Why competitors matter for market orientation

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Abstract
Purpose – This paper aims to investigate whether it is meaningful to decompose market orientation into customer orientation and competitor orientation, and what possible implications this decomposition may have for researchers and business practitioners.

Design/methodology/approach – Through a review of existing market orientation research, two of its salient dimensions, customer orientation and competitor orientation, are theoretically investigated. Then, two symmetric component measures are developed and tested on 308 manufacturing firms in a cross-sectional questionnaire survey, supplemented with census data.

Findings – Empirical evidence reveals that, while competitor orientation is positively related to a firm’s market share, a customer orientation is detrimental to a firm’s return on assets for firms in less competitive environments.

Research limitations/implications – The study advocates moving beyond “global” measures of market orientation and focusing on symmetric component measures of customer orientation and competitor orientation when investigating a firm’s performance differentials. The study’s cross-sectional setting limits inference about causality among the constructs.

Practical implications – Customer versus competitor orientation appears to be contingent on a firm’s competitive environment, which indicates that market orientation and its components are not necessarily equally relevant for firms with different strategies and in different environments.

Originality/value – The paper introduces and empirically tests two novel symmetric component measures of customer orientation and competitor orientation. Academicians are provided with insights with respect to the content and symmetry of component measures of the market orientation construct and their relation to firm performance. Furthermore, business practitioners are given a more solid foundation for better allocation of resources to their customer and competitor-oriented activities.

Keywords Competitors, Customer orientation, Market orientation, Company performance

Paper type Research paper

Introduction
Market orientation is often considered to be marketing’s contribution to business strategy (Hunt and Lambe, 2000), and its salient dimensions, competitor and customer orientation, are considered important strategic orientations (e.g., Gatignon and Xuereb, 1997; Zhou et al., 2005; Slater and Narver, 1994; Day and Wensley, 1983, 1988). Stoelhorst and van Raaij (2004) describe market orientation as marketing’s explanation of performance differentials between firms. The advantages of strategic market orientation...
are generally argued to be improved market-sensing capabilities, and, thus, improved market responsiveness, particularly in more hostile and unpredictable environments (Day, 1994, 1999a; Jaworski and Kohli, 1993, see also Vargo and Lusch, 2004). Kohli and Jaworski (1990) emphasize that market orientation and other orientations come at a cost. For this reason, it is essential that the bottom-line consequences of a firm’s market orientation is critically assessed and evaluated (Day, 1994).

Meta-analyses of empirical research on market orientation document the positive effects of a firm’s overall market orientation on that firm’s performance (Kirca et al., 2005; Baker and Sinkula, 2005; Cano et al., 2004; Langerak, 2003). Less systematic attention has been given to the effect customer orientation and, especially, competitor orientation, has on firm performance; some exceptions are Gatignon and Xuereb (1997), Im and Workman (2004), and Olson et al. (2005). Jaworski et al. (2002) found that there is little research on how firms efficiently generate competitor intelligence, in contrast to the generation of customer intelligence, which has been widely researched. Despite its importance, the competitive aspect of a firm’s market orientation is neglected in the theoretical and empirical market orientation literature. Consequently, little empirical insight is available about these potentially more nuanced drivers of market orientation, in terms of explaining firm performance.

The purpose of this paper is to investigate whether it is meaningful to decompose market orientation into customer orientation and competitor orientation and what possible implications this decomposition may have for researchers and business practitioners. I investigate this by synthesizing extant market orientation research and on the basis of two novel symmetrical component measures of the market orientation construct, customer orientation and competitor orientation. The reason for introducing refined measures is that prior research on customer orientation and competitor orientation most often is conducted with asymmetrical component measures, i.e. the measures’ indicators are systematically skewed towards customer orientation and/or do not assess the proposed theoretical content.

The paper begins with a literature review of market orientation research, with a particular focus on the customer and competitor components of market orientation. Then I elaborate on the symmetric aspects and content of competitor and customer orientation. In the empirical portion of the paper, I present a conceptual model and develop a set of hypotheses based on a synthesis of standard empirical market orientation research pertaining to the effect of customer and competitor on firm performance in different environments. The paper ends with an examination of the results of a survey of 308 manufacturing firms, followed by discussion, implications, and conclusion.

The dimensions of the market orientation construct
A broad and representative definition of the contemporary market orientation construct was provided by Jaworski and Kohli (1996, p. 131), who define market orientation as the:

[… ] organization-wide generation of market intelligence pertaining to customers, competitors, and forces affecting them, internal dissemination of the intelligence, and reactive as well as proactive responsiveness to the intelligence.

Kohli and Jaworski’s (1990, p. 1) use of “market orientation’ to mean the implementation of the marketing concept” is widely applied in the market orientation literature (e.g.,
Deng and Dart, 1994; Slater and Narver, 1999; see also Slater and Narver, 1995, footnote 3). According to this idea, a market-oriented firm is one whose actions are consistent with the marketing concept (Kohli and Jaworski, 1990). While the marketing concept originally emphasized customers and the term has been used synonymously with having a customer orientation (e.g., Houston, 1986), market orientation has a dual focus on customers and competitors, thus supplementing the marketing concept (Hunt and Morgan, 1995). This argument is traceable in representative definitions of market orientation (see Table I).

As indicated in Jaworski and Kohli (1996), as well as more recent research, e.g. Siguaw et al. (1998), Matsuno and Mentzer (2000), and Matsuno et al. (2005), the market orientation construct has evolved to incorporate a multitude of objects (or dimensions) of orientations, such as suppliers, distributors, stakeholders, and macro environment. The apparent all-inclusiveness of the broad contemporary market orientation construct and its associated empirical measures may not necessarily be advantageous to market orientation research. A too-broad market orientation construct and associated measure may hide its true underlying drivers, particularly if the orientations are not separated out as stand-alone measures.

For this reason, the present paper focuses on customer orientation and competitor orientation as salient dimensions of market orientation. Adding to the discussion above, Abell (1980) and Dickson (1992) lead to this focus when they argue that a market consists of a set of products, a set of customers, a set of competitors, and a geographical region in which the customers and competitors interact. The salient actors of the market are customers and competitors. Customers are pivotal to all definitions of market orientation, but debate on the role and relevance of competitors in market orientation is dividing contemporary market orientation research. Deshpandé and Farley (1998) argue that market orientation and competitor orientation are conceptually distinct and that market orientation should comprehend only customer-oriented activities.

A narrow focus on customers has, however, proven to have negative consequences for firms (Christensen and Bower, 1996). However, a strong preoccupation with competitors and competitive intelligence can also have negative consequences for a firm’s financial performance. Armstrong and Collopy (1996) found that firms with competitor-oriented objectives, which they define as having too much focus on market shares and “beating the competitors”, have poorer financial performance than firms with, e.g. profitability as objective. They conclude that a firm’s usage of competitor information should be applied as input to the strategy formulation process rather than as a target for the firm’s relative financial performance.

Bearing this in mind, there are several other arguments for including competitor-oriented activities in market orientation. First, an exclusive focus on customers is inconsistent with the underlying marketing literature, which argues that firms should have a balanced customer and competitor orientation (e.g., Day and Wensley, 1988). Second, other definitions of market orientation – besides Kohli and Jaworski (1990) and Narver and Slater (1990) and research building on their framework – attach great importance to both customers and competitors (Hunt and Morgan, 1995; Harris, 2002). Moreover, Day (1999a, p. 5) uses “superior” in his definition of market orientation to remind firms that winning in a competitive market means outperforming competitors, and that market orientation “skills” cannot be judged without reference to competitors or competitive alternatives. Slater and Narver (1994) also argue that
Kohli and Jaworski (1990, p. 6) define an MO as “organization-wide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organization-wide responsiveness to it” and emphasize customer focus, coordinated marketing, and profitability as the core pillars of the marketing concept.

Narver and Slater (1990, pp. 20-21) define an MO as “the culture that most effectively and efficiently creates the behaviors for the creation of superior value for buyers,” state that MO “consists of three behavioral components – customer orientation, competitor orientation, and interfunctional coordination – and two decision criteria – long-term focus and profitability,” and emphasize that the behavioral components comprehend the activities of market information acquisition and dissemination and the coordinated creation of customer value.

Kohli et al. (1993, p. 467) define an MO as “the organization-wide generation of market intelligence pertaining to current and future needs of customers, dissemination of intelligence horizontally and vertically within the organization, and organization-wide action or responsiveness to market intelligence.”

Deshpandé et al. (1993, p. 27) define MO as “a set of beliefs that puts the customer’s interest first, while not excluding those of all other stakeholders such as owners, managers, and employees, in order to develop a long-term profitable enterprise,” and emphasize that customer orientation (used synonymously with Kohli and Jaworski’s (1990) market orientation) as being part of an overall, but more fundamental, corporate culture.

Day (1994, p. 37) defines MO as “superior skills in understanding and satisfying customers” and emphasize market-sensing and customer-linking capabilities that set market-driven firms apart as the key to better anticipation and response to changing market requirements ahead of competitors (Day, 1994, p. 38).

Hunt and Morgan (1995, p. 11) define MO as “(1) the systematic gathering of information on customers and competitors, both present and potential, (2) the systematic analysis of the information for the purpose of developing market knowledge, (3) the systematic use of such knowledge to guide strategy recognition, understanding, creation, selection, implementation and modification”, and emphasize that interfunctional coordination should not appear in a concept’s definition, and that MO conceptually is supplemental to the marketing concept, in that MO guides strategy selection and the marketing concept informs the use of MO components while keeping the customer prominent.

Jaworski and Kohli (1996, p. 131) define MO as the “organization-wide generation of market intelligence pertaining to customers, competitors, and forces affecting them, internal dissemination of the intelligence, and reactive as well as proactive responsiveness to the intelligence,” and emphasize that market intelligence is a broad construct and can be generated from internal and external sources.

Table I.
Representative definitions of market orientation

(continued)
customer orientation and competitor orientation provide different types of information for different types of decisions and decision-makers.

In existing market orientation research, the components of the market orientation construct are generally theorized to follow the conceptualizations of either Kohli and Jaworski (1990) (intelligence generation, intelligence dissemination, and responsiveness) or Narver and Slater (1990) (customer orientation, competitor orientation, and interfunctional coordination). Inspired by Cadogan and Diamontopoulos (1995) and Lafferty and Hult (2001), we propose an integration of the two conceptualizations, due to apparent conceptual and operational overlaps. Moreover, Cadogan and Diamontopoulos (1995), Lafferty and Hult (2001) and Gatignon and Xuereb (1997) argue that “interfunctional coordination” is conceptually distinct from market orientation. Other research has argued that implementing factors such as “interfunctional coordination” should not appear in the definition of a concept (Hunt and Morgan, 1995, p. 11).

On the basis of these qualifications and synthesis, we argue that the market orientation construct essentially consists of generation and dissemination of intelligence pertaining to customers and competitors as well as action based on the intelligence, see, the early market orientation research by Kohli and Jaworski (1990) and Narver and Slater (1990). The focused conceptualization of this study maintains a balanced focus on customers and competitors, as advocated by Day and Wensley (1988) and in recent research by Olson et al. (2005) and Slater et al. (2007). Moreover the notion of responsiveness and proactivity in relation to market orientation is beyond the scope of this study. For research on the latter, see Slater and Narver (1998, 1999), Jaworski et al. (2000), Kumar et al. (2000), and Narver et al. (2004). The general neglect of competitor orientation, in particular, in the market orientation literature may therefore be a reason why the full potential and understanding of the role of market orientation has yet to be realized.

On customer orientation and competitor orientation
Customer orientation and competitor orientation are each defined symmetrically to market orientation, incorporating the components of generation and dissemination of intelligence and action. Customer orientation and competitor orientation are frequently referred to as being part of a firm’s strategic orientation (Gatignon and Xuereb, 1997; Zhou et al., 2005; see also Day and Wensley, 1983). A strategic orientation reflects the
set of broad strategic choices implemented in the pursuit of sustainable superior performance, and is a predisposition for creating the proper employee, manager, and overall firm activities for achieving superior performance (Gatignon and Xuereb, 1997). The general purpose of a customer orientation is to provide a solid basis of intelligence pertaining to current and future customers for executive actions. A customer orientation provides sufficient understanding of a firm’s target buyers, so that the firm can continuously create superior value for them (Narver and Slater, 1990).

The purpose of a competitor orientation is to provide a solid basis of intelligence pertaining to present and potential competitors for executive actions. Competitors are defined as firms offering products or services that are close substitutes, in the sense that they serve the same customer need (Porter, 1980; Kotler, 2000). For example, in serving the coffee-sweetener market, a provider of beet sugar faces competition from other providers of beet sugar, as well as from providers of cane sugar and synthetic sugar. A firm’s current and potential competitors may therefore be found among firms with similar and dissimilar production technology platforms. Narver and Slater (1990) describe a competitor orientation as a firm’s understanding of short-term strengths and weaknesses and long-term capabilities and strategies of both current and potential competitors.

The focus here is to separate the activities attributable to a customer orientation and the activities attributable to a competitor orientation. Some of the activities presented below may be attributable to both a customer and a competitor orientation. In these cases the important aspect of the activity is whether the activity is conducted with the customer or competitor in mind. In determining the activities of a competitor orientation and possible actions towards competitors, Porter (1980) and Day and Reibstein (1997), in particular provide a thorough supplement to the extant market orientation literature on competitor orientation.

Intelligence generation
Traditionally, it has been the responsibility of the marketing function to generate customer intelligence for the purpose of feeding a firm’s strategic and tactical/operational decisions. An essential feature of a market-oriented firm is the organization-wide generation of intelligence pertaining to customers. Consequently, it is not exclusively the marketing function’s responsibility to generate intelligence. In high-tech firms, engineers and scientists frequently have good intelligence about trends in customers’ preferences, which they derive from conferences, scientific journals and interactions with other engineers or scientists. Managers from different departments of the firm should pay visits to present and prospective customers. Other functions, such as sales representatives and front-line personnel with direct contact with customers, may also be valuable sources of customer intelligence. Production may also have direct calls from customers concerning complaints or inquiries about products being processed or about previously purchased products.

And yet, employees outside the marketing/management departments are seldom aware of the value of the information they hold. Obviously, their job functions require different skills and specialization. The intelligence generation by other departments may therefore be made directly by the employees themselves or indirectly through interviews or questionnaires carried out by the marketing department. The task of generating valuable intelligence from internal and external sources is, by itself, challenging. Another task is compiling and storing the intelligence in a meaningful and
efficient way. Many data-warehouse systems and customer relationship management (CRM) systems are available that provide systematized and user-friendly databases for customer intelligence.

Like customer intelligence, competitor intelligence is available in many forms and from many internal and external sources. Identification of relevant sources of vital forms of competitive intelligence is therefore equally important. The more traditional forms of competitive intelligence are based on assessment of competitors’ goals, financial results, and successes and failures, as well as competitors’ assumptions about themselves and the industry. For a thorough list of sources of intelligence, see Porter (1980, p. 73). Competitive intelligence is also likely to be generated across different functions in firms. Particularly in firms with products or production facilities of high technological complexity, valuable competitive intelligence resides among scientists or engineers. Possible next-generation products and technologies are frequently easier for technological experts to identify, if they know what to look for. It is also important to keep the technological experts aware of the relevance of their intelligence to the firm as a whole.

**Intelligence dissemination**

As argued above, intelligence may already reside inside the organization. But intelligence has no value if it is not disseminated to the relevant decision-maker(s). Systematic dissemination of intelligence is therefore important. Dissemination of intelligence may be hindered for several reasons. As mentioned above, employees may not know that their information is valuable because they have not been trained to generate and assess intelligence in a systematic way. Usually, intelligence from employees composes a very small part of a larger puzzle, which makes it difficult to know what and when to report. The dissemination of competitive intelligence is essentially similar to the dissemination of customer intelligence. It is equally important that the intelligence is received by the relevant executive in a timely manner. Sound dissemination of customer and competitive intelligence therefore requires at the very least: organization-wide awareness of the content of relevant intelligence; formal and informal means of routine dissemination of the intelligence; and incentives to share the intelligence.

Certain organizational antecedents, e.g. senior management, interdepartmental dynamics and organizational systems, can enhance or impede dissemination of intelligence and the general implementation of a market orientation, (see, e.g. Kohli and Jaworski, 1990). Organizational antecedents that enhance market orientation are, for example, an active top management that communicates a consistent commitment to creating a market orientation supported with credible resource allocations (Kohli and Jaworski, 1990). Organizational systems that impede market orientation and the effective use of market intelligence are high formalization and centralization (Jaworski and Kohli, 1993). Other aspects may also impede the effective use of market intelligence, for example, employee-specific customer intelligence. In some firms, sales people may have their *raison d’être* because of information asymmetries that exist between them and their colleagues. Consequently, if an employee’s position in a firm relies on specific customer intelligence, that employee has little incentive to share the intelligence and thus can impede the firm’s market orientation.
Once customer intelligence is generated and disseminated to the relevant executive, and is subsequently analyzed, actions must be taken based upon the processed intelligence. The early market orientation literature reports that the action taken is intended to elicit favorable customer response (Kohli and Jaworski, 1990). In order to increase customer value and response, firms may either lower customers’ perceived costs in relation to benefits or increase customers’ perceived benefits in relation to costs (Zeithaml, 1988). Firms perform a variety of actions, from buying clips to building new factories in foreign countries. It is not the action *per se* that is important here; it is the drivers of the actions. A firm’s customer-oriented actions are driven by the understanding and anticipation of current and prospective customers’ needs and wants for the purpose of creating customer value. Better understanding of customer intelligence and action based on available intelligence is vital in utilizing a customer orientation.

Firms respond to competitors in many ways, from tactical price cuts to more strategic actions, such as changes in plant capacity, product selection and R&D (Sutton, 1991; Tirole, 1988). Action taken on the basis of intelligence in a competitor orientation revolves around a firm’s understanding of competitive opportunities and competitive retaliation. An example of a “pure” competitive action by a firm is investment in excess capacity for the purpose of deterring potential competitors from one’s market (Tirole, 1988). It is important to recognize that a firm’s competitor-oriented actions are driven by competitive consequences more than customer value. Competitive action based on available intelligence is a good measure of how well firms are utilizing their competitor orientation.

The above elaboration on market-oriented activities related to customers and competitors indicates that the activities are different when they are oriented towards customers than when they are oriented towards competitors. This argument suggests that while both customer orientation and competitor orientation are vital for the general understanding of markets, they may provide different types of information for different types of decisions and decision-makers. For this reason, they may potentially benefit from separation in the market orientation construct.

**Conceptual model and hypotheses**

For the reasons set forth in the previous sections, the conceptual model posits, in general terms, that customer orientation and competitor orientation have a positive relationship with performance (*H1*). Firm performance has been shown to be influenced directly by various industry (structural) and firm-specific factors. Controls for these factors are therefore included in the model (*H2*). Moreover, previous research has also reported that environmental conditions, such as competitive intensity, may moderate the relationship between customer and/or competitor orientation and firm performance (*H3*). (See Figure 1 for an overview of the conceptual model and hypotheses.)

**Customer orientation, competitor orientation and firm performance**

Firm performance is a multidimensional construct cf. Venkatraman and Ramanujam’s (1986) financial performance (return on assets (ROA), return on investments (ROI), etc.) and operational performance (market share, new product success, product quality, marketing effectiveness, customer loyalty/satisfaction etc.). In Kirca et al.’s (2005) meta-analysis of the market orientation literature, the equivalents are labeled

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cost-based performance measures, which reflect performance after accounting for the
cost of implementing a strategy (e.g., ROA), and revenue-based performance measures,
which do not account for the cost of implementing a strategy (e.g., market share). The
present study focuses on the direct relationship between customer orientation and
competitor orientation and the two dimensions of firm performance represented by
ROA and market share. Market share is given different roles in the market orientation
literature. For example, market share is deemed to be a performance variable (e.g.,
Jaworski and Kohli, 1993; Matsuno et al., 2002; Baker and Sinkula, 1999, 2005), a proxy
for a firm’s relative size (Narver and Slater, 1990; Slater and Narver, 1994), and a proxy
for incumbency (Zhou et al., 2005). The present study follows the dominant convention
of treating market share as an indicator of firm performance.

Although the majority of research has found positive support concerning the direct
effect of market orientation on performance, the literature on market orientation
generally reports mixed results from this relationship (Kirca et al., 2005). Different
explanations have been advanced for the possible causes of the reported mixed results.
The main findings are that the relationship between market orientation and firm
performance, operationalized as both ROA and market share, is stronger for
manufacturing firms than for service firms. To increase a firm’s performance, the
marketing literature generally suggests that the firm should balance customer and
competitor orientation (Slater and Narver, 1994; Day and Wensley, 1988). The
component measures of customer orientation and competitor orientation provide the
foundation for investigating the separate effects of the salient dimensions of a market
orientation on a firm’s performance. It is hypothesized that:

H1a. The level of customer orientation is positively related to performance.

H1b. The level of competitor orientation is positively related to performance.

Control variables and firm performance
The level of a firm’s performance depends on variables other than market orientation.
Prior research, based on the literature on industrial organization and competitive
forces, suggests that environmental and structural conditions influence a firm’s
performance (Scherer, 1980; Porter, 1980; McGahan and Porter, 1997). The empirical
literature on market orientation has generally adopted the control variables introduced
in the works of Narver and Slater (1990) and Jaworski and Kohli (1993), i.e. competitive intensity, industry concentration, entry barriers, market growth, buyer power, supplier power, and cost structure of firms. The present study replicates this research setup.

The description of the control variables in the following paragraphs is largely based on Narver and Slater (1990) and Jaworski and Kohli (1993).

Competitive intensity refers to the degree of competition within an industry. Competition in an industry continually works to drive down firm-level performance. Higher levels of competitive intensity within an industry thus tend to lower a firm’s overall performance. Another structural condition influencing firm performance is industry concentration. Industry concentration refers to the degree to which sales in a market are concentrated on a few competitors (concentrated industry) or on many (fragmented industry). In concentrated industries, competition is generally lower and thus leads to higher overall performance (Sutton, 1991). Entry barriers also influence a firm’s performance. Entry barriers refer to those costs that potential entrants outside the industry would have to incur to enter and compete in the industry, e.g. R&D or plant capacity. The higher the entry barriers, the lower the competitive pressure is on the industry from both current competitors and potential entrants. Higher entry barriers thus generally lead to higher performance for firms in the industry.

The general conditions of markets are also found to influence performance. If markets are growing, it is generally easier for firms to acquire customers without much competition. Firms in growing markets therefore tend to have higher performance than firms in mature markets. The nature of the predictability of future markets also influences firm performance. Other influences on a firm’s performance are bargaining power, relative size, and relative cost structure. If a firm’s bargaining power over buyers is lower, it tends to negotiate lower prices for products or services, and thus has lower performance. The same phenomenon is present for firms who have lower bargaining power over their suppliers, who therefore also tend to have lower performance. A firm’s relative cost structure in terms of overall operating cost in proportion to competitors also explains differences in performance. Firms with cost disadvantages due to higher operating costs are hypothesized to have poorer performance than firms with lower operating costs. In sum, the signs of the hypothesized relationships between the control variables and performance are:

\[ H2a. \text{ Competitive intensity (–).} \]
\[ H2b. \text{ Industry concentration (+).} \]
\[ H2c. \text{ Entry barriers (+).} \]
\[ H2d. \text{ Market growth (+).} \]
\[ H2e. \text{ Buyer power (–).} \]
\[ H2f. \text{ Supplier power (–).} \]
\[ H2g. \text{ Cost structure of firms (–).} \]

Moderating effects of environmental conditions
Empirical investigation of possible moderating effects is generally introduced to establish when specific effects are present (Baron and Kenny, 1986). An example is to
test whether the effect of customer orientation on firm performance is different for firms in highly competitive environments than for firms in less competitive environments. Generally, a firm’s environmental conditions are theorized to influence the relative importance of market orientation (Kohli and Jaworski, 1990; Slater and Narver, 1994), as well as to influence the relative balance of customer orientation and competitor orientation (Day and Wensley, 1988; Slater and Narver, 1994). The empirical literature on market orientation has placed particular emphasis on competitive intensity as the main influence on the relative importance of market orientation in firms (Kirca et al., 2005). However, the literature reports mixed results regarding the influence of a firm’s competitive environment on the relationship between market orientation and its components and firm performance (e.g., Jaworski and Kohli, 1993; Slater and Narver, 1994; Han et al., 1998; Kumar et al., 1998; Pelham, 1999; Perry and Shao, 2002). The majority of empirical research reports non-significant results for the moderating effect of environmental variables on the relationship between market orientation and performance (Kirca et al., 2005).

For the reasons set forth above, it is argued that a firm’s market-oriented activities are different when it is oriented towards customers than when it is oriented towards competitors. For this reason, customer orientation and competitor orientation may also have different effects on firm performance. Day and Wensley (1988) and Slater and Narver (1994) argue that customer orientation is mandatory in (dynamic) markets with high competitive intensity, shifting mobility barriers, many competitors, and highly segmented end-user markets. Conversely, if markets have low competitive intensity and low environmental uncertainty (i.e. stable markets, predictable demand, concentrated and stable competitive structure), competitor orientation should be emphasized. Jaworski and Kohli (1993) argue that higher competitive intensity leads to more alternative options for customers and thus requires better understanding of customers. Also, if the “rules of competition” in markets are stable, close monitoring of competitors may uncover competitive weaknesses, etc. (Slater and Narver, 1994).

Kumar et al. (1998) and Gatignon and Xuereb (1997) found, on the other hand, that environments characterized by competitive intensity favor competitor orientation. They argue that higher competitive intensity requires a competitor orientation for establishing the necessary firm infrastructure for identification of competitors’ strengths and weaknesses and anticipation of competitive moves. These empirical findings are supported by Noble et al. (2002), who, in a study of the highly competitive US retailing industry, found that a competitor orientation is positively related to superior performance. It is hypothesized that:

\textit{H3a}. Higher competitive intensity has a positive effect on the relation between customer orientation and performance.

\textit{H3a}. Higher competitive intensity has a positive effect on the relation between competitor orientation and performance.

\textbf{Research design: methods and measures}

Specification of measurement and structural models as well as tests of the hypothesized direct effects, were performed using structural equation modeling (AMOS 5). The tests of the hypothesized moderating effects were performed using multiple hierarchical regression (Sharma et al., 1981; Aiken and West, 1991) in SPSS 14.
Data collection procedure
A priori content validity of the measures was established by a panel of marketing academicians and business practitioners from the target sample. Given the non-English research context, translation and, particularly, back-translation of the original measures were performed to assure that the underlying theoretical meaning of each of the questions was not lost during the translation (Douglas and Craig, 1983). A professional market research firm with prior experience in conducting academic surveys conducted the data collection. A sample of 2,527 Danish manufacturing firms, predominantly SMEs, was contacted, of which 791 firms agreed to participate. The questionnaires were set up as either web-based or postal and were addressed to CEOs and marketing managers. The questionnaire data were supported by census data containing each firms’ return on assets. Two follow-up telephone and mailing contacts were conducted, resulting in useful responses from 308 CEOs. Therefore, the overall response rate is 12.2 percent (308/2,527). The primary reasons for non-participation were “lack of time”, “lack of willingness to partake”, or “tired of answering questionnaires”. Non-response bias was tested using Levene’s test for firm size, in terms of employees, and ROA, and a $\chi^2$ test for industry membership. The tests revealed that the working sample contains slightly larger firms with higher ROA, which limits the generalizability of the study’s results to the population.

Operationalization of customer orientation and competitor orientation
A review of the market orientation literature provides a large selection of “global” measures of market orientation (e.g., Narver and Slater, 1990; Kohli et al., 1993; Deshpandé and Farley, 1998; Matsuno and Mentzer, 2000) and “component” measures of competitor and customer orientation based on Narver and Slater (1990) (e.g., Gatignon and Xuereb, 1997; Im and Workman, 2004). By a “global measure” we mean a measure of market orientation that is developed for the purpose of capturing the general attributes or overall meaning of the market orientation construct. The notion of global measure should not be confused with the single-indicator global measure of market orientation described by Kohli et al. (1993).

“Component measures” refer to measures of components or aspects of market orientation for the purpose of capturing parts of the market orientation with more focused and detailed measures, or theoretically accurate measures. A theoretical assessment of the existing component measures by Im and Workman (2004) and particularly Gatignon and Xuereb (1997) revealed that they neglect aspects of the customer orientation and competitor orientation constructs and thus are construct deficient. The degree of correspondence between a construct and its measure is referred to as construct validity (Schwab, 1980). In other words, construct validity is the degree to which a construct achieves empirical and theoretical meaning, and therefore lies at the heart of scientific progress in marketing (Bagozzi, 1980; Steenkamp and van Trijp, 1991). Two new symmetric component measures, largely based on a synthesis of Slater and Narver’s (1999) MKTOR and the competitor orientation of Olson et al. (2005), were therefore developed for this study and applied to measure firms’ customer orientation and competitor orientation (see Tables II-V).

Operationalizing firm performance
The empirical research on market orientation is predominantly based on subjective measures of performance. In a meta-analysis by Cano et al. (2004), 36 of 53 studies on
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<tr>
<th>Indicator</th>
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<tr>
<td>IGCU1</td>
<td>We constantly monitor our level of commitment to serving customers’ needs</td>
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<tr>
<td>IGCU2a</td>
<td>We measure customer satisfaction systematically (and frequently; removed)</td>
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<tr>
<td>IGCU3a</td>
<td>Our top managers from every function regularly visit current and prospective customers</td>
</tr>
<tr>
<td>IGCU4</td>
<td>We give close attention to after-sales service</td>
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<tr>
<td>IDCU1a</td>
<td>We freely communicate information about our successful and unsuccessful customer experiences across all business functions</td>
</tr>
<tr>
<td>IDCU2</td>
<td>All of our business functions (e.g., marketing/sales, operations, R&amp;D, finance/accounting, etc.) are integrated in serving the needs of our target markets</td>
</tr>
<tr>
<td>IDCU3</td>
<td>All of our managers understand how everyone in our business can contribute to creating customer value</td>
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<tr>
<td>ACU1</td>
<td>Our business objectives are driven primarily by customer satisfaction</td>
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<tr>
<td>ACU2</td>
<td>Our strategy for competitive advantage is based on our understanding of customer needs</td>
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<tr>
<td>ACU3</td>
<td>Our business strategies are driven by our beliefs about how we can create greater value for our customers</td>
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</table>

**Notes:**

- Excluded in the improved, symmetric component measure of customer orientation; operationalized on a seven-point Likert scale bounded by 1: “Strongly disagree” to 7: “Strongly agree”

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Indicator wording</th>
</tr>
</thead>
<tbody>
<tr>
<td>IGCO1a</td>
<td>We diagnose competitors’ goals</td>
</tr>
<tr>
<td>IGCO2</td>
<td>We track the performance of key competitors</td>
</tr>
<tr>
<td>IGCO3</td>
<td>We identify the areas where the key competitors have succeeded or failed</td>
</tr>
<tr>
<td>IGCO4</td>
<td>We attempt to identify competitors’ assumptions about themselves and our industry</td>
</tr>
<tr>
<td>IDCO1</td>
<td>Top management regularly discusses competitors’ strengths and weaknesses</td>
</tr>
<tr>
<td>IDCO2</td>
<td>Our salespeople regularly share information within our business concerning competitors’ activities</td>
</tr>
<tr>
<td>IDCO3</td>
<td>All of our managers understand how every business function can contribute to information on competitive activities</td>
</tr>
<tr>
<td>ACO1</td>
<td>We target customers where we have an opportunity for competitive advantage</td>
</tr>
<tr>
<td>ACO2</td>
<td>We rapidly respond to competitive actions that threaten us</td>
</tr>
<tr>
<td>ACO3a</td>
<td>We look for market opportunities that do not threaten competitors</td>
</tr>
</tbody>
</table>

**Notes:**

- Excluded in the improved, symmetric component measure of competitor orientation; operationalized on a seven-point Likert scale bounded by 1: “Strongly disagree” to 7: “Strongly agree”

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMP1</td>
<td>Competition in our industry is cut-throat</td>
</tr>
<tr>
<td>COMP2</td>
<td>Price competition is a hallmark of our industry</td>
</tr>
<tr>
<td>COMP3</td>
<td>Anything that one competitor can offer, others can match readily</td>
</tr>
<tr>
<td>COMP4a</td>
<td>One hears of a new competitive move almost every day</td>
</tr>
<tr>
<td>COMP5a</td>
<td>There are many “promotion wars” in our industry</td>
</tr>
<tr>
<td>COMP6a</td>
<td>Our competitors are relatively weak</td>
</tr>
</tbody>
</table>

**Notes:**

- Excluded in the re-specified measure; indicator-wording reversed; indicators were operationalized using a seven-point Likert scale bounded by 1: “strongly disagree” and 7: “strongly agree”

---

Table II. Component measures of customer orientation
Table III. Component measures of competitor orientation
Table IV. Control variables – indicator wording for competitive intensity (COMP)
market orientation were reported only to use subjective measures. Of the remaining studies, six studies were reported to apply objective measures and 11 were reported to use objective and subjective measures of firm performance. In the present study, a firm’s performance is operationalized by two measures: ROA, based on objective census data, and market share (MS), based on subjective data from questionnaires. The measure for MS is a single indicator assessing a firm’s market share in the principal market served.

**Operationalizing control variables**

A firm’s environment, along with firm-specific factors, jointly referred to as structural control variables, also influence firm performance. The selected structural control variables for this study are well established in the market orientation literature (e.g., Narver and Slater, 1990; Jaworski and Kohli, 1993; see also Kirca et al., 2005), as well as in the strategic management and industrial organization literature (e.g., Scherer, 1980; Porter, 1980; Sutton, 1991). The structural control variables are operationalized as: competitive intensity, industry concentration, entry barriers, market growth, buyer power, supplier power, and relative cost structure. Industry concentration is a single indicator measure calculated as the Herfindahl-Hirshmann Index (HHI) based on census data (see below), while the other structural control variables are based on questionnaire data. Competitive intensity is a multi-indicator measure, and the remainder of the structural control variables are single-indicator measures. Single-indicator measures of control variables are frequently used in questionnaire surveys in the market orientation literature (e.g., Narver and Slater, 1990; Slater and Narver, 1994). The indicator wording of the control variables is found in the Appendix.

**HHI**

The HHI measures the degree of industry/seller concentration (e.g., Sutton, 1991; Church and Ware, 2000). Contrary to the concentration ratios, such as the “C4” measure, the HHI adjusts for differences in firm size. The HHI is calculated as the sum of squares of market shares ($s_j$) for all firms in the industry (N) based on NACE codes. The HHI varies between 0 (fragmented industry) and 1 (monopoly). Consequently, the closer the HHI score is to 1, the more concentrated the industry. However, census data on firm turnover was not reported for all firms. To counter this problem, a firm’s total balance is chosen as a proxy for a firm’s relative size in terms of relative turnover.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>BPOW&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Customers have a good possibility of negotiating lower prices from us</td>
</tr>
<tr>
<td>SPOW&lt;sup&gt;a&lt;/sup&gt;</td>
<td>We have a good possibility of negotiating lower prices from our suppliers&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td>RCOST&lt;sup&gt;a&lt;/sup&gt;</td>
<td>Our costs (e.g. for administration, production, sales/marketing) are very large relative to our main competitors</td>
</tr>
<tr>
<td>ENTRY&lt;sup&gt;a&lt;/sup&gt;</td>
<td>If a new firm entered this industry, its set-up cost would be very high</td>
</tr>
<tr>
<td>MKTGR&lt;sup&gt;b&lt;/sup&gt;</td>
<td>The accumulated demand in our industry during the last three years</td>
</tr>
</tbody>
</table>

**Notes:**<sup>a</sup> The indicators were operationalized on a seven-point Likert scale bounded by 1: “Strongly disagree” to 7: “Strongly agree”;<sup>b</sup> The indicator was operationalized on a seven-point Likert scale bounded by 1: “Strong decline” to 7: “Strong growth”;<sup>c</sup> Indicator-wording reversed
Measurement purification

The assessment of the measurement models’ construct validity was based on unidimensionality, reliability, discriminant validity, and nomological validity (e.g., Nunnally and Bernstein, 1994), as well as *a posteriori* content validity (Sørensen and Slater, 2008). By the latter we mean that content validity should persist after re-specifying one’s measures. Unidimensionality was established by means of the measures’ composite reliability (CR) and average variance extracted (AVE) (Fornell and Larcker, 1981; Bagozzi and Yi, 1988). CR and AVE were calculated separately using Fornell and Larcker’s (1981) procedure. Discriminant validity was tested using a pairwise $\chi^2$ difference test (Anderson and Gerbing, 1988) and Fornell and Larcker’s (1981) pairwise comparison of constructs respective AVE and their mutual correlation squared.

The full measurement model consists of the latent constructs presented above, customer orientation, competitor orientation, and competitive intensity, as well as a set of single-indicator measures. The re-specifications and estimations of customer orientation and competitor orientation led to the elimination of five indicators not compromising *a posteriori* content validity. The indicators’ regression weights were all significant ($t \geq 8.025$). Composite reliability and average variance were above the required thresholds: CUSOR (CR 0.88; AVE 0.51) and COMOR (CR 0.91; AVE 0.52). Note that prior to re-specification, COMOR had Cronbach’s alpha on 0.89, which would indicate good reliability, and that there consequently was no need for re-specification. However, the calculated AVE on 0.38 indicated that the variance due to measurement error was larger than the variance captured by the construct, and re-specification was initiated. Competitive intensity was re-specified to a three-indicator measure. All regression weights are significant with $t \geq 9.180$. Composite reliability and average variance were above the required thresholds (CR 0.793; AVE 0.568).

The pair-wise $\chi^2$ difference test and Fornell and Larcker’s (1981) test for discrimination revealed good discriminant validity among the constructs. The study’s focus on the effects of customer orientation and competitor orientation on two types of performance – firms’ market shares (MS) and return on assets (ROA) – resulted in the specification and estimation of two different measurement models, one with MS as the dependent variable and one with ROA as the dependent variable. The results of the specification and estimation of the full measurement models are, for MS, ($\chi^2$ (df) 471 (237); CFI 0.918; TLI 0.896; RMSEA 0.057), and, for ROA, ($\chi^2$ (df) 471 (237); CFI 0.918; TLI 0.896; RMSEA 0.057). Both measurement models met the required thresholds for CFI, TLI, and RMSEA (Baumgartner and Homburg, 1996; Browne and Cudeck, 1993). The correlation matrix and descriptive statistics are presented in Table VI.

**Results**

*Direct effects of customer orientation and competitor orientation on market share and ROA*

$H1a$ and $H1b$, claim that a firm’s customer orientation and competitor orientation have significant positive effects on the firm’s performance. The direct effects on firm performance are presented in Tables VII and VIII. Of the four regression weights between customer orientation and competitor orientation and the measures of firm performance, only the regression weight between competitor orientation and market share is significant ($p = 0.003$). It is emphasized that the path coefficient of customer orientation on ROA not only has an unexpected negative sign, but that the coefficient is
### Table VI. Correlation matrix and descriptive statistics of measures

<table>
<thead>
<tr>
<th>Measures</th>
<th>Mean</th>
<th>St. dev.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ROA</td>
<td>7.42</td>
<td>13.78</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. MS</td>
<td>3.59</td>
<td>1.82</td>
<td>0.087</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. CUSOR7</td>
<td>5.45</td>
<td>1.00</td>
<td>-0.081</td>
<td>0.111</td>
<td>1</td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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</tr>
<tr>
<td>4. COMOR8</td>
<td>4.65</td>
<td>1.26</td>
<td>-0.040</td>
<td>0.150**</td>
<td>0.383**</td>
<td>1</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. COMP3</td>
<td>4.56</td>
<td>1.30</td>
<td>0.092</td>
<td>-0.206**</td>
<td>-0.058</td>
<td>0.184**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. HHI</td>
<td>0.06</td>
<td>0.06</td>
<td>-0.089</td>
<td>0.007</td>
<td>0.094</td>
<td>0.062</td>
<td>0.032</td>
<td>1</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>8. SPOW</td>
<td>4.04</td>
<td>1.53</td>
<td>0.035</td>
<td>-0.086</td>
<td>0.133*</td>
<td>-0.027</td>
<td>-0.065</td>
<td>0.065</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. BPOW</td>
<td>3.72</td>
<td>1.48</td>
<td>-0.125*</td>
<td>-0.022</td>
<td>-0.102</td>
<td>0.088</td>
<td>0.304**</td>
<td>-0.060</td>
<td>-0.121*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. RCOST</td>
<td>3.23</td>
<td>1.63</td>
<td>-0.153**</td>
<td>0.065</td>
<td>-0.094</td>
<td>-0.092</td>
<td>0.087</td>
<td>0.046</td>
<td>0.004</td>
<td>0.073</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. ENTRY</td>
<td>5.44</td>
<td>1.70</td>
<td>0.023</td>
<td>0.095</td>
<td>0.153**</td>
<td>0.130*</td>
<td>0.083</td>
<td>0.102</td>
<td>0.055</td>
<td>0.009</td>
<td>-0.120*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>12. MKTGR</td>
<td>3.70</td>
<td>1.21</td>
<td>0.211**</td>
<td>0.064</td>
<td>0.044</td>
<td>0.033</td>
<td>-0.115*</td>
<td>0.108</td>
<td>0.048</td>
<td>0.027</td>
<td>-0.151**</td>
<td>0.105</td>
<td>1</td>
</tr>
<tr>
<td>p-value</td>
<td></td>
<td></td>
<td>0.127</td>
<td>0.052</td>
<td>0.081</td>
<td>0.159</td>
<td>0.485</td>
<td>0.108</td>
<td>0.118</td>
<td>0.541</td>
<td>0.029</td>
<td>0.094</td>
<td></td>
</tr>
<tr>
<td>Notes: * = p &lt; 0.05 (two-tailed); ** = p &lt; 0.01</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
significant, at $p < 0.1$ ($p = 0.051$). This interesting result is investigated further in the section testing moderation. Thus, only $H1b$ is partially supported for market share.

**Direct effects of control variables on market share and ROA**

$H2a$-$H2g$, provide the claimed effects of various control variables’ explanation of firm performance. As noted above, an unexpected lack of relationship between the measures of market share and return on assets is found in the data ($r = 0.077$, $p = 0.179$).

Table VII presents the direct effects of the control variables on MS. Three of the seven path coefficients – competitive intensity ($p = 0.000$), supplier power ($p = 0.051$), and entry barriers ($p = 0.029$) – are found to be significant and thus support the underlying hypotheses, $H2a$, $H2c$, and $H2f$. Relative cost structure is significant ($p = 0.029$), but the sign is in the opposite direction. Comparing these findings to other empirical studies of market orientation, the (subjective) measure of market share is considered to be valid despite the opposite sign of the relative cost structure. Table VIII presents the direct effects of the control variables on ROA. Again, three of seven path coefficients are found to be significant and thus to support the underlying hypotheses, $H2d$, $H2e$, and $H2g$. The three supported hypotheses are market growth ($p = 0.000$), buyer power ($p = 0.028$), and relative cost structure ($p = 0.034$). The HHI is significant ($p = 0.05$), but with an opposite sign. In particular it is noted that the significant explanations of a firm’s ROA are different constructs from those explaining a firm’s
market shares. Another interesting finding is that relative cost structure is significant, as hypothesized. These findings strengthen the validity of the measure of ROA.

**Moderation of competitive intensity**

The framework of hierarchical regression analyses, as set forth by Sharma et al. (1981), is used to establish the existence of moderation and type of moderation. The measures of customer orientation and competitor orientation and the measure of competitive intensity were (mean) centered before the interaction terms were created (Cohen et al., 2003). The transformation of the variables is performed to reduce the potential problem of multicollinearity between the interaction term and its components (e.g., Aiken and West, 1991; Mason and Perreault, 1991). Competitive intensity was trichotomized into subgroups based on cutoff values of 0.674 standard deviation (value for 0.75 confidence levels) from the mean. The trichotomization is operationalized by coding the low, medium, and high competitive intensity groups with −1, 0, and 1 respectively. This procedure equals that of building contrasts into datasets. The partial $F$-statistics were calculated separately using the procedure in Malhotra (1996).

The results in Table IX reveal that a competitive environment moderates ($p = 0.030$) the relationship between customer orientation and return on assets as hypothesized in $H3a$. In Sharma et al.’s (1981) terminology, the moderator is pure, since the moderator is unrelated to the dependent variable per se. Although only a small amount of the variance in ROA is explained (low $R^2$), the effect is still significant. In general terms, the

<table>
<thead>
<tr>
<th>CUSOR Variables</th>
<th>H Model 1</th>
<th>ROA Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>MS Model 5</th>
<th>Model 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.092</td>
<td>3.519</td>
<td>3.765</td>
<td>34.861</td>
<td>35.528</td>
<td>35.482</td>
</tr>
<tr>
<td>sig.</td>
<td>0.002</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Independent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUSOR</td>
<td>−0.081</td>
<td>−0.086</td>
<td>0.093</td>
<td>0.111</td>
<td>0.099</td>
<td>0.098</td>
</tr>
<tr>
<td>COMP</td>
<td>0.1143</td>
<td>0.1514</td>
<td>0.1638</td>
<td>1.953</td>
<td>1.780</td>
<td>1.750</td>
</tr>
<tr>
<td>Moderator</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMP</td>
<td>−0.097</td>
<td>−0.113</td>
<td>0.200</td>
<td>0.203</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CUSOR</td>
<td>−1.701</td>
<td>−1.974</td>
<td>−5.579</td>
<td>−3.604</td>
<td></td>
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</tr>
<tr>
<td>Interaction</td>
<td>0.090</td>
<td>0.045</td>
<td>0.000</td>
<td>0.000</td>
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</tr>
<tr>
<td>CU*COMP</td>
<td>+</td>
<td>0.125</td>
<td>0.026</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>2.185</td>
<td>0.461</td>
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<tr>
<td></td>
<td></td>
<td>0.030*</td>
<td>0.645</td>
<td></td>
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</tr>
<tr>
<td>$R^2$</td>
<td>0.006</td>
<td>0.016</td>
<td>0.031</td>
<td>0.012</td>
<td>0.052</td>
<td>0.053</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>0.003</td>
<td>0.009</td>
<td>0.021</td>
<td>0.009</td>
<td>0.046</td>
<td>0.043</td>
</tr>
<tr>
<td>$F$</td>
<td>1.997</td>
<td>2.452</td>
<td>3.247</td>
<td>3.815</td>
<td>8.384</td>
<td>5.646</td>
</tr>
<tr>
<td>Sig.</td>
<td>0.159</td>
<td>0.088</td>
<td>0.022*</td>
<td>0.052</td>
<td>0.000***</td>
<td>0.001**</td>
</tr>
<tr>
<td>$\Delta R^2$</td>
<td>0.006</td>
<td>0.015</td>
<td>0.015</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partial $F$</td>
<td>4.776</td>
<td>0.002**</td>
<td>0.002*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table IX. Testing moderation – customer orientation

Notes: * = $p < 0.05$; ** = $p < 0.01$; *** = $p < 0.001$
theoretical argument is that a firm’s customer orientation is more valuable in an environment characterized by high competitive intensity. This argument is true for this study as well, but in terms of lowering the detrimental effects of a customer orientation, not increasing firm performance (see the exemplification in Figure 2). Competitive intensity, on the other hand, does not moderate the relationship between competitor orientation and ROA and market share, see Table X. The interaction terms are

![Figure 2. Relationship between customer orientation and ROA](image)

<table>
<thead>
<tr>
<th>Variables</th>
<th>H</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td></td>
<td>3.145</td>
<td>3.425</td>
<td>-0.122</td>
<td>35.044</td>
<td>36.040</td>
<td>35.482</td>
</tr>
<tr>
<td>t</td>
<td></td>
<td>0.002</td>
<td>0.001</td>
<td>0.903</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Sig.</td>
<td></td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Independent</td>
<td></td>
<td>0.002</td>
<td>0.001</td>
<td>0.903</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>COMOR</td>
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<td>-0.040</td>
<td>-0.024</td>
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<td>0.150</td>
<td>0.195</td>
<td>0.190</td>
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<tr>
<td></td>
<td></td>
<td>-0.699</td>
<td>-0.412</td>
<td>-0.268</td>
<td>2.659</td>
<td>3.481</td>
<td>3.375</td>
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<tr>
<td></td>
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<td>0.458</td>
<td>0.681</td>
<td>0.789</td>
<td>0.008**</td>
<td>0.001**</td>
<td>0.001**</td>
</tr>
<tr>
<td>Moderator</td>
<td></td>
<td>-0.087</td>
<td>-0.084</td>
<td>-0.241</td>
<td>-0.240</td>
<td>-4.317</td>
<td>-4.296</td>
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<tr>
<td>COMP</td>
<td></td>
<td>-1.507</td>
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<td>-4.317</td>
<td>-4.296</td>
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<tr>
<td></td>
<td></td>
<td>0.133</td>
<td>0.152</td>
<td>0.000***</td>
<td>0.000***</td>
<td>0.000***</td>
<td>0.000***</td>
</tr>
<tr>
<td>Interaction</td>
<td></td>
<td>0.036</td>
<td>0.625</td>
<td>0.533</td>
<td>-0.034</td>
<td>-0.615</td>
<td>-0.615</td>
</tr>
<tr>
<td>CO*COMP</td>
<td></td>
<td>0.002</td>
<td>0.009</td>
<td>0.009</td>
<td>0.023</td>
<td>0.079</td>
<td>0.080</td>
</tr>
<tr>
<td>R²</td>
<td></td>
<td>0.002</td>
<td>0.009</td>
<td>0.009</td>
<td>0.023</td>
<td>0.079</td>
<td>0.080</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td></td>
<td>-0.002</td>
<td>0.002</td>
<td>-0.001</td>
<td>0.019</td>
<td>0.073</td>
<td>0.071</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td>0.489</td>
<td>1.382</td>
<td>0.919</td>
<td>7.073</td>
<td>13.058</td>
<td>8.814</td>
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<tr>
<td>Sig.</td>
<td></td>
<td>0.458</td>
<td>0.253</td>
<td>0.432</td>
<td>0.008**</td>
<td>0.000***</td>
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<tr>
<td>ΔR²</td>
<td></td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Partial F</td>
<td></td>
<td>0.002</td>
<td>0.002</td>
<td>0.002</td>
<td>0.378</td>
<td>0.769</td>
<td>0.769</td>
</tr>
<tr>
<td>Notes:</td>
<td></td>
<td>* = p &lt; 0.05; ** = p &lt; 0.01; *** = p &lt; 0.001</td>
<td></td>
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</tr>
</tbody>
</table>
non-significant at $p > 0.5$ for both ROA and market share. On account of these findings, it is concluded that competitive intensity does not moderate the relationship between competitor orientation and a firm’s performance in terms of ROA and market share. $H3b$ is thus rejected.

**Discussion and implications**

Olson *et al.* (2005) argue that firms should place emphasis on prioritizing their orientations and then allocate resources accordingly. This study provides additional support for this argument by demonstrating that not only do the salient components of market orientation have different direct effects on performance, but also that this effect is moderated by a firm’s competitive environment.

On the basis of a conceptual elaboration and subsequent empirical investigation of the customer and competitor components of market orientation, we show that the use of global, rather than component, measures of market orientation may provide deficient information about the actual underlying drivers of a firm’s performance. The study also investigates the potential consequence of eliminating the competitor orientation from the market orientation construct, as suggested by Deshpande´ and Farley (1998), which, from this author’s perspective, would be unfavorable to market orientation research.

The most notable result of the analyses of the relationship between the aspects of market orientation and firm performance concerns the detrimental effect of customer orientation on ROA for firms in environments characterized by limited competition (recall Figure 2). The moderating effect of competitive intensity on the relationship between customer orientation and ROA is as hypothesized. But instead of resulting in higher ROA, as is the inherent idea of the hypothesis, higher competitive intensity lowers the detrimental effects of customer orientation. The detrimental effect of customer orientation on a firm’s ROA in a more stable environment is puzzling, in particular because much research in the market orientation literature argues for the opposite effect. An alternative explanation is provided by Day (1999b), who, in a discussion on change processes, suggests that firms facing poor performance will tend to invest heavily in, here, customer orientation, to realign with the needs and wants of the customers.

The significant positive effect of competitor orientation on a firm’s market share confirms that higher levels of competitor orientation lead to higher market share. Competitor orientation is thus a strong remedy for enhancing a firm’s dominant position in its market. Building larger market shares usually involves high start-up costs due to heavy investment in new technologies, having aggressive pricing strategies, etc., to provide the platform for increasing one’s customer base (e.g., Porter, 1980). Essentially, these means for increasing market share are oriented towards competition and may benefit from competitor orientation. The observation that firms with higher competitor orientation have higher market shares but that they do not accomplish higher ROA may reflect Armstrong and Collopy’s (1996) argument that strong preoccupation with market share and beating the competitor has negative effects on firm performance.

An early warning about the limits of the value of “orientations” was provided by Kohli and Jaworski (1990), who note that an orientation is useful only if the benefits it affords exceed the costs of the resources committed to the orientation (see also Day, 1994). They continue by listing environmental conditions, including limited competition, in which a market orientation may not be related to firm performance.
Kohli and Jaworski (1990) conclude that managers should pay close attention to the cost/benefit ratio of a market orientation in certain environments. I extend this argument, by arguing that the degree of attention to the cost/benefits of any “orientations” not should be a function of a firm’s environmental conditions, but should be ever present. The results of the present study may indicate that a firm’s attention to the cost/benefit ratio of its “orientation” is at least partly neglected.

**Limitations**

The present study provides empirical evidence for the effect of customer orientation and competitor orientation on firm performance. There are, nonetheless, still many limitations to the study. Since the sample consists predominantly of small to medium-sized enterprises (SMEs), our ability to generalize the reported results to larger firms is restricted. Further restriction of the generalizability of the results is caused by the sample consisting of slightly larger firms with higher ROA than the overall population of SMEs. Also, the novel approach of using both web-based and traditional postal questionnaires may hold threats to the validity of the study. However, this distinction was not registered in our database and thus cannot test for possible biases. In addition, the standard cross-sectional setting of the study limits inferences about the causality among the constructs. Finally, another limitation is caused by the low percentages of variance explained ($R^2$), particularly for the models including ROA as the dependent variable. The theoretical models have, however, sufficiently adequate levels of model-fit indices, suggesting that they are sound representations of the underlying data. Nonetheless, the low levels of variance explained may also limit the generalization of the results of the study.

**Implications for further research**

Despite the preceding limitations, I believe that the study’s discussions and empirical results advocate moving beyond global measures of market orientation and focusing on symmetric component measures of customer orientation and competitor orientation when investigating firm performance differentials. As argued above, this study builds on improved component measures of market orientation that tap better into the competitive aspects of market orientation. Although previous research finds little empirical support for the possible influence of a firm’s environment on the relative importance of customer orientation and competitor orientation, the new measurement approach developed in this study invites further investigation of the phenomenon.

Generally, it is observed that the marketing literature, particularly that of CRM, tends to neglect the dynamic forces of competition and to factor competitor analyses into strategy formulation. In line with the increased emphasis on the competitive aspect of market orientation in the present study, I recommend that a more balanced research effort, including both customer and competitive aspects, is placed on marketing phenomena dominated by customer orientation.

Given the empirical setting of manufacturing SMEs, this type of study would benefit from replication with larger manufacturing firms, service firms, R&D intensive industries, etc. Besides replication in different contexts, the marketing literature would benefit from more research investigating additional financial and, particularly, non-financial dimensions of firm performance, cf. Venkatraman and Ramanujam (1986), in relation to market orientation and its salient dimensions. From a normative perspective, research
exploring which conditions, such as industry life cycle, firm age, type of industry, etc., a firm benefits more from investing in customer vis-à-vis competitive activities would provide valuable contributions to both academia and business practitioners.

From a methodological perspective, the measures of customer orientation and competitor orientation could be improved, as they do not achieve discriminant validity between their respective components, generation and dissemination of intelligence, as well as action taken upon the intelligence. The measures of customer orientation and competitor orientation are also limited in terms of their indicators’ focus on particular activities. Indicators tapping into why or how these particular activities are carried out in firms would also provide valuable information. This additional information may contribute to the understanding of the underlying organizational culture (or motivation) governing a firm’s market orientation. Also, we may get insights as to why firms’ fail to benefit from their market-oriented activities. Concerning the “action” component, I suggest that improvement may be made to both the construct and measure by emphasizing and incorporating the timing of the action towards customers and competitors. So far, the construct and measures tend to assume that action has been made in a timely manner.

In the spirit of the broad definition of market orientation suggested by Jaworski and Kohli (1996) and the broader indicator sampling domain as suggested by Matsuno and Mentzer (2000) and Matsuno et al. (2005), I propose that future research should be conducted based on an augmentation of orientations, e.g. supplier, distributor, institutional, and interest group orientations. For each new orientation, indicators tapping into activities of intelligence generation and dissemination, as well as action taken on the basis of the intelligence, should be developed.

Managerial implications
Customer orientation and competitor orientation appear to be contingent on a firm’s competitive environment. This suggests that while both customer orientation and competitor orientation are vital for the general understanding of markets, they may provide different types of information for different types of decisions and decision-makers. Moreover, this finding is a strong indicator that market orientation and its components are not necessarily equally relevant for firms with different strategies and for firms in different environmental conditions.

The influence of competitor orientation and, particularly, customer orientation on a firm’s ROA in different environmental conditions in this study is provocative. The conclusion of this study is that firm activities pertaining to understanding and anticipating changes in markets do not generate superior performance. But the negative effect of customer orientation on ROA does not necessarily mean that marketing and other market-related activities per se have negative effects on firm performance. The evidence from other studies on market orientation (e.g., Kirca et al., 2005) indicates that marketing activities and capabilities are indeed beneficial, but that marketing activities need focus and must be implemented with a profitable purpose and not just blindly executed.

It is of general concern that firms may be neglecting marketing as a valuable resource. Since marketing and market-oriented activities require allocation of costly resources, the bottom-line consequences of these activities must be assessed on a continuous basis to ensure their high quality and effectiveness (Kohli and Jaworski, 1990; Day, 1994). The findings indicate, however, that the quality and effectiveness of
market-oriented activities in medium-sized firms in manufacturing industries may need improvement - particularly firms’ customer-oriented activities in stable environments. The results of the present study therefore call for a stronger managerial emphasis on effective implementation and control of marketing and customer and competitor-oriented activities.

Conclusion
This study contributes to the growing body of marketing research investigating the relationship between a firm’s customer orientation and competitor orientation and firm performance. On the basis of a conceptual and empirical investigation, I conclude that it is meaningful theoretically, as well as empirically, to decompose market orientation into customer orientation and competitor orientation. Also, I conclude that while the study cannot disprove the general argument that being market-oriented can never be a negative (Slater and Narver, 1994), it can refine it by arguing that a customer orientation apparently can be a negative. Evidence compiled from empirical data from 308 firms, predominantly SMEs in manufacturing industries, reveals the negative relationship between customer orientation and ROA for manufacturing firms in less competitive environments. Furthermore, the results indicate that there is no relationship between firms’ competitor orientation and ROA and that customer orientation has no relationship with ROA in highly competitive environments. Finally, firms’ market share is explained by competitor orientation, but not by customer orientation.

The study’s results indicate that the improved component measures of customer orientation and competitor orientation applied in this study provide more nuanced and applicable information about the important aspects of a firm’s market orientation in relation to performance in different competitive environments. In conclusion, I argue that distinguishing customer orientation and competitor orientation indeed does matter and hope that the present study will stimulate further debate and research in this area.

References


**Further reading**


**About the author**

Hans Eibe Sørensen, PhD is Assistant Professor at the Section for Strategic Organization Design, Department of Marketing and Management, University of Southern Denmark. His research interests include organization of customer and competitive intelligence, market orientation and marketing management’s role in strategy implementation. As a practitioner, he has been a sergeant in the Royal Danish Military Police, freelance consultant and data analyst, and as well as having co-founded biotech companies. Hans Eibe Sørensen can be contacted at: hes@sam.sdu.dk

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