

**Micro-Foundations for Strategy:
A Goal-Framing Perspective on the Drivers of Value Creation**

Nicolai J. Foss

Siegwart Lindenberg

SMG WP 5/2013

March, 2013

SMG Working Paper No. 5/2013

March, 2013

ISBN: 978-87-91815-87-4

**Department of Strategic Management and Globalization
Copenhagen Business School
Kilen, Kilevej 14A
2000 Frederiksberg
Denmark
www.cbs.dk/smg**

**MICRO-FOUNDATIONS FOR STRATEGY:
A GOAL-FRAMING PERSPECTIVE ON THE DRIVERS OF VALUE CREATION**

Nicolai J Foss

Department of Strategy and Globalization
Copenhagen Business School
Kilen; Kilevej 14, 2nd fl.
2000 Frederiksberg; Denmark
Njf.smg@cbs.dk

and

Department of Strategy and Management
Norwegian School of Economics
Breiviksveien 40, N-5045
Bergen; Norway

Siegwart Lindenberg

Department of Sociology/ICS
University of Groningen
Grote Rozenstraat 31; 9712 TG Groningen

and

Tilburg Institute for Behavioral Economics Research (TIBER),
Tilburg University, The Netherlands

20. March, 2013

Keywords: Microfoundations, strategic management, value creation, motivation, goals, framing.

JEL Code: D21, D23, L2

MICRO-FOUNDATIONS FOR STRATEGY: A GOAL-FRAMING PERSPECTIVE ON THE DRIVERS OF VALUE CREATION

Abstract

Scholars increasingly seek to proffer microfoundations for macro management theory, notably strategic management theory. These microfoundations naturally revolve around human resources. We argue that proper microfoundations for strategic management theory must recognize that the management of motivation is first and foremost a matter of the management of cognitions of organizational members, an insight that we found in goal-framing theory, an emerging perspective based on cognitive science, behavioral economics, and social psychology. Building on this insight, we argue that a key reason why strategic goals matter to firm performance—that is, firm-level value creation and value capture and sustained competitive heterogeneity—is that such goals influence value creation rooted in employee motivations. Unfolding this idea allows us to generate new insight in the relations between value creation, strategic leadership and strategic goals.

INTRODUCTION

Strategic management is concerned with the creation, identification, and exploitation of those sources of competitive heterogeneity that result in high levels of appropriable value creation. Yet, many of the causal linkages between the strategic management process and value creation are unclear. In particular, how do *strategic goals* affect value creation? One hypothesis is that such goals mainly steer the cognition and actions of the top management team. Another one is strategic goals affect very functioning of the firm in the sense that they influence its internal governance and the cognition and motivation of organizational members, not just the top management. In this article we make the case that strategic goals matter in this broader sense. Understanding how this works requires attention to microfoundations—specifically, to microfoundations that highlight the (intertwined) motivation and cognitions of individuals (rather than, say, routines; but see Winter, 2013).

It is increasingly recognized that the microfoundations of strategic management greatly matters to the questions that scholars in the field can raise, address, and answer (Abell, Felin & Foss, 2008; Van de Ven, 2013). Much of the concern with microfoundations fundamentally revolves around human resources, often argued to be the “key ingredient to organizational success and failure” (Baron & Kreps, 1999: 4). Accordingly, research highlights the cognitions (Gavetti, 2005) and, more often, motivations of those human resources (Coff, 1999; Gottschalg & Zollo, 2007).

Along with a number of the other contributors to this symposium (in particular, Felin & Barney, 2013), we argue that strategic management theory is in need of better microfoundations. We take it as a given that such microfoundations must involve individuals. While indeed individuals have been highlighted in recent microfoundational research in macro management theory, mainly strategic management, we are concerned that extant research is dichotomized. Specifically, such research either starts from purely cognitive foundations (Gavetti, 2005; Teece, 2007; Powell, Lovallo & Fox, 2011: 1370) or from purely motivational foundations (e.g., Abell, Felin, & Foss, 2008;

Gottschalg & Zollo, 2007; Wang & Barney, 2008; Nickerson & Zenger, 2008). However, a crucial insight that has emerged from cognitive (social) psychology over the last twenty years is that cognitive and motivational processes are so strongly intertwined that they must be considered simultaneously and as closely interacting (Kruglanski et al., 2002). We argue that proper microfoundations for strategic management theory should recognize the fundamentally intertwined nature of cognition and motivation: the management of motivation is first and foremost a matter of the management of overarching goals that link cognition and motivation. Building on this insight, we argue that a key reason why strategic goals matter to firm performance—that is, firm-level value creation and value capture and sustained competitive heterogeneity—is that such goals influence the overarching goals of members of the organization and thereby the value creation rooted in employee motivations (an idea already hinted at in Barney & Griffin, 1992; Hamel & Prahalad, 1989; Kay, 2010; Birkinshaw, 2012.) The purpose of this article is to work out the logic of this link.

We specifically show that *goal-framing theory* (Lindenberg, 2003, 2004, 2006; 2008, Lindenberg & Foss, 2011)—an emerging perspective based on cognitive science, behavioral economics, and social psychology (e.g., Förster, Liberman & Higgins, 2005; Gollwitzer & Bargh, 1996; Kruglanski & Köpetz, 2009)—has the unique capacity to address this link (Foss, 2011). We show that the microfoundations provided by goal-framing theory allow us to address and answer key strategy questions in a novel manner, and in particular how strategic goals influence firm performance. Goal-framing theory deals with overarching goals that influence large clusters of subgoals. Specifically, the theory states that the overarching goal most conducive to value creation is one that promotes a motivation for *joint production*, whereby organizational members are motivated to engage in joint productive endeavors in which they choose their actions in terms of joint goals and exert intelligent effort to reach joint goals (Lindenberg & Foss, 2011). However, such a *normative* goal-frame can easily be sidelined by other overarching goals that are explicitly or implicitly expressed in the strategic management process of the firm. The crucial mechanism is that

overarching goals of employees are subject to a top-down contagion process by overarching goals from top management.

The motivation that is most conducive to value creation is not mobilized by overarching goals that make blatant reference to the maximization of profits or shareholder value, exactly—we will argue—because such strategic goals prompt employees to adopt goal-frames that are not conducive to joint production motivation. Rather, profit, shareholder value and market share must not be pursued as the major explicit strategic goal but *obliquely* as a result of more socially oriented goals (cf. Kay, 2010; Birkinshaw, 2012).

In sum, in building our argument about the impact of the strategic management process on the contribution of human resources to value creation, we draw on recent developments in cognitive science, social psychology, and behavioral economics which “provide new opportunities for merging psychology and strategy” (Powell et al., 2011: 1370), going beyond the dichotomization between the cognitive and the motivational dimensions in extant microfoundational research. We develop novel implications for key strategy issues from goal-framing theory. Our theory relates to established insights in particularly the resource-based view (Barney, 1986, 1991; Kogut & Zander, 1996; Foss, 2011), but uniquely points to the importance of the role of overarching goals in establishing joint production motivation as the instrument for creating maximum value. Relatedly, we briefly discuss the huge difficulties of sustaining joint production motivation over time, which is based on the precariousness of the normative goal frame and its tendency to give way to competitive goal-frames, as a key reason for the decline of competitive advantages.

PSYCHOLOGICAL FOUNDATIONS OF STRATEGIC MANAGEMENT:

GOAL-FRAMING THEORY

Beyond Behavioral Micro-foundations

Research has increasingly emphasized that sound microfoundations are important to the development of strategic management theory. Traditionally, the microfoundations of strategic

management theory have been located in economics (i.e., industrial organization, organizational economics, and financial economics; e.g., Coff, 1997, 1999; Lippman & Rumelt, 2003; Abell, Felin & Foss, 2008; Wang & Barney, 2008; Chatain & Zemsky, 2011), but there are familiar limits to the explanatory leverage of standard economics. Thus, scholars increasingly look for microfoundations for strategy in psychology. For example, how the heuristics of strategic decision-making emerge from experience (Bingham & Eisenhardt, 2011), or how firm-level identification processes influence competitive dynamics (Livengood & Reger, 2010), are difficult to analyze on a deep level solely from an economics perspective (which is not to say that such insights necessarily escape economic modeling, e.g., Camerer & Lovallo, 1999).

Thus, strategic management scholars have long made use of psychology research (Hodgkinson & Sparrow, 2002), most notably behavioral decision theory as embodied in Cyert and March (1963) and reflected in the emergence of the “behavioral strategy” field (Bromiley, 2005; Gavetti, Levinthal & Ocasio, 2007; Powell et al., 2011), as well as in cognitive perspectives (e.g., Porac & Thomas, 1990; Weick, 1995) and notions such as attention allocation, escalation, learning myopia and so on (Bromiley, 2005). And yet, the editors of a recent special issue of this journal on the “psychological foundations of strategic management” observe that “strategic management theory lacks adequate psychological groundings” and they conclude that “until strategy theory builds stronger foundations in psychology, it will struggle to explain the facts of firm performance” (Powell, Lovallo & Fox, 2011: 1370) (see also Greve, 2013). The key problem, they argue, is inadequate paradigm development in “behavioral strategy,” that is, the merger of cognitive and social psychology with strategic management theory and practice. Strikingly, however, motivational issues are not mentioned in their overview of “behavioral strategy.”

The behavioral approach to strategy has not gone uncontested. For example, Felin and Foss (2011) criticize its philosophical foundations, arguing that in spite of the stated interest in developing a more realistic view of decision-making, the behavioral approach fundamentally derives from

behaviorist psychology and works with the same impoverished view of decision-making. Our point of departure is different: behavioral strategy is not sufficient, because it says too little about *motivation*. Specifically, behavioral theory focuses all attention on cognitive issues, such as perception, framing, experiential and vocational learning, and heuristics. However, a key theme in psychology research over the last two decades is that cognition and motivation are strongly intertwined, so strongly intertwined, in fact, that often they are not meaningfully separable (Kruglanski, 1999). Behavioral strategy typically emphasizes search heuristics, attention, memory, etc. as drivers of management decisions and firm behavior. Behavioral strategy's starting point in bounded rationality is entirely warranted. A fundamental characteristic of cognitive processes is indeed their selectivity: Attention is selective, memory is selective, concepts and chunks of knowledge are at any given moment only selectively accessible. Selectivity comes about by the twin process of activating some aspects and inhibiting others (cf. Shah, Friedman & Kruglanski, 2002). This creates important differences regarding how individuals look at a situation, the key point in behavioral strategy. However, the link of these cognitive effects with motivational effects is brought about by overarching goals. The dynamics of overarching goals combines cognitive and motivational processes in their relation to the environment, and thus the dynamics of these goals should be the core aspect of microfoundations for strategic management. Goal-framing theory specifies how these links come about.

Goal-framing Theory

A key finding of recent social psychological research is that individuals act very differently in terms of their strategy choice (defect or cooperate) depending cues in the environment. For example, the very same prisoners' dilemma can carry the label "Community game" or "Wall Street game" and this cue makes a big difference for the strategy people choose (Lieberman, Samuels, & Ross, 2004; see also Pillutla & Chen, 1999). Experimental game theory has produced very similar findings (e.g., Camerer, 2003). A cogent explanation for such strong effects of cues is that they affect the relative

weight of activated overarching goals (see Keizer, Lindenberg, and Steg 2008, Lindenberg 2012a), as specified in goal-framing theory (Lindenberg 2008, Lindenberg & Steg 2007). Goal-framing theory is all about the fact that a particular overarching goal can govern large sets of subgoals and thereby change what preferences are salient, which even affects the kind of constraints that are being perceived. Let us briefly have a closer look at how this works.

Goal-framing theory distinguishes between three overarching goals. There is the overarching *hedonic* goal, which expresses the desire to improve (or preserve) the way one feels right now, related to one's need fulfillment; there is the overarching *gain* goal, which expresses the desire to improve (or preserve) one's resources; and there is the overarching *normative* goal which expresses the desire to act appropriately in the service of a collective entity, such as an organization or a group. When one of these three goals is focal, it captures so many of the cognitive and motivational processes that it truly "frames" the situation. Thus, these overarching goals govern what we attend to (Posner & Petersen, 1990), what alternatives we consider, and what knowledge we draw on (Förster et al., 2005; Gollwitzer & Bargh, 1996; Kruglanski & Köpetz, 2009). In turn, these cognitive processes have an impact on motivation by inhibiting other goals (Shah et al., 2002), by influencing what we like and dislike (Ferguson & Bargh, 2004), and by governing the expectations about what other people will do and the criteria that are used to judge goal realization or failure (Carver & Scheier, 2002).

Goals need to be activated (or "focal"), notably by situational cues, in order to influence behavior. A *goal frame* denotes an overarching goal (together with the integrated cognitive/motivational processes that are driven by this goal) when it is more strongly activated than the other two overarching goals. For example, organizational members who are in a gain goal-frame and whose specific goal within this frame is to improve their status in the organization, will be particularly alert to information about opportunities for improving status; the relevant causal knowledge they activate is what pertains to reaching this goal; they will be oriented towards the

longer term, and are likely to focus on behavioral alternatives that advance their status position to various degrees. Opportunities pertaining to other high-level goals (such as “behaving appropriately” in the service of joint production) are likely to be more or less ignored unless they overlap with opportunities for the status goal. A goal-frame does not completely inhibit the other two overarching goals. Rather, it pushes these other goals the background to various degrees. More often than not, motivations are therefore mixed and it depends on the relative strength of the foreground and background goals what the final effect will be. Cues in the environment will heavily influence the relative weight, thereby creating shifts in cognitions and motivations. However, due to a different *apriori* strength of the overarching goals, it takes stronger cues to increase the weight of a normative goal-frame than for the hedonic goal-frame (with the gain goal-frame in between). This makes evolutionary sense; thus, from an evolutionary point of view, the group is there for the adaptive advantage of the individual and not the other way around. Thus the goal-frame pertaining to a group orientation is *apriori* the weakest and thus highly precarious. The hedonic goal-frame pertaining to the satisfaction of needs here and now is *apriori* the strongest, and the goal-frame pertaining to resources is in between.¹

The important additional point for the microfoundations for strategic management is that the most potent cues in the environment that affect the relative strength of a goal-frame are the signals of goal-frames of other people, especially of those in higher positions (Aarts, Gollwitzer & Hassin, 2004; Keizer, Lindenberg, & Steg 2008, 2011). This creates a strong top-down contagious process of goal-frames (Lindenberg & Foss, 2011) that is enhanced by horizontal contagion because each employee’s goal-frame becomes a cue that affects the other’s goal-frame, creating a strong tendency for goal-frames to spread in a group. Because the normative goal-frame is highly precarious and because power-relations are highly asymmetric (i.e., top-down), employees watch out for signals that reveal the goal-frame of the management (Lindenberg 2000; Takeuchi, Chen & Lepak, 2009). If

¹ Note that this while goals can displace each other, they are not necessarily conflict. Different goals can be compatible although only one goal can be in the cognitive foreground. More on this in Lindenberg and Foss (2011).

higher-ups clearly signal that they are in a normative goal-frame, it will greatly help to stabilize this goal-frame in subordinates (Mühlau & Lindenberg, 2003; Brown, Treviño & Harrison 2005). By the same token, signals that higher-ups are not in a normative goal-frame will weaken this goal-frame in subordinates.

GOAL-FRAMING, JOINT PRODUCTION MOTIVATION, AND VALUE-CREATION

Joint Production Motivation

Different goal-frames are associated with different levels of value creation in firms because different goal-frames are associated with mobilizing motivation for very different goals. In particular, we argue that the *normative* goal-frame is associated with the highest levels of value creation. The reason is that this goal-frame, and it alone, can prompt the motivation of organizational members to engage in truly collaborative activities, what Lindenberg and Foss (2011) call *joint production motivation*. Organizational members can recognize a joint endeavor and see themselves as part of this endeavor, each with their own roles and responsibilities, involving a sharing of cognitions about the relevant tasks, interdependencies, timing, and possible obstacles to smooth coordination. This leads them to exert intelligent and adaptive efforts that result in productivity gains and innovativeness. Why is joint production motivation so important?

In the strategy literature Lippman and Rumelt (2003) model firms as bundles of complementary, co-specialized resources. They argue that the "... heart of business management and strategy concerns the creation, evaluation, manipulation, administration, and deployment of *unpriced* specialized resource combinations" (2003: 1083; *emph. in orig.*). While choosing new resources and discovering novel ways of combining resources are important avenues to superior performance, it is a major point of our argument that at the heart of specialized resource combinations is the motivation of human resources in the bundle (Baron & Kreps, 1999; Gottschalg & Zollo, 2007; Lindenberg & Foss, 2011). Strategy thus has to focus first and foremost on this motivation for the realization of whatever higher strategic goal is chosen. We will argue that there is a special motivation that may

characterize interacting resources in a bundle and, that strategy should focus on activating and increasing this motivation in the service of achieving superior firm performance.

Another word for the resources bundles of Lippman and Rumelt is “teams” (Alchian, 1984). Teams are a basic form of human cooperation with an impressive evolutionary past, firms are indeed organized around teams of strongly complementary human resources (Lepak & Snell, 1999; Lippman & Rumelt, 2003), and several literatures in management and economics research are taken up with teams.² However, none of these literatures explicitly recognize a key recent finding of evolutionary anthropology, namely that human beings are especially equipped with cognitive and motivational faculties that are specifically geared to team-based cooperation (i.e., motivation for joint production) and that this is special source of motivation that created the adaptive advantages of humans cooperating in groups. Joint production involves heterogeneous but complementary resources, a high degree of task and outcome interdependence, and the potential for super-additive outcomes (as in Alchian & Demsetz, 1972). According to what become known as the “social brain hypothesis,” the most potent human brain power (the neocortex) evolved as a “social brain” to allow human beings to realize the adaptive advantages that stem from cooperation in larger groups involving joint production (Dunbar, 2003). The brain apparently contains a hardwired ability to recognize a situation as one of joint production, and to trigger motivational and cognitive faculties that are specialized to facilitate joint production (cf. Sebanz, Bekkering & Knoblich, 2006).³

² The economics of the firm literature offers two very different understandings of the nature of teams. One derives from Alchian and Demsetz’ basic characterization of team production, that is, productive activity that involves heterogeneous but complementary resources, a high degree of task and outcome interdependence, and the potential for super-additive outcomes. The other derives from Marschak and Radner’s (1972) characterization of a team as a group of agents with a common goal that can only be achieved by an appropriate combination and coordination of the individual activities of the group members. Both contributions have given rise to much subsequent work. See Foss and Lindenberg (2012) for a more extensive discussion.

³ Of course, the social brain is also involved in deception and in detection of deception (Epley, Caruso & Bazerman, 2006). Because of that, the normative goal-frame is important, not just the ability to put yourself into the shoes of others. In fact reactive egoism is most likely when an individual is already in a gain goal-frame.

Haidt (2012: chpt. 10) adopts the imagery of a “hive switch,” which refers to the activation of a special (human) motivation that is specifically geared to the pursuit of team or group goals. However, the hive terminology is potentially misleading as it also implies an imagery of mindless, ant-like individuals. Indeed, empirical research shows that members of a team perceive the environment differently than in independent action, and generate shared representations of actions and tasks *in terms of* joint goals. They exert intelligent effort to cognitively coordinate temporal and spatial aspects of cooperation and to correctly anticipate goal-related actions from others (Sebanz et al., 2006). They are willing to induce and assist others to do their bit (Tomasello et al., 2005). In ambiguous situations, group members will not wait to be instructed but rather search actively for ways to serve the group goal(s) (De Dreu, Nijstad & Van Knippenberg, 2008), and they are heedful of their and others’ contribution to the collective goals (Weick & Roberts, 1993). Given the right social and cultural circumstances (Henrich et al., 2001), a special kind of motivation that contains all these ingredients is activated, namely “joint production motivation.” Because extant research on teams does not recognize joint production motivation it sidesteps “... some of the most interesting ... questions about teams, including: What are the sources of the economic surpluses in team production, and how can they best be harnessed and directed?” (Blair & Stout, 1999: 267-8).

Value Creation from a Goal-Framing Perspective

The consideration of joint production motivation changes the way one may look at value creation in firms. Strategic management is conventionally taken to be about the creation and appropriation of value, and specifically creating and appropriating *more* value than the competition (i.e., superior financial performance) on a sustained basis (Peteraf & Barney, 2003). While the yardstick for the financial performance is reasonably clear (e.g., average industry profitability), what is the yardstick against which we measure value creation? Strategy scholars who have addressed this question have typically taken an economics perspective and defined the maximum conceivable level of value creation as the relevant yardstick. Thus, Lippman and Rumelt (2003: 1082) in their focus on

coalitions of resources defined “strategic equilibrium as the state in which all possible resource transfers that create value have taken place.” Foss and Foss (2005) focus on how the reduction of transaction costs increase value creation, and argue that the relevant yardstick is a state of zero transaction costs, implying maximum value creation. Such states are what economists call “first-best” states.

Note, however, that such efficiency yardsticks are defined relative to *given preferences*. In standard microeconomics, preferences stay put: people know exactly what they like, how much they like it relative to other things, and the relevant ranking does not change over time. (Or, if changes of preferences take place, they are not caused by economic factors). In the world of standard microeconomics, top-management changing strategic goals or exercising transformational leadership may have behavioral consequences at lower levels of the organization (e.g., because of the informational content of such a change, e.g., Hermalin, 1998), but these behavioral consequences are not (and cannot be) driven by preference changes of organizational members. Accordingly, leaders can only influence the actions chosen by organizational members, their work/leisure tradeoffs, their behavioral persistence, problem-solving intensity say, exercise of sophisticated helping behaviors, and so on, by changing their constraints. By implication, the assumed stability of preferences represents a brake on value creation. It also represents a constraint on what can meaningfully be said about impact of strategic goals on the motivation of organizational members. The fundamental problem is that (given) preference is a part of a logic of trade-offs which tends to suppress or trivialize the processes that lead to preference orderings. In contrast, goal-framing theory builds off of a logic of means-ends relationships, where changing overarching goals imply changing entire sets of situationally salient preferences. Preferences and constraints thus interact.

In terms of goal-framing theory, standard microeconomics assumes that individuals are always and everywhere in the gain-goal frame. Thus, it is not just that preferences are stable but also that they have a specific content, that is, individuals (always and everywhere) seek to pursue their own

individual interests.⁴ That individuals entertain such interests is uncontroversial and economics has made impressive headway based on its single-minded examination of the many ramifications of individuals pursuing their own goals and intentions. Thus, agency theory and mechanism design theory have yielded much important insight into how harmonizing collective and individual goals can be (partially) brought about by interest alignment through incentives and/or supervision. However, such alignment usually requires very significant monitoring effort (of input and/or output performance), and because of the costliness of monitoring, it is inherently imperfect, thus severely limiting the actual alignment of interests (Lindenberg 2013). By contrast, because of normative goal-frames and joint production motivation, there is a different way to link the individual employee to organizational goals: individuals may also choose actions *in terms of* what serves collective goals. Standard microeconomics rules this out, because the team is only a context for the realization of the agent's individual goals. The entire process of deliberating upon and choosing actions in terms of group goals is thus ignored as a source of value creation

In sum, the notion of first-best value creation imported from standard microeconomics assumes that organizational members are *always* in a gain goal-frame (Foss & Lindenberg, 2012). The introduction of the normative goal-frame and its support of joint production motivation change this: The first-best in a situation where organizational members are in a normative goal-frame is different—specifically, higher—relative to what it is when organizational members are in a gain goal-frame. Because of the difficulty of establishing and maintaining a normative goal-frame and joint production motivation, the additional economic surplus that is caused by the motivational force of a collective orientation accrues on the longer run. Interest alignment (with all its limitations) often seems a first-best solution when one takes a short-term perspective. In this perspective, not just the longer-term advantages of joint production motivation are neglected, but the costs of using interest

⁴ To be sure, (behavioral) economics is by no means inconsistent with the notion that decisions can be driven by self-esteem, excitement, fairness, etc. However, these are modelled as extra determinants of utility that are not dependent on the context. In contrast, goal-framing theory points out that the salience of various goals, such as pursuing fairness, is context-dependent.

alignment are also ignored (Lindenberg 2013) What, more specifically, are the sources of this additional economic surplus stemming from joint production motivation?

Joint production motivation has beneficial organization-level consequences that either directly or indirectly translates into higher value creation, because it impacts the tasks that organizational members are willing to engage in, how much effort they will put into these tasks, and how they coordinate their actions. Empirical research links the normative goal frame to pro-social behaviors, such as spontaneous sharing of knowledge (De Dreu et al., 2008), which, in turn, may positively impact work productivity and innovation performance (Tsai, 2001). The heedful interrelating discussed by Weick and Roberts (1993), and found to assist coordination in ambiguous situations (Weick & Roberts, 1993) and to promote innovation performance (Dougherty & Takacs, 2004), results from joint production motivation. As the normative goal frame implies a partial suspension of moral hazard/opportunism, it reduces the need for costly control mechanisms (Podsakoff & McKenzie, 1997).

Coordination costs are reduced because joint production motivation implies that organizational members generate shared representations of actions and tasks in terms of joint goals, reducing the need for planning and formalization. Individual efforts are channeled towards the realization of common goals. Because individuals who are in a normative goal frame engage in fundamentally pro-social activities that they do not engage in when in the gain goal frame (and may choose higher levels of effort), the *first best under joint production motivation is higher than the first-best identified by standard microeconomics*. Because standard microeconomics assumes that individuals are always in the gain goal frame, it is simply too pessimistic with respect to what can be achieved by human cooperation and at the same time too optimistic about what can be achieved by attempts to align individual and organizational goals by incentives.⁵ In general, economics-based strategic

⁵ This is clearly seen by Alchian and Woodward (1988) who in a review of Williamson (1985) conclude that "... it is important to recognize the forces of ethics, etiquette, and 'proper, correct, reasonable, moral, etc.' standards of conduct in controlling business relationships." While they may have the language to describe what is seemingly so important, they admit that "... we don't know enough about how such 'moral' forces operate to say more than that they exist and should

management therefore underestimates the upside of what firms can do in terms of value creation, because it neglects the normative goal-frame and joint production motivation.

This underestimation of cooperative potential is confounded by a systematic neglect of the costs of failures to achieve interest alignment by incentives (in terms of indicator behavior, apathy, and sabotage, see Lindenberg, 2013). This neglect derives to a large extent from the fact that microeconomics has no room for the workings of the *hedonic* goal-frame. Hedonic goals are directed at improving how one feels at a particular moment, such as seeking direct improvement in self-esteem, seeking excitement, and avoiding unpleasant effort, and reacting to perceived unfairness (such as sabotage and taking revenge). The criteria for success in a hedonic goal-frame relate to improvements in the way one feels not the way things function. The power of this goal-frame *vis-à-vis* rival goal-frames is considerable and it derives from its direct link to basic needs and emotions (Ryan, Huta & Deci, 2008).

An organization in which members take a myopic perspective and are predominantly hedonically oriented is not conducive to value creation (cf. Lindenberg, 2004): Investments in human capital are not undertaken, helping behaviors do not thrive, and rewards that are not directly linked to efforts may be useless. Such myopic behaviors may arise even if incentives are geared to supporting a gain goal frame. For example, Postrel and Rumelt (1992) document cases in which, even in spite of high-powered incentives, firms had to resort to intense monitoring to hinder the consequences of employees adopting hedonic goal frames. For these reasons, the hedonic goal frame is the goal frame that is associated with the lowest level of value creation.

Figure 1 depicts how goal frames and value creation are related (for the two kinds of human resources, x_1 and x_2 , interacting in a team, but generalizable to n human resources). The key questions raised by the figure are how firms can reach the level of value creation associated with the goal frame, and, once reached, how firms can maintain this level of value creation.

not be ignored in seeking an understanding of how the economic institutions of capitalism, or any other -ism, evolve and operate ... Whatever the emotive language, 'decent' behavior saves resources and enables greater welfare" (Alchian & Woodward, 1988: 77).

---- *Insert Figure 1 here* ----

STRATEGIC CONCERNS: LINKING JOINT PRODUCTION MOTIVATION, GOVERNANCE, AND STRATEGIC GOALS

There are potentially two interrelated avenues by which strategic management can affect the motivation for joint production and thereby bring about the consequences of such motivation in terms of high levels of appropriable value creation. One is the direct way: By making the internal governance structure for joint production motivation a core concern for strategy. The other way is indirect: adopting an *oblique* approach to strategic opportunities (Kay, 2010; Birkinshaw, 2012), that is, to opportunities that increase appropriable value creation (Denrell, Fang & Winter, 2003). However, there are supporting relations between these two approaches: A governance structure that supports joint production motivation is positively or negatively affected by strategic goals of the firm. Only oblique (and typically prosocial) strategic goals will support a governance structure for joint production motivation. Moreover, we argue, both ways are importantly interrelated with leadership style, which gives leadership style a central place in strategy; see Figure 2. In the remainder of the article, we will unfold the logic that generated Figure 2.

---- *Insert Figure 2 Here* ----

The Internal Governance Structure as Strategic Concern

As stated, goal-frames have a strong tendency to spread in a group. The more employees see others committed to joint production, the stronger their own commitment. For example, to the degree to which others have positive feelings about their jobs, employees are more willing to use intelligent effort in terms of innovativeness (Shipton, West, Parkes, Dawson & Patterson, 2006). Similarly, receiving positive relational signals from others in the daily interaction on the shop floor fosters sending positive relational signals and increases overall performance (Colquitt, 2004; Tabibnia, Satpute & Lieberman, 2008)). Conversely, colleagues who clearly show that they work for their own goals (gain or hedonic) rather than for company goals, can drag many others to their side.

Colleagues have a weaker contagion effect than higher-ups. As already mentioned, the normative goal-frame is highly precarious and power-relations are highly asymmetric (i.e., top-down), and because of this, employees watch out for signals that reveal the goal-frame of the management (Mühlau & Lindenberg, 2003; Takeuchi, Chen & Lepak, 2009). If higher-ups clearly signal that they are in a normative goal-frame, it will greatly help to stabilize this goal-frame in subordinates (Mühlau & Lindenberg, 2003; Brown, Treviño & Harrison 2005). By the same token, signals that higher-ups are not in a normative goal-frame will weaken this goal-frame in subordinates. For example, in a vignette study, Keizer, Lindenberg and Steg (2013) show that when higher-ups use company money for their private purposes, employees are less inclined to keep to their own work rules. In short, such “goal contagion” effect (Aarts, Gollwitzer & Hassin, 2004) can strongly influence the stability of the normative goal-frame in both positive and negative directions. This also limits the ability by the management to use the language of cooperation, joint production, and solidarity as a means to get individuals to work for the company goals, without believably signaling that they are in a normative goal-frame. Signaling such a normative goal-frame is inherently difficult. Because of the difference in power and in stakes with regard to company profits, employees don’t easily trust higher-ups, which makes relational signals from the top very costly and easily distorted. Therefore, management signaling of a normative goal frame needs support from other structures (cf. also Foss, Reinholdt, Pedersen & Stea, 2013).

In previous work (Lindenberg & Foss, 2011), we have identified the organizational preconditions for the activation of a normative goal-frame that is conducive to joint production motivation. For reasons of space, we only briefly summarize these preconditions. First, members of an organization must perceive their various interdependencies in terms of joint production (through the team and task structure). Thus, employees must understand that tasks and teams are designed for the achievement and maintenance of joint production. The clearer the common goals, the various roles in which individuals help to reach these goals, and the functional connections of tasks and goals

between different levels of the firm, the easier it is for employees to develop and sustain a motivation for joint production. Second, even if common goals are specified in the task and team design, they must still be embedded in a shared sense of common direction and affect on the level of the firm. This will also help prevent subunit egoism. A suitable means for achieving a common direction is a vision and mission statement, consensually supported by top management, that focuses on a common purpose (Ashforth & Johnson, 2001) rather than operational goals that are appropriate for the task and team structure. Third, reward structures must be calibrated so that they provide direct support for the normative goal-frame (i.e., individual rewards should be explicitly recognitions for contributions to joint production, and team rewards for contributions to high-level goals). This also holds for indirect support by keeping the gain goal frame in the background strong enough to stall excessive group pressure and conformism. In addition to non-contingent rewards linked to position, employees also need to be rewarded individually in a contingent manner in order to maintain the motivation to engage in certain activities. But contingent gain rewards, such as status advancement and money, must remain modest, because they can foster a gain goal-frame, just as contingent hedonic rewards, such as especially enjoyable tasks and better offices, can foster a hedonic goal-frame. When rewards get too strong, they can undermine the normative goal-frame, and intelligent effort will be selectively driven by what leads to personal rewards (hedonic or gain), rather than by contribution to the realization of common goals. Fourth, authority should be legitimized in terms of the functional prerequisites for joint production, by linking it to superior insight on what is needed for the realization of common goals, rather than based on fiat and contractual clauses.

Gain-related Strategic Goals and the Importance of Obliquity

Goal-framing theory explicitly addresses high-level (strategic) goals. But true to the importance of motivation for joint production, it focuses on the implications of such high-level goals for motivation. The key to understanding how this works is the vertical contagion effect. Thus, if firms adopt goals that stress seeking to continually seize profit opportunities (as in Avon Products'

“We will deliver superior returns to our shareholders by tirelessly pursuing new growth opportunities”), this sends a signal down in the organization that top-management is in a gain goal-frame. Due to the contagion effect of overarching goals, this means that the gain goal-frame will spread throughout the organization. Thus, if gains are explicitly addressed as the key strategic goal, this makes it difficult, if not impossible, to maintain a governance structure that supports joint production motivation. For this reason, goal-framing theory would maintain that even though firms have to make profits, gain-related strategic goals should not get center stage (Lindenberg 2013). They should be approached obliquely. This point has also been picked up recently by popular management books that have made the case for “oblique” strategic goals (explicitly in Kay, 2010; Birkinshaw, 2012). There, the arguments for this oblique approach remain somewhat fuzzy. As Birkinshaw (2012: 124) notes, obliquity is “not an easy concept to come to grips with,” and it is not well established in the research literature in strategic management (in fact, there has, as far as we can tell, been no attention to the concept or the underlying ideas in the research literature).

There are scholars who have examined the impact of strategic goals on the internal workings of the firm. They provide part of the answer by emphasizing that organizational goals serve the functions of providing direction, facilitating planning, and assisting in the process of evaluating and controlling performance (Barney & Griffin, 1992). The potential motivating role of strategic goals frequently emerges in such discussions.⁶ For example, Hamel and Prahalad’s (1989: 64) discussion of strategic intent links this construct to an “...active management process that include focusing the organization’s attention on the essence of winning, motivating people by communicating the value of the target, leaving room for individual and team contributions [and] sustaining enthusiasm by providing new operational definitions as circumstances change.” But lacking microfoundations that deal with the integration of cognition and motivation through overarching goals, the possibility and importance of obliquity has not been theorized. Goal-framing theory can give a clear underpinning of

⁶ There is also work on the motivational ramifications of employee involvement in strategic planning (e.g., Ketokivi & Castaner, 2004), but this is distinct from our focus here on the motivational implications of strategic goals (i.e., outcomes of planning processes).

the importance of obliquity with regard to gain goals and, as we will see shortly, some of the world's best known corporations seem to have arrived at the same point. Let us look at this link between strategy and obliquity in somewhat more detail.

Strategic goals exist at different levels, from mission and vision statements at the highest strategic level over operational goals at the business unit level to the goals set for individual organizational members. In this discussion, we focus on the high-level, strategic goals that define aspirations and directions for the firm as a whole, but the arguments are meant to apply equally to strategic goals nested in lower levels. High-level strategic goals of the organization are the embedding for lower-level strategic goals and thus influence the weight of goal-frames inside the firm, thereby indirectly affecting the motivation for joint production. Such goals have a double function. One function is the direct influence in the relative strength of the gain goal over the normative goal. This influence derives from the fact that overarching goals are highly contagious, especially when they are imbued with status. Because the normative goal-frame is apriori weaker than the gain goal-frame, the former will be easily displaced by the latter. In this way high-level goals will have a trickle effect through all levels of the organization, if it is known that the management (“status”) stands behind these goals.

But high-level strategic goals also have another important function: they help or hinder coordinated action and the use and sharing of knowledge, depending on how they affect the employees' understanding of higher-level goals. For example, increasing market share as a strategic goal pushes a gain goal-frame. That alone makes it difficult to maintain a normative goal-frame for joint production motivation. But such a goal also makes it difficult for employees to know how their tasks relate to those of others, not giving them a sense of why and how they matter (see Anand et al, 2008; Montgomery 2008). This too, frustrates the realization and maintenance of joint production motivation.

High-level strategic goals either refer directly to gain (profit or market share, or shareholder value etc.) or they refer to a substantive mission in terms of societal goals. In both versions, these goals that define the aspiration of firms, are quite abstract and not very operational. But they are *directional*, providing purpose, and that is their strategic function. “Sitting at the hub of the strategy wheel, purpose aligns all the functional pieces and draws the company into a logically consistent whole. Well understood, it serves as both a constraint on activity and a guide to behavior.” (Montgomery 2008: 56). For example, compare the mission statement by the Cooper Tire & Rubber Company with that of IKEA. “The purpose of the Cooper Tire & Rubber Company is to earn money for its shareholders and increase the value of their investment. We will do that through growing the company, controlling assets and properly structuring the balance sheet, thereby increasing EPS, cash flow, and return on invested capital.” This mission is clearly directed at gain and it will push a gain goal-frame in the employees. In addition, it does not help employees to define their own role, to understand their purpose in the organization. This contrasts with IKEA’s mission statement, namely to “... offer a wide range of home furnishing items of good design and function, excellent quality and durability, at prices so low that the majority of people can afford to buy them”. This mission statement can serve collective identification with firm goals (thus supporting a normative goal-frame) and it helps the individual employee to give direction to his or her own role in realizing the collective goals. Other examples are not difficult to find. For example, another Fortune 500 company, Avon Products, declares that “We will deliver superior returns to our shareholders by tirelessly pursuing new growth opportunities while continually improving our profitability, a socially responsible, ethical company that is watched and emulated as a model of success.” Here, an ethical component is mentioned, but it is hijacked by the gain component. By contrast, LEGO’s mission is stated as “to help children develop their creativity and learning skills through constructive play.” This goal is both easy to identify with (thus supporting a collective orientation to the firm’s goal) and concrete enough to give each employee a sense of what it is that needs to be done (Lindenberg &

Foss 2011). High-level strategic goals can also be explicitly linked to goals of the employees. For example, the pharmaceutical company Eisai explicitly states that “it is most important that we know and share the feelings of the patients, their joys, anger, sadness, and happiness. The essence of Eisai is our pursuit of the ‘Eisai way,’ which is realized through the exercise of strong entrepreneurship by each employee” (in Spender & Strong, 2012: 18).

The Strategic Importance of Leadership Style

For both ways to influence the motivation for joint production (governance structure and obliquity with regard to gain-goals), there is likely to be a symbiotic relationship with leadership style, which imbues leadership style with strategic importance. First of all, there is the top-down contagion process that gives considerable weight to the overarching goals of leaders for affecting the goal-frames of the employees. Thus for obliquity to work, the leadership must be seen as supporting these high-level goals also in daily practice. Second of all, leadership can actively encourage identification with the organization and the preconditions for individuals to be motivated to take individual responsibility for reaching collective goals. In the literature, such kind of leadership has been identified as transformational leadership (Kirkpatrick & Locke, 1996; Judge & Piccolo, 2004; Grant, 2012).

Overall, this literature asserts that (strategic) leaders motivate followers/employees by communicating compelling visions, typically in the context of stressing collective identities as we all as generally and strongly held core human values that can motivate followers to switch from gain goal frames to normative goal frames (Shamir, House & Arthur, 1993). Thus, from the point of view of goal-framing theory, transformational leaders need to capture motivating aspects of the high-level goals and use them to steer identification processes so that they provide direct support for the normative goal-frame by embedding common goals (Van Knippenberg, 2000) and providing links to values (Thompson & Bunderson, 2003). Because the normative goal-frame is linked to a supra-individual entity, there must be particular emphasis on what organizational members have in

common, what binds them, together with the creation and maintenance of positive affect connected to what organizational members have in common (Bollen & Hoyle, 1990; Liberman et al., 2004; Zaccaro & McCoy, 1988).

Grant (2012: 458) notes that findings in the transformational leadership literature have been mixed, with “inconsistent effects of transformational leadership on followers’ performance” emerging in laboratory as well as field experiments. A possible reason is that leaders may fail to take steps “to ensure that the vision is not simply rhetoric” (Kirkpatrick & Locke, 1996: 37). Indeed, goal-framing theory suggests that strategic “as if” relational campaigns that actually only try to create the appearance of relational concern and concern for individual improvement, will not be effective for long and will ultimately drive out normative goal-frames in favor of gain or hedonic goal-frames (Greenberg, 1990, Miller, 2001). Of course, leaders also have a transactional role of control, but that should be embedded in the transformational approach (Wang et al 2011). This means that control too needs to be approached obliquely.

Grant (2012) suggests that transformational leadership is most effective with respect to motivating followers when leaders lead by example and engage in direct contact with followers. Goal-framing theory supports this idea: Because the normative goal-frame is highly precarious and because power-relations are highly asymmetric (i.e., top-down), employees watch out for signals that reveal the goal-frame of the management (Mühlau & Lindenberg, 2003; Six and Sorge 2008; Takeuchi, Chen & Lepak, 2009). What Grant calls “beneficiary contact,” for example, when leaders visibly work with organizational members (“beneficiaries”) in a manner oriented towards joint production, can signal the normative goal frame of leaders and show concretely to organizational members that strategic goals are indeed geared towards joint production and underpinned by prosocial visions that make a difference to stakeholders. Because of the contagion effects on the stability of the normative goal-frame, seeing that strategic leaders, in special communal events, show affective and consensual commitment to a cause and the related vision/mission, and seeing that many

other employees experience this simultaneously, creates affective communality among organizational members (see Islam & Zyphur, 2009; Trice & Beyer, 1984). In short, there is need for a transactional role of control but it is of strategic importance that the leadership actually “live” their strategic goals that keep gain goals oblique.

CONCLUSION

From the point of view of pragmatic management research, microfoundations matter, not so much because microfoundations are philosophically the right thing to do, but because they furnish substantive implications for theory-building that truly matter to practitioners. This insight is not new, but until now, microfoundations for strategic management have separated the cognitive and motivational dimensions and neglected their crucial interconnection in the dynamics of overarching goals. To be sure, the investigation of the effects of heuristics and biases on the behavior of top-management teams (Powell et al., 2011) is a worthwhile endeavor, as is the integration of motivation research with strategic management (Coff, 1997; Osterloh & Frey, 2000). However, consistent with important recent research in experimental economics, social psychology, and cognitive science, goal-framing theory argues that cognitive and motivational microfoundations are strongly intertwined, and that both dimensions should be taken into account—and that this makes a substantive difference in terms of theory-development in strategic management. Specifically, goal-framing theory allows us to cast the fundamental strategic management issues of value creation and strategic goals in a new light and to explore their interrelations (cf. Figure 1 and 2).

On the basis of goal-framing theory one can thus argue that the heart of value creation in firms lies in the motivation for joint production for all involved. No matter what the firm wants to achieve, optimal value creation will always crucially depend on eliciting a motivation among employees that is directed at common goals, such that organizational members are motivated to choose their actions in terms of joint goals and exert intelligent effort to reach joint goals (Lindenberg & Foss, 2011). Literatures on human resource management (e.g., Rousseau & Wade-Benzoni, 1994) and goal-

setting (e.g., Locke & Latham, 2002) often address the strategic importance of employee motivation, but they do not focus on joint production motivation but rather on the dyadic link of the individual to the organization. For example, Rousseau and Wade-Benzoni (1994) argue that HR practices are key ways in which strategies are implemented. Different practices implement different psychological contracts and the motivation of an employee is closely related to her interpretation of promises and commitments issued by the organization. However, this literature remains fundamentally dyadic in its orientation: It is the relation between the individual organizational member and the organization that is in focus.

In traditional microeconomic approaches to strategy, the joint production motivation has also been neglected, as have the costs of failing interest alignment with incentives. Yet, from a strategic management point of view, it is exactly the motivation for joint production that is crucial for optimal value creation. Accordingly, we have argued that the core strategic concern is to create a governance structure that can bring about and maintain a high level of joint production motivation among all members of the organization. One way to do this is to make the governance structure itself a key strategic concern (for more detail, see Lindenberg and Foss, 2011).

For the strategy field, another influence on the motivation for joint production is possibly less obvious but just as important: the influence of high-level strategic goals on motivation. Because of their obvious centrality, high-level strategic goals have been extensively discussed from multiple perspectives. For example, agency theorists have discussed the extent to which the goals of the firm are aligned with those of shareholders (Jensen & Meckling, 1976); resource-based theorists see the goals of the firm as constrained by the resource portfolio of the firm (Wernerfelt, 1984); positioning theory explains how goals are constrained by external competitive forces (Porter, 1980); competitive dynamics theory emphasizes how environmental changes influence changes in strategic goals (Audia, Locke and Smith, 2000); strategy process theories explain how goals may emerge from lower echelons in the organization (Burgelman, 1994) or reflect changing levels of aspiration

(Shinkle, 2012) or reference points (Fiegenbaum, Hart & Schendel 1996, 222); and strategic leadership theorists examine how goals are influenced by the discretion possessed by strategic managers (Finkelstein & Hambrick, 1996). However, whether, how and why strategic goals have to deal with obliquity is generally not addressed in the strategic management literature.

As become clear from the point of view of goal-framing theory, with regard to high-level strategic goals, strategic management involves a fundamental squaring-of-the-circle operation: On the one hand the overall aim is indeed to maximize appropriable value creation relative to the competition. This seems to require a competitive and economizing mindset associated with the gain goal-frame. On the other hand, promoting such a mindset internally results (*via* the operation of the vertical goal contagion mechanism) in the adoption on the part of organizational members of the gain goal-frame, which is associated with a lower level of value creation than the normative goal-frame. The implication is that the successful maximization of net returns require an oblique strategy, that is, one that stresses explicit goals that can support the normative goal-frame, which—in turn—is conducive to joint production motivation and aids a governance structure that is supportive of joint product motivation.

A good example of a successful oblique approach is the Swedish bank, Svenska Handelsbanken. Kroner (2011) who has studied this bank shows that the bank's strategic goal of higher return on equity than the average of its peers is pursued in a rather oblique way (p.139-141) and supported by an internal organization that is conducive to joint production. Thus, Handelsbanken's culture stresses employees being "self-directed and entrepreneurial" (p.93) with a high degree of accountability; the task structure is simple and highly transparent (p.96); and "Handelsbanken does not award bonuses" (p.98). This internal organization supports the "... bank's visceral dislike for risk-taking, its focus on concentrating on customer satisfaction over profits, and its emphasis on long-term orientation" (p.99). Svenska Handelsbanken has been consistently successful in pursuing its strategic goal in this oblique way, placing it among the top-25 in Europe.

This success of Handelsbanken is a witness to yet another strategic concern derivable from goal-framing theory: the importance of transformational leadership. Such leadership is important in making strategic gain goals oblique, in creating common purpose, and in maintaining a governance structure that is supportive of joint production motivation. The three strategic concerns suggested here (governance, oblique gain goals, and transformational leadership) take time and a long-term perspective to develop and might well constitute the heart of the complex and path-dependent resources highlighted by the resource-based perspective (Barney, 1991).

REFERENCES

- Aarts, H., Gollwitzer, P. M., & Hassin, R. R. 2004. Goal contagion: Perceiving is for pursuing. *Journal of Personality and Social Psychology*, 87: 23-37.
- Abell, P, Felin, T., & Foss, N. J. 2008. Building microfoundations for the routines, capabilities and performance link. *Managerial and Decision Economics*, 29: 489-502.
- Alchian, A. A. 1984. Specificity, specialization, and coalitions. *Journal of Institutional and Theoretical Economics*, 140: 34-49.
- Alchian, A. A. & Demsetz, H. 1972. Production, information costs, and economic organization. *American Economic Review*, 62: 772-795.
- Alchian, A.A. & Woodward, S. 1988. The firm is dead; long live the firm. A review of Oliver E. Williamson's *The Economic Institutions of Capitalism*. *Journal of Economic Literature*, XXVI.: 65-79
- Anand, G., Ward, P.T., Tatikonda, M.V. & Schilling, D.A. 2009. Dynamic capabilities through continuous improvement infrastructure. *Journal of Operations Management*. 27:444-461
- Andreoni, J. 1988. Why free ride? Strategies and learning in public goods experiments. *Journal of Public Economics*, 37: 291-304.
- Ashforth, B.E., & Johnson, S.A. 2001. *Which hat to wear?* The relative salience of multiple identities in organizational contexts. In M. A. Hogg & D. J. Terry (Eds.), *Social identity processes in organizational contexts: 31-48*. Philadelphia: Psychology Press
- Audia, P. G., Locke, E. A. & Smith, K. G. 2000. The Paradox of Success: An Archival and a Laboratory Study of Strategic Persistence Following Radical Environmental Change. *The Academy of Management Journal*, 43(5): 837-853.
- Barney, J. B. 1986. Organizational culture: Can it be a source of sustained competitive advantage? *Academy of Management Review*, 11: 656-665.
- Barney, J. B. 1991. Firm resources and sustained competitive advantage. *Journal of Management*, 17: 99-120.
- Barney, J.B. & Griffin, R.W. 1992. *The Management of Organizations: Strategy, Structure, Behavior*. Boston: Houghton Mifflin.

- Baron, J. N., & Kreps, D. M. 1999. *Strategic human resources: Frameworks for general managers*. New York: Wiley.
- Bingham, C. B. and Eisenhardt, K. M. 2011. Rational heuristics: the ‘simple rules’ that strategists learn from process experience. *Strategic Management Journal*, 32: 1437–1464.
- Birkinshaw, J. 2012. *Reinventing Management - Smarter Choices for Getting Work Done*. New York: Wiley.
- Blair, M. M. & Stout, L. 1999. A team production theory of corporate law. *Virginia Law Review*, 85 (2): 247-328.
- Bollen, K. A., & Hoyle, R. H. 1990. Perceived cohesion: A conceptual and empirical examination. *Social Forces*, 69: 479-504.
- Bromiley, P. 2005. *The behavioral foundations of strategic management*. Oxford, UK Blackwell.
- Brown, M. E., Treviño, L. K., & Harrison, D. A. 2005. Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, 97: 117-134.
- Burgelman, R. A., 1994, ‘Fading Memories: A Process Theory of Strategic Business Exit in Dynamic Environments’. *Administrative Science Quarterly*, 39: 24–56.
- Camerer, C. F. 2003. *Behavioral game theory: Experiments on strategic interaction*. Princeton: Princeton University Press.
- Camerer, C. F., & Lovallo, D. 1999. Overconfidence and excess entry: An experimental approach. *American Economic Review*, 89: 306–18.
- Carver, C. S., & Scheier, M. F. 1990. Principles of self-regulation. Action and emotion. In Higgins, E.T. & Sorrentino, R.M. (Eds.), *Handbook of motivation and cognition; Foundations of social behavior* Vol. 2. New York: The Guildford Press
- Chatain, O., & Zemsky, P. 2011. Value creation and value capture with frictions. *Strategic Management Journal* 32: 1206–1231.
- Coff, R. W. 1997. Human assets and management dilemmas: Coping with hazards on the road to resource-based theory. *Academy of Management Review*, 22: 374-402.
- Coff, R. 1999. When competitive advantage doesn’t lead to performance: Resource-based theory and stakeholder bargaining power. *Organization Science*, 10: 119-133.
- Colquitt, J. A. 2004. Does the justice of the one interact with the justice of the many? Reactions to procedural justice in teams. *Journal Of Applied Psychology*, 89: 633-646.
- Cyert, R. M. & March, J. G. 1963. *A Behavioral Theory of the Firm*. Englewood Cliffs, NJ: Prentice-Hall.
- De Dreu, C. K. W., Nijstad, B. A., & Van Knippenberg, D. 2008. Motivated information processing in group judgment and decision making. *Personality and Social Psychology Review*, 12: 22–49.
- Denrell, J., Fang, C., & Winter, S. G. 2003. The economic of strategic opportunity. *Strategic Management Journal*, 24: 977-990.
- Dougherty, D., & Takacs, H. 2004. Team play: Heedful interrelating as the boundary for innovation. *Long Range Planning*, 37: 569-590.

- Dunbar, R. I. M. 2003. The social brain: Mind, language, and society in evolutionary perspective. *Annual Review of Psychology*, 32: 163-181.
- Epley, N., Caruso, E., & Bazerman, M.H. 2006. When Perspective Taking Increases Taking: Reactive Egoism in Social Interaction. *Journal of Personality and Social Psychology*, 91(5): 872-889.
- Fehr, E., & Gächter, S. 2002. Altruistic punishment in humans. *Nature*, 415: 137-140.
- Felin, T. & Barney, J.B. 2013. Microfoundations of organization and strategy: Half-truths, truths and future Directions. *Academy of Management Perspectives* (this issue).
- Felin, T., & Foss, N. J. 2011. The endogenous origins of experience, Routines and organizational capabilities: The poverty of stimulus. *Journal of Institutional Economics*.
- Ferguson, M. J., & Bargh, J. A. 2004. Liking is for doing: The effects of goal pursuit on automatic evaluation. *Journal of Personality and Social Psychology*, 87: 557-572.
- Fiegenbaum, A., Hart, S. & Schendel, D. 1996. Strategic Reference Point Theory. *Strategic Management Journal*, 17: 219-235.
- Finkelstein, S. & D.C. Hambrick. 1996. Strategic leadership: Top executives and their effects on organizations. New York: West Publishing Company.
- Foss, N. 2011. Micro-foundations for Resource-based Theory. *Journal of Management*, 37: 1413-1428.
- Foss, K. & Foss, N. J. 2005. Value and Transaction Costs: How the Economics of Property Rights Furthers the RBV. *Strategic Management Journal* 26: 541-553
- Foss, N. J. & Lindenberg, S. 2012. Teams, team motivation, and the theory of the firm. *Managerial and Decision Economics*, , 33: 363-389
- Foss, N.J., Reinholdt, M., Pedersen, T. & Stea, D., 2013. Motivating to be prosocial: how complementary motivators reduce the ambiguity of informal rewards. *Manuscript*. Förster, J., Liberman, N., & Higgins, E. T. 2005. Accessibility from active and fulfilled goals. *Journal of Experimental Social Psychology*, 41: 220-239.
- Gavetti, G. 2005. Cognition and hierarchy: Rethinking the microfoundations of capabilities' development. *Organization Science*, 16: 599-617.
- Gavetti, G., Levinthal, D., & Ocasio, W. 2007. Neo-Carnegie School's past, present, and reconstructing for the future. *Organ. Sci.* 18(3) 523–536.
- Gollwitzer, P. M., & Bargh, J. A. (Eds.). 1996. *The psychology of action: Linking cognition and motivation to behavior*. New York: Guilford Press.
- Gottschalg, O., & Zollo, M. 2007. Interest alignment and competitive advantage. *Academy of Management Review*, 32: 418-437.
- Grant, A. M. 2012. Leading with meaning: Beneficiary contact, prosocial impact, and the performance effects of transformational leadership, *Academy of Management Journal*, 5: 458-476.
- Greenberg, J. 1990, Organizational Justice: Yesterday, today and tomorrow, *Journal of Management*, 16, 399-432.
- Greve, H. 2013. Microfoundations of management: behavioral strategies and levels of rationality in organizational action. *Academy of Management Perspectives* (this issue).
- Haidt, J. 2012. *The Righteous Mind*. London: Allen Lane.

- Hamel, G., & Prahalad, C. K. 1989. Strategic Intent. *Harvard Business Review*, 63-76.
- Henrich, J., Boyd, R., Bowles, S., Camerer, C., Fehr, E., Gintis, H., & McElreath, R. 2001. Cooperation, reciprocity and punishment in fifteen small-scale societies. *American Economic Review*, 91: 73–78.
- Hermalin, B. E. 1998. Toward an Economic Theory of Leadership: Leading by Example, *American Economic Review*, 88 (5), 1188– 1206.
- Hodgkinson, G. & Sparrow, P.R. 2002. *The competent organization: a psychological analysis of the strategic management process*. Buckingham: Open University Press.
- Islam, G., & Zyphur, M. J. 2009. Rituals in organizations: A review and expansion of current theory. *Group Organization Management*, 34: 114-139.
- Jensen, M. C., & Meckling, W.H. 1976. Theory of the Firm: Managerial Behaviour, Agency Costs and Ownership Structure, *Journal of Financial Economics*, 3 (4), 305-360.
- Judge, T. A. & Piccolo, R. F. 2004. Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89: 755-768.
- Keizer, K., Lindenberg, S., & Steg, L. 2008. The spreading of disorder. *Science*, 322: 1681-1685.
- Keizer, K., Lindenberg, S, & Steg, L. 2011. Higher-ups make especially influential norm violators. *Working paper, University of Groningen*.
- Ketokivi, M. & Castañer, X.. 2004. Strategic Planning as an Integrative Device. *Administrative Science Quarterly*, 49(3): 337-365.
- Kirkpatrick, S.A. & Locke, E.A. 1996. Direct and indirect effects of three core charismatic leadership components on performance and attitudes. *Journal of Applied Psychology*, 81: 36-51.
- Kogut, B., & Zander, U. 1996. What firms do? Coordination, identity, and learning. *Organization Science*, 7: 502-517.
- Kroner, N. 2011. *A Blueprint for Better Banking*. Hampshire: Harriman House.
- Kruglanski, A. (1999) Motivation, cognition, and reality: Three memos for the next generation of research. *Psychological Inquiry*, 10:1, 54-58
- Kruglanski, A. W., & Köpetz, C. 2009. What is so special (and non-special) about goals? A view from the cognitive perspective. In G. B. Moskowitz & H. Grant (Eds.), *The psychology of goals: 27-55*. New York: Guilford Press.
- Kruglanski, A. W., Shah, J. Y., Friedman, R., Fishbach, A., Chun, W. Y., & Sleeth-Keppler, D. 2002. A theory of goal systems. *Advances in Experimental Social Psychology*, 34 : 331-378.
- Ledyard, J.O., 1995. Public goods: a survey of experimental research. In: J.H. Kagel, and A.E. Roth (Eds.), *The Handbook of Experimental Economics*, Princeton NJ: Princeton University Press: 111–194.
- Lepak, D. P., & Snell, S. A. 1999. The human resource architecture: Toward a theory of human capital allocation and development. *Academy of Management Review*, 24: 31-48.
- Liberman, V., Samuels, S. M., & Ross, L. 2004. The name of the game: Predictive power of reputations versus situational labels in determining prisoner's dilemma game moves. *Personality and Social Psychology Bulletin*, 30: 1175-1185.
- Lindenberg, S. 2000. It takes both trust and lack of mistrust: The workings of cooperation and relational signaling in contractual relationships, *Journal of Management and Governance* 4:

11-33.

Lindenberg, S. 2003. The cognitive side of governance. *Research in the Sociology of Organizations*, 20: 47-76.

Lindenberg, S., 2004. Myopia's price: Inefficiencies in organizations. In A. Diekmann & T. Voss (Eds.), *Rational-choice-theorie in den Sozialwissenschaften*: 217-229. Munich: Oldenbourg.

Lindenberg, S. 2006. Prosocial behavior, solidarity, and framing processes. In D. Fetchenhauer, A. Flache, A. P. Buunk, & S. Lindenberg (Eds.), *Solidarity and prosocial behavior: An integration of sociological and psychological perspectives*: 23-44. New York: Springer.

Lindenberg, S. 2008. Social rationality, semi-modularity and goal-framing: What is it all about? *Analyse und Kritik*, 30: 669-687.

Lindenberg, S. 2012a. How cues in the environment affect normative behavior. In L. Steg, A.E. van den Berg, & J.I.M. de Groot (eds.) *Environmental Psychology: An Introduction*, New York: Wiley

Lindenberg, S. 2013. Cognition and governance: Why incentives have to take the back seat. In A. Grandori (ed.) *Handbook of Economic Organization*. Elgar:

Lindenberg, S. & Foss, N. J. 2011. Managing joint production motivation: The role of goal framing and governance mechanisms. *Academy of Management Review*.

Lippman, S. A., & Rumelt, R. P. 2003. A bargaining perspective on resource advantage. *Strategic Management Journal*, 24: 1069–1086.

Livengood, R. S., & Reger, R. K., 2010. That's our turf! Identity domains and competitive dynamics. *Academy of Management Review*, 35: 48-66.

Locke, E. A., & Latham, G. P. 2002. Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist*, 57: 705-717.

Metcalf, J., & Mischel, W. 1999. A hot/cool-system analysis of delay of gratification: Dynamics of willpower. *Psychological Review*, 106: 3–19.

Miller, D. 2001. Disrespect and the experience of injustice. *Annual Review of Psychology*. 52: 527–553.

Montgomery, C. 2008. Putting leadership back into strategy. *Harvard Business Review*. 85: 54-60

Muhlau, P., & Lindenberg, S., 2003. Efficiency Wages: Signals or Incentives? *Journal of Management and Governance*, 385–400.

Nickerson, J. & Zenger, T. 2008. Envy, Comparison Costs, and the Economic Theory of the Firm. *Strategic Management Journal*, 29: 1429-1449.

Osterloh, M., & Frey, B. 2000. Motivation, knowledge transfer and organizational form. *Organization Science*, 11: 538-550.

Peteraf, M. A., & Barney, J. B. 2003. Unraveling the resource-based tangle. *Managerial and Decision Economics*, 24(4): 309-323.

Pillutla, M., & Chen, X. P. 1999. Social norms and cooperation in social dilemmas: The effects of context and feedback. *Organizational Behavior and Human Decision Processes*, 78, 81–103.

Podsakoff, P. M., & MacKenzie, S. B. 1997. Impact of organizational citizenship behavior on organizational performance: A review and suggestions for future research. *Human Performance*, 10: 133–151.

Porac, J. F. & Thomas, H. 1990. Taxonomic mental models in competitor definition, *Academy of*

Management Review, 15(2), pp. 224–240.

- Porter, M. E. 1980. *Competitive strategy*. New York: Free Press.
- Posner, M. I., & Petersen, S. E. 1990. The attention system of the human brain. *Annual Review of Neuroscience*, 13: 25-42.
- Postrel, S., & Rumelt, R. P. 1992. Incentives, routines, and self-command. *Industrial and Corporate Change*, 1: 397-425.
- Powell, T. C., Lovallo, D., & Fox, C. 2011. Behavioral Strategy. *Strategic Management Journal*, 32: 1369-1386.
- Rousseau, D. M., & Wade-Benzoni, K. A. 1994. Linking strategy and human resource practices: How employee and customer contracts are created. *Human Resource Management*, 33: 463–489.
- Rumelt, R. 2011. *Good Strategy, Bad Strategy*. London: Profile Books.
- Ryan, R. M., Huta, V., & Deci, E. L. 2008. Living well: A self-determination theory perspective on eudaimonia. *Journal of Happiness Studies*, 9: 139-170.
- Sebanz, N., Bekkering, H., & Knoblich, G. 2006. Joint action: Bodies and minds moving together. *Trends in Cognitive Science*, 10: 70-76.
- Six, F., and Sorge, A. 2008. Creating a high-trust organization: An exploration into organizational policies that stimulate interpersonal trust building. *Journal of Management Studies* 45, 857-884
- Shah, J. Y., Friedman, R., & Kruglanski, A. W. 2002. Forgetting all else: On the antecedents and consequences of goal shielding. *Journal of Personality and Social Psychology*, 83: 1261-1280.
- Shamir, B., House, R. J. & Arthur, M. B. 1993. The motivational effects of charismatic leadership: A self-concept based theory. *Organization Science*, 4: 577-594.
- Shinkle, George A. 2012. Organizational Aspirations, Reference Points, and Goals: Building on the Past and Aiming for the Future. *Journal of Management*, 38(1): 415-455.
- Shipton, H. J., West, M.A., Parkes, C. L., Dawson, J. F., & Patterson, M. G. 2006. When promoting positive feelings pays: Aggregate job satisfaction, work design features, and innovation in manufacturing organizations *European Journal of Work and Organizational Psychology*, 15: 404–430.
- Spender, J. C., & Strong, Bruce. (2012). *Strategic Conversations*. Cambridge: Cambridge University Press.
- Tabibnia, G., Satpute, A. B., & Lieberman, M. D. 2008. The sunny side of fairness: Preference for fairness activates reward circuitry (and disregarding unfairness activates self-control circuitry). *Psychological Science*, 19: 339-347.
- Takeuchi, R., Chen, G., & Lepak, D. 2009. Through the looking glass of a social system: Cross-level effects of high-performance work systems on employees' attitudes. *Personnel Psychology*, 62: 1-29.
- Teece, D. J. 2007. Explicating dynamic capabilities: The nature and micro-foundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28: 1319-1350.
- Thompson, J. A., & Bunderson, J. S. 2003. Violation of principle: Ideological currency in the psychological contract. *Academy of Management Review*, 28: 571–586.
- Tomasello, M., Carpenter, M., Call, J., Behne, T., & Moll, H. 2005. Understanding and sharing intentions: The origin of cultural cognition. *Behavioral and Brain Sciences*, 28: 675-735.

- Tsai, W. 2001. Knowledge transfer in intraorganizational networks: Effects of network position and absorptive capacity on business unit innovation and performance. *Academy of Management Journal*, 44: 996-1004.
- Trice, H. M., & Beyer, J. M. 1984. Studying organizational cultures through rites and ceremonials. *Academy of Management Review*, 9, 653-669.
- Van den Bergh, B., Dewitte, S., & Warlop, L. 2008. Bikinis instigate generalized impatience in intertemporal choice. *Journal of Consumer Research*, 35: 85-97.
- Van Knippenberg, D. 2000. Work motivation and performance: A social identity perspective. *Applied Psychology: An International Review*, 49: 357-371.
- Van de Ven, Andrew. 2013. Rational and reasonable microfoundations of markets and institutions. *Academy of Management Perspectives* (this issue).
- Wang, H., & Barney, J. 2008. Employee incentives to make firm-specific investments: Implications for resource-based theories of corporate diversification. *Academy of Management Review*, 31: 466-476.
- Weick, K. E. 1995. *Sensemaking In Organizations*. Thousand Oaks, CA: Sage Publications
- Weick, K. E., and Roberts. K. H. 1993. Collective mind in organizations: Heedful interrelating on flight decks. *Administrative Science Quarterly*, 38: 357-381.
- Wernerfelt, B. 1984. A resource-based view of the firm. *Strategic Management Journal*, 5: 171-180.
- Winter, S. 2013. Habit, deliberation and action: strengthening the microfoundations of routines and capabilities. *Academy of Management Perspectives* (this issue).

Figure 1: Value Creation Frontiers and Goal-frames

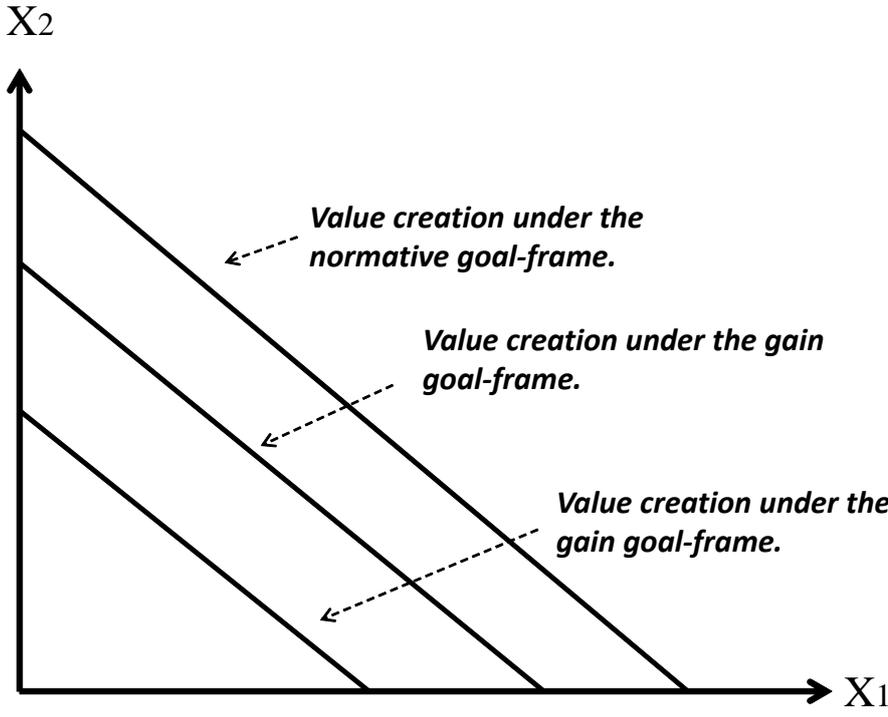
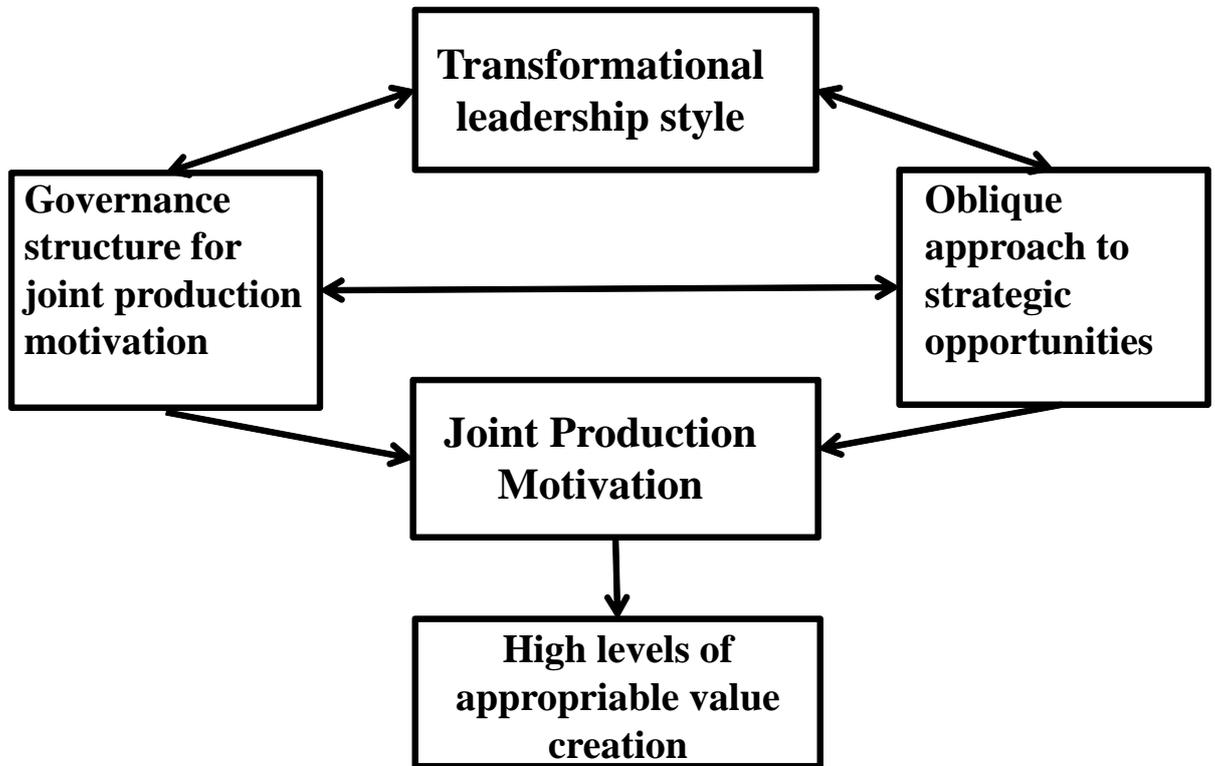


Figure 2: *The key concerns for strategic management based on goal-framing theory*



SMG - Working Papers

www.cbs.dk/smg

2003

- 2003-1:** Nicolai J. Foss, Kenneth Husted, Snejjina Michailova, and Torben Pedersen: Governing Knowledge Processes: Theoretical Foundations and Research Opportunities.
- 2003-2:** Yves Doz, Nicolai J. Foss, Stefanie Lenway, Marjorie Lyles, Silvia Massini, Thomas P. Murtha and Torben Pedersen: Future Frontiers in International Management Research: Innovation, Knowledge Creation, and Change in Multinational Companies.
- 2003-3:** Snejjina Michailova and Kate Hutchings: The Impact of In-Groups and Out-Groups on Knowledge Sharing in Russia and China CKG Working Paper.
- 2003-4:** Nicolai J. Foss and Torben Pedersen: The MNC as a Knowledge Structure: The Roles of Knowledge Sources and Organizational Instruments in MNC Knowledge Management CKG Working Paper.
- 2003-5:** Kirsten Foss, Nicolai J. Foss and Xosé H. Vázquez-Vicente: "Tying the Manager's Hands": How Firms Can Make Credible Commitments That Make Opportunistic Managerial Intervention Less Likely CKG Working Paper.
- 2003-6:** Marjorie Lyles, Torben Pedersen and Bent Petersen: Knowledge Gaps: The Case of Knowledge about Foreign Entry.
- 2003-7:** Kirsten Foss and Nicolai J. Foss: The Limits to Designed Orders: Authority under "Distributed Knowledge" CKG Working Paper.
- 2003-8:** Jens Gammelgaard and Torben Pedersen: Internal versus External Knowledge Sourcing of Subsidiaries - An Organizational Trade-Off.
- 2003-9:** Kate Hutchings and Snejjina Michailova: Facilitating Knowledge Sharing in Russian and Chinese Subsidiaries: The Importance of Groups and Personal Networks Accepted for publication in *Journal of Knowledge Management*.
- 2003-10:** Volker Mahnke, Torben Pedersen and Markus Verzin: The Impact of Knowledge Management on MNC Subsidiary Performance: the Role of Absorptive Capacity CKG Working Paper.
- 2003-11:** Tomas Hellström and Kenneth Husted: Mapping Knowledge and Intellectual Capital in Academic Environments: A Focus Group Study Accepted for publication in *Journal of Intellectual Capital* CKG Working Paper.
- 2003-12:** Nicolai J Foss: Cognition and Motivation in the Theory of the Firm: Interaction or "Never the Twain Shall Meet"? Accepted for publication in *Journal des Economistes et des Etudes Humaines* CKG Working Paper.
- 2003-13:** Dana Minbaeva and Snejjina Michailova: Knowledge Transfer and Expatriation Practices in MNCs: The Role of Disseminative Capacity.
- 2003-14:** Christian Vintergaard and Kenneth Husted: Enhancing Selective Capacity Through Venture Bases.

2004

- 2004-1:** Nicolai J. Foss: Knowledge and Organization in the Theory of the Multinational Corporation: Some Foundational Issues
- 2004-2:** Dana B. Minbaeva: HRM Practices and MNC Knowledge Transfer
- 2004-3:** Bo Bernhard Nielsen and Snejina Michailova: Toward a Phase-Model of Global Knowledge Management Systems in Multinational Corporations
- 2004-4:** Kirsten Foss & Nicolai J Foss: The Next Step in the Evolution of the RBV: Integration with Transaction Cost Economics
- 2004-5:** Teppo Felin & Nicolai J. Foss: Methodological Individualism and the Organizational Capabilities Approach
- 2004-6:** Jens Gammelgaard, Kenneth Husted, Snejina Michailova: Knowledge-sharing Behavior and Post-acquisition Integration Failure
- 2004-7:** Jens Gammelgaard: Multinational Exploration of Acquired R&D Activities
- 2004-8:** Christoph Dörrenbächer & Jens Gammelgaard: Subsidiary Upgrading? Strategic Inertia in the Development of German-owned Subsidiaries in Hungary
- 2004-9:** Kirsten Foss & Nicolai J. Foss: Resources and Transaction Costs: How the Economics of Property Rights Furthers the Resource-based View
- 2004-10:** Jens Gammelgaard & Thomas Ritter: The Knowledge Retrieval Matrix: Codification and Personification as Separate Strategies
- 2004-11:** Nicolai J. Foss & Peter G. Klein: Entrepreneurship and the Economic Theory of the Firm: Any Gains from Trade?
- 2004-12:** Akshey Gupta & Snejina Michailova: Knowledge Sharing in Knowledge-Intensive Firms: Opportunities and Limitations of Knowledge Codification
- 2004-13:** Snejina Michailova & Kate Hutchings: Knowledge Sharing and National Culture: A Comparison Between China and Russia

2005

- 2005-1:** Keld Laursen & Ammon Salter: My Precious - The Role of Appropriability Strategies in Shaping Innovative Performance
- 2005-2:** Nicolai J. Foss & Peter G. Klein: The Theory of the Firm and Its Critics: A Stocktaking and Assessment
- 2005-3:** Lars Bo Jeppesen & Lars Frederiksen: Why Firm-Established User Communities Work for Innovation: The Personal Attributes of Innovative Users in the Case of Computer-Controlled Music
- 2005-4:** Dana B. Minbaeva: Negative Impact of HRM Complementarity on Knowledge Transfer in MNCs
- 2005-5:** Kirsten Foss, Nicolai J. Foss, Peter G. Klein & Sandra K. Klein: Austrian Capital

Theory and the Link Between Entrepreneurship and the Theory of the Firm

- 2005-1:** Nicolai J. Foss: The Knowledge Governance Approach
- 2005-2:** Torben J. Andersen: Capital Structure, Environmental Dynamism, Innovation Strategy, and Strategic Risk Management
- 2005-3:** Torben J. Andersen: A Strategic Risk Management Framework for Multinational Enterprise
- 2005-4:** Peter Holdt Christensen: Facilitating Knowledge Sharing: A Conceptual Framework
- 2005-5:** Kirsten Foss & Nicolai J. Foss: Hands Off! How Organizational Design Can Make Delegation Credible
- 2005-6:** Marjorie A. Lyles, Torben Pedersen & Bent Petersen: Closing the Knowledge Gap in Foreign Markets - A Learning Perspective
- 2005-7:** Christian Geisler Asmussen, Torben Pedersen & Bent Petersen: How do we Capture "Global Specialization" when Measuring Firms' Degree of internationalization?
- 2005-8:** Kirsten Foss & Nicolai J. Foss: Simon on Problem-Solving: Implications for New Organizational Forms
- 2005-9:** Birgitte Grøgaard, Carmine Gioia & Gabriel R.G. Benito: An Empirical Investigation of the Role of Industry Factors in the Internationalization Patterns of Firms
- 2005-10:** Torben J. Andersen: The Performance and Risk Management Implications of Multinationality: An Industry Perspective
- 2005-11:** Nicolai J. Foss: The Scientific Progress in Strategic Management: The case of the Resource-based view
- 2005-12:** Koen H. Heimeriks: Alliance Capability as a Mediator Between Experience and Alliance Performance: An Empirical Investigation Into the Alliance Capability Development Process
- 2005-13:** Koen H. Heimeriks, Geert Duysters & Wim Vanhaverbeke: Developing Alliance Capabilities: An Empirical Study
- 2005-14:** JC Spender: Management, Rational or Creative? A Knowledge-Based Discussion

2006

- 2006-1:** Nicolai J. Foss & Peter G. Klein: The Emergence of the Modern Theory of the Firm
- 2006-2:** Teppo Felin & Nicolai J. Foss: Individuals and Organizations: Thoughts on a Micro-Foundations Project for Strategic Management and Organizational Analysis
- 2006-3:** Volker Mahnke, Torben Pedersen & Markus Venzin: Does Knowledge Sharing

Pay? An MNC Subsidiary Perspective on Knowledge Outflows

- 2006-4:** Torben Pedersen: Determining Factors of Subsidiary Development
- 2006-5** Ibuki Ishikawa: The Source of Competitive Advantage and Entrepreneurial Judgment in the RBV: Insights from the Austrian School Perspective
- 2006-6** Nicolai J. Foss & Ibuki Ishikawa: Towards a Dynamic Resource-Based View: Insights from Austrian Capital and Entrepreneurship Theory
- 2006-7** Kirsten Foss & Nicolai J. Foss: Entrepreneurship, Transaction Costs, and Resource Attributes
- 2006-8** Kirsten Foss, Nicolai J. Foss & Peter G. Klein: Original and Derived Judgement: An Entrepreneurial Theory of Economic Organization
- 2006-9** Mia Reinholt: No More Polarization, Please! Towards a More Nuanced Perspective on Motivation in Organizations
- 2006-10** Angelika Lindstrand, Sara Melen & Emilia Rovira: Turning social capital into business? A study of Swedish biotech firms' international expansion
- 2006-11** Christian Geisler Asmussen, Torben Pedersen & Charles Dhanaraj: Evolution of Subsidiary Competences: Extending the Diamond Network Model
- 2006-12** John Holt, William R. Purcell, Sidney J. Gray & Torben Pedersen: Decision Factors Influencing MNEs Regional Headquarters Location Selection Strategies
- 2006-13** Peter Maskell, Torben Pedersen, Bent Petersen & Jens Dick-Nielsen: Learning Paths to Offshore Outsourcing - From Cost Reduction to Knowledge Seeking
- 2006-14** Christian Geisler Asmussen: Local, Regional or Global? Quantifying MNC Geographic Scope
- 2006-15** Christian Bjørnskov & Nicolai J. Foss: Economic Freedom and Entrepreneurial Activity: Some Cross-Country Evidence
- 2006-16** Nicolai J. Foss & Giampaolo Garzarelli: Institutions as Knowledge Capital: Ludwig M. Lachmann's Interpretative Institutionalism
- 2006-17** Koen H. Heimriks & Jeffrey J. Reuer: How to Build Alliance Capabilities
- 2006-18** Nicolai J. Foss, Peter G. Klein, Yasemin Y. Kor & Joseph T. Mahoney: Entrepreneurship, Subjectivism, and the Resource - Based View: Towards a New Synthesis
- 2006-19** Steven Globerman & Bo B. Nielsen: Equity Versus Non-Equity International Strategic Alliances: The Role of Host Country Governance

2007

- 2007-1** Peter Abell, Teppo Felin & Nicolai J. Foss: Building Micro-Foundations for the Routines, Capabilities, and Performance Links

- 2007-2** Michael W. Hansen, Torben Pedersen & Bent Petersen: MNC Strategies and Linkage Effects in Developing Countries
- 2007-3** Niron Hashai, Christian G. Asmussen, Gabriel R.G. Benito & Bent Petersen: Predicting the Diversity of Foreign Entry Modes
- 2007-4** Peter D. Ørberg Jensen & Torben Pedersen: Whether and What to Offshore?
- 2007-5** Ram Mudambi & Torben Pedersen: Agency Theory and Resource Dependency Theory: Complementary Explanations for Subsidiary Power in Multinational Corporations
- 2007-6** Nicolai J. Foss: Strategic Belief Management
- 2007-7** Nicolai J. Foss: Theory of Science Perspectives on Strategic Management Research: Debates and a Novel View
- 2007-8** Dana B. Minbaeva: HRM Practices and Knowledge Transfer in MNCs
- 2007-9** Nicolai J. Foss: Knowledge Governance in a Dynamic Global Context: The Center for Strategic Management and Globalization at the Copenhagen Business School
- 2007-10** Paola Gritti & Nicolai J. Foss: Customer Satisfaction and Competencies: An Econometric Study of an Italian Bank
- 2007-11** Nicolai J. Foss & Peter G. Klein: Organizational Governance
- 2007-12** Torben Juul Andersen & Bo Bernhard Nielsen: The Effective Ambidextrous Organization: A Model of Integrative Strategy Making Processes.

2008

- 2008-1** Kirsten Foss & Nicolai J. Foss: Managerial Authority When Knowledge is Distributed: A Knowledge Governance Perspective
- 2008-2** Nicolai J. Foss: Human Capital and Transaction Cost Economics.
- 2008-3** Nicolai J. Foss & Peter G. Klein: Entrepreneurship and Heterogeneous Capital.
- 2008-4** Nicolai J. Foss & Peter G. Klein: The Need for an Entrepreneurial Theory of the Firm.
- 2008-5** Nicolai J. Foss & Peter G. Klein: Entrepreneurship: From Opportunity Discovery to Judgment.
- 2008-6** Mie Harder: How do Rewards and Management Styles Influence the Motivation to Share Knowledge?
- 2008-7** Bent Petersen, Lawrence S. Welch & Gabriel R.G. Benito: Managing the Internalisation Process – A Theoretical Perspective.
- 2008-8** Torben Juul Andersen: Multinational Performance and Risk Management Effects: Capital Structure Contingencies.

- 2008-9** Bo Bernard Nielsen: Strategic Fit and the Role of Contractual and Procedural Governance in Alliances: A Dynamic Perspective.
- 2008-10** Line Gry Knudsen & Bo Bernhard Nielsen: Collaborative Capability in R&D Alliances: Exploring the Link between Organizational and Individual level Factors.
- 2008-11** Torben Juul Andersen & Mahesh P. Joshi: Strategic Orientations of Internationalizing Firms: A Comparative Analysis of Firms Operating in Technology Intensive and Common Goods Industries.
- 2008-12** Dana Minbaeva: HRM Practices Affecting Extrinsic and Intrinsic Motivation of Knowledge Receivers and their Effect on Intra-MNC Knowledge Transfer.
- 2008-13** Steen E. Navrbjerg & Dana Minbaeva: HRM and IR in Multinational Corporations: Uneasy Bedfellows?
- 2008-14** Kirsten Foss & Nicolai J. Foss: Hayekian Knowledge Problems in Organizational Theory.
- 2008-15** Torben Juul Andersen: Multinational Performance Relationships and Industry Context.
- 2008-16** Larissa Rabbiosi: The Impact of Subsidiary Autonomy on MNE Knowledge Transfer: Resolving the Debate.
- 2008-17** Line Gry Knudsen & Bo Bernhard Nielsen: Organizational and Individual Level Antecedents of Procedural Governance in Knowledge Sharing Alliances.
- 2008-18** Kirsten Foss & Nicolai J. Foss: Understanding Opportunity Discovery and Sustainable Advantage: The Role of Transaction Costs and Property Rights.
- 2008-19** Teppo Felin & Nicolai J. Foss: Social Reality, The Boundaries of Self-fulfilling Prophecy, and Economics.
- 2008-20** Yves Dos, Nicolai J. Foss & José Santos: A Knowledge System Approach to the Multinational Company: Conceptual Grounding and Implications for Research
- 2008-21** Sabina Nielsen & Bo Bernhard Nielsen: Why do Firms Employ foreigners on Their Top Management Teams? A Multi-Level Exploration of Individual and Firm Level Antecedents
- 2008-22** Nicolai J. Foss: Review of Anders Christian Hansen's "Uden for hovedstrømmen - Alternative strømninger i økonomisk teori"
- 2008-23** Nicolai J. Foss: Knowledge, Economic Organization, and Property Rights
- 2008-24** Sjoerd Beugelsdijk, Torben Pedersen & Bent Petersen: Is There a Trend Towards Global Value Chain Specialization? - An Examination of Cross Border Sales of US Foreign Affiliates

2008-25 Vikas Kumar, Torben Pedersen & Alessandro Zattoni: The performance of business group firms during institutional transition: A longitudinal study of Indian firms

2008-26 Sabina Nielsen & Bo B. Nielsen: The effects of TMT and Board Nationality Diversity and Compensation on Firm Performance

2008-27 Bo B. Nielsen & Sabina Nielsen: International Diversification Strategy and Firm Performance: A Multi-Level Analysis of Firm and Home Country Effects

2009

2009-1 Nicolai J. Foss: Alternative Research Strategies in the Knowledge Movement: From Macro Bias to Micro-Foundations and Multi-Level Explanation

2009-2 Nicolai J. Foss & Peter G. Klein: Entrepreneurial Alertness and Opportunity Discovery: Origins, Attributes, Critique

2009-3 Nicolai J. Foss & Dana B. Minbaeva: Governing Knowledge: The Strategic Human Resource Management Dimension

2009-4 Nils Stieglitz & Nicolai J. Foss: Opportunities and New Business Models: Transaction Cost and Property Rights Perspectives on Entrepreneurships

2009-5 Torben Pedersen: Vestas Wind Systems A/S: Exploiting Global R&D Synergies

2009-6 Rajshree Agarwal, Jay B. Barney, Nicolai J. Foss & Peter G. Klein: Heterogeneous Resources and the Financial Crisis: Implications of Strategic Management Theory

2009-7 Jasper J. Hotho: A Measure of Comparative Institutional Distance

2009-8 Bo B. Nielsen & Sabina Nielsen: The Impact of Top Management Team Nationality Diversity and International Experience on Foreign Entry Mode

2009-9 Teppo Felin & Nicolai Juul Foss: Experience and Repetition as Antecedents of Organizational Routines and Capabilities: A Critique of Behaviorist and Empiricist Approaches

2009-10 Henk W. Volberda, Nicolai J. Foss & Marjorie E. Lyles: Absorbing the Concept of Absorptive Capacity: How To Realize Its Potential in the Organization Field

2009-11 Jan Stentoft Arlbjørn, Brian Vejrum Wæhrens, John Johansen & Torben Pedersen: Produktion i Danmark eller offshoring/outsourcing: Ledelsesmæssige udfordringer

2009-12 Torben Pedersen: The 30 Largest Firms in Denmark

2010

- 2010-1** Dana B. Minbaeva, Kristiina Mäkelä & Larissa Rabbiosi: Explaining Intra-organizational Knowledge Transfer at the Individual Level
- 2010-2** Dana B.Minbaeva & Torben Pedersen: Governing Individual Knowledge Sharing Behavior
- 2010-3** Nicolai J. Foss & Peter G. Klein: Alertness, Judgment, and the Antecedents of Entrepreneurship
- 2010-4** Nicolai J.Foss & Joseph T.Mahoney: Exploring Knowledge Governance
- 2010-5** Jasper J. Hotho, Florian Becker-Ritterspach & Ayse Saka-Helmhout: Enriching Absorptive Capacity Through Social Interaction
- 2010-6** Nicolai J. Foss & Bo B. Nielsen: Researching Collaborative Advantage: Some Conceptual and Multi-level Issues
- 2010-7** Nicolai J. Foss & Nils Stieglitz: Modern Resource-Based Theory(ies)
- 2010-8** Christian Bjørnskov & Nicolai J. Foss: Do Economic Freedom and Entrepreneurship Impact Total Factor Productivity?
- 2010-9** Gabriel R.G. Benito, Bent Petersen & Lawrence S. Welch: Mode Combinations and International Operations: Theoretical Issues and an Empirical Investigation

2011

- 2011-1** Peter D. Ørberg Jensen & Bent Petersen: Human Asset Internalization and Global Sourcing of Services - A Strategic Management Analysis on Activity-level
- 2011-2** Mie Harder: Management Innovation Capabilities: A Typology and Propositions for Management Innovation Research
- 2011-3** Mie Harder: Internal Antecedents of Management Innovation: The effect of diagnostic capability and implementation capability

- 2011-4** Mie Harder: Explaining Management Innovation Pervasiveness: The Role of Internal Antecedents
- 2011-5** Mie Harder: Internal Determinants of Product Innovation and Management Innovation: The Effect of Diagnostic Capability and Implementation Capability
- 2011-6** Nicolai J. Foss, Peter G. Klein & Per L. Bylund: Entrepreneurship and the Economics of the Firm
- 2011-7** Nicolai J. Foss & Jacob Lyngsie: The Emerging Strategic Entrepreneurship Field: Origins, Key Tenets and Research Gaps
- 2011-8** Nicolai J. Foss: Entrepreneurship in the Context of the Resource-based View of the Firm
- 2011-9** Bent Petersen, Gabriel R.G. Benito, Olesya Dovgan & Lawrence Welch: Offshore outsourcing: A dynamic, operation mode perspective
- 2011-10** Bent Petersen, Gabriel R. G. Benito & Lawrence Welch: Dynamics of Foreign Operation Modes and their Combinations: Insights for International Strategic Management
- 2011-11** Nicolai J. Foss: Teams, Team Motivation, and the Theory of the Firm
- 2011-12** Nicolai J. Foss: Knowledge Governance: Meaning, Nature, Origins, and Implications
- 2011-13** Nicolai J. Foss, Kirsten Foss & Phillip C. Nell: MNC Organizational Form and Subsidiary Motivation Problems: Controlling Intervention Hazards in the Network MNC
- 2011-14** Kåre Moberg: Evaluating Content Dimensions in Entrepreneurship Education

2012

- 2012-1** Nicolai J. Foss, Nicholas Argyres, Teppo Felin & Todd Zenger: The Organizational Economics of Organizational Capability and Heterogeneity: A Research Agenda

- 2012-2** Torben J. Andersen, Carina Antonia Hallin & Sigbjørn Tveterås: A Prediction Contest: The Sensing of Frontline Employees Against Executive Expectations
- 2012-3** Peter G. Klein, Jay B. Barney & Nicolai J. Foss: Strategic Entrepreneurship
- 2012-4** Kåre Moberg: The Impact of Entrepreneurship Education and Project-based Education on Students' Personal Development and Entrepreneurial Intentions at the Lower Levels of the Educational System: Too Much of Two Good Things?
- 2012-5** Keld Laursen & Nicolai J. Foss: Human Resource Management Practices and Innovation
- 2012-6** Kåre Moberg: An Entrepreneurial Self-Efficacy Scale with a Neutral Wording

2013

- 2013-1**
Nicolai J. Foss, Diego Stea: The Principal's Theory of Mind: The Role of Mentalizing for Reward Design and Management in Principal-Agent Relations
- 2013-2** Dana Minbaeva, Chansoo Park & Ilan Vertinsky: The Influence of Foreign Partners' Disseminative Capacities on Knowledge Transfers to International Joint Ventures
- 2013-3** Nicolai J. Foss & Peter G. Klein: Hayek and Organizational Studies
- 2013-4** Kåre Moberg, Lene Vestergaard, Casper Jørgensen, Elisabeth Markussen & Sose Hakverdyan: How to Assess the Development of Entrepreneurship Education at University Level – the Case of Denmark
- 2013-5** Nicolai J. Foss & Siegwart Lindenberg: Micro-Foundations For Strategy: A Goal-Framing Perspective on the Drivers of Value Creation

