

CAPTURE, GOVERNANCE, AND RESILIENCE: STRATEGY IMPLICATIONS FROM THE HISTORY OF ROME

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Organizational resilience is a subject of great interest to management and strategy scholars. Drawing on over 1,000 years of historical data on the Republic of Rome, and focusing primarily on the period of its establishment (509 BC–338 BC), we identify two generic strategies, capture and governance, that together are essential for organizational resilience. Capture strategy relates to market expansions, while governance strategy refers to the capacity of an organization to assimilate, retain, defend, and increase its dominance within annexed markets. The history of Rome also reveals four supporting tactics—saving power, maintaining a stronghold base, isolating and weakening adversaries, and creating forward outposts—that shore up and reinforce the capture and governance strategies, to create a more enduring and resilient enterprise. Interestingly, a system-wide view of the strategy-tactic framework also offers insights on resilience through smallness, thus illustrating its conceptual utility to organizations of all sizes including small enterprises. Copyright © 2010 John Wiley & Sons, Ltd.

INTRODUCTION

What strategies are primarily related to organizational resilience; and what tactics are indispensable when organizations strive to enhance their resilience and prolong their existence? These and similar questions regarding the architecture of long-lasting organizations are vexing research topics in the field of strategic management. A plethora of insightful frameworks (e.g., the structure-conduct-performance paradigm, Porter's generic strategies and the five forces framework, resource-based view, dynamic capabilities, and core competencies, among others) do help, but the survival rate of businesses remains low; for every 10 small

businesses, seven survive their first year and only two remain in operation after five years (Klein, 2002). These statistics are consistent with research showing that 50 to 70 percent of all new firms disband within their first five years, over 80 percent disperse in the first decade of their existence, and many firms survive but do not thrive (Aldrich, 1999; Morris, 2009).

Interestingly, despite keen attention to this high disbandment rate, the literature has yet to offer a coherent, *system theory* that would tie generic strategies and specific tactics to organizational longevity (Birkinshaw, Hamel, and Mol, 2008; Burgelman and Grove, 2007). Understanding why some organizations are more resilient and capable of prolonged existence than others is an important subject of inquiry because the costs of disbandment can be staggering. Ecologists contend that organizations cannot fully avoid decline, but it is the thesis of this study that lessons from the history of nations can expand the vistas on organizational

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resilience—the capacity of an organizations to sustain and bounce back from a setback (Sutcliffe and Vogus, 2003). Indeed, historians have long been concerned with issues of longevity—the ability to sustain operations, processes, functions, and productivity for several centuries (Kennedy, 1987; Tuchman, 1985). The case of Rome provides an instructive historical account; at its territorial peak, the Roman Empire governed about 2,300,000 square miles of land, it persisted over 1,000 years, and some of its accomplishments left economic footprints that endure to this day, mostly through its influence on language, science, religion, architecture, philosophy, law, and government.

CONCEPTUAL BACKGROUND

Naturally, the history of Rome is only one example of a city-state that, *ex nihilo*, managed to prolong its existence, but the question we ask is: what can firms learn from larger, human-made systems—such as political entities or nations—about their own resilience? The answer, as our study suggests, is adamantly, quite a lot. Already there is a growing interest in drawing lessons from the endurance, longevity, and competitiveness of nations and military forces (cf. Aupperle, 1996; Bellak, 2005; Clausewitz, 1827/1976; Clemons and Santamaria, 2002; Nelson, 1996; Porter, 1990). Learning from nations' strategic supremacy and spheres of influence, D'Aveni, Gunther, and Cole (2001) show how historical analysis can help firms achieve more sustained positions. They say, 'While some may view the story of the Roman Empire as ancient history, many of today's most successful modern global businesses have used similar strategies to achieve strategic supremacy' (D'Aveni *et al.*, 2001: 18). Efforts to build theory through historical analysis, then, are not unusual (e.g., Aupperle, 1996; Calori *et al.*, 1997; Lubatkin *et al.*, 2005; Paret, 1965). Two factors suggest that the field of strategic management can borrow and benefit from political science. First, nations and commercial firms are both human-made systems, so they share many commonalities; and, second, the ability of nations to endure and thrive despite escalating administrative complexities explains why such systems offer unique insights into firms' longevity and resilience.

This is a study of 'storicity.' It uses knowledge of the past to shed light on issues other than the past. Indeed, a theory is unlikely to predict the future if it fails to explain the past; and because dependable data are available solely about the past, crafting theories based on historical data is a useful means to look into the future. Using an inductive theory-building approach, we start with premises based on a body of historical data to define, construct, and identify causal relationships (Locke, 2007; Peikoff, 2007). We then tie in additional constructs from other theories and recent data on firm action, all the while integrating the logic—with boundary conditions—into a theory. Here, specifically, we draw on the founding and the 1,000-year history of the Republic of Rome, and focus on the tumultuous period from 509 BC to 338 BC to present two generic strategies—*capture* and *governance*—and then exemplify their utility for building more resilient organizations.¹ Briefly, *capture strategy* relates to growth, say through territorial expansion, while *governance strategy* refers to management and administrative oversight before, during, and after expansion. However, while necessary for resilience, by themselves these strategies are insufficient to create more enduring enterprises.

We make three contributions. First, using Rome's historical data, we draw parallels to and distill lessons for organizational resilience. Specifically, while most recognize that capture and governance strategies are related, we show that Rome accelerated its growth out of a small city-state in a volatile and hostile environment *only after* it learned to systematically combine, align, and reinforce the two strategies. This fine distinction—the methodical and recursive fusion of capture and governance strategies—has important implications for all firms, including those that deal with the liability of newness and those that face the hazard of stagnation (Stinchcombe, 1965). As our second contribution, we explain how different permutations of *capture-governance strategies* yield varying degrees of growth and longevity. Firms

¹ Rome was not a new entity, but with the establishment of the Republic it achieved a new organizational form (a new business model). We focus on Rome because of the abundant records relating to its endurance through capture and governance strategies. Clearly, there are other examples (e.g., Athens, the period of Alexander the Great), but to remain parsimonious and reduce complexity, we exclude these avowedly interesting and useful examples.

pursuing capture strategies—independent of governance strategies—harness unsustainable growth that brings disbandment, whereas companies that use governance strategies *without* capture strategies can actually endure for many years, but usually in the shadow of bigger (albeit perhaps younger) players. Finally, we identify and elaborate on four reinforcing tactics—saving power, maintaining a stronghold base, isolating and weakening adversaries, and creating forward outposts—that are crucial for realizing the full potential of the two generic strategies, and explain how they serve as indispensable building blocks for organizational resilience. By themselves, the strategies and tactics are not new; however, research on generic strategies, precise tactics, and a dynamic system view of links between them are surprisingly scarce. We begin to mitigate this gap by offering a system-wide view that articulates how the ‘moving parts’ work together to drive organizational resilience.

Boundary conditions

After considering hundreds of long-lasting firms that managed to outlast governments, nations, and cities, we chose a sample of 150 to study more carefully. We learned that most multi-centennial firms—firms that endured for several-centuries, as Rome did—are actually small, frequently family-owned businesses. We also discovered and cautiously analyzed large, publicly-traded corporations, but large firms endured for far fewer years than either Rome or the small firms did. For example, AXA ranked as the 15th biggest company in the world (based on revenue) according to the 2006 Fortune 500 global list, but it could not serve as a case study because (i) it is made up of a group of semi-independent companies; and (ii) it is ‘merely’ 200 years old, which is not long enough by our definition of longevity and resilience. We also excluded the Dutch East India Company (founded in 1602), which was the first multinational corporation and the first company to issue stock; it also possessed quasi-governmental powers, including the ability to wage war, negotiate treaties, coin money, and establish colonies. However, this company perished by corruption and was dissolved before it reached 200 years old. To the best of our knowledge, then, no single publicly traded firm has managed to endure for as long as Rome did. Had there been such a business exemplar, we would be

using that firm, rather than Rome, as our historical case.²

Our framework is relevant to competitive dynamics research, but it focuses neither on hypercompetition nor on how advantage is created, eroded, destroyed, or recreated (D’Aveni, 1999, 2004). While high-order interactions between the strategies and tactics are also interesting, the theoretical complexity due to such interactions far exceeds the insight sought at this conceptual stage. We therefore direct attention to the interplay between the two strategies and then discuss the role of the supporting tactics. We use mini-cases as examples in order to illustrate the conceptual content in action and to disambiguate the framework, but, of course, examples do not replace the inductive logic of the theory *per se*. Finally, we considered Rome’s entire history (over 1,000 years), but to remain within reasonable bounds, we elaborate primarily on its ‘tipping point for growth; the period of its founding (509 BC–338 BC). That is, Rome’s decline—when it ceased to synchronize its generic strategies with the supporting tactics—is interesting as well, but the topic of decline is outside the scope of the current study.

We proceed as follows. The next section reviews Rome’s capture strategy during four hostile encounters with its neighbors, followed by a discussion of the strategy Rome developed to better govern conquered city-states (Shatzman, 1990). The theory development section begins by applying insights drawn from Rome’s capture and governance strategies to business organizations and ends by explaining the role of several supporting tactics. We conclude with implications for theory, practice, and future research.

ROME’S CAPTURE STRATEGY

Approximately 70 percent of Italy is mountainous. The Alps mountain range extends into France, Austria, and Switzerland, and the Apennine Mountains divide Italy’s east and west coasts. Initially, Rome was located right in the heart of Italy on a large plain called Latium, only 15 miles from

² Consider the ‘excellent companies’ (Peters and Waterman, 1982), ‘built-to-last corporations’ (Collins and Porras, 1994), and the ‘good-to-great firms’ (Collins, 2001) and how most have now gone from great to below average (Hamel and Välikangas, 2003).

the Tiber estuary. Its geographic location generated a number of advantages. Fertile land supplied the needs of Rome's relatively large population; its hills protected it from floods and invaders; and the Tiber estuary provided it easy access to a sea—and, thus to foreign trade. Its location also insured that Rome held the best crossing of the Tiber estuary, the main artery of Italy's west coast—a site that was relatively defensible and hindered unified action by rivals. For visual clarity, Figure 1 shows Rome's position in 509 BC, and Figure 2 shows its expansion by 338 BC.

Rome and Latium: the Cassius Treaty

The domination of Rome was established in the seventh century BC. In the first treaty between Rome and the Latin peoples (who are hereafter referred to as the Latin League), circa 510 BC, Rome gained the right to represent the Latium area. In 509 BC, Rome and the Latin League lost a battle against the Etruscans, who had come from the north; the Etruscan victory was short-lived, however, as they were defeated in 506 BC by the Latin League. Then, in 493 BC, after several years of conflict between Rome and the Latin League, the two signed the Cassius Treaty. For the first time, Rome and the Latin League committed

to provide mutual assistance in case of foreign attacks, to share all booty equally, and to rotate the leadership of their incorporated army (Gibbon, 1778/1994; Nicolet, 1991).

Given that Rome was clearly stronger, why did it *not* seek to conquer the Latin League or to dominate the entire Latium region at that time? There were several reasons for this, particularly in the early days of the Republic (Heurgon, 1973). First, after years of battles, Rome's ramparts were destroyed and the city was vulnerable. Second, Rome was enmeshed in an internal clash between the lower-echelon populace, who lacked political and economic power (the Plebs), and the landowners (the Patricius). This conflict had weakened Rome's social fabric, commercial prowess, and military might. Third, Rome faced persistent threats from outside: the Etruscans wielded pressure through Veii, a city-state about 10 kilometers north of Rome; the Sabines maintained incessant pressure from the northeast; and other threats came from the mountain tribes of the Etruscans, who attacked Rome from the northeast, and from the Volscs, who invaded Latium from the south. Collectively, the internal strife and external threats caused Rome to be disorganized, vulnerable, and incapable of expansion; cooperation on equal terms with the Latin League was in the best

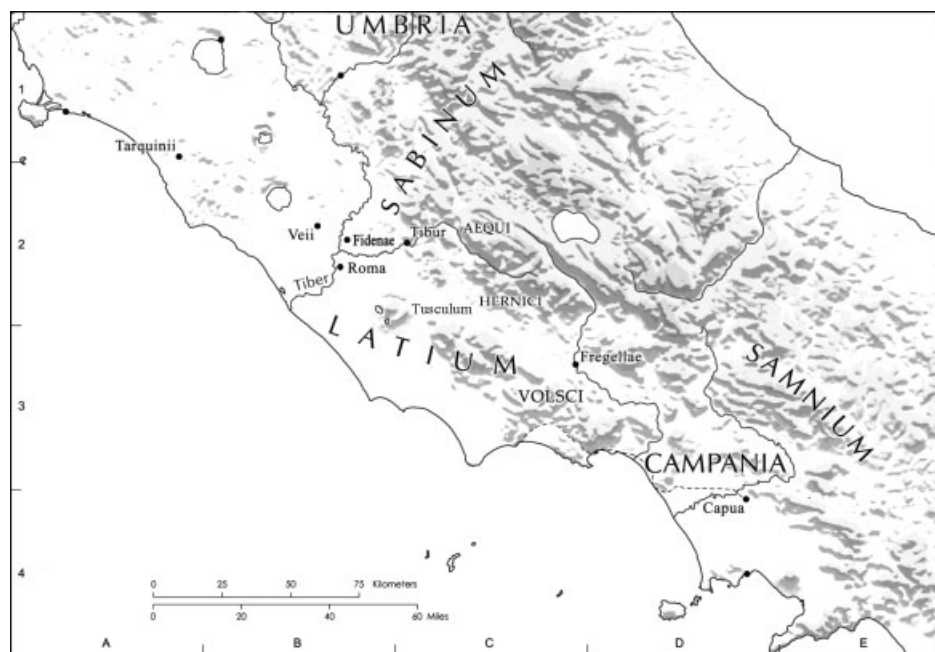


Figure 1. Rome's position in 509 BC, prior to its expansion

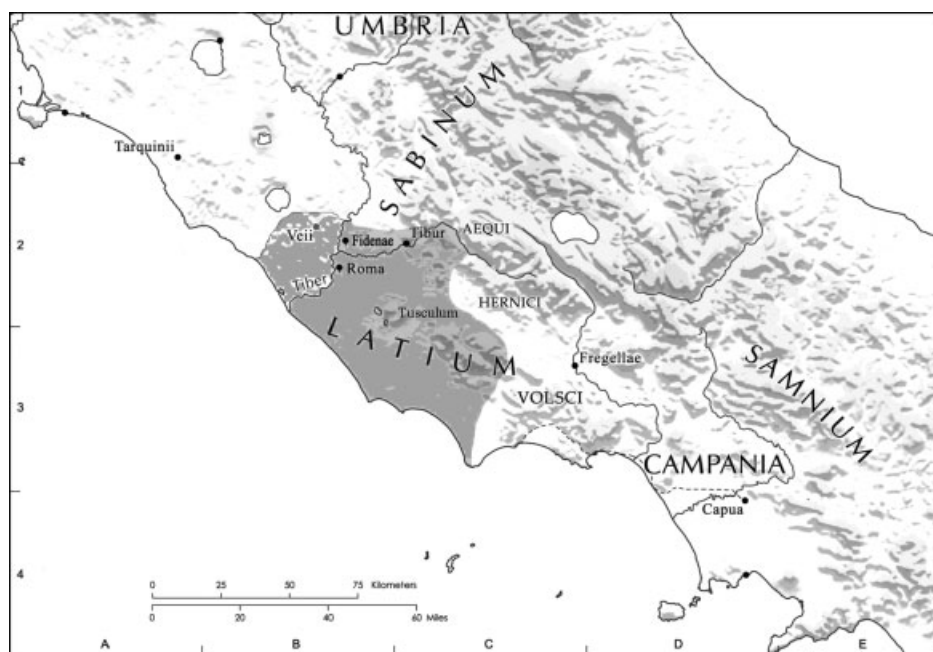


Figure 2. Rome's position (growth and expansion) in 338 BC

interest of both. The Latin League served to secure Rome's southern borders. Furthermore, the Cassius Treaty and the external threat quieted the conflicts between Rome and the Latin League while creating economy of scale in military strength, a dominant force that was previously unattainable. For the first time, Rome capitalized on the resources of others through *resource captivity* (Markman, Gianiodis, and Buchholtz, 2009a) or what Luttwak (1976) calls a saving power tactic. Although a simplified view, Figure 3 is important in showing Rome's tumultuous evolution from 509 BC to 338 BC.

Rome and Veii

As indicated, Rome fought against the powerful Etruscan city, Veii, located on the northern bank of the Tiber Valley. To wage war effectively—to reduce risk by saving power—Rome sought to conquer Veii's support city, Fidenae, which was a critical supply pathway for Veii and a gateway to the Tiber Valley. In 425 BC, after about 50 years of intermittent effort, Rome finally conquered Fidenae. Then, in 405 BC, Rome attacked the weakened Veii, and after a 10-year blockade, the critical city was finally conquered and destroyed.

Its eventual conquest of Veii by first capturing Fidenae illustrates how Rome saved power when

it *isolated and weakened* its rivals through indirect moves and resource captivity. That is, when Fidenae residents were enslaved, the practice instantly increased Rome's workforce capacity, which facilitated the attack on Veii. Rome then used the added territory and labor capacity to strengthen itself; it distributed the new land to its loyal citizens, thus increasing the number of personnel joining its military machine. Finally, the surplus land also allowed Rome to quell internal tension and conflicts between the Plebes and the Patricius. In short, the capture strategy—in combination with the reinforcing tactics of isolating and weakening and of saving power—enabled Rome to not only double its territory and become the largest city in Latium but also to increase its military might, thus boosting its spheres of influence and expansion capacity (D'Aveni, 1999, 2004).

Rome and the Gauls

Rome's subsequent growth was delayed for some time; then its vulnerability increased sharply with the appearance of the Gauls, who invaded Italy from central Europe and defeated the Etruscans. The Gauls took control of the Po Valley and made Milan (Melpum) their capital. In 390 BC the Gauls invaded Etruria and blockaded the city

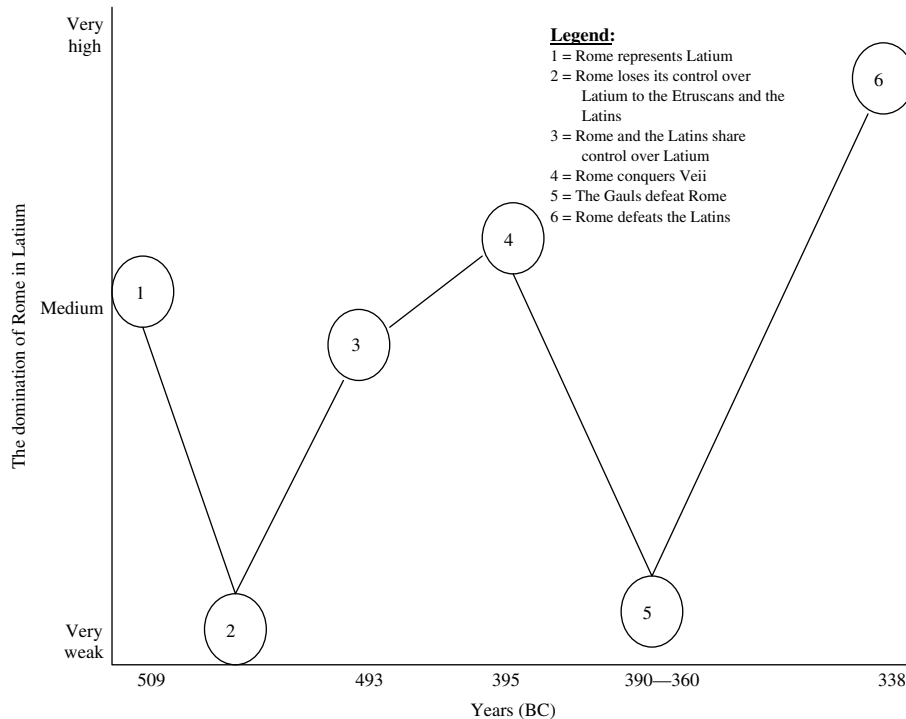


Figure 3. Key events leading to Roman domination in Latium (509–338 BC)

of Clusium. When Rome tried to impede their advances, the Gauls abandoned their blockade of Clusium and engaged in open battle with Rome. The Gauls eventually defeated the Roman army and blockaded its city. Seven months and a large ransom later, the Gauls agreed to leave the Roman city.

Rome's defeat ruined what had taken a century to build. At that point local enemies and former allies tried to exploit Rome's vulnerability. They failed, not because of Rome's strength, but primarily because each party acted alone. Concurrently, however, the Gauls continued their attacks upon bordering tribes (Umbrians, Etruscans, and Alpines), thus weakening Rome's opponents. In 360 BC, the Gauls renewed their assaults on Rome, but this time they failed. On the Etruscan front, Rome continued to fight several battles, eventually removing the remaining threat along its northern frontier and signing treaties with the Caeritis (353 BC), Troiugenes (351 BC), and Falernus (343 BC). During the 30-year hiatus between the Gauls' attacks, the Romans rebuilt their city; the recent crises, clear and present threat, and a sense of urgency triggered substantial social, military, and political reforms. Powerful leaders

took control and harnessed internal unity; they reorganized their army, modernized its weaponry, and rebuilt Rome's outer stone walls and ramparts. As societal conflicts gradually subsided, the size and influence of the Roman army grew, which facilitated the formation of critical treaties. Its stronger and more unified military, internal cohesion, and new treaties allowed Rome to forge, for the first time, potent opposition to the Latin League and, eventually, to break the Cassius Treaty. The question, though, is, 'Why did Rome decide to sever its ties with the Latin League at that time (493 BC)?' We turn to this question next.

The Great Latin War

At its inception, the Cassius Treaty created a Roman-Latin alliance that prevented the Volscres' and Etruscans' expansion into Latium. However, the power of these tribes had declined by the beginning of the fourth century BC, limiting their threat to Rome. Given the diminishing capacity of the Volscres and Etruscans to realize their expansionist aims, along with the Gauls' declining threat on Rome, the Cassius Treaty was no longer critical to Rome, and Rome and the Latin

League went to war—the Great Latin War (circa 340 BC). In 338 BC, Rome, supported by southern tribes, defeated the Latins and gained control of Latium and other surrounding areas (Salmon, 1967, 1969).

Unlike earlier conflicts, which had been costly, protracted, and had highly uncertain outcomes, Rome's victory in the Great Latin War was decisive because it followed earlier, quite successful engagements. In 381 BC, Rome had conquered Tusculum—the strongest town of the Latin League—and, in what at the time was a radical move, granted the residents of Tusculum partial Roman citizenship. Subsequently, the warfare between Rome and the Latin League gradually abated, and in 358 BC the League agreed to re-endorse a revised Cassius Treaty to fend off mutual enemies (i.e., the Gauls and Samnites). Reflecting Rome's strength and dominance vis-à-vis the Latin League, the new treaty granted Rome sole command over the joint military forces. In ensuing battles, Rome used this advantage to militarily crush remaining resistance while mitigating less violent opposition through truces, pacts, and accords. For example, by signing a treaty with the Samnites, Rome established clearer spheres of influence, with the Samnites expanding toward the northeast and the Romans expanding eastward. The treaty was sustained—for a while—because both saw the Gauls as a mutual enemy. Finally, the treaty strengthened Rome's position vis-à-vis the Latins while preventing the latter from receiving military assistance from neighboring tribes and city-states. While the Rome-Samnite treaty was not without problems, the move allowed Rome to augment its military force and fight more selectively against the Latin League—in itself a strong coalition of forces. Finally, Latium was fully conquered.

Up to now, we have focused on the capture strategy; however, below we show why a capture strategy is insufficient to ensure organizational resilience. Executives tend to treat governance as expense activities and bureaucratic support functions; our thesis, however, is that Rome expanded its territory, strengthened its military, enhanced the quality of life of its citizens, and extended its longevity because (1) it used governance *as strategy* and not only as back-office operation; and (2) it methodically interlaced and synchronized its capture strategy with a governance strategy.

ROME'S GOVERNANCE STRATEGY

During and after the Great Latin War, Rome faced a new, complex, and critical problem—how to govern a large territory that was populated by insubordinate, hostile, and even rebellious city-states. The governance arrangements that Rome used, which became its strategy cornerstones beyond Latium and Italy, would continue to serve it for hundreds of years to come, even as Rome outgrew its city-state status. This governance strategy aimed to remove rebellious sentiments by ensuring the loyalty of cities and tribes and by turning them into highly versatile and mobile resource bases for future expansion. Indeed, evidence indicates that Rome's governance strategy turned Latium's hostile cities into partners, thus allowing Romans to leverage on saving power tactics and to marshal the labor force of the occupied cities in order to strengthen its military and to carry out territorial expansion (Salmon, 1967).

Post war, Rome was responsible for the overall conduct of the foreign and military affairs of all the cities and tribes of Latium. Rome neither interfered in the daily life of Latium or its tribes, nor did it levy taxes, thus greatly diminishing the threat of social unrest. The relationship between Rome and its conquered cities, tribes, and subjects was predicated on a system of laws, policies, and treaties. For example, no consul could enter a city to loot it. Thus, although Rome's strategy was to control foreign and military affairs, it sought minimal interference with social life. This governance strategy imparted saving power, which gave Rome critical comparative advantages. First, it allowed Rome to invest little of its own resources to govern daily life. Second, it granted the conquered people a sense of independence that minimized friction and rebellious sentiment. Third, Rome implemented a carrot-and-stick, segmentation policy to sequentially eliminate or co-opt enemies: loyal towns became a part of Rome with residents earning full Roman citizenship; non-loyal towns received only partial citizenship and had no political rights; hostile towns were considered a threat—their leaders were killed or exiled and their assets—navy, military, lands, and slaves—were confiscated and repurposed and redeployed by Roman force.

The segmentation policy allowed Rome to isolate, weaken, divide, and control its subjects. This policy consisted of two key principles. First, the Romans dealt with each defeated city separately;

any foreign, military, or direct relationships among them were precluded in order to eradicate organized resistance. Second, distinct types of city annexations differentiated among Rome's subjects, with different juridical categories defined by differences in status, rights, and obligations (Cornell, 1995). For example, because Roman citizenship afforded substantial autonomy and other political and economic privileges, granting differing degrees of citizenship became a powerful governance mechanism that served to isolate, weaken, and divide new subjects and to instill compliance and, eventually, long-lasting loyalty among seasoned subjects. The citizenship-based segmentation and the partial and conditional incorporation emerged as a remarkable isolate and weaken tactic that allowed Rome to govern outsized, previously hostile territories. Status differences for cities also diminished subjects' mobility and thus the proclivity to organize against Rome, while the prospect of citizenship offered a compelling incentive to join and support Rome's growth and longevity.

Another reinforcing tactic was the creation of forward outposts in strategic locations (cf. D'Aveni, 2004). Rome's forward outposts enhanced its control and oversight of land pathways, shorelines, and ports, with significant military and economic implications. Forward outposts such as colonies, also served the Roman expansion process by enabling a resettlement enterprise for its loyal population. While Rome (and others) had situated colonies earlier (e.g., as a joint enterprise with the Latin League), 338 BC saw the first era of exclusive Roman colonization, thus extending Rome's power base and reach. These new forward outposts served as early checkpoints and chock points; they allowed Rome to detect and deter hostility early and to disconnect enemies from their allies and resources.

THEORY DEVELOPMENT: ORGANIZATIONAL RESILIENCE

Corporations endure when they withstand or evade rivals' onslaughts, technological discontinuities, regulatory upheavals, geopolitical shocks, industry's creative destruction, and fickle consumer preferences, among other threats. Consistent with an inductive theory building approach, here we tie in the two strategies with additional constructs

from other theories and mini-cases from the business world to better calibrate the logic and to make the framework of organizational resilience more refined.

At the broadest level, the history of Rome suggests that, all else being equal, organizational resilience is a function of an ongoing, methodical pursuit of capture and governance strategies. Firms that expand rapidly—say through mergers and acquisitions (M&A)—but ignore governance issues such as product integration, culture harmonization, general cross-organizational synergies, or even business ethics will eventually face severe setbacks. For example, Vivendi was a French water utility firm, but after a six-year acquisition spree—buying MCA Records, Universal Studios, USA Networks, various publishers, theme parks, and Internet companies—it bulged into a global media conglomerate. The M-form company soon saw how the benefits from economies of scale and scope were eclipsed by complexity, including interdivisional rivalries and business units competing against each other. Then, after losing about \$70 billion in market value, Vivendi was forced to sell off its recently acquired parts, prune some of its older business units, and fire its chief executive officer (CEO).

As we learn from the case of Rome, expansion does make sense, but only when firms capture segments they can manage and dominate through effective governance. Put more formally, because the two strategies have a joint, interactive, and iterative effect on organizational resilience, scholars and managers might want to regard them not as semi-related, but as fully codependent. In fact, the historical analysis of Rome nuances our understanding that capture and governance strategies—when done synchronously and recursively—strengthen each other. It appears, also, that corporate resilience is about neither crisis management nor turnaround programs but, rather, about an ongoing bundling and redeployment of capture and governance strategies; it is not reactive but proactive organizational conditioning (e.g., ambidexterity).

Figure 4 features a capture-governance matrix, which provides a schematic view of the interplay between the two strategies and its likely impact on organizational resilience, focus, and vulnerability. Briefly, the SW quadrant suggests that organizational resilience is implausible; indeed, in the

Capture strategy	Exists	Unstable resilience Focus on rapid, raw growth Vulnerability to internal inefficiency Main tactics: isolating and weakening, and forward outposts	Resilience through dominance Focus on balanced growth Vulnerability to complexity and bigness Main tactics: saving power, stronghold base, isolating and weakening, and forward outposts
	Doesn't exist	Unsustainable resilience Unclear focus Vulnerability to internal strife and external threats Tactics without strategy...	Resilience through smallness Focus on organic growth Vulnerability to larger, expanding players Main tactics: stronghold base
		Doesn't exist	Exists
		Governance strategy	

Figure 4. A capture-governance matrix: variations in resilience, focus, and vulnerability as a function of the interplay between capture and governance strategies

absence of explicit focus on capture and governance strategies, firms become vulnerable and their 'longevity' quite temporary. This unsustainable existence would ensue even for incumbents that initially might have held strong positions—perhaps due to historical circumstances such as first-mover advantage—because they lack critical competencies to manage, defend, or sustain their favored position. Consider the iPod. In three years it revolutionized portable entertainment, accounting for almost 50 percent of Apple's revenue, and the firm's market capitalization catapulted from \$1 billion (2003) to \$150 billion (2007). This story is not new, but less known is the fact that the first movers to develop competencies, to create this new category, and to occupy and dominate this market segment were Diamond Multimedia (with the Rio player in 1998) and Best Data (with the Cabo 64 player in 2000). While still in operation today, both firms live meager and vulnerable lives outside the portable entertainment market because they lacked the competencies to manage and defend their earlier positions.

For organizations that leverage on only one of the strategies (either capture strategy or governance strategy; NW or SE quadrants respectively), resilience is greater than it is for firms in the SW quadrant, but somewhat conditional nonetheless. When a firm grows through capture strategy without governance strategy (NW quadrant), its growth is suboptimal and longevity moderately temporary. Such an organization might make sound acquisitions and capture attractive markets for a while, but because it would lack the critical competencies

required to manage and integrate its acquisitions, the cost of growth would be higher than for firms that carefully combine growth with governance strategies. Consider Enron's capture strategy. In 2000, before its 2001 bankruptcy, Enron was an exemplary corporation that included electricity, natural gas, pulp and paper, and even telecommunication companies, with \$101 billion in revenues and 22,000 employees.³ Sadly, Enron's growth and capture strategy was unsustainable because its governance strategy hinged on accounting fraud and corruption—in fact, the focus on growth to the detriment of governance led to one of the biggest and most complex bankruptcy cases in U.S. history. The Enron story is extreme but not unique,⁴ and the implication is clear: combining sound capture strategy with unsound governance strategy damages focal firms while also compromising a slew of adjacent incumbents (e.g., Arthur Andersen).⁵

Inattention to governance as a strategy—merely minimizing operating expenses due to redundancies in plants, property, operation, equipment, staffing, or cross-purpose functions—weighs down

³ *Fortune* named Enron 'America's Most Innovative Company' for six consecutive years, from 1996 to 2001.

⁴ Inattention to governance strategy can even cease robust longevity: though it survived the Napoleonic Wars and both World Wars, the 233-year-old Barings was shut down after its Singaporean branch lost \$1.3 billion due to speculations—primarily on futures contracts.

⁵ Although the guilty verdict against Arthur Andersen for its involvement with the Enron debacle was subsequently overturned, the damage was too high and the firm was forced to disband, resulting in the loss of 85,000 jobs.

capture strategies. Examples of deficient governance include failure to systematize operating procedures, failure to streamline systems for cash management and resource allocation, failure to centralize purchasing, and failure to standardize benefits. Naturally, organizations must attend to their governance; it is the glue that unites diverse administrative tasks. But the point we stress here is that even the best capture strategy will not ensure organizational resilience unless it is coupled with an explicit governance strategy. In fact, a counterintuitive lesson is that governance *is* strategy; firms that ignore this caveat might acquire the wrong companies—or significantly overpay for buying and integrating the right ones. All else being equal, when governance is merely operational instead of strategic, a company might have the growth capabilities, but it would not necessarily have the administrative and decision-making bandwidth to sustain its position (e.g., management know-how and discipline to ‘stitch’ and leverage on resources and capabilities). Indeed, a 15-year study of thousands of acquisitions carried out by some 1,700 firms in the United States, Europe, and Japan shows that most acquisitions fail (Lovallo *et al.*, 2007). The reasons for such systematic failure are certainly complex, but the case of Rome suggests that a probable culprit is the absence of an effective governance strategy.

When firms apply effective governance strategy without a capture strategy (SE quadrant), longevity is stronger than what is typically seen in the NW quadrant. In fact, our study of numerous cases suggests—contrary to what one might expect—that a strong governance strategy could extend a firm’s life span beyond the NE quadrant. Examples include: Japan’s Hoshi Hotel has been functioning since 718 AD; the Fonderia Pontificia Marinelli, a bell foundry in Italy, was founded in 1000 (its bells have since tolled in New York City, Beijing, and Jerusalem); the Venetian glassmakers, Barovier & Toso, were established in 1295; Richard de Bas, a French family business, has made paper since 1326 (their paper was used by Braque and Picasso); a Tuscan winemaker, the famous Antinori dynasty, has been producing its vintages since 1385; the Beretta family has been crafting guns in Italy since 1526; the oldest family firm in the United Kingdom, textile makers John Brooke & Sons, has been in business since 1541; and Zildjian (cymbal, drumstick, and mallet manufacturer)—founded in Constantinople, Turkey in

1623, then relocated to Norwell, Massachusetts in 1929—is perhaps the oldest family business in the United States.⁶ Firms that expand organically extend their longevity no less, and perhaps even more, than those that grow through acquisitions, albeit organic growth is appreciably slower (Lovallo *et al.*, 2007). As one might expect, *resilience through smallness* explains why many of the exemplars listed above reflect a narrow geo-product area—meaning, an enduring positioning that is quite ‘local’ in terms of geographical location or product space.

Finally, the NE quadrant depicts organizational resilience as a function of both capture strategy and governance strategy. Organizations fitting this profile know how to acquire critical market positions and also how to integrate business units and manage resource flow. For example, GE acquires dozens of companies each year; Cisco Systems has made more than 100 acquisitions throughout its 20-year history; and now even nonprofit players pursue growth through acquisitions. To de-risk their growth, some pharmaceutical firms form ‘pre-merger’ alliances with biotechnology and biomedical startups (Rothaermel and Hill, 2005). Even when a merger or acquisition is aborted, alliances may still give parties access to new competencies and know-how. As we learn from the history of Rome and our inductive logic, the resilience of firms is greatly influenced by their capture-governance strategies, *ceteris paribus*.

Figure 4 offers clear quadrants with straight demarcation lines, but in reality these lines are less important than appreciating the *system-wide view* in which different permutations of capture-governance strategies stem from diverse growth foci and understanding that both strategies are related to varying levels of vulnerability and resilience. Further, what gives rise to, sustains, and balances capture and governance strategies are four reinforcing tactics, which we discuss next.

REINFORCING TACTICS

All organizations must develop areas of distinctiveness. Indeed, deciding what product-market position to pursue and which factor-market space

⁶ Kongō Gumi (a temple construction firm in Osaka, Japan) was the world’s oldest independent company, operating for 1,429 years, since 578, until it was bought out in 2007.

Table 1. A summary of the supporting tactics and their strategic intent

Supporting tactics	Strategic intent	Dominant quadrant in the capture-governance matrix
Saving power	Capture, repurpose, and redeploy others' resources Do more at others' expense to facilitate one's own economies of scale and scope	NE
Stronghold base	Reinforce current core competencies Leverage (locally) on core competencies and initiatives	NE, SE
Isolating and weakening	Mitigate the strength of and threat from other players Weaken rivals prior to engagements Shape rules of engagement to one's own advantage	NE, NW
Forward outposts	Create options for and de-risk core expansion and initiatives Facilitate offensive strikes on rivals' 'soft' points Establish multimarket contacts with rivals Monitor opponents' moves in areas outside one's own control	NE, NW

to occupy, defining offering scope, and clarifying which resource-capability mix to secure, are vital for any firm's resilience (Markman *et al.*, 2009a). It is a thesis of this study that Rome used several tactics to complement its capture-governance strategies and that articulating these tactics sheds light on organizational resilience. Because competitive forces exert stern pressure and events rarely go according to plan, strategy gives shape and meaning to tactics and is, in turn, carried out by tactics. Hence, tactics are concerned with action, operation, and function, whereas strategy is concerned with the use of tactics to achieve organizational objectives. The principle is that strategies define tactics, and that tactics without strategies or vice versa are unlikely to invigorate organizational resilience as they would when deployed together.⁷ This section and Table 1 reinforce a *system-wide view* that articulates the intent of tactics, outlines their supporting manifestations, and identifies links between these tactics and the permutations of the capture-governance strategies.

Saving power

Rome's growth and expansion from a city-state was aided by *saving power*, i.e., achieving one's

objectives through others. Thus, when Rome realized that conquering Latium was beyond its capacity, it allied itself with neighboring tribes and city-states and then used their military capacity to complement its own. The renewed Cassius Treaty with the Latin League enabled Rome to push back the Gauls and cope with the threat of other enemies. As indicated earlier, *saving power* is akin to various cooperative and competitive moves seen among nations and commercial organizations, as evidenced in several arrangements. Trade agreements between the United States and Japan in 1986 resulted in market partitioning and defined spheres of influence in the semiconductor industry; for a while, Japanese producers dominated the dynamic random access memory niche while U.S. producers led the microprocessor segments (cf. Scherer, 1996). Today, China focuses chiefly on manufacturing, India on services (mainly information technology and engineering⁸), and Russia on natural resources. Firms also save power through market partitioning. The U.S. beer market is divided among fewer, but larger, mass-production brewers and a slew of smaller microbreweries (Carroll and Swaminathan, 2000). Saving power through market partitioning enables firms to deploy their resources in a more efficient manner.

⁷ To echo Sun Tzu, strategy without tactics is the slowest route to victory, whereas tactics without strategy is the noise before defeat (circa 500 BC).

⁸ For example, Wipro is the world's largest supplier of outsourced R&D and among the largest business process outsourcing providers.

Naturally, meeting the challenges of and defeating each and every opponent is a difficult, complex, and probably unlikely task because markets are populated by diverse firms and it is impossible to gauge the threat *ex ante* and to predict how much effort would be needed toward this end. To moderate this uncertainty, the Romans pursued their saving power tactics, which ensured that the cost of waging wars would be spread out and passed on, at least to some extent, to its captured city-states and allies. Also, as we noted earlier, Rome enjoyed surplus military capacity because (1) it routinely minimized its presence and engagement in the daily life of annexed territories; and (2) it converted only few, albeit critical, locations within captured city-states into stronghold bases. These practices reduced the reaction time of its armed forces and increased the effectiveness of its resource utilization and capacity maximization, thus strengthening Rome's domination of large territories at reduced cost.

We noted how nations and firms leverage on saving power tactics during hostile engagements, such as capture strategies; but these tactics are useful, as well, in non-rivalrous contexts. We also maintain that internal resources endowments are always more limited than those held by all others (Markman, Gianiodis, and Phan, 2009b); hence the significance of access to 'external' resource endowments—that is, those resources held by others—to one's own longevity. Consider the following examples: Merck enjoys a sizable research and development (R&D) budget, but given that its budget accounts for only one percent of global biomedical research, it now taps into the remaining 99 percent by reaching out to players worldwide. In 2008, Procter & Gamble (P&G) captured 50 percent of its new technology and innovation from other firms. Combined, Merck and P&G employ thousands of bright scientists; however, to strengthen their position at a lower cost, these firms now tap into resources (technological and human) owned by others.

Saving power, such as innovation in-sourcing, is important because it improves a firm's absorptive capacity, lowers its competitive costs, and reduces its vulnerability to technological chock points and rivals' lockouts (Markman *et al.*, 2009b). Reducing nonproductive resource deployment is always necessary, but the comparative advantages stemming from a focal firm's strategic, tactical, and operational agility are directly and proportionately

related to its ability to leverage on the capacity of others and to degrade rivals' access to or use of their own resources, *ceteris paribus*. Not surprisingly, saving power tactics benefit all firms, but they are particularly valuable for and prevalent among large, multimarket incumbents that pursue aggressive growth objectives (i.e., NW and NE quadrants).

Stronghold base

Rome understood the importance of Latium as its *stronghold base*—or core—for survival and future growth. Consistent with such concepts as *core competencies* (Prahalad and Hamel, 1990) and *core business* (Zook, 2004), we define *stronghold base* as dominance in a well-defined geo-product space. Indeed, a 10-year study of more than 2,000 firms in a variety of industries shows how most growth strategies fail to create value—and even destroy wealth—primarily because firms diversify far outside their core or their stronghold base (Zook, 2004). Contrast Walmart, which became the largest company in the Fortune 500 in 2002, with Kmart, which drifted into bankruptcy that same year. Each firm opened its first store in 1962, but Walmart applied methodical capture and governance strategies of adjacent markets (e.g., Sam's Club), while Kmart's expansion was far removed from its stronghold base (e.g., Walden Books and The Sports Authority). Naturally, failure is a function of diverse and complex factors, but Kmart's poor combination of capture and governance strategies was also symptomatic of another problem—an ill-defined and undefended stronghold base. We see, in both the history of Rome and in Kmart's case, that a capture strategy is counterproductive when a stronghold base is mismanaged. Put more formally, an ill-defined stronghold base moderates the synergistic relations between capture and governance strategies, rendering growth and resilience unsustainable.

When the Gauls first halted Rome's expansion and then defeated it, the prolonged crisis served to clarify Rome's priorities and strategies, leading to social reforms and tectonic governance modernization, which, in turn, triggered military reorganization. Gradually, military units became flatter; spans of control were broadened with fewer degrees of separation; and the number of hierarchies within combat units was reduced (Shatzman, 1990). In

other words, as Rome refocused on its stronghold base, it also became more reflexive.

These historical accounts raise the question: how does one reconcile Rome's reflexive reaction to adversity with the *threat-rigidity thesis*, whereby threats increase centralization, formalization, standardization, and routinization, thus yielding rigidity that ossifies flexibility and compels firms to react improperly to adversity (Staw, Sandelands, and Dutton, 1981)? While most conceptualizations of the threat-rigidity thesis focus on single crisis reaction events, our research shows that multiple crisis reaction events allowed Rome to shape competencies to withstand diverse dangers and to become more resilient. Also, while crises are usually sudden and externally caused, many of Rome's adverse encounters were self-caused, gradual, and well anticipated. Interestingly, Rome's history is also consistent with learning theory in which, as a prelude to future crises, firms initiate preadaptive changes—they use latent threats to regenerate flexibility, learning, renewal and eventually resilience. Similarly, research shows that in adverse environments, some firms decentralize their control, and become more open to new ideas and opinions (Eisenhardt, 1989; Krishnan, Miller, and Judge, 1997; Sharfman and Dean, 1997).

Management science confirms that crisis, brought about by fierce competition, imposes a strong refocusing effort on the stronghold base, usually through operational changes (Osterman, 1996; Rajan and Wulf, 2006; Whittington *et al.*, 1999). In addition, experiences of failure and learning from these events help organizations to adapt to the environmental changes (Carmeli & Sheaffer, 2008). Interestingly, these changes to refocus a stronghold base are not driven by alternative explanations, such as reduced business capacity, improvements in communication technology, location factors, and a host of or other explanations (Guadalupe and Wulf, 2008). Facilitated by flattened hierarchies, a focused stronghold base pushes decision-making authority downward, thus improving the ability of firms to cope with uncertainty, disorder, and the fluidity of competitive markets. Indeed, as international competition intensifies, CEOs increase their delegation of authority to local managers (Aghion and Tirole, 1997). These recent findings are consistent with earlier work (cf. Greiner, 1972) and contingency theory (Galbraith, 1977; Lawrence and Lorsch, 1967),

but for our purposes it is important to emphasize that crises are test points in the evolution of firms (Carmeli & Schaubroeck, 2008); they motivate restructure of operations, rearrangement of assets, reconsideration of resource-capability mixes, and recommitment to a focused and well-defined stronghold base. A firm's redesign of its stronghold base is not limited to emergencies and crises, such as swift gales of creative destruction or turbulent markets; in fact, it can also be a steady, ongoing response to declined strategies and gradual atrophy.

In sum, Rome's timeless strategic precept is that building dominance in a well-defined stronghold base—prior to implementing growth strategies—is a key driver of organizational longevity and an invaluable platform for future expansion. A focused stronghold base is critical to all firms in all industries, regardless of growth orientation. However, our framework, supported by the evidence presented thus far, confirms that this tactic is particularly important among NE-quadrant inhabitants and among firms that pursue *resilience through smallness* (i.e., SE quadrant). In addition, while a stronghold base is used infrequently by NW inhabitants, its use is particularly rare among those who need it most—SW-quadrant inhabitants.

Isolating and weakening

Rome's capture and governance strategies were also supported by *isolate and weaken* tactics.⁹ For example, to defeat Veii with minimum effort, Rome first captured Fidenae; a move that cut off Veii from supplies and allied support and thus weakened its fighting capability, while giving Rome a robust bridgehead for a stronger attack. By isolating, weakening, dividing, and controlling its opponents, Rome created several city-state classes—ranging from hostile to collaborative. City-states that defied Rome paid a heavy price; as noted earlier, their leaders were killed or exiled and their properties were repurposed. On the other hand, those considered loyal stood a chance to

⁹ The isolate and weaken tactic is quite similar to *divide and control*, but the concepts are not identical. Isolating means quarantining adversaries, whereas dividing refers to splitting them into subgroups. Weakening implies diminishing the strength of adversaries, whereas controlling is the act of dominating them. Finally, the former tactic tends to precede the latter (e.g., economic sanctions and no-flight zones in 1990s preceded the U.S. invasion of Iraq in 2003).

better themselves and their subjects by becoming an integral part of Rome. *Isolate and weaken* tactics are currently used by nonmarket players to attack market players. Unions frequently pull employees off work and into picket lines in an effort to isolate, weaken, and pave the way for more favorable contract settlements, such as concessions in health and pension benefits, work rules, and compensation, which severely reduces firms' competitiveness. Consider, also, how some firms wage *proxy rivalry* by forcing their rivals to switch resources from productive uses to defensive expenditures (Markman *et al.*, 2009a). In the \$19 billion dietary supplement industry, large firms used nonmarket players, such as trade groups and lobbyists, to tighten Food and Drug Administration standards on the manufacturing, packaging, and labeling of dietary supplements. As expected, the new standards imposed a significant economic burden on many of the smaller players, forcing them to either change product lines or go out of business.

The principle of isolating and weakening opponents is critical for organizational resilience and longevity; it reinforces the adage that once a firm gains dominance, it must take decisive action to defend its position (Greenwald and Kahn, 2005). To echo Peteraf (1993), a strong position poses *ex post* limits to competition. This nuance goes beyond the notion of static entry barriers, emphasizing a more dynamic approach: firms segment rivals according to threat and enmity levels—neutralizing or co-opting the more benign players and taking stronger action to defeat the more hostile adversaries.

Isolate and weaken tactics also aim to discover vulnerability points that, once exploited effectively, can bring about new industry logic while reducing rivals' ability to fight back. Once Rome identified its enemies' Achilles' heel, it rapidly marshaled resources to attack them at those points. In a similar vein, in the mid 1990s, commercial airlines began to use the Internet to interface directly with customers, thus isolating and weakening travel agents. Once the number of online orders reached a critical mass, Delta Airlines surprised travel agents by slashing commissions, from 10 percent to a flat \$50, and then to \$35 per ticket. Other players (not only airlines) swiftly emulated Delta's move and gradually declining commissions threatened intermediaries' longevity. These intermediaries had miscalculated the extent of their isolation and the degree to which the

Internet had accelerated new industry logic that favors service creators (cf. Clemons and Santamaria, 2002; Evans and Wurster, 2000). Likewise, in the long-distance telephone market of the early 1980s, MCI exploited AT&T's vulnerability—aging copper cable technology—when it deployed wireless microwave technology and laid higher-capacity fiber optic lines. MCI also lodged and won litigation that forced AT&T to grant other carriers access to its circuits, thus enabling MCI to access AT&T's customers. Finally, MCI attacked AT&T in less-defended geographical markets, where initial successes provided the capital for further expansion. We now know that the strong isolate and weaken tactics have accelerated MCI's growth, but its weak governance strategy compromised its resilience. As expected, isolate and weaken tactics are particularly prevalent among NE- and NW-quadrant inhabitants.

Forward outposts

Rome also used colonies, their *forward outposts*, to boost its governance in new territories. As noted earlier, the Romans placed their colonies in strategic locations—shores, ports, transportation arteries, and overpasses with significant military and political implications. Of course, companies do not establish colonies per se, but they do, similarly, set forward operations to extend their spheres of influence, save power, and capture or repurpose less costly resources. For example, firms set outposts in unprofitable market segments, as Microsoft did with its stakes in MSN and MSNBC (D'Aveni, 1999, 2004). Such moves dilute economies of scale and, hence, do not help leverage core competencies, but they do reveal deeper tactical intents—the establishment and sustenance of balance of power in an industry, and the deterrence of competitors. Johnson & Johnson (J&J) and P&G hold outposts in their respective stronghold bases or core markets (D'Aveni, 2004). By setting forward positions in rivals' markets, multimarket firms engender and sustain mutual forbearance (Markman *et al.*, 2009a). For example, rather than fighting each other on multiple fronts, J&J has focused on medical equipment and hospital supplies while P&G has focused on the consumer product market. This market partitioning allows P&G to compete more effectively with Unilever while saving J&J's power (D'Aveni, 2004). While Rome set colonies

in geographical locations, firms choose to set forward outposts—workflows, R&D facilities, and other value-creating operations—in those strategic locations where they will be most effective. Off-shoring (i.e., setting business operations in distant locations) saves power; when done correctly, it achieves better use of resources and capabilities, and more agile and reflexive value chains, thus enhancing organizational resilience.

Of course, expansions—for example, internationalization, M&A, joint ventures, and so forth—bring new vulnerabilities, complexity (Vermeulen and Barkema, 2002), and confidence traps (Zollo, 2007). To strengthen their resilience and prolong their longevity, then, firms must learn how to detach links in their value chain and how to select the most suitable sites for certain activities; they must also develop competencies that will enable them to manage the complexity of long-distance governance, and capabilities to decouple operations while they accomplish tasks with no loss in quality and reliability. Failure to use these tactics has weakened global automakers. The Big Three U.S. automakers started off-shoring almost two decades ago, but the percentage of parts sourced from low-cost economies still remains in the single digits (e.g., fewer than five percent of all their R&D is carried out in the developing countries). Contrast this level of forward outposts with that of APC, a Rhode Island company that makes cooling and surge protection devices. Most APC customers are in the United States and Europe, its home base, but more than 85 percent of the company's products are manufactured in the Philippines and India. Of course, power protection devices and vehicles are not quite comparable, but well-leveraged forward outposts entail more than the 'usual suspects'—modularized, customer-facing activities (e.g., sales, accounting, diagnostics, and tech support). High-impact forward outposts embrace off-shoring of major, back-office processes, and even legacy operations (e.g., R&D and other back-office activities), as practiced by Microsoft, Intel, Motorola, Google, Cisco, IBM, HP, and many others.

Maintaining positions in peripheral markets and extending spheres of influence can provide firms with early warning signs about market dynamics, thus increasing their shock-absorbing capacity against decline. Unlike core markets, which are critical for firm longevity, small outposts and niche positions have limited economic utility, so

they are expendable buffer zones (D'Aveni, 2004). Some of these outposts might become critical market areas in the future, so from an option-theory perspective, they provide hedges against market shifts—even without specific rivals or offerings in mind. Because these outposts are located in rivals' territories, they are particularly useful for reinforcing mutual forbearance, but they can also function as offensive, front-line positions to challenge a rival's core (Markman *et al.*, 2009a). To borrow from D'Aveni (2004), Microsoft's diverse forward outposts counter a slew of rivals in the market for personal digital assistants (PDAs), handheld devices, gaming systems (Xbox), and other consumer products. Microsoft is unlikely to displace all players or dominate each of these markets, but its outposts deter and weaken would-be rivals, thus enhancing its resilience.

As with the isolate and weaken tactics, the forward outposts are particularly widespread among NE- and NW-quadrant inhabitants; they are less practical and hence uncommon among SE- and SW-quadrant inhabitants.

DISCUSSION

This research explains how organizations attain and sustain their resilience to prolong their longevity. Using the case of the Republic of Rome and investigating its history, we provide a deeper understanding of two generic strategies and four corresponding tactics, which, *ex nihilo* as it were, formed the building blocks for Rome's legacy as one of the most resilient organizational systems in world history. Broadly, our research offers several contributions. First, it calls attention to capture and governance as generic strategies that must be fused synchronously and recursively to shape a firm's growth and longevity. Second, it provides insights into why and when different permutations of *capture-governance strategies* may yield varying levels of resilience. Third, the research stresses that *capture-governance strategies* are essential but insufficient, as they require four supporting tactics—saving power, maintaining a stronghold base, isolating and weakening adversaries, and creating forward outposts—if organizational resilience is to be sustained. Finally, our study offers an internally consistent, system-wide perspective that cascades abstract concepts into (i) tangible and concrete actions firms take to

prolong their longevity, and; (ii) measurable constructs that scholars can study to advance knowledge on resilience. In so doing, we not only shed light on competitive dynamics and interfirm rivalry but we also expand the vistas and explain why, how, and with what consequences the combination of two generic strategies and four tactics enables organizational resilience.

Some critics might worry that each construct we featured, by itself, is not overly novel. We agree. What is quite novel, useful, and nonobvious, however, are (i) the system-wide view of the interactions between the generic strategies and the supporting tactics; and (ii) the articulation of the conditions under which the strategies and tactics would be most critical for resilience. To use an analogy, years before resource-based view (RBV) was formalized as a useful theory, resource attributes (e.g., valuable, rare, inimitable, and non-substitutable) were quite ‘obvious’ and not too novel. When, however, scholars began to specify how *together* these resources yield competitive advantage, they made substantial contributions to our field. Similarly, by itself, the bargaining power of customers is neither a novel nor unique concept; in fact, the origin of the construct appears even before the early framing of resource-dependence theory (Pfeffer, 1982; Pfeffer and Salancik, 1978; Salancik, 1979). Yet, when Michael Porter introduced the five forces framework for analyzing industry structure and business strategy in the 1980s, it became a powerful conceptual tool. We are not claiming that our contribution is equal to that of RBV or the five forces framework; far from it. We simply point out that conceptual clarity develops from appreciating how seemingly ‘trivial’ or ‘unrelated’ constructs are actually connected; in our case, how generic strategies and specific tactics interlace to improve organizational resilience.¹⁰

Acknowledging the different permutations of capture-governance strategies also counteracts a prevailing assumption that growth and dominance are the sole or primary drivers of resilience. In fact, the capture-governance matrix shows that firms that pursue governance strategies *without* capture strategies can actually endure for a long time, albeit in the shadow of bigger and stronger players. Given the strong bias toward either fast or steady growth (respectively, NW and NE quadrants), this is perhaps the most counterintuitive insight of this

matrix. In addition, because of its attention to a wider range of tactics and to their synchronous interactions with two generic strategies, the matrix explains why some organizations become increasingly resilient whereas others become progressively more vulnerable. This demonstrates that building a repertoire of strategy-tactic combinations is critical for realizing the full potential of organizational resilience. The topic is conceptually interesting and practically useful because it offers a system-based theory as to why and when resilience is bound to increase or decrease.

As with system thinking, the case of Rome details the emergence of complementary strategies and reinforcing tactics that served the Romans for hundreds of years, and made resilience more predictable, specifiable, and repeatable. In a sense, our framework shows how a complex, human-made system can maintain continuity and cultivate resilience even in the face of severe jolts. This contributes to research on ambidextrous organizations, which points out that firms can thrive when they muster and master the skills to pursue differing strategic orientations (Chen and Katila, 2008; March, 1991; Tushman and O'Reilly, 1996, 2004). Rome's ambidexterity—how it utilized four tactics to sharpen its capture and governance strategies—created a resilient yet reflexive organization. We stress that these strategies and tactics made Rome highly reflexive because, as history shows, organizational reflexivity enforces industry logic that compels others to perpetually react or adapt to such imposing moves.

While the concept of resilience is not new, the system view, the links among the strategies and tactics, and their specificity are novel, useful, and nonobvious. Collectively, they constitute the analytics by which executives and scholars can assess complex rivalrous situations, and make effective decisions about growth and longevity. Not only does the case of Rome tell a cohesive story, it actually injects a dynamic impetus to earlier frameworks and provides a more holistic and nuanced perspective of resilience. Further, the focus on micromechanisms, longevity, and the applicability to large enterprises *as well as* small players departs from earlier work, which focuses on competitive advantage and is primarily useful for larger, dominant players who seek market supremacy (D'Aveni *et al.*, 2001). Our system-wide view explains why incumbents who appear to grow at a nice clip may suddenly stall and even decline; such reversals are

¹⁰ We thank an anonymous reviewer for raising this issue.

especially acute when firms mismanage the intersections of and interactions between strategies and tactics.

Drawing lessons from Rome's past created a strategy-tactic framework that is applicable to firms today. Consider, for instance, how companies that use the same suppliers, specialized labor, and distribution channels co-locate, agglomerate, and form economies-of-scale clusters. In Monterrey, Mexico, an appliance cluster includes forward outposts of many large foreign firms—Whirlpool, Carrier, Criotec, Hussman, IMPCO Technologies, LG Electronics, Mabe, York—and over 200 small, local players. Players who co-locate their forward outposts in a cluster save power; they buy materials jointly, ship and transport together, share labor and support services, and increase their capacity without bearing the costs of building independent factories and extended value networks. Because forward outposts in a cluster also facilitate the exchange of information and collaboration, they can simplify, de-risk, and accelerate business functions. Commercial outposts also reduce uncertainty about environmental shifts and opponents' intentions and capabilities. These are anecdotal examples, but they are consistent with Rome's placement of forward outposts to enhance its ability to enter, govern, and expand territories that initially were beyond its reach.

Limitations and future research

As with all research, here too there are several limitations, and hence opportunities, for future research. First, case-based research can limit broad theoretical inferences. This limitation notwithstanding, Siggelkow (2007:20) notes that 'it is often desirable to choose a particular organization precisely because it is very special in the sense of allowing one to gain certain insights that other organizations would not be able to provide.' This view is not unusual (Eisenhardt and Graebner, 2007; Suddaby, 2006). While Rome represents a single case study, its diverse, long, and rich historical data, coupled with an inductive methodology begins to demystify the critical drivers of organizational resilience.

Second, the dispersed digital infrastructures and the capability to unbundle business activities suggest that firms now govern their activities in ways that were unfathomable just a few decades ago (and certainly unknowable to Rome). Consider

the following 'recent' changes. Advances in transportation and communication infrastructures in the 1900s—railroads, telegraph, and eventually the telephone—facilitated the rise of multidivisional enterprises (e.g., General Electric, DuPont, General Motors, and AT&T). At that time, a large firm organized by integrating much of its activities internally—*product and service development, customer and employee relations, and the like*. Today, many firms organize by unbundling even critical activities to specialists; they farm out the chores of logistics to FedEx and UPS; call centers to Convergys; contract manufacturing to Flextronics; and innovation to InnoCentive. Changes in how firms organize—including variations in their business models—do not diminish the lessons from Rome's history, because activities and functions are guided by fit-enhancing strategy-tactic permutations (Yin and Zajac, 2004). Still, given the conceptual proximity between strategies, tactics, and how firms organize, future research could assess how these changes influence organizational resilience. Similarly, our study focuses on resilience at the firm level, but future research might explore resilience as it applies to entire value networks.

A third opportunity for future research stems from the fluidity of competitive landscapes wherein each supporting tactic might 'merge' with another. As we noted upfront, neither capture and governance strategies nor their supporting tactics should be considered in isolation because they all influence and are shaped by market and nonmarket conditions—creating a continuous, fluctuating flow of strategy-tactic permutations. Future research, then, might refine our framework by studying more specific fit-enhancing, strategy-tactic permutations and whether the lessons from Rome continue to hold even in fast-paced, complex, fluid, and more uncertain business environments.

Despite the oft-cited analogies between nations and businesses, the marketplace is not, after all, a battlefield, and even the best lessons from history are not to be applied indiscriminately to business contexts. That said, our strategy-tactic framework is relevant to businesses precisely because it articulates specific actions firms can take to enhance their resilience. For instance, the lessons of outflanking rivals rather than overpowering them, targeting their weaknesses, rendering them incapable of retaliation, and capturing and repurposing their resources are useful for all

firms wishing to increase their resilience with minimal deployment of their own resources. While the lesson for small players and entrepreneurs is also clear—that is, resilience and longevity through smallness—future research might explore whether larger, multibusiness corporations can increase their resilience by giving their business units greater autonomy.

Finally, organization's resilience is critically tied to issues of vulnerabilities. Because moves tend to elicit countermoves, managers and scholars should recognize that, as we improve our understanding of competitive dynamics and resilience, more players use the very same concepts and frameworks to set new rules of engagement, to unlevel the playing field, and to shape spheres of influence in their favor. And when firms allocate their resources to one area, perhaps in an effort to defend their position or expand outwardly, they usually face resource constriction—and increased vulnerability—elsewhere. We did not attend to issues of vulnerability in greater detail and did not address the problem of decline, but we suspect that these, too, would be fertile areas for future research.

CONCLUSION

The importance of organizational resilience is well documented in the literature; however, research has not converged on a unifying model that articulates what firms can do to extend their longevity. Though there is recognition that organizations must change and adapt in order to survive and thrive, and there is an appreciation that generic strategies and supporting tactics are important in general, this is the first effort to gain an in-depth understanding about the ways strategies and tactics interact and reinforce each other to enhance resilience and longevity. Our in-depth analysis of the history of Rome reveals the power of both capture and governance strategies and tactics—saving power, maintaining a stronghold base, isolating and weakening adversaries, and creating forward outposts—that shape a complex, yet highly resilient human-made system. While each of the strategies and supporting tactics is a valuable concept on its own, the utility for organizational longevity is most fully realized when they are all linked together under a system view. And just as

strategies are insufficient, and, in fact, counterproductive when stripped of their supporting tactics, so are tactics in the absence of overarching strategies. Given that market turbulence, economic volatility, and the costs of disbandment are increasing, we suspect that the quest for even a more nuanced framework of organizational resilience will continue as well.

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REFERENCES

- Aghion P, Tirole J. 1997. Formal and real authority in organizations. *Journal of Political Economy* **105**: 1–27.
- Aldrich H. 1999. *Organizations Evolving*. Sage: London, U.K.
- Aupperle KE. 1996. Spontaneous organizational reconfiguration: a historical example based on Xenophon's *Anabasis*. *Organization Science* **7**: 445–460.
- Bellak C. 2005. Adjustment strategies of multinational enterprises to changing national competitiveness. *International Journal of the Economics of Business* **12**: 139–162.
- Birkinshaw J, Hamel G, Mol MJ. 2008. Management innovation. *Academy of Management Review* **33**: 825–845.
- Burgelman RA, Grove AS. 2007. Let chaos reign, then rein in chaos—repeatedly: managing strategic dynamics for corporate longevity. *Strategic Management Journal*, **28**: 965–979.
- Calori R, Lubatkin M, Very P, Veiga JF. 1997. Modelling the origins of nationally-bound administrative heritages: a historical institutional analysis of French and British firms. *Organization Science* **8**: 681–696.
- Carroll GR, Swaminathan A. 2000. Why the microbrewery movement? Organizational dynamics of resource partitioning in the U. S. brewing industry. *American Journal of Sociology* **106**: 715–762.

- Carmeli A, Schaubroeck J. 2008. Organisational crisis-preparedness: The importance of learning from failures. *Long Range Planning* **41**: 177–196.
- Carmeli A & Sheaffer Z. 2008. How Learning Leadership and Organizational Learning from Failures Enhance Perceived Organizational Capacity to Adapt to the Task Environment. *Journal of Applied Behavioral Science* **44**: 468–489.
- Chen EL, Katila R. 2008. Rival interpretations of balancing exploration and exploitation: simultaneous or sequential? In *Handbook on Technology and Innovation Management*, Shane S (ed). Wiley: New York; 197–214.
- Clausewitz CV. 1827/1976. *On War*. Howard M, Paret P (trans./eds). Princeton University Press: Princeton, NJ.
- Clemons EK, Santamaria JA. 2002. Maneuver warfare: can modern military strategy lead you to victory? *Harvard Business Review* **80**: 56–65.
- Collins JC. 2001. *Good to Great: Why Some Companies Make the Leap...and Others Don't*. HarperCollins: New York.
- Collins JC, Porras JJ. 1994. *Built to Last*. HarperBusiness: New York.
- Cornell TJ. 1995. *The Beginnings of Rome: Italy and Rome from the Bronze Age to the Punic Wars (c. 1000–264 BC)*. Routledge: London, U.K.
- D'Aveni RA. 1999. Strategic supremacy through disruption and dominance. *MIT Sloan Management Review* **40**(3): 127–135.
- D'Aveni RA. 2004. Corporate spheres of influence. *MIT Sloan Management Review* **45**(4): 38–46.
- D'Aveni RA, Gunther R, Cole J. 2001. *Strategic Supremacy: How Industry Leaders Create Growth, Wealth, and Power through Spheres of Influence*. Free Press: New York.
- Eisenhardt KM. 1989. Building theories from case study research. *Academy of Management Review* **14**(4): 532–550.
- Eisenhardt KM, Graebner ME. 2007. Theory building from cases: opportunities and challenges. *Academy of Management Journal* **50**: 25–32.
- Evans P, Wurster TS. 2000. *Blown to Bits. The Boston Consulting Group, Inc.* Harvard Business School Press: Boston, MA.
- Galbraith JK. 1977. *The Age of Uncertainty*. Houghton Mifflin: Boston, MA.
- Ghemawat P. 1991. *Commitment: The Dynamic of Strategy*. Free Press: New York.
- Gibbon E. 1778/1994. *The History of the Decline and Fall of the Roman Empire*. Penguin Books: New York.
- Greenwald B, Kahn J. 2005. *Competition Demystified: A Radically Simplified Approach to Business Strategy*. Portfolio: New York.
- Greiner LE. 1972. Evolution and revolution as organizations growth. *Harvard Business Review* **50**: 37–46.
- Guadalupe M, Wulf JM. 2008. *The Flattening Firm and Product Market Competition: The Effect of Trade Liberalization*. Working Paper 09–067. Harvard Business School, Boston, MA. Available at: <http://www.hbs.edu/research/pdf/09-067.pdf>. (28 August 2009).
- Hamel G, Välikangas L. 2003. The quest for resilience. *Harvard Business Review* **81**: (September): 52–63.
- Heurgon J. 1973. *The Rise of Rome to 264 B.C.* Willis J (trans). University of California Press: Berkeley, CA.
- Kennedy P. 1987. *The Rise and Fall of the Great Powers: Economic Change and Military Conflict from 1500 to 2000*. Random House: New York.
- Klein KE. 2002. The bottom line on startup failures. *BusinessWeek Online*. 4 March. Available at: http://www.businessweek.com/smallbiz/content/mar2002/sb2002034_8796.htm. (28 August 2009).
- Krishnan HA, Miller A, Judge WQ. 1997. Diversification and top management team complementarity: is performance improved by merging similar or dissimilar teams? *Strategic Management Journal* **18**(5): 361–374.
- Lawrence P, Lorsch J. 1967. Differentiation and integration in complex organizations. *Administrative Science Quarterly* **12**: 1–30.
- Locke EA. 2007. The case for inductive theory building. *Journal of Management* **33**: 867–890.
- Lovallo D, Viguerie P, Uhlener R, Horn J. 2007. Deals without delusions. *Harvard Business Review* **85**: 92–99.
- Lubatkin MH, Lane PJ, Collin S-O, Very P. 2005. Origins of corporate governance in the USA, Sweden and France. *Organization Studies* **26**: 867–888.
- Luttwak EN. 1976. *The Grand Strategy of the Roman Empire*. Johns Hopkins University Press: Baltimore, MD.
- March JG. 1991. Exploration and exploitation in organizational learning. *Organization Science* **2**: 71–87.
- Markman, GD, Gianiodis PT, Buchholtz AK. 2009a. Factor-market rivalry. *Academy of Management Review* **34**: 423–441.
- Markman GD, Gianiodis PT, Phan PH. 2009b. Supply-side innovation and technology commercialization. *Journal of Management Studies* **46**: 625–649.
- Morris JR. 2009. Life and death of businesses: a review of research on firm mortality. *Journal of Business Valuation and Economic Loss Analysis* **4**(1): Article 3.
- Nelson RR. 1996. The evolution of comparative or competitive advantage: a preliminary report on a study. *Industrial and Corporate Change* **5**: 597–617.
- Nicolet C. 1991. *Space, Geography, and Politics in the Early Roman Empire*. University of Michigan Press: Ann Arbor, MI.
- Osterman P. 1996. *Broken Ladders: Managerial Careers in The New Economy*. Oxford University Press: New York.
- Paret P. 1965. Clausewitz: a bibliographical survey. *World Politics* **17**: 272–285.
- Peikoff L. 2007. Induction in physics and philosophy (taped lectures). Available at www.aynrandbookstore.com (28 August 2009).
- Peteraf MA. 1993. The cornerstones of competitive advantage: a resource-based view. *Strategic Management Journal* **14**(3): 179–191.

- Peters T, Waterman RH. 1982. *In Search of Excellence: Lessons from America's Best-run Companies*. HarperCollins: New York.
- Pfeffer J. 1982. *Organizations and Organization Theory*. Pitman: Marshfield, MA.
- Pfeffer J, Salancik GR. 1978. *The External Control of Organizations: A Resource Dependence Perspective*. Harper & Row: New York.
- Porter ME. 1990. *The Competitive Advantage of Nations*. Free Press: New York.
- Porter ME. 1996. What is strategy? *Harvard Business Review* **74**: 61–78.
- Prahalad CK, Hamel G. 1990. The core competence of the corporation. *Harvard Business Review* **68**: 79–91.
- Rajan RG, Wulf J. 2006. The flattening firm: evidence on the changing nature of firm hierarchies from panel data. *Review of Economics and Statistics* **88**: 759–773.
- Rothaermel FT, Hill CWL. 2005. Technological discontinuities and complementary assets: a longitudinal study of industry and firm performance. *Organization Science* **16**(1): 52–70.
- Salancik GR. 1979. Interorganizational dependence and responsiveness to affirmative action: the case of women and defense contractors. *Academy of Management Journal* **22**(2): 375–394.
- Salmon ET. 1967. *Saminite and the Samnites*. Cambridge University Press: London, U.K.
- Salmon ET. 1969. *Roman Colonization under the Republic*. Thames & Hudson Press: London, U.K.
- Scherer FM. 1996. *Industry Structure, Strategy, and Public Policy*. HarperCollins College: New York.
- Sharfman MP, Dean JW. 1997. Flexibility in strategic decision making: informational and ideological perspectives. *Journal of Management Studies* **34**: 191–217.
- Shatzman I. 1990. *A History of the Roman Republic* [Toldot ha-republikah ha-Romit (Toldot ha-olam ha-klasi) (Hebrew edn.)] Magnes: Jerusalem, Israel.
- Siggelkow N. 2007. Persuasion with case studies. *Academy of Management Journal* **50**: 20–24.
- Staw BM, Sandelands LE, Dutton JE. 1981. Threat rigidity effects in organizational behavior: a multilevel analysis. *Administrative Science Quarterly* **26**(4): 501–524.
- Stinchcombe AL. 1965. Social structure and organizations. In *Handbook of Organizations*, Marsh JG (ed). Rand-McNally: Chicago, IL; 142–193.
- Suddaby R. 2006. What grounded theory is not. *Academy of Management Journal* **49**: 633–642.
- Sutcliffe KM, Vogus TJ. 2003. Organizing for resilience. In *Positive Organizational Scholarship: Foundations of a New Discipline*, Cameron KS, Dutton JE, Quinn RE (eds). Berrett-Koehler: San Francisco, CA; 94–121.
- Tuchman BW. 1985. *The March of Folly: From Troy to Vietnam*. Knopf: New York.
- Tushman ML, O'Reilly CA. 1996. Ambidextrous organizations: managing evolutionary and revolutionary change. *California Management Review* **38**: 8–30.
- Tushman ML, O'Reilly CA. 2004. The ambidextrous organization. *Harvard Business Review* **82**: 74–81.
- Vermeulen F, Barkema H. 2002. Pace, rhythm, and scope: process dependence in building a profitable multinational corporation. *Strategic Management Journal* **23**(7): 637–653.
- Whittington R, Pettigrew A, Peck S, Fenton E, Conyon M. 1999. Change and complementarities in the new competitive landscape: a European panel study, 1992–1996. *Organization Science* **10**: 583–600.
- Yin X, Zajac EJ. 2004. The strategy/governance structure fit relationship: theory and evidence in franchising arrangements. *Strategic Management Journal* **25**(4): 365–383.
- Zollo M. 2007. Superstitious learning revisited: outcome ambiguity and confidence traps in corporate acquisitions. Working paper, INSEAD: Fontainebleau, France.
- Zook C. 2004. *Beyond the Core: Expand Your Market Without Abandoning Your Roots*. Harvard Business School Press: Boston, MA.