Sustainability Strategy and Firm Performance in Residential Trade and Industry: A Conceptual Analysis

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Abstract—The request for a sustainable development challenges both managers and consumers to rethink habitual practices and activities. While consumers are challenged to develop sustainable consumption patterns, companies are asked to establish managerial systems and structures considering economical, ecological, and social issues. As this is in particular true for housing associations, this paper aims first, at providing an understanding of sustainability strategy in residential trade and industry (RTI) by identifying relevant facets of this construct and second, at conceptually analyzing the impact of sustainability strategy in RTI on operational efficiency and performance of municipal housing companies. The author develops a model of sustainability strategy in RTI and its effects and further, sheds light in priorities for future research.

Keywords—firm performance, sustainability strategy, residential trade and industry

I. INTRODUCTION

CALLS for sustainable development over the past decades have made players in politics, the economy, and science face numerous challenges. A growing variety of environmental consequences, loss of biodiversity, climate changes, progressively devastating natural disasters, air and water pollution but also the disparities between rich and poor, the growing gap between industrialized and developing nations, and the resulting risks to prosperity, security and stability all are issues modern societies are increasingly confronted with [1], [2].

An analysis of current trends in the residential trade and industry (RTI) shows an environment undergoing major changes as a phenomenon that necessitates close examination from both the scientific and practical point of view. In recent years, there has been advancing privatization of residential facilities formerly in public hand [3], [4], [5]. Here, the reduction of liabilities by selling large residential portfolios is assumed to be the most significant benefit [5]. However, the question arises whether sales of residential portfolios in order to gain short-term economic benefit can be actually considered a sustainable strategy. The question gains weight in the face of actual social and political functions often assumed to be fulfilled by local housing enterprises. In this

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context, Veser et al. 2007 demonstrate that the strategies pursued by buyers of residential portfolios primarily focus on business economic optimisation of the portfolios as they are considered as investments [4]. This leaves social and environmental aspects inevitably lagging behind in terms of priorities, thus obstructing a sustainable approach.

Although there are numerous studies that address environmental aspects of housing and construction, by now there has been no comprehensive assessment of all the aspects of sustainability in residential trade and industry except some initial broad takes. Focusing on the subject of sustainability strategies in commercial operations, the research of existing sources yields an even more urgent need of scientific attention. For instance, McGee 1998 explicitly points out the need to devise sustainability strategies in commercial enterprises [6]. Further, Salzmann et al. 2005 conclude a significant lack particularly of branch-specific research which prevents development of precise measurement tools [7]. The subject of sustainability strategies in housing enterprises currently lacks attention in scientific sources, amounting to an actual research gap. The present paper intends to close this gap by answering two relevant questions. (1) How can sustainability strategy in residential trade and industry be conceptualized? (2) How does sustainability strategy in residential trade and industry determine firm performance of municipal housing companies?

The article is organized as follows. The first section focuses on the theoretical bases by discussing theories relevant to this research subject. After that, attention turns towards model development including the conceptualization of sustainability strategy in residential trade and industry and the effects on firm performance. The last section outlines priorities for further research.

II. THEORY

Previous studies relating to sustainability in commercial operations in this context refer to four types of theories including (1) instrumental theories, (2) political theories, (3) integrative theories, and (4) ethical theories [8]. Because instrumental theories such as shareholder value [9], resource-based view [10], [11] or dynamic capabilities view [12] refer to economic relationships between a firm and its natural and social environment, they appear well-suited as a theoretical foundation for this research. Thus, the following sections focus on the competence-based view and the dynamic

capabilities view.

A. Contributions of the Competence-based View

The competence-based view may be considered a strategic management concept that traces its origin to resource-based view [13]. As basic contributions in economic theory on resource-based view and competence-based view, the works by Penrose 1959 and Selznick 1957 may be considered [14], [15]. Within resource-based view, particularly the studies by Prahalad/Hamel 1990, Collis 1991, Teece/Pisano/Shuen 1997, and Sanchez 2004 lay foundations to competence-based view that in the meantime has developed to what can be termed a separate concept [16], [17], [12], [18]. By emphasizing organizational competences of a firm, an interconnection may be established between the firm's resources and the marketrelated tasks to attend to [13]. The explicit inclusion of competences comprises the causal chain between resources, competitive advantages and firm performance, additionally explaining - as opposed to resource-based View - how different firm performance comes about even despite equality in available resources [13]. Hence, a conclusion applies that competence-based view tries to explain success in corporate operations through competitiveness in markets as defined by resources and competences held at a specific point of time. The core element in the competence-based view is the notion of competence. According to Freiling 2004, competences (particularly organizational competences) are "reproducible, non-randomly determined options for collective action [...] that enable the firm to combine available resources in processes that reflect market needs in a way facilitating the firm to successfully reinforce its position with customers in market operations" [13]. The insights pursued by the competence-based view are identifiable with examination of corporate competitiveness [19]. According to Stead et al. 2004, p. 104 corporate sustainability strategies can be defined as "integrative strategies designed to provide long-term competitive advantages to organizations by taking advantage of external opportunities and minimizing external threats along all three dimensions of sustainability" Consequently, a sustainability strategy can be described through the qualities of long-term orientation, future perspective, inclusion of external framework variables and contribution to securing corporate competitiveness as existential prerequisite. This implies that a sustainabilityoriented approach and strategic approach closely interrelate. Further, there appears to be a causal relationship between sustainability strategy and corporate competitiveness. Consequently, sustainability strategy as a research subject may be considered essentially compatible with the insights pursued by the competence-based view. This leaves competence-based view an appropriate theoretical basis to explore the working principles of sustainability strategy within RTI.

B. Contributions of the Dynamic Capabilities View

The dynamic capabilities view, which can be also termed as

theory of dynamic capabilities, addresses the weaknesses of the classical resource-based view, focusing on those specific processes that comprise accumulation of new skills and resources [21], [22]. Contrary to the classical resource-based view that employs existing corporate resources in order to explain competitive advantages, the dynamic capabilities view aims at improving the existing pools of resources [23], [24]. This makes the dynamic capabilities view an answer to calls for dynamizing the classical resource-based view [25], [26]. The dynamic capabilities view traces its origin to Teece/Pisano/Shuen 1997 [12]. The core message of this theory includes the development and improvement of a pool of resources and capabilities to secure sustained competitiveness. Due to changes in market environment caused for example by market entries of new competitors or changes in consumer preferences, new requirements emerge upon corporate pool of resources and capabilities. Hence, the core managerial task is (1) to steadily improve already existing internal and explore and secure company external capabilities and (2) to recombine the capabilities in new working setups [12]. The dynamic capabilities view places emphasize on the fact that firm performance in the market within a changing environment is determined by corporate dynamic capabilities [12], [21]. This leaves performance relevant strategies as one among the focus points in the concept, implying the compatibility of the dynamic capabilities view with the scope of this article.

III. CONCEPTUAL FRAMEWORK

A. Conceptualizing Sustainability Strategy in RTI

In terms of origin in the English language, the term sustainability dates back to the 13th century, being used in the sense of "to preserve/maintain". In German speaking areas its term equivalent "Nachhaltigkeit" dates back to 1713. In a study dealing with issues of forestry, the term was used for the first time by Hans Carl von Carlowitz, director of the mining office with the royal court of Saxony [27]. In view of the threat outlined above to natural life-sustaining resources and social disparities, sustainability as term saw its renaissance in the 1980s, becoming the driving idea behind sustainable development [28]. The generally accepted definition of a sustainable development was coined by the Brundtland Commission. Accordingly, a sustainable development is considered as a development "[...] that meets the needs of the present without compromising the ability of future generations to meet their own needs" [28].

A sustainable development is seen to have great potential particularly in areas of residential development and housing and construction. Due to economic and social significance of sustainable development, enterprises and organizations, particularly in the residential trade and industry, are held to practice sustainable business strategies. Key players in this area are commercial enterprises in the housing industry. Of the total of approx. 39.8 million residential units in Germany, in 2008 almost 90 percent were used on a rental basis [29].

Most of the residential units are offered by enterprises in the housing industry. This is added by the fact that the branch that gives jobs to some 400,000 people is a major employer in the national economy [29]. Consequently, commercial enterprises in the residential trade and industry are key players in the area of housing and construction capable of exercising significant influence upon a sustainable development.

This study aims at exploring the construct sustainability strategy in residential trade and industry. According to Stead et al. 2004, p. 104, corporate sustainability strategies may be defined as "integrative strategies designed to provide longterm competitive advantages to organizations by taking advantage of external opportunities and minimizing external threats along all three dimensions of sustainability" [20]. This definition refers to the three-dimensionality inherent to the sustainability concept. According to the triple bottom line concept, these dimensions include economical, ecological and social issues [30], [31], [32]. Thereby, ecology refers to the protection of ecosystems and prudent approaches to natural resources as well as to reducing consumption of energies and commodities [32]. The economic dimension refers to viability of economic systems as well as to economic performance Finally, the social dimension environmentally friendly satisfaction of basic human needs, equality of chances and basic social security [32].

Due to the still abstract nature of this definition, some authors demand a more precise characterization of sustainability strategy according to the specific context. The application of the general principles of sustainable actions in daily corporate operations poses great challenges to firms [31]. For instance, firms should devise their own sustainability management systems to suit their company-specific environment [31].

Against this background, this article focuses on the residential trade and industry. The following four classes of activities are considered as the principal areas of operation of housing enterprises. They include: (1) facility planning and construction; (2) maintenance and use; (3) adaptations, overhauls, refurbishments, and restorations, and finally (4) unbuilding and demolition activities.

Consequently, the conceptualisation of sustainability strategy in residential trade and industry entails three dimensions comprising (1) the environmental dimension of sustainability strategy, (2) the economic dimension of sustainability strategy, and (3) the social dimension of sustainability strategy along these four context-specific activities of housing companies. The conceptualization is consistent with the sustainability dimensions outlined above, embracing the listed sustainability aspects found relevant.

B. Conceptualizing Firm Performance

Firm performance is identified as a major variable in a number of studies. Many studies have already addressed the effects of strategies, management systems and corporate operations on firm performance [33], [34], [35]. A firm's performance refers to what has been achieved, thus amounting

to a balance variable. According to Hofer/Schendel 1986, firm performance results from the strategy pursued by the firm [36]. Accordingly, firm performance also can be defined as the result of successful implementation of a corporate strategy. This definition shall be employed as reference for purposes of examinations herein. A literature review reveals a variety of suggestions for conceptualizing the construct firm performance. Firm performance may be considered a multidimensional construct. The particular aspects of this construct that are frequently paid attention in literature in this context are financial or operational performance and organizational efficiency [37]. While the first of these aspects refers to meeting economic target variables, the second aspect refers to the transformation of input effort into output performance of organization. Vorhies/Morgan 2004 define firm performance as a three-dimensional construct that comprises the dimensions of customer satisfaction, market efficiency and corporate profitability [34]. Due to the comprehensive nature of this particular conceptualization and inclusion of customerrelated aspects (customer satisfaction), market-related aspects (market efficiency) and corporate aspects (profitability) alike, the conceptualization shall be adopted and applied for this research. Hence, the conceptualization of firm performance in residential trade and industry is based on three dimensions comprising (1) tenant satisfaction, (2) market efficiency of the housing enterprise concerned, and (3) profitability of the housing enterprise concerned. This conceptualization is in line with the requirements by Venkatraman/Ramanujam 1986.

C. Hypotheses

According to Hart/Ahuja 1996 and Waddock/Graves 1997, a firm's sustainability strategy affects the firm's performance in the market [38], [39]. This research postulates causal relationships between the three dimensions of sustainability strategy and the three dimensions of firm performance resulting in nine hypotheses (Fig. 1).

By considering ecological aspects in terms of managing housing stocks, housing companies are able to reduce emissions, increase energy efficiency, and avoid environmental pollution. From a managerial perspective, these issues address (1) environmental concerns of tenants resulting in higher levels of satisfaction with the housing companies, (2) competitors, and in turn market efficiency, by establishing competitive advantages, and (3) profitability, by saving costs due to a reduction in energy consumption. Thus, this paper posits the hypotheses:

- H1: The ecological dimension of sustainability strategy in RTI has a positive impact on tenant satisfaction.
- H2: The ecological dimension of sustainability strategy in RTI has a positive impact on market efficiency.
- H3: The ecological dimension of sustainability strategy in RTI has a positive impact on profitability.

Focusing on the economical issues of property management,

an efficient and profitable management of apartments and/or houses results in higher tenant satisfaction caused by market-

driven rental fees and plausible service charges. Further, considering economical aspects of managing residential entities assumably affects market efficiency as well as profitability of housing firms as these issues determine a company's competitiveness and internal operational efficiency. Consequently, the present paper posits the following hypotheses.

- H4: The economical dimension of sustainability strategy in RTI has a positive impact on tenant satisfaction.
- H5: The economical dimension of sustainability strategy in RTI has a positive impact on market efficiency.
- H6: The economical dimension of sustainability strategy in RTI has a positive impact on profitability.

Focusing on the social issues of property management, the consideration of needs of actual and prospective tenants as well as residents during planning, maintenance, or refurbishments of residential entities influences not only tenant satisfaction, but also market efficiency, as those companies are perceived as caring about their customers' needs and wishes, which results in a positive image as an attractive landlord. Moreover, considering social aspects in managing housing stocks and apartments influences firm's profitability due to a reduction of tenant fluctuation and thus, stabile rental charges. Consequently, the present paper posits the following hypotheses.

- H7: The social dimension of sustainability strategy in RTI has a positive impact on tenant satisfaction.
- H8: The social dimension of sustainability strategy in RTI has a positive impact on market efficiency.
- H9: The social dimension of sustainability strategy in RTI has a positive impact on profitability.

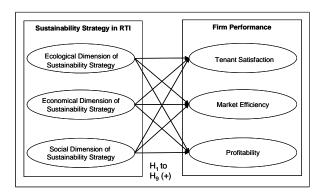


Fig. 1 Conceptual Framework

IV. CONCLUSION

The objective of this paper is to shed light on the role of sustainability strategy in residential trade and industry. More precise, the article intends to answer two relevant questions, namely: (1) How can the construct sustainability strategy in RTI be conceptualized? (2) How does this construct affect firm performance of housing enterprises? Answers to the questions potentially entail a number of implications in terms of future research needs in the area.

First, the present article contributes to a better understanding of the construct sustainability strategy in RTI by suggesting a conceptualization of this construct which includes three components and thus, contributing to the discussion about the nature and relevant facets of a sustainability strategy in RTI.

Second, the present article allows detailed insights into the effects that result from pursuing a sustainability strategy in RTI. Here, the particular impact of sustainability strategies on firm performance is analyzed and hypothesized.

Third, the papers might be understood as a point of departure for future research, empirically investigating and analyzing the hypothesized causal relationships using covariance-based methods of data analysis. Moreover, as this article focuses on the outcomes of sustainability strategy in RTI, future research might investigate antecedents which determine sustainability strategy in RTI.

REFERENCES

- UN (2002), Report of the World Summit on Sustainable Development.
 Johannesburg, South Africa, 26 August 4 September 2002. New York.
- [2] UNEP (2001): Consumption Opportunities. Strategies for Change. Geneva.H. Poor, An Introduction to Signal Detection and Estimation. New York: Springer-Verlag, 1985, ch. 4.
- [3] Eekhoff, J.; Arentz, O.; Rauen, S.; Langner, B. (2007): Zur Ökonomisierung der Immobilienwirtschaft Entwicklungen und Perspektiven. Bericht der Kommission des Deutschen Verbandes für Wohnungswesen, Städtebau und Raumordnung e.V. im Auftrag des Bundesministeriums für Verkehr, Bau und Stadtentwicklung, Köln.
- [4] Veser, J.; Thrun, T.; Jaedicke, W. (2007): Veränderungen der Anbieterstruktur im deutschen Wohnungsmarkt und wohnungspolitische Implikationen. Forschungen Heft 124, Bonn.
- [5] Voigtländer, M. (2007): Die Privatisierung öffentlicher Wohnungen. In: Wirtschaftsdienst 2007, Nr. 11, S. 748-753.
- [6] McGee, J. (1998): Commentary on ,Corporate Strategies and Environmental Regulations: An Organizational Framework' By A. M. Rugman and A. Verbeke. In: Strategic Management Journal, Vol. 19, pp. 377-387.
- [7] Salzmann, O.; Ionescu-Somers, A.; Steger, U. (2005): The Business Case for CorporateSustainability: Literature Review and Research Options. In: European Management Journal, Vol. 23, No. 1, pp. 27-36.
- [8] Garriga, E.; Melé, D. (2004): Corporate Social Responsibility Theories: Mapping the Territory. In: Journal of Business Ethics, Vol. 54, pp. 51-71.
- [9] Friedman, M. (1970): 'The Social Responsibility of Business is to Increase its Profits'. In: New York Times Magazine, September 13th, pp. 32–33.
- [10] Barney, J. (1991): Firm Resource and Sustained Competitive Advantage. In: Journal of Management, Vol. 17, pp. 99-120.
- [11] Wernerfelt, B. (1984): A resource-based view of the firm. In: Strategic Management Journal, Vol. 5, No. 2, pp. 171-180.
- [12] Teece, D. J.; Pisano, G.; Shuen, A. (1997): Dynamic capabilities and strategic management. In: Strategic Management Journal, Vol. 18, No. 7, pp. 509-533.
- [13] Freiling, J. (2004): A Competence-based Theory of the Firm. In: Management Revue, Vol. 15, pp. 27-52.
- [14] Penrose, E. T. (1959): The Theory of the Growth of the Firm. Oxford.
- [15] Selznick, P. (1957): Leadership in Administration: A Sociological Interpretation. Berkeley.
- [16] Prahalad, C. K.; Hamel, G. (1990): The Core Competence of the Corporation. In: Harvard Business Review, Vol. 90, pp. 71-91.
- [17] Collis, D. J. (1991): Organizational Capability as a Source of Profit. Cambridge.
- [18] Sanchez, R. (2004): Understanding Competence-based Management. Identifying and Managing Five Modes of Competence. In: Journal of Business Research, Vol. 57, pp. 518-532.

- [19] Freiling, J.; Gersch, M.; Goeke, C. (2006): Notwendige Basisentscheidungen auf dem Weg zu einer Competence-based Theory of the Firm. In: Burmann, C.; Freiling, J.; Hülsmann, M. (Hrsg.): Neue Perspektiven des Strategischen Kompetenz-Managements. Wiesbaden, S. 3-34.
- [20] Stead, W. E.; Stead, J. G.; Starik, M. (2004): Sustainable Strategic Management. London.
- [21] Eisenhardt, K. M.; Martin, J. A. (2000): Dynamic capabilities: What are they? In: Strategic Management Journal, Vol. 21; No. 10/11, pp. 1105-1121.
- [22] Helfat, C. E.; Peteraf, M. A. (2003): The dynamic resource-based view: Capability lifecycles. In: Strategic Management Journal, Vol. 24, No. 10, pp. 997-1010.
- [23] Schulze, W. S. (1994): The two schools of thought in resource-based theory: Definitions and implications for research. In: Advances in Strategic Management, Vol. 10, pp. 127-152.
- [24] Makadok, R. (2001): Toward a synthesis of the resource-based and dynamic-capability views of rent creation. In: Strategic Management Journal, Vol. 22, No. 5, pp. 387-401.
- [25] Black, J. A.; Boal, K. B. (1994): Strategic resources: Traits, configurations and paths to sustainable competitive advantage. In: Strategic Management Journal, Vol. 15, No. 5, pp. 131-148.
- [26] McWilliams, A.; Smart, D. L. (1995): The resource-based view of the firm. Does it go far enough in shedding the assumptions of the S-C-P paradigm? In: Journal of Management Inquiry, Vol. 4, No. 4, pp. 309-316.
- [27] Carlowitz, H. C. von (2000): Sylvicultura oeconomica oder haußwirthliche Nachricht und naturmäßige Anweisung zur wilden Baum-Zucht. Freiberg. Nachdr. d. Ausg.: Carlowitz, H. C. von (1713): Sylvicultura oeconomica oder haußwirthliche Nachricht und naturmäßige Anweisung zur wilden Baum-Zucht. Leipzig.
- [28] WCED (1987): Our Common Future. Oxford, New York.
- [29] Bundesverband deutscher Wohnungs- und Immobilienunternehmen (GdW) (2009): Wohnungswirtschaftliche Daten und Trends. Berlin.
- [30] Ranganathan, J. (1998): Sustainability Rulers: Measuring Corporate Environmental & Social Performance. In: Sustainable Enterprise Initiative, pp. 1-8.
- [31] Azapagic, A. (2003): Systems Approach to Corporate Sustainability. A General Management Framework. In: Trans IChemE, Vol. 81, Part B, S. 303-316.
- [32] Bansal, P. (2004): Evolving Sustainability: A Longitudinal Study of Corporate Sustainable Development. In: Strategic Management Journal, Vol. 26, pp. 197-218.
- [33] Youndt, M. A.; Snell, S. A.; Dean, J. W.; Lepak, D. P. (1996): Human Resource Management, Manufacturing Strategy, and Firm Performance. In: The Academy of Management Journal, Vol. 39, No. 4, pp. 836-866.
- [34] Vorhies, D. W.; Morgan, N. A. (2005): Benchmarking marketing capabilities for sustainable competitive advantage. In: Journal of Marketing, Vol. 69, No. 1, pp. 80-94.
- [35] Morgan, N. A.; Rego, L. L. (2009): Brand Portfolio Strategy and Firm Performance. In: Journal of Marketing, Vol. 73, pp. 59-74.
- [36] Hofer, C.; Schendel, C. (1986): Strategy Formulation: Analytical Concepts. St. Paul.
- [37] Venkatraman, N.; Ramanujam, R. (1986): Measurement of Business Performance in Strategy Research: A Comparison of Approaches. In: The Academy of Management Review, Vol. 11, No. 4, pp. 801-814.
- [38] Hart, S. L.; Ahuja G. (1996): Does it pay to be green? An empirical examination of the relationship between pollution prevention and firm performance. Business Strategy and the Environment, pp. 30–37.
- [39] Waddock S. A., Graves S. B. (1997): The corporate social performance– financial performance link. In: Strategic Management Journal, Vol. 18, No. 4, pp. 303–319.

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