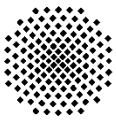
Diskussionspapierreihe
Innovation, Servicedienstleistungen und Technologie

Research Papers on
Innovation, Services and Technology

1/2011

Frohwein, Torsten / Burr, Wolfgang

Emerging Issues in the further Development of the Resource-Based View of the Firm



Universität Stuttgart

Betriebswirtschaftliches Institut
Abteilung I - Forschungs-, Entwicklungs- und Innovationsmanagement

ISSN 2193-2301

Diskussionspapierreihe
Innovation, Servicedienstleistungen und Technologie

Research Papers on
Innovation, Services and Technology

1/2011

Frohwein, Torsten / Burr, Wolfgang

Emerging Issues in the further Development of the Resource-Based View of the Firm

Emerging Issues in the further Development of the Resource-Based View of the Firm

Frohwein, Torsten / Burr, Wolfgang

Abstract

The resource-based view is the dominant paradigm in strategic management. One of the unanswered questions is how innovations are addressed in the resource and competence based literature. In answering this question the conformance of the fundamental methodological principles of the resource-based reasoning with the defined explanation goals is challenged. Theoretical foundation based on transaction costs and property rights arguments can help to clarify a sufficient explanation of the emergence, occupation, and decay of sustainable competitive advantage. The necessity and the feasibility to integrate transaction costs and property rights aspects into the resource-based reasoning is to be proofed.

Keywords

Resource-based view, property rights, theory integration, innovations, strategic management

1 Introduction

Derived from the foundations of the resource-based literature the competence management has developed to a promising strategic management approach. The main issue of the competence management to satisfy the claim to become a key paradigm in business management research is at the focus of this paper. The subordinate research question asks for the conformance of the fundamental methodological principals of the resource based approach with the defined explanation goals. More precise, we ask for the sufficiency of the strategic resource and competence management in explaining the emergence, occupation and decay of sustainable competitive advantages and to appropriate economic rents. Theoretical foundation for our argumentation is in the property rights and transaction costs theory. The main purpose of this paper is to extend the classical reasoning of the sustainable competitive advantage by considerably important aspects of property rights.

A significant part of the argumentation is based on the unanswered question how innovations are addressed in the resource and competence based literature.

First step to the further proceedings is a brief analysis of the key notions of what is meant by resources and competences (chap. 2). In analyzing the claim evolving to a key paradigm in strategic management research and reviewing the theoretical foundations of the resource based approach the *necessity* to integrate aspects of the property rights theory and transaction costs theory is motivated. Taking into account several aspects of innovations this relationship becomes even clearer.

Close to the necessity of integration it must be asked for the methodological and epistemological *feasibility* to integrate the resource-based approach and the property rights theory. Therefore, in the second step a proposal is presented that explains in what aspects both approaches are methodological complementary. In addition we provide some epistemological criteria with which an integration can be ensured (chap. 4). If compliancy with the criteria can be ascertained the exclusive presumption of resource attributes for sustainable competitive advantage (known as the VRIO-framework) ascribing to Barney (1991) must be shed in a new light. Additionally it seems necessary to enhance the relevance of transaction costs when taking them in closer relation to the conditions of sustainable competitive advantage. Particularly in these matter interrelations to innovation theory seem possible and reasonable. Deduced from the close interrelations new fruitful findings for the emergence, occupation and decay of sustainable competitive advantages can be derived. However, if the epistemological criteria for an integration of the resource-based approach and property rights theory can not be met, a more eclectically procedure for analyzing the interrelation between resource and competence management and innovation aspects must be favored.

2 Fundamental Relations and Definitions in the Resource and Competence Management

The basic principles and core paradigms of strategic management reveal no development of a holistic theory. However, there is a basic agreement about the sustained existence of firms

through an active and goal-oriented governance of corporate development, which in itself represents the primary objective of corporate management (Rasche/Wolfrum 1994, p. 501). The securing of long-term corporate development is carried out with the creation and preservation of strategic competitive advantages and sustained potentials of competitive success. The analysis of competitive advantages yields answers to the questions regarding corporate sustainability and evolutionary development.

The explanation goal of the resource and competence approach are rents generated by sustainable competitive advantages. As theoretical constructs, the concept of sustainable competitive advantage rely on specific resource attributes and their implementation into competitive advantage through appropriate competences. From a resource-oriented point of view, the primary task of strategic management is the creation and enforcement of firm-specific skills and competences (Rasche/Wolfrum 1994:502).

2.1 The concept of sustainable competitive advantages

In order to persist in the dynamics of competition, the firm has to make use of its resources to create so-called sustainable competitive advantages (Barney 1991; Wernerfelt 1984). Sustainability in the sense of a 'resource protection barrier' generates sustainable competitive advantages. Such a sustained competitive advantage is created when a "… value creating strategy [is] not simultaneously being implemented by any current or potential competitors and when these other firms are unable to duplicate the benefits of this strategy" (Barney 1991, p.102). From a very narrow perspective, sustainable competitive advantages in principle cannot be occupied by other firms. But, not all firm resources possess the inherent potential to create sustainable competitive advantages. Resources with the potential for the creation of sustainable competitive advantages have to meet the characteristics of heterogeneity and immobility indicated by the attributes to be valuable, rare, imperfectly imitable and non-substitutable (Barney 1991, p. 105f).

The resource and competence management attempts to give theoretically-based answers to this core problematic of strategic management. Sustained above-average profits in terms of economic rents are considered to be the expression of obtaining competitive advantages. The fundamental explanation of corporate success is located at the organizational level and can particularly be attributed to resource and competence-based factors of the firm.

2.2 The definition of resources and competences

The concept of resources can be interpreted in many different ways. Neither the economic interpretation, nor the classical business economics in the tradition of Gutenberg share the equivalent terminological and contextual understanding of resources, as expressed in literature of the resource-based view (Freiling 2001, p. 11ff.). Even in the broad resource literature itself a sufficient terminological differentiation does not prevail. Wernerfeldt (1984, p.172)

describes resources as all "… (tangible and intangible) assets which are tied semi-permanently to the firm". While Penrose categorized the resources of a firm as "tangible" or "human" (Penrose 1995, p. 24f), Barney broadened the classification to 3 categories: physical, human and organizational resources (Barney 1991, pp.101). Grant (1991, p.119) proposes a classification in financial resources, technological resources and reputation.

In a different attempt, resources can be seen as bundles of various functions, because "it is never resources themselves that are the 'inputs' in the production process, but only the services that the resources can render." (Penrose 1995, p.25). The potential of success of productive resource utilization depends on the function of this resource. While definition of a resource can be made independently of a resource's intended use, the definition of a resource function remains bound to its application. Cumulating in the following core statement, with the distinction between resources and resource functions Penrose provides an explanation for the firm's heterogeneity: Firm resources accumulated over a certain period of time collectively result in a high degree of resource-specific heterogeneity, which provides the basis for competitive advantages and considerable profits in terms of economic rents. What causes resource heterogeneity is the existence of imperfect factor markets (Amit/Schoemaker 1993, pp.36; Peteraf 1993, pp.180; Bamberger/Wrona 1996, p.130), chance or "luck" in decision making of corporate management (Barney 1986) regarding resource acquisition, as well as various paths dependencies in the firm's development through firm-specific usage of resource potentials.

With the broadly defined concept of resources a fundamental problem in the resource approach arouses. While it is possible to locate the methodological core and fundamental position in literature, a harmonized terminological basis for the definition of resources cannot be assessed. The various examples of definitions provided above show the ambiguity and problems in operationalizing of central concepts of the resource-based approach. Freiling (2001, p. 3) points out that it is only possible to decide for an appropriate terminological basis when the research objectives of the resource approach are clearly defined. This means that the concept of resources requires a clarification of long-term success factors and an identification of factors to establish a sustained differentiation from competitors through effective exclusion barriers. Freiling (2004, p. 30) focuses on a resource concept referring to marketable (generic) input factors, which receive resource characteristics during firm-specific refinement processes. The results of the transformation process which turns generic input factors into resources are firm-specific characteristics of sustainable competitiveness, for which a sustained exclusion of use from competitors can achieved in the long run. An important part of the resource definition is effective of control over resources (Barney 1991, p.101; Amit/Schoemaker 1993, p.35). Heterogeneity of resources is particularly originated in the exercise of control by individuals in the transformation process of generic input factors into firm-specific competitive advantages.

The emergence and further development of the heterogeneity of firms can be considered as functionally related to firm-specific competences (Schneider 1997, p.60, Mahoney/Pandian 1992, p.365). In contrast to the view of resources as a subset of input factors, competences describe firm abilities used for the transformation of resource potentials into effective competitive advantages (Grant 1991, p.119). Amit/Schoemaker (1993, p. 35) categorize

competences as knowledge-based, tangible or intangible firm-specific processes, which are developing in a co-evolutionary process to resources. Burr (2004, p.123) distinguishes competences as process-related abilities in organizational routines, technological competences and core competences.

The competence-based approach of strategic management most notably refers to the preliminary work of Sanchez (1997, 2002) and Sanchez/Heene (1997), who emphasize the claim for a holistic approach of strategic management theory. Facing a dynamic and highly competitive environment, incomplete information and bounded rationality, the success factors for the occupation of sustainable competitive advantage can be found in an adaptive competence management, which ensures sufficient strategic flexibility for the creation and sustaining of competitive advantages (Sanchez 1997, p.941). The access to and control of firm-specific assets and firm-addressable assets allows the competence management to govern the refinement process of resource generation, because "the strategic value of a given resource depends on the way a firm combines, coordinates, and deploys that resource with other firm-specific and firm-addressable resources." (Sanchez/Heene 1997, p.313).

The competence-based strategic management presented above implies the necessity for a permanent adaption process of the competence development in order to identify profitable competitive opportunities. Similarly to the case of resources it must be stated that the scientific literature offers no consistent definition of competences. Contextual analogies are prevailing in the functionality of competences, which is on the effective utilization of success potentials generated by resources.

2.3 The resource-based approach as theory of the firm and a theory of strategic management

A more focused discussion of the claim of the resource and competence approach to become a key paradigm requires a discussion of the basic characteristics of the theory of the firm. Such a theory has to find answers to questions regarding (i) the emergence, further existence and decay of firms, (ii) the market success and the different dimensions of success as well as (iii) the explanation of the boundaries of the firm (Foss 1996, p.470; Freiling 2001, p.53).

The emergence and existence of firms occur beside to the availability and refinement of individual input factors, from the bundling of resources, as well as to the development of competences, which Edith Penrose (1995, p.25) defines as services (resource functions) rendered by resources. According to Penrose, the firm is suggested as a heterogeneous bundle of resources, governed and controlled by an administrative-organizational framework.

In the understanding of the resource approach as a theory of strategic management questions concerning the creation, existence and decay of sustainable competitive advantages come to the fore. It must be exactly revised if the existing solutions fully satisfy the raised problems of strategic management in explaining the emergence, existence and decay of sustainable competitive advantage. When studied in detail, each of the three problems in question reveals explanatory gaps in the classical resource-based approach which could possibly be

supplemented by an integrated approach, combining economics from the resource-based argumentation with property rights and innovation aspects.

3 The necessity to integrate property rights, transaction costs and innovation aspects into the resource and competence management

The traditional resource approach offers no satisfying answers to the causes of the ability to appropriate rents from sustainable competitive advantages and the central question of the valuation of a resource bundle. Furthermore, traditional literature on resource and competence management offers no solutions to the problems of the resource value, the process of becoming a resource and innovation as causes for sustainable competitive advantages. In order to shed light on these interrelations, the property rights theory and transaction costs theory seem promising.

3.1 Property rights in the resource and competence management

There are a number of implicit references in the resource-based approach which refer to an influence of property rights on sustainable competitive advantages. Various definitions of the term 'resource' implicitly point to a property rights dimension. In the definition by Amit/Schoemaker resources are described as "…stocks of available factors that are owned or controlled by the firm" (Amit/Schoemaker 1993, p.35). In this definition the necessary condition of ownership and control of input factors is explicitly stated, which undoubtedly implies concentrated and exclusive property rights. In the resource-based theory of the firm resources and competences obtain an economic value in the terms of competitive advantages if the firm is enabled to exercise effective control over bundles of resource and competence.

Property rights are the rights concerning physical (tangible) goods (res corporales). Financial claims, patents or copyrights are altogether rights on intangible goods (res incorporales), which are treated as tangible goods and are included in the total value of an asset (Meyer 1983, pp.8). In a more precise consideration, what are traded on markets are not physical goods, but the respective property rights. The control of property rights over a physical good create its value. Furthermore we agree with Demsetz who wrote "[T]he value what is being traded depends upon the allowed rights of action … and upon the degree to which these rights are enforced... A proper definition of a right of action includes the degree to which [it] is allowed to enforce the right" (Demsetz 1964, pp.18). Property rights appear in different characteristics. Differentiated by (i) the right to use a tangible or intangible good and the right to exclude others from the use (ius usus), (ii) the right to modify the shape and substance of the good (ius abusus), (iii) the exclusive right to appropriate all profits or bear all losses from the use of a good (ius usus fructus) and (iv) the right to transfer partial rights to third parties or to dispose them completely (ius successionis) goods consist of various resource functions and differentiated partial property rights (Burr 2004, p.102, Zöllner 2007, p.66). Effective property rights permit the control of resources, the kind of resource utilization and influence

on the distribution of profits by the allocation of resources (Grossmann 2001, p.347). Revenue and disposal rights are residual rights. Residual rights are rights that are not specified in contracts, to appropriate rents from exercising effective control of goods. Control rights are related to the partial rights of using and modifying goods. Residual rights and control rights generate economic rents (Ricardianian rents) resulting from the unequally distribution and scarcity of effective control of goods.

Resources possess tangible aspects (the physical characteristics of the resource) and intangible or immaterial aspects embodying a property rights dimension. Rights of action and property rights, together with the physical characteristics, determine the value of resources collectively. According to Coase (1960, pp.43), in the process of value creation physical (input) goods are used, however, it is only the property rights on these goods that are traded on markets. The argumentation provided by Alchian/Demsetz (1973, p.17) is similar – "it is not the resource that is owned; it is a bundle…of rights to use of a resource that is owned." The services described by Penrose correspond not merely to individual resource functions, but also to partial property rights on resources, and thus they receive an additional dimension. Resources and competences contain a bundle of potential services, which in turn can be described by discrete vectors of property rights (Foss/Foss 2005, p.543; Foss 2009, p.xxi; Kim/Mahoney 2002, 2006). Thus, the property rights theory further specifies the concept of 'resources'. Every resource characteristic, functionality and usability is associated to a specific property rights constellation. Property rights can be aggregated to distinct resources and traded separately on markets (for example leasing contracts and rental contracts based on ius usus and their separation from the other partial rights on a resource). The more concentrated these vectors of property rights are at the firm, the more the resource potential be applied and sustained on the market.

3.2 Limited sustainability of competitive advantages as a consequence of unspecified property rights

The concept of the resource-based approach for the realization of above-average profits through occupation of sustainable competitive advantages implies the assumption that unlimited sustaining of competitive advantages and hence the unrestricted appropriation of rents is solely based on specific resource attributes (Amit/Schoemaker 1993, Barney 1991, Lippmann/Rumelt 1982, Diericks/Cool 1989). In a more real world view, both the theory of incomplete contracts and the consideration of the transaction costs dimension provide evidence for the fact that an unrestricted appropriation of rents from sustainable competitive advantages cannot be ass.

3.2.1 Transaction costs

In a world without transaction costs, the allocation of property rights would not play a critical role in analyzing the outcome market transactions (Coase 1960). In the traditional resource

and competence management transaction costs are not considered. “While the rudiments of the resource-based view of sustainable competitive advantage (Barney, 1991; Peteraf, 1993) are thus far consistent with the zero transaction cost assumption, this assumption only leaves limited room for understanding the links between resources and sustained competitive advantage. In order to explore these links in detail, the assumption that transaction costs are zero must be abandoned.” (Foss/Foss 2005, p.546).

Sustaining of competitive advantages is costless and is referred only to specific resource attributes (Barney 1991, pp.105). If in a more realistic view multiple resource functions are to be observed and a transaction costs dimension is considered, the importance of property rights in the resource and competence management becomes obvious.

Transaction costs include the costs of defining, exchanging, policing and enforcing property rights (Furubotn/Pejovich 1972, p.1143). “Transaction costs may be defined as the cost of exchanging ownership titles” (Demsetz 1968, p. 35). In particular, transaction costs appear in terms of searching costs for eligible market partners, negotiation costs in the transaction process and costs for enforcing, securing and policing of contractual specifications (Schüller 1983, pp.158). Due to this background, a number of resource functions remain inevitably unspecified.

If the sustaining of resource potentials cannot properly be assumed as fully protectable, certain individual resource functions become subject to capturing efforts by competitors. Capturing is a non-internalized external effect of resource-consuming activities to appropriate value without compensation of the resource-owner (Foss/Foss 2005, p.544). If in the case of prohibitive transaction costs the right to exclude non-owners from any use of a resource and its functions cannot be applied, the effective prevalence of control of the owner is considerably diminishing right up to complete abandonment of the resource functions that are not under effective control. Positive transaction costs suggest that property rights are in general not fully protected and capturing is theoretically feasible. Enforcement describes resource-consuming activities of the resource-owner aimed at the prevention of capturing. In this case enforcement implies more than the prevention of imitation and substitution. Moral Hazard or Hold-Up can be addressed by establishing appropriate governance structures. The use of the legal system, defensive strategies deterring market entrance, and strategies for preventing adverse selection are further options of effective enforcement (Foss/Foss 2005, p.544). In the extreme case, the value of the rents generated by the utilization of resource functions is eroding to zero when enforcement and capturing activities are applied. Furthermore, the introduction of transaction costs qualifies property right positions as a result from exercising residual rights. “Ownership is a function of the costs of enforcement and capture…” (Foss 2009, p. xx).

In consequence, “sustained competitive advantage depends on transaction costs.” (Foss/Foss 2005, pp.549). If transaction costs are considered, the notion of resources receives an additional dimension. In a more detailed view, resources are not merely “…the outcomes of processes of economizing with transaction costs” (Foss/Foss 2005, p.543), but individual resource functions are emerging by the minimization of transaction costs for enforcement strategies and the maximization of transaction costs related to the strategies of capturing. Furthermore, the notion of competences is also adapted in sense that “the ability to reduce

transaction costs can be a distinct source of competitive advantage" (Foss 2009, p. xxi). The competences of a firm to reduce transaction costs become a sufficient precondition for sustained occupation and protection of competitive advantages. Transaction costs are a limiting factor of utilization of the firm's effective property rights vector. The durability and enforcement of competitive advantages cannot be considered as being complete and independent of historical matters. Technological or institutional innovations can reduce the transaction costs of strategies of enforcement or capturing, and thus create sustainable competitive advantages for a firm or its competitors (superior efficiency induced by transaction cost advantages). In the case of one-sided increase of transaction costs induced by technological or institutional innovations, the risk of losing sustainable competitive advantages for the concerned party increases. The creative process of re-combination of input factors into resources that is governed by competences depends on knowledge and is reflected as "the prime resource and the one that defines all others" (De Gregori 1987, p.1242).

3.2.2 Bounded rational behavior

By the assumption of bounded rationality and incomplete information, the variety of potential services rendered by resources and competences cannot be fully determined in advance. In contrast to contractually specified rights of action and property rights, residual rights describe contractually unspecified uses on a priori undetermined resource functions (Grossmann/Hart 1986; Hart 1988; Hart/Moore 1990). The ownership of resource functions can be defined by the exercise of residual rights. With recourse to the definition of property rights, the meaning of control is clearly emphasized: "…the key word is 'control' rather than 'ownership'. Formal property rights do not count for much if they do not confer control rights. By the same token, sufficiently strong control rights may do the trick even in the absence of formal property rights." (Rodrik 2000, p. 6). (In-)divisibility and the ability to enforce residual rights determine the allocation of a resource function to a concentrated or common ownership (Foss/Foss 2001, pp.27).

Based on the a priori imperfect specification of resource functions the allocation of property rights on resource functions to a single contractual party seems rather impossible. Thus, it is expected that "[m]ore than one party can claim some ownership interest in the same resource" (Alchian/Demsetz 1973, p.17). In consequence, identification of an individual owner of a resource or its services seems impossible (Foss/Foss 2001, p.27). "Property rights are rarely absolute, even when set formally in the law." (Rodrik 2000, p.6). The ownership structure can be expressed similar to a vector of property rights. The boundary of ownership correlates to the potential to exclude non-owners to make any usage of the resource. The sustaining of competitive advantage is thus related not only to specific attributes of a resource, but also to a comprehensive property rights vector and as well as to a preferably complete specification of property rights.

3.2.3. Incomplete contracts

The contract theory offers a distinction of complete and incomplete contracts about the internal and external use of resource- and competence-related services. Bounded rationality, asymmetrical information, opportunistic behavior and the existence of transaction costs are the rationales why it is in a real world only possible to sign incomplete contracts (Williamson 1985). Incompleteness of contracts is the reason why allocations of property rights on resource functions cannot be fully specified for all future realities. Incomplete contracts give a more precise explanation of the existence of residual rights and residual rents, because "...the issue of ownership can be separated from the issue of contractual compensation" (Grossmann/Hart 1986, p.694). As interim finding we can declare, that property rights on resources or on their services are not concentrated at one individual party, neither is it nearly impossible to determine an individual ownership of a resource, because particular property right vectors of resource functions can be allocated to third parties. "[O]wnership is not absolute: sometimes a non-owner has some residual rights of control…" (Hart 1988, p.124). The theory of incomplete contracts suggests a restricted sustaining of competitive advantages with respect to durability and enforcement.

3.3 Innovations in the resource and competence management

At the beginning of our considerations the claim of the resource and competence management was characterized in giving answers to fundamental questions and objectives of strategic corporate management. Individually, the resource-based approach remains static and must be attributed to equilibrium-oriented approaches referring to it's theoretically core (Foss/Ishikawa 2007, p.751). In possessing limitations of a static theoretical foundation, the economic problem is spinning around the efficient use of strategically important resources with respect to minimized transaction costs and given technological and organizational characteristics. With the exception of the dynamic view of competences, innovations as a discovery process remain dismissed.

3.3.1 Resources are not, they become

The discussion of the concept of resources made by Freiling (2001, 2004) has clarified that the generation of resources has to be understood as process-oriented and time-related. An appropriate and relevant vehicle to consider the evolution of a firm in historical matters is to study its competences. When "…competence[s] may be exercised in a creative, entrepreneurial or in a rule-following way" (Foss 1993, p.135), then it can be suggested that they are comparable to the routine-determined behavior described by Nelson/Winter (1982). The dynamic character of the competitive process becomes not obvious until a competence-based perspective is adopted.

A more detailed analysis reveals that for clarifying the process of the generation of resources a more dynamic and evolutionary concept is required. With "Resources are not; they become" De Gregori (1987, p.1241) provided an interesting formulation. He elaborates that even new technological innovations (for example, mining of yet not accessible to deposits or value generation out of yet unused productive inputs) determine whether an input factor could evolve to a resource. The best examples are production residues, which can be turned into value generating resources using a new recycling process. In addition, institutional arrangements, such as the allocation of property rights, determine which input factors are to be included in the refinement process of becoming a resource and exclusion of non-owners can be arranged. In addition, market demand and supply also determine the existence of resources. If we have specified property rights, it is likely that efficient markets and prices for resources are established. The best examples here are the politically created certifications of emission rights, which are traded on markets. Without regulation and the establishment of corresponding property rights, the markets for emission rights would not exist. Summing up, it can be said that the interaction of technological and institutional factors, together with consumer preferences, determine whether a marketable input factor would become a resource. Despite the sharpened definition provided above, the notion of resources within the resource-based approach remains quite fuzzy particularly.

3.3.2 Innovations as the discovery of new resource functions

Considered from the resource perspective, the Schumpeterian competition for innovation rents is based on the establishment of new sustainable competitive advantages through the discovery of new profitable combinations of resource functions (Mahoney/Pandian 1992, p.369). Creative destruction is the outcome of control over property right vectors of resource functions, which in turn represent a kind of permitted exclusion of third parties. In cause of incomplete contracts and the existence of transaction costs, innovative activities (seen as external effects) are reactions to shifted cost-benefit relations (Demsetz 1967, p.350). The prerequisite must always be a creative momentum in any case. In this sense, innovations can be defined as a non-contractual modification of the scope of property rights of third parties on known or unknown resource functions (Meyer 1983, p.21).

Turning away from the view of given resource endowments of firms, "…unknown and unused productive services immediately become of considerable importance…" (Penrose 1995, p.77). The exploitation of unused and unknown resource functions offers the unique possibility to occupy competitive advantage (Mahoney/Pandian 1992, p.366).

In his consideration of various forms of firm competences Sanchez (2002, pp.525) indirectly assumes known and given resource functions when he asks for intrinsic resource functionality. But, the potential of the competence management in maximizing the utilization of input factors is thus limited, much in the same way as the discovery of new resource functions is excluded. Foss (2008) shows that in the sense of the Austrian School, not all potentials of resource utilization might be known a priori to the owner and third parties, but are rather likely to be discovered and exploited in later stages. The evolution of resources is

thus based on a competitive process of searching and discovering (Hayek 1976): Actors are searching for new resources (for example, new materials with new physical characteristics) and for new applications of existing resources (for example, known ingredients in the pharmaceutical research, which can be applied to new diseases and patient groups).

Technological, legal or organizational changes of the transaction costs of defining and protecting property rights yield the incentives to search and discover new potential resource functions and combinations to establish sustainable competitive advantages (Foss/Foss 2008, p.192). Just like regular products on the market, resources can also undergo the process of creative destruction through innovations: technological breakthroughs can devaluate valuable resources (for example, natural rubber or expert knowledge) through substitution (for example, methods for the synthetic production of rubber based on synthetic materials). Institutional changes (for example, new regulations for the open access to telecommunication or electricity networks) can devaluate strategically important resources (for example, local telecommunication networks or high-voltage power lines). Companies which cannot adjust their resource basis to changes of these kinds in time run the risk of losing sustainable competitive advantages which may lead to their ultimate decay. Should a firm be unable to sustain a resource-based competitive advantage, Grant (1991) recommends a strategy of short-term exploitation of this advantage (‘harvesting’) before competitors can imitate or substitute.

In the search for new combinations of resource functions, there is a latent dependency on transaction costs. In the process of exploitation of resource functions, the transaction costs expected by the innovators influence the preconditions of appropriation through the degree of definability and enforceability of property right vectors. This correlation largely determines the incentives and intensity of the search for new resource functions (Furubotn/Pejovich 1972, p.1140; Foss/Foss 2008, p.194). This statement supports the suggestion to consider the property rights theory as a theory of incentives (Schmidtchen 1999, p.6). Property rights provide incentives to increase motivation and capacity and thus enhance innovation activity. “Property rights are, of course, a motivating force” (Leibenstein 1983, p.831).

The dependence of the discovery and evaluation of new resource functions on the expected transaction costs restricts the range of probable resource functions considered for the process of discovery. For the remaining sphere, innovation possibilities are subjected to a capability test (Röpke 1987, p.234). Resource heterogeneity is thus also the result of the process of refinement of generic input factors, carried out by individuals with certain personal characteristics and various capabilities. Simultaneously, transaction costs set off a governing mechanism or a co-evolution on specific resource functions, which leads to increased firm-specific learning processes and comprehensive knowledge-creation of competences, when relatively low transaction costs can assumed. In course of the exploitation of resource functions a path depended process is caused that correlates to the decision of sustainable competitive advantages (Foss/Foss 2008, p.193). The expected advantages from learning on resource functions must exceed the relevant transaction costs of the iterative process of decision making, the problem-solving capacity of individual resource functions including the definition of their usability, productivity measurements and coordination.

Capturing attempts of competitors through innovative activities mobilize a sanctioning potential in the case of occupied competitive advantages. An incentive to reduce enforcement costs and increase capturing costs by the means of innovations is created. "[The] relative reduction in transactions costs depends, inter alia, on technical progress" (Furubotn/Pejovich 1972, p.1145). The sustaining of competitive advantages is threatened if prohibitively high transaction costs prevent the protection of property rights on resource functions, and the sum of necessary enforcement costs exceeds the benefits generated by the respective resource functions.

The object of innovative attempts is to internalize externalities, which can be found either (i) in the exclusive appropriation of self-established innovative advances (appropriation of Schumpeterian Rents) or (ii) in the significant increase of transaction costs of capturing activities (appropriation of Ricardianian rents). Property rights and transaction costs are most important antecedents for the discovery of new and the continuous enforcing of existing sustainable competitive advantages in the context of the resource and competence approach.

3.4 Determinants of the resource value

The value adds of resources and competences to occupy sustainable competitive advantages are reflected in the traditional resource-based approach. The preconditions for the realization of competitive advantages are found in specific attributes inherent to resources (Barney 1991, pp.105). Similarly to the traditional view, we argue that the measurement of resource and competence value can be determined through their contribution to the sustaining of competitive advantages regarding durability and enforcement. "…Property rights make resources valuable and as resources become more valuable, property rights become more precise." (Mahoney/Pandian 1992, p.370). When accepting the position of resources as bundles of property right vectors of their services rendered, resource value is determined the value of the property right vectors subtracting the transfer costs for the tradability (firm-internal or on external markets), the costs enforcement, as well as the 'residual loss' resulting from unavoidable value capturing activities (Foss/Foss 2008, p.195). The implementation of property rights in the resource and competence management enables "…to move beyond potential value creation and to analyze … strategic management issues concerning realized value creation." (Kim/Mahoney 2002, p. 225). The issue of resource value is largely ignored in traditional resource and competence-based approaches. This is even more surprising because the explanation goals is exactly on the rents generated by sustainable competitive advantages. A value-based consideration that focuses on the emergence and extent of resource and competence value is also missing. This explanatory lack can be reduced through the integration of the property rights theory and transaction costs considerations.

There are close correlations between both transaction costs and the process of value creation, and transaction costs and value appropriation (Foss/Foss 2005, pp.542). Transaction costs related to the exchange, protection and appropriation of property rights influence the appropriation of competitive advantages in a particular way. The characteristics of transaction costs co-determine the amount of value creation and the appropriation of profits (Foss/Foss

2005, p.542). In the case of positive transaction costs of enforcing, some potential resource functions including residual rents are not covered and remain at competitors. For the resource-owner, these remaining capturing options represent an unavoidable 'residual loss' despite all protection attempts. In a world with incomplete contracting and property rights, as well as incomplete information, an exhaustive enforcement against capturing attempts is not possible at all.

In a world with positive transaction costs, a certain amount of loss of potential resource value cannot be avoided by the costly effort of enforcement. On the one hand, the increase of enforcement effort reduces the discharging of resource value through capturing attempts. However, on the other hand, it also increases the discharge of resources through the imbursements for enforcement. In contrast, the decreasing of enforcement efforts increases the possibility of value-loss through capturing attempts.

There are two kinds of resource value-loss (Foss/Foss 2005, p.546). In comparison to a world without transaction costs, enforcing and capturing efforts directly reduce the value of a resource, because both are not costless and consume resource values. Already some sources of the traditional resource-based literature (Dierickx/Cool 1989, p.6) describe that a loss of value is indicated by value eroding through enforcement and capturing. On the other hand, in a world with transaction costs there are also courses of action, that allow for creating and appropriation of value (Foss/Foss 2005, p.546). The direct loss of value can be reduced through the exploration of cost-decreasing potentials. At a given level of protection innovative technological or organizational solutions could decrease enforcement costs or increase the level of protection at given enforcement costs. Over-protection can be avoided by arranging enforcement costs according to cost estimates for capturing attempts (Barzel 1994, pp.395).

A fundamentally different strategy could employ technological and institutional innovations to increase the cost of capturing. An example for this proceeding is the implementation of encrypting software and Digital Rights Management (DRM) in order to protect audio data at the internet against illegal copying and distribution. These systems increase the costs of capturing, because they cause additional efforts for bypassing the DRM system.

4 Integration of the property rights approach in the resource and competence management – complementarity and methodological integratability

The preceding discussion has clearly shown that if the resource and competence management claims for a holistic approach in strategic management theory a deeper integration of the property rights theory cannot be opposed. This chapter clarifies in what matter the resource-based literature and the property rights approach are methodological complementary. Furthermore, it is asked for supporting criteria with which epistemological integration can be reviewed and when indicated be ensured.

4.1 Methodological Complementarity

Methodological complementarities of the resource-based approach and the property rights theory are emphasized by various authors. Mahoney and Pandian (1992, p. 370) are assuming that "„…not only are there substantive areas of overlap between organizational economics and the resource-based view of the firm but there are methodological similarities as well." In detail complementarities can easily be found in the function of the firm. Just like in the resource-based literature the meaning of the function of the firm in the property rights theory complies with the combination and productive utilization of single resource functions. An incentive for bundling individual attributable resource functions is the appropriation of economic rents that emerge from the complementarity and co-specialization of resource functions. Beside to the similarities in value creation by co-specialization of resources and competences a further mutual condition for sustainable competitive advantage is seen in mechanisms of effective control of property rights (Kim/Mahoney 2002, p.236).

The process of resource accumulation is described as path-dependent in both approaches. While competences are responsible for managing the resource accumulation process in the resource-based approach in the property rights theory the accumulation of resources is closely linked to the existent vector of possessed property rights. In sum deployment and bundling of resource functions are dependent on firm specific conditions. Kim/Mahoney (2002, p.235) describe the intention of complementarity on the process of becoming a resource illustrative with "…the more valuable the resources, the more incentives there are to make property rights of resources more precise and the more precisely delineated the property rights of resources, the more valuable resources become."

While in the resource-based literature heterogeneity of firms is only seen as caused by given resource attributes property rights theory as an element of the organizational theory building provides „…the theoretical underpinnings for the resource-based approach by analyzing the nature of market failure" (Mahoney/Pandian 1992, p.370). In the representation of resource functions as bundles of property rights heterogeneity results from processing with transaction costs. Eventually heterogeneity is a reflection of the firm specific bundling of resource functions represented by a set or a vector of property rights. The allocation of competences in the firm plays a prominent role in first the selection of innovative activities and second in the becoming of a resource in the firm-specific upgrading process.

But it must be acknowledged that there are some methodological discrepancies as well. In the analysis of the boundaries of the firm the resource-based approach deficiently asks for the organizational alignment of vertical and horizontal diversification. The complementary goal is achieved in the property rights theory by exercising control rights to the realized exclusion of competitors. Causes for market frictions are found in the resource-based approach by imperfections in factor markets. In the property rights theory market frictions are attributed to incomplete contracts and opportunistically behavior. Distributional aspects are only discussed in the property rights theory. While the explanandum in the resource and competence management are potential gains from competitive differences the property rights theory focuses on realized returns from competitive advantage. In the latter case conclusions about the efficiency of the property rights configuration can be revealed.

4.2 Methodological Integrateability

A deeper analysis of methodological integration requires a comparison of epistemological criteria. Complementarities and differences must be discussed on (i) the level of analysis, (ii) the unit of analysis, (iii) the efficiency criteria, (iv) the object of explanation and (v) the underlying behavioral presumptions.

In the resource-based literature the level of analysis is the firm. Penrose (1995) defined the firm as a resource bundle within an administrative framework. With the firm as the level of analysis in the resource-based approach a unambiguous difference is made to the position of methodological individuality of the property rights theory. In direct tradition of Demsetz (1988, p.154) who describes the firm as a "nexus of contracts" Foss (1996, p.470) argues of firms as "efficient contractual entities". If a relational nature of property rights is suggested the firm is translated into an aggregated nexus of contracts that at least approximatively can be disintegrated in individually attributed vectors of property rights regarding to inside and outside relations of the firm.

Resources are the units of analysis in the resource and competence management. In the view of the property rights theory "…the unit of analysis is the individual property right." (Foss/Foss 2005, p. 543). At first glance both approaches seem to be completely incommensurate in this sense. The difference in the consideration of the unit of analysis is fading away if in the tradition of Coase resources and their functions are considered as bundles of property rights. In this sense resources are consistent with an „…aggregation of the unit of analysis (the individual property right)." (Foss/Foss 2005 543). Thus, in accordance with the preceding argumentation an integrative and uniform consideration of the unit of analysis in the resource-based and property rights approach is achieved.

As well as the original resource-based literature the notion of efficiency of the property rights approach is derived from a comperative-statistitic perspective. A dynamic perspective is covered by the process oriented competence view.

The explanandum in the resource and competence management are resources as the cause for sustainable competitive advantage are. Regarding the property rights theory it can be assumed that "…the EPR agrees with the RBV position that resources matter for the analysis of competitive advantage." (Foss/Foss 2005, p.543). Additionally efficiency and incentive aspects can in the property rights theory be derived from the configuration of vectors of property rights.

Actor's behavioral presumptions of the resource approach are modeled as fully rational. The competence-based view broadens this proposition to bounded rationality that is also a basic principle of the property rights theory. If in the common academic doctrine the different approaches of the organizational economics are accepted as an integrated theory building, from our point of view integratibility of the resource and competence management with the property rights theory can be assumed in principle. Beside a deeper theoretical foundation of the explanatory goal of the resource approach by integration convergences of the main methodological dimensions of both approaches can be found. Reasonability of integration is supported by the multitude of insights if the resource and competence management is viewed

in a more reality based framework where innovations take place and the presumption of incomplete contracting by utility maximizing actors can be applied.

5 Conclusions

The resource and competence management rightly claims to become an independent key paradigm of the strategic management. In essence, access to the essential questions of a theory of the firm is provided. The integration of property rights, including the transaction costs dimension can complete a resource-based theory of the firm and allows a more comprehensive explanatory scheme of key issues of the strategic management.

The emergence of resource-based sustainable competitive advantages cannot only be explained with imperfections of factor markets and the "luck" of the management in sourcing of input factors from the market. Moreover, (i) the mechanism of value enhancing or value deterioration of resources induced by technical innovations, (ii) the innovation competence of individuals searching for potential uses for already known resource functions and/or for yet undiscovered resource functions, (iii) institutional regulations that modify existing property rights structures and in that way create new markets for resources and respectively open alternative chances for establishing sustainable competitive advantages, and (iv) reduced transaction costs of utilizing resources and protection against capturing provide alternative explanations for the emergence of sustainable competitive advantages. The heterogeneity of firms therefore must be seen in a multifactorial dependence that goes far beyond the discussed relations of classic literature of the resource-based approach.

The explanation of the continuing existence of sustainable competitive advantages is not only caused by resource attributes, but particularly dependent to property rights of the resource and the numerous usage options of a resource. High transaction costs can create barriers for competitors in imitating and substituting resource-based competitive advantages. The decay of sustainable competitive advantages cannot only be explained by changes in resource attributes. Alternative explanations are based on the creative destruction of competitive advantages caused by technical innovation respectively institutional reforms by shifting of wants in resource markets.

On the way towards a key paradigm the resource and competence management has to meet the demand of deriving the explanation for the achievement of potentially attainable competitive advantages not only based on the structural criteria of resource attributes. Process-oriented explanations for the realization of sustainable competitive advantages must be included as paradigmatically equivalent. While "…the EPR refines the RBV understanding of resources, and how they create and appropriate value." (Foss/Foss 2005, p.543), this demand is being met. The property rights theory extends the significance and explanatory power of the traditional resource and competence management beyond the achievement of potential sustainable competitive advantages. With the implementation of the property rights theory the explanation of the various causes of realized competitive advantages can be discussed. At the same time, the conceptual basis of resources is obtaining further specifications. Resources cannot no longer be considered as stock values. The bundle of the

(assumed as unknown in advance) resource functions is in a functional relationship depending on the kind of usage (Penrose 1995, p.25). In result resources become more flows than stock. With emphasis of the understanding of resources represented by the corresponding vector of property rights of the bundles of resource functions, the property rights theory adds a supplemental dimension to the explanans of the resource-based approach in explaining the heterogeneity of firms and resources (Foss / Foss 2005, p.549).

Furthermore, the property rights theory contributes to the explanation of market imperfections as the basis of which above-average profits can be achieved. Following the paradigm of the classical resource approach, to create sustainable competitive advantages resources solely have to meet the VRIN conditions (Barney 1991). The discovery process of the required resource combination as well as their implementation and sustained enforcement is carried out completely and costless. In synthesis with the property rights theory, the realized processes of emergence, implementation, enforcement and decay of sustainable competitive advantages are placed on a theoretically consistent basis. With the argumentation expressed in this paper we clearly support the positioning of the resource and competence management as a approach in the tradition of the new Austrian school made by Freiling (2001, pp. 77).

Fluctuations in the heterogeneity of firms and resources are explained by innovative activities. "Because it is the source of new value creation, opportunity discovery seems central to strategic management. … the RBV, has still to find room for opportunity discovery in its theoretical edifice." (Foss/Foss 2008, p.202). In this paper only peripherally discussed, the innovative competence of a firm needs further specifications when the property rights theory is to be integrated. Besides the inherent resource attributes itself, sustaining of competitive advantages is a function of exclusive control of the bundles of property rights and innovation competences of the firm. Two causal relationships have to be considered. On the one hand, innovations can induce - due to yet unknown or unused resource functions - new sustainable competitive advantages. "Worthless things become scarce resources as soon as somebody discovers that they could be converted into marketable goods." (Pejovich 1983, p.41). Closely related a re-evaluation of property rights bundles becomes mandatory which in turn offers incentives for a re-allocation in the exploitation and acquisition of resources. If, on the other hand, an essential resource function for sustaining competitive advantages is becoming scarce, the value of the given property rights bundle is increasing. Scarcity prices and value increasing provide incentives for innovations which are either aimed at a more efficient utilization process of already known resource functions or innovations are targeted at replacing the original functionality of a specific resource with a new resource function derived from a different resource at all. In the latter case of substitution of the originally used resource function, the innovation is followed by a re-evaluation of the respective vector of property rights now including the new substitutive resource function.

The property rights theory shows great promise to be an intermediate element in the harmonization of the strategic management, particularly in the development of the resource and competence management to a key paradigm in strategic management theory. For further research work the „...intersection of the economics of property rights (EPR) and the resource-based view (RBV), [offers] an emerging theoretical lens in strategic management research." (Foss/Foss 2008, p.192). Interesting issues which have to be discussed in the future, are for

example affiliated to the conception of the ‚Limits to Growth' proposed by Penrose (1995). Starting points are offered by the innovation competences of the firm for discovering of new and enforcing of existent sustainable competitive advantages.

Literaturverzeichnis / References

Alchian, A. A., Demsetz, H. 1973. The Property Rights Paradigm. Journal of Economic History. 33(1) (Mar) 16-27.

Amit, R., Schoemaker, P. J. H. 1993. Strategic Assets and Organizational Rent. Strategic Management Journal. 14(1)(Jan) 33-46.

Bamberger, I., Wrona, T. 1996. Der Ressourcenansatz und seine Bedeutung für die Strategische Unternehmensführung. ZfbF. 48 130-153.

Barney, J. B. 1986. Strategic Factor Markets: Expectations, Luck, and Business Strategy. Management Science. 32(10)(Oct) 1231-1241.

Barney, J. 1991. Firm Resources and Sustained Competitive Advantage. Journal of Management. 17(1) 99-120.

Barzel, Y. 1994. The Capture of Wealth by Monopolists and the Protection of Property Rights. International Review of Law and Economics. 14 393-409.

Burr, W. 2004. Innovationen in Organisationen. Kohlhammer, Stuttgart.

Coase, R. H. 1960. The Problem of Social Cost. The Journal of Law and Economics, 3(Oct) 1-44.

De Gregori, T.R.1987. Resources are not, they become. Journal of Economic Issues, XXI(3)(Sept)
1241-1263.

Demsetz, H. 1964. The Exchange and Enforcement of Property Rights. Journal of Law and Economics 7(Oct) 11-26.

Demsetz, H. 1967. Toward a Theory of Property Rights. The American Economic Review. 57(2)(May) 347-359.

Demsetz, H. 1968. The Cost of Transacting. The Quarterly Journal of Economics, 82(1)(Feb) 33-53.

Demsetz, H. 1988. The Theory of the Firm Revisited. The Journal of Law, Economics and Organization. 4(1)(Spring) 141-161.

Dierickx, I., Cool, K. 1989. Asset Stock Accumulation and Sustainability of Competitive Advantage. Management Science. 35(12)(Dec) 1504-1511.

Foss, N.J. 1993. Theories of the Firm: Contractual and Competence perspectives. Journal of Evolutionary Economics. 3 127-144.

Foss, N. J. 1996. Knowledge-based Approaches to the Theory of the Firm: Some Critical Comments. Organization Science. 7(5)(Sep-Oct) 470-476.

Foss, N.J. 2009. Knowledge, Economic Organization and Property Rights. Edward Elgar.

Foss, K., Foss, N.J. 2001. Assets, Attributes and Ownership. International Journal of the Economics of Business. 8(1) 19-37.

Foss, N.J. 2009. Knowledge, Economic Organization and Property Rights. Edward Elgar, 265-283.

Foss, K., Foss, N. J. 2005. Resources and Transaction Costs: How Property Rights Economics furthers the Resource-Based View. Strategic Management Journal. 26 541-553.

Foss, K., Foss, N.J. 2008. Understanding Opportunity Discovery and Sustainable Advantage: The Role of Transaction Costs and Property Rights. Strategic Entrepreneurship Journal. 2 191-207.

Foss, N.J., Ishikawa, I. 2007. Towards a Dynamic Resource-Based View. Insights from Austrian Capital and Entrepreneurship Theory. Organization Studies. 28(5) 749-772.

Freiling, J. 2001. Resource-based View und ökonomische Theorie. DUV, Wiesbaden.

Freiling, J. 2004. A Competence-based theory of the Firm. Management Revue, 15(1) 27-52.

Furubotn, E.G., Pejovich, S. 1972. Property Rights and Economic Theory: A Survey of Recent Literature. Journal of Economic Literature. 10(4)(Dec) 1137-1162.

Grant, R.M. 1991. The Resource-Based Theory of Competitive Advantage: Implications for Strategy Formulation. California Management Review 33(3) 114-135.

Grossmann, H.I., 2001. The Creation of Effective property Rights. The American Economic Review. 91(2). Papers and Proceedings of the Hundred Thirteenth Annual Meeting of the American Economic Association (May) 347-352.

Grossmann, S.J., Hart, O.D. 1986. The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration. Journal of Political Economy. 94(4) 691-719.

Hart, O. 1988. Incomplete Contracts and the Theory of the Firm. Journal of Law, Economics, and Organization. 4(1)(Spring) 119-139.

Hart, O., Moore, J. 1990. Property Rights and the Nature of the Firm. Journal of Political Economy. 98(6) (Dec) 1119-1158.

Hayek, F. A. 1976. Individualismus und wirtschaftliche Ordnung. 2. Auflage, Salzburg.

Kim, J., Mahoney, J.T. 2002. Resource-Based and property Rights Perspectives on Value Creation: The Case of Oil field Unitization. Journal of Managerial and Decision Economics. 23 225-245.

Kim, J., Mahoney, J.T. 2006. How Property Rights Economics furthers the Re-source-Based View: Resources, transaction Costs and Entrepreneurial Activity. International Journal of Strategic Change Management. 1 40-52.

Leibenstein, H. 1983. Property Rights and X-Efficiency: Comment. The American Economic Review. 73(4)(Sept) 831-842.

Lippman, S.A., Rumelt, R.P. 1982. Uncertain Imitability: An Analyis of Interfirm Differences in Efficiency under Competition. The Bell Journal of Economics. 13(2)(Fall) 418-438.

Mahoney, J.T., Pandian, R.J. 1992. The Resource-Based View Within the Conversation of Strategic Management. Strategic Management Journal. 13(5)(Jun) 363-380.

Meyer, W. 1983. Entwicklung und Bedeutung des Property Rights-Ansatzes in der Nationalökonomie. In: Schüller, A. 1983. Property Rights und ökonomische Theorie, S. 1-45.

Nelson, R. R., Winter, S. G. 1982. An Evolutionary Theory of Economic Change.

Pejovich, S. 1983. Innovation and Alternative Property Rights. In: Schüller, A., Leipold, H., Hamel, H. (Hrsg.): Innovationsprobleme in Ost und West. Stuttgart/New York, S. 41-49.

Penrose, E.T. 1995. The Theory of the Growth of the Firm. 2nd ed. Oxford University Press, New York.

Peteraf, M. A. 1993. The Cornerstone of Competitive Advantage: A Resource-Based View. Strategic Management Journal. 14(3)(Mar) 179-191.

Rasche, C., Wolfrum, B. 1994. Ressourcenorientierte Unternehmensführung. In: DBW, 54. Jahrgang (1994), S. 501-517.

Rodrik, D. 2000. Institutions for High-Quality Growth: What They Are and How to Acquire Them. Studies in Comparative International Development. 35(3)(Fall) 3-31.

Röpke, J. 1987. Möglichkeiten und Grenzen der Steuerung wirtschaftlicher Entwicklung in komplexen Systemen. In: Borchert, M., Fehl, U., Oberender, P. (Hrsg.): Markt und Wettbewerb. Festschrift für E. Heuß zum 65. Geburtstag. S. 227-243.

Sanchez, R. 1997. Strategic Management at the Point of Inflection: Systems, Complexity and Competence Theory. Long Range Planning - International Journal of Strategic Management. 30(6) 939-946.

Sanchez, R. 2002. Understanding Competence-Based Management – Identifying and Managing Five Modes of Competence. Journal of Business Research. 57 518-532.

Sanchez, R., Heene, A. 1997. Reinventing Strategic Management: New Theory and Practise for Competence-Based Competition. European Management Journal. 15(3)(June) 303-317.

Schmidtchen, D. 1999. Funktionen und Schutz von "Property Rights". Discussion Paper 9804, Center for the Study of Law and Economics, Universität des Saarlandes.

Schneider, D. 1997. Betriebswirtschaftslehre, Band 3: Theorie der Unternehmung. Oldenbourg, München.

Schüller, A. 1983. Property Rights, Theorie der Firma und wettbewerbliches Marktsystem. In: Schüller, A. (Hrsg.): Property Rights und ökonomische Theorie. München, S. 145-184.

Wernerfelt, B. 1984. A Resource-based View of the Firm. Strategic Management Journal. 5(2)(Apr-June) 171-180.

Williamson, O. 1985. The Economic Institutions of Capitalism. New York.

Zöllner, C. 2007. Interne Corporate Governance. Wiesbaden.

Diskussionspapierreihe
Innovation, Servicedienstleistungen und Technologie

Research Papers on
Innovation, Services and Technology

Bisher erschienen / Published Papers:

1/2011	Frohwein, Torsten / Burr, Wolfgang	Emerging Issues in the further Development of the Resource-Based View of the Firm

Herausgeber / edited by

Wolfgang Burr

Betriebswirtschaftliches Institut der Universität Stuttgart
Lehrstuhl für ABWL, Forschungs-, Entwicklungs- und Innovationsmanagement

Keplerstrasse 17
70174 Stuttgart

Erscheinungsort

Stuttgart, Deutschland