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Standardization as Institutional Work: The Regulatory Power of a Responsible Investment Standard

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Abstract

This paper conceptualizes standardization as institutional work to study the emergence of a standard and the deployment of its regulatory power. We rely on unique access to longitudinal archival data for exploring how the FTSE4Good index, a responsible investment index, emerged as a standard for socially responsible corporate behavior. Our results show how three types of standardization work – calculative framing, engaging and valorizing – support the design, legitimation and monitoring processes whereby a standard acquires its regulatory power. Our findings reveal new facets in the dynamics of standardization by approaching standardization as a product of institutional work and in showing how unintended consequences of that work can be recaptured to strengthen the regulatory power of the standard.

Keywords

institutional work, legitimacy, regulatory power, responsible investment, standardization

Introduction

Today's organizations must operate in an environment which has been described as a 'world of standards' (Brunsson & Jacobsson, 2000) or an 'audit society' (Power, 1997). The influence of standard setters has been evidenced across a broad range of organizational fields from the International Standards Organization (ISO) (Beck & Walgenbach, 2005; Boiral, 2003) to business schools (Durand & McGuire, 2005) and to responsible investment (Déjean et al., 2004).

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Standardization is increasingly recognized as a form of regulation (Brunsson & Jacobsson, 2000) but little is known about the ways in which the regulatory power of standards is created and maintained over time. What is missing from prior research is a dynamic view of standardization as a process that relies on the continuous actions of various organizations and actors, and the recognition that some of these actions may have unintended consequences and results (Selznick, 1949). In addition, most studies of standardization lack an account of the dynamic interplay between the micro-level activities of the various sets of actors involved in standardization. This oversight can partly be explained by the prevalent focus on the outcomes of standardization in these studies, which often consider the internal activities of standard making organizations as ‘taken-for-granted’ (Seidl, 2007). However, as this paper shows, these activities play an important role in the maintenance of the regulatory power of standards.

This paper opens the ‘black box’ of standardization (Gilbert et al., 2011) in studying the creation and maintenance of the FTSE4Good index, a responsible investment (RI) index created in 2001. Over time the index has become seen as a de facto standard for good corporate social responsibility practices by included companies. The index is part of the structure of international accountability standards that have emerged in the corporate social responsibility field (Waddock, 2008), which are defined as ‘voluntary predefined rules, procedures, and methods to systematically assess, measure, audit and/or communicate the social and environmental behavior and/or performance of firms’ (Gilbert et al., 2011, p. 24).

Our analysis relies on interviews and unique access to archival data for exploring how various activities are combined and sustained over time by FTSE4Good actors, companies and third parties. We theorize standardization work as the institutional work (Lawrence & Suddaby, 2006) that needs to be undertaken to develop and maintain the regulatory power of standards. We found three types of work – *calculative framing*, *engaging* and *valorizing* – that were deployed by different actors at various points in time to design and legitimize the standard, and to monitor the behavior of its adopters. Finally, our findings show how unintended effects of standardization are recaptured by the standard making organization as the bar for inclusion in the index is continuously raised, in order to influence the responsible behavior of the included companies.

In approaching standardization as a product of institutional work, our paper makes three key theoretical contributions to the study of the dynamics of standardization. First, we show that standardization is a much more dynamic activity involving a greater variety of work than is generally understood. Specifically, we conceptualize standardization as a *continuous process* which is permanently supported by a set of micro-activities. This enables us to explore the work that underpins effective standardization. We show that the regulatory power of standards does not appear out of nowhere, but results from the institutional work undertaken by various actors.

Second, our study reveals the *highly participatory activity* that underpins standardization, as the work involves not simply the standard makers but also the standard users and third parties. Standardization as a mode of regulation and coordination (Brunsson & Jacobsson, 2000) may be comparatively flexible and open to change, but this flexibility also requires constant work from a diverse group of actors to maintain the legitimacy of the standard in a highly dynamic environment.

Third, in approaching standardization as a product of institutional work, the paper refines the conceptualization of institutional work itself by showing how different types of work add up to more than the sum of their parts, as the standard takes on ‘a life of its own’ (Selznick, 1949). Viewing standardization as a product of institutional work highlights how *unintended consequences* can be recaptured to strengthen the standard in counter-intuitive ways. These dynamics of standardization suggest that organizations can skillfully combine several types of work to create and maintain the regulatory power of standards in a continuous cycle.

Organizational and Institutional Perspectives on Standard Production

Although standards form a prominent part of modern organizational life, their study as a product of organizational activities is still in its infancy (Brunsson & Jacobsson, 2000; Seidl, 2007). Recent work highlights the complexity of standard making as a social act that involves various stakeholders (Timmermans & Epstein, 2010), whether for ISO norms (Tamm Hallström, 2000), multi-stakeholder standards (Fransen & Kolk, 2007), or the development of sustainable reporting standards such as the Global Reporting Initiative (Etzion & Ferraro, 2010).

Standardization is increasingly recognized as a form of regulation and standards are regarded as 'instruments of control' (Brunsson & Jacobsson, 2000, p. 1). Standards facilitate coordination by defining the appropriate attributes of the standardized subject, rendering these aspects visible to external inspection and opening up the possibility of sanctioning non-compliance (Brunsson & Jacobsson, 2000; Power, 1997). In doing so, standards provide their creators with a form of power that is exerted through seemingly disinterested routines and practices (Déjean et al., 2004).

Public metrics, such as indices or rankings, share the ability of standards to 'govern at a distance' by making organizational performance visible and auditable (Power, 1997) and exert a powerful discipline (Foucault, 1970) on organizational behavior (Sauder & Espeland, 2009). A stark example illustrating the regulatory power of standards is provided by Espeland and Sauder's studies of the *U.S. News & World Report* rankings of law schools. They show how this newly introduced ranking came to be perceived as a legitimate standard for quality legal education, first by external stakeholders and consequently by law school administrators (Sauder, 2008). The rankings have created a 'standardized norm of excellence' that significantly influences the strategies and perceptions of all actors involved in law education (Sauder & Espeland, 2009, p. 74). Often, organizations are induced to adjust their behavior in line with ranking criteria in order to achieve a favorable ranking (Sauder & Espeland, 2009).

Although the regulatory power of standards is widely acknowledged, the conditions enabling the construction and maintenance of this regulatory power over time have been overlooked in the literature. Missing from prior research is a dynamic account of standardization as a continuous process intended to enhance the standard's regulatory power. Specifically, little attention has been given to the purposive activities that underlie the process of standard making, and the recapturing of the unintended consequences of those activities through successive modifications. In addition, when researchers study standardization at the organizational level, they do so mainly by considering the relationships between the standard promoter and its external stakeholders, an approach which tends to overlook the intra-organizational making of the standard and its impact on the search for external legitimacy (Déjean et al., 2004; Etzion & Ferraro, 2010). The activities *within* the standard making organizations are usually not considered as these organizations tend to be treated as a 'black box' in these studies (Gilbert et al., 2011).

In order to uncover the underlying activities that sustain standards' regulatory power, we need first to highlight the key processes that enhance a standard's regulatory power over time. This can be done by analyzing the properties of standards as they have been defined in prior theory. Table 1 provides an overview of commonly used definitions of standards, both in general and as applied to the area of Corporate Social Responsibility (CSR).

We identify three dimensions that contribute to the regulatory capacity of standards, which feature in the various definitions provided in the literature (see Table 1): *standard design*, *legitimation* and *monitoring*. Standard design involves the definition of membership rules, which is often achieved through identification of practices common amongst potential members (Ahrne et al.,

Table 1. Identifying core elements of standards and standardization

Definitions of standards and standardization	Dimensions of standardization		
	DESIGN	LEGITIMACY	MONITORING
	Definition of membership rules through identification of common practices	Legitimizing through knowledge creation and collaboration with experts	Rule enforcement through monitoring of behavior of standard adopters
'Standards constitute rules about what those who adopt them should do' (Brunsson & Jacobsson, 2000, p. 1).	X		X
'Standardization as a process involves constructing uniformities across time and space, through the generation of agreed-upon rules' (Bowker & Star 1999; Timmermans & Epstein, 2010)	X		X
'Standards involve rules; membership; hierarchical authority or authority based on third party alliance or expertise; systems of monitoring and sanctions' (Ahrne et al., 2007).	X	X	X
'Standards influence users by virtue of the expertise on which they are based and because of their enforcement by public and private actors' (Kerwer, 2005).		X	X
'International accountability standards are voluntary predefined rules, procedures, and methods to systematically assess, measure, audit and/or communicate the social and environmental behavior and/or performance of firms' (Gilbert et al., 2011).	X		X

2007, Bowker & Star, 1999). Standard legitimation usually involves knowledge creation and collaboration with third party experts (Brunsson & Jacobsson, 2000; Kerwer, 2005). Lastly, standard monitoring is used to effectively control organizational behavior (Ahrne et al., 2007, Gilbert et al., 2011). These three dimensions can be conceptualized as three processes whereby the standard acquires its regulatory capacity.

Although these processes of standardization can be conceptually isolated, it should be noted that they are not mutually exclusive and reinforce each other whilst enhancing the standard's regulatory

capacity. For example, a collaborative standard design process that includes industry experts is likely to be more practical as well as more legitimate with standard adopters (Kerwer, 2005). To secure legitimacy, the standard may have to be reworked in response to new expectations and needs from the ‘standardized’ organizations within the field (Tamm Hallström, 2000). Yet, such changes in standard content are risky. An inappropriate change can undermine the standard maker’s reputation, and subsequently the legitimacy of the standard it promotes (Durand & McGuire, 2005, pp. 167–9). Creating a new standard thus involves successive adjustments to the reciprocal expectations between standard maker and standard adopters, a process which has been described as a form of ‘standard co-construction’ (Durand & McGuire, 2005).

In this paper our aim is to provide a dynamic account of standardization by exploring the micro-level activities that are needed to create the three dimensions which support the regulatory power of standards. To do so, we rely on the institutional work concept.

Standardization as a Product of Institutional Work

Studies of institutional work examine how institutions are created, maintained or disrupted by the purposive and practical actions of individuals and organizations (Lawrence et al., 2009). Whilst previous studies have emphasized the synergies between standardization processes and institutional perspectives on organizational behavior (e.g. Lawrence, 1999; Olshan, 1993), the concept of institutional work introduces a perspective on standard making that is infused with agency. This makes it a fitting perspective to examine the micro-activities involved in the organizational production of a new standard. It allows us to see standardization as a process involving multiple parties in constant negotiation, and to notice that both the creation and implementation of standards require constant work (Lawrence et al., 2011; Timmermans & Epstein, 2010). Agency in standardization processes is likely to be distributed amongst various actors, rendering it difficult to coordinate the process, and requiring constant learning and modification (Lawrence et al., 2011).

Our focus on practices rather than accomplishments also enables us to identify the unintended consequences of institutional work (Lawrence et al., 2009, 2011). As Selznick (1949) noted, institutions can acquire a ‘life of their own’ if they are co-opted by agents with particular commitments that go beyond the original technical requirements endorsed by the institution. The unintended or unanticipated consequences of cooptation have not received much attention by scholars of institutional change, nor do they feature prominently in studies of standardization (but see Sahlin-Andersson, 2000). We argue that examining unintended consequences of the work involved with the process of cooptation and the infusion of value beyond technical requirements (Selznick, 1949; 1957, p. 17) could tell us more about ‘what works’ in successful standardization. It shifts the focus away from the activities of the standard makers to also encompass the work of standard adopters and third parties in standardization.

According to Perkmann and Spicer (2008, p. 828), standardization as institutional work can be seen purely as technical activity, and is mainly concerned with ambiguity reduction and routine implementation. However, the enhancement of a standard’s regulatory capacity through design, legitimation and monitoring processes is likely to involve substantive work beyond the mere development of technical solutions. Extending prior literature on standard production, we theorize that standardization work needs various types of institutional work in order to develop, maintain and enhance the regulatory capacity of the standard. For example Garud, Jain and Kumaraswamy (2002) show that different political and social skills are needed for the different stages of creation and maintenance of standards, and these skills not always easy to combine (Garud et al., 2002).

Although not recognized as such in the repertoire of institutional work as set out by Lawrence and Suddaby (2006), symbolic work, including the use of artifacts associated with standard adoption, is also likely to play an important role in institutionalization (Zilber, 2006). The display of artifacts can provide a symbolic resource for companies to provide legitimacy to their practices (Glynn & Abzug, 2002). The use and production of artifacts not only reinforce standardization but can also extend, adapt or modify institutionalized understandings embedded in the standard (Kaghan & Lounsbury, 2006).

We thus conceptualize standardization as the product of the institutional work that needs to be undertaken to develop and maintain the regulatory power of the standard. We investigate empirically the institutional work that relates to the standard's design, legitimation and monitoring. We focus on the case of the FTSE4Good index, an RI index that has emerged as a standard for evaluating socially responsible corporate behavior. The next section describes the case context and research methods.

Case Context and Methods

Responsible investment and the FTSE4Good index

Our study focuses on the development of a standard in the emerging field of RI,¹ which refers to investments made based on considerations of financial returns together with considerations of the ethical, social, governance and environmental impacts or behaviors of the companies in the investment portfolio (Kurtz, 2008). Although it represents a relatively small proportion of investments in the US and in Europe (an estimated 12% and 10% respectively of total assets under management in these markets were invested in some form of RI in 2010), its growth has been sustained over the last 15 years and has influenced mainstream investment through signaling the significance of social and environmental risk (see Eurosif, 2010; SIF, 2010). Central to the development of RI markets is the existence of metrics which allow actors to include the consideration of the extra-financial 'quality' of corporate stocks in their investment choice (Déjean et al., 2004). RI indices, like other equity market indices, can be used by investors to compare the performance of responsible companies against the broader stock market, as a basis for creating funds and investment products such as derivatives, and to facilitate access to the capital of responsible investors (Rivoli, 2003).

Although FTSE4Good was primarily designed as a financial index, it became a de facto standard within the RI field and thus constitutes an interesting case of standard emergence. First, from an analytical viewpoint the FTSE4Good index can be approached as a standard according to most of the definitions reviewed in Table 1 as it involves the design of membership rules for inclusion and exclusion, the development of expertise in relation to criteria setting, and monitoring of the behavior of included corporations (Ahrne et al., 2007; Brunsson & Jacobsson, 2000; Krewer, 2005).

Second, actors from the field were quick to treat this index as a standard and the FTSE4Good index is commonly referred to as a standard in the vocabulary of CSR actors more widely, as illustrated by the following quotes:

This is the sort of low-level hurdle that has attracted the plus 'Ethics Lite'. But in fact this is precisely what the FTSE4Good index is supposed to be – a basic *standard* that most companies can meet with a little effort, and which moves those companies in the right direction. (Cowe, *Ethical Corporation*, 2002, emphasis added)

We help companies and organizations think about what good practice looks like. And so within that we would look at FTSE4Good and also the Dow Jones Sustainability Index, to be able to present clients

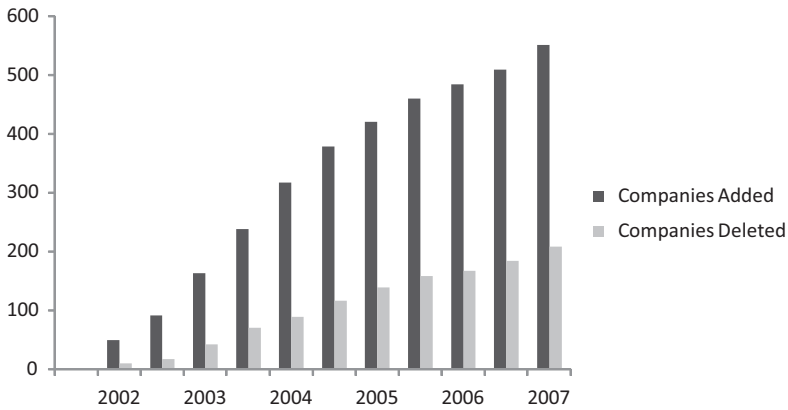


Figure 1. Number of companies included and excluded in the FTSE4Good Index
Source: FTSE

with the information to say: well this is what internationally recognized *standards* and indices think good looks like, and this is where you can place yourself as a result. (Consultant B, interview, emphasis added)

Third, the FTSE4Good index can be regarded as a successful attempt to establish a standard amongst eligible companies. Over the years, more companies have been added to the index than have been deleted, and even as the inclusion criteria have been strengthened, the number of companies meeting the criteria has increased since its launch, as can be seen in Figure 1.

The high profile of the index is also reflected in the intensity of media discourse focusing on the FTSE4Good index. It received coverage in over 200 newspaper articles in the year of its launch. The UK media, especially, highlighted the potential impact that an RI index launched by a reputable organization such as FTSE could make to the growth of RI in mainstream financial markets (Farrow, 2001). The creation of the FTSE4Good index series can be seen as an extension of the general FTSE brand into the new RI market. The concept of institutional work is particularly suited to study the legitimization process that takes place when an existing standard making organization wants to extend its activities to a new field (Durand & McGuire, 2005).

Fourth, the FTSE4Good index presents an ideal case to observe the emergence of a standard and is a window on standardization ‘in the making’ due to its objective to continuously develop new inclusion criteria to cover an increasingly wide array of aspects related to responsible corporate behavior (FTSE, 2006, p. 6). This effectively creates a moving target for included companies. It also means the index is almost constantly in flux, which provides a unique opportunity to study the dynamics of standardization in practice.

Data Collection

The case study relies on unique access to multiple data sources: interview data, longitudinal *in situ* observations, and archival material from the FTSE RI team. This has been completed with a systematic review of secondary data (newspaper reports). Appendix 1 lists all data sources.

Interviews. The author who conducted the interviews had the opportunity to visit the FTSE premises several times a year in order to conduct *in vivo* observations of meetings. This person

spent around 12 weeks at the FTSE Group over a period of 3 years and had many informal conversations with the FTSE RI team members that confirmed many of the insights of the interviews and helped weigh the value of interviews and archival data during the data coding process. Three categories of informants have been interviewed: those involved with day-to-day management and governance of the index; managers of companies included in the index; and external CSR consultants. The RI team responsible for overseeing the day-to-day management of the index consisted of 3 to 6 people in the period studied. All the members of the FTSE RI team were interviewed concerning their responsibilities, which ranged from overseeing the strategic direction of the index to daily engagement with included companies. We also conducted interviews with four members of the Policy Committee which oversees the governance of the index. These interviews were exploratory in nature, and focused on the methodology of the index and the work involved in developing and implementing new inclusion criteria. Follow-up interviews were conducted after initial analysis of main events (see section on Data analysis) and drafts of the paper were reviewed in an email exchange with the first author and members of the FTSE RI team.

Analysis of the interviews with FTSE staff highlighted the role of external consultancy in enlisting companies onto the index, and we thus proceeded to interview CSR consultants in order to examine this role further. Five UK-based CSR consultants were interviewed who had been selected from an attendance list for a FTSE workshop aimed at UK CSR consultancies.

Finally, we conducted interviews with 20 corporate managers of companies that were, or had been, included in the FTSE4Good index in the period 2001–7. These managers had responsibility for interaction with the FTSE RI team and were asked about their motivations for inclusion in the index. This sample was selected to reflect the range of industry sectors and geographical regions represented in the index. As a result five UK-based, five Europe-based, five US-based and five Australasia-based companies were selected. All interviews, lasting an hour on average, were recorded and transcribed. In combining the number of insiders and outsiders, a total of 35 interviews were conducted.

Archival material. Three categories of archival material were consulted. We reviewed the three progress reports published by FTSE, in order to trace the activities and successes reported publicly by FTSE. We reviewed the FTSE4Good website information, which names the companies that have been added and deleted from the index from 2002 onwards. In addition to this publicly available information, we had access to more private material, including the minutes and papers of the Policy Committee meetings. Meeting papers proposing changes to the index criteria and its constituents are prepared by the RI team for assessment by the Policy Committee and voted upon in the bi-annual index review meetings. We studied materials covering the period from 2001 through to the end of 2007 (totaling over 600 pages). The Policy Committee meetings were observed from 2008 to 2011, to contextualize the archival material.

Secondary data. Secondary longitudinal data were gathered in the form of newspaper articles. We used the Nexis database to retrieve the articles mentioning ‘FTSE4Good’ over the period 2001–7 from major English language news sources.² We performed separate searches for the *Financial Times (FT)*, as a mainstream financial market publication, and *Ethical Corporation*, one of the main UK CSR publications, to compare and contrast their coverage of the index over the 2001–7 period. As can be expected, the coverage in these two publications differed, with *Ethical Corporation* reports focusing on the company perspective for engaging in the FTSE4Good index and the *FT* mainly focusing on impact of the index on the RI market.

Data Analysis

The initial stages of analysis focused on the FTSE archival data to derive a narrative of main events, such as the introduction of new inclusion criteria, hiring of additional staff, or changes in regulatory structures governing the index. The narrative was used to make sense of the overall development of the index, and as such served both as a data organization device and as a validation tool (Langley, 1999). The narrative was verified in a number of follow-up interviews with FTSE staff members, who provided additional information that strengthened the narrative, but did not introduce major changes.

Next, the narrative served as an organization device in coding the interview data. Working iteratively between the data and the literature on institutional work (e.g. Lawrence & Suddaby, 2006), we coded for the various activities undertaken by key actors. Data segments describing institutional work activities were extracted from the interview transcripts and archival data using N-vivo 8 qualitative data analysis software.

In line with prior empirical studies using the concept of institutional work (e.g. Tracey et al., 2011), we used a process of ‘constant comparison’ (Charmaz, 2006; Glaser & Strauss, 1967) between theory and data. The first order constructs were derived from prior literatures and are defined in Table 2. We induced from this process three constructs that captured a homogenous cluster of activities in relation to standardization. Table 2 summarizes this process in showing how the second order constructs were built out of the coded activities from the first order constructs. Tables 3, 4 and 5 provide illustrative data segments for each of the three constructs we identified.

The first construct of *calculative framing* captures the continuous activities related to measuring CSR and defining the inclusion criteria. The second construct, *engaging*, relates to activities undertaken to ensure eligible companies and third parties are participating in the index inclusion process. The third construct, *valorizing*, refers to activities that support an ‘infusion of normative value’ (Selznick, 1957) beyond technical requirements.

The emerging categories were further verified by an analysis of professional media. Specifically we wanted to see whether and how the emerging constructs were supported in both mainstream financial and specialized CSR forums. To that extent we analyzed reports on the FTSE4Good index in the *Financial Times* and *Ethical Corporation*.

In the next section we will describe the institutional work of calculative framing, engaging and valorizing. The subsequent section describes how that work produces and maintains the regulatory power of the index in a dynamic way.

Institutional Work for Standardization

Calculative framing

The work of *calculative framing* involves defining and calculating the rules that frame the practices of eligible members. We borrow the term ‘calculative frame’ from Beunza and Garud (2007), who use it to identify material and cognitive elements in the frame-making of securities analysts in financial markets (Beunza & Garud, 2007, p. 26). According to Beunza and Garud (2007), calculative frames encompass the categories, metrics and analogies used to sustain actors’ calculative practices. In our case, we identified four types of activities that contribute to the institutional work of calculative framing: *commensurating*, *defining*, *mimicking* and *analogical work*. Table 3 provides illustrations of these activities which we analyze below.

The first step entails defining responsible business practices and commensurating the wide range of issue areas addressed by companies under this heading into a systematic standard of

Table 2. Process of constructs coding, identification and refinement

First order construct	First order construct definition and conceptual sources	Main activities observed at the micro-level for first order construct	Main actors involved	Second order construct and definition
COMMENSURATING	Transforming different qualities into a common metric (Espeland & Stevens, 1998)	<ul style="list-style-type: none"> Researching CSR performance of eligible companies Categorizing companies in industry sectors according to risk factors 	ERIS FTSE RI team	CALCULATIVE FRAMING Creation and calculation of the rules that frame the practices of adopters
DEFINING	Constructing a rule system that confers membership and status (Lawrence & Suddaby, 2006)	<ul style="list-style-type: none"> Defining inclusion thresholds and criteria Publicly naming included and excluded companies 	FTSE RI team	
MIMICKING	Imitating existing practices or templates in order to legitimize new practices or organizational forms (Lawrence & Suddaby, 2006)	<ul style="list-style-type: none"> Selecting eligible universe of listed companies Defining the technical rules regarding index calculation Ensuring where possible stability of index members over time 	FTSE RI team Policy Committee	
ANALOGICAL WORK	Directing attention to incongruence between the new emerging practice and its analogical source, in order to facilitate the acceptance of innovative practices (Etzion & Ferraro, 2010)	<ul style="list-style-type: none"> Including RI and CSR experts in index governance committee Establishment RI team with CSR experts Defining the 'Roadmap' for the introduction of additional inclusion criteria over time 	FTSE RI team Policy Committee	
CONVENING	Creating collaborative arrangements in order to solve a particular problem (Dorado, 2005)	<ul style="list-style-type: none"> Consultation of experts and companies in criteria development process Designing a process to deal with controversial corporate behavior highlighted by external parties 	FTSE RI team NGOs / Experts Consultants Companies	ENGAGING Creation of knowledge and expertise needed to legitimate and monitor standard adoption

Table 2. (Continued)

First order construct	First order construct definition and conceptual sources	Main activities observed at the micro-level for first order construct	Main actors involved	Second order construct and definition
EDUCATING	Providing standard adopters with the knowledge to comply with the standard (Brunsson & Jacobsson, 2000)	<ul style="list-style-type: none"> • Providing information and advice about index criteria • 'Good cop/bad cop' routine in dialogue with companies • Engaging with companies under threat of exclusion 	Consultants FTSE RI team Companies	
SYMBOLIC WORK	The production and use of artefacts to underline symbolic value of membership conferred by the standard (Glynn & Abzug, 2002)	<ul style="list-style-type: none"> • Providing permission for logo display • Sending out annual certificates of inclusion • Display of FTSE4Good logo in corporate communication 	FTSE RI team Companies	VALORIZING Infusion of values beyond technical requirements of the standard
SHIFTING NORMATIVE ASSOCIATIONS	Re-making the connections between sets of practices and the moral and cultural foundations for those practices (Lawrence & Suddaby, 2006)	<ul style="list-style-type: none"> • Appealing the inclusion of individual companies in the index • Highlighting RI indices as benchmarks for CSR 	NGOs Experts Consultants	

Table 3. Illustrations of coding for calculative framing work

Calculative framing	Illustrative quotes
COMMENSURATING	<p>'The FTSE4Good indices bring different perspectives on CSR and SRI together to spotlight those companies with good records in this respect, and measure their share price performance.' (Minutes Policy Committee meeting 2001)</p> <p>'The new human rights criteria were announced in April 2003 and focused initially on the two highest risk groups: the global resource sector (GRS), which comprises upstream oil, gas and mining companies, and companies with a significant presence in countries of major human rights concern.' (FTSE report 2004)</p>
DEFINING	<p>'Food retailer Tesco and the Royal Bank of Scotland were this week left desperately fighting to maintain their credentials as socially responsible companies after they failed to make it onto a stock market index of ethical organisations. Both companies said they were in talks to see why they had been left off the [FTSE4Good].' (<i>Guardian</i>, 14 July 2001)</p> <p>'The standards we have set are not best practice, they are not leading edge, they are challenging but they are very achievable for companies.' (FTSE staff member C)</p>
MIMICKING	<p>'When FTSE4Good was launched last July environmental criteria were included but the system was less detailed. FTSE said at the time that it would review the criteria for inclusion annually, gradually raising the hurdle. Mark Makepeace, chief executive of FTSE, said he expected only a handful of companies would be dropped because of the changes. "FTSE4Good is first of all an index, so we want to keep some stability," he said. "We are not trying to name and shame."' (<i>Financial Times</i>, 22 May 2002)</p> <p>'The objectives were really to fill that gap in the market. There was no widely recognised benchmark for measuring companies' corporate social responsibility practices and that's what we wanted to do, is to provide that, that product.' (FTSE staff member A)</p>
ANALOGICAL WORK	<p>'The launch of the index certainly meant that there was a huge amount of media interest in it, a lot of NGOs saying "why is that company in the index?", or a company saying "why aren't we included in the index?". FTSE didn't really have the expertise on it, there was the committee and the researchers, but FTSE needed to take a position on it, and so we needed to set up a team.' (FTSE staff member B)</p> <p>'Now that the initial criteria amendments committed to at the launch of the index series are almost complete, a roadmap detailing the next tranche of developments has been created. This roadmap is aligned to the ongoing evolution of responsible investment.' (FTSE Report, 2006)</p>

measurement. Commensuration, or the transformation of different qualities into a common metric, simplifies information and renders what is being measured relative and comparable (Espeland & Stevens, 1998; Power, 1997). FTSE enlists the services of EIRIS, an ethical investment research provider, to research the CSR performance of major listed companies worldwide. Companies are categorized on the basis of their exposure to issues such as human rights violations, and their impact on the environment and stakeholders. The aim of the work is to set 'challenging but achievable' criteria at a level that would ensure 50 percent of eligible listed companies could be included in the index, whilst also representing good CSR practice. In 2002 the Policy Committee defined an

Table 4. Illustrations of coding for engaging work

Engaging	Illustrative quote
CONVENING	<p>'The FTSE4Good Climate Change Advisory Committee was established in March 2006 consisting of the Climate Group, Carbon Trust, Institutional Investors Group on Climate Change, Forum for the Future and World Wildlife Fund (WWF). The Group met several times to develop the proposed criteria, and FTSE hosted Focus Groups, bringing in companies and experts to comment on the draft criteria.' (FTSE Report, 2006)</p> <p>'We like to base the criteria as much as possible on existing standards. We are not a campaigner, so we need to link into things that are out there.' (FTSE staff member F)</p>
EDUCATING	<p>'We do advise our clients, if they are not in it, why they are not in it. And what changes they need to make to pass the criteria. Because a lot of them find the criteria quite opaque, depending on their understanding and their time to get to grips with them. Because I do understand, having worked on them, and I have the time to read all the updates and participate in the consultation process, I can understand and explain in simple terms: this is what you need to do.' (Consultant B)</p> <p>'[FTSE] sent us a lot of the things: that we were actually in FTSE4Good the index, but unless we sort of redeveloped the reporting, that they were going to throw us out of it. So we worked with them, and actually that helped push some of our reporting. It was a good thing.' (HS&E Manager Company 27)</p>

Table 5. Illustration of coding for valorizing work

Valorizing	Illustrative quote
SYMBOLIC WORK	<p>'[The logo] would be on our website all the time and also Dow Jones [Sustainability Index logo]. We also put it in standard presentations on the company to groups, whoever they may be, university lectures, if we're doing investor road shows, we also highlight it there.' (CSR Manager Company 16)</p> <p>'It's not really an award but it's just a certificate of membership but it's also like you did well if you get this certificate, so that's a very good thing I think.' (CSR Director Company 19)</p>
SHIFTING NORMATIVE ASSOCIATIONS	<p>'I mean the usage was originally investors, it was targeted at investors, but its evolved to be used by companies as a framework for developing corporate responsibility programmes internally, as a benchmark for companies themselves to be, you know to achieve compliance with the index criteria.' (FTSE RI team Director)</p> <p>'The FTSE4Good index was initially criticized by some for being too easy for companies to get into, but FTSE have shown that they intend to tighten the rules, and the index demonstrated its teeth and commitment to improvement by the removal of some companies a few months ago due to their environmental non-performance.' (<i>Ethical Corporation</i>, 9 June 2003)</p>

ambitious agenda for criteria development that would strengthen the environmental and human rights criteria and would see the introduction of criteria on labor standards and countering bribery within the space of five years. FTSE staff members were confident that the index reflected the prominence given to CSR issues by companies as evidenced by the minutes of the first Policy Committee meeting in 2001:

Debates about responsibilities are gradually being distilled into agendas for business, and those agendas are being translated into expectations for action. ... The FTSE4Good indices aim to express consensus views on these matters. (minutes from the 2001 Policy Committee meeting)

The defining and commensurating work undertaken by FTSE, supported by research provider EIRIS, translates abstract international standards, such as the International Labour Organisation (ILO) standards, into detailed corporate responsibility standards that set specific indicators for corporate policies, management systems and reporting. International standards are often highly formalized and require re-contextualization (Botzem & Quack, 2006). Discourse and rhetoric play an important role in this process of justification of the standard (Patriotta et al., 2011). The rhetorical strategies that were employed by FTSE aimed to reflect current debates on CSR, and connected these to mainstream financial markets, creating cognitive legitimacy for the 'appropriateness' of the index and the wider CSR agenda as a whole (Green, 2004; Suddaby & Greenwood, 2005).

Mimicking and analogical work further contribute to this cognitive legitimacy. As the main purpose of the index in the early years was to provide institutional investors with a useful benchmark, FTSE set out to replicate regular financial indices. Accordingly, the basic principles of the index, including the governance structure, rules regarding liquidity of the equities and market capitalization, were applied akin to FTSE's 'traditional' financial indices. This replication of templates already legitimized in the financial market confirms prior description of emerging institutions in the RI field. For instance, Déjean et al. (2004) show how social rating agencies that tried to legitimize RI practices in the French market designed measurement tools that were closely aligned to mainstream financial logics of analysis and quantification (Déjean et al., 2004). Mimicking of pre-existing templates in the organizational field renders the new practices and standards that are promoted more understandable (Lawrence & Suddaby, 2006).

Successful mimicry is often combined with analogical work that highlights conformity to existing templates but, over time, directs attention to incongruence between the new emerging practice and its analogical source, in order to facilitate the acceptance of innovative practices (Etzion & Ferraro, 2010). FTSE's analogical work aimed to identify the innovations that were needed to create a credible index in the field of RI. For example, rather than being composed of investors and financial experts only, the FTSE4Good Policy Committee members include representatives of NGOs and CSR experts. Whilst the main purpose of the index remained to provide a metric for RI, FTSE used its profile in the financial market to 'contribute to the debate about corporate social responsibility' (*Financial Times*, 27 April 2001). Although not without criticism from some NGOs claiming the inclusion criteria were too weak, FTSE's expertise as an index provider was transferred to a metric in the field of RI and CSR:

Institutions which want to make sure their investments are not going to attract headlines accusing them of destroying the rainforest or supporting oppressive regimes can now turn to FTSE4Good. The series of international indices, launched this week, provide benchmarks against which institutions can measure and market the performance of their ethical funds. But FTSE ... hopes that they will have a wider effect than that. ... FTSE calls the new indices 'an aspirational framework for change' which it hopes will affect the way companies behave. (*Financial Times*, 3 March 2001)

Research on the history of statistics has shown that numbers are often seen as more authoritative than qualitative information (Desrosières, 1998; Porter, 1995). This was certainly recognized by companies looking for an independent and credible benchmark to communicate their CSR efforts. As FTSE proceeded to publicly name companies included in the index in 2001, the index proved

to be an instant hit with companies, especially in the UK. FTSE received numerous requests from companies that wanted to be included. A Policy Committee member remembers:

[Company X] made very quick strides to make sure it was in the index, the first time afterwards. But it also was extremely professional. I remember them because they were the first company ever to contact me directly. The person that was responsible for CSR in the corporate headquarters called me and asked: why are we not in the index?' (Policy Committee member B)

Based on our analysis, we argue that calculative framing constitutes an important part of the design of standards, as it encompasses the activities needed to create and calculate the rules that frame the practices of eligible members. Rather than focusing on technical activities of rule setting only (Perkmann & Spicer, 2007), our analysis highlights the material and cognitive aspects that go into calculative framing work (see also Tables 2 and 3). This work not only contributes to the design of standards but also imbues legitimacy by highlighting resemblances with existing templates (Elsbach, 1994; Suddaby & Greenwood, 2005). However, as the next section will show, additional work is needed to strengthen the legitimacy of the newly designed standard.

Engaging

Standards created by private organizations lack formal authority, and their legitimacy often relies on perceived expertise and knowledge of the standard maker in the given issue area (Ahrne et al., 2007). We summarize *engaging* as work that serves to create the knowledge and expertise needed to legitimate the standard and monitor the behavior of its adopters. We identified two types of engaging work: convening and educating. Table 4 provides illustrative quotes about these two types of work.

Convening refers to the creation of collaborative arrangements in order to solve a particular problem (Dorado, 2005). In our context convening work aims to create loose alliances with external third party experts. In order to achieve its objective to raise the responsible business bar by introducing new criteria, FTSE actors increasingly consulted third party experts in the criteria development process. The criteria were intended to build on international standards and regulations, and on work undertaken by NGOs, such as Transparency International, which developed guidelines regarding the issues of bribery and corruption. Convening involves convincing potential beneficiaries of collaboration (Dorado, 2005), and the external parties in the criteria development process needed to be engaged to work with FTSE. In an email exchange between the first author and the FTSE4Good team member in charge of this process, it is described as follows:

When we develop new criteria we work with experts to identify the key issues that companies should address. This is an iterative process as the experts get to know and understand FTSE4Good. A key understanding we build with them is that FTSE4Good criteria thresholds represent good practice for many companies rather than best practice for a few. The criteria need to be challenging but achievable, and that companies should not be deleted from the index for not meeting one very aspirational criteria indicator alone. (email communication, FTSE team member F)

Educating work serves to provide companies with the knowledge to comply with the index inclusion criteria. When new environmental criteria were introduced in 2003, over half of the companies of the index were threatened with exclusion for not meeting the new criteria. FTSE created a dedicated RI team including additional staff members with experience in CSR issues. Their task

is to identify which companies are willing to adapt their management systems and policies in order to meet the revised criteria and remain in the index. Drawing on the research undertaken by EIRIS, the RI team warns companies that do not meet the continuously changing inclusion criteria. The threat of exclusion presents a powerful incentive to cooperate with the RI team as highlighted by one manager who went through the experience:

When we received this note that said unless you do something you could be in danger of falling out of the index that certainly made people think do we want [that]? It would be a big concern if you fell out because you would have to justify why you were doing that. I think you would just be expected to be there and to be in it. (VP CR, company 30)

The FTSE RI team also offers the opportunity to discuss with companies to explain the requirements and provide advice on implementation of new CSR policies. Companies are given an extension of the deadline if they are in dialogue with the RI team and if they can show that they are working towards, and committed to, meeting the criteria. One of the strategies in the educating work is the 'good cop/bad cop' routine as one FTSE RI team member calls it: whilst research agency EIRIS delivers a strict 'yes or no' verdict on whether or not a company meets the criteria, the FTSE RI team provides further information and guidance to help managers understand what they need to do to meet the criteria.

The engaging work thus provides knowledge to companies by providing information on the criteria and deadlines to managers to support them in meeting the inclusion criteria. CSR consultants, especially those based in the UK, provide advice to clients on their submission to EIRIS when needed, or help interpret the implications of new criteria, in some cases acting as intermediaries between the company and FTSE RI team. As such they support the educating activities of the FTSE RI team.

The picture then is of the RI team using a variety of strategies to aid standard legitimation. It convenes third party experts to aid the criteria development by infusing expert knowledge into the criteria (Brunsson & Jacobsson, 2000). This expert knowledge is used to actively engage with the FTSE's target audience (Power, 1997). At the same time, the engaging work also monitors the implementation of the standard. The FTSE RI team is able to identify laggard companies and help them implement the practices needed to comply with the criteria, in effect ensuring the enforcement of its rules amongst the included companies.

In sum, the engaging work serves the dual purpose of monitoring the behavior of standard adopters and providing legitimacy to the index as a de facto accreditation standard of good CSR practices. As Durand and McGuire (2005) have shown, in the case of accreditation standards, legitimacy is often co-constructed between the accreditation agency and accredited members in the field (Durand & McGuire, 2005). The next section will show how the index was valorized by its targeted members.

Valorizing

In his classic study of the Tennessee Valley Authority, Selznick shows that organizations may acquire a 'life of their own' as the result of intended or even unintended cooptation by third parties with a strong commitment to or interest in the organizational practices (Selznick, 1949). Over time this cooptation may lead to an infusion of value beyond technical requirements, a process at the heart of any institutionalization process (Selznick, 1957; 1996). This infusion of value, which we capture here under the label 'valorizing', forms an important dynamic in the co-construction of the

legitimacy of the FTSE4Good index. Valorizing work builds on symbolic work engaged in by FTSE and the included companies, and the associated shifts in the normative associations of actors in the field, in relation to the index. Table 5 provides illustrations of these two clusters of activities that we now analyze further.

Symbolic work entails the production and use of artifacts to underline the symbolic value of membership of the index. FTSE has created various artifacts that increase the reputational value of being included in the index. Companies receive an annual certificate of inclusion, and they are allowed to use the FTSE4Good logo in their CSR communications. Index inclusion is used by companies to signal to external stakeholders, such as consumers or investors, that their CSR policies and programs have been found to measure up to an independent standard. Companies often use the logo to report on their membership, or even, as a RI team member recalls:

We have companies asking us if they can put the logo on their letter head, their business card, we had a Japanese company that is engraving it in their corporate headquarters in a big piece of stone! (FTSE staff member D)

Many companies use the artifacts to co-opt the index as a certification of good CSR practice. In their opinion, inclusion provides an independent ‘stamp of approval’ that can be used to communicate CSR efforts to external audiences. This is reinforced by CSR consultants, who would often describe the index criteria to clients as representing the indicators for investor demands on CSR. Managers also use the process of index inclusion to attract the attention of colleagues and senior management to CSR practices within the company. For instance, the indices can be used as an explanation to colleagues as to why they have to collect and monitor vast amounts of information, something which might take up valuable resources. As index inclusion status often forms part of their reporting to senior management, CSR managers can point to the requirements of the RI indices when trying to get CSR initiatives approved.

Despite its popularity amongst companies, the index was not received that enthusiastically by a number of NGOs and CSR experts, who criticized it for setting its standards too low. Although it has never disappeared completely, this criticism diminished when the Policy Committee started the process of introducing stricter inclusion criteria and as it became clear that companies would be deleted for not meeting these enhanced standards (Cowe, 2002). This changing opinion is reflected in the CSR magazine *Ethical Corporation*, which had previously accused the index of supporting an ‘ethics light’ version:

The [FTSE’s] responsible business index was developed in 2001 to identify companies that managed their business risks responsibly. The results were aimed essentially at socially responsible investors but the Index has gained the respect of many for tightening rules for inclusion and is seen as a bellwether for the responsible business movement. (*Ethical Corporation*, 16 January 2005)

Evidence of this shift in normative associations is also found in the activities of NGOs. Recognizing the importance companies attach to their index membership, various groups have started to appeal the inclusion of certain companies with the RI team and Policy Committee as part of their campaigns, through public letters in media outlets and in direct dialogue with FTSE. In response, the RI team has devised a formal process that describes the actions to be taken by the Policy Committee when the inclusion of a company in the FTSE4Good Index is questioned based on a serious allegation of violating international standards. Moreover, the actions of these groups can paradoxically enhance the strength of the standard (Sauder, 2008). After all, by appealing the

inclusion of a 'bad' company, they implicitly recognize the 'good' characteristics of other included companies (Hedmo et al., 2006; Bowker & Starr, 1999) and the index as a metric to identify those companies (Sauder, 2008).

In sum, we found that valorizing work is an essential element of establishing the legitimacy of the index as a de facto standard for CSR practices, which is co-constructed through the work of FTSE actors, companies and third parties (Durand & McGuire, 2005). At the same time it has shifted the normative associations of third parties, who increasingly see it as a standard in the field of CSR. We can now investigate how the three types of standardization work we have theorized – calculative framing, engaging and valorizing – interplay to enhance the standard's regulatory power.

Mobilizing the Standard's Regulatory Power

Standards are instruments of control that can guide the organizational behavior of their target audience (Brunsson & Jacobsson, 2000). The interaction of the calculative framing, engaging and valorizing work by the different parties creates a dynamic that enhances a standard's regulatory power, turning it into an instrument of control. Managers see the criteria of RI indices as indicators of what stakeholders, in particular responsible investors, determine to be important issues which they should address within CSR policies and practices. Often, they keep close track of changes in the questionnaire that is used to measure their CSR performance and try to be informed of imminent changes to criteria:

To know of any changes that are coming up, anything that I might need to be doing this year that I didn't do last year to remain on the index. You know, what I don't want to do is to find out next August that we're not going to be on the index because I could have been doing something now in November of this year that would have been good for us. (HS&E Manager, Company 25)

The reaction of managers to the index requirements and to the RI teams engaging work has resulted in an increase in public disclosure and reporting on CSR practices by the included companies. This often means companies have to collect more internal data on CSR practices in order to prepare for disclosure, and the index criteria thus become incorporated into internal data collection practices. Managers also react to the engagement by (re-)drafting company policies, management systems or reporting in line with the index criteria. Due to the level at which the inclusion criteria for the FTSE4Good index are set, this effect is stronger for those which still have significant strides to make in order to perform well in the indices. As a manager of a 'leading' company in terms of CSR practices puts it:

If I was a smaller business that was earlier in the journey of sustainability and corporate responsibility then potentially I've a lot to gain by being listed and getting my rating in the top quartile. I think once your company has been listed and you're consistently in the top quartile, then it becomes an expectation and it becomes ... but because it's expected that you're in there, as long as you're in there and you're not performing badly, it largely gets ignored. (CSR Manager, Company 22)

Most standardization work simultaneously contributes to standard creation as well as maintenance activities. Mimicking and analogical work both help to design the index and to create legitimizing templates. FTSE convened experts and NGOs to provide expertise in the continuous re-designing of the index inclusion criteria, and this also contributed to the legitimation and

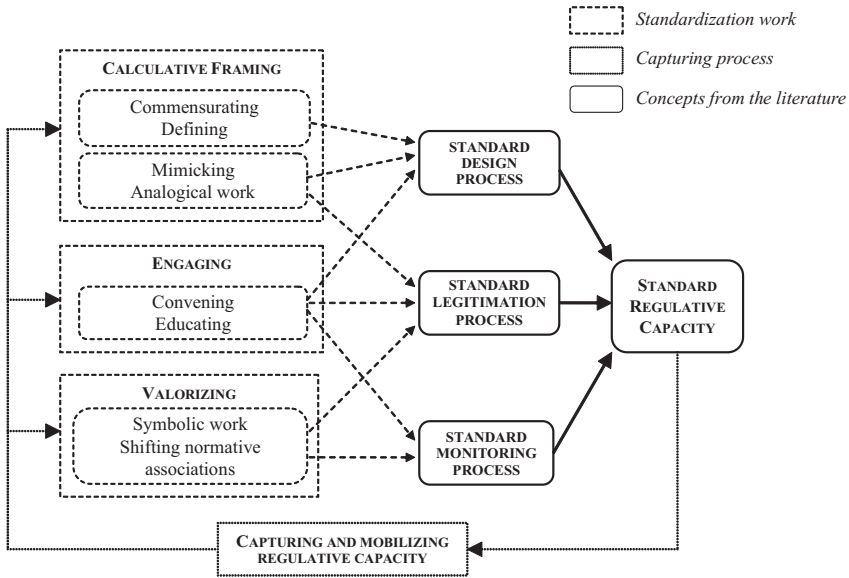


Figure 2. Standardization work framework

monitoring of standard implementation. Likewise valorizing work also serves the dual purpose of legitimizing and monitoring standard implementation, especially through the activities of NGOs. Although their role is not officially designated, NGOs monitor company behavior, highlighting controversial behavior of included companies to the Policy Committee which, on a case-by-case basis, evaluates whether the inclusion criteria need to be adjusted. Figure 2 shows how the standardization work of calculative framing, engaging and valorizing contributes to the three processes of standard design, standard legitimation and standard monitoring and thereby enhance the regulatory power of the standard.

Some of these activities take place sequentially: logically, educating follows the design of new inclusion criteria. Other types of work are constant and require little purposive activity. For example, symbolic work remains prominent throughout the period under study, yet requires little active effort from FTSE actors, once artifacts to sustain the work have been created. The three types of standardization work are recurrent and intertwined with the activities of various actors, creating a dynamic process of standardization that is fluid and ongoing (Tracey et al., 2011).

In this dynamic process of standardization, the different types of work can have unforeseen consequences. The valorizing work by companies and consultants was an initially unanticipated consequence of the design work, which was quickly incorporated into the objectives of the index. Rather than merely reflecting the ‘consensus view’ on current CSR practices, as was the aim of the early work in the design stages, more attention was paid to the delicate balance required in developing inclusion criteria that were ‘challenging but achievable’ to sufficient companies for the index to remain attractive for investors, whilst still representing good CSR practices. This is also recognized by some of the CSR consultants:

When FTSE introduced new criteria, like for countering bribery, that definitely encouraged some companies to look at that area where they hadn’t before to start developing policies in that area. And I think

that the constant tightening of the criteria means that the companies realize that they have to be on their toes, and they can't make a big effort and then stop for 5 years, they have to make a big effort and consider every year how they can do that. (CSR consultant B)

Capturing these unintended consequences can serve to strengthen the regulatory power of the standard. FTSE actors have learned to use the dynamic interplay between the design, legitimation and monitoring to their advantage. As the former head of the RI team recalls:

It wasn't the intention of it originally, it was an investment tool. But it quickly became apparent that it was something that was influencing corporate disclosure initially and then corporate behavior thereafter and that it would maintain that ability to influence companies, by raising the profile of the index and by engaging with companies. But also the general awareness of corporate social responsibility has helped over the last 8 or 9 years to do that. (FTSE staff member A)

As a consequence of the widened objectives of the index, the RI team has invested more resources in the educating work to give the companies an opportunity to remain on the index. This in turn enables FTSE to raise the bar continuously by introducing new and stricter inclusion criteria over time.

To conclude, we argue that the reaction of companies to changes in the inclusion criteria can be likened to a process of reactivity: individuals or organizations change their behavior in reaction to being evaluated, observed or measured (Espeland & Sauder, 2007). The reactivity created by the index is not, however, based solely on commensuration work (Espeland & Sauder, 2007). Our study shows engaging work is also needed on the part of the organization creating the standard, in combination with valorizing work by the target organizations and a wider network of organizations providing normative legitimacy. The combination of these types of standardization work over time has created a metric that is regarded as a standard for CSR practices, which can control organizational behavior by continuously raising the bar for inclusion. Hence, the three types of institutional work for standardization need to be deployed in combination to enhance the regulatory power of the standard. This dynamic process of standardization is never completely finished, as it relies on constant innovation in criteria and the continuous interaction between the different types of work.

Discussion and Conclusion

In this study we advance the theorization of standardization in revealing dimensions of standardization dynamics neglected in prior research. To do so, we approach standardization as a product of institutional work. We analyze and understand which micro-activities go into the design, legitimation and monitoring of standards, and how these activities sustain the standard's regulatory power. Our analysis shows that a range of political, normative, cognitive, and material practices are involved in making the index into a standard for responsible corporate behavior. In theorizing standardization as institutional work, we have identified three categories of activity that correspond to the design, legitimation and monitoring of standards: *calculative framing*, *engaging* and *valorizing*. In the case of valorizing, the work of calculative framing created a metric that was adopted by companies as a benchmark for corporate social responsibility practices. In recurrent cycles of criteria development, the standard maker was able to mobilize its engaging work to further strengthen this effect and to learn how to effectively raise the bar for inclusion in the index, which would encourage companies to change their corporate social responsibility practices in accordance with each set of newly introduced inclusion criteria.

Our study has resulted in a number of insights into standardization as a product of various types of institutional work; the distribution of this work amongst various organizations and actors; and the re-capturing of the effects of standardization by those actors. In the rest of this section, we discuss these insights in more detail and suggest areas for further research.

The continuous work of standardization

The efforts involved in standardizing and making things the ‘same’ is often underestimated (Desrosières, 1998; Porter, 1995), and simply treated as if flowing automatically from the process of standard setting. Our focus on the micro-activities of various groups of actors shows standardization is a reciprocal process with multiple phases (Lounsbury & Crumley, 2007). Some types of institutional work are constant, whilst others change, disappear or re-emerge. Standardization is complex and requires skilful combination of various activities. It results from organizational actors’ capacity to articulate reflexively the relevant types of institutional work. Figure 2 provides an overarching framework of the institutional work of standardization that accounts for this complex process. This empirically grounded theorization of ‘standardization work’ distinguishes three main activities: *calculative framing*, *engaging* and *valorizing*, in addition to a capturing process, which could be used to investigate the functioning and development of other standards.

Our case points both to the work needed to enhance the regulatory power of standards, and the imperative of involving standard adopters in the change process (Durand & McGuire, 2005). Private organizations that set standards need to be careful to avoid legitimacy traps that may arise in situations where current or old rules are enforced whilst new rules are simultaneously being created (Garud et al., 2002). An inclusive approach to continuous standard development helps to avoid a loss of credibility amongst standard adopters (Gilbert et al., 2011). This requires a careful balancing of calculative framing, engaging and valorizing work involved in standardization. The greater the use of different types of institutional work, the greater the likelihood of diffusion and institutionalization (Perkmann & Spicer, 2007).

Standardization thus requires constant work, much of which is invisible to standard adopters (Timmermans & Epstein, 2010). Timmermans and Epstein argue this invisibility of standardization work means change is difficult once the standard is institutionalized (Timmermans & Epstein, 2010, p. 71). When we focus on the interaction between different types of institutional work carried out by various groups of actors, however, it becomes clear that standardization can resemble a ‘process of continuous change’ (Pettigrew et al., 2001) that is never completely finished. This has important implications for the study of evolution in standards. To view standardization as a continuous process means that the different types of institutional work are recursive, each work building on the effects of other work in a recurrent fashion (Lawrence, 1999; Lounsbury & Crumley, 2007). The degree to which standards are valorized by standard adopters will aid legitimation and monitoring of standard adoption by the standard maker and third parties. Similarly, the design and legitimation of the standard by experts outside the standard making organization will act as a resource for valorizing work. Standardization therefore is not necessarily a linear process of different types of work that follow each other sequentially, but rather a more dynamic process of interactions between different work by different actors (Tracey et al., 2011). Accordingly, reflexivity and critical evaluation of standards’ effects by actors, together with the ‘openness’ and ‘flexibility’ of the standard (e.g. Ansari, Fiss & Zajac, 2010), may be central to the successful institutionalization of an

emerging standard. This insight could be explored in future research comparing multiple processes of standard emergence.

The distributed nature of standardization work

By employing the concept of institutional work we shift the focus from standards as institutions to the work involved in the creation and maintenance of standards (Lawrence et al., 2011). It enables us to highlight that standardization work is distributed amongst a wide range of actors, including the standard maker, standard adopters and external third parties. A recurrent dynamic exists between standard makers and standard adopters. As Seidl (2007) points out in his study of corporate governance codes, the content of a standard is defined not only by its wording, but also by the processes entailed in following that standard (Seidl, 2007). Not only is the legitimacy of a standard co-constructed (Durand & McGuire, 2005) but, through the distributed nature of standardization work, the regulatory power of a standard also becomes co-constructed in the dynamic interplay of the various types of standardization work. Like other types of 'soft' regulation, authority is not predefined but needs to be developed in each specific setting of standardization (Jacobsson & Sahlén-Andersson, 2006). As various forms of global self-regulation and multi-stakeholder regulation increase, further studies would benefit from a micro perspective similar to that employed in our study to learn more about the implications and effects of this 'distributed regulation'.

Durand and McGuire (2005) show that standard making organizations expand their activities to new domains in response to both selection pressure and the need to maintain their legitimacy. In so doing, they need to work closely with old and new constituents (Durand & McGuire, 2005). The study also reveals the role of intermediaries in standardization by providing knowledge, expertise and a source of legitimacy. Intermediaries such as management consultants and NGOs play a crucial role. The work carried out by these third parties both strengthens the expertise needed to legitimize the standard in the field and contributes to the monitoring of standard adopters' behavior (Kerwer, 2005; Seidl, 2007). These third parties are not necessarily given a formal role in the standardization process, but the standard maker nevertheless draws on their activities to strengthen the elements of the standardization process on an ad hoc basis. These activities might be of a political nature (e.g. convening work) or of a more cultural-normative nature (e.g. valorizing work). This means that standard makers themselves need not possess all the skills required for the different types of institutional work (Perkmann & Spicer, 2007), but they can draw on the skills and activities of others to advance standardization.

Our results suggest that a standard's successful diffusion within a field can be related to the emergence of new actors who aid in the translating of the standard's requirements for actors seeking to adopt it. Future studies could investigate this phenomenon in more depth and highlight whether this market development is a by-product of standard development or an important condition explaining the capacity of standards to influence organizations within a field.

Re-capturing of standardization effects

Sauder and Espeland (2009) argue that the characteristics of public metrics, such as continuous surveillance, attention to detail, comparison and homogenization, are likely to lead to tight coupling of measurement criteria and organizational activities (Sauder & Espeland, 2009). Participation in public metrics is usually not obligatory, but can become hard to escape when a metric is used extensively to judge organizational performance (Sauder, 2008), resulting in

'complex, unplanned control structures' (Kerwer, 2005). Recent studies have shown how institutional work can have unintended effects and consequences for these control structures. Quack (2007), for example, highlights how the 'by-products' of the activities of transnational law professionals evolve into non-binding legal rules that are subsequently integrated in the transnational law-making process (Quack, 2007). Similarly, in our case the valorizing activities have become integrated into the standardization process. The index has been co-opted, first by companies, and gradually by consultants and NGOs, as a *de facto* certification for CSR, and as such has become infused with additional value beyond its technical requirements as an investor product (Selznick, 1949; 1957).

Such external cooptation needs to be managed carefully for the organization to continue to achieve its organizational goals, which may change in response to the activities of co-opting parties (Selznick, 1949). Whilst Sauder and Espeland (2009) highlight the work that organizations undertake to comply with leading metrics in their field, they do not capture the work that goes into the making of these metrics. Our study shows that turning metrics into standards requires purposive activities, including the creation of artifacts and the provision of knowledge and information, to support implementation by targeted organizations.

More research is needed to explore the incorporation of standards by companies (Aravind & Christmann, 2011) at an intra-organizational level. So far limited attention has been paid to how external tools, such as public metrics, are used in the day-to-day practices of managers who are responsible for the development and implementation of CSR strategies. We found evidence to suggest that RI indices might be attractive to senior executives because of their analogy with traditional indices. We also found evidence of CSR managers using index inclusion as leverage to get additional CSR initiatives approved by senior management. An in-depth qualitative case study employing a practice perspective could reveal further dynamic aspects of institutional work inside standard adopting organizations.

In sum, our paper has drawn attention to the range of activities and actors involved in the dynamic process of standardization. This enables us to identify in 'the world of standards' (Brunsson & Jacobsson, 2000) features associated with the distributed nature of standards, with which corporate social responsibility and corporate citizenship (Moon, Crane & Matten, 2011), business self-regulation (Vogel, 2010), and international accountability standards (Gilbert et al., 2011) are often associated. It stresses the work involved with the maintenance and development of the regulatory power of standards. In this respect, we highlight the need for participation in the design, legitimization and monitoring of standards; dynamic consensus and reciprocity among those participants; and the roles of reflexivity and reputation in making these standards for business responsibility effective.

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Notes

1. A variety of names exist to describe the field, which reflects ongoing developments and issues under consideration: ethical, socially responsible, sustainable or green investment. The field is also described by the acronym of the factors under consideration: economic (E), social (S) and governance (G) issues. We employ the term responsible investment here as it is one of the most neutral and encompassing terms used to describe the field.

2. A list of news sources included in this category is available on the Nexis website (www.lexisnexis.com) or available from the authors upon request.

References

- Ahrne, G., Brunsson N., & Tamm Hallström, K. (2007). Organizing organizations. *Organization*, 14, 619–624.
- Ansari, S. M., Fiss, P. C., & Zajac, E. J. (2010). Made to fit: How practices vary as they diffuse. *Academy of Management Review*, 35, 67–92.
- Aravind, D., & Christmann, P. (2011). Decoupling of standard implementation from certification: Does quality of ISO 14001 implementation affect facilities environmental performance? *Business Ethics Quarterly*, 21, 73–102.
- Beck, N., & Walgenbach, P. (2005). Technical efficiency or adaptation to institutionalized expectations? The adoption of ISO 9000 standards in the German mechanical engineering industry. *Organization Studies*, 26, 841–866.
- Beunza, G., & Garud, R. (2007). Calculators, lemmings or frame-makers? The intermediary role of security analysts. In M. Callon, Y. Millo, & F. Muniesa (Eds.), *Market devices* (pp. 13–39). Malden, MA: Blackwell Publishing.
- Boiral, O. (2003). ISO 9000: Outside the iron cage. *Organization Science*, 14, 720–737.
- Botzem, S. & Quack, S. (2006). Contested rules and shifting boundaries: International standard-setting in accounting. In M.-L. Djelic & K. Sahlin-Andersson (Eds.), *Transnational governance: Institutional dynamics of regulation* (pp. 266–286). Cambridge: Cambridge University Press.
- Bowker, G. C. & Star, S. L. (1999). *Sorting things out: Classification and its consequences*. Cambridge, MA: MIT Press.
- Brunsson, N. & Jacobsson, B. (Eds.) (2000). *A world of standards*. Oxford: Oxford University Press.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. London: SAGE.
- Cowe, R. (2002) Increasing the criteria for sustainability indices and SRI investment. *Ethical Corporation*, 17 July.
- Déjean, F., Gond J.-P., & Leca, B. (2004). Measuring the unmeasured: An institutional entrepreneur strategy in an emerging industry. *Human Relations*, 57, 741–764.
- Desrosières, A. (1998). *The politics of large numbers: A history of statistical reasoning*. Cambridge, MA: Harvard University Press.
- Dorado, S. (2005). Institutional entrepreneurship, partaking, and convening. *Organization Studies*, 26, 385–414.
- Durand, R. & McGuire, J. (2005). Legitimizing agencies in the face of selection: The case of AACSB. *Organization Studies*, 26, 165–196.
- Elsbach, K. D. (1994). Managing organizational legitimacy in the Californian cattle industry: The construction and effectiveness of verbal accounts. *Administrative Science Quarterly* 39, 57–88.
- Espeland, W. N., & Stevens, M. L. (1998). Commensuration as a social process. *Annual Review of Sociology*, 24, 313–343.
- Ethical Corporation (2003). FTSE announces market consultation to develop breast milk substitutes exclusion. T. Webb *Ethical Corporation* 9 June 2003
- Ethical Corporation (2005). Ethical index raises bar for corporate inclusion. P. M. Saha *Ethical Corporation* 16 January 2005
- Espeland, W. N., & Sauder, M. (2007). Rankings and reactivity: How public measures recreate social worlds. *American Journal of Sociology*, 113, 1–40.
- Etzion, D. & Ferraro, F. (2010). The role of analogy in the institutionalization of sustainability reporting. *Organization Science*, 21, 1092–1107.
- Eurosif (2010). *European SRI study*. Available at: www.eurosif.org.
- Farrow, P. (2001). The green funds are growing. *Sunday Telegraph*, 21 October, p. 8.
- Financial Times 2001. A Footsie index for corporate ethics: The launch this summer of FTSE4Good will put companies' standards in the spotlight. A. Skorecki, *Financial Times*, 27 April 2001:18.

- Financial Times, (2001). Ethical indices set to test companies' claims that they are a force for good: FTSE4Good could change corporate behaviour. A. Skorecki, *Financial Times*, 3 March 2001:16.
- Financial Times (2002). FTSE tightens criteria for ethical index. A. Skorecki, *Financial Times*, 22 May 2002:30.
- Foucault, M. (1970). *The order of things: An archaeology of the human sciences*. London: Tavistock Publications.
- Fransen, L. W., & Kolk, A. (2007). Global rule-setting for business: A critical analysis of multi-stakeholder standards. *Organization*, 14, 667–684.
- FTSE (2006). *Adding values to your investment: FTSE4Good Index Series – 5 Year Review*. London: FTSE Group.
- Garud, R., Jain, S., & Kumaraswamy, A. (2002). Institutional entrepreneurship in the sponsorship of common technological standards: The case of Sun Microsystems and Java. *Academy of Management Journal*, 45, 196–214.
- Gilbert, D. U., Rasche, A., & Waddock, S. (2011). Accountability in a global economy: The emergence of international accountability standards. *Business Ethics Quarterly*, 21, 23–44.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Hawthorn: Aldine de Gruyter.
- Glynn, M. A., & Abzug, R. (2002). Institutionalizing identity: Symbolic isomorphism and organizational names. *Academy of Management Journal*, 45, 267–280.
- Green, S. E. (2004). A rhetorical theory of diffusion. *Academy of Management Review*, 29, 653–669.
- Guardian (2001). The big names who are out in the cold: A new FTSE index highlighting the companies which take their social responsibilities seriously has its share of surprises. P. Inman *The Guardian* 14 July 2001:4
- Hedmo, T., Sahlin-Andersson, K., & Wedlin, L. (2006). The emergence of a European regulatory field of management education. In M.-L. Djelic & K. Sahlin-Andersson (Eds.), *Transnational governance: Institutional dynamics of regulation* (pp. 308–328). Oxford: Oxford University Press.
- Jacobsson, B. & Sahlin-Andersson, K. (2006). Dynamics of soft regulations. In M.-L. Djelic & K. Sahlin-Andersson (Eds.), *Transnational governance: Institutional dynamics of regulation* (pp. 247–265). Oxford: Oxford University Press.
- Kaghan, W. N., & Lounsbury, M. (2006). Artifacts, articulation work and institutional residue. In A. Rafaeli & M. G. Pratt (Eds.), *Artifacts and organizations: Beyond mere symbolism* (pp. 279–289). Mahwah, NJ: Lawrence Erlbaum Associates.
- Kerwer, D. (2005). Rules that many use: Standards and global regulation. *Governance*, 18, 611–632.
- Kurtz, L. (2008). Socially responsible investment and shareholder activism. In A. Crane, A. McWilliams, D. Matten, J. Moon & D. S. Siegel, *The Oxford Handbook of Corporate Social Responsibility* (pp. 249–267). Oxford: Oxford University Press.
- Langley, A. (1999). Strategies for theorizing from process data. *Academy of Management Review*, 24, 691–710.
- Lawrence, T. B. (1999). Institutional strategy. *Journal of Management*, 25, 161–188.
- Lawrence, T. B. & Suddaby, R. (2006). Institutions and institutional work. In S. R. Clegg, T. B. Lawrence & W. R. Nord (Eds.), *The SAGE handbook of organization studies* (pp. 215–254). London: SAGE.
- Lawrence, T. B., Suddaby, R., & Leca, B. (Eds.) (2009). *Institutional work: Actors and agency in institutional studies of organizations*. Cambridge: Cambridge University Press.
- Lawrence, T., Suddaby, R., & Leca, B. (2011). Institutional work: Refocusing institutional studies of organization. *Journal of Management Inquiry*, 20, 52–58.
- Lounsbury, M. & Crumley, E. T. (2007). New practice creation: An institutional perspective on innovation. *Organization Studies*, 28, 993–1012.
- Moon, J., Crane, A., & Matten, D. (2011). Corporations and citizenship in new institutions of global governance. In C. Crouch & C. MacLean (Eds.), *The responsible corporation in a global economy* (pp. 203–224). Oxford: Oxford University Press.
- Olshan, M. A. (1993). Standards-making organizations and the rationalization of American life. *Sociological Quarterly*, 34, 319–335.
- Patriotta, G., Gond, J.-P., & Schultz, F. (2011). Maintaining legitimacy: Controversies, orders of worth and justifications. *Journal of Management Studies* 48(8): 1804–1836.

- Perkmann, M. & Spicer, A. (2007). 'Healing the scars of history': Projects, skills and field strategies in institutional entrepreneurship. *Organization Studies*, 28, 1101–1122.
- Perkmann, M., & Spicer, A. (2008). How are management fashions institutionalized? The role of institutional work. *Human Relations*, 61, 811–844.
- Pettigrew, A. M., Woodman, R. W., & Cameron, K. S. (2001). Studying organizational change and development: Challenges for future research. *Academy of Management Journal*, 44, 697–713.
- Porter, T. M. (1995). *Trust in numbers: The pursuit of objectivity in science and public life*. Princeton, NJ: Princeton University Press.
- Power, M. (1997). *The audit society: Rituals of verification*. New York: Oxford University Press.
- Quack, S. (2007). Legal professionals and transnational law-making: A case of distributed agency. *Organization*, 14, 643–666.
- Rivoli, P. (2003). Making a difference or making a statement? Finance research and socially responsible investment. *Business Ethics Quarterly*, 13, 271–287.
- Sahlin-Andersson, K. (2000). Arenas as standardizers. In N. Brunsson & B. Jacobsson (Eds.), *World of standards* (pp. 100–113). Oxford: Oxford University Press.
- Sauder, M. (2008). Interlopers and field change: The entry of U.S. News into the field of legal education. *Administrative Science Quarterly*, 53, 209–234.
- Sauder, M. & Espeland, W. N. (2009). The discipline of rankings: Tight coupling and organizational change. *American Sociological Review*, 74, 62–82.
- Seidl, D. (2007). Standard setting and following in corporate governance: An observation-theoretical study of the effectiveness of governance codes. *Organization*, 14, 705–727.
- Selznick, P. (1949). *TVA and the grassroots*. New York: Harper and Row.
- Selznick, P. (1957). *Leadership in administration: A sociological interpretation*. New York: Harper and Row.
- Selznick, P. (1996). Institutionalism 'Old' and 'New'. *Administrative Science Quarterly*, 41, 270–277.
- SIF (2010). *Socially responsible investment trends in the United States*. Available at: www.ussif.org.
- Suddaby, R. & Greenwood, R. (2005). Rhetorical strategies of legitimacy. *Administrative Science Quarterly*, 50, 35–67.
- Tamm Hallström, K. (2000). Organizing the process of standardization. In N. Brunsson & B. Jacobsson (Eds.), *World of standards* (pp. 85–99). Oxford: Oxford University Press.
- Timmermans, S. & Epstein, S. (2010). A world of standards but not a standard world: Towards a sociology of standards and standardization. *Annual Review of Sociology*, 36, 69–89.
- Tracey, P., Phillips, N., & Jarvis, O. (2011). Bridging institutional entrepreneurship and the creation of new organizational forms: A multilevel model. *Organization Science* 22(1): 60–80.
- Vogel, D. (2010). The private regulation of global corporate conduct: Achievements and limitations. *Business and Society*, 49, 68–87.
- Waddock, S. (2008). Building a new institutional infrastructure for corporate responsibility. *The Academy of Management Perspectives*, 22(3), 87–108.
- Zilber, T. B. (2006). The work of the symbolic in institutional processes: Translations of rational myths in Israeli high tech. *Academy of Management Journal*, 49, 281–303.

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Appendix I. Overview data sources

Data source	Details		
Interviews	Participant	Country	Industry sector
	1. FTSE staff member A	UK	Financial Services
	2. FTSE staff member B	UK	Financial Services
	3. FTSE staff member C	UK	Financial Services
	4. FTSE staff member D	UK	Financial Services
	5. FTSE staff member E	UK	Financial Services
	6. FTSE staff member F	UK	Financial Services
	7. Policy Committee member A	UK	Financial Services
	8. Policy Committee member B	UK	Financial Services
	9. US Advisory committee member A	USA	Industry Association
	10. US Advisory committee member B	USA	Academic
	11. CSR consultant A	UK	Consultancy
	12. CSR consultant B	UK	Consultancy
	13. CSR consultant C	UK	Consultancy
	14. CSR consultant D	UK	Consultancy
	15. CSR consultant E	UK	Consultancy
	16. CSR Manager	Switzerland	Construction
	17. IR Director	France	Retail
	18. IR Manager	Switzerland	Pharmaceutical
	19. CSR Director	Germany	Tourism
	20. Communications Manager	Norway	Chemical
	21. Communications Director	UK	Logistics
	22. CSR Manager	UK	Communication
	23. CSR Manager	UK	Communication
	24. Company Secretary	UK	Services
	25. HS&E Manager	UK	Engineering
	26. Communications Director	USA	Engineering
	27. HS&E Manager	USA	Retail
	28. IR Manager	USA	Finance
	29. IR Manager	USA	Pharmaceutical
	30. VP CR	USA	Finance
	31. CSR Manager	Australia	Utilities
	32. VP CR	Australia	Mining
	33. CSR Manager	Japan	Electronics

(Continued)

Appendix I. (Continued)

Data source	Details		
Interviews	Participant	Country	Industry sector
	34. CSR Manager	Japan	Automobile
	35. CSR Manager	Japan	Chemical
Archival data	<p>FTSE Reports (available on: http://www.ftse.com/Indices/FTSE4Good_Index_Series/index.jsp)</p> <p><i>Criteria Development and Company Engagement Programme 2003–2004</i></p> <p><i>Impact of New Criteria & Future Direction 2004–2005</i></p> <p><i>Adding Values to Your Investment – 5 Year Review</i></p> <p>FTSE minutes and meeting papers:</p> <p>Bi-annual FTSE4Good Policy Committee meeting minutes and papers 2001–2007, 621 pages</p> <p>Media coverage:</p> <p>Nexis® major English news sources, 2001–2007, 492 articles</p> <p><i>Financial Times</i>, 2001–2007, 115 articles</p> <p><i>Ethical Corporation</i>, 2001–2007, 97 articles</p> <p>Corporate documents:</p> <p>Corporate communication on CSR in reports and web pages, 2001–2010, where available for the 20 companies selected for interviews</p>		