C. H., Roberts, R. W., & Patten, D. M. (2010). The language of U.S. corporate environmental disclosure. *Accounting, Organizations and Society*, 35(4), 431–443.
- Cho, C. H., Laine, M., Roberts, R. W., & Rodrigue, M. (2015). Organized hypocrisy, organizational façades, and sustainability reporting. *Accounting, Organizations and Society*, 40, 78–94.
- Cho, C. H., Michelon, G., & Patten, D. M. (2012). Impression management in sustainability reports: An empirical investigation of the use of graphs. *Accounting and the Public Interest*, 12(1), 16–37.
- Cho, C. H., & Patten, D. M. (2007). The role of environmental disclosures as tools of legitimacy: A research note. *Accounting, Organizations and Society*, 32(7/8), 639–647.
- Christensen, J. (2010). Conceptual frameworks of accounting from an information perspective. *Accounting and Business Research*, 40(3), 287–299.
- Climate Disclosure Standards Board (CDSB). (2015). CDSB Framework for reporting environmental information and natural capital: Advancing and aligning disclosure of environmental information in mainstream reports. [http://www.cdsb.net/sites/cdsbnet/files/cdsb\\_framework\\_for\\_reporting\\_environmental\\_information\\_natural\\_capital.pdf](http://www.cdsb.net/sites/cdsbnet/files/cdsb_framework_for_reporting_environmental_information_natural_capital.pdf). Accessed March 22, 2016.
- Congiu, P. (2009). *Il bilancio sociale delle imprese cooperative*. Milano: Giuffrè Editore.
- Conselho Federal de Contabilidade. (2008). Resolução Conselho Federal De Contabilidade CFC No. 1.138 DE 21.11.2008. Conselho Federal de Contabilidade, Brasília.
- Cox, B. (1979). *Value added: An appreciation for the accountant concerned with industry*. Portsmouth, UK: Heineman [for] the Institute of Cost and Management Accountants.
- De Dominicis, U. (1976). *Lezioni di ragioneria generale* (Vol. III). Capitale, costi, ricavi e reddito, Tipografia Babina, Bologna.
- De Villiers, C., & Van Staden, C. J. (2011). Where firms choose to disclose voluntary environmental information. *Journal of Accounting and Public Policy*, 30(6), 504–525.
- Deegan, C. (2002). The legitimizing effect of social and environmental disclosures: A theoretical foundation. *Accounting, Auditing and Accountability Journal*, 15(3), 282–311.

- Deegan, C., & Gordon, B. (1996). A study of the environmental disclosure practices of Australian corporations. *Accounting and Business Research*, 4, 187–199.
- Deegan, C., & Hallam, A. (1991). The voluntary presentation of value added statements in Australia: A political cost perspective. *Accounting & Finance*, 31(1), 1–21.
- Dowling, J., & Pfeffer, J. (1975). Organizational legitimacy: Social values and organizational behaviour. *Pacific Sociology Review*, 18(1), 122–136.
- Elkington, J. (1998). *Cannibals with forks: The triple bottom line of 21st century business*. Stony Creek, CT: New Society Publishers.
- Enthoven, A. (1980). International management accounting: a challenge for accountants. *Management Accounting*, 62(3), 25–32.
- Enthoven, A. (1985). *Mega accounting trends*. Center for International Accounting Development at the University of Texas at Dallas, Dallas, TX.
- European Union (EU) (2014). Directive 2014/95/EU of the European parliament and the council of 22 october 2014 amending directive 2013/34/EU as regards disclosure of non-financial and diversity information by certain large undertakings and groups. <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L:2014:330:FULL&from=EN>. Accessed March 22, 2016.
- Gabrovec Mei, O. (1995). *Sistemi contabili e strutture del conto del risultato economico*. CEDAM, Padova.
- Gabrovec Mei, O. (1999). *Il linguaggio contabile*. Torino: Giappichelli.
- GBS (2013). Principi di redazione del bilancio sociale. In IAAER conference.
- Gray, R. H., Adams, C., & Owen, D. (2014). *Accountability, social responsibility and sustainability: Accounting for society and the environment*. Harlow: Pearson Education.
- Gray, S. J., & Maunders, K. T. (1980). *Value added reporting: Uses and measurement*. London: The Association of Certified Accountants.
- Gray, R., Owen, D. L., & Adams, C. A. (1996). *Accounting and accountability: Changes and challenges in corporate social and environmental reporting*. London: Prentice Hall.
- GRI (2011a). Sustainability reporting guidelines. <https://www.globalreporting.org/resourcelibrary/G3.1-Guidelines-Incl-Technical-Protocol.pdf>. Accessed March 22, 2016.
- GRI (2011b). Indicator protocols. <https://www.globalreporting.org/resourcelibrary/G3.1-Guidelines-Incl-Technical-Protocol.pdf>. Accessed March 22, 2016.
- GRI (2013). Sustainability reporting guidelines. Reporting principles and standard disclosures. <https://www.globalreporting.org/resourcelibrary/GRIG4-Part1-Reporting-Principles-and-Standard-Disclosures.pdf>. Accessed March 22, 2016.
- Haller, A. (1997). *Wertschöpfungsrechnung*. Stuttgart: Schäffer-Poeschel Verlag.
- Haller, A., & Stolowy, H. (1998). Value added in financial accounting: A comparative study of Germany and France. *Advances in International Accounting*, 11, 23–51.
- Haller, A., & Van Staden, C. J. (2014). The value added statement: An appropriate instrument for integrated reporting. *Accounting, Auditing & Accountability Journal*, 27(7), 1190–1216.
- Hooghiemstra, R. (2000). Corporate communication and impression management: New perspectives why companies engage in corporate social reporting. *Journal of Business Ethics*, 27(1–2), 55–68.
- Ianniello, G. (2008). Il conto economico a valore aggiunto: Archeologia o innovazione contabile? *Contabilità e cultura aziendale*, 7(2), 28–56.
- International Accounting Standards Board (IASB). (2010). *The conceptual framework for financial reporting*. London: IASB.
- International Integrated Reporting Council (IIRC). (2013). The International Framework. [www.theiirc.org](http://www.theiirc.org). Accessed March 22, 2016.
- Karpik, P., & Riahi-Belkaoui, A. (1990). The relative relationship between systematic risk and value added variables. *Journal of International Financial Management and Accounting*, 17(3), 259–276.
- KPMG (2014). *A New Vision of Value: Connecting corporate and societal value creation*. <https://www.kpmg.com/Global/en/topics/climate-change-sustainability-services/Documents/a-new-vision-of-value.pdf>. Accessed Nov 30, 2015.
- KPMG (2015). *Currents of change: The KPMG international survey of corporate responsibility reporting 2013*. <http://www.kpmg.com/CN/en/IssuesAndInsights/ArticlesPublications/Documents/kpmg-survey-of-corporate-responsibility-reporting-2015-O-201511.pdf>
- Larrinaga, G. C. (2001). Aspectos sociales y políticos del estado de valor añanido. *Revista de Contabilidad*, 4(8), 35–62.
- Lehmann, M. R. (1954). *Leistungsmessung durch Wertschöpfungsrechnung*. Essen: Verlag W. Girardet.
- Leong, S., Hazelton, J., Taplin, R., Timms, W., & Laurence, D. (2014). Mine site-level water reporting in the Macquarie and Lachlan catchments: A study of voluntary and mandatory disclosures and their value for community decision-making. *Journal of Cleaner Production*, 84(1), 94–106.
- MacFarlane, S. (1993). Stop talking about profits ... value-added is more relevant in the New South Africa. *Accountancy SA*, June 4–5.
- Machado, M. A. V., Macedo, M. S., & Machado, M. R. (2015). Analysis of the relevance of information content of the value added statement in the Brazilian capital markets. *Revista Contabilidade & Finanças*, 26(67), 57–69.
- Matten, D., & Crane, A. (2005). Corporate citizenship: Towards an extended theoretical conceptualization. *Academy of Management Review*, 30(1), 166–179.
- Maunders, K. T. (1985). The decision relevance of value added reports. In F. Choi & G. G. M. Mueller (Eds.), *Frontiers of international accounting: An anthology* (pp. 225–245). Ann Arbor, US: UMI Research Press.
- McLeay, S. (1983). Value added: A comparative study. *Accounting, Organizations and Society*, 8(1), 31–56.
- Meek, G., & Gray, S. (1988). The value added statement: An innovation for U.S. Companies. *Accounting Horizons*, 2(2), 73–81.
- Meyer-Merz, A. (1985). *Die Wertschöpfungsrechnung in Theorie und Praxis*. Zürich: Schulthess.
- Montrone, A. (2000). *Il valore aggiunto nella misurazione della performance economica e sociale dell'impresa*. Milano: FrancoAngeli.
- Moore, M. H. (1995). *Creating public value: Strategic management in government*. Cambridge, MA: Harvard University Press.
- Morley, M. (1978). *The value added statement: A review of its use in corporate reports*. London: Institute of Chartered Accountants of Scotland.
- Morley, M. (1979). The value added statement in Britain. *The Accounting Review*, 54(3), 619–629.
- Mudd, G. M. (2008). Sustainability reporting and water resources: A preliminary assessment of embodied water and sustainable mining. *Mine Water and the Environment*, 27(3), 136–144.
- Neu, D., Warsame, H., & Pedwell, K. (1998). Managing public impressions: Environmental disclosures in annual reports. *Accounting, Organizations and Society*, 23(3), 265–282.
- Nobes, C., & Parker, R. B. (2016). *Comparative international accounting* (13th ed.). London: Pearson.
- Orlandini, P. (2008). *Rendicontazione e responsabilità sociale*. Torino: Giappichelli Editore.

- Owen, D. L., Swift, T. A., Humphrey, C., & Bowerman, M. (2000). The new social audits: Accountability, managerial capture or the agenda of social champions? *European Accounting Review*, 9(1), 81–98.
- Patten, D. M. (2002). The relation between environmental performance and environmental disclosure: A research note. *Accounting, Organizations and Society*, 27(8), 763–773.
- Piketty, T. (2014). *Capital in the twenty-first century*. Cambridge, MA: Harvard University Press.
- Pong, C., & Mitchell, F. (2005). Accounting for a disappearance: A contribution to the history of the value added statement in the UK. *Accounting Historians Journal*, 32(2), 173–199.
- Porter, M. E., & Kramer, M. R. (2011). Creating shared value. *Harvard Business Review*. January-February, 89, 62–77.
- Rappaport, A. (1986). *Creating shareholder value: The standard for business performance*. New York: Free Press.
- Reichmann, T., & Lange, C. (1981). The value added statement as part of corporate social reporting. *Management International Review*, 21(4), 17–22.
- Renshall, M., Allan, R., & Nicholson, K. (1979). *Added value in external financial reporting*. London: The Institute of Chartered Accountants in England and Wales.
- Riahi-Belkaoui, A. (1992). *Value added reporting: Lessons for the United States*. Westport, Connecticut: Quorum Books.
- Riahi-Belkaoui, A. (1993). The information content of value added, earnings, and cash flow: US evidence. *International Journal of Accountancy*, 28(1), 140–146.
- Riahi-Belkaoui, A. (1996a). *Performance results in value added reporting*. Westport, Connecticut: Quorum Books.
- Riahi-Belkaoui, A. (1996b). Earnings–Returns relation versus net-value-added-returns relation: The case for a nonlinear specification. *Advances in Quantitative Analysis of Finance and Accounting*, 4, 175–185.
- Riahi-Belkaoui, A., & Fekrat, M. A. (1994). The magic in value added: merits of derived accounting indicator numbers. *Managerial Finance*, 20(9), 3–15.
- Riahi-Belkaoui, A., & Picur, R. D. (1994a). Explaining market returns: earnings versus value added data. *Managerial Finance*, 20(9), 44–55.
- Riahi-Belkaoui, A., & Picur, R. D. (1994b). Net value added as an explanatory variable for returns. *Managerial Finance*, 20(9), 56–64.
- Rutherford, B. A. (1977). Value added as a focus of attention for financial reporting: some conceptual problems. *Accounting and Business Research*, 7(27), 215–220.
- Rutherford, B. A. (1978). Examining some value added statements. *Accountancy*, 89(7), 48–52.
- Rutherford, B. A. (1980). Published statements of value added: A survey of three years' experience. *Accounting and Business Research*, 11, 15–28.
- Schäfer, E. (1951). Vom 'Mehrwert' zur 'Wertschöpfung'. *Zeitschrift für Betriebswirtschaft*, 21, 449–459.
- Schneider, P. (1985). *Finanzwirtschaftliche Nebenrechnungen – Eine empirische Untersuchung von Geschäftsberichten börsennotierter deutscher Aktiengesellschaften zum Publizitätsverhalten bei Kapitalfluß*. Wertschöpfungs- und Kapitalerhaltungsrechnung, Frankfurt: Umsatzüberschuß.
- Schreuder, H. (1979). Corporate social reporting in the federal republic of Germany: An overview. *Accounting, Organizations and Society*, 4(1/2), 109–122.
- Shaoul, J. (1998). Critical financial analysis and accounting for stakeholders. *Critical Perspectives on Accounting*, 9(2), 235–249.
- Stainbank, L. (1992). Value added reporting in South Africa. *DE RATIONE*, 6(1), 43–58.
- Stainbank, L. (2009). The value added statement: Does it add any value? *Meditari Accounting Research*, 17(2), 137–149.
- Struckmann, P. (1989). *A critical evaluation of value added reporting in South Africa*. Cape Town: Department of Accounting, University of Cape Town.
- Sullivan, R., & Gouldson, A. (2012). Does voluntary carbon reporting meet investors' needs? *Journal of Cleaner Production*, 36, 60–67.
- Suojanen, W. W. (1954). Accounting theory and the large corporation. *The Accounting Review*, 29(3), 391–398.
- Talbot, D., & Boiral, O. (2016). GHG reporting and impression management: An assessment of sustainability reports from the energy sector. *Journal of Business Ethics*. doi:10.1007/s10551-015-2979-4.
- Tonkin, D. J. (1989). *World survey of published accounts*. London: Lafferty Publications.
- Tweedie, D., & Hazelton, J. (2015). Social accounting for inequality: Applying Piketty's capital in the twenty-first century. *Social and Environmental Accountability Journal*, 35(2), 113–122.
- UN (2008). *Systems of National Accounts*, UN, New York, NY: <http://unstats.un.org/unsd/nationalaccount/sna.asp>. Accessed Dec 28, 2015.
- Van Staden, C. J. (1998). The usefulness of the value added statement in South Africa. *Managerial Finance*, 24(11), 44–59.
- Van Staden, C. J. (1999a). Aspects of the predictive and explanatory power of value added information in South Africa. *South African Journal of Accounting Research*, 13(2), 53–75.
- Van Staden, C. J. (1999b). Revisiting the value added statement: A case for the formulation of statutory requirements for financial reporting. *Meditari Accountancy Research*, 7, 257–275.
- Van Staden, C. J. (2003). The relevance of theories of political economy to the understanding of financial reporting in South Africa: The case of value added statements. *Accounting Forum*, 27(2), 224–246.
- Van Staden, C. J., & Hooks, J. (2007). A comprehensive comparison of corporate environmental reporting and responsiveness. *The British Accounting Review*, 39, 197–210.
- Walton, P., Haller, H., & Raffournier, B. (2003). *International accounting* (2nd ed.). London: Thompson.
- Zeghal, D., & Maaloul, A. (2010). Analysing value added as an indicator of intellectual capital and its consequences on company performance. *Journal of Intellectual Capital*, 11(1), 39–60.