

# Two Sides of a Coin: A Model of Managerial Decision-Making Integrating the Resource-Based View and Transaction Cost Economics

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## Abstract

The resource-based view (RBV) and transaction cost economics (TCE) are two of the most influential theoretical frameworks in organizational theory today, yet their normative implications for managerial decision-making have rarely been explicitly compared. We argue that the two theories are mutually compatible but inform different decisions: resource considerations come into play when economic agents decide how to create value, whereas transaction cost considerations come into play when economic agents subsequently decide on a mode of governance for the process of value creation. We present a simple model to illustrate how, under ideal assumptions, the two decisions are made separately and sequentially, and discuss how the model can be adapted if the assumptions are relaxed. Finally we consider the example cases of firm internationalization and mergers and acquisitions to illustrate the model and show that it is broadly realistic even in its ideal form.

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## 1. Introduction

The resource-based view (RBV) and transaction cost economics (TCE) are perhaps the two most influential theoretical frameworks in organizational theory today. They are often used to explain similar things, such as why firms exist or what makes firms successful, yet they have strikingly different characters. TCE is preoccupied with the importance of preventing negative outcomes resulting from opportunism and bounded rationality; RBV is preoccupied with the exploitation of positive opportunities arising from configurations of resources. This sharp contrast has fuelled an ongoing debate about the relationship between the two frameworks.

A few researchers have claimed that the two theories are downright incompatible. More commonly, though, scholars see the theories as highlighting different aspects of the same phenomena. The debate then turns on how to delineate the respective domains of each theory and on clarifying their relative importance. Some proponents of RBV argue that the explanatory power of TCE is overrated relative to that of RBV, and vice versa.<sup>1</sup>

Both RBV and TCE have obvious implications for managers, yet we feel the managerial perspective has been undeservedly neglected in prior studies. No studies comparing the two theories have focused attention explicitly on the process of managerial decision-making. The present paper is a tentative first step towards filling this gap in the literature. We offer an interpretation of the concepts of RBV, TCE, value creation, and governance mode that allows all of these constructs to be integrated into a simple, streamlined framework for describing the process of managerial decision-making. We hope this contribution can serve to stimulate more research in the area and help bridge the gap between the fields of organizational economics and strategic management.

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<sup>1</sup> See the literature review in Section 4.

The paper is constructed as follows. Section 2 and 3 provides overviews of the major ideas and historical development of TCE and RBV, respectively. In Section 4, the literature relevant to the problem under study in this paper—how the two theoretical frameworks relate to each other with respect to managerial decision-making—is surveyed and discussed. Section 5 outlines our model of managerial decision-making, and Section 6 gives examples of how the model works in different contexts. Section 7 concludes.

## **2. Transaction cost economics**

The theory of transaction costs examines the efficiency of alternative institutions with respect to the minimization of transaction costs when conducting a transaction. It evolved as a corrective to the neoclassical perspective of the market, which was based on assumptions that turned out to be too strict. Furthermore, the neoclassical theory treated firms as black boxes and modelled them as production functions.<sup>2</sup> In a broader sense, transaction cost economics (TCE) tries to counteract market failure and to achieve a solution close to a neoclassical equilibrium, but modelling the firm using organizational terms. Despite the fact that there are many scholars in the field, the focus on two major contributors is sufficient to outline the general idea behind the theory. Ronald Coase (1937) was the first who emphasized that using the price system in the market as well as the coordination mechanism of an organization incurs costs. The costs of using the price mechanism include costs for discovering prices and negotiation and conclusion costs of contracts. His understanding of a firm as an alternative coordinating mechanism to the market enabled him to answer the entrepreneurial decision of making or buying and to determine the boundaries of a firm. His conclusion was that a firm would expand until the marginal costs of internal organization are equal to the marginal costs of using the price mechanism of the market.

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<sup>2</sup> Demsetz, 1997.

Oliver Williamson refined the argumentation of Coase by defining the costs of using the price mechanism and shedding light on the question of why some transactions are more costly than others. To explain his reasoning he introduces the concept of incomplete contracts, which is based on the two behavioral assumptions of bounded rationality and opportunism. According to Williamson economic agents intend to act rationally, but are only limitedly able to do so. Owing to bounded rationality, especially to the fact that economic agents are not able to foresee the future, it is impossible to specify a contract completely and secure oneself against all possible contingencies. As a consequence, in the case of a highly specific investment, the lack of contractual specification gives rise to opportunistic behavior of the potential contractual partner in the ex post phase of the contract. Williamson offers three possible solutions to this problem of contractual hazard: a once and for all contract, several short term contracts, or vertical integration. Every economic agent who wants to interact with another agent faces this decision problem. Each of the opportunities implies advantages and disadvantages which need to be considered. A once and for all contract has to be specified in the sense, already outlined above, that it has to secure one against all kinds of contingencies, which is impossible. Therefore, after agreeing on a contract, both parties will be “locked into a bilateral exchange”,<sup>3</sup> facing the danger of opportunistic behavior by the other party caused by incongruent interests. Several short term contracts seem to be preferable because they facilitate adaptation and renegotiation during the period of contracting, but the incentive to invest in a specified resource is in this case very low. Furthermore, the potential for contractual hazard during renegotiation also exists. Concluding from those considerations, vertical integration seems to be the best solution to avoid opportunism in the ex post period of contracting. The problem is that this rationale does not hold in general.

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<sup>3</sup> Williamson , 1971.

Therefore Williamson defined three dimensions which should be taken into account when facing the decision of governance mode: frequency of the transaction, uncertainty of the transaction due to imperfect knowledge, and asset specificity determined by “the degree to which transactions are supported by durable, transaction-specific investments”.<sup>4</sup> As a rule of thumb, the higher the frequency, the uncertainty, and the asset specificity, the higher the transaction costs and the more likely is vertical integration. Even though all three dimensions have to be taken into account, asset specificity has the most impact on the decision-making process. To cover all degrees of asset specificity and the corresponding costs of the governance structure, Williamson introduced a hybrid form comprising all degrees of asset specificity between the extrem realizations of very high and very low.<sup>5</sup> A hybrid governance mode could be a joint venture or a merger or acquisition. In any case, the chosen government structure will mitigate contractual hazards and minimize transaction costs.

Besides those considerations, principal-agent problems implying choosing the right incentive structure, property-rights problems or the question of ownership, measurement problems and monitoring problems also need to be taken into account when deciding the type of governance mode. All of those phenomena belong to TCE as well, but we will forgo further exploration because they play a complementary but minor role in our model.<sup>6</sup>

Despite the fact that TCE gives more insight into a firm than the neoclassical perspective, the approach has been criticized by several scholars. Moran and Goshal (1996), for example, criticize the underlying assumptions of TCE as being too strong and claim that the use of stylized facts limits

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<sup>4</sup> Williamson, 1981.

<sup>5</sup> Williamson, 1971,1981, 1991a, 1993.

<sup>6</sup> Grossman and Hart,1983; Alchian and Demsetz, 1972; Holmstrom1982; Hart and Moore,1990.

its applicability. They furthermore criticized the concept of opportunism as being a too negative view of human motivation. Moran and Goshal state that the method of avoiding opportunism by monitoring and exercising control causes a decrease in employee performance and therefore has the opposite of the intended effect. Hill (1990) uses game-theoretic reasoning to argue that the role of opportunism is exaggerated in TCE. Another criticism refers to the characterization of the firm in TCE. Modelling it by using a construct of a representative firm, the underlying assumption is that firms are homogeneous. Therefore TCE offers an explanation for the existence of firms, but not for their heterogeneity. Hence TCE cannot explain why firms in the same industry that differ only with respect to their resource endowments can outperform each other.

### **3. The resource-based view**

The resource-based view (RBV) originates from criticism of the neoclassical approach as well. In neoclassical theory firms do not need to exist. Due to the assumption of an atomistic market structure and perfect information of all economic agents, every transaction can be realized via the market. Furthermore, neoclassical theory models the market as a static equilibrium.

By contrast, according to Mahoney and Pandian (1992) and Williamson (1999), RBV theory follows the tradition of Schumpeter, viewing the market as an institution that is dynamic and in which competition takes place, giving rise to innovation. Its origins go back to Edith Penrose (1959). Modelling the processes of the market from an economic market perspective is not the major concern of the RBV, though. It rather focuses on the inside of the firm, trying to outline the process taking place in the *black box*. The motivation of the RBV is the attempt to explain differences in the performances of firms by outlining the process of value creation. In doing so it gives guidance to the question of how firms can improve their performance and why and how some

firms are able to gain competitive advantage over other firms.<sup>7</sup> A competitive advantage exists if a company “is able to create more economic value than the marginal (breakeven) competitor in its product market”, economic value being defined as “the difference between the perceived benefits gained by the purchasers of the good and the economic cost to the enterprise.”<sup>8</sup> As a starting point, the RBV models a company as a bundle of resources and capabilities. The crucial assumptions underlying the theory are that firms are heterogeneous with respect to their resources and capabilities and that resources are immobile.<sup>9</sup> From this perspective it is in line with the view of strategic management. The divergence from strategic management reasoning exists therein that RBV infers from the resources to the products and the markets to be served and not the other way around, which is the main approach of strategic management. But as Wernerfelt (1984) points out, “resources and products are two sides of the same coin”.

To give further insights into the theory, the key terminology should be clearly defined. The definition of resources is not unanimously agreed upon in the RBV literature. Some scholars like Markides and Williamson (1996) distinguish between resources and capabilities, whereas others, e.g. Barney (1991) and Peteraf (1993), use the term *resources* synonymously for both. According to Wernerfelt (1984), a resource can be “anything which could be thought of as a strength or weakness of a given firm” like, for example, “ brand names, in-house knowledge of technology, employment of skilled personnel, trade contacts, machinery, efficient procedures, capital etc.” Another, more formal definition by Wernerfelt inspired by Caves (1980) emphasizes one of the crucial assumptions of RBV, which is also another important feature of resources, namely that they are immobile at least in the short term: resources are “those (tangible and intangible) assets which are tied semi-permanently to the firm”.

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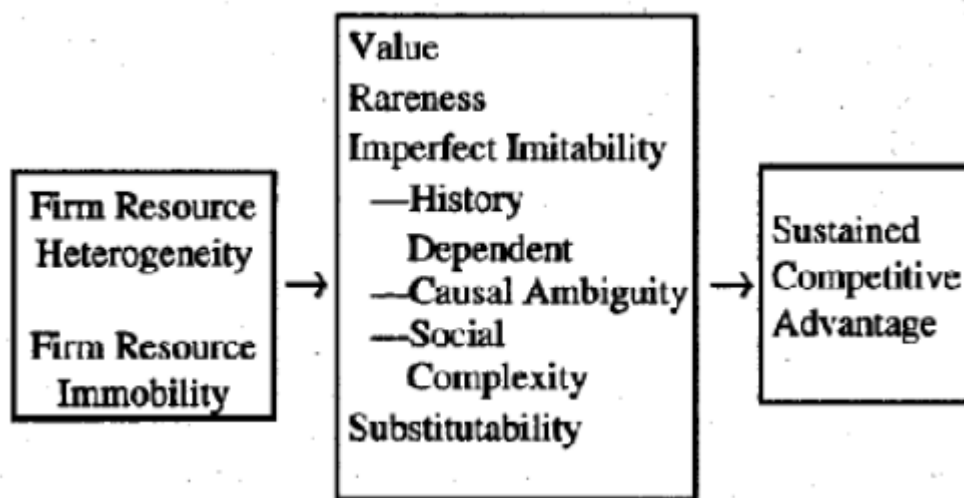
<sup>7</sup> Peteraf and Barney, 2003.

<sup>8</sup> Peteraf and Barney, 2003.

<sup>9</sup> Barney, 1986.

Since a firm cannot influence the perception of a customer regarding the value of a good reflected in her willingness to pay, it has to focus on those aspects it can control to maximize the difference: its resources and capabilities. Those will enable the company to either produce with lower costs or to create more value than its competitors.

The RBV is therefore an efficiency-oriented theory. The process of value creation, in terms of rent generating, is solely determined by the resources and their possible combinations within the firm. In order to achieve those rents, or a competitive advantage, a resource must satisfy four criteria: it must be valuable, inimitable, rare, and non-substitutable. These dimensions have been identified by Barney (1991) and are referred to as the VRIS framework.



**Figure 1:** The relationship between resource heterogeneity and immobility, value, rareness, imperfect imitability and substitutability and sustained competitive advantage.<sup>10</sup>

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<sup>10</sup> Barney, 1991.

The main point of the RBV is therefore the identification of those resources within a firm that can generate a competitive advantage, or how such resources can be created by combinations of other existing resources. But some intangible resources which could be a source of competitive advantage, like social capital, cannot be created ad hoc. Therefore scholars like Dierickx and Cool (1989) point out that it is important to choose the right policies over a certain period of time in order to build those stocks.

After a firm has gained a competitive advantage, the RBV also deals with the topic of how a position like this can be sustained. Inimitability and non-substitutability are crucial in this respect. Scholars like Dierickx and Cool (1989) and Peteraf (1993) enumerate several features, like causal ambiguity, time compression diseconomies, ex ante- and ex post limits to competition, which support the sustainability. The concept of causal ambiguity has also been pointed out by Lippman and Rumelt (1982) as being the most influential factor for gaining a sustainable competitive advantage besides the alternative of using market power. They examine causal ambiguity by applying a concept referred to as uncertain imitability.

Over time the approach of RBV has been developed further. Out of this theory the core competences approach by Prahalad and Hamel (1990) evolved. Further refinement gave rise to the dynamic capabilities approach by Teece et al. (1997), which especially focuses on the firm's ability to combine its competences in order to adapt to constantly changing environments. The knowledge-based theory<sup>11</sup> is another approach which has its origins in the RBV or, to put it another way, is the essence of it, in the sense that every examination of resources and capabilities will eventually focus solely on the contemplation of the necessary knowledge needed to apply both in an optimal way.<sup>12</sup>

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<sup>11</sup> Kogut and Zander, 1992.

<sup>12</sup> Conner and Prahalad, 1996.

Since the basic reasoning remains the same throughout all those developments, they will not be discussed further.

The RB view has also been criticized. The criticism by Priem and Butler (2001) is the most important one, saying that the RBV is tautological in the sense that the outlined relationship between resources and competitive advantage is true by logic, since the concepts used for defining both terms are the same. The debate about it is still ongoing. Another important criticism is the one by Foss and Knudsen (2003). They state that there is no consensus about the terminology even among some of the main contributors like Peteraf (1993) and Barney (1991). The lack of precision also leads to problems regarding operationalization. The last point might also explain why the RBV receives only partial empirical support (Newbert, 2008). Crook et al. (2008) point out that the RBV neglects intervening steps between strategic resources and their impact on performance. Hence, if the process through which strategic resources improve performance is unclear, the value of the theory for practitioners is limited.

Even though there is still need for refinement and further clarification of concepts and reasoning within the RBV and its several branches, it is a useful approach for practitioners. It can serve as a guideline in the value-creating process of firms.

#### **4. Literature survey**

The literature about RBV and TCE comprises a lot of different approaches to the combination of both theories. One branch focuses on the comparison of RBV and TCE with respect to the theory of

the firm, trying to evaluate which one is more appropriate to explain the existence and boundaries of a company.<sup>13</sup>

Other scholars try to combine both theories. These approaches are highly diverse. Foss and Foss (2004) combine both theories by saying that TCE or, more specifically, the theory of property rights supports the RBV because a clear definition of property rights solves the question of ownership and therefore makes the creation of value by using legally owned resources easier. A poor definition of property rights exacerbates the access to the resources needed in order to create value and causes more transaction costs which reduce the value of a resource even more.

Approaches that are similar in the sense that one theory serves either as basis for the other or as means for broadening the scope of it are also taken by Mahoney and Pandian (1992). They suggest that the RBV could serve as a framework for a dialogue within organizational economics, including TCE, since it is complementary to it. They are in line with Foss and Foss (2004) in saying that property rights make resources more valuable which in turn increases the precision of property rights. Another argument for their statement is that transaction cost considerations influence the combination of resources and that resources tend to be sticky due to transaction costs. According to Mahoney and Pandian (1992) both theories share a dissatisfaction with the neoclassical view of the firm. Williamson (1999), one of the main contributors to TCE, also notes that existing strengths and weaknesses in a firm (i.e. its resources and capabilities) must be taken into account when deciding on a governance mode.

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<sup>13</sup> Kogut and Zander, 1995a,b; Foss, 1996a,b; McFetridge, 1995; Love, 1995.

In contrast to that, Conner (1991) says that there are no complementarities at all. Therefore the RBV and TCE are completely different approaches which cannot be combined in any way, but rather be used as substitutes. Conner also argues that the notion of opportunism is not necessary in order to explain the existence of firms. This argument is supported by another study of her and Prahalad (1996) in which they develop a resource- or knowledge-based theory of the firm as an alternative to the transaction cost economic theory of the firm, explicitly mentioning that they ignore the concept of opportunistic behavior.

Another approach which is often used to contrast or combine both theories is to examine a certain phenomenon or business activity through the lens of both theories. Examples of such studies are those of Wolter and Veloso (2008), Gooderham and Ulset (2006), Lin (2006), Mayer and Salomon (2006), Hoetker (2005), Leiblein and Miller (2003), Silverman (1999), Combs and Ketchen (1999), and Zajac and Olsen (1993). Most of the studies show that transaction costs and capability considerations determine vertical integration and governance mode. Mayer and Salomon (2006) furthermore found that firms develop governance capabilities that support the mitigation of contractual hazards. They limit this finding, though, saying that first of all this statement only holds for well-developed and vigorous capabilities and that they can only mitigate certain types of hazard like the danger of being held up, but not ones like appropriability. Gooderham and Ulset (2006) analyze the transfer of knowledge within multinational firms with respect to the concept of trust derived from both theories illustrated on the example of Telenor. They use the RBV only implicitly by referring to social capital as a resource or capability which facilitates knowledge transfer. They conclude that a well-structured hierarchy is more important for successful transfer than the capability contained in social capital, but that the latter, being itself enhanced by a good hierarchy, might increase the probability of successful knowledge transfer within a MNC even more.

Lin (2006) examines the influence of both approaches regarding different types of strategic resources exchange on interorganizational collaboration and social embeddedness with respect to value creation, trying to show why collaboration is more successful than working as a single entity. In this study the view is supported that the RBV and TCE are complementary, mutually non-exclusive theories for explaining and structuring the process of value creation.

Combs and Ketchen (1999) conduct an empirical study trying to outline the influence of both theories on the decision-making process of firms to make predictions about the engagement of companies in interfirm cooperation. They come to the conclusion that resource-based considerations come first when deciding about cooperating with another firm, although that sometimes decreases the performance of some companies. Silverman (1999) integrates principles of TCE into the RBV. Existing resources in a firm influence decisions about diversification, but this decision is also influenced by the problem of contractual hazards. Silverman (1999) concludes that the RBV and TCE exhibit strong complementarities that should not be ignored. But he also points out that conflicts between the two theories exist, especially with regard to the possibility of using contracts to exploit specific rent-generating assets.

Zajac and Olsen (1993) use a transactional value perspective to examine interorganizational strategies. Adopting this perspective enables them to focus on joint value maximization and the process of creating and claiming value instead of overemphasizing cost minimization and the structural features of an interorganizational change.

Even though the last three studies imply a sequential approach of the RBV and TCE, none, except for the one by Combs and Ketchen (1999), mentions this explicitly. Combs and Ketchen (1999) do in fact outline the sequential nature of both in the decision-making process of firms, but only in regard to cooperation between firms. There is only one study—by Ghosh and John (1999)—that proposes a governance value analysis framework outlining the sequential nature of RBV and TCE considerations. Their framework is based on the assumption that it is not sufficient simply to create value. A firm must also be able to claim its share of the value it creates. Thus, governance mechanisms must be devised so as to solve the value-claiming problem. This is in line with our reasoning in this paper. But a shortcoming of their model, in our view, is that it only focuses on customers' needs as an external influence on value-creating activities.

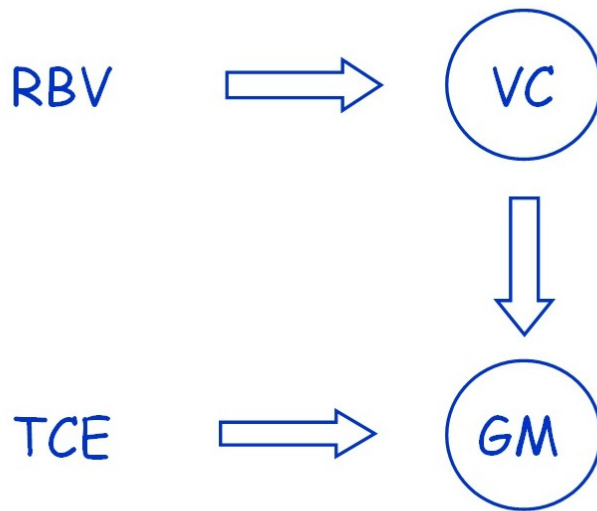
The paper of Zajac and Olsen (1993) emphasizes the process of creating and claiming value. One of the major insights of their paper is that joint interorganizational value creation might require a governance structure that is not optimal from a transaction cost perspective. The authors point out that a pure transaction cost approach might lead to suboptimal decisions if the aspect of joint value creation is neglected. We agree completely with their argument. This is why we combine both aspects—value creation and transaction cost reasoning—in our approach. Customers' needs are not the only factor with an impact on value-creating activities. In this paper we will try to elaborate on the subsequent role of RBV and TCE in decision-making from a theoretical perspective, presenting a model that supports the view of Ghosh and John (1999), Combs and Ketchen (1999), and Zajac and Olsen (1993), but allows for further generalization than their approaches because it can be adapted to fit different scenarios. While giving a realistic perspective on managerial decision-making, our model still emphasizes the importance and precedence of value creation over transaction cost considerations. Furthermore, almost all of the studies outlined above focus on a

national-level perspective. With globalization, an international perspective is becoming indispensable. It is crucial to be able to model an international business perspective of managerial decision-making. The abstract nature of our model allows us to include factors that arise from the international context of such a decision-making process, as will be shown in section 6.

## **5. A model of managerial decision-making**

How are RBV and TCE related to each other with respect to their implications for managerial decision-making? A priori, there are three possibilities. First, the two may be complementary inputs to the same decisions (that is, managers should take both into account). Second, they may be rivalrous inputs to the same decisions (that is, they give contradictory answers so that managers must choose which theory they believe in). Third, the two may be complementary inputs to *different* decisions. Our analysis of the relationship between RBV and TCE in corporate decision-making supports the third view.

We propose a simple model to illustrate the relationship between RBV and TCE in managerial decision-making. See Figure 2.



**Figure 2:** A sequential model of the decision-making process.

In the model, VC is short for Value Creation and GM for Governance Mode. Circles represent decisions to be made; they can be thought of as option spaces. The model makes three points: first, that resource considerations are among the factors that companies or other economic actors take into account when designing value-creating processes (the top half of the model); second, that transaction cost considerations are among the factors that companies take into account when deciding on a mode of governance for their value-creating processes (the lower half of the model); and third, that the design of value-creating processes takes precedence over the choice of governance mode in the sense that the governance structure is continuously adapted to any changes in the structure of value creation (the arrow linking the upper and lower halves of the model). Thus the following three hypotheses can be distilled from the model:

*H1: Managers apply resource-based reasoning and not transaction cost-based reasoning when deciding which value-creating activities to undertake.*

*H2: Managers apply transaction cost-based reasoning and not resource-based reasoning when deciding on a mode of governance for their activities.*

*H3: Companies adapt their mode of governance to fit their choice of value-creating activity, not vice versa.*

The model assumes that companies are not locked into a particular governance mode. According to the perspective of this model, companies should not say, “This is the governance mode we have; which opportunities for value creation does it give us?” Rather, they should consider their opportunities for value creation, based on available resources and other factors, and make their choice of activities *independently* of the current mode of governance. The mode of governance is subsequently adapted to suit the selected activities.<sup>14</sup>

The upshot of the model is that RBV and TCE, respectively, are viewed as essential inputs to two different decision problems separated in time, where the solution to the latter decision problem depends on the solution to the former. The major assumptions of the model are discussed in more detail below.

## **RBV and value creation**

The RBV framework was developed to provide an explanation of performance differences among competing firms, attributable to the heterogeneity in their resources. It was not the primary purpose of the framework to provide a tool for managerial decision-making. Nevertheless, the theory has obvious implications for managers. Since the RBV framework identifies the foundations of

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<sup>14</sup> Particular governance modes may carry advantages (e.g. tax benefits or market power) that are unconnected with the choice of value-creating activities. Companies should of course take such advantages into consideration when choosing or adapting the governance mode, but they do not concern us here.

economic value creation and competitive advantage, managers will find its insights helpful as long as they are concerned with enhancing value creation and competitive advantage. Indeed Peteraf and Barney (2003), in a clarification of definitions of key concepts contained in the RBV framework, hint that the constructs of the theory have been devised with practitioners in mind. Specifically, the constructs have been formulated so as to make RBV “of interest to a variety of types of organizations, including non-profits.”<sup>15</sup>

As formulated by Peteraf and Barney, RBV is essentially a firm-level theory of economic value creation. It is not a theory of value distribution, nor is it a theory of value appropriation through anti-competitive or other strategic behaviour. We stick to this definition and conclude that to the extent that RBV is helpful to managers, its helpfulness lies in its ability to improve decisions about how to create value, for example by guiding managers to exploit rare, inimitable, and non-substitutable resources. We do not aim to develop a practical guideline for managerial decision-making in this paper. Suffice it to say that while value creation may not be the only goal of a firm, it is an essential one without which a productive enterprise would have no socially defensible reason to exist, and that resource considerations are important inputs to resolving the problem of how to create value.

On the other hand, the resource configuration of the firm is obviously not the only factor that may be relevant to the firm’s choice of which value-creating activities to carry out. Government regulation, obligations to employees, customers, the local community, or other stakeholders as well as the personal interests and visions of owner-entrepreneurs are examples of factors that may cause a firm to rationally deviate from the strategy that a purely resource-based analysis would suggest.

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<sup>15</sup> Peteraf and Barney, 2003.

## **TCE and the choice of governance mode**

While resource considerations are relevant to managers when they decide how to create value, we argue that the relevance of transaction cost considerations arises when it comes to the choice of a governance mode for the value-creating activities. There may be other factors entering into the choice of governance mode besides transaction cost considerations, but TCE plays a crucial role.

By “governance mode” we understand in a broad sense the means, legal or otherwise, by which the initiators of an economic activity ensure that the agents involved in the activity carry it out the way the initiators intended. For example, shared ownership rights to the cash flows generated by an activity may be a way of ensuring that the agents carrying it out have an incentive to do a good job. Likewise, a contract stipulating the exact obligations of a particular agent may induce him or her, through the threat of legal penalties, to act in accordance with the plan of the initiators.

Consider the key concepts of Williamsonian transaction cost theory: asset specificity, frequency of transactions, and uncertainty of transactions. None of these concepts are helpful when managers face the decision of what kind of value to provide to consumers. On the contrary, they all presuppose that a value-creating activity *has already been defined* and are concerned with the danger that the activity may break down because of opportunistic behaviour by the involved human agents.

For example, exploiting an asset to produce goods is a value-creating activity. According to transaction cost theory, if the asset has high specificity, the owner of the asset (i.e. the initiator of the value-creating activity) may not have sufficient incentive to exploit the asset because of a risk of

being held up by suppliers or customers. Transaction cost economics points to a way out of this problem through vertical integration. Thus, TCE helps managers decide on a governance mode to ensure the successful implementation of the predefined value-creating activity.

Mayer and Salomon (2006) observe that firms facing a similar level of contractual hazards may choose different governance modes depending on their “governance capabilities”, i.e. their ability to select capable suppliers, monitor their progress, and share knowledge with them. Strong governance capabilities make it easier to control transaction costs, which again leads to a preference for market-based modes of governance. Note that this is not inconsistent with our model. It does not imply that the governance capabilities constitute a resource that should be exploited for its own sake, and it does not contradict the notion that managers can decide how to create value first and then decide on a governance mode that suits the planned activities.

Imagine asking someone what they do for a living and receiving the cryptic answer, “I govern.” Which follow-up question would you ask? You might ask *what* they govern or *who* they govern, but you surely wouldn’t ask straight away *how* they govern. By definition, the choice of a governance mode must be preceded by the existence of something that needs to be governed. You can’t just “govern”; you must govern *something*. Thus we argue that the decision problems of how to create value and how to govern have a complementary and sequential nature, and that RBV and TCE, respectively, provide valuable contributions to the solution of each problem. How this works in practice will be elaborated with examples in section 6.

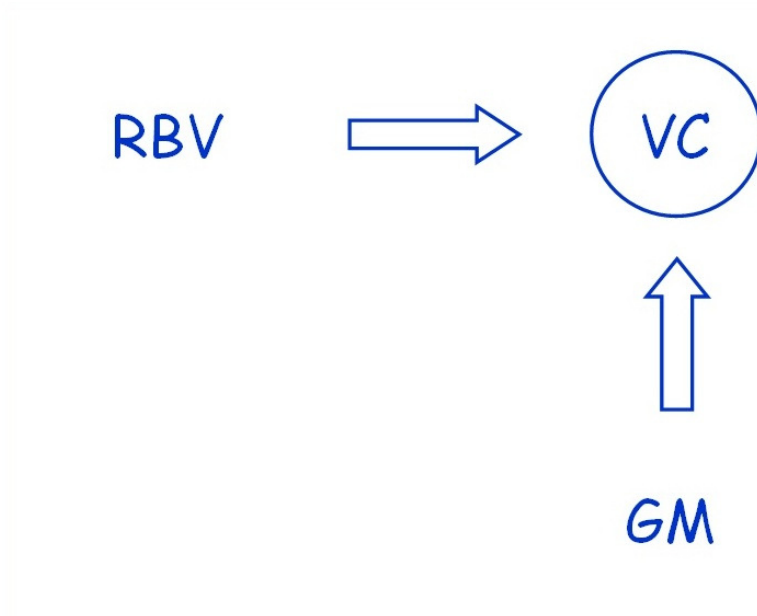
As mentioned in section 4, Ghosh and John (1999) is another paper that presents a sequential decision-making model informed by RBV and TCE, among other things. In that model, however,

the links between theoretical domains and practical decisions are not emphasized. One of the unique features of our model is that it makes a crystal-clear delineation of which decisions RBV and TCE are relevant for, respectively.

### **Limitations**

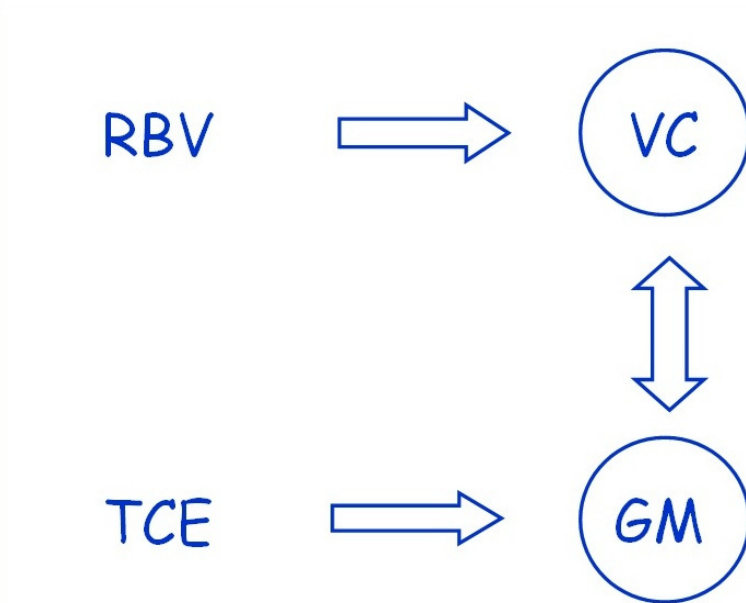
At this point, a few words on the limitations of the model are in order. The model is a somewhat idealized and simplified model of reality. In particular, it makes three simplifying assumptions about managerial decision-making: 1) that governance mode can be continually changed at low cost to adapt to changes in value-creating activities; 2) that a feasible governance mode can always be found for whatever value-creating activity they decide to do (put more simply, firms can always find a way to profit from doing what they are good at); and 3) that governance mode is not in itself a source of value. All three assumptions often are only approximately true.

In some cases it may be quite costly for companies to adapt their governance mode—e.g. by expanding or reducing the boundaries of the firm or by changing its ownership structure—as demanded by a pure focus on optimal resource utilization. If changing the governance mode is costly, the projected cost must willy-nilly be taken into consideration in the initial selection of value-creating activities. In extreme cases the firm may be completely locked into its current governance mode. Figure 3 shows how the model must be adapted under such a scenario. Note that GM is no longer encircled since there is no decision to be made regarding it. It is simply a set of facts to be considered in the value creation decision, just like RBV.



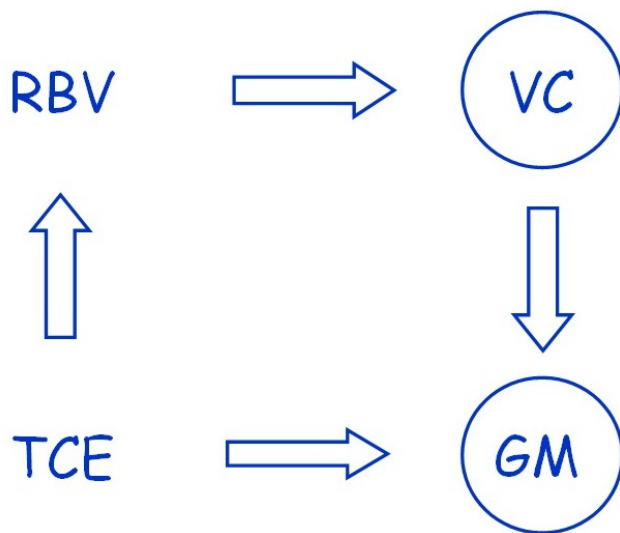
**Figure 3:** How the model changes if the assumption that governance mode can be changed at low cost is NOT satisfied.

If the *second* assumption mentioned above does not hold—that is, if the possibility exists that the firm cannot find a feasible governance mode at all—a backward loop must be built into the model, to reflect the possibility that decision-makers must go back and reconsider their choice of value-creating activity because no feasible governance mode could be found. Figure 4 shows the model when this assumption is relaxed while assumptions 1) and 3) are upheld.



**Figure 4:** The model when it is NOT assumed that a feasible governance mode can always be found for any relevant value-creating activity.

Finally, it is conceivable that some companies have outstanding capabilities for implementing certain modes of governance successfully. For such companies, the governance capabilities themselves represent a rare, valuable, possibly inimitable and non-substitutable resource and should be exploited as such according to an RBV line of reasoning. For instance, a company with rich experience in implementing complex cross-border joint ventures may find it natural to view this experience as a future source of value creation and competitive advantage, as opposed to seeing cross-border joint ventures simply as a convenient way of reducing transaction costs. This is inconsistent with our model in its ideal guise, which is based on a fundamental distinction between RBV and value creation on the one hand and TCE and governance mode on the other. Figure 5 shows the model when the possibility of TCE as a resource in itself is acknowledged while assumptions 1) and 3) are upheld.



**Figure 5:** The model when it is NOT assumed that TCE cannot be a resource in itself.

The pure-form model can easily be adapted to accommodate different *combinations* of the three assumptions as well.

To sum up, the pure-form model we proposed at the beginning of this section is not conceived as a perfect representation of reality. On the contrary, its aim is to make reality more tractable and easier to analyze by way of making simplifying assumptions and highlighting certain basic relationships. Arguably, models of this sort have constituted some of the greatest contributions in the history of economics (though we of course hasten to disclaim any such status for the present paper), and we believe the simplifying assumption that value creation decisions can be made independently of governance mode decisions is broadly realistic and pays dividends by directing attention to what is most important to corporate success—value creation.

Even if decision-makers in particular real-world situations are unwilling to accept the idealizing assumptions of our pure-form model, it does not follow that the model is completely worthless; rather, this section has shown how the pure-form model can be adapted to changes in assumptions so as to retain its practical usefulness as a generic guide to decision-making.

## **6. Examples**

In this section we discuss two general choice-of-governance-mode problems in view of the model outlined in the previous section, with the aim of illustrating the basic tenets of the pure-form model: that economic agents' choice of which value-creating activities to carry out can generally be seen as determined essentially by the resources available to the firm and not determined or constrained by mode of governance, while the choice of a governance mode can be viewed essentially as a problem of minimizing the transaction costs of carrying out the value-creating activities. The first problem we discuss is firm internationalization; the second is mergers and acquisitions.

### **Internationalization**

When firms go international, for example by expanding into new markets or by off-shoring production, they have to deal with a new set of local suppliers, customers, and business partners and need to figure out a governance mode for these dealings. For example, a Norwegian company that wishes to move production to China in order to save on labour costs needs to decide whether to subcontract production to a local Chinese manufacturer, enter into a joint-venture agreement with one, or set up a wholly-owned subsidiary of its own. The key theme here is the fact that distances of geography and culture and a limited knowledge of local conditions make the internationalizing company dependent on local expertise while at the same time exposing it to a variety of risks of expropriation.

On the face of it, the application of our model to such problems looks fairly straightforward. Companies identify an opportunity to boost value creation by relocating production or expanding markets, and the problem of which governance mode to adopt for the international activities is then a secondary problem that can in principle be considered separately, as proposed by our model. However, there are a few complicating issues that should be addressed.

Transaction cost reasoning suggests that if a firm is unable to effectively monitor its business partners, it may be sensible to internalize the activities carried out by the partners so as to eliminate any conflict of interest between them and the company. For example, if a company that has outsourced production to a local manufacturer in China is concerned about having its technology unlawfully appropriated by the subcontractor, vertical integration is a way out of the quandary. This is of course consistent with our model, which predicts that transaction cost considerations should weigh heavily on the choice of governance mode. On the contrary, however, it has also been suggested that a strong knowledge of local conditions—which implies a strong ability to monitor and deal with local firms—may lead firms to internalize because they do not need the assistance and expertise of a local joint-venture partner; they have the capabilities necessary to go it alone, and they want to use those capabilities instead of relying on outsiders.<sup>16</sup> If firms choose to internalize *even though* they could easily have adopted a market-based solution, in other words, if they voluntarily choose to forgo the advantages of using the market in favour of the less flexible internalization approach, then surely this must mean that the governance mode they choose helps them create value in a way that goes beyond merely saving on transaction costs? This would seem to contradict our model which suggests that the governance mode is not in itself a source of value.

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<sup>16</sup> Wei et al., 2005, confirm this with an empirical study of foreign companies in China.

The key here is to keep in mind that the “choice of governance mode” referred to in the model should be understood in a quite narrow sense. It is not concerned with *who* should carry out value-creating activities—that decision has already been made in the first step of the model. The choice of governance mode is solely a matter of how best to govern the people or firms that have already been assigned with the task. This usage is somewhat different from the everyday distinction between governance modes such as wholly-owned subsidiary and subcontracting. If firms decide to “go it alone” because they feel that can do the job better than outsiders, this is not a governance mode decision in our sense; it is a value creation decision about who ought to do the job. The subsequent governance mode decision concerns how to ensure that the assigned people have proper incentives to perform as envisioned.

Admittedly, when firm internationalization involves investment in a country with very poor protection of foreign investors’ ownership rights, there is a real possibility that Figure 4 may apply; that is, the firm may decide that although its resource configuration suggests that investment in said country is worthwhile, there may not be a governance mode available to allow the firm to capture the rents it expects to generate there. In such a case the firm will have to reconsider its choice of what to do with its resources (cf. the backward loop in Figure 4). Still, although our model in its pure form is not perfect, we feel it does a fairly neat job of structuring the concepts of RBV, value creation, TCE, and choice of governance mode in a way that is simple and natural without sacrificing too much in the way of descriptive accuracy.

## Mergers and acquisitions

Assessing the pros and cons of a merger or acquisition is a familiar problem that cuts across the boundaries of finance, accounting, organization, and management. Carrying out a merger or an acquisition basically means changing from one governance mode (separate ownership) to another (joint ownership). To see if our model can withstand scrutiny from a variety of angles, we will examine the textbook motivations for a merger or acquisition one by one and see if they are consistent with our model.<sup>17</sup>

*1. Taking advantage of economies of scale.* Mergers are commonly justified with the argument that the participating firms may achieve economies of scale after the merger, for example through the elimination of duplicate facilities in production and administration. How does this motivation relate to our model? Clearly it is an efficiency-oriented motivation—the idea is to combine resources so as to reduce costs and thereby generate more economic value (economic value being defined as the difference between the perceived benefits gained by consumers and the economic costs to the enterprise<sup>18</sup>). This places it on the left-hand side of our model, even though the question of whether to merge or not is a choice-of-governance-mode problem and therefore would seem to belong on the right-hand side of the model. Does the model break down? Not necessarily.

The key question is this: is the change in governance mode (from separate to joint ownership) the *source* of increased value generation or can it be viewed merely as a means of reducing transaction costs *after* management has decided that resources ought to be combined in order to reduce costs? Our model suggests the latter interpretation. We believe this is defensible. Our model encourages managers to think, “Here is an opportunity to create value by eliminating duplicate facilities and

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<sup>17</sup> The list of motivations we use is due to Palepu et al. (2004).

<sup>18</sup> Peteraf and Barney, 2003.

saving on administrative costs. Let's pursue this opportunity. Which mode of governance facilitates it best?" This sequential line of thought makes more economic sense than, "Here is an opportunity to make money by combining two legal entities into one legal entity."

In principle, the economies of scale of joint production and administration could be realized without a merger, relying on contractual arrangements to achieve cooperation among the involved parties, perhaps strengthened by a cross-ownership alliance. In fact such arrangements are not uncommon, especially in industries where economies of scale are crucial, say, automobile manufacturing. We believe it is entirely realistic to view the variety of governance patterns in such industries—joint-equity alliances, contract-based sharing of production capacity, as well as full mergers—as strategies to minimize transaction costs rather than sources of value generation. The need for large-scale joint efforts is given by the nature of the resources (i.e. the technology) of the industry; the choice of how to govern those joint efforts is a secondary question of how to align the interests of all the involved agents so that cooperation can proceed smoothly, in other words, it is a question of minimizing transaction costs.

*2. Improving target management.* A firm is likely to become an acquisition target if there is a suspicion among outsiders that the firm's management is not doing a good job, either in the sense that it makes poor investment and operating decisions or in the sense that it pursues goals that are inconsistent with the goals of shareholders. In such cases, the firm may be taken over in a hostile acquisition and the managers replaced. How does this relate to our model?

Arguably, replacing the incumbent management with more competent and dedicated managers is a way of enhancing value generation. This would seem to challenge our model, which views changes

in mode of governance mainly as ways of reducing transaction costs and not as sources of value. However, the two perspectives can easily be reconciled by clarifying the relevant definitions.

Our model posits that decisions about how to create value precede the choice of governance mode, which in turn is made to minimize transaction costs. Strictly speaking, if economic value is defined as the surplus of perceived consumer benefits over the economic costs to the enterprise, then reducing transaction costs is in itself a way of generating value. However, for the purpose of our model, “value creation” refers to deriving value from *resources*. We make a distinction between value creation in this sense and the cost savings that can be achieved by limiting the damage caused by opportunism and bounded rationality, which is what we refer to as economizing on transaction costs. Our model is based on the idea that before you can save on transaction costs you must have transactions; in other words, you must first think of how to create value with your resources before you can create “value” by minimizing transaction costs.

As far as acquisitions aimed at improving target management are concerned, we think it is not unreasonable to view them as means with which to deal with transaction cost problems. Such takeovers are not ways of exploiting resources in order to create value; they are ways of *removing obstacles*, in the forms of opportunism and bounded rationality, to the exploitation of resources. Thus they lend themselves to a TCE analysis but not to an RBV analysis.

*Combining complementary resources.* Mergers and acquisitions are often justified with reference to prospective synergies among the involved parties. For example, a firm with a strong research and development unit could merge with a firm that has a strong distribution unit for mutual benefit. Here we offer essentially the same argument as we did in the context of mergers aimed at achieving

economies of scale: the merger (i.e. the change of governance mode) by itself does not create value; the joint exploitation of resources does. The shift to joint ownership can be viewed as a measure undertaken to reduce transaction costs, as suggested by our model.

*Capturing tax benefits.* Depending on the tax regime that firms are subject to, they may have a tax savings motive for merging. Notably, a loss-making firm that has loss carryforward benefits that it does not expect to be able to use may acquire a profitable firm and offset its losses against the profitable firm's profits.

How this relates to our model is straightforward. As explained earlier, there may be considerations entering into a firm's choice of governance mode that are not covered by the domain of conventional transaction cost economics, and tax considerations is one such factor. Recall that this is precisely why the TCE circle on the right-hand side of our model only covers part of the governance mode circle. As for the left-hand side of the model, capturing tax benefits clearly has nothing to do with value creation and does not lend itself to RBV analysis. The tax-savings motive for mergers and acquisitions therefore does not pose a challenge to our concept of the separation of value creation decisions and governance mode decisions.

*Providing low-cost financing to a financially constrained target.* Newly formed high-growth firms often find it difficult to raise the capital they need to finance their growth through the capital market because of information asymmetries between them and potential investors. A solution to this problem may be for an established firm in the industry to buy up the start-up firm in a friendly acquisition. Is this motivation for joint ownership consistent with our model?

The funding problem introduced above is a transaction cost problem in the sense that the information asymmetries mentioned are directly linked with the concepts of bounded rationality and opportunism that form the bedrock of transaction cost theory. The reasons why it is difficult for a high-tech start-up firm to communicate the true value of its resources to the investment community are 1) that outsiders generally lack the technological understanding necessary to evaluate the claims made by the start-up firm (bounded rationality), and 2) that outsiders have doubts about the credibility of the statements made by the start-up firm because the firm has no track record (fear of opportunistic behaviour).

Again, as with previously discussed motivations for M&A, it is not the acquisition itself that creates value, at least not in the sense of our model. The situation, as seen through the lens of our model, is this: the start-up firm has unexploited resources. These resources should be exploited to create economic value (left-hand side of the model). However, transaction cost obstacles stand in the way, so relevant economic actors find a governance mode that lowers transaction costs and allows the utilization of the resources (right-hand side of the model).

*Increasing product-market rents.* This final motivation for mergers and acquisitions is the classic one of reducing competition in an industry. By merging, firms increase their market power and may collude to restrict output and raise prices, thereby increasing combined profits. Choosing a governance mode with the aim of gaining monopoly power is clearly unrelated to value creation and the resource-based view. Recall that our model does not assert that governance mode decisions must necessarily be linked to value creation decisions—it merely claims that to the extent that there is a linkage, the direction of the link is from left to right. As such, the market power motive for M&A is compatible with the model.

The market power motivation may be interpreted as transaction cost-based in the sense that firms *could* in principle collude to raise profits by forming a cartel instead of merging, but find that a cartel is difficult to maintain because of the incentives each firm has to behave opportunistically and cheat on the other(s). Merging eliminates the transaction costs of maintaining the cartel. Depending on whether one adopts this perspective or not, the market power motive for mergers and acquisitions belongs either in the inner or the outer circle of the governance mode side of our model.

## **7. Conclusion**

In this study we have explored how the resource-based view and transaction cost economics relate to each other with respect to their implications for managerial decision-making. We have proposed a simple model of decision-making that ties together the concepts of RBV, TCE, value creation, and choice of governance mode in one integrated framework. The major tenets of the model are that resource considerations are important inputs to the decision of how to create value; that value creation decisions can be made independently of and prior to the choice of a mode of governance for the value-creating activities; and that transaction cost considerations are important inputs to the choice of a governance mode. We have shown how to interpret actual decision-making problems—specifically, the problems of whether to carry out a merger or acquisition and of how to internationalize company operations—in terms of the model. We have also discussed how one can adapt the model to the relaxation of one or more of the assumptions underlying it.

The model invites further research in several directions. We have focused in this paper on explaining the model on a conceptual and intuitive level. Empirical testing is needed to validate its assumptions, and there is plenty of scope for further refinement and elaboration of the model itself.

Aside from its academic interest, we believe the model has potential for being developed into an operational tool for managers as well.

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