INTRODUCTION

Perhaps we should have waited one more year to produce this book. Next year will mark the 25th anniversary of the publication of Oliver Williamson's classic *The Economic Institutions of Capitalism* (Williamson, 1985), which is perhaps the broadest statement of transaction cost economics (TCE) in academe. As is obvious, the title of this volume is a direct takeoff of that tome. We, along with the chapter authors, have been profoundly influenced by Williamson's insights about the role that economic institutions play in the theory of the firm and more generally in strategic management.

But why the *Economic Institutions of Strategy*, and why now? We believe that such a volume is appropriate – and appropriate now – for three reasons. First, although TCE (and institutional economics more broadly) has had an immense impact throughout the social sciences, one can argue that TCE's most significant legacy lies in the strategy field. As noted below, an assessment of the TCE literature suggests that strategy scholars have been among the most receptive to this theoretical lens, and that TCE undergirds a remarkable proportion of strategy research. Second, TCE is a broad success story that continues to open up new research frontiers in strategy, many of which extend far beyond the early promise of the theory. Identifying some of these frontiers and recognizing their interrelatedness should be of interest to strategy scholars, especially those searching for a more comprehensive theory of the firm. Third, there are some signs that TCE may be a victim of its own success within strategy research – its basic insights are sufficiently accepted that they are perceived as simply part of the baseline explanation for phenomena, which tends to make the theory a "background institution" in some scholars' minds. Our hope is to convey to young scholars – Ph.D. students and faculty alike – some of the excitement that we and the chapter authors feel toward this research perspective and our belief that the perspective has significant potential to explain many more phenomena of interest to research scholars.

TRANSACTION COST ECONOMICS'S LEGACY WITHIN STRATEGY ... THUS FAR

To assess the impact of TCE on the field of strategy, we first quantified the distribution of TCE-related research articles across all disciplines and fields. Specifically, we identified every article that appeared in a journal included in the Institute for Scientific Information's (ISI's) Web of Knowledge between 1975 and 2008 and that included among its keywords some variation of "transaction costs." We then removed those articles for which this term clearly did not refer to transaction costs of the Coasean kind (primarily articles in finance and computing, for which "transaction cost" has a different meaning). Finally, we categorized each journal according to its discipline or field. Granted, this requires some judgment, but we attempted to be objective in our categorizations.[1] As Table 1 shows, articles that are

Table 1. Distribution of Articles Explicitly Related to Transaction Cost Economics (Articles in ISI Journals that Include "Transaction Cost" among Their Keywords, 1975–2008).

Strategy	352	
Strategy		118
International business		92
Entrepreneurship and innovation		61
Strategy and organization		58
Other		23
Economics	246	
Economics		127
Economic policy		13
Economics and organization		39
Law and economics		22
Economics and strategy		7
Development		18
Other		20
Management/organization behavior/IR/HR	195	
policy and political science	160	
Marketing	119	
MIS (IT and Internet)	98	
Agriculture/environment	98	
Operations	77	
Law	42	
Health	36	
Accounting and finance	33	
Geography	26	
Other	125	
	1,607	

self-described as part of the TCE research stream have appeared more frequently in strategy journals than in the journals of any other discipline or field. We interpret this as evidence of TCE's impact on strategy, and of the importance of the strategy field to TCE.

Of course, it is possible that this reflects the sheer number of articles printed in strategy journals over this time period. To explore this from another angle, we focus attention on the proportion of articles within the strategy field that are influenced by TCE, as evidenced by citations to Oliver Williamson's body of work. For ease of calculation, we restrict our attention to publications in *Strategic Management Journal* (*SMJ*), due to its position as the longest-running journal devoted to strategy research aimed at the academic community. We revisited all articles published in *SMJ* from its founding in 1980 through 2008 and identified whether or not each article cited Williamson. Fig. 1 plots the number of articles (and percent of all *SMJ* articles) published each year that cited Williamson at least once.[2] Two trends jump to the fore. First, while in the early years of the journal, Williamson's research had only a moderate impact, the impact grew rapidly in the late 1980s – roughly coincident with the publication of *The Economic Institutions of Capitalism* – and has held steady since then. Second, on an annual basis, approximately one-quarter to one-third of all *SMJ* articles build on Williamson's work.

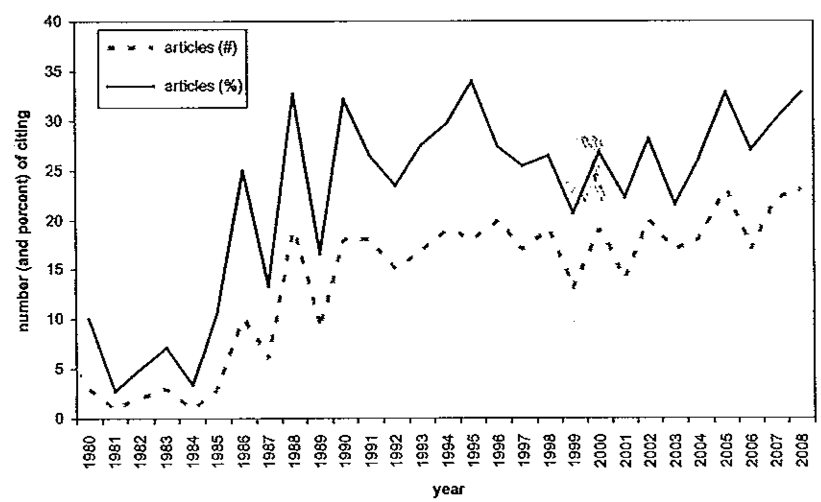

Fig. 1. Articles in *Strategic Management Journal* that Cite Williamson, 1980–2008.

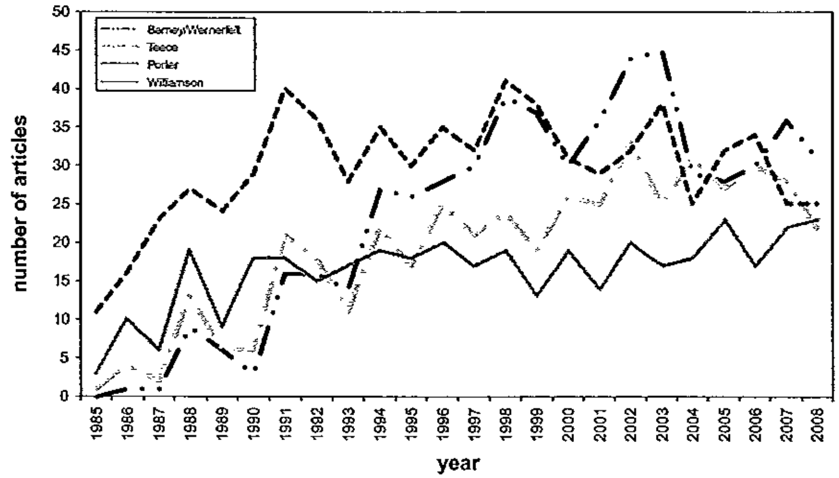

Fig. 2. Articles in *Strategic Management Journal* that Cite Major Strategy Scholars, 1985–2008.

Is one-quarter to one-third a large proportion? One way to tell is to compare this impact to that of other strategy scholars. We replicated the previous analysis for Michael Porter (competitive strategy), Jay Barney/Birger Wernerfelt (the resource-based view), and David Teece (the dynamic capabilities view). Although these scholars by no means "span the space" of strategic management, they do represent prominent theoretical lenses in strategy research. As Fig. 2 demonstrates, the rate of citation to Williamson is certainly "in the mix" from a standpoint of citations of many of the notable figures that have shaped the field over the last 25 years of research.

Our analysis obviously is not definitive. Nevertheless, we believe that it is suggestive of our assertion that the impact of TCE on strategy research has been substantial and sustained.

TRANSACTION COST ECONOMICS IN STRATEGY RESEARCH: A WIDE-RANGING SUCCESS STORY

Virtually all contemporary textbooks in strategy discuss TCE in the context of firm boundaries. In particular, the focus tends to be on the canonical issue of vertical integration and its relationship to strategy. Yet our reading of the

research is that scholars working out of a comparative institutional perspective have identified and made progress in understanding a wide variety of phenomena in the domain of strategy. Firm boundaries, internal organizational structure, technology transfer and problem solving, mergers and acquisitions, entrepreneurship, nonmarket strategy, foreign direct investment, franchising, and contracting are just a few of the phenomena for which TCE's comparative institutional perspective has provided useful insight. The enclosed chapters provide testament to the vast opportunities for valuable research opportunities generated by TCE.

TRANSACTION COST ECONOMICS: NOW A "BACKGROUND INSTITUTION" IN STRATEGY RESEARCH?

Even as references to Williamson and articles explicitly related to TCE have remained steady or increased in recent years, a cursory look at a large sample of Ph.D. course syllabi suggests that the next generation of scholars is receiving little training on TCE. Indeed, in our conversations with faculty who teach in Ph.D. programs around the world, we perceive that TCE is given relatively little attention as a perspective that can inform a broad range of strategic phenomena beyond vertical integration. As noted above, we believe that TCE is a victim of its own success. To the extent that transaction cost insights are now perceived as part of the baseline explanation for strategic phenomena, students are often encouraged to incorporate TCE as an important "background institution," but admonished to create new theory after "controlling for" basic TCE insights. We see a significant downside to taking TCE for granted. If the theory is viewed as a background institution within strategy research, then new frontiers within the field may be sought out without gaining benefit from a comparative institutional perspective.

THE GOAL OF THIS VOLUME

Thus, one response to "why the *Economic Institutions of Strategy* and why now?" is that it is worthwhile to collect in a single volume evidence that clarifies the utility of a fundamental pillar of strategy research, that highlights the breadth of its application to a wide range of strategic phenomena, and that demonstrates to young scholars (and those who are young at heart) the vibrant future available to those who pursue research using the TCE approach. We hope that this volume will find its way onto the syllabi of Ph.D. courses in strategy around the world, and thus will contribute to the foundational knowledge of the next generation of strategy scholars.

In developing this volume, we had two pragmatic goals that we hope will be of interest to students of strategy, especially those early in their scholarly careers. First, the chapters that follow take stock of how TCE's comparative institutional approach has developed and advanced numerous subfields of strategy. While not comprehensive in spanning the scholarly terrain, these chapters nonetheless describe much of the relevant topography. Each chapter either summarizes a particular research domain or revisits one or a small number of papers that have added important landmarks to the field. The chapters provide an up-to-date summary of literature, which, in and of itself, is useful.

Our second, and perhaps more ambitious and valuable, goal is to explore, identify, and describe fruitful and valuable trajectories for future research. To accomplish this goal we held a conference for contributing authors during which we collectively pushed for, brainstormed about, and elaborated research trajectories and their potential value. Those interested in the economic institutions of strategy will discover in the pages that follow numerous research projects that the chapter authors believe can significantly advance the field. The chapters not only identify these projects but also try to flesh them out sufficiently so that readers can gain a deep enough understanding of how to proceed theoretically as well as empirically. In other words, we collectively believe that the proposed research trajectories are not only valuable but also feasible to pursue. We hope that readers will find the book's focus on future research directions of great and perhaps unique value.

Choosing which topologies to explore was guided by three motivating questions. We asked how firms and individuals create and capture value; how firms and individuals find new opportunities; and how firms adapt to changing circumstances. While this does not provide comprehensive coverage of the entire field of strategy, we believe these three questions reflect current and important streams of research in strategy. These questions will have legs for some time to come. Of course, the amount of research corresponding to these three questions is not balanced in quantity – some questions receive more research than others – so we clustered the chapter topics to make it easier to navigate the book. Part I explores the development of new technology with chapters discussing technology transfer and the use of alliances as options. Part II discusses two new approaches to finding new business and growth opportunities. Part III offers several perspectives on interfirm relationships and how these map to competitive advantage and achieving high performance. Part IV introduces two different perspectives on corporate strategy. Part V discusses the relationship between diversification strategy and industry structure. Part VI investigates the interaction between strategy and national institutions in terms of location, foreign direct investment, and nonmarket strategies. Part VII concludes with a discussion of organizational adaptation and the dynamics of change. Below we offer a brief overview of each chapter that will help you identify which chapters might be of most interest.

PART I: DEVELOPMENT OF NEW TECHNOLOGY

In "Transaction Costs in Technology Transfer and Implications for Strategy," Ajay Agrawal revisits his 2002 publication with Rebecca Henderson on the same subject (reprinted herein). Their original paper investigated technology transfer from two academic departments and discovered that patents represent a relatively small channel for knowledge transfer compared to other channels such as consulting, publishing, and recruiting graduate students. They also show that patenting is not representative of these alternative channels and that patenting does not substitute for publishing. In revisiting their arguments, Agrawal explores how the means by which technology is transferred impacts strategy research. He identifies research that has appeared in press since his publication and reports that although his initial findings have received additional empirical support, recent research has opened up new questions for exploration. He then locates the current frontier of research on technology transfer channels and formulates a variety of valuable opportunities for future research.

TCE encompasses ex ante as well as ex post concerns. Whereas most modern TCE research in strategy focuses on ex post adaptation concerns, Jeff Reuer reminds us that ex ante hazards are vital to our understanding of mergers and acquisitions (M&A) and their success and failure. In "Organizational Economics Insights from Acquisition Research," Reuer reviews the literature on M&A to identify the range of ex ante contractual hazards that derive from information economics and their implications for organizational governance and strategy. This review argues that synergies from combining analysis of ex ante along with ex post hazards provide fruitful research opportunities for the intrepid strategy researcher. Reuer discusses a number of these synergies and describes future research possibilities.

PART II: DEVELOPMENT OF NEW BUSINESS OPPORTUNITY/BUSINESS MODEL

Entrepreneurship once was viewed as a field distinct and separate from economic institutions and strategy. No longer; the economic institutions of strategy provide tools and viewpoints to advance our understanding of entrepreneurship. In their paper, "Opportunities and New Business Models: Transaction Cost and Property Rights Perspectives on Entrepreneurship," Nils Stieglitz and Nicolai Foss focus on the investment in the assembly of resources in anticipation of uncertain future receipts. By combining TCE with the property rights perspective, they show that there are rich opportunities to expand the understanding of entrepreneurship. For instance, the paper explores how organizational structures and choices shape incentives for creating and capturing value. In so doing, they generate several opportunities for future research into the formation and antecedents of expectations, beliefs, and cognitive representations that are the foundation for entrepreneurial activity.

It can be argued that organizations exist to find and solve customer problems. Michael Leiblein and Jeffrey Macher summarize in "The Problem Solving Perspective: A Strategic Approach to Understanding Environment and Organization" a relatively new literature that adopts the problem as the unit of analysis and explores the appropriate matching between problem complexity and structure with organizational alternatives. The problem solving perspective draws on recent insights from NK modeling and the well-established comparative institutional analysis of TCE to generate new predictions about the relationship between innovation and efficient organizational structure. The chapter highlights several fertile directions for future research within this relatively new paradigm.

PART III: COMPETITIVE ADVANTAGE AND PERFORMANCE

During the past 40 years, interfirm contracting has expanded from solely the domain of lawyers to the domain of economists and strategic management scholars. In "The Future of Interfirm Contract Research: Opportunities Based on Prior Research and Nontraditional Tools," Libby Weber, Kyle Mayer, and Rui Wu review the economics of interfirm

contract research from the perspectives of property rights, agency theory, and TCE. In so doing, they not only highlight the progress that has been made but also provide vital questions for tomorrow's scholars. Moreover, they expand beyond the economic domain to suggest how sociological and psychological perspectives can be easily combined to stimulate valuable research.

In Joanne Oxley's 1997 article "Alliances and Performance" (reprinted herein) on hybrid forms of organization, she made explicit the connection between TCE and strategic alliances, and decomposed alliances into those characterized by unilateral contracts, bilateral contracts, and equity joint ventures. She also highlighted the importance of studying these arrangements within operational domains such as technology development, retailing, and component supply. Most importantly, her research cast a spotlight on appropriability as a contractual hazard in alliances. In her chapter "The Who, What, How (and So What) of Alliances", Oxley provides an update on how the literature has developed since her paper and offers several important directions for future research.

While franchising has become a deep literature in organizational economics, surprisingly little of the research has looked at franchising from a strategic point of view. Steven Michael and Janet Bercovitz begin to remedy this oversight by providing an overview of the franchising literature and exploring ways in which economic institutions of strategy can provide deeper insights into the domain of study. In "A Strategic Look at the Organizational Form of Franchising," they move beyond standard franchising and contract structure to explore different organizational forms within the franchising domain. They also explore topics of franchise dynamics and life cycle concerns. The chapter provides numerous opportunities to launch new research programs in a very active research arena.

While much of the research from a TCE perspective focuses on firm boundaries, Nicholas Argyres uses a transaction cost lens to peer inside the firm. In "Internal Organization from a Transaction Cost Perspective," Argyres explores the extent to which TCE can provide new insights into the structure and operations of firms. Of particular focus in his exploration is the extent to which organizational structure facilitates adaptation. Argyres's discussion highlights the trade-off in cooperative adaptation versus incentive intensity in various structures. Yet, he argues that such trade-offs are still not fully understood across different organizational structures. He provides several paths for researchers to pursue that deepen our understanding of these trade-offs not only across different organizational structures but also between formal and informal organization.

PART IV: CORPORATE STRATEGY

Much of the extant organizational economics literature on R&D focuses on the optimal mechanism through which to commercialize an innovation. But the strategic organization of R&D entails several questions that are antecedent to a firm's developing an innovation. Who conducts R&D? How much R&D? What type of R&D (i.e., generic or industry specific)? Only once these decisions have been made do firms develop innovations that can be commercialized through various governance modes. In "Strategic Organization of R&D," Bruno Cassiman and Alfonso Gambardella review the prior literature on R&D through an organizing framework that explicitly focuses on these questions. Key features are the size and homogeneity of a given product market, the transaction costs associated with trading technology in that market, and uncertainty about the growth of that market. For large, homogeneous markets with little uncertainty, most R&D will be product market specific and will occur in the business units of large diversified firms. As markets become more fragmented and uncertainty increases, R&D will be more generic and, as transaction costs increase, more heavily located in large, diversified corporations. These factors will subsequently affect the commercialization of a given innovation by influencing both the location of the innovator and the prevalence of other organizations with which the innovator could in-license or out-license. The authors provide directions for further research that covers both R&D investment decisions and commercialization decisions.

Strategy research indicates that firms acquire positions of advantage and competitive capability by assembling sets of unique and complementary resources, activities, or assets. A central feature in this assembly is the decision to make or buy the relevant assets. Although integration has advantages over market transactions, it does not necessarily lead to economies of scale and scope of the firm. Organizations can fail particularly as they become larger in size. In "Limits to the Scale and Scope of the Firm," Todd Zenger and Jeffrey Xiaofei Huang interpret recent advances in organizational economics and business strategy as evidence that the limits to integration are a result of behavioral anomalies (such as self-serving bias, shading, and retaliation) or social processes (such as social comparison and identity). They explore how these elements can serve as new building blocks

for a more comprehensive theory of the firm and offer three research trajectories to explore these new elements.

PART V: INDUSTRY ANALYSIS

Product diversification has a long history in the study of corporate strategy. Instead of surveying the enormous literature on the topic of diversification, Peter Klein and Lasse Lien drill deeply into the relationship between diversification strategy and industry structure. The pivot point for "Diversification, Industry Structure, and Firm Strategy: An Organizational Economics Perspective" is the role of transaction costs in providing efficiency explanations for related as well as unrelated diversification. Importantly, these authors provide numerous suggestions for high-value research and, conversely, provide advice on which kinds of diversification studies are unlikely to be successfully published in top-tier journals.

In the late 1990s, scholars began to confront the so-called "patent paradox": US patenting rates increased dramatically in the 1980s, yet at the same time R&D managers in most industries claimed to rely relatively little on patent protection to appropriate returns from their innovations. Bronwyn Hall and Rosemarie Ziedonis offered a convincing resolution of this paradox, resting on a key change to the background institutions governing intellectual property, in a 2001 *Rand Journal of Economics* article (reprinted herein). In so doing, they generated numerous other questions at the intersection of firm strategy, intellectual property, and TCE. In "Intellectual Property Regimes and Firm Strategy: Putting Hall and Ziedonis (2001) in Perspective," Rosemarie Ziedonis revisits the 2001 article, assessing subsequent research sparked by these ideas and providing numerous research questions for strategy scholars to pursue.

PART VI: LOCATION, NATIONAL INSTITUTIONS, AND STRATEGY

Choosing where to expand is an important decision for firm strategy. In "Value Creation and Appropriation Through Geographic Strategy: Evidence from Foreign Direct Investment," Miguel Ramos and J. Myles Shaver review and structure research concerning international location choices. They first categorize extant research based on the motive for expansion, distinguishing market seeking from resource-seeking explanations. Within these two categories, the chapter assesses the progress of the literature toward an increased acknowledgement of strategic interaction among firms. It also evaluates recent work that has begun to account for different modes of expansion. This emerging research explores the role of geography in acquisitions and begins to incorporate firms' often complex geographic configurations in the assessment of particular location/mode decisions. Building on these developments, the chapter highlights areas for future research including examining further the role of location in acquisitions, exploring the role of geography in post-expansion restructuring, and investigating the interaction between vertical and horizontal spillovers to entrants.

In his 2000 article "The Institutional Environment for Multinational Investment" (reprinted herein), Witold Henisz argued that political hazards affect the choice of market entry mode, which varies across multinational firms based on the extent to which they face expropriation hazards from their potential joint-venture partners in the host country. By combining an international business perspective on country risk with a transaction cost perspective on counterparty risk, Henisz identified interactions between the hazards associated with the political environment in the host country and the hazards associated with the transaction itself. In "Beyond the Economic Institutions of Strategy: Strategic Responses to Institutional Variation," Henisz reviews more recent developments of the literature on the institutional environment for multinational investment and discusses unanswered questions and topics for future research at the intersection of institutions and international business.

There exists a vibrant literature that analyzes nonmarket strategy through the lens of positive political theory. Much of this literature describes how legislators, regulators, and judges may be influenced through interest groups' campaign contributions and lobbying efforts. In "Integrated Political Strategy," John de Figueiredo reviews the key literature with an eye toward extending it to consider how firms might pursue an integrated market- and nonmarket-based strategy. Key directions forward include developing models that incorporate multiple interest groups and multiple levels of decision makers; generation of more comprehensive data sets to more thoroughly test theoretical models; and (the Holy Grail) linking a firm's nonmarket strategy to policy outcomes and then to the firm's market performance.

Although there is an extensive literature in organizational economics that explores contracting among private parties, the literature on contracting between a private entity and government is less well explored. This relative

deficit of research activity is surprising given that the last 30 years have seen intense debate about the ability of the private sector to provide a variety of public services more effectively than the government. In "Contracting with Governments," Eric Brousseau and Stéphane Saussier review contracting issues raised by a government's decision to involve private firms in the provision of public services. After reviewing different types of contractual arrangements, ranging from transactional contracts through public–private partnerships to pure privatization, the authors highlight the relevant contractual hazards under three conditions: government as unitary actor and beneficent dictator, government as unitary actor and non-benevolent actor, and government as multiheaded actor. The authors propose future research directions associated with each of these views of government.

PART VII: DYNAMICS

Organizational change has long been a substantial topic in the fields of strategy and organizational behavior. While much of this research focuses on content, far less explores the content of change. Jackson Nickerson and Brian Silverman revisit this literature in "New Frontiers in Strategic Management of Organizational Change," and discuss the role of governance choice in not only predicting content but also how asset specificity and governance combined shape the rate and likely success of organizational change. In so doing, they describe several research opportunities that can create new value in understanding organizational change.

CONCLUSION

In concluding, we note one more motivation for editing this volume. We chose the title *Economic Institutions of Strategy* (EIS) to honor Oliver Williamson's contributions to the foundations of the field of strategy, as well as acknowledge what he has contributed to advancing our own personal thinking and development as scholars. Indeed, we both attended UC-Berkeley's Haas School of Business, one year apart, and experienced Olly as a teacher, advisor, and taskmaster. Many of the contributors to this volume have a similar Ph.D. lineage; many others studied carefully Williamson's research from afar. Practically all who have gone through the Berkeley program under Olly or studied carefully his research have received a transaction cost imprinting that has shaped their research and world views.

They have learned to undertake research in a "slow, molecular, definitive way," and to approach problems in a comparative institutional way, taking the world as it is and trying to understand phenomena on their own terms. They also have learned that adaptation is the central issue for understanding organizations and institutions. Although not every research program pursued by these travelers is appropriately categorized as TCE, which also can be said for the chapters in these volumes, the imprinting for how to approach problems of organization is obvious in their research.

If we can get just a few readers as excited as we are about the institutional economics approach to strategy, then we will have accomplished our goal. And, if after reading this book you are still skeptical of the approach described herein, at least you will be well positioned to criticize it from deep knowledge!

NOTES

1. Details of this analysis and categorization are available from the authors. We note in passing that the number of articles with "transaction cost" in the keywords has continued to grow steadily throughout the last 15 years both in the strategy field and overall.
2. The actual number of citations is much higher, as individual citing articles often cite more than one article by Williamson.

REFERENCE

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PART I
DEVELOPMENT OF NEW TECHNOLOGY