INCOMPLETE OBSERVATIONS AND CONSTRUCTED RELEVANCE: A FRAMEWORK FOR THE ASSESSMENT AND MANAGEMENT OF CORPORATE SUSTAINABILITY

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ABSTRACT

In this paper I argue that the assessment and management of corporate sustainability potentially runs the risk of severe biases due to the application of inadequate criteria. Firstly, present praxis as well as theory of corporate sustainability assessment tend to not distinguish between structural and performance related features relevant for corporate sustainability. Secondly, the nature of corporate sustainability as the result of a constructive process of complexity reduction performed by social systems, which is highly context-specific, selective, and ambiguous, is ignored. Considering these two features as well as their interactions is described as one step towards rendering theorizing about and management of corporate sustainability able to adequately take into account the immense increase of complexity the adherence to the goal of corporate sustainability represents.

INTRODUCTION

Referring to the Brundtland-definition, sustainability can be defined as long-term system maintenance (Crane and Matten, 2004, p. 22). Due to the factual and temporal complexity and multi-dimensionality of this concept, analysis of sustainability is a complex task and there is no fair chance for unambiguous optimization (Spangenberg, 2004).

In theory as well as in practice, the concept of sustainability often is subdivided into three factual spheres – environmental, economic, and social sphere. These spheres often are described as constituents of corporate sustainability (CS) (Bansal, 2005), which in turn is regarded as one important contributor to sustainable development (Hart and Milstein 2003), as companies generate and distribute wealth as well as affect and transform societies and the ecosystem. Having acknowledged its important role in sustainable development, businesses are described as increasingly endeavoring to contribute to this development (Schmidheiny and Business Council for Sustainable Development, 1992). An increasing number of initiatives (e.g. United Nations Global Compact) and the changing reporting practice of firms (by means

of different types of corporate non-financial reports such as sustainability- or CSR-reports) point in this direction. Even if the sincerity of many initiatives can be doubted (Laufer, 2003) and a workable definition of CS as well as methods to assess CS are still lacking, it is becoming clear, that firms increasingly engage in sustainability-related measures. Thus comparable definitions and reliable ways to measure sustainability become evermore necessary. Even if approaches like the Global Reporting Initiative aim in this direction by suggesting a set of indicators to enable firms to assess their sustainability, the uniqueness of each firm and its relations with its environment and the complexity of competing sustainability-related requirements render the assessment and management of CS an extremely complex task.

Thus it is difficult for companies to identify their relevance for sustainability and find concrete steps and measures to contribute to it (Kiewiet and Vos, 2007, p.4). In the process of identification and definition of sustainability-relevant issues as well as in the process of their measurement, be it by businesses themselves or by external observers, some problems need to be tackled to avoid severe biases, which in the better case render such efforts useless and are counterproductive in the worse case. In the following I argue that defining and assessing corporate sustainability by corporations harbors different pitfalls, which are important taken alone, but moreover can be mutually enforcing. In the following section, the first pitfall, namely the confusion of sustainability performance and sustainability-related structural features will be described as a confusion of distinct complementary observational modes. In section three, the second pitfall, the misconception of corporate sustainability as measurable by a set of unequivocal values will be covered. By conceptualizing firms as social systems and the process of sustainability-definition, -assessment, and -management as a process of system-specific complexity-reduction the idiosyncratic nature of firm-specific sustainability-definitions will be emphasized. The fourth section deals with the implications of the inadequate application of the different observational modes in the process of sustainability-definition and -management. The paper concludes with the delineation of avenues for further research.

PITFALL 1: THE CONFUSION OF STRUCTURE AND PERFORMANCE

In the process of the assessment of corporate sustainability, be it in internal assessments or in outside-inspections, the sustainability of a firm is firstly operationalized by means of indicators – denoted as sustainability performance indicators in the following – like the amount of emissions (or of reduced emissions) of a firm or the amount of water and energy

consumed (or saved) in the environmental sphere. In the social sphere, indicators like average wages, the amount of money invested in social projects and philanthropic giving or the number of accidents reduced are used to define social sustainability. Economic sustainability is – if at all – mainly concretized by the number of apprentices or generation of new jobs. These measures are generally supplemented by various structural features. Examples for these structural features are sustainability-specific organizational units and governance arrangements. This ranges from board-member responsibility for sustainability, the coupling of incentives and the attainment of specific sustainability goals, the existence of working groups and sustainability departments to the presence of sustainability representatives. Furthermore, several formalized tools like codes of conduct, certificates and mission statements can be found as measures for the sustainability of a company. These features certainly are elements of the process of implementing sustainability within a firm's operations, but they must not be confused with the performance measures mentioned before, since their existence in a firm does not necessarily mean that the company is more sustainable than a firm without these features. For example, the existence of sustainability-reporting alone must not be seen as an indicator for the sustainability of a company, a fortiori with respect to sustainability becoming a standard element of the self-portrayal of most firms. However, even if this difference is not neglected completely in the practice of sustainability assessment and reporting (see for example the distinction between 'practical actions' and 'outcomes' in the reporting methodology of the United Nations Global Compact), in most instances such a distinction is not made.

The Two Dimensions of CS

Since the aforementioned suggests that in the practice of sustainability assessment measures concerning the organizational potential to act sustainably are at the most dealt with just as measures concerning actual performance, I will recommend a distinction between actual sustainability performance and the organizational potential to attain and pursue CS.

Performance related features can be regarded as concerning the present sustainability of a firm and therefore as constituting the actual sustainability. In contrast to that, structural features are the precursors of future sustainability, but are far from being a sufficient condition for that and by no means indicators for the actual sustainability performance of a firm. The features constituting this group have two things in common: firstly, they are future-related insofar as they are suitable for ensuring sustainability performance in the future. Secondly, they concern managerial and organizational features. In the following, the differences between

sustainability performance and structural anchoring of sustainability will be outlined.

Sustainability Performance

As noted above, the concept of sustainability integrates economic, environmental and social concerns. Within the triple-bottom line approach, this concept in translated into business logics, emphasizing requirements of efficiency as well as of effectiveness in the economic, ecological and social sphere (Dyllick and Hockerts, 2002). The concrete indicators used in practice to operationalize and measure CS substantiate the contributions of companies to the goal of societal sustainability. In the most apparent form, these are measures concerning measurable flows of substances or money (and the development of these indicators over time). In the economic domain, the measurement of performance is standardized and carried out in a quantitative and comparable way. Even if the relevance of specific indicators is contested, a multitude of indicators is available. In contrast to financial indicators, in both non-financial spheres the reporting is partially qualitative and partially quantitative (Perrini, 2006), and still only standardized to a limited degree (Schäfer, 2005). In the ecological sphere, with rising awareness for environmental issues as well as a rising number of legal requirements, measurement of the ecological performance of an enterprise is becoming more and more common. As soon as relevant factors are identified and benchmarks are agreed on, measuring according indicators is a technical matter, but nevertheless feasible. One example is the measurement of the reduction of polluting emissions (Skaerseth and Wettestad, 2009). In the social sphere, things are more difficult: measuring social sustainability in most cases has its limits due to intangibility and ambiguity of the impacts of business on society. Compared to economic and ecological sustainability – measurable flows of money or substances – social sustainability is more intangible. Impacts depend on objective criteria as much as on subjective perception. A further problem – especially for multinational corporations – is the heterogeneity of social values and the resulting ambiguity of certain social impacts.

If a set of measures is agreed on (see ‘Pitfall 2’ below, concerning the importance of this process) to represent sustainability, the measurement might be technically difficult but nonetheless feasible. As discussed by Chatterji and Levine, the selection of specific measures excludes others and hence harbours the danger of inadequacy (2006). But there is at least agreement that the aim of the process of measurement is the assessment of the actual performance in a specific domain.

Structural Anchoring of Sustainability

In contrast to measures for actual performance, measures of structural features are not necessarily indicators for performance. And they also are no guarantee for performance. As noted by Morgan et al., features like structural orientation towards sustainability, reporting practice or codes of conduct do not necessarily indicate how well a company does manage sustainability related issues, even if the 'presence and depth of governance mechanisms, operating structures and systems provides at least some feel for corporate conduct in this space' (2009, p.43). But 'some feel' is definitely not enough to be taken as a valid measure for a company's actual sustainability performance, used both for the management of CS and as an informational basis for investment decisions.

Nevertheless, the mention of arrangements destined to attain CS is used by many firms in their non-financial reporting practice without distinguishing it from performance indicators. Whether this is intended to show efforts to attain sustainability without being obliged to show any achievements, functioning as an alibi (see already: Meyer & Rowan, 1977), or whether this is the description of serious work in progress (Caron and Turcotte, 2009) is not discernible at a specific point of time but needs to be evaluated ex post. But it should be clear that actual performance and enablers of potential performance are two distinct categories which are sometimes confused, leading to a biased picture of the actual sustainability of a firm. One example is the utilization of the number of board members as an indicator of good governance (Chatterji and Levine, 2006). Another example is a code of conduct: a code of conduct might be a step towards sustainability (Bondy et al., 2007). But the existence of such a code alone does not say anything about the sustainability of a firm (Murphy, 2005; Holder-Webb, 2008).

Two Complementary Modes of Observation

Summing up, it becomes clear that CS consists of two complementary facets. To frame these theoretically, we refer to the concept of complete and incomplete observational schemas (Seidl, 2007). Complete observational schemas detail definite values which leave no space for interpretation. In contrast, incomplete observational schemas leave space for individual filling. Obviously, both modes of observation are necessary conditions for the valid assessment of CS. Taken alone, each of them sheds light only on a specific facet of CS. One problem lies in the exclusive application of only one of the described observational schemas and the potentially resulting 'partial blindness' of CS assessment. A further related problem is that these two types of observation often are not recognized as distinct from each other. Be it

the exclusive confinement on one mode or be it the confusion of both modes, the nonreflective application of these distinct modes harbors the danger of rendering CS assessment and subsequent CS management effective only to a limited extent. The concentration on incomplete observations, be it strategically or without intention, tends to support processes of decoupling (Meyer & Rowan, 1977) of structure and activity.

PITFALL 2: THE MISCONCEPTION OF CORPORATE SUSTAINABILITY AS A SET OF UNEQUIVOCAL VALUES

Corporate Sustainability: A Complexity Perspective

Based on the description of different observational modes available for the assessment of CS, in the following the process of defining and observing CS by firms will be conceptualized as a constructive and necessarily idiosyncratic process executed by complex social systems as a means to reduce environmental complexity. I argue that in this process of construction of CS, both observational schemas described above are applied. However, the balanced application of both schemas is a necessary condition to guarantee a balanced definition, assessment and management of CS.

Complexity in general can be defined as the property of a connected set of elements: as soon as the amount of elements exceeds the capacity of the single elements to connect to each other element, the set can be termed complex (Luhmann, 1995). Accordingly, the observance of a potentially immeasurable multiplicity of economic, ecological and social factors can be regarded as a complex venture for every firm. The complex properties of the concept of sustainability and the implications for tackling the challenges of sustainable development have been recognized and analyzed at length (e.g. Kelly, 1997; Hjorth and Bagheri, 2006).

The theory of social systems (Luhmann, 1973; Luhmann, 1995) adds another facet of complexity to the challenges of CS. According to systems theory, one decisive property of systems is the reduction of the complexity of their environment as a means to secure the survival of the system. This is mainly achieved by selection: specific elements of the environment get selected as relevant whereas others are deemed irrelevant. The processing of this already reduced complexity is in turn coped with by an increase of system-internal complexity (Luhmann, 1973).

Classical economic reasoning was centered on the generation of revenue. Firms were constructed as layers of means-end-relations (Luhmann, 1973) with value generation as the final aim, thereby reducing the requirements for system-internal complexity of an

organization as well as the complexity of the organizational environment to a considerable extent. In the course of modern theory of the firm it became possible to re-conceptualize firms as complex social systems subject to numerous internal as well as external (and partially confliction) requirements (Luhmann, 1973; Ackoff, 1994).

In addition to these objections, the mechanistic conceptualization of firms as a mere means to attain the end of profit generation or actually even profit maximization necessarily collides with the rising paradigm of sustainable development. According to the definition of the paradigm of sustainable development described above, the purpose of business can be redefined as long-term maintenance of an organization according to environmental, economic, and social considerations and its contribution to the long-term survival of its environment. Successfully navigating a firm through immensely increased complexity therefore necessitates the reconsideration of control factors. Even when considering only the economic sphere as immediately relevant for organizational decision-making, the concentration on a single value is illusionary. Rather, the relevance of different factors as well as their interdependence needs to be taken into account to facilitate the survival of a firm (see e.g. Gälweiler, 1990).

Since adherence to the principle of sustainability can be formulated as an enormous increase of decision complexity (Jones 2009) and since firms can be conceptualized as a specific type of social system (Steinmann and Schreyögg, 2000), the challenge that the adherence to the principle of sustainability (whichever version) poses to a firm can be described as the confrontation of a complex system which a complex environment.

As soon as business organizations integrate considerations of sustainability into their decision making, factors, interrelations and feedbacks not deemed relevant or even not known before are gaining centrality besides purely economic factors. Accordingly, an organization needs to develop capacities to identify relevant issues, process this information and respond to these new challenges in an adequate manner (Meins and Schneider, 2010), leading to increased internal complexity requirements.

According to the aforesaid, CS can be re-formulated as a firm's ability to process environmental complexity in a way which aims simultaneously at the survival of the firm and of the environment.

Sustainability Assessment and the Management of Complexity

For a system the basis of acquiring the capacities to cope with a complex environment is the agreement on a specific definition of this environment. Only if such a definition is constructed, further steps can be undertaken. Thus, in the case of the management of CS, and

analogous to management of firms mainly based on economic indicators, firms need to resort to specific values and measures to facilitate (1) the definition of goals, (2) the definition of strategies to reach these goals, and (3) the control of success or failure of a specific strategy. All three stages of this process essentially depend on (potentially continually changing) basic assumptions.

The selection of such values is of utmost centrality for the management of a firm. Subsequent to the definition of firms as social systems given above, the constitution of a firm's environment can be described as a constructive process. The firm decides what shall count as relevant and what shall count as irrelevant and thus creates its environment (Luhmann, 2000). This initial selection of parameters constitutes the external as well as internal environment deemed relevant for a firm and thus also for the management of a firm which has the task to "bring the environment back into the organization" (Seidl and Becker, 2006). Within this process, a shared mental model is created which functions as a basis for all subsequent action (Holland et al., 1986).

On the firm level, the importance of the initial selection and definition of the relevant environment for all subsequent action can be illustrated by the example of Novo Nordisk. The definition of sustainability as a main part of the business strategy and the subsequent inclusion of sustainability-related features into organizational structure, culture and reporting practice (Morsing and Oswald, 2009) can be regarded as exemplary for the redefinition of a firms' environment as the precondition for subsequent modification of action. For example, the decision to '[…] offer diabetes treatment, including free insulin, to 10,000 children in some of the world's poorest countries' (Novo Nordisk, 2008) can be interpreted as the constitution of a relevant section of the environment, while therewith other sections of the environment (e.g. HIV, a problem at least similarly pressing) are implicitly defined as not relevant and therefore not included into organizational decision making.

Thus the process of selecting internal as well as external parameters deemed relevant for steering a firm can be conceived of as a constructive act. As soon as a parameter is included in decision making, its development can be tracked and behavior can be modified accordingly if necessary. However, if a parameter is deemed not relevant, it will not be observed because it is outside the actual world of the organization (but might enter this world by force anytime, if its potential importance and dynamic is overlooked).

The Construction of Corporate Sustainability: Influences and Dependencies

Acknowledging that the constitution of a firm's relevant environment can be conceptualized as a constructive process, the question is which factors are deemed decisive for the survival of a firm and thus shape the firm-specific definition of CS. From the fact that the environment is a system-relative situation (Luhmann, 1995, p. 181) follows that every firm's environment is different and hence unique. Therefore specific individual conceptions of corporate sustainability, defined as the ability of a firm to process information about its environment in way which secures the long-term survival of the firm as well as the stability of its environment, are shaped by specifics of the firm, by specifics of the environment, and by interactive processes between firm and environment. All three factors of influence will be described in the following.

Specifics of the Firm

First, the management of a firm's sustainability depends to a large degree on its capacity to define, observe, process, and manage this complexity. Whereas in large enterprises specific controlling- or sustainability-departments are concerned with the assessment of a firm's sustainability-performance, in small enterprises this often is an additional task for the owner/manager. Accordingly, the selection of indicators needs to be more rigorous to assure the manageability of the according factors. A further factor might be the ownership-structure of a firm. From this perspective, it is argued that family-owned firms tend to be directed in a more forward-looking way than other businesses (Miller & Le Breton-Miller, 2006) and this in turn might to a stronger and more comprehensive sustainability-orientation. Furthermore, individual characteristics of owners and managers (Kusyk & Lozano, 2007; Sharma, 2000) as well as corporate culture can be regarded as shaping the firm-specific definition of CS as well as subsequent actions.

Specifics of the Environment

The environment of a firm restricts and shapes the process of conceptualizing corporate sustainability in multiple respect (Kusyk & Lozano, 2007; Sharma, 2000). Firstly, the affiliation to a specific industry at least excludes a number of sustainability-related issues. For instance, within an energy-intensive industry energy consumption is more relevant than in a firm only consuming small amounts of energy, most service firms do not deal with radioactive waste, etc.

Secondly, embedded in a cultural, economic, political, technological and physical macro-

environment, the ability of a firm to develop a specific concept of corporate sustainability and apply it in practice, depends on innumerable factors. To identify just a few: different views on the purpose of a firm necessitate, legitimize or illegalize certain measures; economic incentive structures and competitive pressures call for specific initiatives or limit the latitude of firms; laws require particular measures, threshold values get set and readjusted; innovations facilitate the transformation of production processes; changes in the physical environment determine the urgency of specific measures.

Interaction of Firm and Environment

Besides firm- and environment-specific factors, the interaction of firms and environments also decisively influences processes of sustainability-conceptualization. In the environment of a firm, there are factors which influence organizational decision-making as well as social processes preceding strategic decisions, such as the individual definition of corporate sustainability. The interpretation of the relevant environment is guided by shared perceptions of the environment. These can be the result of cognitive frames shared within a certain organizational field a firm is active in. They can also be the outcome of collective endeavors. The best example for this are the activities of the World Business Council for Sustainable Development. This organization is actively shaping and disseminating its vision of sustainable development: 'To maintain entrepreneurial freedom through voluntary initiatives rather than regulatory coercion' (Banerjee, 2010, p. 267). This definition in turn is likely to feed back to individual firms, shaping its conceptualization of CS and subsequent actions.

Furthermore, external selection of information (e.g. by the media) as well as pressure (e.g. by interest groups) need to be regarded as decisively shaping organizational processes (King & Soule, 2007) and thus also the intra-organizational process of conceptualizing corporate sustainability. And this is the place where the distinction between the two observational modes, given in the former section, comes into play again, as will be described in the next section.

THE INTERACTION OF PITFALL 1 AND PITFALL 2: OBSERVING SUSTAINABLE SYSTEMS

Summing up, it became clear that the assessment of CS firstly harbors the danger that the difference between complete and incomplete observational schemes is not recognized. Secondly, assuming that the sustainability of a firm can be measured by a set of unambiguous indicators and disregarding the constructive nature of CS possibly leads to the application of

inadequate measures. In addition to these two obstacles, I argue that a further problem lies in the combination of the two problems described above. In the following, possible reciprocal effects will be described with the aim to uncover further potential pitfalls of the theoretical as well as practical handling of CS.

Basically, the potential problem is that the inadequate and one-sided application of different observational schemas in the process of the construction of CS by individual firms can lead to self-reinforcing processes and the lock-in of inappropriate measures of CS-assessment and -management. Drawing on new institutional theory (DiMaggio & Powell, 1983; Meyer & Rowan, 1977) it can be argued that the application of specific observational schemas by observers as well as by other firms in the environment of the focal firm potentially affects the process of the construction of sustainability within this firm. If we assume that a firm to some extent orients its own practice (and therefore also the process of sustainability-construction) to the practice within its organizational field as well as to the observational schemas applied by a range of observers (ranging from rating-agencies to governmental and non-governmental organizations to the media and to science) it becomes obvious that the imbalanced application of observational schemas potentially increases the probability of the application of a specific observational schema and decreases the probability of the application of the other observational schema, leading to a self-reinforcing process and eventually to the dominance and lock in of one of the two observational schemas (for the logic of self-reinforcing processes see Arthur, 1989). Insofar, the problem of decoupling of structure and activity might become a de-facto standard, rendering the goal of corporate sustainability unrealizable.

As an example for a development in such a direction, the United Nations Global Compact (UNGC) can be invoked: to maintain membership, participating firms need to report on their progress inn different areas ranging from anti- corruption to environmental protection. Inter alia, the UNGC-statutes require the description of practical actions (i.e. in the form of an incomplete observation) as well as a measurement of outcomes (i.e. by means of complete observation). However, as an ongoing analysis of the content of reports submitted to and deemed ‘notable’ by the UNGC indicates, even in the category of outcome-measurement, the incomplete mode of observation is applied, restricting the possibility to comprehensively evaluate the sustainability of the reporting firms and blurring the distinction between measures and (successful) effects.

AVENUES FOR FURTHER RESEARCH AND CONCLUSION

One interesting question for further research would be the analysis of the adoption of inadequate observational modes by other decisive actors, the dynamics and incentives potentially resulting from this imbalance, and the effects of such processes on the sustainability-discourse and policy-making. One example for this are the US Sentencing Guidelines, which state that in the case of criminal conduct of organizations, the existence of specific procedural and structural features aiming at the prevention of criminal conduct – features observable by means of incomplete observational schemas – may lead to a reduction in fines up to 95% (Desio, 2004). A similar further example is the USEPA's audit policy, in which the reduction of penalty up to 75% is possible, if adequate auditing programs and compliance management systems are implemented. Such measures are exactly the described structural features of corporate sustainability which can be assessed by means of incomplete observational schemas. In both described cases, the emphasis primarily lies on structural means, which not necessarily lead to the aspired improvement of performance. This can be interpreted as an incentive for decoupling of structure and activity, which potentially lets unsustainable firms appear sustainable.

Given the complexity of the concept of CS and the problems to define and measure CS, in many cases the application of proxies for CS seems appropriate or at least feasible. However, if done so, it is necessary to bear in mind that the proxies are only proxies. Otherwise, a range of processes might get under way which render the very objectives of CS, namely the contribution of business to sustainable development, less and less attainable.

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