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McKinsey on Finance

20th anniversary edition

Reflections on sustainable, inclusive growth

Number 80

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McKinsey on Finance

Welcome to a very special edition of *McKinsey on Finance*: our 20th-anniversary edition—and issue number 80.

This edition is largely a compendium of *McKinsey on Finance* articles that we have published over the past two decades. We chose these articles not just because they have been among our most read and shared pieces and help reflect the breadth and depth of what we have been addressing, but also because we believe they are particularly relevant for readers today. The compendium articles are presented in five categories: (1) fundamentals of strategy and value creation, (2) strategic combinations and divestitures, (3) ESG, (4) CFOs and the evolving finance function, and (5) debiasing investment and strategy decisions. The articles within each compendium category are grouped by themes, not chronologically.

Of course, seasoned CFOs and company leaders—and those who aspire to leadership, or simply love finance—know that challenges neither neatly arrange themselves into categories nor wait to present themselves one at a time. If only it were that simple! They arrive together and affect, and are affected by, one another.

There are, therefore, important lessons we can draw from a higher-level view. Three of the most important takeaways are described in the opening article, "Reflections on 20 years of *McKinsey on Finance*—and three challenges ahead," written for this edition by Michael Birshan and Ishaan Seth (who colead McKinsey's Strategy & Corporate Finance Practice globally) and Tim Koller (the founder of *McKinsey on Finance*, a member of the *McKinsey on Finance* board since its inception, and a core leader of the firm's Strategy & Corporate Finance Practice). There are also clear patterns we can observe over the long term (though they are sometimes less apparent in the immediate, shorter term) about the market's ability to deliver real returns over generations. We present those findings in the featured exhibit and brief essay on our closing pages, "Looking back."

Today, the sine qua non of effective free markets is sustainable, inclusive growth. Markets, after all, aren't essentially trading floors or digital algorithms. Rather, markets are the amalgamation of what individuals, each with their own immeasurable worth, value now and tomorrow. A robust, sustainable market can thrive only if more and more people take part: cooperating, competing, investing, creating, and solving in a responsible way, for the long term, to provide solutions that other people value.

So here's to the next 20 years: may we continue to solve together.

—The Editors

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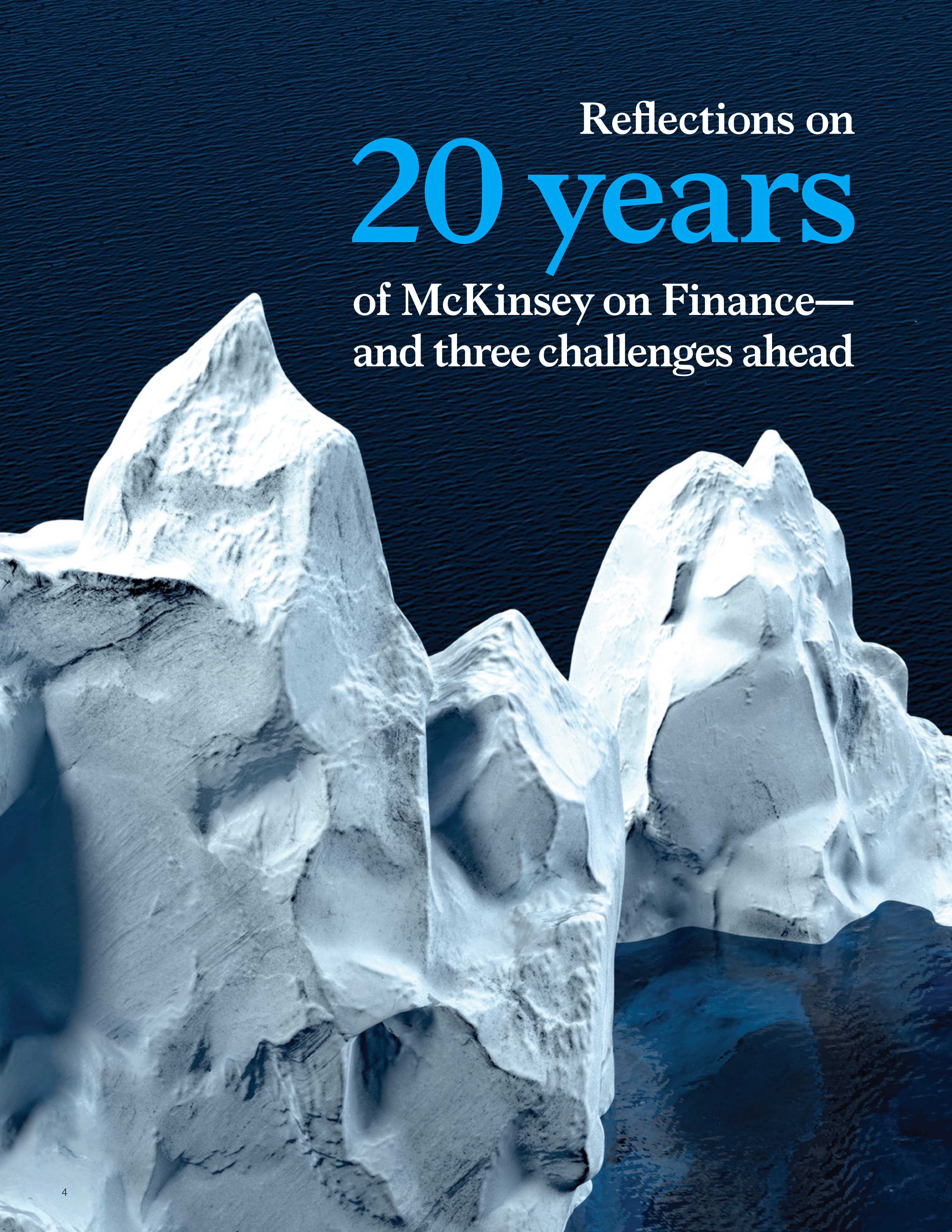
Reflections on 20 years of McKinsey on Finance—and three challenges ahead



Revolutionary innovations, brilliant ideas, and climate imperatives will change everything—except the rules of finance and economics.

by Michael Birshan, Tim Koller, and Ishaan Seth

This is the 20th anniversary of *McKinsey on Finance*—and the 80th issue. We released our first in the summer of 2001, when companies were still reeling from the dot-com crash—and only a few weeks before the world-shattering events of 9/11.[1]

In the decades since, we've seen wars, financial crises, a global pandemic, a substantial decline in trust for some major institutions, and a heightened urgency about existential climate change. We've witnessed technological advances on an almost incomprehensible scale, millions of people lifted out of poverty, the dramatic rise of Asia, and stunning medical breakthroughs.

What will the next 20 years bring? One ignores the likelihood of immense changes at one's peril. We don't have a crystal ball. But we do have a compass: long-term value creation.[2] We've studied, been challenged about, sharpened our thinking on, and ultimately reinforced our appreciation of core economic and financial principles, particularly as they apply through very uncertain times.

Winston Churchill famously observed that "the longer you can look back, the farther you can look forward." We might add, "and the more broadly you can see." There are certainly a great many more challenges worth considering. In this article, we address three of the most pressing challenges for large companies: massive innovation, good ideas taken too far, and competitive advantage in the net-zero transition.

[1] *McKinsey on Finance*, Summer 2001, Number 1.
[2] Pursuing long-term value creation requires companies to consider implications for a wide range of stakeholders and to be proactive in investing for sustainable, inclusive growth. See Marc Goedhart, Tim Koller, and David Wessels, "The real business of business," McKinsey, March 1, 2015.

1 Investing in innovation: A lesson in creative destruction

The past 20 years have seen tremendous innovation in the real economy. Advances have been profound across sectors—and even created new ones. When we launched *McKinsey on Finance*, Alphabet, Amazon, Netflix, and Tencent were in their early days. Apple had not yet introduced the iPod, let alone the iPhone. Airbnb and Meta did not exist. Tesla was known, if at all, as a Serbian engineer.

In fact, well beyond the tech sector, innovations have added years to life, and life to years—and unleashed tremendous value. Life sciences companies continue to conceive of and introduce lifesaving medicines and therapies, sometimes at almost inconceivable speeds (prominently so in the development of COVID-19 vaccines and therapies). In consumer packaged goods, to take food and beverages as just one example, we've seen healthier foods and more consumer choice, including new and popular waters, iced teas, and alcoholic beverages. Retailing has been upended by e-commerce. Automobiles are not only going electric but also may someday be smart enough to drive themselves.

From an economy-wide perspective, it doesn't matter where the innovation comes from; we all benefit. But from the perspective of big companies and their investors, it's disappointing that so much innovation has come from outside company walls. Some large companies do follow through on building new businesses. Yet our colleagues have found that while 84 percent of CEOs believe that innovation is critical to growth, only 6 percent of CEOs are satisfied with their company's innovation performance.

Loss aversion, bureaucracy, and organizational inertia can often make large corporations hit the brake on innovation. While bigger companies do create incentives for progress by purchasing innovations from smaller companies, this may be an inefficient use of capital: shareholders of large corporations can sometimes pay more for innovation than they would if they had funded it at the source. Shareholders are sometimes left holding the bag as far more innovative companies leave traditional ones behind.

While 84 percent of CEOs believe that innovation is critical to growth, only 6 percent of CEOs are satisfied with their company's innovation performance.

What has happened over the past two decades is a textbook illustration of Joseph Schumpeter's creative destruction: if a business doesn't disrupt itself, a more innovative business will disrupt it instead. We believe that large companies *can* be innovative, but only if they are willing to encourage risk taking and stop worrying so much about quarterly earnings. The future will not be decided in a quarter. The smartest investors know this, and our research shows these investors are the ones who drive share prices in the long term.[3] Although they pay attention to quarterly earnings for clues about a company's future prospects, they don't want companies to meet quarterly earnings at the expense of long-term health and growth.

There is no evidence that companies which consistently meet or beat consensus estimates are valued more highly than companies which fluctuate around the consensus. On the contrary: companies that play for the short term are more likely to lose ground over the longer term or fail entirely.[4] Indeed, sustained growth without sufficient investment in innovation is incredibly hard to pull off. One recent study from our colleagues found that only about one in ten companies achieved higher revenue growth and profitability than their peers across a given decade-long cycle of economic downturn and prosperity.

2 Avoiding systemwide failure: When good ideas go bad

Innovation has, by and large, been a tremendous benefit for society, even though some industries have been adversely affected. External tragedies, on the other hand—as we have seen, for example, in the COVID-19 pandemic and the war in Ukraine—have the power to disrupt economies. But many sector- and economy-wide failures have been self-inflicted.

Poor economic outcomes have directly followed when good or well-intentioned business ideas were taken too far. In the past 20 years, three ideas in particular that were good in principle—until they clashed with the fundamentals of finance and economics—were responsible for major market losses and economic recessions.

The first idea was to move rapidly in a "new economy": if companies can catch an early technological wave, positive results will follow. There is no doubt that being an early mover can be a very good idea and can confer benefits such as network effects. But merely taking up space on a new frontier does not necessarily mean that a company can sustain (or even achieve) attractive returns on its cost of capital. It certainly does not mean that traditional value-creating principles will no longer apply or that the economics will eventually come through.

In the late 19th century, for example, the United States experienced a railroad boom; tens of thousands of miles of track were laid, often with obvious and significant redundancies. Investors and entrepreneurs put growth in this new technology first: Why miss out? It was a period of fund

[3] See, for example, "Where companies with a long-term view outperform their peers," McKinsey Global Institute, February 8, 2017; Dominic Barton and Mark Wiseman, "Investing for the long term," McKinsey, December 1, 2014; and Dominic Barton and Mark Wiseman, "Focusing capital on the long term," McKinsey, December 1, 2013.

[4] See, for example, Dominic Barton, "Capitalism for the long term," *Harvard Business Review*, March 1, 2011; Ariel Babcock, Sarah Keohane Williamson, and Tim Koller, "How executives can help sustain value creation for the long term," McKinsey, July 22, 2021; and Dominic Barton, James Manyika, and Sarah Keohane Williamson, "Finally, evidence that managing for the long term pays off," *Harvard Business Review*, updated February 19, 2017.

Merely taking up space on a new frontier does not necessarily mean that a company can sustain (or even achieve) attractive returns on its cost of capital.

and fund, build and build—until it all went bust in 1894, ushering in a major economic depression. Of course, the bust did not result in the end of railroads. On the contrary: visionary thinkers went on to run the smarter, more rationalized railways that unleashed massive growth across the economy in the early 20th century. These thinkers understood the railroad business, recognized the levers of value creation, and could more clearly see and capture the possibilities.

History repeats, or at least rhymes, as the internet and the dot-com bubble show. We remember the mantra that the World Wide Web would "change everything." As the market in the late 1990s and early 2000s became increasingly frothy, very smart people confidently asserted that the rules of economics and finance had changed. The popular 1999 book *Information Rules* by Carl Shapiro and Hal Varian describes how some companies can earn increasing returns to scale. As these companies get bigger, the book explains, they earn higher margins and returns on capital. The authors also specifically described how rare it is for companies to realize efficiencies in this way.

But new-economy proponents—some may not have read the book at all—touted a winner-take-all world where staking out a place in the ether was all that mattered. This simplistic view imagined that the laws of economics were suspended. The zeitgeist, fueled by sky-high valuations, led some companies to create and expand dot-com businesses at all costs. Many investors and managers lost sight of the fundamentals.[5] This was a bubble doomed to pop.

After it did, the internet, like railroads more than a century before, became a source of enormous, and far more enduring, value creation—and an enabler of broader economic growth. Successful entrepreneurs did the hard, detail-oriented work of analyzing the specific circumstances in which enormous value creation was possible. These entrepreneurs created value-sustaining businesses, which generated returns far above their cost of capital.

[5] The lack of perfect liquidity in the capital markets can lead to distortions or bubbles. In particular, when naïve investors rush into certain stocks simply because they are the latest fad and everyone else is investing in them, they push up the price beyond intrinsic value. Further exacerbating this effect is the presence of "trading investors" who bet that the trend will continue and that when the stock plateaus and turns down to reasonable levels, they will exit their positions and lock in the profits before naïve or slow investors can. Finally, other institutional investors may buy shares because they worry about their tracking error versus the stock market indexes. It might be supposed that smart investors would step in and sell the shares short to bring the share price in line with fundamentals. But shorting is expensive, illiquid, and risky, so there often isn't enough of it to keep a share price in line with intrinsic value.

A second idea that can be taken too far is that size alone provides a competitive advantage. Of course, size matters—but only if size befits a company's business model. Regrettably, the idea that size is an end in itself has occurred across industries, geographies, and eras. One illustration of this is electric-power generation in the United States. In the late 1990s, as a number of states deregulated power generation, multiple US electric-utility companies spun off their power generation units so they could raise more capital and grow faster. They were spurred on by some who argued that the biggest power generators would create the most value. Some companies pursued more thoughtful strategies than others. But in their rush for size, several companies ended up with a diverse collection of power plants across the United States—and sometimes across the globe—with few strategic benefits (and a large pile of debt). The rush for size also contributed to overcapacity in the industry as a whole. Overcapacity and commodity price changes led to lower returns for power producers. Some large producers, especially those without coherent strategies and competitive advantages, as well as with high debt levels, ended up in bankruptcy.

A third idea that was good until taken too far—with significant repercussions for millions of people—was securitizing mortgage debt. Bundling individual mortgage loans, turning them into securities, and then selling the securities to investors was certainly innovative. But the practice was taken to such an extreme that it led to the financial crisis of 2008. Many have focused on what could have been done to mitigate the crisis once it started. History has shown, though, that most financial crises are caused by imbalances in the allocation of economic resources. Once the imbalances become too large, it can be exceptionally difficult to avert a collapse.

By 2005–06, a financial crisis was virtually inevitable. Banks, enabled by their ability to package and sell mortgage-backed securities, were lending too much money to too many people, who were buying too many houses. Mortgages, including a rising number of subprime mortgages, could be repaid only if property prices continued to rise at abnormal rates for an unsustainably long time. Also, when mortgage-backed bonds were first issued, the buyers were sophisticated investors who spent considerable effort analyzing the underlying portfolios. As the bonds became more popular, however, they were purchased by less sophisticated investors who did not do their own research; many relied on bond-rating agencies. These agencies were in competition with one another and were paid by the issuers of the mortgage-backed bonds. They were thus under tremendous pressure to give the bonds high credit ratings. Other investors relied on the fact that the mortgages were being pooled—normally, a way to mitigate risk. Bad mortgages, though, are still bad mortgages. Bundling them together, selling them to less diligent investors, and relying on home prices to rise forever reaped the whirlwind.

Of course, innovation can't come from "the same old ideas." Questions about how far is too far are bound to arise, at least initially. New theories are already shedding light on the disruptive potential of blockchain (including its use in cryptocurrencies) and the ways that businesses could be transformed in the metaverse. Another idea now in contention is the sustainability of low interest rates and the attendant risks of inflation. After the 2008 financial crisis, and again after the magnitude of the COVID-19 pandemic became clear, central banks pushed down interest rates through various mechanisms, including purchasing large amounts of government bonds. This has allowed governments to borrow vast sums of money at very low rates, which, not surprisingly, has led to a surge in spending and larger government deficits.

The question today is whether lower interest rates—even given the recent rise—will be the new normal, enabling governments to run larger deficits. One side argues that the world has changed: central banks can keep interest rates relatively low, so governments can keep borrowing to finance initiatives such as social spending and climate action. The other side argues that once government debt rises too high, it's almost impossible to contain inflation, especially when borrowing is facilitated by central banks printing money. Both ground their hypotheses in economics; the future will have the final say.

3 Competing under climate change: Capital is not enough

A third major development of the past 20 years is the sharpening awareness of climate change and the dramatic shifts this has brought to regulation, capital allocation, and consumer behavior. Climate change threatens the world. It creates enormous challenges—and tackling it opens up enormous opportunities. Across industries and sectors, climate change is a clarion call for innovation and for the reallocation of resources. Our colleagues at the McKinsey Global Institute estimate that to achieve net-zero emissions by 2050, $9.2 trillion in annual average spending on physical assets—$3.5 trillion more than today—would be required.[6]

Entrepreneurs and companies that seek to create value from less carbon-intensive businesses, however, will need a competitive advantage; simply having capital to invest or reallocate will not be enough to compete and win in a net-zero world. Today, private equity, venture capital, pension funds, and sovereign-wealth funds are investing billions of dollars in renewable energy, alternative

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[6] "The net-zero transition: What it would cost, what it could bring," McKinsey Global Institute, January 2022.

fuels, carbon capture, and new technological solutions. It is not a foregone conclusion that a company from a traditional industry will have the expertise, incentives, employee capabilities, and organizational agility to be in the vanguard in these fields. Companies that plan to compete in the net-zero transition must figure out how they can be the visionaries that best understand the new businesses, rather than be the followers that don't have a well-considered strategy or the ones who entirely ignore the imperative to change.

As the economy shifts from fossil fuels to renewables and other sources of energy, companies in sectors such as oil and gas, chemicals, and mining should think carefully about how to manage the decline of their traditional businesses. Moving away from their core businesses requires careful consideration of the impact for stakeholders and a thoughtful approach to navigating through challenging competitive forces. If, after frank consideration, companies determine that they cannot reinvest their excess cash flows in technologies in which they can have a competitive advantage, they can release that unused cash back to their investors. In that way, the money can flow to those who do have a competitive advantage in new value-creating low-carbon solutions.

The complexities and the possibilities of the net-zero transition are enormous. They are not enormous enough, however, to bend the laws of finance and economics. Forgetting core principles of competitive advantage and the need to earn returns above the cost of capital bodes ill for the sustainability of companies, the livelihoods of their employees, the investors (on behalf of millions of people) whose funds are at risk, and a multitude of constituencies worldwide.

It would be simplistic to say that enormous challenges lie before us, even when those challenges include developing innovation from within, comprehending new ideas, and navigating businesses through existential climate change. It is more correct to recognize that those challenges are already here. Fortunately, so too are the time-proven principles of finance and economics—including the need to pursue change relentlessly, the imperative to seek competitive advantage, and the foundational requirement to understand one's business in order to create value, societal as well as economic, from the opportunities for sustainable, inclusive growth.

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Fundamentals of strategy and value creation

Think back to the titans of industry in the late-19th and early-20th centuries in the United States, and you are likely to think of empire builders such as Cornelius Vanderbilt, Andrew Carnegie, and John D. Rockefeller. Also high on the list of the greatest tycoons during those years is Henrietta (Hetty) Howland Robinson Green.

Green built an immense fortune worth billions in today's dollars by shrewd investing. She zeroed in on cash flow, kept her nerve, stayed ahead of rivals, and profited immensely during downturns and crises, such as the Great Panic of 1907. Yet she didn't make her money by chasing bigness—at least not for bigness's sake. "There is a price on everything I have," she said. "When that price is offered, I sell."

Core principles of disciplined value creation—knowing an asset's intrinsic value, understanding a company's competitive advantage, and not fearing to take bold steps—continue to hold true. Companies that allocate and continually reallocate capital to areas in which they hold a competitive advantage demonstrably outperform companies that stand still. Businesses that aren't afraid to grow but understand that growth should never destroy value stand a better chance of creating more value for the long term. Their leaders are alert to broader business trends and strive to anticipate them. But they don't fall for flavors of the month, set about to build empires, or forget that companies that grow sustainably and earn returns above their cost of capital create the most value.

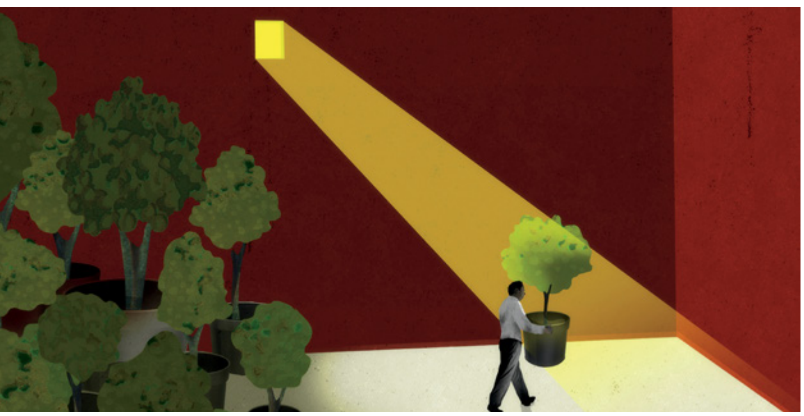
That's been proven across eras, from Hetty Green's time to our own. But then, fundamentals of strategy and finance have always been about the long term.

2012

How to put your money where your strategy is

Most companies allocate the same resources to the same business units year after year. That makes it difficult to create an effective corporate strategy and undermines performance. Here's how to overcome inertia.

by Stephen Hall, Dan Lovallo, and Reinier Musters



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Picture two global companies, each operating a range of different businesses. Company A allocates capital, talent, and research dollars consistently every year, making small changes but always following the same broad investment pattern. Company B continually evaluates the performance of business units, acquires and divests assets, and adjusts resource allocations based on each division's relative market opportunities. Over time, which company will be worth more?

If you guessed company B, you're right. Our research into corporate resource-allocation patterns finds that returns to shareholders are higher—and the risk of falling into bankruptcy or the hands of an acquirer lower—at companies where capital and other resources flow more readily from one business opportunity to another. In fact, after 15 years, company B will be worth an average of 40 percent more than company A.

We also found, though, that inertia reigns at the vast majority of companies—those that resemble company A. Therein lies a major disconnect between the aspirations of many corporate strategists to boldly jettison unattractive businesses or double down on exciting new opportunities, and the reality of how they invest capital, talent, and other scarce resources.

We're not suggesting that executives act as investment portfolio managers. That implies a search for stand-alone returns at any cost rather than purposeful decisions that enhance a corporation's overall long-term value and strategic coherence. But given the prevalence of stasis today, most organizations are a long way from the headlong pursuit of disconnected opportunities. Rather, many leaders face a stark choice: shift resources among their businesses to realize strategic goals or run the risk that the market will do it for them. As author and Kleiner Perkins Caufield & Byers partner Randy Komisar told us, "If corporations don't approach rebalancing as fiduciaries for long-term corporate value, their average life span will continue to decline as creative destruction gets the better of them."

Weighing the evidence

Every year for the past quarter century, US capital markets have issued about $85 billion of equity and $536 billion in associated corporate debt. During the same period, the amount of capital allocated or reallocated within multibusiness companies was approximately $640 billion annually—more than equity and corporate debt combined.[1] While most perceive markets as the primary means of directing capital and recycling assets across industries, companies with multiple businesses actually play a bigger role in allocating capital and other resources across a spectrum of economic opportunities.

To understand how effectively corporations are moving their resources, we reviewed the performance of more than 1,600 US companies between 1990 and 2005.[2] The results were striking. For one-third of the businesses in our sample, the amount of capital received in a given year was almost exactly that received the year before—the mean correlation was 0.99. For the economy as a whole, the mean correlation across all industries was 0.92. In fact, over the entire 15-year period, only one-third of companies shifted more than 40 percent of their capital resources among their businesses; the bottom third shifted an average of just 10 percent.

In other words, the enormous amount of strategic planning in corporations seems to result, on the whole, in only modest resource shifts. Whether the relevant resource is capital expenditures, operating expenditures, or human capital, this finding is consistent across industries as diverse as mining and consumer packaged goods. Given the performance edge associated with higher levels of reallocation, such static behavior is almost certainly not sensible. Our research showed the following:

— Companies that reallocated more resources—the top third of our sample, shifting an average of 56 percent of capital across business units over the entire 15-year period—earned, on average, 30 percent higher total shareholder returns (TSR) annually than companies in the bottom third of the sample. This result was surprisingly consistent across all sectors of the economy. It seems that when companies disproportionately invest in value-creating businesses, they generate a mutually reinforcing cycle of growth and further investment options (exhibit).

— Consistent and incremental reallocation levels diminished the variability of returns over the long term.

Exhibit

Companies with higher levels of capital reallocation experienced higher average shareholder returns.

Average total return to shareholders by companies' degree of capital reallocation, CAGR, 1990–2005, % (n = 1,616)

[1] See Ilan Guedj, Jennifer Huang, and Johan Sulaeman, "Internal capital allocation and firm performance," working paper for the International Symposium on Risk Management and Derivatives, October 2009 (revised in March 2010).

[2] We used Compustat data on 1,616 US-listed companies with operations in a minimum of two distinct four-digit Standard Industrial Classification codes. Resource allocation is measured as 1 minus the minimum percentage of capital expenditure received by distinct business units over the 15-year period. This measure captures the relative amount of capital that can flow across a business over time; the rest of the money is "stuck." Similar results were found with more sophisticated measures that control for sales and asset growth.

— A company in the top third of active reallocators was, on average, 13 percent more likely to avoid acquisition or bankruptcy than low reallocators.

— Over an average six-year tenure, chief executives who reallocated less than their peers in the first three years on the job were significantly more likely than their more active peers to be removed in years four through six. To paraphrase the philosopher Thomas Hobbes, tenure for static CEOs is likely to be nasty, brutish, and, above all, short.

We should note the importance of a long-term view: over time spans of less than three years, companies that reallocated higher levels of resources delivered lower shareholder returns than their more stable peers did. One explanation for this pattern could be risk aversion on the part of investors, who are initially cautious about major corporate capital shifts and then recognize value only once the results become visible. Another factor could be the deep interconnection of resource-allocation choices with corporate strategy. The goal is not to make dramatic changes every year but to reallocate resources consistently over the medium to long term in service of a clear corporate strategy. That provides the time necessary for new investments to flourish, for established businesses to maximize their potential, and for capital from declining investments to be redeployed effectively. Given the richness and complexity of the issues at play here, differences in the relationship between short- and long-term resource shifts and financial performance are likely to be a fruitful area for further research.

Overcoming inertia

The failure to pursue a more active allocation agenda is a result of organizational inertia that has multiple causes, often related to cognitive biases[3] or political wrangling. Or as one CEO told us, "If you're asking me to play Robin Hood, that's not going to work." Regardless of the source, inertia's gravitational pull is strong—and overcoming it is critical to creating an effective corporate strategy. As tempting as it is to believe that one's own company avoids these traps, our research suggests that's unlikely. Our experience also suggests, though, that taking steps such as those described below can materially improve a company's resource allocation and its connection to strategic priorities.

1. Have a target corporate portfolio

When it comes to developing an allocation agenda, it is helpful to have a target portfolio in mind. Most companies shy away from this, for understandable reasons: it requires a lot of conviction to describe planned portfolio changes in anything but the vaguest terms, and the right answers may change if the broader business environment turns out to be different from the expected one. In our experience, though, a target portfolio need not be slavish or mechanistic and can be a powerful forcing device to move beyond generic strategy statements, such as "strengthen in Asian markets" or "continue to migrate from products to services." Identifying business opportunities where your company wants to increase its exposure can create a foundation for scrutinizing how it allocates capital, talent, and other resources. For example, Kjell Aamot, a former CEO of Scandinavian media company Schibsted, says its evolution from a print- to digital-media leader means that "if you look at [our] strategy and investment allocation today, more or less 100 percent goes into online activities." That's a shift in focus that took several years to effect.

Evaluating reallocation performance relative to peers also can help companies set targets. From 1990 to 2009, for example, Honeywell reallocated about 25 percent of its capital as it shifted away from some existing business areas toward aerospace, air-conditioning, and controls. Honeywell's competitor Danaher, which was in similar businesses in 1990, moved 66 percent of its capital into new ones during the same period.

[3] For more on cognitive biases, see, for example, Dan Lovallo and Olivier Sibony, "The case for behavioral strategy," *McKinsey Quarterly*, March 1, 2010.

Both companies achieved returns above the industry average in these years—TSR for Honeywell was 14 percent and for Danaher 25 percent. We're not suggesting that companies adopt a mindset of "more is better, and if my competitor is making big moves, I should too." But differences in allocation levels among peer companies can serve as valuable clues about contrasting business approaches—clues that prompt questions that can yield strategic insights.

2. Use all resource-reallocation tools at your disposal

Talking about resource allocation in broad terms oversimplifies the choices facing senior executives. In reality, allocation comprises four fundamental activities: seeding, nurturing, pruning, and harvesting. *Seeding* is entering new business areas, whether through an acquisition or an organic start-up investment. *Nurturing* involves building up an existing business through follow-on investments, including bolt-on acquisitions. *Pruning* takes resources away from an existing business, either by giving some of its annual capital allocation to others or by putting a portion of the business up for sale. Finally, *harvesting* is selling whole businesses that no longer fit a company's portfolio or undertaking equity spin-offs.

Our research found that there's little overall difference between the seeding and harvesting behavior of low and high reallocators. This should come as little surprise: seeding involves giving money to new business opportunities—something that's rarely resisted. And while harvesting is difficult, it most often occurs as a result of a business unit's sustained underperformance, which is difficult to ignore.

However, we found a 170 percent difference in activity levels between high and low reallocators when it came to the combination of nurturing and pruning existing businesses. Together, these two represent half of all corporate reallocation activity. Both are difficult because they often involve taking resources from one business unit and giving them to another. What's more, the better a company is at encouraging seeding, the more important

The better a company is at encouraging seeding, the more important nurturing and pruning become—nurturing to ensure the success of new initiatives, and pruning to eliminate flowers that will not ever bloom.

nurturing and pruning become—nurturing to ensure the success of new initiatives, and pruning to eliminate flowers that will not ever bloom.

3. Adopt simple decision rules to break the status quo

Simple rules can help minimize political infighting because they change the burden of proof from the typical default allocation ("what we did last year") to one that makes it impossible to maintain the status quo. For example, a simple harvesting rule might involve putting a certain percentage of an organization's portfolio up for sale each year to maintain vibrancy and to cull dead wood.

When Lee Raymond was CEO of Exxon Mobil, for example, he required the corporate-planning team to identify 3 to 5 percent of the company's assets for potential disposal every year. Exxon Mobil's business divisions were allowed to retain assets placed in this group only if they could demonstrate a tangible and compelling turnaround program. In essence, the burden on the business units was to prove that an asset should be retained, rather than the other way around. The net effect was accelerated portfolio upgrading and healthy turnover in the face of executives' natural desire to hang on to underperforming assets. Another approach we've observed involves placing existing businesses into different categories—such as "grow," "maintain," and "dispose"—and then following clearly differentiated resource-investment rules for each. The purpose of having clear investment rules for each category of business is to remove as much politics as possible from the resource-allocation process.

Sometimes, the CEO may want a way to stimulate resource reallocations directly, in parallel with regular corporate processes. One natural-resources company, for example, gave its CEO sole discretion to allocate 5 percent of the company's capital outside the traditional bottom-up annual capital-allocation process. This provided an opportunity to move the organization more quickly toward what the CEO believed were exciting growth opportunities, without first having to go through a "pruning" fight with the company's executive-leadership committee.

Of course, the CEO and other senior leaders will need to reinforce discipline around such simple allocation rules; it's not easy to hold the line in the face of special pleading from less favored businesses. Developing that level of clarity—not to mention the courage to fight tough battles that arise as a result—often requires support in the form of a strong corporate center or a strategic-planning group that is independent of competing business interests and can provide objective information.

4. Implement corporate processes to mitigate inertia

Systematic processes can strengthen resource-allocation activities. One approach, explored in detail by our colleagues Sven Smit and Patrick Viguerie, is to create planning and management processes that generate a granular view of a company's product and market opportunities.[4] The overwhelming tendency is for corporate leaders to allocate resources at a level that is too high—namely, by division or business unit. When senior management does not have a granular view, division leaders can use their information advantage to average out allocations within their domains.

Another approach is to revisit a company's businesses periodically and engage in a process similar to the due diligence conducted for investments. Executives at one energy conglomerate annually ask whether they would choose to invest in a business if they didn't already own it. If the answer is no, a discussion about whether and how to exit the business begins.

Executives can further strengthen allocation decisions by creating objectivity through reanchoring—that is, giving the allocation an objective basis that is independent of both the numbers the business units provide and the previous year's allocation. There are numerous ways to create such independent,

[4] See three publications by Mehrdad Baghai, Sven Smit, and Patrick Viguerie: "The granularity of growth," *McKinsey Quarterly*, May 1, 2007; *The Granularity of Growth: How to Identify the Sources of Growth and Drive Enduring Company Performance*, Hoboken, NJ: Wiley, 2008; and "Is your growth strategy flying blind?," *Harvard Business Review*, May 2009, Volume 87, Number 5.

fact-based anchors, including deriving targets from market-growth and market-share data or leveraging a benchmarking analysis of competitors. The goal is to create an objective way to ask business leaders this tough question: “If we were to triangulate between these different approaches, we would expect your investments and returns to lie within the following range. Why are your estimates so much higher (or lower)?”

Finally, it’s worth noting that technology is enabling strategy-process innovations that stir the pot through internal discussions and “crowdsourcing.” For example, Rite-Solutions, a Rhode Island–based company that builds advanced software for the US Navy, defense contractors, and first responders, derives 20 percent of its revenue from businesses identified through a “stock exchange” where employees can propose and invest in new ideas.

Much of our advice for overcoming inertia within multibusiness companies assumes that a corporation’s interests are not the same as the cumulative resource demands of the underlying divisions and businesses. As they say, turkeys do not vote for Christmas. Putting in place some combination of the targets, rules, and processes proposed here may require rethinking the role and inner workings of a company’s strategic and financial-planning teams. Although we recognize that this is not a trivial endeavor, the rewards make the effort worthwhile. A primary performance imperative for corporate-level executives should be to escape the tyranny of inertia and create more dynamic portfolios over time.

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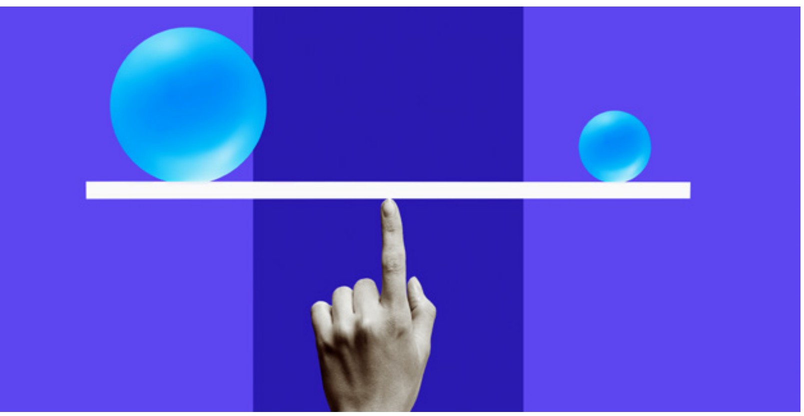
2006

Balancing ROIC and growth to build value

Companies find growth enticing, but a strong return on invested capital is more sustainable.

by Bing Cao, Bin Jiang, and Timothy Koller



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Growth might be the lifeblood of a business, but it isn't always the best or most sustainable way to create value for shareholders. Return on invested capital (ROIC) is often just as important—and occasionally even more so—as a measure of value creation and can be easier to sustain at a high level.

When a company's ROIC is already high, growth typically generates additional value. But if a company's ROIC is low, executives can create more value by boosting ROIC than by pursuing growth (exhibit). A close look at companies with high price-to-earnings multiples shows that many have extraordinary returns on capital but limited growth. This scrutiny suggests that, contrary to conventional wisdom, investors recognize (and will pay more for) the anticipated returns of companies with a strong ROIC, despite their limited growth prospects. This observation doesn't mean that growth is undesirable; unless companies keep up with their industries, they will likely destroy value. But they shouldn't pursue growth heroically at the expense of improvements in ROIC.

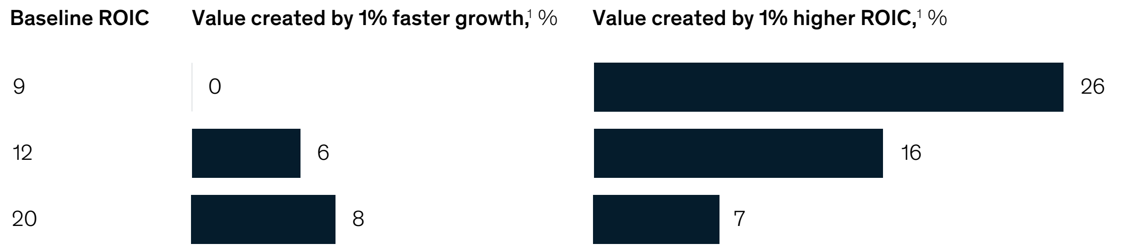
After identifying the largest publicly listed companies in the United States (by revenues) in 1965, 1975, 1985, and 1995, we examined their long-term patterns of growth and ROIC.[1] The median ROIC for the 1965 group remained stable, at about 9 percent, over the next 40 years. We observed the same pattern for the groups from 1975, 1985, and 1995. In other words, ROIC tends to remain stable over time.

Growth, by contrast, is fleeting. The median inflation-adjusted growth in revenues for the top 500 companies in 1965 started out at 7 percent and steadily declined to 2 percent over the next 10 years, hitting a cyclical low of 0 percent by year 17. For the next 20 years, growth hovered at around 2 percent—a figure below the level of US GDP growth.[2] We observed a similar general pattern of decay in median real growth for the top 500 companies in 1975, 1985, and 1995.

[1] The performance of each set of companies was tracked as a portfolio until 2004.
[2] Real GDP growth averaged around 2.5 to 3.5 percent a year from 1929 to 2005.

Exhibit

Improving returns on invested capital creates more value than growth (except when ROIC is already high).



[1] Assumes 9% weighted average cost of capital.

Moreover, pattern analysis at the industry[3] level further shows the importance of managing ROIC. A comparison of ROIC[4] for the top 500 companies of 1965 shows that it remained steady in most sectors and even increased in some—particularly those with strong brands or patent-protected products (household and personal goods, for example) and pharmaceuticals and biotechnology. Growth, by contrast, almost always declined, except in pharmaceuticals.

A close examination of individual companies finds similar patterns; companies with high levels of ROIC tend to hold on to that advantage, whereas high-growth companies rarely do. We looked at the probability that a company will migrate from one level of ROIC to another over the course of a decade. A company that generated an ROIC of less than 5 percent in 1994, for instance, had a 43 percent chance of earning less than 5 percent in 2003. We found that low and high performers alike demonstrate consistency throughout the 40-year period. Companies with an ROIC of 5 to 10 percent had a 40 percent probability of remaining in the same group ten years later; companies with an ROIC of more than 20 percent had a 50 percent probability.

But when it comes to growth, companies are very likely to experience substantial declines. Of companies that grew by more than 20 percent in 1994, for example, 56 percent were growing at real rates of less than 5 percent ten years later. Only 13 percent of the high-growth companies maintained 20 percent real growth ten years on, and acquisitions probably drove most of it.

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[3] Defined by the Global Industry Classification Standard (GICS).
[4] Measured by the median ROIC of companies that survived in subsequent years.

2018

Strategy to beat the odds

If you internalize the real odds of strategy, you can tame its social side and make big moves.

by Chris Bradley, Martin Hirt, and Sven Smit

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Several times a year, top management teams enter the strategy room with lofty goals and the best of intentions: they hope to honestly assess their situation and prospects, and mount a decisive, coordinated response toward a common ambition.

Then reality intrudes. By the time they get to the strategy room, they find it is already crowded with egos and competing agendas. Jobs—even careers—are on the line, so caution reigns. The budget process intervenes, too. You may be discussing a five-year strategy, but everyone knows that what really matters is the first-year budget. So, many managers try to secure resources for the coming year while deferring other tough choices as far as possible into the future. One outcome of these dynamics is the hockey-stick projection, confidently showing future success after the all-too-familiar dip in next year's budget. If we had to choose an emblem for strategic planning, this would be it.

In our book, *Strategy Beyond the Hockey Stick* (John Wiley & Sons, February 2018), we set out to help companies unlock the big moves needed to beat the odds. Another strategy framework? No, we already have plenty of those. Rather, we need to address the real problem: the "social side of strategy," arising from corporate politics, individual incentives, and human biases. How? With evidence. We examined publicly available information on dozens of variables for thousands of companies and found a manageable number of levers that explain more than 80 percent of the up-drift and down-drift in corporate performance. That data can help you assess your strategy's odds of success before you leave the strategy room, much less start to execute the plan.

Such an assessment stands in stark contrast to the norms prevailing in most strategy rooms, where discussion focuses on comparisons with last year, on immediate competitors, and on expectations for the year ahead. There is also precious little room for uncertainty, for exploration of the world beyond the experience of the people in the room, or for bold strategies embracing big moves that can deliver a strong performance jolt. The result? Incremental improvements that leave companies merely playing along with the rest of their industries.

Common as that outcome is, it isn't a necessary one. If you understand the social side of strategy, the odds of strategy revealed by our research, and the power of making big moves, you will dramatically increase your chances of success.

The social side of strategy

Nobel laureate Daniel Kahneman described in his book *Thinking, Fast and Slow* (Farrar, Straus and Giroux, 2011) the "inside view" that often emerges when we focus only on the case at hand. This view leads people to extrapolate from their own experiences and data, even when they are attempting something they've never done before. The inside view also is vulnerable to contamination by overconfidence and other cognitive biases, as well as by internal politics.

It's well known by now that people are prone to a wide range of biases, such as anchoring, loss aversion, confirmation bias, and attribution error. While these unintentional mental shortcuts help us filter information in our daily lives, they distort the outcomes when we are forced to make big, consequential decisions infrequently and under high uncertainty—exactly the types of decisions we confront in the strategy room. When you bring together people with shared experiences and goals, they wind up telling themselves stories, generally favorable ones. A study found, for instance, that 80 percent of executives believe their product stands out against the competition—but only 8 percent of customers agree.[1]

Then, add agency problems, and the strategy process creates a veritable petri dish for all sorts of dysfunctions to grow.[2] Presenters seeking to get that all-important "yes" to their plans may define market share so it excludes geographies or segments where their business units are weak, or attribute weak performance to one-off events such as weather, restructuring efforts, or a regulatory change. Executives argue for a large resource allotment in the full knowledge that they will get negotiated down to half of that. Egos, careers, bonuses, and status in the organization all depend to a large extent on how convincingly people present their strategies and the prospects of their business.

That's why people often "sandbag" to avoid risky moves and make triple sure they can hit their targets. Or they play the short game, focusing on performance in the next couple of years in the knowledge that they likely won't be running their division afterward. Emblematic of these strategy-room dynamics is the hockey-stick presentation. Hockey sticks recur with alarming frequency, as the experience of a multinational company demonstrates. The company planned for a breakout in 2011, only to achieve flat results. Undeterred, the team drew another hockey stick for 2012, then 2013, then 2014, then 2015,

If you understand the social side of strategy, the odds of strategy revealed by our research, and the power of making big moves, you will dramatically increase your chances of success.

[1] See Dominic Dodd and Ken Favaro, *The Three Tensions: Winning the Struggle to Perform Without Compromise*, first edition, San Francisco, CA: Jossey-Bass, 2007.

[2] Agency problems emerge when an agent is required to make decisions for another person or group whose information, preferences, and interests may not be aligned with the agent's.

even as actual results stayed roughly flat, then trailed off.

To move beyond hockey sticks and the social forces that cause them, the CEO and the board need an objective, external benchmark.

The odds of strategy

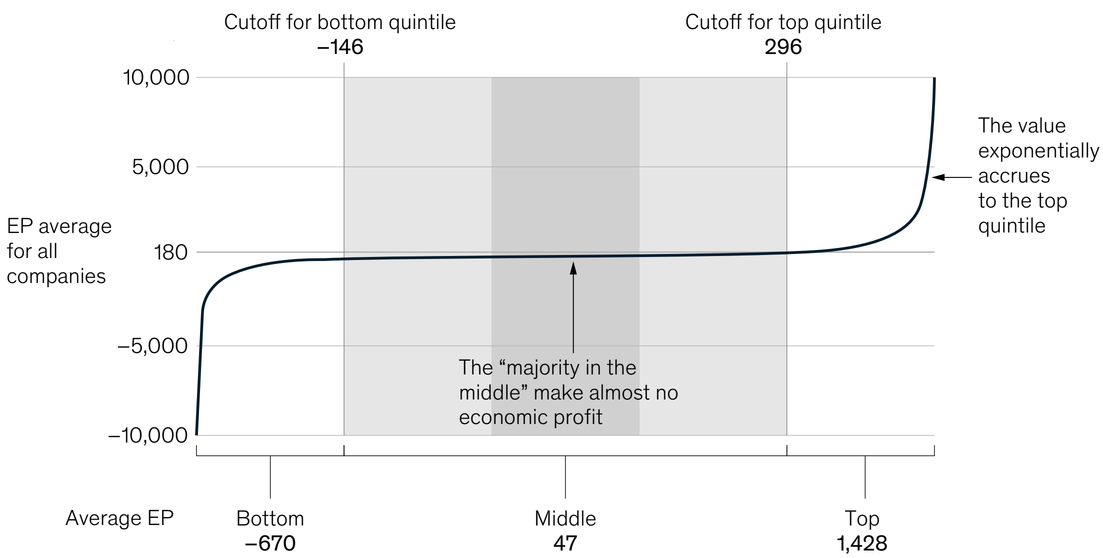
The starting point for developing such a benchmark is embracing the fact that business strategy, at its heart, is about beating the market; that is, defying the power of "perfect" markets to push economic surplus to zero. Economic profit—the total profit after the cost of capital is subtracted—measures the success of that defiance by showing what is left after the forces of competition have played out. From 2010 to 2014, the average company in our database of the world's 2,393 largest corporations reported $920 million in annual operating profit. To make this profit, they used $9.3 billion of invested capital,[3] which earned a return of 9.9 percent. After investors and lenders took 8 percent to compensate for use of their funds, that left $180 million in economic profit.

Plotting each company's average economic profit demonstrates a power law—the tails of the curve rise and fall at exponential rates, with long flatlands in the middle (exhibit). The power curve reveals a number of important insights:

Exhibit

The power curve of economic profit: The global distribution of economic profit is radically uneven.

Average annual economic profit (EP) generated per company, 2010–14, $ million, n = 2,393[1]



[1] Excluding 7 outliers (companies with economic profit above $10 billion or below –$10 billion).
Source: Corporate Performance Analytics by McKinsey

[3] We measure profit as NOPLAT—net operating profit less adjusted taxes. Invested capital comprises operating invested capital of $6.66 billion and goodwill and intangibles of $2.602 billion. In other words, 28 percent of the capital of a typical company represents additional value over book value paid in acquisitions.

- *Market forces are pretty efficient.* The average company in our sample generates returns that exceed the cost of capital by almost two percentage points, but the market is chipping away at those profits. That brutal competition is why you struggle just to stay in place. For companies in the middle of the power curve, the market takes a heavy toll. Companies in those three quintiles delivered economic profits averaging just $47 million a year.

- *The curve is extremely steep at the bookends.* Companies in the top quintile capture nearly 90 percent of the economic profit created, averaging $1.4 billion annually. In fact, those in the top quintile average some 30 times as much economic profit as those in the middle three quintiles, while the bottom 20 percent suffer deep economic losses. That unevenness exists within the top quintile, too. The top 2 percent together earn about as much as the next 8 percent combined. At the other end of the curve, the undersea canyon of negative economic profit is deep—though not quite as deep as the mountain is high.

- *The curve is getting steeper.* Back in 2000 to 2004, companies in the top quintile captured a collective $186 billion in economic profit. Fast forward a decade and the top quintile earned $684 billion. A similar pattern emerges in the bottom quintile. Since investors seek out companies that offer market-beating returns, capital tends to flow to the top, no matter the geographic or industry boundaries. Companies that started in the top quintile ten years earlier soaked up 50 cents of every dollar of new capital in the decade up to 2014.

- *Size isn't everything, but it isn't nothing, either.* Economic profit reflects the strength of a strategy based not only on the power of its economic formula (measured by the spread of its returns over its cost of capital) but also on how scalable that formula is (measured by how much invested capital it could deploy). Compare Walmart, with a moderate 12 percent return on capital but a whopping $136.0 billion of invested capital, with Starbucks, which has a huge 50 percent return on capital but is limited by being in a much less scalable category, deploying only $2.6 billion of invested capital. They both generated enormous value, but the difference in economic profit is substantial: $5.3 billion for Walmart versus $1.1 billion for Starbucks.

- *Industry matters, a lot.* Our analysis shows that about 50 percent of your position on the curve is driven by your industry—highlighting just how critical the "where to play" choice is in strategy. Industry performance also follows a power curve, with the same hanging tail and high leading peak. There are 12 tobacco companies in our research, and nine are in the top quintile. Yet there are 20 paper companies, and none are in the top quintile. The role of industry in a company's position on the power curve is so substantial that it's better to be an average company in a great industry than a great company in an average industry.

- *Mobility is possible—but rare.* Here is a number that's worth mulling: the odds of a company moving from the middle quintiles of the power curve to the top quintile over a ten-year period are 8 percent. That means just one in 12 companies makes such a leap. These odds are sobering, but they also encourage you to set a high bar: Is your strategy better than the 92 percent of other strategies?

The power of big moves

What can you do to improve the odds that your company will move up the power curve? The answer is lurking in our data. Consider this analogy: to estimate a person's income, we can start with the global average, or about $15,000 per year. If we know that the person is American, our estimate jumps to the average US per capita income, or $56,000. If we know that the individual is a 55-year-old male, the estimate jumps to $64,500. If that guy works in the IT industry, it jumps to $86,000. And if we know the person is Bill Gates, well, it's a lot more than that.

Adding ever more information similarly helps to zero in on the probabilities of corporate success. Even if you know your overall odds, you need to understand which of your attributes and actions can best help you raise them. We identified ten performance levers and, importantly, how strongly you have to pull them to make a real difference in your strategy's success. We divided these levers into three categories: endowment, trends, and moves. Your endowment is what you start with, and the variables that matter most are your revenue (size), debt level (leverage), and past investment in R&D (innovation). Trends are the winds that are pushing you along, hitting you in the face, or buffeting you from the side. The key variables there are your industry trend and your exposure to growth geographies. In analyzing the odds of moving on the power curve, we found that endowment determines about 30 percent and trends another 25 percent.

The moves that matter

However, it is your moves—what you do with your endowment and how you respond to trends—that make the biggest difference. Our research found that the following five moves, pursued persistently, can get you to where you want to go:

— *Programmatic M&A.* You need a steady stream of deals every year, each amounting to no more than 30 percent of your market cap but adding over ten years to at least 30 percent of your market cap. Corning, which over the course of a decade moved from the bottom to the top quintile of the power curve, shows the value of disciplined M&A. Corning understands that doing three deals a year means it must maintain a steady pipeline of potential targets, conduct due diligence on 20 companies, and submit about five bids.

— *Dynamic reallocation of resources.* Winning companies reallocate capital expenditures at a healthy clip, feeding the units that could produce a major move up the power curve while starving those unlikely to surge. The threshold here is reallocating at least 50 percent of capital expenditure among business units over a decade. When Frans van Houten became Koninklijke Philips's CEO in 2011, the company began divesting itself of legacy assets, including its TV and audio businesses. After this portfolio restructuring, Philips succeeded at reinvigorating its growth engine by reallocating resources to more promising businesses (oral care and healthcare were two priorities) and geographies. Philips started, for example, managing performance and resource allocations at the level of more than 340 business-market combinations, such as power toothbrushes in China and respiratory care in Germany. That led to an acceleration of growth, with the consumer business moving from the company's worst-performing segment to its best-performing one within five years.

Even if you know your overall odds, you need to understand which of your attributes and actions can best help you raise them.

— *Strong capital expenditure.* You meet the bar on this lever if you are among the top 20 percent in your industry in your ratio of capital spending to sales. That typically means spending 1.7 times the industry median. Taiwanese semiconductor manufacturer Taiwan Semiconductor Manufacturing Company (TSMC) pulled this lever when the Internet bubble burst and demand for semiconductors dropped sharply. The company bought mission-critical equipment at the trough and was ready to meet the demand as soon as it came back. TSMC had been in a head-to-head race before the downturn but pulled clear of the competition after it ended because of its investment strategy. That laid the foundation for TSMC to become one of the largest and most successful semiconductor manufacturing pure plays in the world.

— *Strength of the productivity program.* This means improving productivity at a rate sufficient to put you at least in the top 30 percent of your industry. Global toy and entertainment company Hasbro successfully achieved the top quintile of the power curve with a big move in productivity. Following a series of performance shortfalls, Hasbro consolidated business units and locations, invested in automated processing and customer self-service, reduced head count, and exited loss-making business units. The company's selling, general, and administrative expenses as a proportion of sales fell from an average of 42 percent to 29 percent within ten years. Sales productivity lifted, too—by a lot. Over the decade, Hasbro shed more than a quarter of its workforce yet still grew revenue by 33 percent.

— *Improvements in differentiation.* For business-model innovation and pricing advantages to raise your chances of moving up the power curve, your gross margin needs to reach the top 30 percent in your industry. German broadcaster ProSieben moved to the top quintile of the power curve by shifting its model for a new era of media. For example, it expanded its addressable client base by using a "media for equity" offering for customers whose business would significantly benefit from mass media but who couldn't afford to pay with cash. Some of ProSieben's innovations were costly, sometimes even cannibalizing existing businesses. But, believing the industry would move anyway, the company decided that experimenting with change was a matter of survival first and profitability second. ProSieben's gross margin expanded from 16 percent to 53 percent during our research period.

Greater than the sum of the parts

Big moves are most effective when done in combination—and the worse your endowment or trends, the more moves you need to make. For companies in the middle quintiles, pulling one or two of the five levers more than doubles their odds of rising into the top quintile, from 8 percent to 17 percent. Three big moves boost these odds to 47 percent.

To understand the cumulative power of big moves, consider the experience of Precision Castparts Corp. (PCC). In 2004, the manufacturer of complex metal components and products for the aerospace, power, and industrial markets was lumbering along. Its endowment was unimpressive, with revenues and debt levels in the middle of the pack, and the company had not invested heavily in R&D. PCC's geographic exposure was also limited, though the aerospace industry experienced enormous tailwinds over the following ten years, which helped a lot.

Most important, however, PCC made big moves that collectively shifted its odds of reaching the top quintile significantly. The company did so by surpassing the high-performance thresholds on four of the five levers. For mergers, acquisitions, and divestments, it combined a high value and large volume of deals between 2004 and 2014 through a deliberate and regular program of transactions in the aerospace and power markets.

PCC also reallocated 61 percent of its capital spending among its three major divisions, while managing the rare double feat of both productivity and margin improvements—the only aerospace and defense company in our sample to do so. While nearly doubling its labor productivity, PCC managed to reduce its overhead ratio by three percentage points. It lifted its gross profit-to-sales ratio from 27 to 35 percent.

The combination of a positive industry trend and successful execution of multiple moves makes PCC a showcase of a "high odds" strategy and perhaps explains why Berkshire Hathaway agreed in 2015 to buy PCC for $37.2 billion. Could our model have predicted this outcome? Based on the moves PCC made, its odds of rising to the top were 76 percent.

Patterns of movement

You should be mindful of several dynamics when undertaking major strategic moves. First, our research shows that really big moves can "cancel out" the impact of a poor inheritance. Making strong moves with a poor inheritance is about as valuable as making poor moves with a strong inheritance. And even small improvements in odds have a dramatic impact on the expected payoff, owing to the extremely steep rise of the power curve. For example, the probability-weighted expected value of a middle-tier company increasing its odds to 27 percent from the average of 8 percent is $123 million—nearly three times the total average economic profit for midtier companies.

Big moves are also nonlinear, meaning that just pulling a lever does not help; you need to pull it hard enough to make a difference. For instance, productivity improvements that are roughly in line with the improvement rates of your industry won't provide an upward boost. Even if you are improving on all five measures, what matters is how you stack up against your competitors.

And four of the five big moves are asymmetric. In other words, the upside opportunity far outweighs the downside risk. While M&A is often touted as high risk, for example, in reality programmatic M&A not only increases your odds of moving up the curve but simultaneously decreases your odds of sliding down. Capital expenditures is the one exception. By increasing capital expenditures, your chances of going up on the power curve increase, but so do the chances of dropping.

In general, making no bold moves is probably the most dangerous strategy of all. You not only risk stagnation on the power curve but also miss out on the additional reward of growth capital, which mostly flows to the winners.

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The authors wish to thank Nicholas Northcote for his contributions to this article and to the accompanying body of research.

2006

Making capital structure support strategy

A company's ratio of debt to equity should support its business strategy, not help it pursue tax breaks. Here's how to get the balance right.

by Marc H. Goedhart, Timothy Koller, and Werner Rehm

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CFOs invariably ask themselves two related questions when managing their balance sheets: should they return excess cash to shareholders or invest it and should they finance new projects by adding debt or drawing on equity? Indeed, achieving the right capital structure—the composition of debt and equity that a company uses to finance its operations and strategic investments—has long vexed academics and practitioners alike.[1] Some focus on the theoretical tax benefit of debt, since interest expenses are often tax deductible. More recently, executives of public companies have wondered if they, like some private equity firms, should use debt to increase their returns. Meanwhile, many companies are holding substantial amounts of cash and deliberating on what to do with it.

The issue is more nuanced than some pundits suggest. In theory, it may be possible to reduce capital structure to a financial calculation to get the most tax benefits by favoring debt, for example, or to boost earnings per share superficially through share buybacks. The result, however, may not be consistent with a company's business strategy, particularly if executives add too much debt.[2] In the 1990s, for example, many telecommunications companies financed the acquisition of third-generation (3G) licenses entirely with debt, instead of with equity or some combination of debt and equity, and they found their strategic options constrained when the market fell.

Indeed, the potential harm to a company's operations and business strategy from a bad capital structure is greater than the potential benefits from tax and financial leverage. Instead of relying on capital structure to create value on its own, companies should try to make it work hand in hand with their business strategy, by striking a balance between the discipline and tax savings that debt can deliver

[1] Franco Modigliani and Merton Miller, "The cost of capital, corporate finance, and the theory of investment," *American Economic Review*, June 1958, Number 48.
[2] There is also some potential for too little debt, though the consequences aren't as dire.

and the greater flexibility of equity. In the end, most industrial companies can create more value by making their operations more efficient than they can with clever financing.[3]

Capital structure's long-term impact

Capital structure affects a company's overall value through its impact on operating cash flows and the cost of capital. Since the interest expense on debt is tax deductible in most countries, a company can reduce its after-tax cost of capital by increasing debt relative to equity, thereby directly increasing its intrinsic value. While finance textbooks often show how the tax benefits of debt have a wide-ranging impact on value, they often use too low a discount rate for those benefits. In practice, the impact is much less significant for large investment-grade companies (which have a small relevant range of capital structures). Overall, the value of tax benefits is quite small over the relevant levels of interest coverage. For a typical investment-grade company, the change in value over the range of interest coverage is less than 5 percent.

The effect of debt on cash flow is less direct but more significant. Carrying some debt increases a company's intrinsic value because debt imposes discipline; a company must make regular interest and principal payments, so it is less likely to pursue frivolous investments or acquisitions that don't create value. Having too much debt, however, can reduce a company's intrinsic value by limiting its flexibility to make value-creating investments of all kinds, including capital expenditures, acquisitions, and, just as important, investments in intangibles such as business building, R&D, and sales and marketing.

Managing capital structure thus becomes a balancing act. In our view, the trade-off a company makes between financial flexibility and fiscal discipline is the most important consideration in determining its capital structure and far outweighs any tax benefits, which are negligible for most large companies unless they have extremely low debt.[4]

Mature companies with stable and predictable cash flows as well as limited investment opportunities should include more debt in their capital structure, since the discipline that debt often brings outweighs the need for flexibility. Companies that face high uncertainty because of vigorous growth or the cyclical nature of their industries should carry less debt, so that they have enough flexibility to take advantage of investment opportunities or to deal with negative events.

Not that a company's underlying capital structure never creates intrinsic value; sometimes it does. When executives have good reason to believe that a company's shares are under- or overvalued, for example, they might change the company's underlying capital structure to create value either by buying back undervalued shares or by using overvalued shares instead of cash to pay for acquisitions. Other examples can be found in cyclical industries, such as commodity chemicals, where investment spending typically follows profits. Companies invest in new manufacturing capacity when their profits are high and they have cash.[5] Unfortunately, the chemical industry's historical pattern has been that all players invest at the same time, which leads to excess capacity when all of the plants come on line simultaneously. Over the cycle, a company could earn substantially more than its competitors if it developed a countercyclical strategic capital structure and maintained less debt than might otherwise be optimal. During bad times, it would then have the ability to make investments when its competitors couldn't.

A practical framework for developing capital structure

A company can't develop its capital structure without understanding its future revenues and investment requirements. Once those prerequisites are in place, it can begin to consider changing its capital structure in ways that support the broader strategy. A systematic approach can pull together steps that many companies already take, along with some more novel ones.

[3] Richard Dobbs and Werner Rehm, "The value of share buybacks," *McKinsey on Finance*, Number 16, Summer 2005, pp. 16–20.
[4] At extremely low levels of debt, companies can create greater value by increasing debt to more typical levels.
[5] Thomas Augat, Eric Bartels, and Florian Budde, "Multiple choice for the chemical industry," *McKinsey Quarterly*, August 1, 2003.

While these tax and signaling effects are real, they mainly affect tactical choices about how to move toward a defined long-term target capital structure, which should ultimately support a company's business strategies.

The case of one global consumer product business is illustrative. Growth at this company we'll call Consumerco has been modest. Excluding the effect of acquisitions and currency movements, its revenues have grown by about 5 percent a year over the past five years. Acquisitions added a further 7 percent annually, and the operating profit margin has been stable at around 14 percent. Traditionally, Consumerco held little debt: until 2001, its debt to enterprise value was less than 10 percent. In recent years, however, the company increased its debt levels to around 25 percent of its total enterprise value in order to pay for acquisitions. Once they were complete, management had to decide whether to use the company's cash flows, over the next several years, to restore its previous low levels of debt or to return cash to its shareholders and hold debt stable at the higher level. The company's decision-making process included the following steps.

1. *Estimate the financing deficit or surplus.* First, Consumerco's executives forecast the financing deficit or surplus from its operations and strategic investments over the course of the industry's business cycle—in this case, three to five years.

   In the base case forecasts, Consumerco's executives projected organic revenue growth of 5 percent at profit margins of around 14 percent. They did not plan for any acquisitions over the next four years, since no large target companies remain in Consumerco's relevant product segments. The company's cash flow after dividends and interest will be positive in 2006 and then grow steadily until 2008. EBITA (earnings before interest, taxes, and amortization) interest coverage will quickly return to historically high levels even exceeding ten times interest expenses.

2. *Set a target credit rating.* Next, Consumerco set a target credit rating and estimated the corresponding capital structure ratios. Consumerco's operating performance is normally stable. Executives targeted the high end of a BBB credit rating because the company, as an exporter, is periodically exposed to significant currency risk (otherwise they might have gone further, to a low BBB rating). They then translated the target credit rating to a target interest coverage ratio (EBITA to interest expense) of 4.5. Empirical analysis shows that credit ratings can be modeled well with three factors: industry, size, and interest coverage. By analyzing other large consumer product companies, it is possible to estimate the likely credit rating at different levels of coverage.

3. *Develop a target debt level over the business cycle.* Finally, executives set a target debt level of €5.7 billion for 2008. For the base case scenario, they projected €1.9 billion of EBITA in 2008. The target coverage ratio of 4.5 results in a debt

level of €8.3 billion. A financing cushion of spare debt capacity for contingencies and unforeseen events adds €0.5 billion, for a target 2008 debt level of €7.8 billion.

Executives then tested this forecast against a downside scenario, in which EBITA would reach only €1.4 billion in 2008. Following the same logic, they arrived at a target debt level of €5.7 billion in order to maintain an investment-grade rating under the downside scenario.

In the example of Consumerco, executives used a simple downside scenario relative to the base case to adjust for the uncertainty of future cash flows. A more sophisticated approach might be useful in some industries such as commodities, where future cash flows could be modeled using stochastic-simulation techniques to estimate the probability of financial distress at various debt levels.

The final step in this approach is to determine how the company should move to the target capital structure. This transition involves deciding on the appropriate mix of new borrowing, debt repayment, dividends, share repurchases, and share issuances over the ensuing years.

A company with a surplus of funds, such as Consumerco, would return cash to shareholders either as dividends or share repurchases. Even in the downside scenario, Consumerco will generate €1.7 billion of cash above its target EBITA-to-interest-expense ratio.

For one approach to distributing those funds to shareholders, consider the dividend policy of Consumerco. Given its modest growth and strong cash flow, its dividend payout ratio is currently low. The company could easily raise that ratio to 45 percent of earnings, from 30 percent. Increasing the regular dividend sends the stock market a strong signal that Consumerco thinks it can pay the higher dividend comfortably. The remaining €1.3 billion would then typically be returned to shareholders through share repurchases over the next several years. Because of liquidity issues in the stock market, Consumerco might be able to repurchase only about one billion shares, but it could consider issuing a one-time dividend for the remainder.

The signaling effect[6] is probably the most important consideration in deciding between dividends and share repurchases. Companies should also consider differences in the taxation of dividends and share buybacks, as well as the fact that shareholders have the option of not participating in a repurchase, since the cash they receive must be reinvested.

While these tax and signaling effects are real, they mainly affect tactical choices about how to move toward a defined long-term target capital structure, which should ultimately support a company's business strategies by balancing the flexibility of lower debt with the discipline (and tax savings) of higher debt.

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[6] The market's perception that a buyback shows how confident management is that the company's shares are undervalued, for example, or that it doesn't need the cash to cover future commitments, such as interest payments and capital expenditures.

2021

How executives can help sustain value creation for the long term

Joint research from FCLTGlobal and McKinsey highlights the behaviors that can help corporate leaders and board directors sidestep pressures and stay focused on the long term.

by Ariel Babcock, Sarah Keohane Williamson, and Tim Koller

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Ample evidence shows that when executives consistently make decisions and investments with long-term objectives in mind, their companies generate more shareholder value, create more jobs, and contribute more to economic growth than do peer companies that focus on the short term.[1] Data also show that companies can achieve better long-term performance when they address the interests of employees, customers, and other stakeholders.[2] But a survey of approximately 500 global executives conducted by FCLTGlobal and McKinsey shows that many continue to feel pressure from shareholders and directors to meet near-term earnings targets at the expense of long-term strategies.[3]

In one data point, respondents said they believed their companies would cut long-term growth investments by 17 percent, on average, when faced with a 15 percent decrease in revenue—even though the survey specified that the dip resulted from external factors (such as currency fluctuations), would not imperil the company's existence, and would not persist. Other survey responses were similarly short-term oriented—and not just because of the COVID-19 pandemic or other economic shocks.[4]

We wanted to understand better what differentiates long-term-oriented companies from others. How have they sidestepped the pressures? We reviewed and synthesized our own research and that of

[1] Dominic Barton, Jonathan Godsall, Tim Koller, James Manyika, Robert Palter, and Josh Zoffer, "Where companies with a long-term view outperform their peers," McKinsey Global Institute, February 8, 2017.
[2] Witold Henisz, Tim Koller, and Robin Nuttall, "Five ways that ESG creates value," *McKinsey Quarterly*, November 14, 2019.
[3] The online survey was conducted from June 20, 2020, to July 20, 2020, and garnered responses from 481 participants at or above the director level from European and North American companies with annual revenues of $250 million or more.
[4] The survey was conducted at the beginning of the COVID-19 pandemic, but respondents were asked to focus on the long-term course of their businesses rather than on the immediate crisis.

others in academia and the business world. We also surveyed executives and analyzed data on management and corporate performance. In the process, we identified five behaviors that managers and boards can take to reorient their organizations toward long-term value creation rather than just short-term performance:

— Invest sufficient capital and talent in large, risky initiatives to achieve a winning position.

— Construct a portfolio of strategic initiatives that deliver returns exceeding the cost of capital.

— Dynamically allocate capital and talent (through divestitures, if need be) to the businesses and initiatives that create the most value.

— Generate value not only for shareholders but also for employees, customers, and other stakeholders.

— Resist the temptation to take actions that boost short-term profits.

Global executives who choose to take these actions can, apart from gaining clear performance advantages for their organizations, resolve much of the perceived conflict between stakeholders' interests and shareholders' interests. In fact, the two sets of interests largely converge in the long run. Companies create long-term value for investors only when they satisfy customers, engage and motivate employees, and maintain good relations with communities and regulators across extended time horizons.

Invest sufficient capital and talent in large initiatives

Instead of playing to win, many established businesses play to avoid losing and, as a result, struggle to stay in front of competitors. Long-term-oriented companies identify strategic moves that will keep them ahead in the long run. They also commit ample resources to strategic initiatives, such as product innovation, marketing, sales, and talent development. Amazon and Microsoft are two such companies. During the past 15 years, both have invested large sums in their cloud-computing businesses. In 2020, those businesses generated revenues of around $45 billion and $59 billion, respectively—far more than competitors that put less money and talent into their cloud-computing plays.[5]

Sustained investments in strategic priorities matter for long-term performance because they lead to higher rates of revenue growth, and revenue growth is an important driver of long-term TSR. Our research shows that companies in the top third of their industries in revenue growth generated TSR that exceeded those of their bottom-third peers by six to eight percentage points per year. Those trends held over a ten-year period—the additional gains of top-third companies yielded shareholder returns that were 80 to 110 percent greater than those of the bottom-third companies.

Of course, revenue growth alone won't deliver shareholder value over the long term. It's just as critical to deliver strong ROIC.

Construct a portfolio of initiatives whose returns exceed the cost of capital

According to a fundamental principle of corporate finance, companies create long-term shareholder value only when their ROIC exceeds their cost of capital. That seems obvious, yet large numbers of companies around the world still misplace their focus.[6] They should consider reviewing the empirical evidence—among companies with similar growth rates, for instance, those with higher ROIC achieve higher valuation multiples and produce greater shareholder returns over the long term, according to McKinsey research.[7]

[5] "Microsoft's cloud generated more revenue than Amazon and Google combined in 2020," *Entrepreneur*, February 24, 2021, entrepreneur.com.
[6] Chris Bradley, Wonsik Choi, Jeongmin Seong, Ben Stretch, Oliver Tonby, Patti Wang, and Jonathan Woetzel, "The future of Asia: Decoding the value and performance of corporate Asia," McKinsey Global Institute, June 3, 2020.
[7] Bin Jiang and Tim Koller, "How to choose between growth and ROIC," McKinsey, September 1, 2007.

The objective for long-term-oriented companies, therefore, should be to find the combinations of growth and ROIC that work for them, given the conditions in their industries and the opportunities they face. Consider how two US companies, retail giant Costco and spirits and winemaker Brown-Forman, created substantial long-term value in different ways. From 1996 to 2017, Costco's after-tax operating profits grew by 11 percent per year, whereas Brown-Forman's grew by 7 percent per year.[8] Yet the two companies generated identical shareholder returns of 15 percent a year. Brown-Forman matched Costco on that count because its ROIC of 29 percent exceeded Costco's 13 percent.

Not every investment a company makes has to earn more than its cost of capital. Large companies can simultaneously make multiple bets—and not just on those initiatives with the highest chances of succeeding. They may make some risky bets with the potential to yield high rewards. If an entire portfolio of strategic initiatives earns more than its aggregate cost of capital, the company can expect to create value over the long term.

Dynamically reallocate capital and talent to high-value initiatives

Managing for the long term requires executives to monitor their companies' standing in the market and to enter or exit businesses as the competitive landscape shifts—even if it involves shrinking a company. They must also be willing to move talent and other resources to the highest-value initiatives and to do so frequently.

Consider the situation at Walmart. Leaders at the company chose to commit to a major omnichannel initiative, even as they anticipated that some investors would object to the short-term financial hit from the move despite its potential long-term benefits. Since 2014, the company has invested more than $5 billion per year in its e-commerce and omnichannel capabilities. It dynamically reallocated capital to match its new approach to serving customers by increasing funding for supply-chain improvements, store transformations, and digital initiatives. It also made strategic acquisitions, including Jet.com in the United States and a controlling stake in India's e-commerce giant

If an entire portfolio of strategic initiatives earns more than its aggregate cost of capital, the company can expect to create value over the long term.

[8] Marc Goedhart, Tim Koller, and David Wessels, *Valuation: Measuring and Managing the Value of Companies*, seventh edition, Hoboken, NJ: John Wiley & Sons, 2020.

Flipkart. The strategy continues to evolve as Walmart adapts to changes in customer needs and the competitive landscape.

McKinsey research shows that companies that rapidly reallocated resources and talent were 2.2 times more likely to outperform their competitors on TSR than were those that reallocated resources and talent at a slower clip.[9] It also reveals that taking swift action in anticipation of long-term trends is better than waiting too long: 43 percent of respondents in a survey on divestitures said they parted with assets too late or didn't divest them when they should have.[10] Among the reasons they cited for delay were "waiting for business performance to improve" and "difficulty of replacing lost earnings" (exhibit).

Those who worry that investors will frown on acquisitions and divestitures should take heart: the research shows that the stock market consistently reacts positively to both sales and spin-offs.

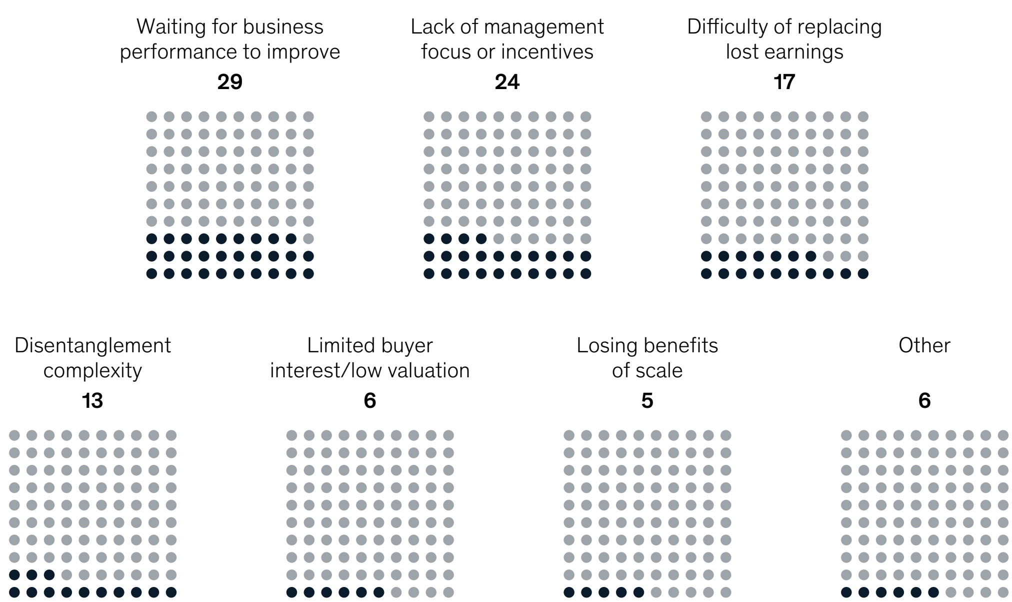
Generate value for all stakeholders

Long-term-oriented companies focus on improving outcomes for *all* their stakeholders, not just those who own shares in the business. They typically rely on environmental, social, and governance (ESG) initiatives to address the needs of a range of stakeholders. In doing so, the research shows, they stand to improve revenue growth, reduce costs, optimize investment decisions, improve employee productivity, and reduce regulatory and legal interventions.

Exhibit

Some executives say their companies waited too long to divest.

Reasons why companies waited to divest, % of respondents[1]



[1] June 2020 survey of 128 executives, board members, and corporate-development leaders at companies with revenues of more than $1 billion.

[9] Mike Barriere, Miriam Owens, and Sarah Pobereskin, "Linking talent to value," *McKinsey Quarterly*, April 12, 2018.
[10] Results are from a June 2020 survey of 128 executives, board members, and corporate-development leaders at companies with revenues of more than $1 billion.

In a 2019 McKinsey survey, 57 percent of respondents said they believed ESG programs create long-term value, and 83 percent said they expected ESG programs to contribute more shareholder value in the long term than they did at that time.[11] Respondents also said they would be willing to pay a 10 percent median premium for a company with a positive ESG record compared with a company with a negative ESG record.

Such responses don't mean that a company should act on every ESG idea that comes along. Rather, executives should actively search for and invest in initiatives that benefit both stakeholders and shareholders. The executive team at Walmart, for instance, will undertake environmental projects with negligible financial returns if managers agree, after debate, that those projects will yield other significant benefits to stakeholders. Many of Walmart's other environmental initiatives offer positive net present value, and so, using a portfolio-level approach to managing risks and returns, the company can cover the costs of those that don't.

Resist temptation

When temporary changes in fortune—dips in revenue, for example—occur, moves to boost short-term results can seem very appealing to pressured executives. Such moves seldom turn out well, however. In our survey, respondents who said executives at their companies tried to meet short-term financial targets by taking actions that created no long-term value also said their companies had worse financial outcomes than others did. Respondents said those companies were half as likely as their peers were to realize more organic revenue growth and 27 percent less likely to generate higher levels of ROIC.

In our experience, long-term-oriented companies actively seek to resist three common temptations. The first is to starve long-term growth investments to make up for short-term challenges, such as earnings deviations.

The second is to cut costs to an extent that could weaken the company's competitive positions. For example, to achieve ambitious earnings targets, a new leader at a retail company cut spending on the frontline sales force by reducing the number of in-store workers and curtailing training programs for those who remained. Over time, customers took notice—and took their business elsewhere. The company's stock price soon plummeted.

In both cases of temptation, executives would do well to lay out their strategic plans. They can explain to key stakeholders that they aren't choosing to depart from those plans just to hit short-term targets.

The final temptation is to reduce the natural volatility in revenue and earnings artificially. Many executives believe that "smooth" earnings growth somehow contributes to value creation. But according to our research, plenty of companies with more volatile earnings growth in the short term generate high TSR in the long term, and plenty of low-volatility companies generate low shareholder returns.[12] Indeed, when institutional investors were asked to rate the importance of various factors in their investment decisions, very few prioritized companies' ability to maintain low earnings volatility. More important to them were management teams' credibility and willingness to take risks with the long term in mind.

Changing mindsets and behaviors

Getting a company to manage for long-term performance requires considerable effort. CEOs and directors must take up new behaviors, abandon old ones, and empower managers to make decisions with long-term outcomes in mind.

Board behaviors

A board of directors ordinarily has a well-established role: thinking about the future of a company, approving its strategy, reviewing its performance, and evaluating management. Few boards spend

[11] "The ESG premium: New perspectives on value and performance," McKinsey, February 12, 2020.
[12] Rebecca Darr and Tim Koller, "How to build an alliance against corporate short-termism," McKinsey, January 30, 2017.

Few boards spend enough time assessing the strategies and investment plans of the businesses they direct, yet they can help orient management toward the long term.

enough time assessing the strategies and investment plans of the businesses they direct. Yet they can help orient management toward the long term in three ways:

— Ensure that strategic investments are fully funded each year and have the appropriate talent assigned to them. To formalize the practice, boards can ask management teams to report on the funding and progress of strategic initiatives and review that report for signs of effective strategic implementation.

— Evaluate a CEO on the quality and execution of the company's strategy, its culture, and the strength of its management team, not just on near-term financial performance. Responses to the survey by FCLTGlobal and McKinsey indicated that companies that evaluated executives' performance primarily based on financial results—rather than on how they achieved those results—were 13 percent less likely to have revenue growth above peers.

— Structure executive compensation over longer time horizons, including the time after executives leave their companies. Adjusting some elements of executive-pay structures, such as the time horizon over which CEOs are compensated, appears to encourage long-term behaviors on the part of CEOs.

CEO behaviors

CEOs, supported by their top teams, are ultimately responsible for creating a focus on the long term in their companies. They must serve as role models for the rest of their management teams when making big decisions. They can also apply their influence and authority in four ways:

— Ensure that strategic initiatives are funded and staffed properly and protected from short-term-earnings pressure. Our survey found that companies whose CEOs allocated resources to critical growth areas were more likely than their peers to exhibit greater organic revenue growth.

— Adapt management systems to encourage bold risk taking and to counter biased decision making. For example, implementing a company-wide rather than a business-unit-level approach to resource allocation can help managers see that their portfolios can accommodate bets on relatively risky endeavors.

— Actively identify and engage long-term-oriented investors—and have the courage to ignore short-term-focused shareholders and other similarly minded members of the investment community. CEOs should spend more time talking with long-term investors. Such conversations can help reassure executives that a long-term outlook best serves their company and its shareholders.

— Demonstrate the link between financial and nontraditional metrics to prevent short-term trade-offs. To enrich the dialogue with long-term shareholders and other stakeholders, executives can select, track, and report on the nontraditional indicators, such as employee satisfaction, that are most material to their companies' long-term performance.

Executives undeniably face real pressure to focus on and deliver satisfactory short-term results. However, they must weigh short-term demands against the flood of empirical evidence showing that companies that seek strong long-term results outperform companies that optimize short-term gains. By understanding which management behaviors distinguish successful long-term companies and expressly fostering those behaviors, CEOs and boards can help their companies produce value for stakeholders over the long run.

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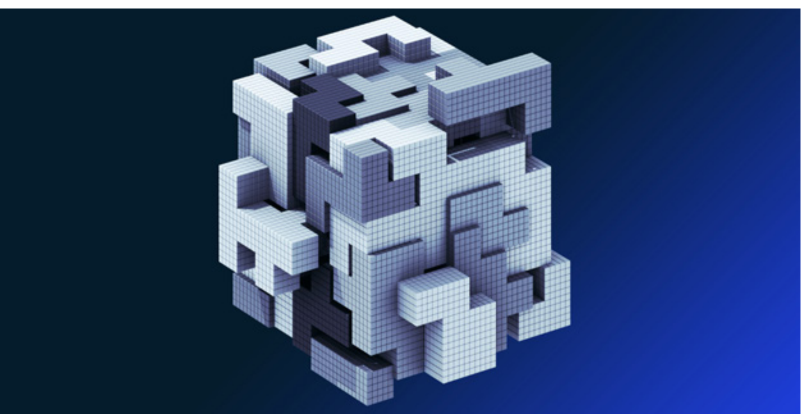
2020

Why ‘digital’ is no different when it comes to valuation

Whether tech enabled or old school, proposed projects and initiatives need to be assessed according to the cash flows they generate. The trick is getting the base case right.

by Liz Ericson and Tim Koller



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Ask any dozen business leaders how they define “digital,” and you will probably get just as many different answers. For some, digital is just an upgraded term for what their IT functions do. For others, it refers to the use of online tools and technologies to make process changes, to enable performance improvements, or to pursue organizational transformation. For still others, it’s an excuse to question the hows and the whys in their core businesses.

Our colleagues examined how a typical consumer-packaged-goods company defined the term and identified at least 33 types of digital initiatives—including digital marketing, optimization of sales-force coverage, predictive maintenance, supply-chain planning, and robotic process automation in the back office.

Given the prevailing fuzzy definition of digital, it isn’t surprising that business leaders are often unsure how to evaluate the myriad technology-enabled initiatives being proposed to them and how much value those initiatives may create. In a 2018 survey of 1,733 managers, about eight in ten said their organizations were pursuing digital initiatives. But only 14 percent of the managers said they had realized significant performance improvements from these efforts, and only 3 percent said they had successfully sustained any changes.[1]

A suggestion for these business leaders: don’t get tripped up by digital labels; follow the same principles that apply to *all* investment decisions. That is, evaluate digital projects and strategies based on

[1] “Five moves to make during a digital transformation,” McKinsey, April 24, 2019.

the cash flows they are expected to generate, making sure to factor in “do nothing” scenarios (or base cases) and the overarching objectives of the digital project or strategy being proposed.

While that approach sounds simple, getting it right requires some thoughtful strategic analysis.

Don’t skip the base case

Which of the following (if either) would be more valuable to the organization: investing in a new e-commerce site or investing in some automation software that could improve the company’s procurement processes? Executives often argue that such digital-investment decisions can be difficult to make for a range of reasons, including the following:

— The benefits from digital initiatives often don’t materialize right away, and the projects can have front-loaded or “shadow” costs—as a result of, say, building a new digital business while maintaining the core business.

— Proposed digital initiatives can’t be meaningfully compared against traditional ones.

— The value of a specific feature (interest-free credit, for example) can be difficult to disentangle from its context.

— The link back to the core business decision underpinning the digital strategy or initiative can be obfuscated.

— Executives are wary of experiencing “death by 1,000 pilots that don’t scale.”

The decision-making default, then, has been to lean in on digital opportunities not because they are the best options but for other reasons—for instance, the potential improvements seem to be the most visible or the project owners are shouting the loudest. As the impact metrics shared previously reveal, this approach creates uneven results.

Ideally, all investment decisions should be analyzed against an alternative course of action. For digital projects, the alternative may be to do nothing. But especially in the case of digital projects, the do-nothing case may not mean net-zero change; it may actually mean a steady (or accelerating) erosion of value. Consider the decision that many banks have faced over the years about whether to invest in mobile-banking apps: if all of a bank’s competitors have mobile apps and the bank doesn’t invest in one, its market share will likely fall over time as it loses customers or fails to attract new ones. Therefore, the base case isn’t stable profits and cash flows; instead, it’s a decline in profits and cash flows—along with a reputation for being a stale brand.

For reasons of comfort and even self-preservation, business leaders are often reluctant to build and share business-as-usual projections that show declines in profits and cash flows. Yet such declines are what most often happen when companies avoid change. Companies must be realistic about the potential for declining base cases. By developing an honest base case and a full range of cash-flow scenarios, business leaders can more meaningfully compare digital initiatives and strategies against other investments that may be competing for scarce resources. This approach may also prompt companies to think more strategically about how, when, and how much to invest in digital projects, given how quickly customers’ expectations are changing.

Examine potential impact from digital

Building a realistic base case can provide the data needed to vet the potential impact of a digital strategy or initiative. It’s also important, however, to identify the *type* of impact that digital strategies and initiatives may have and frame investment discussions accordingly. There can be some overlap, but companies’ digital initiatives typically fall into one of two categories.

By developing an honest base case and a full range of cash-flow scenarios, business leaders can more meaningfully compare digital initiatives and strategies against other investments.

The first category is the application of digital tools and technologies to disrupt an industry fundamentally, requiring a major revamp of a company's business model or a spooling up of new businesses, some of which may even cannibalize the company's core strengths. The second (less dramatic but still critical) category is when companies use digital simply to do the things they already do, only better—in service to, for instance, cost reduction, improved customer experience, new sources of revenue, and better decision making.

New business models

In some cases, the use of digital tools and technologies can upend entire business models or create entirely new businesses. Look no further than the way the internet has changed the ways that consumers research and purchase airline tickets and hotel rooms, disintermediating many traditional travel agents—one of the original cases of industry reinvention. The introduction of video-streaming services has disrupted the economics of traditional broadcast and cable TV channels. And the rise of cloud computing not only has reshaped how companies are transforming themselves but also has entirely disrupted two other industries: manufacturers of mainframe and server computers and businesses that run companies' data centers. Cloud computing itself has become an enormous business: $150 billion was spent on cloud services and infrastructure over the first half of 2019.

To value these new opportunities, business leaders should use the standard discounted-cash-flow approach. The fact that these businesses often grow fast and don't earn profits early on shouldn't affect the valuation approach. Investors can certainly be patient at times, as Amazon saw for decades with its retail business, but digital initiatives will eventually need to generate profits and cash flow and earn an attractive ROIC.

With high-growth companies, business leaders must start from the future rather than the present—markets may not exist yet, so scenario planning is critical.[2] A look at the fundamental economics of the business can help managers build a realistic estimate of returns, but another important consideration is whether the new digital business will engender network effects. That is, as companies grow, they can earn higher margins and ROIC because their products become more valuable with each new customer. In most industries, competition forces returns back to reasonable levels. But in industries with network effects, competition is kept at bay by the low and decreasing unit costs of the market leader (hence the industry tag "winner takes all") and the inconvenience to customers of switching to new suppliers (the "lock-in effect").

Companies like Amazon, Apple, and Google have leveraged their payment, single-sign-on, and connectivity products to create incremental value

[2] "High-growth companies," in Marc Goedhart, Tim Koller, and David Wessels, *Valuation: Measuring and Managing the Value of Companies*, seventh edition, Hoboken, NJ: John Wiley & Sons, June 2020, pp. 709–24.

from each new user. Microsoft's Office software provides another good, if tried-and-true, example of network effects. It has long been the workplace standard for word processing, creating spreadsheets, and generating graphics. As the installed base of Office users expanded, it became ever-more attractive for new customers to use Office for these tasks because they could share documents, calculations, and images with so many others. As the customer base grew, margins were very high because the incremental cost of providing software through DVDs or downloads was so low.

Cost reduction

Many digital initiatives help companies reduce operating costs. One mining company saved more than $360 million per year from process-automation software that gave managers more insight into what exactly was happening in the field, enabling managers to make adjustments on the fly. Meanwhile, several fossil-fuel-based power generators learned that they could improve their plants' heat rates (how efficiently the plants use fuel) by up to 3 percent by using sensors and actuators for remote monitoring and automated operations and by employing smart valves that self-report and repair leakages.[3]

Understanding the economics of cost reduction isn't as straightforward as it may seem. Business leaders might be tempted to estimate present value by simply discounting the expected savings and subtracting the investments required. But business leaders must also examine the second-order effects.

In a competitive industry—chemicals, for instance—cost reductions might simply be passed through to customers as price reductions. The present value of such a chemical company's cost-reduction efforts would seem to be zero. But a look at the alternative case reveals something different: if competitors are pursuing digital initiatives to reduce costs and your company isn't, you will still have to reduce your prices in line with those of your competitors. The alternative to the digital initiative would be a decline in cash flows because of lower prices without reduced costs. The present value of the initiative may turn positive again once the business leader compares the initiative with the right base case.

Improved customer experience

Consumers have benefited tremendously from companies' digital innovations, particularly regarding the purchasing experience. A customer can buy an item of clothing in a physical store or online and have it shipped to the buyer's home, to a local store, or to any one of thousands of pickup points. If a local store doesn't have the right size for an in-store shopper, the customer can order it on the spot and have it delivered to their home. A customer who decides to return an item can return it to any of the company's physical stores or mail it back, regardless of how it was purchased. Consumers can also track in real time the progress of the shipments heading their way.

Using digitization to improve the customer experience can add value to the business in a variety of ways. In some cases, it can lead to reduced costs. An electricity-distribution company fully redesigned its customer interfaces in a "digital first" way that made a priority of customers' online interactions. As a result, its customer satisfaction rose 25 percentage points, employee satisfaction increased by ten percentage points, and customer-service costs fell 40 percent.

As is the case with applying digital solutions to reduce costs, it's critical to think through the competitive effects of investing in digital to gain a superior customer experience. In many situations, customers have come to expect an improved experience and are unwilling to pay extra for it. Meanwhile, providing omnichannel services can be expensive for retailers; the cost to ship online orders often makes these sales unprofitable, especially as shipping is expected to be free and fast (same day, in some cases). Meanwhile, in-store sales may be declining as a result of the omnichannel services, leading to lower margins, as some costs are fixed.

[3] Gerardo Guzman, Abhay Prasanna, Peter Safarik, and Pankaj Tanwar, "Unlocking the value of digital operations in electric-power generation," McKinsey, October 11, 2019.

Even so, retailers have little choice but to provide omnichannel services despite lower profitability. If they don't, they stand to lose even more revenues and profits. When vetting digital initiatives in this category, business leaders should ask themselves some questions. Does the improved customer service lead to higher market share because the company's customer service is better than that of competitors? Or does it maintain the company's market share or avoid losing market share because competitors are doing the same thing?

New sources of revenue

Some companies have been able to create new revenue sources through digital initiatives. In these cases, the economic analysis versus the base case is more straightforward because, at least for a while, the company (and maybe its competitors) are making the pie bigger for the whole industry.

For instance, an ice-cream manufacturer set up centralized freezers in the United Kingdom. A delivery company picks up the ice cream and delivers it to customers within a short time period. This service has generated more than ten times the volume of convenience-store freezers—and mostly in additional sales because without the convenient delivery, customers might simply skip the ice cream. In another case, an industrial-equipment manufacturer created a data-driven service business that collects soil samples and analyzes weather patterns to help farmers optimize crop yields. Sensors in tractors and other machinery provide data for predictive maintenance, automated sprinkler systems synchronize with weather data, and an open-software platform lets third parties build new service apps.[4]

Such new sources of revenue can create value because they don't involve just keeping up with the competition. In both examples, digital innovations created an overall increase in the revenue pool for the industry—even for the same old product—whether in overall consumption of ice cream or overall demand for precision-farming services.

Better decision making

Some executives are using advanced analytics to make better decisions about a broad range of business activities. Doing so can generate additional revenues, reduce costs, or both. For instance, a consumer-products company used advanced analytics to improve the design of its planograms (models of how it will allocate its limited space on retail shelves, describing which products to include and how to display them). The analytics program revealed to the company's decision makers that they could dramatically improve the effectiveness of their product placements. They were able to gain these insights by continually comparing and

In many situations, customers have come to expect an improved experience and are unwilling to pay extra for it.

[4] Jacques Bughin, Tanguy Catlin, Martin Hirt, and Paul Willmott, "Why digital strategies fail," *McKinsey Quarterly*, January 25, 2018.

contrasting alternative product mixes, without waiting for weeks of physical-store receipts to hint at performance.

At the same time, the company was able to reduce the number of people required to design the planograms from ten to just two, driving down costs.

In this case, the investment in advanced analytics helped the company increase total customer spending by getting customers to upgrade to more profitable products. And because the change involved only choices within the company's product mix, the improvement created value without necessarily inviting a competitive response. In other cases, the benefits may be diluted because competitors take similar actions, but the investment in analytics still may create value by maintaining competitive parity.

In our experience, it's easy for executives to get caught up in discussions about how technologies work and then try become fluent in them—for instance, by asking what knowledge graphs are, how exactly machines learn, and so on. More important, though, is to focus on identifying which decisions create (or destroy) the most value in their organizations and then consider the application of advanced analytics toward those discussions. The ultimate goal is to gain better insights and even prescriptive answers on how to operate.

As executives and investors seek to understand the competitive implications of digital technologies, it bears remembering that these topics and the management responses to them will likely be fluid for some time to come. It's also worth remembering that even when definitions seem fuzzy, the principles of valuation are not. They are steadfast and reliable, and they can help business leaders drown out the noise and distinguish value-creating opportunities from value-destroying ones.

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2005

Do fundamentals—or emotions—drive the stock market?

Emotions can drive market behavior in a few short-lived situations. But fundamentals still rule.

by Marc Goedhart, Timothy Koller, and David Wessels

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There's never been a better time to be a behaviorist. During four decades, the academic theory that financial markets accurately reflect a stock's underlying value was all but unassailable. But lately, the view that investors can fundamentally change a market's course through irrational decisions has been moving into the mainstream.

With the exuberance of the high-tech stock bubble and the crash of the late 1990s still fresh in investors' memories, adherents of the behaviorist school are finding it easier than ever to spread the belief that markets can be something less than efficient in immediately distilling new information and that investors, driven by emotion, can indeed lead markets awry. Some behaviorists would even assert that stock markets lead lives of their own, detached from economic growth and business profitability. A number of finance scholars and practitioners have argued that stock markets are not efficient—that is, that they don't necessarily reflect economic fundamentals.[1] According to this point of view, significant and lasting deviations from the intrinsic value of a company's share price occur in market valuations.

The argument is more than academic. In the 1980s the rise of stock market index funds, which now hold some $1 trillion in assets, was caused in large part by the conviction among investors that efficient-market theories were valuable. And current debates in the United States and elsewhere about privatizing Social Security and other retirement systems may hinge on assumptions about how investors are likely to handle their retirement options.

We agree that behavioral finance offers some valuable insights—chief among them the idea that markets are not always right, since rational investors

[1] For an overview of behavioral finance, see Jay R. Ritter, "Behavioral finance," *Pacific-Basin Finance Journal*, 2003, Volume 11, Number 4, pp. 429–37; and Nicholas Barberis and Richard H. Thaler, "A survey of behavioral finance," in *Handbook of the Economics of Finance: Financial Markets and Asset Pricing*, G. M. Constantinides et al. (eds.), New York: Elsevier North-Holland, 2003, pp. 1054–123.

can't always correct for mispricing by irrational ones. But for managers, the critical question is how often these deviations arise and whether they are so frequent and significant that they should affect the process of financial decision making. In fact, significant deviations from intrinsic value are rare, and markets usually revert rapidly to share prices commensurate with economic fundamentals. Therefore, managers should continue to use the tried-and-true analysis of a company's discounted cash flow to make their valuation decisions.

When markets deviate

Behavioral-finance theory holds that markets might fail to reflect economic fundamentals under three conditions. When all three apply, the theory predicts that pricing biases in financial markets can be both significant and persistent.

Irrational behavior. Investors behave irrationally when they don't correctly process all the available information while forming their expectations of a company's future performance. Some investors, for example, attach too much importance to recent events and results, an error that leads them to overprice companies with strong recent performance. Others are excessively conservative and underprice stocks of companies that have released positive news.

Systematic patterns of behavior. Even if individual investors decided to buy or sell without consulting economic fundamentals, the impact on share prices would still be limited. Only when their irrational behavior is also systematic (that is, when large groups of investors share particular patterns of behavior) should persistent price deviations occur. Hence behavioral-finance theory argues that patterns of overconfidence, overreaction, and overrepresentation are common to many investors and that such groups can be large enough to prevent a company's share price from reflecting underlying economic fundamentals—at least for some stocks, some of the time.

Limits to arbitrage in financial markets. When investors assume that a company's recent strong performance alone is an indication of future performance, they may start bidding for shares and drive up the price. Some investors might expect a company that surprises the market in one quarter to go on exceeding expectations. As long as enough other investors notice this myopic overpricing and respond by taking short positions, the share price will fall in line with its underlying indicators.

This sort of arbitrage doesn't always occur, however. In practice, the costs, complexity, and risks involved in setting up a short position can be too high for individual investors. If, for example, the share price doesn't return to its fundamental value while they can still hold on to a short position—the so-called noise-trader risk—they may have to sell their holdings at a loss.

Momentum and other matters

Two well-known patterns of stock market deviations have received considerable attention in academic studies during the past decade: long-term reversals in share prices and short-term momentum.

First, consider the phenomenon of reversal—high-performing stocks of the past few years typically become low-performing stocks of the next few. Behavioral finance argues that this effect is caused by an overreaction on the part of investors: when they put too much weight on a company's recent performance, the share price becomes inflated. As additional information becomes available, investors adjust their expectations and a reversal occurs. The same behavior could explain low returns after an initial public offering (IPO), seasoned offerings, a new listing, and so on. Presumably, such companies had a history of strong performance, which was why they went public in the first place.

Momentum, on the other hand, occurs when positive returns for stocks over the past few months are followed by several more months of positive returns. Behavioral-finance theory suggests that this trend results from systematic underreaction: overconservative investors underestimate the true impact of earnings, divestitures, and share repurchases, for example, so stock prices don't instantaneously react to good or bad news.

But academics are still debating whether irrational investors alone can be blamed for the long-term-reversal and short-term-momentum patterns in returns. Some believe that long-term reversals result merely from incorrect measurements of a stock's risk premium, because investors ignore the risks associated with a company's size and market-to-capital ratio.[2] These statistics could be a proxy for liquidity and distress risk.

Similarly, irrational investors don't necessarily drive short-term momentum in share price returns. Profits from these patterns are relatively limited after transaction costs have been deducted. Thus, small momentum biases could exist even if all investors were rational.

Furthermore, behavioral finance still cannot explain why investors overreact under some conditions (such as IPOs) and underreact in others (such as earnings announcements). Since there is no systematic way to predict how markets will respond, some have concluded that this is a further indication of their accuracy.[3]

Persistent mispricing in carve-outs and dual-listed companies

Two well-documented types of market deviation—the mispricing of carve-outs and of dual-listed companies—are used to support behavioral-finance theory. The classic example is the pricing of 3Com and Palm after the latter's carve-out in March 2000.

In anticipation of a full spin-off within nine months, 3Com floated 5 percent of its Palm subsidiary. Almost immediately, Palm's market capitalization was higher than the entire market value of 3Com, implying that 3Com's other businesses had a negative value. Given the size and profitability of the rest of 3Com's businesses, this result would clearly indicate mispricing. Why did rational investors fail to exploit the anomaly by going short on Palm's shares and long on 3Com's? The reason was that the number of available Palm shares was extremely small after the carve-out: 3Com still held 95 percent of them. As a result, it was extremely difficult to establish a short position, which would have required borrowing shares from a Palm shareholder.

During the months following the carve-out, the mispricing gradually became less pronounced as the supply of shares through short sales increased steadily. Yet while many investors and analysts knew about the price difference, it persisted for two months—until the Internal Revenue Service formally approved the carve-out's tax-free status in early May 2002. At that point, a significant part of the uncertainty around the spin-

Two types of market deviation—the mispricing of carve-outs and of dual-listed companies—are used to support behavioral-finance theory.

[2] Eugene F. Fama and Kenneth R. French, "Multifactor explanations of asset pricing anomalies," *Journal of Finance*, 1996, Volume 51, Number 1, pp. 55–84.
[3] Eugene F. Fama, "Market efficiency, long-term returns, and behavioral finance," *Journal of Financial Economics*, 1998, Volume 49, Number 3, pp. 283–306.

off was removed and the price discrepancy disappeared. This correction suggests that at least part of the mispricing was caused by the risk that the spin-off wouldn't occur.

Additional cases of mispricing between parent companies and their carved-out subsidiaries are well documented.[4] In general, these cases involve difficulties setting up short positions to exploit the price differences, which persist until the spin-off takes place or is abandoned. In all cases, the mispricing was corrected within several months.

A second classic example of investors deviating from fundamentals is the price disparity between the shares of the same company traded on two different exchanges. Consider the case of Royal Dutch Petroleum and "Shell" Transport and Trading, which are traded on the Amsterdam and London stock markets, respectively. Since these twin shares are entitled to a fixed 60-40 portion of the dividends of Royal Dutch/Shell, you would expect their share prices to remain in this fixed ratio.

Over long periods, however, they have not. In fact, prolonged periods of mispricing can be found for several similar twin-share structures, such as Unilever. This phenomenon occurs because large groups of investors prefer (and are prepared to pay a premium for) one of the twin shares. Rational investors typically do not take positions to exploit the opportunity for arbitrage.

Thus in the case of Royal Dutch/Shell, a price differential of as much as 30 percent has persisted at times. Why? The opportunity to arbitrage dual-listed stocks is actually quite unpredictable and potentially costly. Because of noise-trader risk, even a large gap between share prices is no guarantee that those prices will converge in the near term.

Does this indict the market for mispricing? We don't think so. In recent years, the price differences for Royal Dutch/Shell and other twin-share stocks have all become smaller. Furthermore, some of these share structures (and price differences) disappeared because the corporations formally merged, a development that underlines the significance of noise-trader risk: as soon as a formal date was set for definitive price convergence, arbitrageurs stepped in to correct any discrepancy. This pattern provides additional evidence that mispricing occurs only under special circumstances—and is by no means a common or long-lasting phenomenon.

Markets and fundamentals: The bubble of the 1990s

Do markets reflect economic fundamentals? We believe so. Long-term returns on capital and growth have been remarkably consistent for the past 35 years, in spite of some deep recessions and periods of very strong economic growth. The median return on equity for all US companies has been a very stable 12 to 15 percent, and long-term GDP growth for the US economy in real terms has been about 3 percent a year since 1945.[5] We also estimate that the inflation-adjusted cost of equity since 1965 has been fairly stable, at about 7 percent.[6]

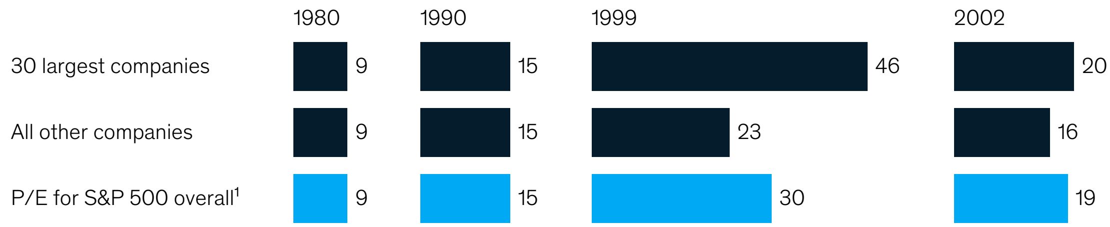
We used this information to estimate the intrinsic P/E ratios for the US and UK stock markets and then compared them with the actual values.[7] This analysis has led us to three important conclusions. The first is that US and UK stock markets, by and large, have been fairly priced, hovering near their intrinsic P/E ratios. This figure was typically around 15, with the exception of the high-inflation years of the late 1970s and early 1980s, when it was closer to 10 (exhibit).

[4] Owen A. Lamont and Richard H. Thaler, "Can the market add and subtract? Mispricing in tech stock carve-outs," *Journal of Political Economy*, 2003, Volume 111, Number 2, pp. 227–68; and Mark L. Mitchell, Todd C. Pulvino, and Erik Stafford, "Limited arbitrage in equity markets," *Journal of Finance*, 2002, Volume 57, Number 2, pp. 551–84.
[5] US corporate earnings as a percentage of GDP have been remarkably constant over the past 35 years, at around 6 percent.
[6] Marc H. Goedhart, Timothy M. Koller, and Zane D. Williams, "The real cost of equity," McKinsey, October 1, 2002.

Exhibit

Stock markets return to intrinsic valuation after deviations.

P/E ratio for listed companies in United States



[1] Weighted average P/E of constituent companies.
Source: Standard & Poor's; McKinsey analysis

Second, the late 1970s and late 1990s produced significant deviations from intrinsic valuations. In the late 1970s, when investors were obsessed with high short-term inflation rates, the market was probably undervalued; long-term real GDP growth and returns on equity indicate that it shouldn't have bottomed out at P/E levels of around 7. The other well-known deviation occurred in the late 1990s, when the market reached a P/E ratio of around 30—a level that couldn't be justified by 3 percent long-term real GDP growth or by 13 percent returns on book equity.

Third, when such deviations occurred, the stock market returned to its intrinsic-valuation level within about three years. Thus, although valuations have been wrong from time to time—even for the stock market as a whole—eventually they have fallen back in line with economic fundamentals.

Focus on intrinsic value

What are the implications for corporate managers? Paradoxically, we believe that such market deviations make it even more important for the executives of a company to understand the intrinsic value of its shares. This knowledge allows it to exploit any deviations, if and when they occur, to time the implementation of strategic decisions more successfully. Here are some examples of how corporate managers can take advantage of market deviations:

— issuing additional share capital when the stock market attaches too high a value to the company's shares relative to their intrinsic value

— repurchasing shares when the market underprices them relative to their intrinsic value

— paying for acquisitions with shares instead of cash when the market overprices them relative to their intrinsic value

— divesting particular businesses at times when trading and transaction multiples are higher than can be justified by underlying fundamentals

Bear two things in mind. First, we don't recommend that companies base decisions to issue or repurchase their shares, to divest or acquire businesses, or to settle transactions with cash or shares solely on an assumed difference between the market and intrinsic value of their shares. Instead, these decisions must be grounded in a strong business strategy driven by the goal of creating shareholder value. Market deviations are more relevant as tactical considerations when companies time and

[7] Marc H. Goedhart, Timothy M. Koller, and Zane D. Williams, "Living with lower market expectations," *McKinsey Quarterly*, November 1, 2003.

execute such decisions—for example, when to issue additional capital or how to pay for a particular transaction.

Second, managers should be wary of analyses claiming to highlight market deviations. Most of the alleged cases that we have come across in our client experience proved to be insignificant or even nonexistent, so the evidence should be compelling. Furthermore, the deviations should be significant in both size and duration, given the capital and time needed to take advantage of the types of opportunities listed previously.

Provided that a company's share price eventually returns to its intrinsic value in the long run, managers would benefit from using a discounted-cash-flow approach for strategic decisions. What should matter is the long-term behavior of the share price of a company, not whether it is undervalued by 5 or 10 percent at any given time. For strategic business decisions, the evidence strongly suggests that the market reflects intrinsic value.

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2015

The real business of business

Shareholder-oriented capitalism is still the best path to broad economic prosperity, as long as companies focus on the long term.

Marc Goedhart, Tim Koller, and David Wessels

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The guiding principle of business value creation is a refreshingly simple construct: companies that grow and earn a return on capital that exceeds their cost of capital create value. The financial crisis of 2007–08 and the Great Recession that followed are only the most recent reminders that when managers, boards of directors, and investors forget this guiding principle, the consequences are disastrous—so much so, in fact, that some economists now call into question the very foundations of shareholder-oriented capitalism. Confidence in business has tumbled.[1] Politicians and commentators are pushing for more regulation and fundamental changes in corporate governance. Academics and even some business leaders have called for companies to change their focus from increasing shareholder value to a broader focus on all stakeholders, including customers, employees, suppliers, and local communities.

No question, the complexity of managing the interests of myriad owners and stakeholders in a modern corporation demands that any reform discussion begin with a large dose of humility and tolerance for ambiguity in defining the purpose of business. But we believe the current debate has muddied a fundamental truth: creating shareholder value is not the same as maximizing short-term profits—and companies that confuse the two often put both shareholder value and stakeholder interests at risk. Indeed, a system focused on creating shareholder value from business isn't the problem; short-termism is. Great managers don't skimp on safety, don't make value-destroying investments just because their peers are doing it, and don't use accounting or financial gimmicks to boost short-term profits, because ultimately such moves undermine intrinsic value.

What's needed at this time of reflection on the virtues and vices of capitalism is a clearer definition of shareholder value creation that can guide managers and board directors, rather than blurring their focus with a vague stakeholder agenda. We

[1] An annual Gallup poll in the United States showed that the percent of respondents with little or no confidence in big business increased from 27 percent in the 1983–86 period to 38 percent in the 2011–14 period. For more, see "Confidence in institutions," gallup.com.

do believe that companies are better able to deliver long-term value to shareholders when they consider stakeholder concerns; the key is for managers to examine those concerns systematically for opportunities to do both.

What does it mean to create shareholder value?

If investors knew as much about a company as its managers, maximizing its current share price might be equivalent to maximizing value over time. In the real world, investors have only a company's published financial results and their own assessment of the quality and integrity of its management team. For large companies, it's difficult even for insiders to know how the financial results are generated. Investors in most companies don't know what's really going on inside a company or what decisions managers are making. They can't know, for example, whether the company is improving its margins by finding more efficient ways to work or by simply skimping on product development, maintenance, or marketing.

Since investors don't have complete information, it's not difficult for companies to pump up their share price in the short term. For example, from 1997 to 2003, a global consumer-products company consistently generated annual growth in earnings per share (EPS) between 11 and 16 percent. Managers attributed the company's success to improved efficiency. Impressed, investors pushed the company's share price above that of its peers—unaware that the company was shortchanging its investment in product development and brand building to inflate short-term profits, even as revenue growth declined. In 2003, managers were compelled to admit what they'd done. Not surprisingly, the company went through a painful period of rebuilding, and its stock price took years to recover.

In contrast, the evidence makes it clear that companies with a long strategic horizon create more value. The banks that had the insight and courage to forgo short-term profits during the real-estate bubble earned much better returns for shareholders over the longer term.[2] Oil and gas companies known for investing in safety outperform those that haven't. We've found, empirically, that long-term revenue growth—particularly organic revenue growth—is the most important driver of shareholder returns for companies with high returns on capital (though not for companies with low returns on capital).[3] We've also found a strong positive correlation between long-term shareholder returns and investments in R&D—evidence of a commitment to creating value in the longer term.[4]

The evidence makes it clear that companies with a long strategic horizon create more value.

[2] Bin Jiang and Tim Koller, "How to choose between growth and ROIC," McKinsey, September 1, 2007.
[3] Jiang and Koller, "How to choose between growth and ROIC."
[4] Tim Koller, Marc Goedhart, and David Wessels, *Valuation: Measuring and Managing the Value of Companies*, fifth edition, Hoboken, NJ: John Wiley & Sons, 2010.

The weight of such evidence and our experience supports a clear definition of what it means to create shareholder value, which is to create value for the collective of all shareholders, *present and future*. This means managers should not take actions to increase today's share price if they will reduce it down the road. It's the task of management and the board to have the courage to make long-term value-creating decisions despite the short-term consequences.

Can stakeholder interests be reconciled?

Much recent criticism of shareholder-oriented capitalism has called on companies to focus on a broader set of stakeholders, not just shareholders. It's a view that has long been influential in continental Europe, where it is frequently embedded in the governance structures of the corporate form of organization. And we agree that for most companies anywhere in the world, pursuing the creation of long-term shareholder value requires satisfying other stakeholders as well.

We would go even further. We believe that companies dedicated to value creation are healthier and more robust—and that investing for sustainable growth also builds stronger economies, higher living standards, and more opportunities for individuals. Our research shows, for example, that many corporate-social-responsibility initiatives also create shareholder value, and managers should seek out such opportunities.[5] For example, IBM's free web-based resources on business management not only help to build small and medium-size enterprises but also improve IBM's reputation and relationships in new markets and develop relationships with potential customers. In another case, Novo Nordisk's "Triple Bottom Line" philosophy of social responsibility, environmental soundness, and economic viability has led to programs to improve diabetes care in China. According to the company, its programs have burnished its brand, added to its market share, and increased sales—at the same time as improving physician education and patient outcomes. Similarly, Best Buy's efforts to reduce attrition among women employees not only lowered turnover among women by more than 5 percent, it also helped them create their own support networks and build leadership skills.

But what should be done when the interests of stakeholders don't naturally complement those of a company, for instance, when it comes to questions of employee compensation and benefits, supplier management, and local community relationships? Most advocates of managing for stakeholders appear to argue that companies can maximize value for all stakeholders and shareholders simultaneously—without making trade-offs among them. This includes, for example, Cornell Law School professor Lynn Stout's book, *The Shareholder Value Myth*,[6] in which Stout argues persuasively that nothing in US corporate law requires companies to focus on shareholder value creation. But her argument that putting shareholders first harms nearly everyone is really an argument against short-termism, not a prescription for how to make trade-offs. Similarly, R. Edward Freeman, a professor at the University of Virginia's Darden School of Business, has written at length proposing a stakeholder value orientation. In his recent book, *Managing for Stakeholders*, he and his coauthors assert that "there is really no inherent conflict between the interests of financiers and other stakeholders."[7] John Mackey, founder and co-CEO of Whole Foods, recently wrote *Conscious Capitalism*,[8] in which he, too, asserts that there are no trade-offs to be made.

Such criticism is naive. Strategic decisions often require myriad trade-offs among the interests of different groups that are often at odds with one another. And in the absence of other principled

[5] Sheila Bonini, Tim Koller, and Philip H. Mirvis, "Valuing social responsibility programs," *McKinsey Quarterly*, July 1, 2009.
[6] Lynn Stout, *The Shareholder Value Myth: How Putting Shareholders First Harms Investors, Corporations, and the Public*, first edition, Oakland, CA: Berrett-Koehler Publishers, 2012.
[7] R. Edward Freeman, Jeffrey S. Harrison, and Andrew C. Wicks, *Managing for Stakeholders: Survival, Reputation, and Success*, first edition, New Haven, CT: Yale University Press, 2007.
[8] John Mackey and Rajendra Sisodia, *Conscious Capitalism: Liberating the Heroic Spirit of Business*, first edition, Boston, MA: Harvard Business School Publishing, 2013.

Consumers benefit when goods are produced at the lowest possible cost, and the economy benefits when unproductive plants are closed and employees move to new jobs with more competitive companies.

guidelines for such decisions, when there are trade-offs to be made, prioritizing long-term value creation is best for the allocation of resources and the health of the economy.

Consider employee stakeholders. A company that tries to boost profits by providing a shabby work environment relative to competitors, underpaying employees, or skimping on benefits will have trouble attracting and retaining high-quality employees. Lower-quality employees can mean lower-quality products, reducing demand and hurting reputation. More injury and illness can invite regulatory scrutiny and more union pressure. More turnover will inevitably increase training costs. With today's more mobile and more educated workforce, such a company would struggle in the long term against competitors offering more attractive environments. If the company earns more than its cost of capital, it might afford to pay above-market wages and still prosper—and treating employees well can be good business. But how well is well enough? A stakeholder focus doesn't provide an answer. A shareholder focus does. Pay wages that are just enough to attract quality employees and keep them happy and productive, pairing those with a range of nonmonetary benefits and rewards.

Or consider how high a price a company should charge for its products. A shareholder focus would weigh price, volume, and customer satisfaction to determine a price that creates the most shareholder value. However, that price would also have to entice consumers to buy the products—and not just once but multiple times, for different generations of products. A company might still thrive if it charged lower prices, but there's no way to determine whether the value of a lower price is greater for consumers than the value of a higher price to its shareholders. Finally, consider whether companies in mature, competitive industries should keep open high-cost plants that lose money just to keep employees working and prevent suppliers from going bankrupt. To do so in a globalizing industry would distort the allocation of resources in the economy.

These can be agonizing decisions for managers and are difficult all around. But consumers benefit when goods are produced at the lowest possible cost, and the economy benefits when unproductive plants are closed and employees move to new jobs with more competitive companies. And while it's true that employees often can't just pick up and relocate, it's also true that value-creating companies create more jobs. When examining employment, we found that the European and US companies that created the most shareholder value in the past 15 years have shown stronger employment growth.[9]

[9] Koller, Goedhart, and Wessels, *Valuation*, fifth edition.

Short-termism runs deep

What's most relevant about Stout's argument, and that of others, is its implicit criticism of short-termism—and that is a fair critique of today's capitalism. Despite overwhelming evidence linking intrinsic investor preferences to long-term value creation,[10] too many managers continue to plan and execute strategy, and then report their performance against shorter-term measures, EPS in particular.

As a result of their focus on short-term EPS, major companies often pass up value-creating opportunities. In a survey of 400 CFOs, two Duke University professors found that fully 80 percent of the CFOs said they would reduce discretionary spending on potentially value-creating activities such as marketing and R&D in order to meet their short-term earnings targets.[11] In addition, 39 percent said they would give discounts to customers to make purchases this quarter, rather than next, in order to hit quarterly EPS targets. Such biases shortchange all stakeholders.

As an illustration of how executives get caught up in a short-term EPS focus, consider our experience with companies analyzing a prospective acquisition. The most frequent question managers ask is whether the transaction will dilute EPS over the first year or two. Given the popularity of EPS as a yardstick for company decisions, you might think that a predicted improvement in EPS would be an important indication of an acquisition's potential to create value. However, there is no empirical evidence linking increased EPS with the value created by a transaction.[12] Deals that strengthen EPS and deals that dilute EPS are equally likely to create or destroy value.

If such fallacies have no impact on value, why do they prevail? The impetus for short-termism varies. Some executives argue that investors won't let them focus on the long term; others fault the rise of shareholder activists in particular. Yet our research shows that even if short-term investors cause day-to-day fluctuations in a company's share price and dominate quarterly earnings calls, longer-term investors are the ones who align market prices with intrinsic value.[13] Moreover, the evidence shows that, on average, activist investors strengthen the long-term health of the companies they pursue, often challenging existing compensation structures, for example, that encourage short-termism.[14] Instead, we often find that executives themselves or their boards are usually the source of short-termism. A 2013 survey of more than 1,000 executives and board members found, for example, that most cited their own executive teams and boards (rather than investors, analysts, and others outside the company) as the greatest sources of pressure for short-term performance.[15]

The results can defy logic. We recently participated in a discussion with a company pursuing a major acquisition about whether the deal's likely earnings dilution was important. One of the company's bankers opined that he knew any impact on EPS would be irrelevant to value, but he used it as a simple way to communicate with boards of directors. Elsewhere, we've heard company executives acknowledge that they, too, doubt that the impact on EPS is so important—but they use it anyway, they say, for the benefit of Wall Street analysts. Investors also tell us that a deal's short-term impact on EPS is not that important. Apparently everyone knows that a transaction's short-term impact on EPS doesn't matter, yet they all pay attention to it.

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[10] Robert N. Palter, Werner Rehm, and Jonathan Shih, "Communicating with the right investors," *McKinsey Quarterly*, April 1, 2008.
[11] John R. Graham, Campbell R. Harvey, and Shiva Rajgopal, "Value destruction and financial reporting decisions," *Financial Analysts Journal*, 2006, Volume 62, Number 6, pp. 27–39.
[12] Richard Dobbs, Billy Nand, and Werner Rehm, "Merger valuation: Time to jettison EPS," *McKinsey Quarterly*, March 1, 2005.
[13] Palter, Rehm, and Shih, "Communicating with the right investors."
[14] Joseph Cyriac, Ruth De Backer, and Justin Sanders, "Preparing for bigger, bolder shareholder activists," McKinsey, March 1, 2014.
[15] Commissioned by the Canada Pension Plan Investment Board and McKinsey & Company, the online survey, "Looking toward the long term," ran from April 30 to May 10, 2013, and garnered responses from 1,038 executives representing the full range of industries and company sizes globally. Of these respondents, 722 identified themselves as C-level executives and answered questions in the context of that role, and 316 identified themselves as board directors and answered accordingly. To adjust for differences in response rates, the data are weighted by the contribution of each respondent's nation to global GDP. For more, see fclt.org.

Shareholder capitalism won't solve all social issues

There are some trade-offs that company managers can't make—and neither a shareholder nor a stakeholder approach to governance can help. This is especially true when it comes to issues that affect people who aren't immediately involved with the company as investors, customers, or suppliers. These so-called externalities—parties affected by a company who did not choose to be so—are often beyond the ken of corporate decision making because there is no objective basis for making trade-offs among parties.

If, for example, climate change is one of the largest social issues facing the world, then one natural place to look for a solution is coal-fired power plants, among the largest man-made sources of carbon emissions. But how are the managers of a coal-mining company to make all the trade-offs needed to begin solving our environmental problems? If a long-term shareholder focus led them to anticipate potential regulatory changes, they should modify their investment strategies accordingly; they may not want to open new mines, for example. But if the company abruptly stopped operating existing ones, not only would its shareholders be wiped out but so would its bondholders (since bonds are often held by pension funds). All of its employees would be out of work, with magnifying effects on the entire local community. Second-order effects would be unpredictable. Without concerted action among all coal producers, another supplier could step up to meet demand. Even with concerted action, power plants might be unable to produce electricity, idling their workers and causing electricity shortages that undermine the economy. What objective criteria would any individual company use to weigh the economic and environmental trade-offs of such decisions—whether they're privileging shareholders or stakeholders?

In some cases, individual companies won't be able to satisfy all stakeholders. For any individual company, the complexity of addressing universal social issues such as climate change leaves us with an unresolved question: If not them, then who? Some might argue that it would be better for the government to develop incentives, regulations, and taxes, for example, to encourage a migration away from polluting sources of energy. Others may espouse a free-market approach, allowing creative destruction to replace aging technologies and systems with cleaner, more efficient sources of power.

Shareholder capitalism has taken its lumps in recent years, no question. And given the complexity of the issues, it's unlikely that either the shareholder or stakeholder model of governance can be analytically proved superior. Yet we see in our work that the shareholder model, thoughtfully embraced as a collective approach to present and future value creation, is the best at bridging the broad and varied interests of shareholders and stakeholders alike.

Marc Goedhart is a senior expert in McKinsey's Amsterdam office, and **Tim Koller** is a partner in the New York office; **David Wessels** is an adjunct professor of finance and director of executive education at the University of Pennsylvania's Wharton School. This article is excerpted from Tim Koller, Marc Goedhart, and David Wessels, *Valuation: Measuring and Managing the Value of Companies*, sixth edition, Hoboken, NJ: John Wiley & Sons, August 2015.

Strategic combinations and divestitures

Corporate acquisitions, mergers, combinations, and divestitures have developed over centuries, together with corporations themselves. The goal has consistently been value creation.

There is no question that a combination of two companies can create synergies—which is why an acquirer needs to be diligent, and artful, in realizing them. A thoughtful acquirer also understands that its determination is about more than just the synergies it can realize from the deal. It weighs the value that could have been realized for the corporation and its shareholders if the deal price (and costs) were invested in other initiatives, used for share repurchases, or released as dividends to shareholders.

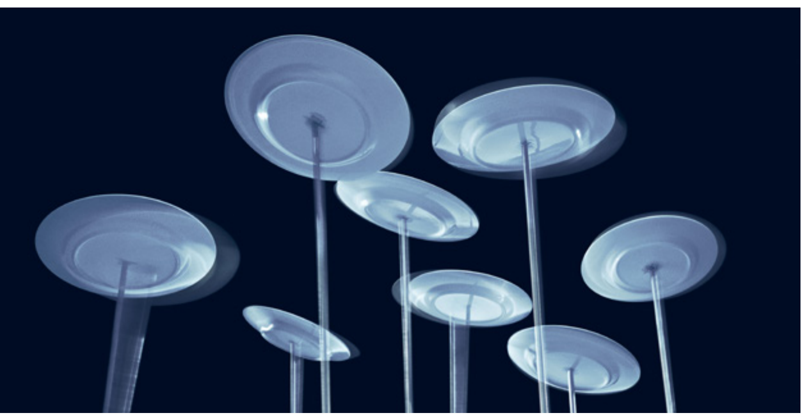
Companies are more likely to be successful dealmakers when they have a strategy-based perspective, develop a robust M&A capability, and think in terms of long-term value creation. A company may create more value by divesting through selling, splitting off, or spinning off businesses for which it isn't the best owner (assuming that the price received is fair value). A company may be best served by entering into a joint venture or alliance. Or, of course, the planned acquisition may make the most sense after all—not least by helping a company improve its digital capabilities or enter an emerging market—so long as value-creating fundamentals are adhered to. While forgoing deals and choosing to grow organically is also always an option (and may be the best decision for a company given its unique circumstances), in the aggregate, companies that keep a dynamic portfolio have serially outperformed those that do not.

2020

Why you've got to put your portfolio on the move

We analyzed hundreds of companies around the world across a decade-long business cycle. The conclusion? Winners change their business mix year after year. Laggards sit still.

by Sandra Andersen, Chris Bradley, Sri Swaminathan, and Andy West



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Every CEO will ask, at least once, "Which business should this company be in?" But the best know it can't be a one-time question; they know the answer will keep changing over time. These executives consistently put their companies' portfolios of businesses on the move—and outperformance tends to follow. The reverse holds true as well: CEOs who rarely ask the question end up with static portfolios. The market moves on, and their company doesn't.

For many companies, sitting still can be a bad option. We know because we have measured. We analyzed the detailed financial results of more than 1,000 global public companies between 2007 and 2017, through a long cycle of downturn, recovery, and growth. Our research makes the case for dynamic portfolio management and reveals five critical principles (based on the outperformers' best practices) for actively reallocating assets:

1. *Be consistent.* The outperformers rotate their portfolios steadily, not wildly, and avoid keeping them fixed in place.

2. *Move with the market.* The outperformers identify how headwinds and tailwinds are shifting, and they deploy resources aggressively to seize potential value-creation opportunities.

3. *Use transactions to speed your way.* The outperformers in our research account for an outsize share of M&A-transaction value during the period studied, and they favor a programmatic approach to M&A.[1]

4. *Focus on acquisitions at the perimeter of your portfolio.* The outperformers use M&A to seize new opportunities in existing but secondary businesses—that is, outside, but not too far outside, of their core sectors.

[1] A company that takes a programmatic approach to M&A makes roughly two or more small or midsize deals in a year, with a meaningful target market capitalization acquired over a ten-year period (the median of the total market capitalization acquired across all deals is 15 percent). See Jeff Rudnicki, Kate Siegel, and Andy West, "How lots of small M&A deals add up to big value," *McKinsey Quarterly*, July 12, 2019.

5. *When the going gets tough, go harder.* Our research reveals that context matters: how you stack up against your competitors affects how hard you need to pull on all the levers we have outlined. We found that companies in the lowest quintile of performance did better when they pulled even harder.

Interestingly, these lessons proved sound in both good times and bad. They are also harder to apply than it seems: challenging economic conditions and cognitive biases that get in the way of good decision making can conspire to keep executives (and their portfolios) in a state of inertia. The reality is, however, that far more CEOs and investors will complain that companies shifted portfolios too little or too late than will gripe about the opposite. The data are with you if you decide to put your portfolio on the move.

The business case for portfolio change

There's a lot of literature available on corporate portfolio management, but it almost never addresses the *business case* for why portfolio changes improve performance or how to go through the difficult task of actually shifting the business mix. With such business realities in mind, we analyzed reams of reported data. We sought out the links between changes in companies' portfolios and actual performance results. More important, we sought conclusions that held true across market cycles. Five core lessons emerged from this study.

1. Be consistent

Our research revealed a Goldilocks rate of portfolio rotation that is neither too low nor too high but just right to produce outperformance. When we drilled down on a controlled subset of our studied companies, we found that about half kept their portfolios mostly static, refreshing them by fewer than ten percentage points over our studied ten-year period. Their portfolio mixes at the end of the period were similar to what they had been at the start. This group barely moved the needle in average annual excess total shareholder returns (TSR). Another group, comprising about a quarter of the companies, refreshed their portfolios by more than 30 percentage points over the decade; they actually produced slightly negative annual excess TSR (Exhibit 1).

The remaining 23 percent of the companies we studied registered a refresh rate between 10 and 30 percent. This last group delivered results that were *just right*—outperforming the others in excess TSR by, on average, 5.2 percent per annum. For a hypothetical company with $10 billion in revenues, a just-right rate of portfolio rotation would mean moving between $1 billion and $3 billion over ten years.

Exhibit 1

An optimal refresh rate keeps a portfolio moving at a steady clip.

Total shareholder returns, average excess performance, in 2007–17 (n = 209), %

[1]Refresh rate calculated as sum of absolute differences in company's share of revenues by industry divided by 2.

Exhibit 2

Move with the market, and change lanes if you have to.

Illustrated example of portfolio momentum

	Industry momentum, 2007–17 Average change in economic profit, $ million		**Company's portfolio exposure** Proportion of revenue, % 2007	2017	Change		**Company's portfolio momentum** Expected change in economic profit, $ million
Business-unit A	1,000	×	27	52	+25	=	250
Business-unit B	100	×	33	48	+15	=	15
Business-unit C	–80	×	40	0	–40	=	32
Total							297

Of course, even within the range we identified, the right refresh rate will be different for companies, depending on industry and other factors. One high performer we studied, today a global logistics company, had operated substantial depository-credit and retail-banking businesses through the first decade of the 2000s. Those business units accounted for more than 15 percent of total company revenue in 2007. But between 2007 and 2017, the company exited banking and expanded its presence in supply chain logistics and parcel and e-commerce delivery instead—areas that each grew to represent about 50 percent of its sales by 2017. This added up to a refresh rate of 16 percent, which put the company in the sweet spot that marks TSR high performers.

2. Move with the market

We created a baseline of industry momentum to consider how a company's portfolio would have evolved had each of its business units performed in line with its pure-play peers. This allowed us to measure whether changes within a portfolio either sped up or slowed down performance. The sum of a company's moves for each of its business units represents total portfolio momentum (Exhibit 2).

When we examined the impact of portfolio momentum on a portion of our broader data set, we found that the one-third of companies that had begun the ten-year study period with positive industry momentum did well, with annual excess TSR of 4.4 percent; they had started in the fast lane and remained there. The companies that had started in the slow lane and moved into the fast lane—for example, a life-sciences conglomerate that shifted capital to testing and treatment—reached the end of the ten years in reasonable shape, with excess TSR growth of 1.7 percent per year. But the companies that began in a slow-growing industry and stayed there delivered a negative average excess TSR over the measured period.

The best companies plumb market insights to forecast which industries and markets are likely to thrive, and they actively configure their portfolios to take advantage of those projected tailwinds. Consider the journey of one company, now a leading global provider of financial research and analytics. In 2007, 40 percent of its revenues came, collectively, from its publishing and education businesses; its financial-research arm contributed about one-third of the company's top line, and its data and analytics businesses accounted for the rest. Seeing the challenges ahead for the publishing industry as a whole, the company sold its publishing and education businesses to private-equity investors and doubled down on financial research and analytics. By 2017, slightly more than half of the company's revenues were derived from financial research, and its financial-data-solutions business reached about 50 percent of the top line. These moves were ahead of the tide: between 2007 and 2017, the average economic profit of companies involved in information provision increased by $1.4 billion, while that of companies involved in publishing declined by $73 million. Veering out of the slow lane of publishing and into the fast lane of financial data helped contribute $400 million of the $850 million in economic-profit lift that the company realized over that period.

3. Use transactions to speed your way

M&A and divestitures are essential for positioning companies for value creation. But it's critical to understand that different approaches to M&A will produce different outcomes over a ten-year period. A company that takes the programmatic approach to M&A makes roughly two or more small or midsize deals in a year, acquiring a meaningful total market capitalization over a ten-year period (the median is 15 percent of total market capitalization acquired across all deals). In the large-deal approach, regardless of how many deals a company does, if an individual deal is larger than 30 percent of the acquiring company's market capitalization, most of its portfolio story is told by this one large bet. Selective M&A involves doing deals, but their value often doesn't add up to a meaningful proportion of a company's market capitalization at the end of a ten-year period. And in the organic approach, a company makes one deal or fewer every three years, and the cumulative value of the deals is less than 2 percent of the acquirer's market capitalization.

When we looked at the companies that were operating at the Goldilocks refresh rate of between 10 and 30 percent over ten years, programmatic M&A appeared to be the optimal path. Indeed, the companies in our sample that used programmatic M&A delivered an average excess TSR of 6.2 percent per year. We found similar outperformance when it came to changing industry lanes: of the companies that used transactions to move into high-growth industries, those that relied on a programmatic approach averaged 3.7 percent in annual excess TSR compared with –0.5 percent for companies that attempted this using selective M&A and 1.2 percent for companies using the large-deal approach.

A global industrial company, for example, divested numerous businesses in which it lacked a competitive advantage and made more than 50 transactions between 2008 and 2017, posting a refresh rate of 29 percent. Its discipline paid off. The company's excess TSR versus that of its peers over the same period was 9 percent.

Programmatic M&A may not be right for every company in every industry, but pursuing a steady stream of deals can give a company access to the latest market intelligence and improve its transaction and integration capabilities. Deals won't succeed all of the time, but doing them as part of a regular business cadence can enforce portfolio-management discipline, help teams get smarter about industry levers and trends, and engender confidence from investors.

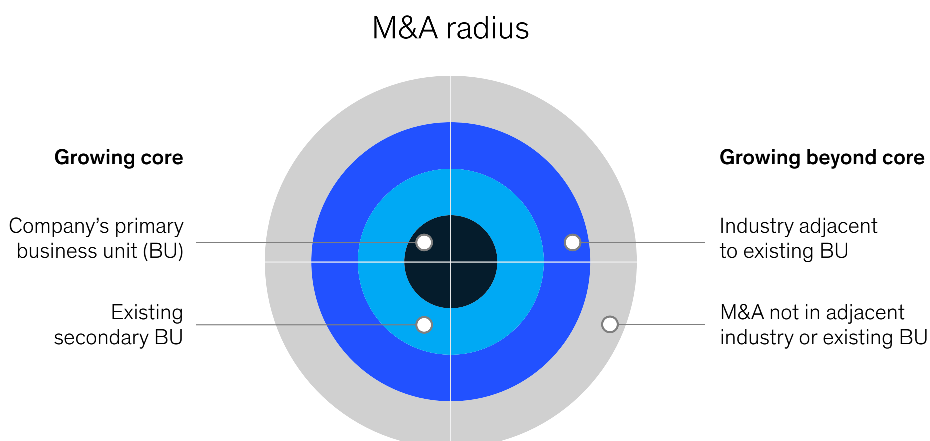
4. Focus acquisitions at the perimeter of your portfolio

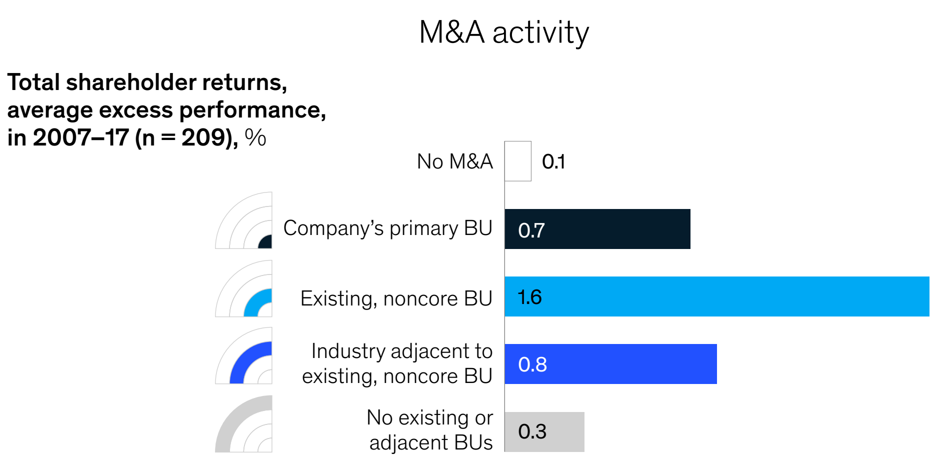
We categorized the acquisitions of the companies in our 2007–17 data set in one of four ways: adding to its primary industry segment; adding to an existing, secondary industry segment; buying into a segment adjacent to an existing business; or stepping out into an unrelated industry. We found that companies that made acquisitions to shore up existing but secondary businesses registered the best results, returning an average of 1.6 percent in annual excess TSR (Exhibit 3). That said, a company's existing industry context turned out to be critical. Those that started in well-performing industries did the best in pursuing M&A within their core industries—not surprising, since they had little reason to shift out of their fast lanes. Conversely, those that needed to change lanes got the biggest boost when they aimed further from their core businesses.

Value creation can be a multistep process, of course. Consider one multinational chemical company. At the start of our study period, it was primarily a basic-chemicals company, operating in a sector in which larger US- and Middle East–based competitors had far greater scale. The company recognized that specialty chemicals—particularly nutritional ones, in which it already had a small footprint—could provide faster growth. Over a decade, it made

Exhibit 3

Top performers tend to aim their M&A outside the core—but not too far outside.





Pursuing a steady stream of deals can give a company access to the latest market intelligence and improve its transaction and integration capabilities.

multiple acquisitions to extend its presence in the nutrition business. In parallel, it exited businesses such as rubber, fertilizers, and energy, raising some $1.6 billion from its divestments. Those moves enabled the company to deliver more than 6 percent annual excess TSR.

5. When the going gets tough, go harder

According to our analysis, the worse your starting point is, the more urgent it becomes to shift to a faster track. Our research showed that bottom-quintile companies (by economic-profit performance) benefited the most from aggressive reallocation and higher-intensity M&A. The numbers revealed that step-out M&A, which is usually considered higher risk than acquisitions closer to the core, is often a better option than modest portfolio shifts are for companies that are at the back of the pack.

Going harder paid off in spades for a large global packaging company. In 2009, after several years of sluggish performance, the company, then much smaller, surprised industry observers by pulling off an ambitious acquisition of a multinational conglomerate's packaging unit. The conglomerate wanted to divest the noncore business unit after it had determined it was no longer the best owner. Through the deal, the packaging company boosted its growth and margin trajectory and realized a decade of outstanding shareholder returns. It was also a "bet the company" moment. Indeed, without the conviction to go hard on portfolio changes, the smaller company may well have become a takeover target itself.

A story of from–to

The metrics on portfolio change speak volumes. Yet too many organizations still incline toward inertia. As our research shows, around half of sampled companies continue to change their business portfolios barely, if at all.[2] There are several proven practices for getting portfolios moving:

— *Shift the default.* Whether we admit it or not, we fall in love with what we have. To break the spell, approach portfolio management as private-equity firms do, with the knowledge that most businesses must be sold or put on the block eventually. Having the conversation about "Why are we entitled to own this asset?" instead of "Should we sell it?" can help shift perspective in a way that generates a healthy and balanced debate.

— *Drive conviction.* When there's a difference of opinion about which strategic actions are required, leaders typically agree to wait a bit longer—surely a turnaround is right around the bend. Better to be clear about your strategy

[2] See Chris Bradley, Martin Hirt, and Sven Smit, "Have you tested your strategy lately?," *McKinsey Quarterly*, January 1, 2011; Dan Lovallo and Olivier Sibony, "The case for behavioral strategy," *McKinsey Quarterly*, March 1, 2010; and Chris Bradley, Martin Hirt, and Sven Smit, "Strategy to beat the odds," *McKinsey Quarterly*, February 13, 2018.

and pursue it with conviction: if a growth opportunity is emerging at the perimeter, your company should be programmed to go out and capture it. Recognize when one of your existing businesses is sputtering; admit that your company can't be a leader in every sector it's in. Follow the lead of one energy company, which established the rule that its corporate-planning team must identify 3 to 5 percent of the company's assets for potential divestiture every year.

— *Build a blueprint.* When companies make deals, they tend to be reactive. A better approach is to start with a quantified vision of how many deals you want to make and then hew to a program to make that happen. Companies that succeed in making portfolio change a part of their DNA spell out a vision for their optimal portfolios, and they create detailed M&A blueprints to establish baselines of their market positions, ambitions, and gaps, as well as boundary conditions (such as types or sizes of deals) that will focus the scope of their deal searches. Progress toward the target portfolio is reviewed by the planning committee regularly, ideally quarterly, to ensure that transactions are purposeful and not opportunistic.

— *Develop a machine.* Sophisticated deal makers manage their M&A programs as core parts of business operations. They consider corporate planning in a comprehensive way, and they view M&A as an enduring capability, not as an occasional event. For example, they conduct due diligence and integration planning at the same time—holding discussions early in the deal process about how to get "under the hood" of deal value and reimagine the opportunities that the acquired company could unleash once the deal is closed. They also have an integration plan, head count, and budget in place before the acquisition is closed, and they strive to fill in gaps in personnel or tools so that integration can begin immediately at closing.

Distinctive companies manage their business portfolios relentlessly, continually pursuing new opportunities to create value and systematically divesting business units that underperform. While not every moment is one for disruption, nor every sector or company ripe for M&A, the dearth of portfolio activity highlighted by our research suggests that too many companies and leaders are keeping their heads too far down. Business leaders must regularly reappraise portfolios—and then commit to move.

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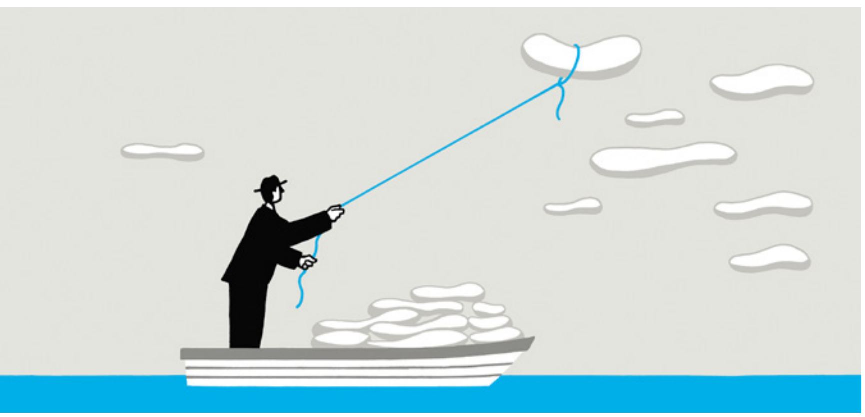
2019

How lots of small M&A deals add up to big value

New research confirms that companies that regularly and systematically pursue moderately sized M&A deliver better shareholder returns than companies that don't.

by Jeff Rudnicki, Kate Siegel, and Andy West



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Nearly a decade ago, we set out to answer a critical management question: What type of M&A strategy creates the most value for large corporations? We crunched the numbers, and the answer was clear: pursue many small deals that accrue to a meaningful amount of market capitalization over multiple years instead of relying on episodic, "big bang" transactions.[1] Between 1999 and 2010, companies following this programmatic approach to M&A generally outperformed peers.[2]

That pattern is even more pronounced in today's fast-moving, increasingly uncertain business environment (see sidebar, "The staying power of programmatic acquisition"). A recent update of our research reflects the growing importance of placing multiple bets and being nimble with capital: between 2007 and 2017, the programmatic acquirers in our data set of 1,000 global companies (or Global 1,000) achieved higher excess total shareholder returns than did industry peers using other M&A strategies (large deals, selective acquisitions, or organic growth).[3] What's more, the alternative approaches seem to have underdelivered. Companies making selective acquisitions or relying on organic growth showed, on average, losses in excess total shareholder returns relative to peers (Exhibit 1).

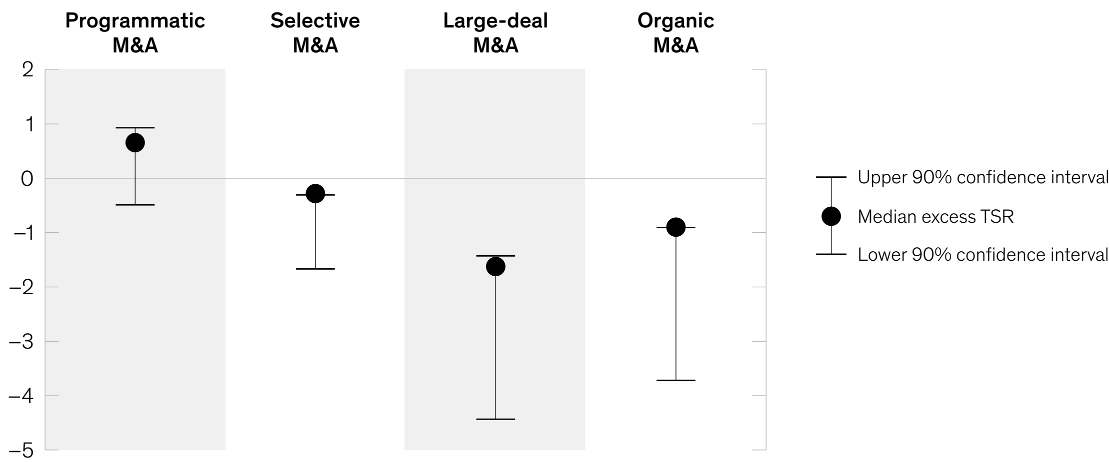
The data also confirmed just how challenging it is for individual companies to make the transition to programmatic M&A from any of the other models we identified. For instance, none of the companies that followed an organic approach between 2004 and 2014 had shifted to a programmatic model by the time we performed our latest analysis. And by

[1] Werner Rehm, Robert Uhlaner, and Andy West, "Taking a longer-term look at M&A value creation," McKinsey, January 1, 2012.
[2] The definition of programmatic M&A is when a company makes more than two small or midsize deals in a year, with a meaningful target market capitalization acquired (median of 15 percent).
[3] In the large-deal approach, a company makes one deal or more per year, and the target market capitalization is equal to or greater than 30 percent of the acquirer's market capitalization. In the selective approach, a company makes two or fewer deals per year, and the cumulative value of the deals is more than 2 percent of the acquirer's market capitalization. In the organic approach, a company makes one deal or fewer every three years, and the cumulative value of the deals is less than 2 percent of the acquirer's market capitalization.

Exhibit 1

Programmatic acquirers achieved excess total shareholder returns that were higher than the median.

Median excess TSR for companies that remained in the Global 1,000 from Dec 2007 to Dec 2017,[1] %

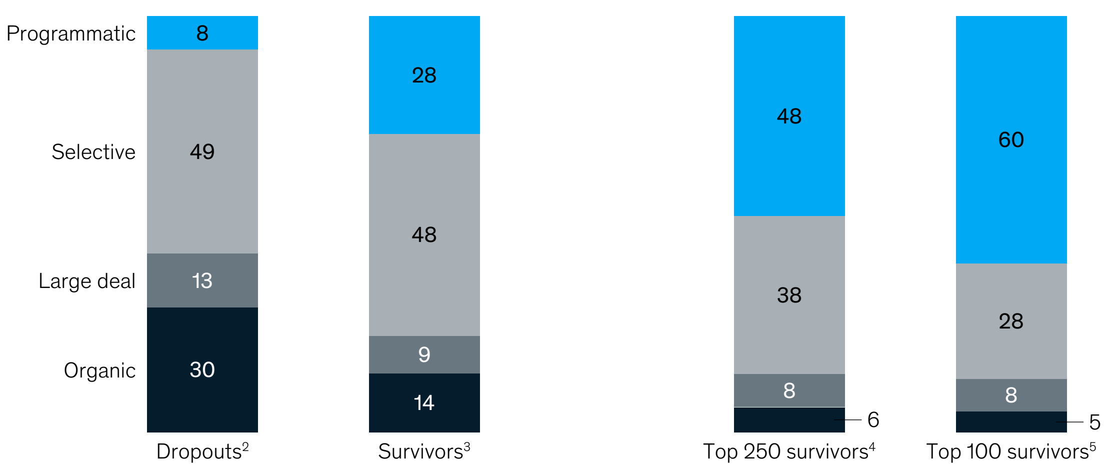


[1] TSR = total shareholder returns. Global 1,000 comprises companies that are among top 1,000 by market capitalization; excludes companies headquartered in Africa and Latin America.
Source: Global 1,000, 2017; Thomson Reuters; Corporate Performance Analytics by McKinsey

Exhibit 2

Programmatic acquirers composed nearly one-third of the companies that remained in the Global 1,000 over ten years.

Distribution of 2007 Global 1,000 in 2017, %[1]



[1] Global 1,000 comprises companies that are among top 1,000 by market capitalization; excludes companies headquartered in Africa and Latin America. Figures may not sum to 100%, because of rounding.
[2] Companies in Global 1,000 on Dec 31, 2007, but not on Dec 31, 2017 (n = 178).
[3] Companies in Global 1,000 on both Dec 31, 2007, and Dec 31, 2017 (n = 686).
[4] Companies among top 250 companies in Global 1,000 on both Dec 31, 2007, and Dec 31, 2017 (n = 157).
[5] Companies among top 100 companies in Global 1,000 on both Dec 31, 2007, and Dec 31, 2017 (n = 65).
Source: Global 1,000, 2017; Thomson Reuters; Corporate Performance Analytics by McKinsey

2017, more than a quarter of those companies had dropped out of the Global 1,000 altogether because of takeovers and other factors. The story was similar among those companies we deemed selective acquirers (Exhibit 2).

When we looked even closer at the data, we saw some striking differences in what high-volume deal makers do relative to peers. For example, the programmatic acquirers were twice as likely as peers to estimate revenue and cost synergies at various stages of the deal-making process, and they were 1.4 times more likely than peers to have designated clear owners for each stage.[4]

These findings are consistent with our experience in the field, in which we see that programmatic acquirers have built up organizational infrastructures and established best practices across *all* stages of the M&A process—from strategy and sourcing to due diligence and integration planning to establishing the operating model. In this article, we will consider how programmatic acquirers typically manage each of these stages.

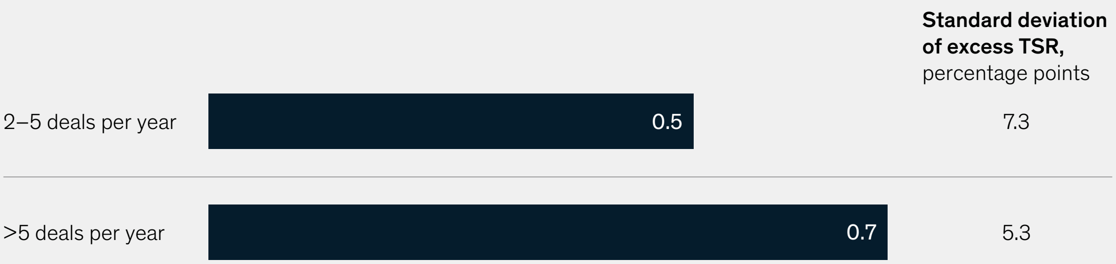
The staying power of programmatic acquisition

In our ongoing research, we track the largest (by market capitalization) 1,000 global companies, measure excess total shareholder returns they created compared with industry peers, and look at the type of acquisition strategy these companies deployed. The data confirm that programmatic acquirers continue to perform better than industry peers; indeed, the more deals a company did, the higher the probability that it would earn excess returns (exhibit). Precisely because these companies are doing deals systematically, we believe they are building lasting, distinctive capabilities in M&A.

Exhibit

Among programmatic acquirers, making more than five deals a year raised the probability of earning excess returns.

Median excess TSR for programmatic acquirers that remained in Global 1,000 from Dec 2007 to Dec 2017,[1] %



[1] TSR = total shareholder returns. Global 1,000 comprises companies that are among top 1,000 by market capitalization; excludes companies headquartered in Africa and Latin America.
Source: Global 1,000, 2017; Thomson Reuters; Corporate Performance Analytics by McKinsey

[4] 2019 McKinsey Global M&A Capabilities Survey.

The programmatic model may not be the right fit for every company, of course. Some businesses may contend with organizational limitations or industry-specific obstacles (consolidation trends and regulatory concerns, for instance). Regardless, it can be instructive for companies with *any* type of M&A program to understand how some companies are taking advantage of the programmatic approach.

Strategy and sourcing

Most of the programmatic acquirers we interviewed said they work hard to connect their strategies with their M&A priorities. The hard work starts with a return to first principles: the development of a blueprint for bringing strategic goals into deal-sourcing discussions. An effective M&A blueprint delineates the limitations of pursuing certain deals and provides a realistic snapshot of market trends—for instance, "Which market-shaping forces are the most promising within our sector, and how are our competitors likely to evolve?" Additionally, the M&A blueprint can help programmatic acquirers identify whether or not they may be the best owner in any deal or transfer of assets—for instance, "What are our sources of competitive advantage, and what capabilities are we trying to acquire?" Finally, the blueprint can help companies assess how realistic it may be to expect success from a deal—for instance, "Are assets readily available, or are they overpriced? Do we have the relationships required to carry out this transaction? Are regulatory constraints too much to overcome?"

These were the kinds of questions senior leaders at one consumer-products company asked themselves as part of a recent deal. The leadership team strongly believed the company needed to expand its presence in China and asked the M&A organization to identify potential acquisition targets. The debate over which regions to focus on went on for several weeks, until senior leaders and the M&A team realized they needed to revisit the base strategy. In a series of fact-finding meetings that took place over an eight-week period—and referring back to their M&A blueprint—the senior leaders and the M&A organization identified the amount of capital required to meet their goals, specific market trends and customer segments in China, and the potential advantages the company could confer to a target (primarily, its global distribution network). Once senior leaders at the consumer-products company had systematically explored such questions, they were able to gain quick agreement on a handful of potential targets in specific regions, several of which had not even been mentioned during the initial discussions.

Due diligence and integration planning

The programmatic acquirers we interviewed said they often tackle due diligence and integration planning simultaneously—holding discussions far ahead of closing about how to redefine roles, combine processes, or adopt new technologies. Having the right resources at the ready seems to be a key tenet for these companies. It was for one consumer-products company that, at the outset of its merger with a target, modeled the optimal sequence for migrating general and administrative tasks from both companies to a centralized shared-services group, thereby jump-starting the overall integration process.

Corporate culture and organizational health—of both the acquirer and target—also seem to be important concerns for programmatic acquirers. Our research shows that programmatic acquirers are more likely than peers to pay close attention to cultural factors during both diligence and integration processes.[5] For instance, the integration team at one technology company closely tracked the balance of employees who would be selected for the combined entity from across both the parent company and the target. If any area of the business was not achieving a balance that matched the relative scale of the merger, team leaders intervened. Additionally, employee selections could not be approved without ratification from the integration team. If two candidates were deemed equally

[5] Ibid.

A programmatic approach won't work if you don't define the program and don't treat M&A as an enduring capability rather than a project or occasional event.

suitable for a role, the team tilted its selection to the target-company candidate, recognizing that managers in the acquiring company likely already had a built-in unconscious bias in favor of the homegrown employee. If neither candidate was considered suitable, the team moved quickly to recruit externally.[6]

M&A operating model

A programmatic approach won't work if you don't define the program and don't treat M&A as an enduring capability rather than a project or occasional event. Our research shows that, compared with peers, programmatic acquirers often focus on building end-to-end M&A operating models with clear performance measures, incentives, and governance processes. For these companies, the devil is in the details. Potential acquisitions are not evaluated ad hoc, for instance. Instead all the decision makers and the criteria they are using are clearly defined and made transparent to all stakeholders. "If it's truly a program, then for each type of opportunity, you need to say, here are the targets that would constitute a doubling down, here are the targets or products we'd like to have, and here are the targets for the distribution we want," one partner at a private-equity company explained. "It has to be systematic."

To that end, one technology company treats M&A in much the same way it does customer acquisitions: it uses a customer-relationship-management-like tool to manage its M&A program. The tool is an online database of hundreds of companies that the technology company actively monitors as potential targets. Using a series of customizable dashboards, the corporate-development team updates the database and tracks statistics about acquired companies and which targets are in which phases of acquisition. (Business-unit leaders are also tasked with keeping this information up to date.) The corporate-development team generates reports, and the head of M&A analyzes the data and tracks progress on deals. The tool enables accountability across all phases of M&A; it is even invoked during executives' performance reviews.

A clear takeaway from our research is that practice still makes perfect. By building a dedicated M&A function, codifying learnings from past deals, and taking an end-to-end perspective on transactions, businesses can emulate the success of programmatic acquirers—becoming as capable in M&A as they are in sales, R&D, and other disciplines that create outperformance relative to competitors.

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[6] Becky Kaetzler, Kameron Kordestani, and Andy MacLean, "The secret ingredient of successful big deals: Organizational health," *McKinsey Quarterly*, July 9, 2019.

2017

The artful synergist, or how to get more value from mergers and acquisitions

Keeping your deal team small ensures confidentiality, but pinpointing synergies requires bringing more people on board. Here's how to strike the right balance.

by Jeff Rudnicki, Ryan Thorpe, and Andy West


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Making sure that large M&A deals create value is as much about knowing whom to involve—and when—as it is about knowing how to capture synergies.[1] The larger the deal, the more critical the need to ensure confidentiality by keeping the team small during the early stages of planning. Such teams may lack breadth, but they're sufficient to produce a rough valuation that allows planning to move ahead.

As planning progresses, more people eventually have to be involved. But many M&A practitioners make the mistake of clinging to too small a team late into the due-diligence stages of a deal. This overly conservative mind-set creates problems, leaving deal planners to perform their roles in isolation. Without others to challenge assumptions and cognitive biases,[2] the planners' synergy estimates, performance benchmarks, and cost and revenue targets can be off the mark. High-priority issues and complex integration challenges can get lumped together indiscriminately with lower-priority and simply managed ones—creating an adversarial, political, and highly emotional working environment. Business managers complain that their synergy targets are too high—when in fact, they often prove to be too low. And companies lose precious time as those tasked with implementing a deal try to reconstruct the expectations of those who planned it. This often squanders internal goodwill, organizational buy-in, and even hard cash.

A more inclusive approach to estimating synergies can create more value and promote a culture of shared accountability and buy-in. But pulling more people into the process requires an artful balance of often-contradictory objectives. Managers must

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[1] Our focus is on large deals (more than 30 percent of the acquirer's size by revenues or market cap). Smaller deals are often different because they don't affect most areas of the business, are often focused entirely—or not at all—on cost cutting, and lack the leadership and organizational challenges of large deals.

[2] See, for example, Tim Koller, Dan Lovallo, and Zane Williams, "Overcoming a bias against risk," McKinsey, August 1, 2012.

promote both transparency and confidentiality, as well as embrace both skepticism and a shared vision, all while keeping a ruthless focus on efficiency.

A more inclusive approach to estimating synergies

As smart as many executives are about keeping their M&A teams small in the beginning,[3] they make the wrong trade-off as they get deeper into the diligence process. As a result, they lay out a framework for integration and develop synergy estimates based on the insights of a small, isolated team—without the buy-in they need from critical stakeholders. These include not just the executives who will carry the heaviest burden of integration execution but also the full complement of a CEO's direct reports.

In our experience, the diligence process can't happen in a vacuum. Synergies vary from deal to deal. Even a straightforward synergy target for general and administrative costs can vary significantly depending on the current state, the assumptions, and the appetite for change. Some functions, such as IT systems or human resources, can enable, delay, or completely prevent other functions from integrating, which renders synergy estimates meaningless. And functional leaders are often wary of committing to performance and budget targets they haven't seen before. Imagine the pushback from a manager at one acquirer when he learned he'd be expected to absorb a 40 percent cut in staffing—instead of adding people, as he had expected, given the complexity of the transaction.

Involving functional-group managers on a deal-specific basis can help, especially when framing the cost and revenue assumptions behind the valuation model for due diligence. These managers can help articulate the risks of cutting too deeply or too quickly, for example, or identify opportunities to build on an existing transformation program. And getting their input early on can create a shared understanding of the final synergy targets—even setting a higher cognitive anchor for them.

Such dialogue needn't take a lot of time. A few targeted conversations and a straightforward information request made over the course of a few short days can dramatically increase the level of insight. That was the case for one acquirer when it sought to buy a business in a deal that included transitional service agreements with its former parent. The acquiring company's CIO helped the M&A diligence team review the transition timelines, which shed important light on the associated costs and risks of the service agreements. Bringing the CIO into the process allowed her to get a head start on integration planning, which is critical for systems that enable synergies elsewhere. It also helped her accept the final synergy targets, even though they were higher than for other functions. Moreover, the dialogue between the CIO and the team revealed that the baseline costs of the transitional service agreements were unreasonably high—and the synergies could be higher if the business quickly transitioned to the acquirer's systems.

Many managers we've talked with find such dialogue so successful that they use it for all large deals, bringing most, if not all, top leaders into parts of the diligence discussion. Even for smaller deals, the company typically includes some subset of top leadership to validate costs and deal assumptions and to pressure-test risks.

Balancing competing objectives

The advantages of a more inclusive team doesn't mean extending an invitation to a cast of thousands. But it does come with risks—especially for larger deals. Not only is maintaining confidentiality more difficult, but larger teams also tend to move more slowly and are more likely to include skeptics who challenge a deal's strategic rationale. Balancing these interests tests managers' cleverness in finding the overlap between seemingly exclusive objectives.

Transparency and confidentiality

We have found it is possible to be both transparent and confidential. For example, the CEO of one serial acquirer balanced the two interests this way.

[3] Patrick Beitel and Werner Rehm, "M&A teams: When small is beautiful," McKinsey, January 1, 2012.

We have found it is possible to be both transparent and confidential.

First, she expressed a very clear perspective on the importance of large deals and the appropriate role of executives in evaluating those deals—creating a time and place for open dialogue and promoting explicit challenges to a deal's rationale. But then she made it clear that once a decision was made, everyone was expected to champion it.

As a result, the members of the executive team understood and respected their roles. They knew when they would be engaged, and they didn't second-guess the process. This engendered a sense of trust that they would be aware of all important M&A efforts and would have a chance to react to potential deals before any became final. Their trust was affirmed over time, with each potential deal forming the basis for confidential discourse. Finally, the CEO herself stressed confidentiality. She chose a core M&A team she trusted. But she also established explicit repercussions for leaking. In one instance, a senior executive was let go after it became clear he was disclosing information about potential deals in the works to people throughout the organization.

Skepticism within a shared vision

In our experience, few deals ever achieve a shared vision among the executive team. But proceeding without one can be destructive. Three months after the close of one recent deal, one senior executive launched an attack on his synergy target while explaining a shortfall in planned savings. Such exchanges were commonplace across the executive team. Later, the executive explained that the deal should never have been done in the first place and that he was worried about his career prospects after being involved in such a bungled deal.

For large deals, it is the CEO's job alone to ensure that his or her executive team has a shared vision for the deal. This sounds simple, but in most deals, we have observed at least several direct reports to the CEO remaining skeptical throughout. The CEO must sell his or her direct reports on the strategic merits of a deal, through conversation—often one-on-one—and through participation. There is no other way to form a productive team that will capture all the value possible from a deal. For smaller deals, similar obligations fall to division and business unit heads.

Productive teams will challenge aspects of the deal, such as strategic fit and synergies. But they do so with a mind-set of trying to make the deal work and creating the best possible outcome. With that mind-set, even the most stubborn skeptics can actually help bring about a better outcome. We have observed a sort of peer pressure at play in these situations, in which dedicated leaders help reinforce commitment among one another and among lower layers in the organization. CEOs can encourage this mind-set by surrounding themselves with those with diverse business backgrounds and by promoting contrarian thinking and risk taking, often leading by example.

Building efficient M&A processes

The best acquisitions aren't the ones that close the fastest, but rather those in which the leadership team comes together to create the greatest amount of value. That takes time. To allow that time, a company must have ruthlessly efficient M&A processes.

To be efficient, companies must have a robust finance function with a transparent view into its own cost structure, the better to quickly interpret and categorize a target's costs. In one recent merger, for example, financial planning was led by two capable and respected executives, who in only three weeks managed to build a comprehensive and detailed combined baseline of performance across the two companies. Because they worked with executives across both companies to make sure they agreed with the baseline, the acquiring CFO was able to present synergy and financial targets for a dozen or so areas of the company less than a month into integration planning, three months before the deal closed.

This proactive approach allowed the leaders of each organization to apply their energies toward creating the leanest and most efficient organization they could, rather than iterating and debating the fact base and targets. The result was a process that was among the most efficient we have ever seen and that encouraged collaborative work across both organizations. We ultimately credit the acquiring CFO, who decided to invest in the right finance professionals to lead this effort.

Efficient M&A teams should also be able to learn from each deal. No set of best practices will ever replace the feel that great executives have for getting a deal done and getting value from it. This means an executive team must come together and review *how* past deals were done, not just *how much* they earned. And they must learn what others involved in the deal did, once that information can be shared freely.

Taking a more inclusive approach to deal making won't eliminate tension from your company's large M&A deals, and it won't turn a bad acquisition into a good one. What it will do is create the conditions in which your management team can artfully build a good deal into a great one.

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2020

The telltale signs of successful digital deals

Digital M&A is challenging—and often a necessity for digital transformation. Sophisticated acquirers boost their odds by addressing the pain points that undermine outperformance.

by Tanguy Catlin and Brett May

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The old saw that the best deals are the ones you don't make doesn't apply when it comes to digital acquisitions—you've got to make them, our research has consistently shown. You also need to do them well, and that can be challenging, because buying in the digital, analytics, and technology space—what we call "digital deals"—is different enough from undertaking conventional transactions to raise the odds of costly lapses.

In this article, we show how to overcome those challenges, and join the ranks of companies that have achieved exceptional performance by energizing their digital-transformation efforts with successful mergers and acquisitions (M&A). Digital leaders pursue M&A about twice as hard as everyone else. They spend three times more on M&A (27 percent of their annual revenues, compared with 9 percent by others) and devote upward of 1.5 times more of their M&A activity to the acquisition of digital capabilities and digital businesses (64 percent, compared with 39 percent for their peers), and ensure that software acquisitions are among their highest priorities. And that was before the COVID-19 crisis, which is making it even more important for many companies to rewire themselves in ways that sometimes necessitate acquiring digital capabilities.

High-performing acquirers approach M&A in a programmatic way, from strategy to deal execution and through integration. You can often spot their work by what they don't do: make unforced errors at key points in the deal life cycle. Sometimes, an acquiring company stumbles before it has even started, not thinking through its strategy or what types of assets and capabilities it needs to acquire. In other cases, the acquirer doesn't sufficiently understand the technology it's purchasing, or how to value it. And even when acquirers navigate the strategy and execution phases smoothly, they can still wind up foundering during integration.

Sophisticated acquirers know the common trouble spots. Three categories of challenges—across strategy, execution, and integration—are particularly worthy of attention. In this article, we address these challenges in turn, so that when your organization moves forward with its digital deals, as it must, it can avoid common errors before they happen (Exhibit 1).

Strategic preparedness

Tried, trite, but true: luck really is the residue of design. So too is the negative: bad luck and poor outcomes follow ill-prepared—and sometimes downright absent—strategies. Don't expect that a deal done on a whim will turn out to be a winner. An acquirer must rigorously consider what it hopes to accomplish, why an acquisition aligns with its direction, and what exactly it is buying.

Be clear about the rationale

As our colleagues have demonstrated, fortune in the digital age favors organizations that have bold, tightly integrated digital strategies.[1] To succeed, digital reinvention must go beyond merely acquiring stand-alone products and services to bring to market. An acquisition should follow your strategic plan.

So be clear about the strategic gaps you are trying to fill. Why do *this* deal? Is it for market leadership? Technical capabilities? Talent? Some combination of those objectives, or perhaps for other strategic reasons? Just because a technology works, or is on track to work, doesn't mean it's the right asset for

Exhibit 1

Common errors occur at common points across the life cycle of the digital deal.

Deal phases		
1 Conception	2 Transaction	3 Integration
Common errors		
Fuzzy thinking	Financial confusion	Postclosing stumbles
Unclear rationale: Why are we doing *this* deal? **Poor technical due diligence:** Do we know what we need to know about this technology?	**Misunderstanding sources of value:** Are we taking a broad view of the value proposition? **Limited valuation tool kit:** Are we using a full range of valuation techniques to get a clearer picture? Are we incorporating the right multiples?	**Talent retention:** Are we doing enough to keep key employees and not just senior ones? **Sales-force conflict:** Are we aligning our sales-people and offering sufficient incentives to move the right products? **Integration delays:** Are we ready the day the deal closes and investing in integration after that?

[1] See Jacques Bughin, Laura LaBerge, and Anette Mellbye, "The case for digital reinvention," *McKinsey Quarterly*, February 9, 2017.

your organization. Different assets, in turn, may look quite similar on their websites yet fulfill very different strategic needs. And you're unlikely to recognize those disconnects if you haven't been rigorous in spelling out the deal's rationale. Articulate your strategy; then identify your target.

It's fine to make a trade-off between commercial scale and cash flow, on the one hand, and more speculative (though potentially pathbreaking) innovation, on the other, so long as you know what you should be shopping for. This is why acquirers that buy profitable, mature assets and then expect game-changing innovation can wind up feeling frustrated. Other times, companies expecting immediate growth or earnings accretion are disappointed when they buy compelling intellectual property (IP) with little commercial traction. Sophisticated acquirers know the difference. They make sure they are paying for what they need, not for what they don't. If a deal, however attractive, doesn't fill a demonstrated gap, the acquirer is setting itself up for disappointment.

One technology services buyer, for example, wanted to beef up its DevOps portfolio and discovered a profitable software company that seemed to fit the bill. But most of the target's revenues—and all of its profits—were derived from a mature, unrelated product with little strategic value to the acquirer. The target's DevOps solution, while capable, turned out to be a niche product, with limited market size and upside potential. The acquirer's strategic goal, assumed by its senior leaders but not clearly spelled out to its business-development team, was to achieve both innovation *and* scale. This deal achieved only the first goal. Returns were compromised because the company hadn't pursued assets more in line with its strategy.

Commit to technical due diligence

Even if your strategy is clear, it will be compromised if what you buy from a technical perspective turns out to be not what you thought you were buying. The problem happens more than you may suspect. In our experience, technical due diligence is the single biggest differentiator of deals done well—or poorly. What's more, technical due-diligence failures can usually be avoided. Almost always, the disappointed acquirer insufficiently vets the technology and discovers too late that it fails to work as advertised. Or the technology does work, but only in constrained environments, and won't scale. In other cases, crucial parts of the IP turn out not to be owned by the seller.

Some organizations do less technology due diligence on targets they plan to acquire for hundreds of millions of dollars than on companies they are evaluating (say, for an internal pilot program) for a fraction of the price. One reason is the necessary confidentiality associated with M&A. Large, market-moving transactions require discretion—which can be problematic for digital deals if it inhibits leaders from bringing individuals with critical engineering know-how into the information loop. Further

To succeed, digital reinvention must go beyond merely acquiring stand-alone products and services to bring to market. An acquisition should follow your strategic plan.

complicating matters: some organizations may not even have the in-house capability to establish that the target can do what it purports to do.

Seasoned acquirers always seek to evaluate the target's technology before a deal. Digital M&A is a capability, and best-in-class acquirers treat it that way, with dedicated technology teams to stress-test prospective acquisitions. It's ideal to be a customer before you become an acquirer; this element alone can dramatically reduce risk. If that's not possible, do whatever you can to become well versed in the technology before you buy it, and understand how it will operate within your organization under real-world conditions. Digital deals aren't plug and play.

A case in point: one healthcare equipment manufacturer purchased an imaging technology company with sophisticated code that worked stand-alone but turned out to be incompatible with the technical architecture of the acquirer's installed base. The expensive mistake could have been avoided had the acquirer simply tried experimenting with the target's products. In another case, a communications-hardware manufacturer acquired a successful company that made remote-network-monitoring software. It was a great product, and a great fit, but it had one great problem: it relied on software code that was licensed, but not owned, by the acquired company. Soon after the acquisition, the company that did own the code was itself acquired by one of the hardware company's competitors. The code became unavailable as a result. The hardware company had to redevelop the missing IP at a cost of tens of millions of dollars and a 24-month delay. An avoidable due-diligence oversight doomed the investment's returns.

Financial perspective

Getting the valuation wrong can of course doom returns as well. Sophisticated acquirers take care to understand value from a range of perspectives—not only from the perspective of the acquirer, but also from that of the target and "the market." Acquirers less familiar with digital M&A may fail to value a digital asset properly. That often stems from misconceptions about the value proposition.

Consider the sources of value

Because M&A in the digital, analytics, and technological space is so critical, it is usually expensive. "Underpaying" is unrealistic; bid too low, and you'll probably miss out. But what does it mean to "overpay"? Consider one acquirer, which we'll call Company X. At the time of an important deal, this organization was numbered among the most valuable technology companies in the world. It had experienced several years of impressive growth, and its talented workforce had an enviable reputation as an innovation engine.

Just as Company X reached its highest valuation to date, it acquired a new software platform for $50 million. The platform had generated virtually no revenue when the deal closed but had the potential to complement the company's software offering and reach a new market of mobile users. The platform produced no revenue over the year after the closing. Nor did it generate revenue the year after that or the following year as well—zero revenue, not just zero earnings, for three years. Did Company X misunderstand the target's value proposition? Hardly. Company X was Google (now Alphabet), and the target was Android, today an immense platform that ships on over 80 percent of all new smartphones. In 2018 alone, Google made $25 billion, enabled by Android's massive installed base, from Google Play.

Value in the digital context is no different from value in other sectors—companies generate value when their return on invested capital exceeds their opportunity cost of capital. But the path from deal conception to value creation can be different enough that if you approach digital M&A valuation solely by traditional means, you're liable to get an incomplete picture. When assessing digital acquisitions, take care to set clear expectations about synergies and time horizons. Revenue synergies typically matter more than cost cutting. Don't over-index on earnings; digital acquisitions made today may not increase cash flow for multiple quarters to come. If you're buying a digital asset to strengthen your technological capabilities, recognize that financial results will manifest indirectly.

An acquirer may have a suite of products that has a gap; the right acquisition will make the entire suite more valuable, driving sales not only for the acquired product but also for adjacent products.

The digital whole really does exceed the sum of its parts. An acquirer may have a suite of products that has a gap; the right acquisition will make the entire suite more valuable, driving sales not only for the acquired product but also for adjacent products. For example, one IT hardware company purchased a security-services company and found revenues increased not just from the security products it could now offer but also from higher renewal rates for annual service contracts on the company's core product.

Expand your valuation tool kit

Pegging the appropriate value of a digital target is hard, and you do yourself no favors if you constrain your valuation methods. As in any deal, you should always run a discounted-cash-flow (DCF) analysis. But in digital, that DCF should come in two flavors. The first should be from the point of view of the acquired company as a stand-alone entity, using target management's current financial projections as a guide. The second should model what the target may be worth *inside* the acquirer. In this second scenario, some costs may be higher (for example, acquirers often have higher labor costs than start-up companies have). Yet there may also be both cost and revenue synergies, such as accelerating sales.

The use of comparables, too, should go beyond the traditional. "Seven-times EBITDA" (or whatever your earnings comp may be) doesn't make sense when you're buying an early-stage technology—comp on revenue instead. Moreover, get under the revenue-driver hood, using metrics specific to the target, such as multiples based on numbers of users or subscribers.

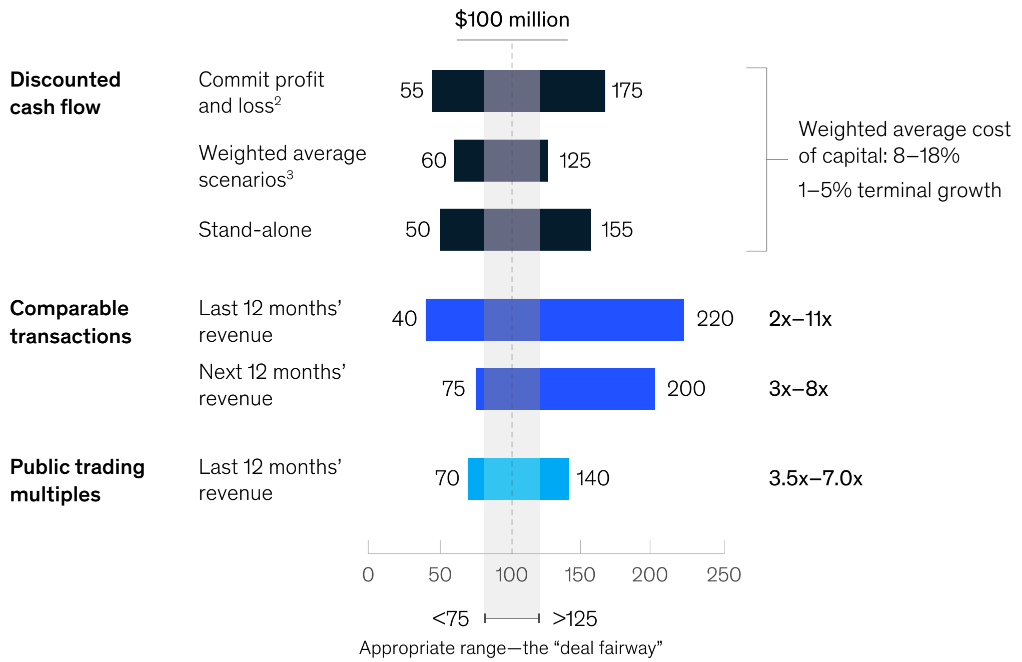
At the same time, don't fixate on a single comparable in isolation. Multiples are a spice. If you treat any one multiple or simple combination of multiples as the main ingredient, you're likely to spoil the valuation broth. (Why, for example, pay a multiple on users if only a subset of users will purchase subscriptions? And why fixate on a multiple on subscriptions if the subscription price is not in line with market rates?) Yet multiples do provide a fuller flavor of the deal. They help set the parameters of a "fairway," feeding into market baselines and meeting the target company's expectations on price (Exhibit 2).

While you may encounter accounting issues such as potential write-downs in the treatment of the target's service revenue, these shouldn't influence your view of the deal, so long as actual cash flow is not affected. Be aware, though, that write-downs can occur and that you'll need to understand the issue in detail in order to have clear investor communication at deal announcement. Understand, too, that costs nearly always go up when acquiring a digital start-up company. Start-up employees are often paid below market salaries in exchange for

Exhibit 2

Use a range of approaches to hit the 'deal fairway'—it will help you decide when to do a deal and when to walk away.

Disguised example from cloud-company acquisition, implied equity value,[1] $ million



[1] Net of balance sheet cash.
[2] Value of company to the acquirer, taking into account its cost of capital.
[3] Scenarios assuming the target is acquired.

stock options, and work in below-standard office spaces. That means the target's earnings trajectory can flatten, at least in the short term, after the deal has closed. Revenues take time to grow, but expenses begin to bite immediately. Experienced acquirers factor this in when they create their earnings forecasts.

Execution follow-through

Unfortunately, even when the strategic, financial, and accounting stars align, before-deal expectations and after-deal results may not. To better your odds for success, bear down on postclosing execution. Three types of unforced errors are among the most prevalent, and preventable.

Prioritize talent retention

It's difficult to overstate the importance of talent retention. In digital M&A, you're acquiring not just IP but also the skills of those who make that IP go. Software engineers are not always interchangeable in the ways that people in other skilled positions are. Retention incentives are common, which may add to the deal price. But scrimping on employee compensation can be a prescription for disaster. Don't be pound foolish.

Very frequently in digital M&A, and as is common for companies that are start-ups or a few years older, you'll be buying a business with different classes of shareholders. Depending upon how many rounds of financing a target has been through (and sometimes within a single round if the investors negotiate unique terms amongst themselves), you'll be dealing with sellers who have disparate interests, incentives, and contractual rights, especially liquidation preferences.

That's why you should always ask for the target's capitalization table, shareholder agreements, and other agreements between and among the company and its shareholders before landing on a final deal price. In some cases, small changes in price may disproportionately affect the attractiveness of a deal for one group of the seller's shareholders over another. Several acquirers have encountered scenarios in which the target's preferred series of investors made a tidy profit from selling at a given price, while some employee–shareholders received nothing. As a result, you may be dealing with disgruntled personnel right from the start.

Buyers typically do try to retain key employees. Yet it is rarely obvious from an acquirer's perspective who the most critical personnel actually are. One common mistake is to confuse seniority with importance. Engineers, even junior ones, can be essential to making the acquired IP function smoothly. Conversely, some of the target's executives, even very senior ones, may not matter for sustained success; they may be serial entrepreneurs or serial start-up chief experience officers (CXOs) who specialize in grooming VC-backed start-ups for acquisition but lack the desire or skill set to manage within large acquiring organizations.

One industrial company did a retrospective study of 40 digital, analytic, and technology acquisitions stretching back over two decades. It found that there was no relationship between acquired CXO attrition and success or failure, and a very clear correlation between engineering attrition and failure. Strikingly, retaining the top one or two executives didn't correlate (positively or negatively) with the success of acquisitions. But broadening the retention program did.

Paying attention to cultural fit improves retention as well. Morale issues can spring up unexpectedly, as they did when a large US-based software company acquired a small Canadian digital start-up, which was proud of its "beer Friday" in the office. That would have been unacceptable for the Fortune 100 acquirer. Beer Friday, lamentably, went down the drain following the acquisition (at least in the office break room), but the effect on morale was relatively tame because this sophisticated acquirer had been proactively generous with retention bonuses for the engineering staff. Other successful acquirers have found ways to be flexible about more conventional traditions, such as free snacks.

Recognize sales-force sensibilities

Closely related to talent retention, but distinct in its own trip wires, is the need to minimize sales-force conflict. When acquired companies come with their own sales forces, these employees often encounter hurdles in their new environment. For one, they may no longer be allowed to reach out to customers directly, instead needing to go through a series of unfamiliar channels and gatekeepers. Sometimes there can be multiple relationships with a single buyer that need to be clarified, or the target's salespeople may be expected to sell into unfamiliar industries. Each of these issues can quickly lead to frustration and attrition.

Mapping two sales forces together is always a challenge. Often, a best practice is to convert the acquired sales force into an "overlay" function. This approach is ideal when the acquirer and acquired have a similar subset of customers, and the buyer also has a much larger set of customers, relationships, and salespeople. It's also a best practice to overincentivize sales of the acquired product in the first one or two years. This way, the acquiring sales force, which may well have a lot of products to promote, won't neglect the new addition.

Often, the acquired company has no sales capability; the target is simply too early-stage. At one energy company we know, which acquired a small analytics provider, all of the target's sales were CXO-led. The energy company planned to deploy its own sales force to sell the acquired technology to its existing customer base, but the product was sophisticated and difficult for the acquirer's sales team to grasp. Although its market-expanding potential was significant, it was a high-complexity, relatively low-price technology when compared with the acquirer's other offerings. As a result, the acquirer's sales force ignored the lower-commission, more complicated acquired product, and the acquisition missed its financial targets. Those missteps could have been averted by having a plan to train existing salespeople sooner, and establishing an incentive package to reward salespeople for selling the new product right from the start.

Keep up the integration momentum

Unfortunately, delays in integration are a common hazard in digital M&A and occur well beyond the sales force. The vast majority of large corporations' digital acquisitions are small (less than $50 million in target revenues) relative to the buyer. As a result, acquired digital assets can wind up neglected, sitting adjacent to other products in an acquirer's portfolio—out of sight and out of mind. That risks letting revenue synergies go untapped, or become stale after sitting too long.

Let's face it, integration is nitty-gritty work. Employees' enthusiasm for integration into the mother ship may or may not be high to begin with, but it rarely gets higher over time. Moving quickly after an acquisition is a challenge in any sector, but, in digital—where technology evolves so rapidly—failing to do so can be ruinous. Sophisticated acquirers have an integration plan, head count, and budget in place before the acquisition is closed. High performers assign a full-time integration leader from the parent company for at least one year, on-site if possible. Combining the acquired workers into one physical location with the parent isn't always possible, but is advisable if it doesn't involve making the whole staff relocate to a new city. It's preferable not to leave the acquired company in a separate facility any longer than necessary.

When times get tough, one of the easiest expenses to cut is acquisition-integration spending. Resist the temptation; a loss of momentum can doom an acquisition. This happened with one deal in the energy software space, when sales at the parent company suffered for macroeconomic reasons a few months following the acquisition. During the downturn, the operating budget to integrate the acquired company was pared. As a result, it missed its commercial targets, a problem that quickly turned into a negative spiral and eventually led to the write-off of the acquired business.

Digital M&A is an engine of digital transformation, and sitting it out is an invitation to falling behind. Getting deals in the digital, analytics, and technology space right can turn, to a surprising degree, on limiting unforced errors at points where they can often go wrong. Sophisticated acquirers know where the missteps can happen. They cultivate digital M&A as a core competence. And while there is no foolproof, step-by-step road map for getting each deal right, every company should know where the common hazards may be, and control for what they can.

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2019

Improving the management of complex business partnerships

Adhering to four key principles can help companies increase the odds that their collaborations will create more value.

by Ruth De Backer and Eileen Kelly Rinaudo

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Partnerships never go out of style. Companies regularly seek partners with complementary capabilities to gain access to new markets and channels, share intellectual property or infrastructure, or reduce risk. The more complex the business environment becomes—for instance, as new technologies emerge or as innovation cycles get faster—the more such relationships make sense. And the better companies get at managing individual relationships, the more likely it is that they will become "partners of choice" and able to build entire portfolios of practical and value-creating partnerships.

Of course, the perennial problems associated with managing business partnerships don't go away either—particularly as companies increasingly strike relationships with partners in different sectors and geographies. The last time we polled executives on their perceived risks for strategic partnerships,[1] the main ones were: partners' disagreements on the central objectives for the relationship, poor communication practices among partners, poor governance processes, and, when market or other circumstances change, partners' inability to identify and quickly make the changes needed for the relationship to succeed (exhibit).

In our work helping executive teams set up and navigate complex partnerships, we have witnessed firsthand how these problems crop up, and we have observed the different ways companies deal with them. The reality is: successful partnerships don't just happen. Strong partners set a clear foundation for business relationships and nurture them. They emphasize accountability within and across partner companies, and they use metrics to gauge success. And they are willing to change things up if needed. Focusing on these priorities can help partnerships thrive and create more value than they would otherwise.

[1] Observations collected in McKinsey's 2015 survey of more than 1,250 executives. Sixty-eight percent said they expect their organizations to increase the number of joint ventures or large partnerships they participate in over the next five years. A separate, follow-up survey in 2018 showed that 73 percent of participants expect their companies to increase the number of large partnerships they engage in.

Establish a clear foundation

It seems obvious that partner companies would strive to find common ground from the start—particularly in the case of large joint ventures in which each side has a big financial stake, or in partnerships in which there are extreme differences in cultures, communications, and expectations.

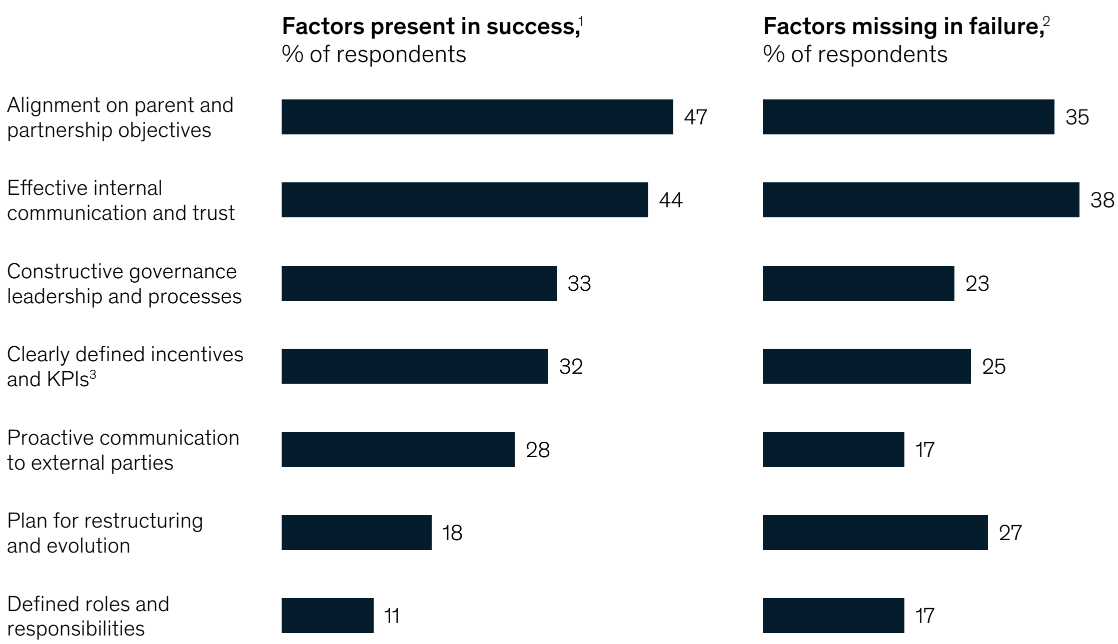
Yet, in a rush to complete the deal, discussions about common goals often get overlooked. This is especially true in strategic alliances within an industry, where everyone assumes that because they are operating in the same sector they are already on the same page. By skipping this step, companies increase the stress and tension placed on the partnership and reduce the odds of its success. For instance, the day-to-day operators end up receiving confusing guidance or conflicting priorities from partner organizations.

How can the partners combat it? The individuals expected to lead day-to-day operations of the partnership, whether business unit executives or alliance managers, should be part of negotiations at the outset. This happens less often than you think because business-development teams and lawyers are typically charged with hammering out the terms of the deal—the objectives, scope, and governance structure—while the operations piece often gets sorted out after the fact.

Transparency during negotiations is the only way to ensure that everyone understands the partners' goals (whether their primary focus is on improving operations or launching a new strategy) and that everyone is using the same measures of success. Even more important, transparency encourages trust and collaboration among partners, which is especially important when you consider the number

Exhibit

Managers cite several core reasons for joint-venture success and failure.



[1] Respondents' top choices out of a list of 10 components whose presence could have a favorable effect on their partnerships (n = 708).
[2] Respondents' top choices out of a list of 10 components whose absence could have a negative effect on their partnerships (n = 262).
[3] Key performance indicators.
Source: 2015 McKinsey Joint Ventures and Alliances Survey

of executives across the organizations who will likely rotate in and out of leadership roles during the life of the relationship.

Inevitably, points of tension will emerge. For instance, companies often disagree on financial flows or decision rights. But we have seen partners articulate such differences during the negotiation period, find agreement on priorities, and reset timelines and milestones. They defused much of the tension up front, so when new wrinkles—such as market shifts and changes in partners' strategies—did emerge, the companies were more easily able to avoid costly setbacks and delays in the business activities they were pursuing together.

Nurture the relationship

Even business relationships that start off solidly can erode, given individual biases and common communication and collaboration issues. There are several measures partners can take to avoid these traps.

Connect socially

If executives in the partner organizations actively look for opportunities to understand one another, good collaboration and communication at the operations level are likely to follow. Given time and geographic constraints, it can be hard for them to do so, but as one energy-sector executive who has negotiated and managed dozens of partnerships noted, "It's important to spend as much time as you can on their turf." He says about 30 to 40 percent of partnership meetings are about business; the rest of the time is spent building friendships and trust.

Keep everyone in the loop

Skipping the step of keeping everyone informed can create unnecessary confusion and rework for partner organizations. That is what happened in the case of an industrial joint venture: the first partner in the joint venture included a key business-unit leader in all venture-related discussions. The second partner apprised a key business unit leader about major developments, but this individual did not actually join the discussions until late in the joint-venture negotiation. At that point, as he learned more about the agreement, he flagged several issues, including inconsistencies in the partners' access to vendors and related data. He immediately recognized these issues because they directly affected operations in his division. Because he hadn't been included in early discussions, however, the partners wasted time designing an operating model for the joint venture that would likely not work for one of them. They had to go back to the drawing board.

If executives in the partner organizations actively look for opportunities to understand one another, good collaboration and communication at the operations level are likely to follow.

Recognize each other's capabilities, cultures, and motivations

Partners come together to take advantage of complementary geographies, corresponding sales and marketing strengths, or compatibilities in other functional areas. But it is important to understand which partner is best at what. This process must start before the deal is completed—but cannot stop at signing. In the case of one consumer-goods joint venture, for instance, the two partner organizations felt confident in their plan to combine the manufacturing strength of one company with the sales and marketing strengths of the other. During their discussions on how to handle financial reporting, however, it became clear that the partner with sales and marketing strengths had a spike in forecasting, budgeting, and reporting expertise. The product team for the first partner had originally expected to manage these finance tasks, but both partner teams ultimately agreed that the second partner should take them on. In this way, they were able to enhance the joint venture's ongoing operations and ensure its viability.

Equally important is understanding each partner's motivation behind the deal. This is a common point of focus during early negotiations; it should continue to be discussed as part of day-to-day operations—particularly if there are secondary motivators, such as access to suppliers or transfer of capabilities, that are important to each partner. Within one energy-sector partnership, for instance, the nonoperating partner was keen to understand how its local workforce would receive training over the course of the partnership. This company wanted to enhance the skills of the local workforce to create more opportunities for long-term employment in the region. The operating partner incorporated training and skill-evaluation metrics in the venture's quarterly updates, thus improving the companies' communication on the topic and explicitly acknowledging the importance of this point to its partner.

Invest in tools, processes, and personnel

Bringing different business cultures together can be challenging, given partners' varying communication styles and expectations. The good news is that there are a range of tools—among them, financial models, key performance indicators, playbooks, and portfolio reviews—companies can use to help bridge any gaps. And not all these interventions are technology dependent. Some companies simply standardize the format of partnership meetings and agendas so that teams know what to expect. Others follow stringent reporting requirements.

Another good move is to convene an alliance management team. This group tracks and reviews the partnership's progress against defined metrics and helps to spot potential areas of concern—ideally with enough time to change course. Such teams take different forms. One pharmaceutical company with dozens of commercial and research partnerships has a nine-member alliance management team charged mostly with monitoring and flagging potential issues for business unit leaders, so it consists of primarily junior members and one senior leader who interacts directly with partners. An energy company with four large-scale joint ventures has taken a different approach: its alliance management team comprises four people, but each is an experienced business leader who can serve as a resource for the respective joint-venture-leadership teams.

How companies structure these teams depends on concrete factors—the number and complexity of the partnerships, for instance—as well as intangibles like executive support for alliances and joint ventures and the experiences and capabilities of the individuals who would make up the alliance management team.

Emphasize accountability and metrics

Good governance is the linchpin for successful partnerships; as such, it is critical that senior executives from the partner organizations remain involved in oversight of the partnership. At the very least, each partner should assign a senior line executive from the company to be "deal sponsor"—someone who can keep operations leaders and alliance managers focused on priorities, advocate for resources when needed, and generally create an environment in which everyone can act with more confidence and coordination.

Sometimes partnerships need a structural shake-up—and not just as an act of last resort.

Additionally, the partners must define “success” for their operations teams: What metrics will they use to determine whether they have hit their goals, and how will they track them? Some companies have built responsibility matrices; others have used detailed process maps or project stage gates to clarify expectations, timelines, and critical performance measures. When partnerships are initially formed, it is usually the business development teams that are responsible for building the case for the deal and identifying the value that may be created for both sides. As the partnership evolves, the operations teams must take over this task, but they will need ongoing guidance from senior leaders in the partner organizations.

Build a dynamic partnership

Sometimes partnerships need a structural shake-up—and not just as an act of last resort. For instance, it might be less critical to revisit the structure of a partnership in which both sides are focused on the joint commercialization of complementary products than it would be for a partnership focused on the joint development of a set of new technologies. But there are some basic rules of thumb for considering changes in partnership structure.

Partner organizations must acknowledge that the scope of the relationship is likely to shift over time. This will be the case whether the partners are in a single- or multiasset venture, expect that services will be shared, anticipate expansion, or have any geographic, regulatory, or structural complexities. Accepting the inevitable will encourage partners to plan more carefully at the outset. For example, during negotiations, the partners in a pharmaceutical partnership determined that they had different views on future demand for drugs in development. This wasn’t a deal breaker, however. Instead, the partners designated a formula by which financial flows would be evaluated at specific intervals to address any changes in expected performance. This allowed the partners to adjust the partnership based on changes in market demand or the emergence of new products. All changes could be incorporated fairly into the financial splits of the partnership.

Partners should also consider the potential for restructuring during the negotiation process—ideally framing the potential endgame for the relationship. What market shifts might occur, how might that affect both sides’ interests and incentives, and what mechanisms would allow for orderly restructuring? When one oil and gas joint venture began struggling, the joint-venture leader realized he was being pulled in opposing directions by the two partner companies because of the companies’ conflicting incentives. “It made the alliance completely unstable,” he told us. He brought the partners back to the negotiation table to determine how to reconcile these conflicting incentives, restructure their agreement, and continue the relationship, thus avoiding deep resentment and frustration on both sides of the deal.

Such dialogues about the partnership’s future, while potentially stressful, should be conducted regularly—at least annually.

The implementation of these four principles requires some forethought and care. Every relationship comes with its own idiosyncrasies, after all, depending on industry, geography, previous experience, and strategy. Managing relationships outside of developed markets, for instance, can present additional challenges involving local cultures, integration norms, and regulatory complexities. Even in these emerging-market deals, however, the principles can serve as effective prerequisites for initiating discussions about how to change long-standing practices and mind-sets.

An emphasis on clarity, proactive management, accountability, and agility can not only extend the life span of a partnership or joint venture but can also help companies build the capability to establish more of them—and, in the process, create outsize value and productivity in their organizations.

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2021

When bigger isn't always better

The recent spate of spin-off announcements reveals the limits of diversification as well as some of the potential value-creating benefits of separations.

by Jamie Koenig, Tim Koller, and Anthony Luu

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Breakups aren't just fodder for celebrity gossip websites. Separations are back in the business pages, as large conglomerates in healthcare, consumer electronics, logistics, and other sectors announce their intentions to spin off business units or explore avenues for doing so.[1]

Despite all the new ink being spilled on this trend, in many ways it's just another chapter in the long-running story about diversification strategies: a company matures, prompting executives to look outside the core business for ways to grow. (A logistics company acquires a software company. A pharmaceutical company enters the consumer-health market.) As revenues increase, so do costs and complexity. Some operational and other synergies may materialize—but eventually executives and boards realize how difficult it is to add value to businesses that have little or no direct connection to the company's core business.[2]

The realization may come when a business unit's performance is lagging behind that of its peers with no clear path to catch up. Or a review of the company's portfolio may reveal that some business units' cost structures are not comparable with those of its peers. Or executives may recognize that the company lacks sufficient management capabilities to grow all the businesses in its portfolio.

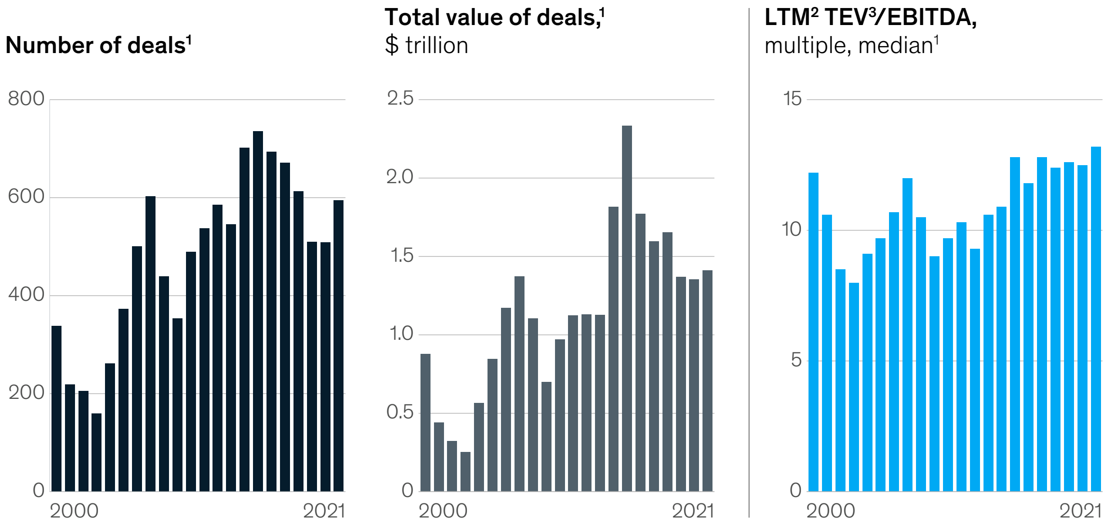
When these signals appear, companies acknowledge that they are no longer the best owner of an asset, and spin-offs ensue—especially in an environment like the one we're experiencing now, when business models are being tested by a crisis and new strategies are needed, market valuations are high, and financial engineers are hard at work (exhibit).

There are fundamental reasons why we're seeing more large companies pursuing spin-offs—specifically, because such deals can help to improve the operating model, management focus and strategy, and capital management for both the parent company and the divested business unit.

[1] Kevin Dowd, "Death to conglomerates: GE, J&J and Toshiba all reveal plans to break themselves up," *Forbes*, November 14, 2021.
[2] Joseph Cyriac, Tim Koller, and Jannick Thomsen, "Testing the limits of diversification" McKinsey, February 1, 2012.

Exhibit

Divestitures are exceeding prepandemic levels while benefiting from historically high valuations.



Note: 2021 data as of end of Q3.
[1] Global corporate divestitures with deal value >$500 million.
[2] Last twelve months.
[3] Total enterprise value.
Source: S&P Capital IQ

Operating model

A group structure often imposes operating requirements on all the business units in a company's portfolio. A pharmaceutical and medical-device conglomerate, for instance, may require all business units to use a centralized compliance and regulatory process or common inventory management and sales-reporting systems. But different drug and device divisions have different needs, so the teams managing these common compliance, procurement, and sales functions would likely struggle to cater to each unit's unique circumstances and priorities. Indeed, when companies' portfolios mix high-margin, high-growth businesses with lower-margin, mature businesses, there can be a clear operating-model mismatch.[3]

A breakup would allow for a more tailored operating model. Consider the case of a global consumer company that owned both a high-margin branded business along with a lower-margin, nonbranded-commodity business: there were clear synergies in distribution and supply chain processes. But razor-thin margins in the highly competitive consumer-packaged-goods industry meant that the nonbranded-commodity business required a much leaner cost structure and a more focused operating model than the consumer company had. By selling off the nonbranded-commodity business to a better owner, the global consumer company was able to streamline its operating model and pursue growth in its branded business.

[3] Tim Koller, Dan Lovallo, and Zane Williams, "Should assessing financial similarity be part of your corporate portfolio strategy?" McKinsey, November 6, 2017.

Management focus and strategy

Experience shows that senior leaders in conglomerates tend to overinvest attention and organizational resources in high-growth parts of their business and underinvest in lower-growth or more mature parts of the organization.[4] The opposite can happen, too. Senior leaders may be overly focused on the success or failure of the biggest business unit and less so on overall growth. The result is often uneven development of businesses within the portfolio. Mature organizations fall further and further behind peers and struggle to find the resources to maintain or recapture their leadership positions, even when they represent most of the company's total revenues. Even if management is appropriately tending to all parts of the business, analysts and investors with limited time to evaluate companies may struggle to understand what's driving growth in disparate parts of a diversified business.

At one technology services provider that also owned and developed its own software, senior management struggled with resource-allocation decisions and at times missed out on some of the biggest trends in the industry—particularly in moving the provider's software to a cloud infrastructure. It was only after divesting its services business that the company was able to position itself as a player in the market for software as a service.

Capital management

A group structure can also make it more difficult for executives to determine how to balance investments in high-risk, high-reward opportunities (or, as they are known in most companies, "the most exciting initiatives") versus low-risk, low-reward ones. Moreover, some executives are reluctant to raise capital for discrete business units—in the case of an acquisition, for instance—when they feel like their share price doesn't fairly reflect the full value of the organization.

Divesting noncore business units can help address these concerns.[5] For instance, if a technology company spins out a legacy infrastructure business unit as a pure-play stand-alone company, it may be easier for the infrastructure business to raise capital for an acquisition and pursue market consolidation—without having to compete for funding with all the other businesses within the technology company.

By selling off the nonbranded-commodity business to a better owner, the global consumer company was able to streamline its operating model and pursue growth in its branded business.

[4] Iskandar Aminov, Aaron De Smet, and Dan Lovallo, "Bias busters: Resisting the allure of 'glamour' projects," McKinsey, February 6, 2019.
[5] Obi Ezekoye and Anthony Luu, "Divesting with agility," McKinsey, November 11, 2020.

Executives frequently comment that a “sum of all parts” valuation, versus applying peer multiples to each business in a portfolio, doesn’t fairly reflect the full value of their business. That is because individual business units tend to perform less well than pure-play companies. In the case of the technology company, then, the separation of the legacy infrastructure business would eliminate this noise and, theoretically, would ensure that each business within the technology company’s portfolio is valued at a fair multiple.

In perfectly rational capital markets, the value from a spin-off would come primarily from the operating-model efficiencies it enables and the management attention that it frees up. Capital markets aren’t completely rational, though, and as we noted, many businesses struggle with allocation decisions. Additionally, there is at least a perceived multiples discount on companies with diverse business lines, perhaps because investors would prefer to make their own diversification decisions rather than rely on management. As a result, companies pursuing spin-offs often include all three sources of value creation when announcing their plans.

It’s true that some technology companies are, so far, still following a bigger-is-better approach. But for most others, the days of the diversified conglomerate are receding.

Our own research and experience suggest two things: first, the best-performing conglomerates do well not because they are diversified but because they are truly the best owners of the businesses within their portfolio. And second, for conglomerates that acknowledge their flaws and that are seeking improvements in the three areas cited earlier (operations, management focus, and capital), breaking up doesn’t need to be so hard to do—as long as executives systematically consider the growth strategies, operations, talent, and cultural changes the parent company and divested business unit will require for a win–win scenario.[6]

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[6] Jan Krause, Anthony Luu, Robert Uhlaner, and Andy West, “Achieving win–win spin-offs,” McKinsey, October 11, 2021.

2013

Profitably parting ways: Getting more value from divestitures

Companies often struggle to capture the full value of a separation. Here's how to do better.

by David Fubini, Michael Park, and Kim Thomas

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Most divestitures start with a strategic decision that a company is no longer the best owner of one of its businesses. It's a natural move for executives who see value in actively managing their portfolio of business units—recognizing that to grow, they sometimes have to shrink first—to deploy capital into a business with higher returns, for example, or to reshape the company's strategy. Indeed, past McKinsey research has shown that companies that more frequently reallocate capital generate higher returns than their peers.[1]

But once a company decides to sell, problems can arise. Managers devote their attention to finding a buyer but seldom scope deals from a potential buyer's point of view, even as they struggle to figure out exactly what should be included in the sale, apart from the productive assets that are its centerpiece. They often think about the separation process only secondarily, assuming they can separate a business and worry about stranded costs later. And they neglect the reality of internal competition for resources that can flare up between the managers who are staying and those who are leaving. Management and the board can get so caught up in the sale that the core business begins to suffer from neglect. All in all, divestiture turns out to be no panacea: sellers can take up to three years to recover from the experience. Indeed, some companies are so wary of these pitfalls that they decide to muddle through with businesses of which they are not the natural owners—another unsatisfactory result, as research suggests that these sales can produce significant returns for both the parent company and the divested or spun-off business.[2]

[1] Stephen Hall, Dan Lovallo, and Reinier Musters, "How to put your money where your strategy is," *McKinsey Quarterly*, March 1, 2012.
[2] Bill Huyett and Tim Koller, "Finding the courage to shrink," *McKinsey Quarterly*, August 1, 2011.

In our experience, even highly complex divestitures can work well, provided companies follow proven practices, especially in three areas: scoping the deal in detail, addressing the so-called stranded costs left behind when the revenue-generating assets are sold, and managing the expectations and concerns of employees.

These are not discrete goals—in fact, they are mutually reinforcing. Setting clear boundaries for the deal will enable managers to understand the implications of any subsequent adjustments to the scope and accordingly help them maximize value. Clear boundaries will also help the seller understand the costs that are likely to be stranded; knowing these early is essential, as they often require some time to wind down. And the process of defining the deal's potential boundaries lets companies be more transparent with employees about the deal process, its progress, and where they're likely to end up. Getting started on these activities quickly, in parallel with the search for a buyer, can unlock enormous value for buyer and seller alike.

Taking the buyer's point of view

Few companies adequately study the likely boundaries of a deal before they start searching for buyers, preferring to start with a simple high-level definition rather than dig into the details. Admittedly, it's a bit impractical to define exact deal boundaries before the identity of the buyer and its preferences are known.

To get around that problem, smart sellers define a number of different deal packages—of assets, people, and services—configured to attract interest from a broad spectrum of buyers. These packages not only broaden the field of potential buyers, often in ways that companies cannot envision at the outset, but also help the company cope with the tough questions that buyers inevitably have about what's in scope, how to separate, the transitional services they can count on, and the financials of the business. Sellers that haven't begun to define the deal will be unable to provide good answers—delaying the sales process and losing their competitive position, as well as leaving buyers to factor more risk into their valuation models and lowering the value they see in the deal.

When one European private-equity firm, for example, didn't get all the answers it sought about a company it was negotiating to acquire, it raised the level of assumed risk in its valuation model, suppressing the value of the deal and lowering the price it was willing to pay. To prevent such problems, a US industrial company divesting a subsidiary conducted a

Smart sellers define a number of different deal packages that not only broaden the field of potential buyers but also help the company cope with the tough questions that buyers inevitably have.

detailed analysis of its true sales, general, and administrative costs and, by clearly defining which activities were attributable to the business being sold, found them to be tens of millions of dollars lower than current allocations. That exercise provided detailed information for potential buyers, increased the profit of the business being sold, and helped get a higher price for the deal.

Sellers can construct sale packages for a range of buyers. Each buyer is unique and will have more or less need for infrastructure, capabilities, and a geographic presence where the assets for sale are located. To prepare for the wide range of needs, most sellers will want to develop basic packages for at least three types of bidder: a strategic buyer with a local presence, a strategic buyer from another region, and a private-equity firm seeking a stand-alone entity. Bundles for strategic buyers with no local infrastructure and for private-equity buyers typically include more support services than those designed for local strategic investors, which may only want the operational and market-facing parts of the business.

These packages represent two ends of the spectrum; in between, there are many possible configurations of support services to package with the assets. And there may also be buyers interested in cherry-picking parts of the core business instead of taking all of it—which, while probably not ideal, should not be discounted out of hand. Sale packages include pro forma financial statements tailored to represent the package being offered to each buyer or class of buyer that highlight the true value of the business, separation and transition plans, and details on proposed management and talent assignments.

When a large industrial company was looking to divest one of its business units in the late 2000s, its managers' first instinct was to sell to a large strategic buyer. But by conducting a form of due diligence on its prospective buyers (often known as a "reverse due diligence")—including some private-equity firms—the company was able to understand all the potential synergies each would gain by buying the business. That enabled managers to design a specific value proposition for each potential buyer. Eventually, they were able to attract—and sell the business to—a much smaller player that hadn't even come up in their initial scan for potential buyers. Even better, the company got a price 20 percent higher than first expected. In fact, all the bids exceeded expectations; the final list of bidders included a private-equity consortium and a few other unanticipated interests.

Rooting out stranded costs

One of the most challenging aspects of a major divestiture is that even sellers that control expenses well are inevitably left with some corporate costs associated with the business but not sold with it. Without the revenues to support them, these stranded costs are a direct threat to the bottom line. Stranded costs essentially can be any type of cost that does not automatically disappear with the transaction, from costs related to shared services, such as marketing and investor relations, to IT infrastructure. Some of these are fixed, such as the IT system, and cannot be readily reduced regardless of the size of the divestiture. Others are more variable and can contract, for example, with a lower head count—but they can still take years to unwind unless explicitly planned as part of the divestiture. As noted, sellers often take up to three years to recover from a divestiture.

Sellers whose cost management is weak are all the more challenged by stranded costs and are often surprised by how much overhead they have. The divestiture typically reveals unsuspected layers of complexity or outright duplication within centralized functions.

We see three strong practices to reduce overhead. First, as we have discussed, defining the precise boundaries of potential deal packages early in the deal brings to light the full extent of the subsidiary's sales, general, and administrative costs. The parent company can make a better attribution of resources to the parent and the subsidiary. That benefits both companies.

Rooting out stranded costs takes a separation manager with the foresight to rethink the parent company's cost base and the authority to make it happen—the third good practice.

Second, successful sellers often use the momentum generated by the divestiture as a catalyst to reduce stranded costs—and to improve the performance of any bloated or inefficient corporate-center activities revealed by the divestiture. (This mirrors a similar effect of transformational acquisitions, in which buyers take advantage of the circumstances of an acquisition as a catalyst to restructure costs more broadly.[3]) Companies can seize the impetus of the divestiture to reexamine their entire cost base using benchmarking analysis to highlight potential inefficiency or even zero-based budgeting to encourage a radical rethinking of the corporate infrastructure.

Rooting out stranded costs takes a separation manager with the foresight to rethink the parent company's cost base and the authority to make it happen—the third good practice.

One industrial organization had divested a few units over the years, but it had not followed suit with its corporate functions, which were still sized for their earlier duties. When it came time to shape another big divestiture, representing about 10 percent of revenues, the company conducted a thorough search for the stranded costs that lay within individual support functions, as well as costs that cut across functions such as real estate. All told, these added up to hundreds of millions of dollars. That proved to be a catalyst for an even broader cost restructuring.

Companies of this size often face a special problem in rooting out stranded costs. For many large multinational companies organized by matrix, the only pragmatic method is for senior management to lead a cross-functional initiative to tackle crosscutting opportunities such as shared-service and outsourcing operations, as well as the change programs required to support the cost transformations.

Managing employee expectations

The challenges of talent management in a divestiture start at the moment companies begin defining the boundaries of different sale packages and continue right through to the close of the deal. First and foremost, managers struggle to figure out what to say to the people involved. Most choose to say nothing at first, reflecting the genuine uncertainty about what will happen. Sometimes company leaders will choose to keep plans for the deal confidential up until signing—as one global CEO and seasoned divestiture veteran told us, "I just deny everything until the deal is signed. It's easier that way." This may be true, but it creates a communication challenge. Many employees inevitably will know about the deal because of the massive preparation work that is impossible to conceal. But if

[3] Marc Goedhart, Tim Koller, and David Wessels, "The five types of successful acquisitions," *McKinsey Quarterly*, July 2010.

It is important to define and implement a set of performance measures and rewards aligned with value maximization, and to use these with all key people involved in the divestiture process.

management officially denies the reports, it becomes very difficult to put in place communication plans and other measures to minimize the concerns that always arise in such situations—all employees want to know, "What happens to me?"

Some form of short announcement is essential. Once managers make an announcement, they should clearly define and communicate the selection process to keep employees motivated while they wait for news of their fate. That can, of course, be challenging in situations where the deal boundaries are unclear until late in the process. Ideally, the communication plan should be part of a compelling story that shows not only employees but also investors, analysts, and customers why the divestiture will leave both buyer and seller better off.

Once the word is out, other challenges begin. In almost every divestiture we've worked on, tension has arisen from the moment it becomes clear who is staying and who is going. Given the role the exiting managers will play in communicating the business's value to potential buyers, delay in informing them is undesirable. But once they are informed, they immediately become another party at the negotiating table, bargaining for the talent, assets, and contracts they feel they'll need to be successful and trying to avoid the ones they don't want.

Failing to manage the tension between the two groups can be damaging. When a global industrial company divested a multibillion-dollar division, for example, it began to receive a lot of applications for transfers from the entity to be divested back into the parent company—so many, indeed, that the company was at risk of visibly depleting the divested company of talent and experienced leadership, potentially affecting its value. To discourage the transfers, it aligned the incentives of people in the departing unit to the characteristics of the sale. It decided to reward managers based on earnings before interest, taxes, depreciation, and amortization (EBITDA)—a critical negotiating point with the private-equity firm that ultimately bought it. The emphasis on EBITDA motivated exiting managers to minimize the overhead they took with them; it also reduced transfer requests.

This approach did leave more overhead for parent-company managers to deal with, just as they too were striving to reduce overhead costs. But they made a conscious choice to accept this, believing that the right way to deal with broader cost issues was, as we discussed above, as part of a thorough change process in the wake of the divestiture.

Parent-company managers often lack the incentives that would compel them to take care of the departing entity. If they do not feel responsible for the unit's success, they may stop investing in value-creating projects, caring for employees and customers, or watching costs. In our experience, it is important to define and implement a set of performance measures and rewards aligned with value maximization, and to use these with all key people involved in the divestiture process. The most obvious rewards are monetary, but research shows that other incentives (such as recognition and promotions) can be equally if not more important determinants of performance.

Negotiations over talent are particularly sensitive. The first inclination of parent-company managers is to keep the best performers and send the rest with the divested business. That's not practical, in the end, because regardless of the type of buyer, the divestor has a moral obligation—and in some places a legal one—to make sure the business is a going concern. Furthermore, sellers who intend to divest multiple businesses in the future do not want to be perceived by the market as selling bad businesses stripped of key talent, as this will of course affect their ability to make future deals. At the same time, the parent company must retain critical resources, and quite often, the exiting managers have the very skills they need. Thus, successful divestors will address the issue of talent early in the process and start building or acquiring the skills needed in both the parent organization and the business to be sold.

Much of the value of a divestiture depends on the effectiveness of the separation process. Defining the right deal, managing talent uncertainty, and rooting out stranded costs can make the difference between a deal that succeeds and one that destroys value. And skill in divestiture is comparatively rare; doing it well can help companies get a competitive edge.

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ESG

Do environmental, social, and governance (ESG) priorities compete with long-term value creation?

While some companies may be tempted to cut back on ESG initiatives in order to boost short-term earnings (just as with any other investment), managing exclusively for short-term earnings is antithetical to long-term value creation. For companies to earn and to continue to merit their social license—and, in turn, deliver value for their investors—they must meet the needs of a wide range of stakeholders; recognize environmental, social, and governance expectations; and understand how those expectations can shift. No organization can remain in business unless it follows law and ethical custom.

Today, the existential dangers of climate change and the need to reach net-zero emissions are clearly top of mind. But as we have shown for decades, forward-thinking companies have been addressing first-, second-, and third-order consequences of climate change, including existing or potential regulation, in a thoughtful, value-creating way.

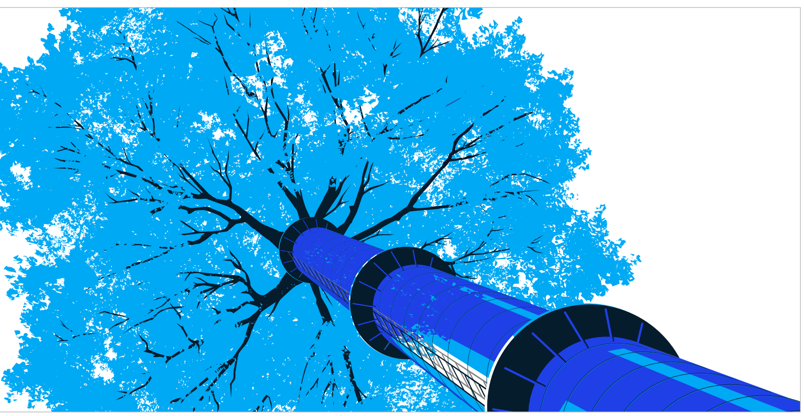
This deliberative approach holds true as companies consider each of the ESG dimensions. When calibrated to the unique requirements of a distinct business model, ESG does not compete with long-term value creation. Rather, ESG can help unlock value, with positive effects for stakeholders, society, and the planet.

2019

Five ways that ESG creates value

Getting your environmental, social, and governance (ESG) proposition right links to higher value creation. Here's why.

by Witold Henisz, Tim Koller, and Robin Nuttall



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Your business, like every business, is deeply intertwined with environmental, social, and governance (ESG) concerns. It makes sense, therefore, that a strong ESG proposition can create value—and in this article, we provide a framework for understanding the five key ways it can do so. But first, let's briefly consider the individual elements of ESG:

— The *E* in ESG, *environmental criteria*, includes the energy your company takes in and the waste it discharges, the resources it needs, and the consequences for living beings as a result. Not least, E encompasses carbon emissions and climate change. Every company uses energy and resources; every company affects, and is affected by, the environment.

— *S*, *social criteria*, addresses the relationships your company has and the reputation it fosters with people and institutions in the communities where you do business. S includes labor relations and diversity and inclusion. Every company operates within a broader, diverse society.

— *G*, *governance*, is the internal system of practices, controls, and procedures your company adopts in order to govern itself, make effective decisions, comply with the law, and meet the needs of external stakeholders. Every company, which is itself a legal creation, requires governance.

Just as ESG is an inextricable part of how you do business, its individual elements are themselves intertwined. For example, social criteria overlaps with environmental criteria and governance when companies seek to comply with environmental laws and broader concerns about sustainability. Our focus is mostly on environmental and social criteria, but, as every leader knows, governance can never be hermetically separate. Indeed, excelling in governance calls for mastering not just the letter of laws but also their spirit—such as getting in front of violations before they occur, or ensuring transparency and dialogue with regulators instead of formalistically submitting a report and letting the results speak for themselves.

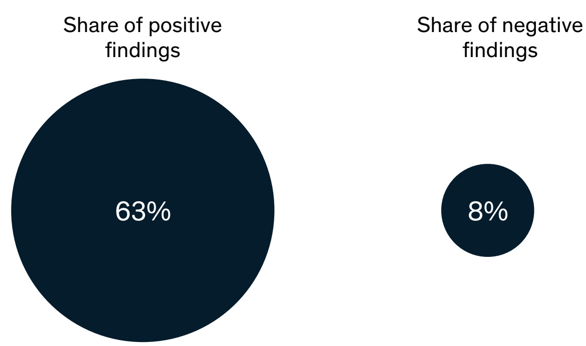
Thinking and acting on ESG in a proactive way has lately become even more pressing. The US Business Roundtable released a statement in August 2019 strongly affirming business's commitment to a broad range of stakeholders, including customers, employees, suppliers, communities, and, of course, shareholders.[1] Of a piece with that emerging zeitgeist, ESG-oriented investing has experienced a meteoric rise. Global sustainable investment now tops $30 trillion—up 68 percent since 2014 and tenfold since 2004.[2] The acceleration has been driven by heightened social, governmental, and consumer attention on the broader impact of corporations, as well as by the investors and executives who realize that a strong ESG proposition can safeguard a company's long-term success. The magnitude of investment flow suggests that ESG is much more than a fad or a feel-good exercise.

So does the level of business performance. The overwhelming weight of accumulated research finds that companies that pay attention to environmental, social, and governance concerns do not experience a drag on value creation—in fact, they experience quite the opposite (Exhibit 1). A strong ESG proposition correlates with higher equity returns, from both a tilt and a momentum perspective.[3] Better performance in ESG also corresponds with a reduction in downside risk, as evidenced, among other ways, by lower loan and credit default swap spreads and higher credit ratings.[4]

Exhibit 1

Paying attention to environmental, social, and governance (ESG) concerns does not compromise returns—rather, the opposite.

Results of >2,000 studies on the impact of ESG propositions on equity returns



Source: Deutsche Asset & Wealth Management Investment; Gunnar Friede et al., "ESG and financial performance: Aggregated evidence from more than 2000 empirical studies," *Journal of Sustainable Finance & Investment*, October 2015, Volume 5, Number 4; McKinsey analysis

1 See "Statement on the purpose of a corporation," Business Roundtable, 2019. The stakeholder approach is elaborated upon in Witold J. Henisz, *Corporate Diplomacy: Why Firms Need to Build Ties with External Stakeholders*, New York, NY: Routledge, 2016; John Browne, Robin Nuttall, and Tommy Stadlen, *Connect: How Companies Succeed by Engaging Radically with Society*, New York, NY: PublicAffairs, 2016; and Colin Mayer, *Prosperity: Better Business Makes the Greater Good*, Oxford, UK: Oxford University Press, 2019.

2 *Global Sustainable Investment Review 2018*, Global Sustainable Investment Alliance, 2018.

3 Mozaffar Khan, George Serafeim, and Aaron Yoon, "Corporate sustainability: First evidence on materiality," *The Accounting Review*, November 2016, Volume 91, Number 6; Zoltán Nagy, Altaf Kassam, and Linda-Eling Lee, "Can ESG add alpha? An analysis of ESG tilt and momentum strategies," *Journal of Investing*, Summer 2015, Volume 25, Number 2.

4 See, for example, Witold J. Henisz and James McGlinch, "ESG, material credit events, and credit risk," *Journal of Applied Corporate Finance*, July 2019, Volume 31; Sara A. Lundqvist and Anders Vilhelmsson, "Enterprise risk management and default risk: Evidence from the banking industry," *Journal of Risk and Insurance*, March 2018, Volume 85, Number 1; Erik Landry, Mariana Lazaro, and Anna Lee, "Connecting ESG and corporate bond performance," MIT Management Sloan School and Breckinridge Capital Advisors, 2017; and Mitch Reznick and Michael Viehs, "Pricing ESG risk in credit markets," Hermes Credit and Hermes EOS, 2017. Similar benefits are found in yield spreads attached to loans; see Allen Goss and Gordon S. Roberts, "The impact of corporate social responsibility on the cost of bank loans," *Journal of Banking and Finance*, July 2011, Volume 35, Number 7; Sudheer Chava, "Environmental externalities and cost of capital," *Management Science*, September 2014, Volume 60, Number 9; Sung C. Bae, Kiyoung Chang, and Ha-Chin Yi, "The impact of corporate social responsibility activities on corporate financing: A case of bank loan covenants," *Applied Economics Letters*, February 2016, Volume 23, Number 17; and Sung C. Bae, Kiyoung Chang, and Ha-Chin Yi, "Corporate social responsibility, credit rating, and private debt contracting: New evidence from syndicated loan market," *Review of Quantitative Finance and Accounting*, January 2018, Volume 50, Number 1.

But even as the case for a strong ESG proposition becomes more compelling, an understanding of why these criteria link to value creation is less comprehensive. How exactly does a strong ESG proposition make financial sense? From our experience and research, ESG links to cash flow in five important ways: (1) facilitating top-line growth, (2) reducing costs, (3) minimizing regulatory and legal interventions, (4) increasing employee productivity, and (5) optimizing investment and capital expenditures (Exhibit 2). Each of these five levers should be part of a leader's mental checklist when approaching ESG opportunities—and so should be an understanding of the "softer," more personal dynamics needed for the levers to accomplish their heaviest lifting.

Five links to value creation

The five links are a way to think of ESG systematically, not an assurance that each link will apply, or apply to the same degree, in every instance. Some are more likely to arise in certain industries or sectors; others will be more frequent in given geographies. Still, all five should be considered regardless of a company's business model or location. The potential for value creation is too great to leave any of them unexplored.

1. Top-line growth

A strong ESG proposition helps companies tap new markets and expand into existing ones. When governing authorities trust corporate actors, they are more likely to award them the access, approvals, and licenses that afford fresh opportunities for

Exhibit 2

A strong environmental, social, and governance (ESG) proposition links to value creation in five essential ways.

	Strong ESG proposition (examples)	**Weak ESG proposition** (examples)
Top-line growth	Attract B2B and B2C customers with more sustainable products Achieve better access to resources through stronger community and government relations	Lose customers through poor sustainability practices (eg, human rights, supply chain) or a perception of unsustainable or unsafe products Lose access to resources (including from operational shutdowns) as a result of poor community and labor relations
Cost reductions	Lower energy consumption Reduce water intake	Generate unnecessary waste and pay correspondingly higher waste-disposal costs Expend more in packaging costs
Regulatory and legal interventions	Achieve greater strategic freedom through deregulation Earn subsidies and government support	Suffer restrictions on advertising and point of sale Incur fines, penalties, and enforcement actions
Productivity uplift	Boost employee motivation Attract talent through greater social credibility	Deal with "social stigma," which restricts talent pool Lose talent as a result of weak purpose
Investment and asset optimization	Enhance investment returns by better allocating capital for the long term (eg, more sustainable plant and equipment) Avoid investments that may not pay off because of longer-term environmental issues	Suffer stranded assets as a result of premature write-downs Fall behind competitors that have invested to be less "energy hungry"

growth. For example, in a recent, massive public–private infrastructure project in Long Beach, California, the for-profit companies selected to participate were screened based on their prior performance in sustainability. Superior ESG execution has demonstrably paid off in mining as well. Consider gold, a commodity (albeit an expensive one) that should, all else being equal, generate the same rents for the companies that mine it regardless of their ESG propositions. Yet one major study found that companies with social-engagement activities that were perceived to be beneficial by public and social stakeholders had an easier go at extracting those resources without extensive planning or operational delays. These companies achieved demonstrably higher valuations than competitors with lower social capital.[5]

ESG can also drive consumer preference. McKinsey research has shown that customers say they are willing to pay to "go green." Although there can be wide discrepancies in practice, including customers who refuse to pay even 1 percent more, we've found that upward of 70 percent of consumers surveyed on purchases in multiple industries, including the automotive, building, electronics, and packaging categories, said they would pay an additional 5 percent for a green product if it met the same performance standards as a nongreen alternative. In another study, nearly half (44 percent) of the companies we surveyed identified business and growth opportunities as the impetus for starting their sustainability programs.

The payoffs are real. When Unilever developed Sunlight, a brand of dishwashing liquid that used much less water than its other brands, sales of Sunlight and Unilever's other water-saving products proceeded to outpace category growth by more than 20 percent in a number of water-scarce markets. And Finland's Neste, founded as a traditional petroleum-refining company more than 70 years ago, now generates more than two-thirds of its profits from renewable fuels and sustainability-related products.

2. Cost reductions

ESG can also reduce costs substantially. Among other advantages, executing ESG effectively can help combat rising operating expenses (such as raw-material costs and the true cost of water or carbon), which McKinsey research has found can affect operating profits by as much as 60 percent. In the same report, our colleagues created a metric (the amount of energy, water, and waste used in relation to revenue) to analyze the relative resource efficiency of companies within various sectors and found a significant correlation between resource efficiency and financial performance. The study also identified a number of companies across sectors that did particularly well—precisely the companies that had taken their sustainability strategies the furthest.

As with each of the five links to ESG value creation, the first step to realizing value begins with recognizing the opportunity. Consider 3M, which has long understood that being proactive about environmental risk can be a source of competitive advantage. The company has saved $2.2 billion since introducing its "pollution prevention pays" (3Ps) program in 1975, preventing pollution up front by reformulating products, improving manufacturing processes, redesigning equipment, and recycling and reusing waste from production. Another enterprise, a major water utility company, achieved cost savings of almost $180 million per year thanks to lean initiatives aimed at improving preventive maintenance, refining spare-part inventory management, and tackling energy consumption and recovery from sludge. FedEx, for its part, aims to convert its entire 35,000-vehicle fleet to electric or hybrid engines; to date, 20 percent have been converted, which has already reduced fuel consumption by more than 50 million gallons.[6]

3. Reduced regulatory and legal interventions

A stronger external-value proposition can enable companies to achieve greater strategic freedom, easing regulatory pressure. In fact, in case after case across sectors and geographies, we've seen that

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[5] Sinziana Dorobantu, Witold J. Henisz, and Lite J. Nartey, "Spinning gold: The financial returns to stakeholder engagement," *Strategic Management Journal*, December 2014, Volume 35, Number 12.
[6] Witold J. Henisz, "The costs and benefits of calculating the net present value of corporate diplomacy," *Field Actions Science Reports*, 2016, Special Issue 14.

strength in ESG helps reduce companies' risk of adverse government action. It can also engender government support.

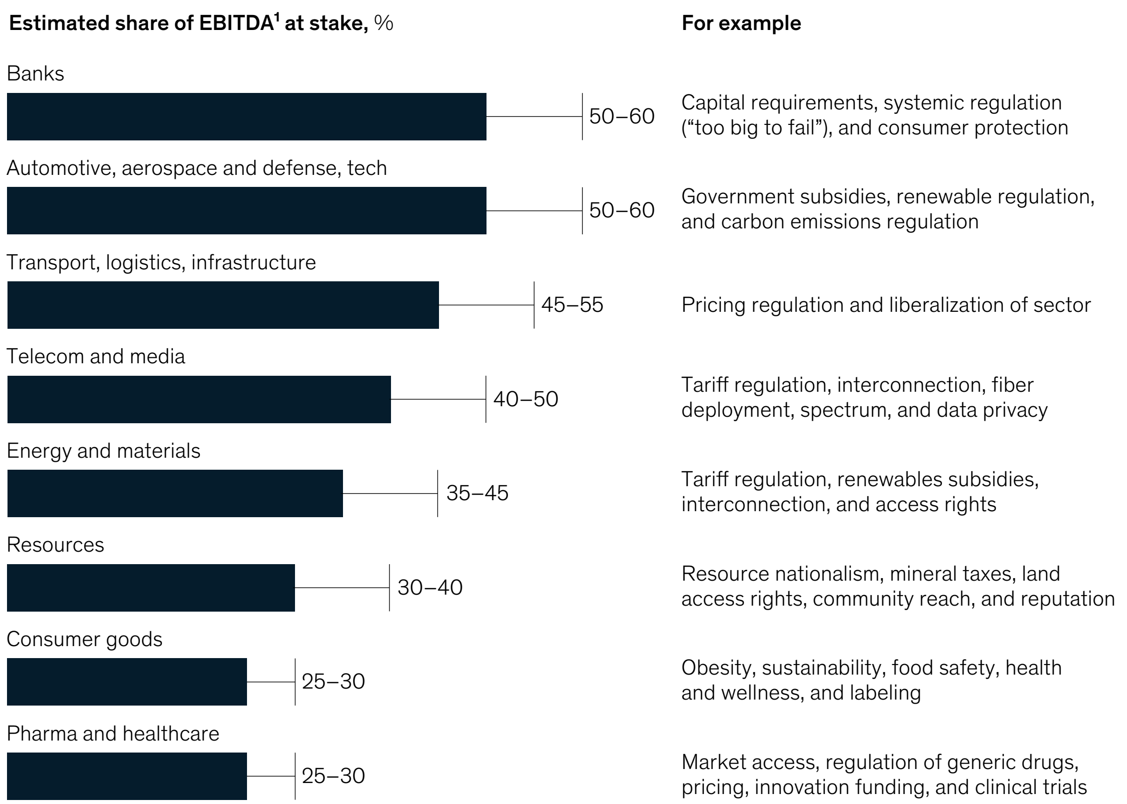
The value at stake may be higher than you think. By our analysis, typically one-third of corporate profits are at risk from state intervention. Regulation's impact, of course, varies by industry. For pharmaceuticals and healthcare, the profits at stake are about 25 to 30 percent. In banking, where provisions on capital requirements, "too big to fail," and consumer protection are so critical, the value at stake is typically 50 to 60 percent. For the automotive, aerospace and defense, and tech sectors, where government subsidies (among other forms of intervention) are prevalent, the value at stake can reach 60 percent as well (Exhibit 3).

4. Employee productivity uplift

A strong ESG proposition can help companies attract and retain quality employees, enhance employee motivation by instilling a sense of purpose, and increase productivity overall. Employee satisfaction is positively correlated with shareholder returns.[7] For example, the London Business School's Alex Edmans found that the companies that made *Fortune*'s "100 Best Companies to Work For" list generated 2.3 percent to 3.8 percent higher

Exhibit 3

In many industries, a large share of corporate profits from external engagement are at stake.



[1] Earnings before interest, taxes, depreciation, and amortization.

[7] Alex Edmans, "Does the stock market fully value intangibles? Employee satisfaction and equity prices," *Journal of Financial Economics*, September 2011, Volume 101, Number 3.

Recent studies have shown that positive social impact correlates with higher job satisfaction, and field experiments suggest that when companies 'give back,' employees react with enthusiasm.

stock returns per year than their peers over a greater than 25-year horizon.[8] Moreover, it's long been observed that employees with a sense not just of satisfaction but also of connection perform better. The stronger an employee's perception of impact on the beneficiaries of their work, the greater the employee's motivation to act in a "prosocial" way.[9]

Recent studies have also shown that positive social impact correlates with higher job satisfaction, and field experiments suggest that when companies "give back," employees react with enthusiasm. For instance, randomly selected employees at one Australian bank who received bonuses in the form of company payments to local charities reported greater and more immediate job satisfaction than their colleagues who were not selected for the donation program.[10]

Just as a sense of higher purpose can inspire your employees to perform better, a weaker ESG proposition can drag productivity down. The most glaring examples are strikes, worker slowdowns, and other labor actions within your organization. But it's worth remembering that productivity constraints can also manifest outside of your company's four walls, across the supply chain. Primary suppliers often subcontract portions of large orders to other firms or rely on purchasing agents, and subcontractors are typically managed loosely, sometimes with little oversight of workers' health and safety.

Farsighted companies pay heed. Consider General Mills, which works to ensure that its ESG principles apply "from farm to fork to landfill." Walmart tracks the work conditions of its suppliers, including those with extensive factory floors in China, according to a proprietary company scorecard. And Mars seeks opportunities where it can deliver what it calls "wins-wins-wins" for the company, its suppliers, and the environment. Mars has developed model farms that not only introduce new technological initiatives to farmers in its supply chains, but also increase farmers' access to capital so that they are able to obtain a financial stake in those initiatives.[11]

5. Investment and asset optimization

A strong ESG proposition can enhance investment returns by allocating capital to more promising and more sustainable opportunities (for example, renewables, waste reduction, and scrubbers). It can also help companies avoid stranded investments

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[8] Alex Edmans, "The link between job satisfaction and firm value, with implications for corporate social responsibility," *Academy of Management Perspectives*, November 2012, Volume 26, Number 4.

[9] Adam M. Grant, "Does intrinsic motivation fuel the prosocial fire? Motivational synergy in predicting persistence, performance, and productivity," *Journal of Applied Psychology*, January 2008, Volume 93, Number 1; Adam M. Grant, "Relational job design and the motivation to make a prosocial difference," *Academy of Management Review*, April 2007, Volume 32, Number 2; and J. Stuart Bunderson and Jeffery A. Thompson, "Violations of principle: Ideological currency in the psychological contract," *Academy of Management Review*, October 2003, Volume 28, Number 4.

[10] Jan-Emmanuel de Neve et al., "Work and well-being: A global perspective," in *Global Happiness Policy Report*, edited by Global Council for Happiness and Wellbeing, New York, NY: Sustainable Development Solutions Network, 2018.

[11] Katy Askew, "'Extended supply chains are broken': Why Mars thinks the commodities era is over," Food Navigator, June 6, 2018.

that may not pay off because of longer-term environmental issues (such as massive write-downs in the value of oil tankers). Remember, taking proper account of investment returns requires that you start from the proper baseline. When it comes to ESG, it's important to bear in mind that a do-nothing approach is usually an eroding line, not a straight line. Continuing to rely on energy-hungry plants and equipment, for example, can drain cash going forward. While the investments required to update your operations may be substantial, choosing to wait it out can be the most expensive option of all. The rules of the game are shifting: regulatory responses to emissions will likely affect energy costs and could especially affect balance sheets in carbon-intense industries. And bans or limitations on such things as single-use plastics or diesel-fueled cars in city centers will introduce new constraints on multiple businesses, many of which could find themselves having to catch up. One way to get ahead of the future curve is to consider repurposing assets right now—for instance, converting failing parking garages into uses with higher demand, such as residences or day care facilities, a trend we're beginning to see in reviving cities.

Foresight flows to the bottom line, and leaning into the tailwinds of sustainability presents new opportunities to enhance investment returns. Tailwinds blow strongly in China, for example. The country's imperative to combat air pollution is forecast to create more than $3 trillion in investment opportunities through 2030, ranging across industries from air-quality monitoring to indoor air purification and even cement mixing.

The personal dynamic

The five links to value creation are grounded in hard numbers, but, as always, a softer side is in play. For leaders seeking out new ESG opportunities or trying to nudge an organization in directions that may feel orthogonal to its traditional business model, here are a few personal points to keep in mind.

Get specific

It's important to understand the multiple ways that environmental, social, and governmental factors can create value, but when it comes to inspiring those around you, what will you really be talking about? Surprisingly, that depends. The individual causes that may inspire any one of us are precisely that—

Taking proper account of investment returns requires that you start from the proper baseline. When it comes to ESG, a do-nothing approach is usually an eroding line, not a straight line.

individual. That means that the issues most important to executives on your team could incline in different directions. Large companies can have dozens of social, community, or environmental projects in motion at any time. Too many at once can be a muddle; some may even work at cross-purposes.

In our experience, priority initiatives should be clearly articulated, and the number should be no more than five. To decide on which ones and to get the most out of them, let the company be your lodestar. For one leading agribusiness, that means channeling its capabilities into ameliorating hunger. The company taps its well-honed competencies to work with farmers in emerging regions to diversify their crops and adopt new technologies, which increases production and strengthens the company's ties with different countries and communities.

Even within the same industry, different companies will have different ESG profiles depending on their position in the corporate life cycle. Attackers typically have high upside potential to drive growth from ESG initiatives (for instance, the craft brewer BrewDog donates 20 percent of its annual profits), while longer-established competitors simply don't have that choice. For some companies, such as coal businesses or tobacco manufacturers, ESG will be more effectively geared to maintaining community ties and prioritizing risk avoidance. Regardless of your company's circumstances, it will be the CEO's role to rally support around the initiatives that best map to its mission.

Get practical

Value creation should be the CEO's core message. Anything else could sound off-key. Managers, especially more senior ones, are usually assessed based on performance targets. Under those conditions, top-down ESG pronouncements can seem distracting or too vague to be of much use; "save the planet" won't cut it. To get everyone on board, make the case that your company's ESG priorities do link to value, and show leaders how, ideally with hard metrics that feed into the business model (for example, output per baseline electricity use, waste cost in a given plant or location per employee, or revenue per calorie for a food-and-beverage business).

The case will be simpler if you've done the hard work to analyze what matters along your value chain, where the greatest potential lies, and which areas have the most impact for your company. Proactive companies carefully research potential initiatives, including by tapping thought leaders and industry experts, iterate their findings with internal and external stakeholders, and then publish the results. Making the case publicly—not least to investors—enforces rigor and helps ensure that practical actions will follow.

Get real

An honest appraisal of ESG includes a frank acknowledgment that getting it wrong can result in massive value destruction. Being perceived as "overdoing it" can sap a leader's time and focus. Underdoing it is even worse. Companies that perform poorly in environmental, social, and governance criteria are more likely to endure materially adverse events. Just in the past few years, multiple companies with a weak ESG proposition saw double-digit declines in market capitalization in the days and weeks after their missteps came to light.[12] Leaders should vigilantly assess the value at stake from external engagement (in our experience, poor external engagement can typically destroy about 30 percent of value) and plan scenarios for potential hits to operating profits. These days, the tail events can seem to come out of nowhere, even from a single tweet. Playing fast and loose with ESG is playing to lose, and failure to confront downside risk forthrightly can be disastrous.

Conversely, being thoughtful and transparent about ESG risk enhances long-term value—even if doing so can feel uncomfortable and engender some short-term pain. Ed Stack, the CEO of North American retailer Dick's Sporting Goods, said he expected that the company's 2018 announcement

[12] Witold J. Henisz and James McGlinch, "ESG, material credit events, and credit risk," *Journal of Applied Corporate Finance*, July 2019, Volume 31, Number 2.

ESG for the long term

Who says that a strong environmental, social, and governance (ESG) proposition cannot create value for companies and their shareholders? Not Milton Friedman. "It may well be in the long-run interest of a corporation," the economist wrote a half-century ago, "to devote resources to providing amenities to [its] community or to improving its government. That may make it easier to attract desirable employees, it may reduce the wage bill . . . or have other worthwhile effects."[1]

Shareholders and stakeholders do not compete in a zero-sum game. Quite the opposite: building a strong connection with broad elements of society creates value, not least because it builds resilience into the business model. Compromising your connections with stakeholders simply to make earnings targets, on the other hand, destroys value. It's the essence of short-termism, measurably and overwhelmingly harmful to most shareholders' economic interests. Research shows that firms that make significant investments for longer-term payoffs have future cash flows that are discounted less by investors than the cash flows of firms that allocate a smaller portion of their cash for the long term; immediate-minded fixes such as share repurchases (which arguably divert cash from investments that generate longer-term returns) correlate with increased discounting as well.[2] Businesses need to play the long game. That means they need to satisfy the needs of their customers, employees, and communities—these days, often a global community—in order to maximize value creation. Thriving businesses concerned with long-term horizons fuel a virtuous cycle. They create jobs, increase tax revenue, and raise standards of living. ESG helps generate wealth, and wealth is not a fixed pie.

But just as it's wrong to assume that shareholders' interests must perforce come at stakeholders' expense, one should not assume that shareholders' and stakeholders' interests cannot conflict. Of course they can! Should companies pay employees more than is necessary to keep them engaged and productive, even if doing so would place employee interests above those of the company as a whole and its shareholders in particular?

The question isn't theoretical—shareholders have sued management on that very issue. While US courts have typically looked to the business-judgment rule, which affords directors wide discretion to decide such matters, judges have even weighed in about shareholder value maximization. For example, in 2010, when the directors of classifieds site Craigslist admittedly sought to run their business without a shareholder-maximization objective, putting the interests of the community above "the business of stockholder wealth maximization, now or in the future," the Delaware courts—the most important jurisdiction in the United States for matters of corporate law—insisted that corporations exist to promote value for shareholders. ("The 'Inc.' after the company name," the deciding court said, "has to mean at least that.") The ruling thus proceeded to invalidate a poison pill that would have allowed Craigslist's board to execute "a business strategy that openly eschews stockholder wealth maximization."[3]

Different countries come to different conclusions about the purpose of business. But across legal systems, maximizing wealth for the long term demands that managers consider trade-offs. In a system such as that of the United States, where shareholder wealth maximization can have the force of law, executives can meet their shareholder-minded mission through an approach that economist Michael Jensen calls an "enlightened value maximization."[4] Under that framework, managers "spend an additional dollar on any constituency provided the long-term value added to the firm from such expenditure is a dollar or more." That enforces a cost-benefit analysis for ESG investments, just as companies would do when allocating capital for any other purpose and keeping long-term value creation in mind.

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[1] Milton Friedman, "A Friedman doctrine—The social responsibility of business is to increase its profits," *New York Times Magazine*, September 13, 1970.
[2] Rachelle C. Sampson and Yuan Shi, "Are US firms becoming more short-term oriented? Evidence of shifting firm time horizons from market discount rates, 1980-2013," *Strategic Management Journal*, 2020.
[3] eBay Domestic Holdings, Inc. v. Newmark, 16 A.3d 1 (Del. Ch. 2010).
[4] Michael C. Jensen, "Value maximization, stakeholder theory and the corporate objective function," *Business Ethics Quarterly*, April 2002, Volume 12, Number 2.

to restrict gun sales would alienate some customers, and he was right: by his own estimate, the announcement cost the company $150 million in lost sales, or slightly less than 2 percent of yearly revenue. Yet the company's stock climbed 14 percent in a little over a year following the shift.

One reason for the resilience of Dick's Sporting Goods may be that gun sales were already a declining part of the company's portfolio. Another reason was that it remained stubbornly committed to its sense of purpose. Researchers have found that the market capitalization of firms increases with stakeholder support, particularly in times when peer stakeholders criticize or attack firm operations.[13] Holding to your company's central values is particularly essential today as polarized forces widen the social gyre. "Fueled in part by social media, public pressures on corporations build faster and reach further than ever before," BlackRock's Larry Fink observed in his highly influential 2019 letter to CEOs.[14] Fink argued that "[a]s divisions continue to deepen, companies must demonstrate their commitment to the countries, regions, and communities where they operate." Walking the talk on purpose strengthens the company and its community. "Profits," Fink notably concluded, "are in no way inconsistent with purpose—in fact, profits and purpose are inextricably linked." (For more about foundational perspectives, see sidebar, "ESG for the long term.")

The linkage from ESG to value creation is solid indeed. Five levers in particular, across the bottom and top lines, can be difference makers. In a world where environmental, social, and governmental concerns are becoming more urgent than ever, leaders should keep those connections in mind.

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[13] Sinziana Dorobantu, Witold J. Henisz, and Lite Nartey, "Not all sparks light a fire: Stakeholder and shareholder reactions to critical events in contested markets," *Administrative Science Quarterly*, January 2017, Volume 72, Number 3.
[14] Larry Fink, "Larry Fink's 2019 letter to CEOs: Profit & purpose," BlackRock, January 2019.

2020

Investors remind business leaders: Governance matters

Activists continue to poke holes in corporate performance and returns, but they are having their greatest success with governance structures. Here's how to think about their moves.

by Michael Birshan, Madeleine Goerg, Anna Moore, and Ellora-Julie Parekh

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Even before the spread of the novel coronavirus (SARS-CoV-2),[1] investors were calling on senior-management teams and corporate boards to focus on environmental, social, and governance (ESG) concerns. Investors were, for example, prompting companies to consider questions of purpose and to pay more attention to the impact of their actions on the environment. Now the pendulum is swinging toward social issues raised by the spread of COVID-19—for instance, worker safety and rising unemployment.

For many businesses, governance remains a less discussed area of vulnerability. That is in part because it involves internal systems, controls, and procedures, which, in many cases, are less visible to stakeholders and the broader public. For instance, stakeholders can't always tell if boards and senior-management teams are preempting regulatory violations or communicating clearly with regulators above and beyond standard reporting—until it's too late.[2]

In the wake of the global pandemic, boards will play a key role in guiding their organizations into the next normal. Indeed, this may well be the moment when boards and leadership teams prove their value—or show their flaws.

Companies that don't regularly review and address governance issues may be ignoring them at their own peril. Governance-related demands by activist investors around the world rose from just 27 in 2009 to about 1,400 in 2019. These demands reflect activists' interest in a broad range of sectors, including the financial-services, basic-materials, energy, business-services, and technology sectors (Exhibit 1).[3]

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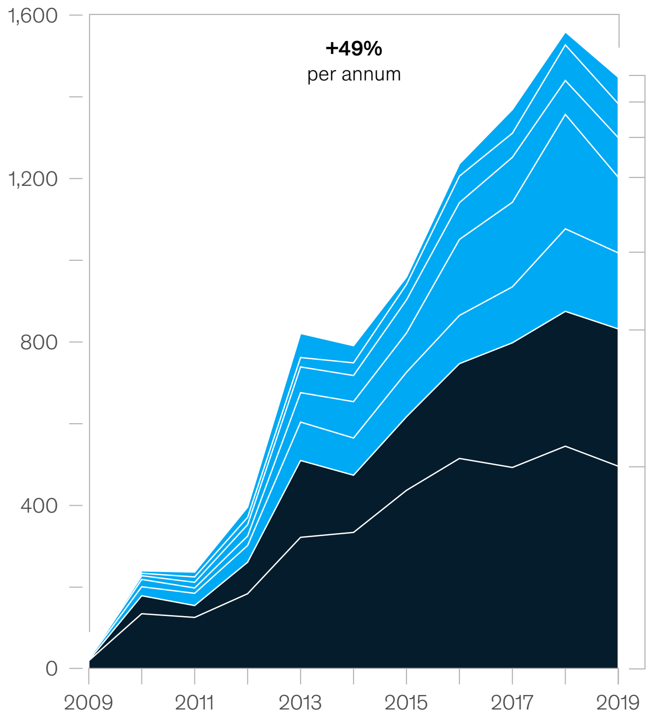
1 "COVID-19: Implications for business," McKinsey, June 11, 2020.
2 Witold Henisz, Tim Koller, and Robin Nuttall, "Five ways that ESG creates value," *McKinsey Quarterly*, November 14, 2019.
3 Activist Insight Governance: 2009–19, Activist Insight, June 2020.

Exhibit 1

The number of board- and governance-related campaigns conducted by investors have increased significantly.

Investor demands by type, number



	CAGR, %	
Structural demands	2009–19	2016–19
Voting rights	30[1]	29
Transparency and accountability	56	8
Remuneration	30[1]	3
Other bylaws	69	<1
Board composition	47	16
Personnel demands		
Leadership change	79	13
Board representation	38	–1

[1] 2010–19.
Source: Activist Insight

What's more, about 70 percent of *all* activist-investor demands over the past decade have focused on governance, and many have garnered support from proxy advisers.[4] Governance is also increasingly top of mind for institutional investors.

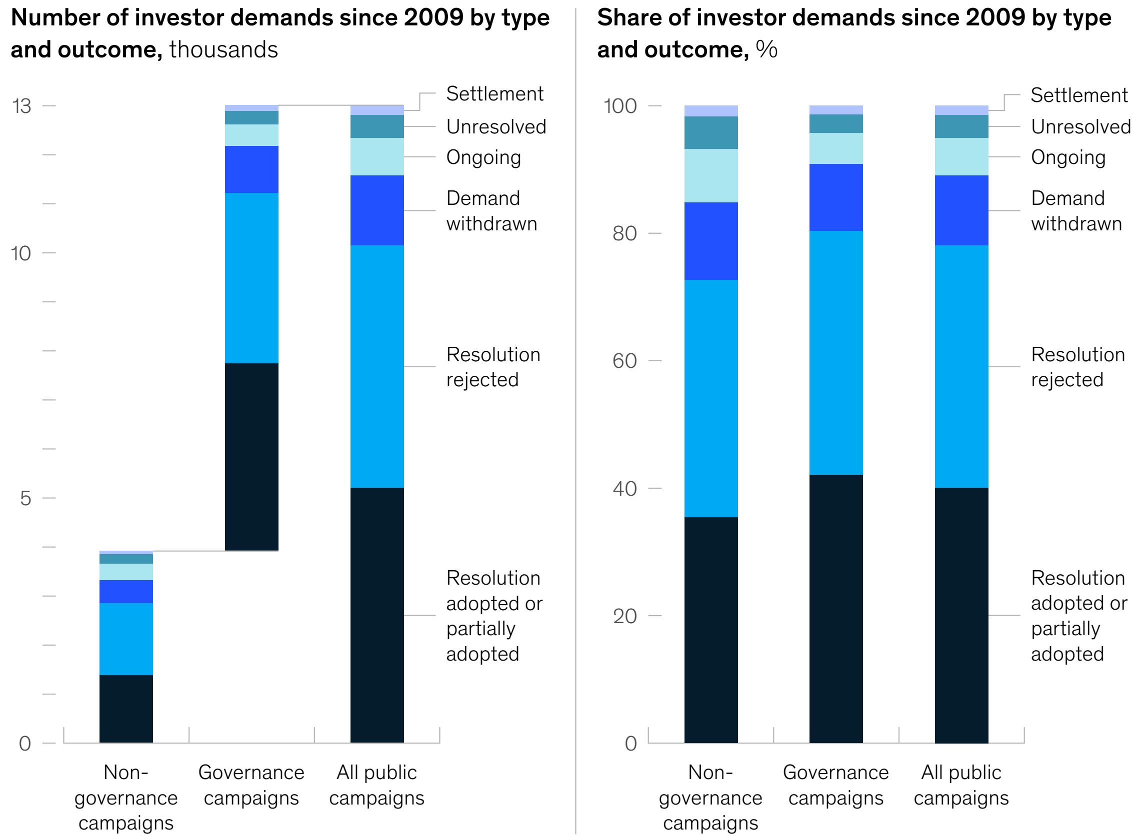
Activists' demands fall into two broad categories: structural and personnel related. They cover a range of issues, including board composition, remuneration, accountability, voting rights, and leadership changes (see sidebar, "Two categories of investor concerns"). Governance-related demands have not only outnumbered others over the past decade but also more successfully achieved their targeted outcomes (Exhibit 2).[5] A typical example of such demands involves a manufacturer's delay in disclosing a transaction appropriately, as well as accusations that its executives had bought votes.

[4] Covers 9,093 governance-related demands and 3,919 nongovernance-related demands; Activist Insight Governance: 2009–19. In the 2017–18 voting season, Glass Lewis and Institutional Shareholder Service (ISS) supported most governance-related proposals from shareholders during shareholder meetings; in 2017–18, ISS and Glass Lewis supported 75 percent and 88.5 percent, respectively, of shareholder proposals for independent board chairs; both supported 100 percent of proposals to adopt majority voting for director elections; Proxy Insight Online: 2019, Proxy Insight, June 2020.

[5] In the past decade, more than 42 percent of governance-related resolutions from shareholder activists were adopted, compared with 35 percent of nongovernance-related resolutions; Activist Insight Governance: 2020, Activist Insight, June 2020.

Exhibit 2

A significant number of governance-related campaigns have been successful over the past decade.



Source: Activist Insight; Proxy Insight

These actions opened it up to a two-year shareholder-activist campaign, culminating in the company's breakup.

As the manufacturer and many other companies have learned the hard way, it's always better to be your own activist rather than have demands thrust upon you. Executives and board members should respond to increased external pressures by continually reviewing their governance efforts and considering the best ways to shore up their governance credentials. These efforts have an added bonus: a strong governance program can promote success in many other parts of the business—including improved operations, motivated talent, and increased innovation—and can strengthen shareholder relations.

In this article, we'll examine the primary governance factors that activist shareholders have targeted and the ways in which some of their concerns were mitigated.

Quantifying the concerns

Not all governance proposals from shareholders are created equal. It's important for companies to quantify the number and type of possible activist overtures. Some of them focus on improving management fundamentals, others suggest board or leadership changes to give activists seats at the table, and still others propose what may be sensible measures for unlocking value.

Data from Activist Insight show that personnel-related demands—to gain board representation and change leadership, for instance—have accounted for more than 40 percent of all governance-related proposals since 2009. The other 60 percent or so have focused on structural concerns. An industrial manufacturer, for example, faced an internal investigation after several quarters of operational issues. It then decided to delay the announcement of quarterly results. These problems and a related decrease in share price prompted activists to demand more frequent earnings disclosures and the election of independent external directors to the board. The manufacturer swiftly agreed, and the results were greater transparency and, ultimately, increased corporate value.

Shoring up governance credentials

Conducting frequent governance reviews is not only a good hedge against demands from activist investors and other shareholders but also simply

Two categories of investor concerns

Our research shows that activist investors' corporate-governance concerns, while many and varied, tend to fall in two broad categories: structural or related to personnel.

Demands relating to structural concerns typically focus on the following five areas:

— *board composition and independence*—the annual election of directors, the introduction of minimum requirements for the number of independent directors, changes to the number of board seats, and transparency about who is being appointed to top positions and about succession planning

— *remuneration*—the proportion of long-term incentives in executive compensation; the introduction of incentives related to environmental, social, and governance issues; and benchmarks for executive compensation, options, bonuses, and expense accounts

— *transparency and accountability*—changes in the auditing process or in the disclosure of financial statements, additional information on transactions, access to shareholder lists, and the results of internal investigations

— *voting rights*—majority voting at shareholder meetings, the amendment or repeal of poison-pill or shareholder-rights plans, and the implementation of a universal proxy card so shareholders can vote for individual director nominees or oppose proxy contests for board seats

— *other bylaws*—the threshold for calling special shareholder meetings, as well as proxy-access bylaws that require a company undergoing an election to include on the voting list the name of any person who meets agreed-upon ownership criteria and has been nominated by a shareholder

Proposals focusing on personnel-related concerns are typically related to the performance of individuals or teams. They challenge a company's stewardship by making demands in the following two areas:

— *board representation*—improving oversight and diversity by challenging the expertise or independence of individual candidates put forward for election

— *leadership change*—requesting the removal of senior executives or board members for failures of performance or campaigning to separate the roles of the chair and the CEO to increase checks and balances part of good corporate hygiene. Companies often don't conduct such reviews because their management teams are under less pressure to focus on these capabilities than they are on others. What's more, the acknowledgement of the direct links between good governance and value creation is a recent development in many companies. Our research and experience in the field suggest that businesses can take several steps to anticipate activists' concerns and shore up their governance credentials.

Change the board's composition

Activist shareholders are demanding more diverse, expert, committed, and independent boards. Rising shareholder expectations are prompting companies to bring in new profiles, adjust the sizes of boards, and review board-member terms and renewals. For similar reasons, a large company under pressure from activist shareholders cut its directors' terms to two years, from three, and reduced the size of its board to nine members, from 11. As a result of this board shake-up, four long-standing board members will step down by the end of 2020 or 2021 to allay concerns over a lack of sector-specific expertise and independence from the CEO.

Companies shouldn't wait to be prompted by activist shareholders to act. They should create more inclusive and professional boards by proactively adding to (and, if appropriate, shaking up) the current composition of the groups, clarifying expectations for board members, and reviewing their level of engagement. Such reviews could include a detailed comparison between the current directors' skills and a competency matrix (the skills the company deems critical). They could also consider the directors' prior affiliations with the company, potential conflicts of interest, and the board's overall responsiveness.

Clarify your remuneration policy

Shareholders increasingly want to understand how senior managers and boards have arrived at their levels of leadership remuneration and whether the methods are fair. They are asking, for instance, if the remuneration is tied to performance or to specific ESG metrics and if it's in line with the remuneration at peer companies. Aiming to align pay with performance, activist shareholders of one industrial conglomerate pushed to change the performance targets for all its top executives. The activists sought to cut the bonuses for those executives whose businesses had recorded losses in 2017, including those of the CEO and CFO.

To anticipate activists' concerns about pay and performance, companies can, for instance, ensure that they have clear and communicable metrics that support their decisions on remuneration. Reacting to a public ESG campaign by a group of shareholders, a major oil and gas company decided to link the compensation of more than 1,000 of its top employees to its success in meeting reduced carbon-emissions targets.

Communicate clearly

When companies are involved in major transactions, investigations, or audits, shareholders look for full transparency. In one large company, shareholders stepped in to demand a governance overhaul, given their concerns about an acquisition decision made by the board. As a result, the company created a board-level committee to consider the interests of noncontrolling shareholders in all major decisions.

To limit speculation and dispel concerns, it's critical for senior managers and boards to give stakeholders coherent narratives about major decisions and their potential effects on corporate performance. Establishing a rhythm of clear, frequent, and comprehensive updates on such decisions, as well as a mechanism for disseminating follow-on reports and metrics to key stakeholders, can help allay shareholder concerns.

Think about the rules of shareholder engagement

Given the pace of change in business and the world today, shareholders are demanding that companies adopt faster decision-making processes. Reviewing how shareholders participate (for example, by testing how voting rules affect shareholder engagement) can help keep up with changing shareholder expectations. A majority vote, for instance, is becoming the standard for board elections. According to the 2019 US Spencer Stuart Board Index, 89 percent of boards in the United States require directors to resign if they fail to receive a majority of the shareholders' votes, compared with just 65 percent in 2009.[6] More and more companies must also submit proposals for poison pills, takeover defenses, and other matters for ratification by shareholders.

Circle back to purpose and societal impact

Shareholders and stakeholders in all sectors continue to make it clear that the impact of any business on the environment and society matters to them. The decision by a large commodity-mining and -trading company to cap its global coal output, for instance, was directly linked to shareholder pressure to align with the targets of the 2015 Paris Agreement. To head off the activists' concerns, senior-management teams and boards can regularly review their portfolios of business activities and map their impact on major global initiatives. A growing number of companies benchmark themselves against the United Nation's Sustainable Development Goals, for example, thus actively positioning themselves to attract top talent and socially conscious consumers and to meet critical regulatory requirements.

With activist investors and other shareholders increasingly focused on stewardship, now is the time to evaluate where you stand. A governance review should form a big part of any program to prepare for and engage with activist investors.

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The authors wish to thank Joseph Cyriac, Tom Kolaja, Frithjof Lund, and Nina Spielmann for their contributions to this article.

6 "2019 U.S. Spencer Stuart Board Index," Spencer Stuart, October 2019.

2021

The state of internal carbon pricing

More and more companies are experimenting with internal carbon charges—but are their pricing thresholds correct?

by Jessica Fan, Werner Rehm, and Giulia Siccardo

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Business leaders know that sustainable growth is possible only when they anticipate inevitable shifts in policy, social norms, and technology that could affect their companies. One of the most prominent of these so-called transition risks is in the area of carbon emissions and the potential introduction of a universal price on carbon.

Given impending policy changes in this area, and with an eye toward protecting the health and livelihoods of customers and employees, some companies are experimenting with internal carbon pricing. That is, some companies are setting an internal charge on the amount of carbon dioxide emitted from assets and investment projects so they can see how, where, and when their emissions could affect their P&L statements and investment choices. Internal carbon pricing was a key factor, for instance, in a European energy company's decision to close several power plants, as the internal charge on increased carbon emissions cut into the expected profitability of those plants. Meanwhile, some US financial-services companies are using internal carbon pricing to identify low-carbon, high-return investment opportunities.

To better understand who is using internal carbon pricing and in which industries, we looked at data from companies that have disclosed information from their internal carbon-pricing programs.[1] Our research reveals growing interest and high variability in companies' use of these internal charges. Specifically, 23 percent of the approximately 2,600 companies in our data set indicated they are using an internal carbon charge, and another 22 percent plan to do so in the next two years. Of the top 100 companies in our global data set (based on 2019 revenue), the ones that most frequently reported using internal carbon pricing were those in the energy, materials, and financial industries. They were followed closely by the technology and industrial sectors (Exhibit 1).

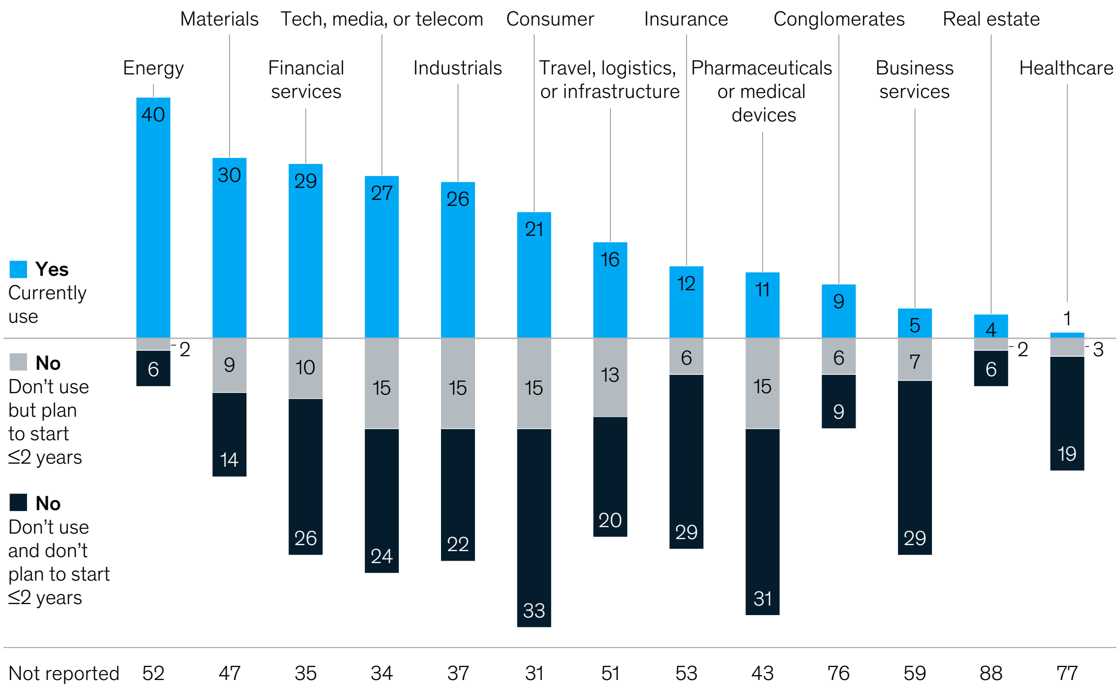
A geographic breakdown shows that 28 percent of companies in Europe are using internal carbon pricing. Japan, the United Kingdom, and the United

[1] Disclosures on internal carbon-pricing policy are documented by the Carbon Disclosure Project, a global organization focused on promoting corporate disclosure of environmental risks and impacts.

Exhibit 1

Internal carbon pricing is most prevalent in energy, materials, and financial-services industries.

Use of internal carbon pricing by industry sector,[1] %



[1]Determined by a sampling of the top 100 companies ranked by 2019 revenue.
Source: Responses from 2,600 companies reporting to the Carbon Disclosure Project (2019)

States have the highest percentage of companies using this mechanism—with 24 percent, 20 percent, and 15 percent, respectively, of companies in those countries tallied.

A closer look at the data also shows that companies' thresholds for the price per metric ton of carbon used vary widely by region and industry. In Europe, for instance, the median internal charge is $27 per metric ton, while in Asia, it's $18. This isn't necessarily surprising, as there are currently no formal, defined global standards for pricing of carbon emissions. Companies are therefore selecting values that are most useful within their own business contexts and regions (Exhibit 2).

Attempts to help companies identify optimal pricing standards are under way. Economists and advocacy groups have posited a broad range of potential pricing levels—from just a few dollars to well over $100 per metric ton, depending on the discount rate used—but the topic remains a point of contention.[2] For instance, the Environmental Defense Fund, a not-for-profit environmental-advocacy

[2] The choice of a discount rate is made by considering the trade-off between a known payment for carbon today and the potential negative impact of carbon in the future. There are different frameworks for evaluating which discount rates to use—for example, internal carbon pricing based on market-based discount rates (which result in lower charges), ethics-driven discount rates (which result in higher charges), "descriptive" approaches determined by economic price, and "prescriptive" approaches that conform to an ideal. See Lawrence H. Goulder and Roberton C. Williams III, "The choice of discount rate for climate change policy evaluation," *Climate Change Economics*, 2012, Volume 3, Number 4; William Nordhaus, "Critical assumptions in the Stern Review on climate change," *Science*, July 2007, Volume 317, Number 5,835.

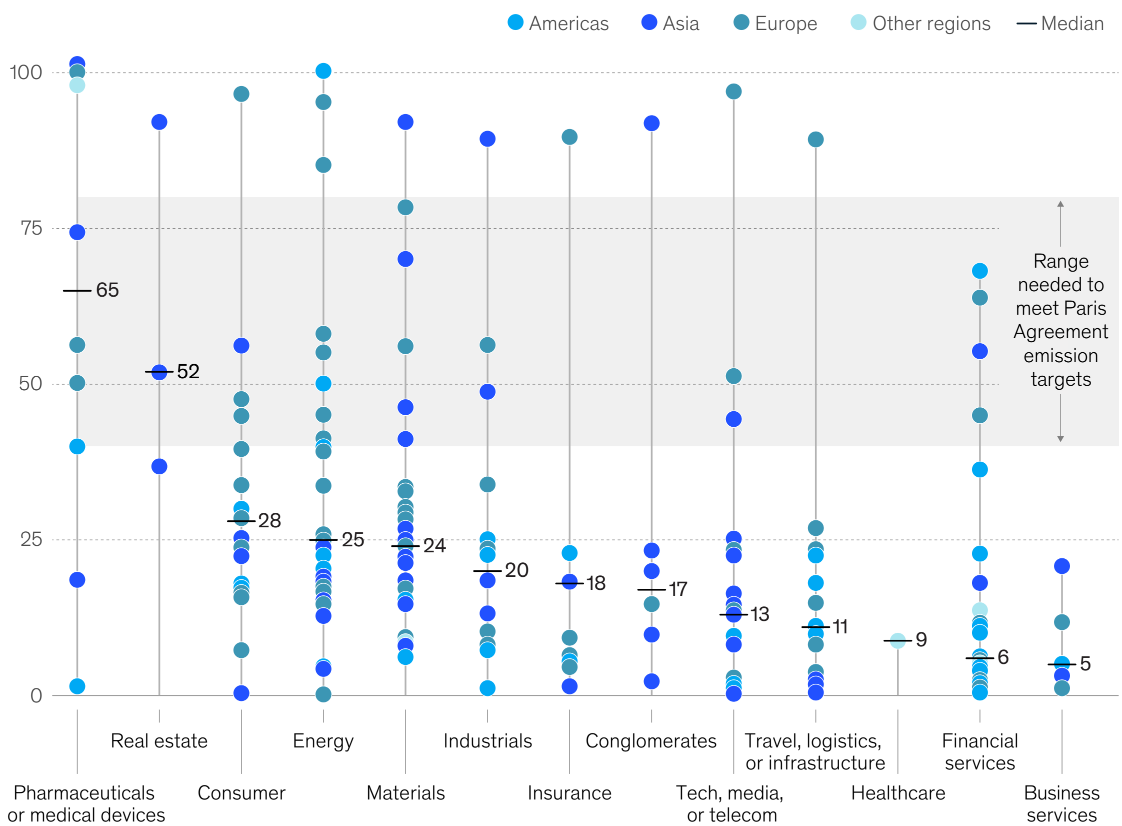
group, has estimated that the societal cost of carbon is greater than $50 per metric ton emitted. It recognizes, however, that this figure could be low because it doesn't yet factor in all potential externalities from the impact of climate change.[3]

Meanwhile, the High-Level Commission on Carbon Prices has estimated that companies would need to set internal carbon pricing between $40 and $80 per metric ton in 2020 and between $50 and $100 per metric ton by 2030 to reduce emissions so they are in line with the standards set in the Paris Agreement.[4] By contrast, most of the companies that report using internal carbon pricing have set their thresholds at around $40 per metric ton. French company Danone, for instance, publicly reports its carbon-adjusted EPS using an internal carbon pricing of €35 per metric ton emitted. Danone's adjusted EPS has grown faster than its regular EPS has because of the company's

Exhibit 2

The internal pricing of carbon emissions varies within and among industries and regions.

Distribution of internal carbon prices in 2019, $



Source: Responses from 2,600 companies reporting to the Carbon Disclosure Project (2019)

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[3] "The true cost of carbon pollution," Environmental Defense Fund.
[4] *Report of the High-Level Commission on Carbon Prices*, Carbon Pricing Leadership Coalition, May 2017.

Corporate carbon accounting is just one means by which business leaders can manage transition risk, support corporate values, and improve their investment decision making—but it's a good step to take.

reduced carbon intensity—for instance, in 2019, Danone's carbon-adjusted EPS grew 12 percent compared with the company's headline EPS growth of 8.3 percent.[5]

Corporate carbon accounting is just one means by which business leaders can manage transition risk, support corporate values, and improve their investment decision making—but it's a good step to take. Companies' internal carbon-pricing initiatives are already affecting 22 percent of global greenhouse-gas emissions, up from 15 percent in 2017.[6] But as the research shows, the pricing thresholds currently being used are lower than they need to be to account for possible negative externalities from carbon emissions. If companies want their strategic decisions to fully reflect the risks and opportunities inherent in carbon emissions, they should take another look at internal carbon-pricing programs and recalibrate.

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[5] "2019 full-year results," Danone, February 2020.
[6] "State and trends of carbon pricing 2020," World Bank, May 2020.

2017

When sustainability becomes a factor in valuation

Sustainability efforts are material to investors only to the extent that they affect cash flows. What matters depends on the industry.

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Investors and other stakeholders seeking to understand companies' risks and opportunities increasingly demand to know more about their performance related to sustainability concerns—or more specifically, environmental, social, and governance issues. Companies generally disclose variables that have a material effect on their value, according to financial accounting standards. But a one-size-fits-all approach to disclosure misses meaningful differences among industries.

In this December 2016 interview, excerpted from a conversation at the inaugural symposium of the Sustainability Accounting Standards Board (SASB), McKinsey's Tim Koller joined alumnus Jonathan Bailey to discuss how accepted principles of valuation apply. Koller, an author of *Valuation: Measuring and Managing the Value of Companies*,[1] has argued that "creating shareholder value is not the same as maximizing short-term profits—and companies that confuse the two often put both shareholder value and stakeholder interests at risk."[2] In this conversation, Bailey and Koller dig into the issues related to how sustainability affects value, the asymmetry of information between companies and their investors, and how companies communicate about that information.

Jonathan Bailey: How does your thinking about valuation reflect today's focus by many stakeholders on sustainability and how it's changed over time?

Tim Koller: I think we have to separate the mechanics of valuation from what managers should be doing to maximize a company's value and how investors react to the whole thing. For hundreds of years, the value of a company has ultimately come down to the cash flows it generated. That's what you can spend as an owner, whether you're a private owner or whether you're a shareholder in a large company.

Now, there have been periods of time when people said, "Oh, the rules are changing." For example,

[1] Marc Goedhart, Tim Koller, and David Wessels, *Valuation: Measuring and Managing the Value of Companies*, sixth edition, Hoboken, NJ: John Wiley & Sons, 2015.
[2] Marc Goedhart, Tim Koller, and David Wessels, "The real business of business," McKinsey, March 1, 2015.

during the dot-com bubble, all of a sudden, people said, "Traditional methods of valuation don't make sense anymore—look at all these companies with high valuations that have nothing to do with cash flow." Well, ultimately, it was the lack of cash flow that brought those companies' valuations back down.

Sustainability issues aren't any different from other things management has to worry about. If the forces in the world that relate to sustainability are going to be material to a business, it's management's job to take a longer view and figure out what to do about them. Because eventually, these things will affect cash flows. And what's good about SASB's approach is its focus on how different sustainability factors might materially affect the cash flows of companies in 79 different industries.

From the perspective of how investors react, one thing we find is that managers have a lot more information than investors—and long before investors have it. So sometimes the markets lag behind in their valuations because some important factor is too vague or unclear for investors to see how it might affect a company's cash flows. When it does become clear, the markets do react. If you look at the way oil and gas companies are valued, for example, people say, "There will be all these stranded assets out there. Some oil reserves won't be produced because of the growth of alternative energy sources." When you look closely, the market's already discounting those concerns. Investors are assuming that there's not much value beyond a certain period of time, which isn't too far into the future.

Jonathan Bailey: That requires managers to be able to think about the long-term horizon, internal budget processes, and capital-allocation decisions with materiality in mind. In my experience with corporate clients, there are often dynamics in the way that people think about creating value within a business that seem to be a little less than efficient.

From your perspective, thinking about it more in terms of corporate finance, what would you say are some of the things we need to overcome in order to help managers do a better job of integrating these longer-term goals, like sustainability?

Tim Koller: When managers make decisions, they always work off some baseline of performance. One trap they fall into is ignoring what really would

'With regard to sustainability, if a company can do things that make customers more likely to buy from it than from a competitor … those things are all going to be positive. But what are the consequences … of not doing something?'

happen, relative to the baseline, if they *didn't* do something. For example, what are the consequences of not doing an acquisition? Maybe they won't be able to achieve their base case. Or, for another example, if they don't invest in safety, the effect on the baseline isn't that safety would increase their cash flow—but rather that it reduces the probability of having lower cash flows.

So one thing managers need to be more thoughtful about is which elements actually create value in and of themselves. With regard to sustainability, if a company can do things that make customers more likely to buy from it than from a competitor, because it has better credentials, those things are all going to be positive. But what are the consequences, relative to the baseline, of not doing something? What if a company doesn't invest in safety, for example? Or if it doesn't invest in environmental mitigation? Or if it builds a plant in such a way that it can't be operated under future regulations as opposed to today's? That's really the challenge for managers. If they don't do these things, what's likely to happen? And it's not going to be business as usual.

Jonathan Bailey: I know some of the work you've been doing recently has been on communication between managers and investors. Given the information asymmetry you mentioned, what do the best companies do to communicate how they'll create value in a way that investors should care about—in the context of sustainability issues?

Tim Koller: I think we're still in a very infant stage with regard to this. Some of the reporting by companies is still boilerplate. But there are some good examples. For instance, some of the consumer-apparel companies have become very conscious about their overseas sourcing. They're becoming more proactive about describing what they do to make sure that suppliers are upholding certain standards. You can also see it in extraction or energy-related industries, where they're worried about sustainability issues. You can see it in healthcare, where they're ultimately concerned about product safety.

Unfortunately, communication often doesn't happen until after there's been a blowup somewhere in the industry—situations where, all of a sudden, something happens that gets everyone's attention, and people start to worry about it.

Jonathan Bailey: Another trend we've seen is in the growth of information available to investors. Whether it's from what they learn from company disclosures, from data providers (which may not be from disclosure), from trawling news media, or from building input-output models that compile a view of what's happening inside a business on sustainability characteristics.

From an investor perspective, do you feel that this is really just a trend toward more data or is it really important to focus on better data?

Tim Koller: I think it's about the better data. There are investors who look at a Bloomberg screen to make investment decisions, and having sustainability factors available there provides a lot of visibility to the issues. But the investors who drive the market are typically much deeper than that. They're going to spend a month doing their research before they decide to make an investment in a company. They're going to follow it for a long period of time. They're going to be more interested in what material factors may drive the company's value.

What ultimately matters, we've learned from sophisticated long-term investors, is the importance of management credibility.[3] It's not so much about the amount of data. It's that managers, when facing those investors one on one, are able to talk about what's really going to matter, what's going to drive the cash flows, and what's being done about it.

So the disclosures are good because they get the conversation going. But whether or not they're mandated or audited, what really matters to

[3] Rebecca Darr and Tim Koller, "How to build an alliance against corporate short-termism," McKinsey, January 30, 2017.

those investors is, when they're face to face with management, whether they have a sense that management really knows what they're talking about and what they're doing about it.

Jonathan Bailey: That's an interesting point, because you'll often hear CEOs say, "Look, I never get questions from sell-side analysts about these sorts of topics." But it's probably the case that those conversations are happening in a different forum. They're not happening on a quarterly earnings call—they're happening in those one-on-one meetings with a value-based investor who has a much more active focus.

So if you're sitting there as a CEO trying proactively to have that conversation, do you think that management teams are doing the best they can to structure the right conversations? Or do you think, on the whole, managers are basically waiting for people to come to them, and the loudest voices will be the ones that shape the discussion?

Tim Koller: It's a combination of the two, because there are two worlds going on. There are the quarterly earnings and the sell-side analysts, and then there are the actual investors, who tend to have private conversations with managers. And those worlds don't intersect for the most part.

When executives sit down with what we call intrinsic investors, the conversation is much deeper, and it does focus on what's material, whether it's sustainability or other things that are affecting the industry. They talk about, "What's going on there? How is management reacting?"—getting a sense of whether management knows what they're doing. That's a sharp contrast from the quarterly calls, where usually only the sell-side asks questions.

I was talking to one investor-relations professional who's been in the business for decades who said that only once did a buy-side investor actually ask to join a quarterly call. There are ways to improve that. When we talk to long-term investors, they would like management to be more proactive in those quarterly calls. They say, "Tell us what you really think is important. Don't try to guess what the sell-side analysts want to know. Tell us about the results in the context of what you're doing longer term. And then find a way to make sure that the most important questions about the long term get raised. Take charge of investor communications and focus on what's really important."

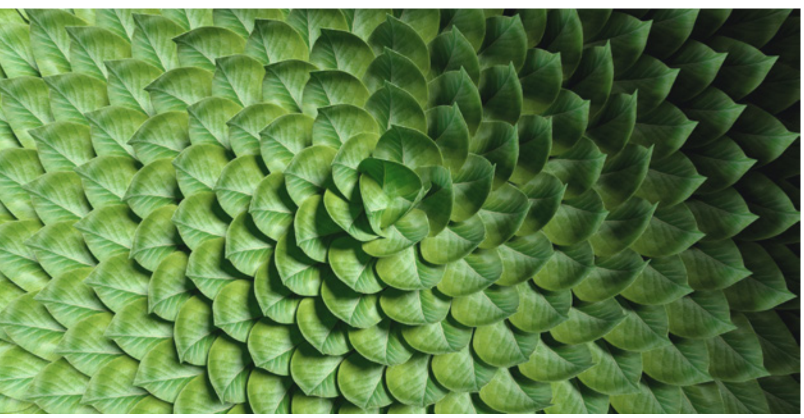
Tim Koller is a partner in McKinsey's New York office. **Jonathan Bailey** is director of research at FCLTGlobal, a not-for-profit organization dedicated to developing practical tools and approaches that encourage long-term behaviors in business and investment decision making. For more information, visit fcltglobal.org.

2007

Investing in sustainability: An interview with Al Gore and David Blood

The former vice president and his partner in an investment-management firm argue that sustainability investing is essential to creating long-term shareholder value.

by Lenny T. Mendonca and Jeremy Oppenheim



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As McKinsey research indicates, executives around the world increasingly recognize that the creation of long-term shareholder value depends on a corporation's ability to understand and respond to increasingly intense demands from society.[1] It is no surprise, then, that the topic of socially responsible investing has been gaining ground as investors seek to incorporate concepts like sustainability and responsible corporate behavior into their assessments of a company's long-term value.

Yet socially responsible investing has always been an awkward science. Early approaches simplistically screened out "sin sectors" such as tobacco. Subsequent evolutions tilted toward rewarding good performers, largely in the extraction industries, on the basis of often fuzzy criteria promulgated by the corporate social-responsibility movement. These early approaches tended to force an unacceptable trade-off between social criteria and investment returns.

Three years ago, former US Vice President Al Gore and David Blood, previously the head of Goldman Sachs Asset Management, set out to put sustainability investing firmly in the mainstream of equity analysis. Their firm, Generation Investment Management, engages in primary research that integrates sustainability with fundamental equity analysis. Based in London and Washington, DC, Generation has 23 employees, 12 of whom are investment professionals, and a single portfolio invested, at any given time, in 30 to 50 publicly listed global companies.

The two partners recently sat down with McKinsey's Lenny Mendonca and Jeremy Oppenheim to discuss reconciling sustainability and socially responsible investing with the creation of long-term shareholder value.

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[1] The research, summarized in "The McKinsey Global Survey of Business Executives: Business and Society, January 2006" (*McKinsey Quarterly*, web exclusive, January 2006), indicates that 84 percent of executives think business has a broader contract with society.

McKinsey: What do you mean by the term "sustainability," and how does it influence your investment philosophy?

David Blood: Sustainability investing is the explicit recognition that social, economic, environmental, and ethical factors directly affect business strategy—for example, how companies attract and retain employees, how they manage the risks and create opportunities from climate change, a company's culture, corporate-governance standards, stakeholder-engagement strategies, philanthropy, reputation, and brand management. These factors are particularly important today given the widening of societal expectations of corporate responsibility.

Al Gore: When, several years ago, David and I were separately looking for ways to integrate sustainability into investing, mutual friends told each of us of the other's search. We discovered immediately that we had a common goal, and that led to a series of meetings and a friendship and, ultimately, to a decision to form a partnership. We researched the history of sustainable investing under its various names and decided to start a new partnership in order to design it, from the ground up, according to the architecture that we believed was essential to address the challenges in the investment-management industry.

McKinsey: What did the history of sustainability investing teach you?

David Blood: Sustainability investing has a long history, starting back with the first wave of negative-screening strategies, where investors excluded entire sectors based on a set of ethical criteria. This strategy remained niche; returns were lackluster due to the fact that your investment-opportunity set was limited. The next wave of sustainability investing was called the positive-screening, or best-in-class, approach. That's the philosophy of the Dow Jones Sustainability Indexes and the KLD Broad Market Social Index—these indexes replicate the underlying benchmarks but select only the best performers on environmental, social, and governance parameters.

However, the problem with this approach is that it's difficult to get a real sense of what's happening in those businesses, because it's basically a one-size-fits-all approach, often using questionnaires for decision making. In addition, often one team does

'Sustainability investing is the explicit recognition that social, economic, environmental, and ethical factors directly affect business strategy.... These factors are particularly important today given the widening of societal expectations of corporate responsibility.'

–David Blood

David Blood

Education
Graduated in 1981 with BA from Hamilton College, Clinton, New York

Earned MBA in 1985 from Harvard Business School

Career highlights
Generation Investment Management
2004–present
Managing partner

Goldman Sachs
1999–2003
Co-CEO and CEO of Goldman Sachs Asset Management

1997–99
CEO of Goldman Sachs Asset Management, Europe

1985–97
Served in various positions, including head of international operations, technology, and finance; treasurer of Goldman Sachs; head of global private capital markets; investment banker

Fast facts
Serves on board of trustees of Acumen (nonprofit global venture fund) and of SHINE (UK organization that funds educational-support projects for disadvantaged children and young people)

the sustainability research and then hands it over to the investment team to do the financial research. That approach, we believe, has too much friction in it because it misses the explicit acknowledgment that sustainability issues are integral to business strategy. So in setting up Generation, we saw the need to fully understand sustainability issues alongside the fundamental financial analysis of a company.

Al Gore: We don't think it's acceptable to force a choice between investing according to our values or according to the ways most likely to get us the best return on investment. Our objective in innovating with this new model was to focus on the best return for our clients, full stop. But we wanted to do so in a way that fully integrates sustainability into the model.

McKinsey: That suggests greater complexity.

David Blood: Yes, sustainability research is complicated because it requires you to think long term and to think about the first- and second-order effects of an issue. We like to describe our approach to sustainability research as taking a systems view. What that means is, if you're thinking about climate change you first need to understand the physical, regulatory, and behavioral impacts on business. But you also need to understand what a changing climate means for disease migration and public health, what it means for poor populations in developing countries, what it means for water scarcity or demographic and urbanization trends. The most important and challenging research is trying to determine how all these factors interact. Without that understanding, you can miss a significant part of the business implications.

McKinsey: What principles drive your approach?

David Blood: The first principle, categorically, is that it is best practice to take a long-term approach to investing. We think that the focus on "short termism" in the marketplace is detrimental to economies, detrimental to value creation, detrimental to capital markets, and a bad investment strategy. It's common corporate-finance knowledge that something on the order of 60 to 80 percent of the value of a business lies in its long-term cash flows.

And if you're investing with a short-term horizon you're giving up the value creation of a business.

The second principle is that the context of business is clearly changing. We are now confronting the limits of our ecological system, and at the same time societal expectations of business are widening. On top of that, multinational businesses are oftentimes better positioned than governments to deal with some of the most complicated global challenges, such as climate change, HIV/AIDS, water scarcity, and poverty. Technology and communications have changed, and we've reached a point where civil society is now demanding a response from business.

McKinsey: What's your perspective on how that changes corporate strategy?

David Blood: In effect what's happening, unbeknownst to many corporate leaders, is that the goalposts for their businesses' license to operate have moved. There are higher expectations and more serious consequences, and the implications go way beyond protecting your reputation or managing costs. Rather, we see this changing context for business as an opportunity for companies to establish competitive positioning, grow revenues, and drive profitability. In the end, that's the holy grail of sustainability investing—to seize the opportunities, not just avoid the risks.

McKinsey: What has been the reception from pension funds and longer-term investors to this notion?

Al Gore

Education
Graduated in 1969 with BA in government from Harvard College

Attended divinity school (1971–72) and law school (1974–76) at Vanderbilt University, Nashville, Tennessee

Career highlights
Generation Investment Management
2004–present
Cofounder and chairman

Current TV
2005–present
Cofounder and chairman

US government
1993–2001
Vice president

1985–93
Senator

1977–84
Member, House of Representatives

Served in US Army in Vietnam War (1969–71) and worked as investigative reporter with the *Tennessean* in Nashville

Fast facts
Author of several books, including *An Inconvenient Truth* (about the threat of and solutions to global warming); featured in the Academy-Award–winning documentary film of the same name

Serves on board of directors of Apple and as senior adviser to Google

Visiting professor at Middle Tennessee State University

David Blood: Very good. They recognize that they have long-term liabilities, and it is their fiduciary duty to match those liabilities with assets. The recent adoption of the UN's Principles for Responsible Investment by asset owners and managers representing over $8 trillion is a good example of the institutional-investment community beginning to commit to a long-term time horizon and the explicit recognition that environmental, social, and governance factors drive value creation.

From Generation's perspective, we're pleased with this awakening. If you go back to when we founded this firm, we thought that sustainability investing would eventually be mainstream, but we never would have guessed that the reception and focus on sustainability would be as loud and as urgent as it is today versus three years ago.

McKinsey: Why do you think that is?

David Blood: It's because people realize that there are reputation issues related to sustainability, but they also recognize that, in the end, this is about driving profitability and competitive position. Asset owners are beginning to get this and they are looking to invest in the companies that understand it.

Al Gore: The market is long on short, and short on long. There's a widespread recognition within the industry that what has emerged over time doesn't really make any sense. They know that it needs to change and they are ready for change.

We are in a period of history, right now, when the contextual changes are larger than the ones we've been used to in the past. Changes that we've associated with very long cycles are now foreshortened and are occurring much more rapidly. Positioning a company to ride out these changes and profit from them often means making stretch investments to change the infrastructure, change the energy source, change the physical plant, and adapt to the new realities. And if there is the tyranny of a three-month cycle, then companies won't make those investments. So focusing only on the quarter can blind you to the most important factors of all.

McKinsey: How many executives really understand the complexity and interconnection of the trends you describe?

Al Gore: It's a rapidly growing number. I recently spoke at a conference in Copenhagen, focused on carbon trading, with thousands of companies represented. As part of an internal survey, attendees were asked how many of them had internalized their "carbon budget" and begun to drive down their internal emissions.

A year ago it was 15 percent. This year it was 65 percent. That would correspond with what we've found in multiple other areas—a kind of tipping point that we are at right now. For example, I had a chance to visit Walmart in Bentonville, Arkansas, around the time they launched their commitment to "green" their supply chain. And David and I spent time with [GE CEO] Jeff Immelt, and we could give you lots of other examples of CEOs who, a few years ago, might not have talked this way and yet are now not only knowledgeable but highly sophisticated. They may have started with concerns about brand protection and reputation and the like. But once they got into it, it was as if a whole new world of opportunity and new markets opened up.

McKinsey: What do those executives and companies that are doing this well see differently?

David Blood: The first is that they understand their long-term strategy. Secondly, they understand the drivers of their business—both financial and nonfinancial. The leading CEOs are the ones who explicitly recognize that sustainability factors drive business strategy.

In our minds, the best businesses have always understood the importance of culture and employees and ethics. And they get it in their soul. But what's now becoming true—particularly for the industrials, the retailers, the pharmaceuticals, the utilities, and a broader array of industries—is that managers are realizing that there are broader factors affecting how they operate. They can recognize that over the next 25 years their strategy will depend on leveraging new opportunities

‘Be part of the solution and not part of the problem. Your employees, your colleagues, your board, your investors, your customers are all soon going to place a much higher value… on an assessment of how much you are a part of the solution to these issues.’

—Al Gore

and must operate within the changing context of business.

McKinsey: Can you give us an example?

Al Gore: In Denmark, Novo Nordisk clearly gets this. They take a holistic view and a long-term view. They look at the whole system. Take their presence in China. They went into China at a very early stage with genuine concern for what they could do to help forestall the diabetes epidemic there, which is growing at a faster rate than it is in the rest of the world due to the transition to a Western diet and lifestyle.

Novo Nordisk has 60 percent of the Chinese market for insulin and they’re focusing their business plan on trying to cure and prevent diabetes. If they succeed then presumably sales of insulin will not increase at the current rate, but they think the problem is large enough that it is more important to address the root cause of the problem. This commitment comes out of the phenomena that David was just describing to you.

McKinsey: Is this approach possible in all sectors? Clearly, the pharmaceutical industry is an interesting case. Can you get there in tobacco? Fast food? Or are these just sectors that are fundamentally, somehow, no-go territory?

David Blood: There are material sustainability challenges in all industries. In the fast-food or food-manufacturing industry, there’s a very strong move toward healthy living and eating, organic food, and the implications for sustainable agriculture. And how do food companies deal with the upstream challenges of these trends, challenges such as water use? While we don’t invest in it, the tobacco sector faces a whole host of issues which are very much sustainability driven—not just the health impact of the product. But, again, sustainable agriculture is a big story, as is litigation risk. In another sector, like financial services, the key sustainability issue is how a company manages its human capital. In the energy sector, climate change is one of the most significant issues. In the health care sector, we look at ethical marketing practices between companies and doctors. Even in industries like luxury goods there are issues around excessive materialism, authenticity, and consumption.

What I’m describing here is what we call a materiality-based approach to investing. Rather than looking at 50 different tick-box sustainability criteria, we think you need to tackle the three or four long-term issues that will really affect corporate profitability.

McKinsey: What examples come to mind of companies that have thought beyond managing sustainability risks and moved on to creating revenue opportunities?

David Blood: A company like Johnson Controls, for example, is interesting because of its focus on demand-side energy efficiency. About 50 percent of its business is batteries for hybrid cars and products to run buildings efficiently; the other 50 percent is automotive interiors and controls. We think it's the former that's going to be growing and driving that company. They understand that their products will help reduce their clients' environmental footprint. This strategy is completely revenue driven. GE's Ecomagination is another example. If you think about how GE's stock price is going to trade, it's going to trade primarily on growth. Jeffrey Immelt knows this. He's betting his reputation and his company on the notion that the businesses related to the environment will enable GE to grow faster than GDP. In Mexico we cover two Mexican home builders that are linked to demographic trends and to the very strong demand and need for affordable housing in Mexico.

These are just some examples of how companies can see sustainability trends as growth opportunities or as new niches for existing products and services.

McKinsey: One of the important interfaces between the investing world and management is the board. What role do boards of directors play in trying to ensure that this kind of mind-set is embedded in corporate activity and communicated to investors?

Al Gore: I think that the board of directors has a growing responsibility to address these very topics. As stewards of shareholder interests, boards should be focused on the long-term sustainability of the firm rather than on the market noise. If I were on the board of a company doing business primarily in the European Union, I would ask questions about how long it will be before my fiduciary responsibility required attention to the aggressive management of carbon. Because even though natural resources are not depreciated and even though pollution is treated as an externality and a reputation risk, where regulations and laws are involved, pollution now has an economic cost. And that cost is increasing.

McKinsey: Do you assess how the board compensates the chief executive?

David Blood: Remuneration is a very specific area that we look at. In line with all the things we've already talked about, perverse short-term incentives in the financial system obviously are manifested at a corporate level by remuneration structures.

McKinsey: What must CEOs do more of?

David Blood: Some are taking on a host of issues and seeing the interlinkages, but there's an enormous segment that is still single-issue focused. I think managing and understanding climate risk is the first wedge into that. You would hope that people then start to look at the second-order effects of climate change. I think one of the biggest things that CEOs can do is explain their longer-term story to the capital markets more forcefully. Increasingly, the research community is interested in the environmental, social, and governance factors that drive company strategy and is integrating these factors into mainstream research.

McKinsey: Can we explore climate change a bit more deeply? How do you think about that from an investing standpoint and what do you think that business should be doing that would help not just with climate change but with investment returns?

Al Gore: There is a big story and opportunity around the supply side of cleaner energy. We would look for companies to recognize that carbon constraints will be more aggressive in the future. So we would expect to see opportunity in businesses that are involved with lower-carbon energy, including renewable-energy provision, such as wind, solar, and cellulosic ethanol[2] production. Or in businesses that are involved in cleaning up traditional fossil energy, which we see as a very big trend. Or in companies that are involved in technologies like carbon capture and storage (CCS) and sequestration-ready power plants.[3]

The demand side, we also think, is an under-appreciated opportunity. The efficiency of buildings—insulation, specifically—is low-hanging fruit in terms of economic opportunity. The technology has existed for some time; it just needs to be deployed and implemented more effectively. There are also demand-side opportunities around sustainable mobility and transportation—for example, growth in hybrid vehicles or lightweight materials in vehicles.

McKinsey: What other indicators do you look for in gauging a company's approach to addressing a sustainability issue such as climate change?

David Blood: In addition to helping us assess the quality of a business model, a company's response to the climate challenge can tell us an enormous amount about a management team. We use its response and engagement in the issue as sort of a litmus test or a lens into the quality of the team. A company's lobbying practices are also an interesting line of inquiry around climate change. Auto companies are telling people that they're wonderfully green all of a sudden, but it's important to evaluate if they are concurrently lobbying against emissions reductions, for example. That gets you to the heart of what is the real truth in a company's culture. If they're lobbying for something different than what they're telling everybody, you've got a problem.

McKinsey: Any final thoughts for executives trying to understand this trend toward sustainability investing?

Al Gore: Be part of the solution and not part of the problem. Your employees, your colleagues, your board, your investors, your customers are all soon going to place a much higher value—and the markets will soon place a much higher value—on an assessment of how much you are a part of the solution to these issues.

Lenny T. Mendonca is a senior partner in McKinsey's San Francisco office, and **Jeremy Oppenheim** is a senior partner in the London office.

The authors wish to acknowledge the contributions of Sheila Bonini; Colin le Duc, the head of research at Generation; and Lila Preston, an associate at Generation.

[2] Cellulosic ethanol is produced using enzymes to break down vegetation into cellulose (the primary structural component of plants), which is then converted into fuel.

[3] Carbon capture and storage (CCS) is an approach to eliminating carbon dioxide emissions from sources such as power plants by capturing the carbon dioxide and then storing it underground in deep geologic formations instead of releasing it into the atmosphere. Sequestration-ready power plants have the appropriate technology equipment and locations to perform CCS.

2008

How climate change could affect corporate valuations

Efforts to reduce climate change can profoundly affect the valuations of many companies, but executives so far seem largely unaware.

by Marcel W. Brinkman, Nick Hoffman, and Jeremy M. Oppenheim

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As global warming spawns new regulations, technological remedies, and shifts in consumer behavior, its effect on the valuations of many sectors and companies is likely to be profound. The shocks to some industries could be severe—potentially as severe as, for example, the effect of the introduction of wireless telephony on the telecommunications sector during the 1990s and of shifting oil prices on the oil and gas sector during the 1970s and 1980s. Yet executives have so far paid scant attention, either because they don't understand the effects of climate change on their businesses or they believe them to be too uncertain or distant to model.

To gauge, even at this early stage, the stress that climate change will place on the cash flows of large public companies, we assessed the impact of a series of carbon mitigation scenarios on benchmark companies in six sectors.[1] The change in cash flows—compared with a business-as-usual scenario, but without explicitly considering the responses of individual companies over time—indicates how much pressure efforts to reduce carbon emissions will exert on valuations and how much volatility a sector's current business systems will face. Such an analysis *cannot*, however, predict the actual impact on cash flows, valuations, or share prices.

Not surprising, we found that carbon-abatement efforts will put dramatically different levels of stress on the cash flows and valuations of different industries. The level of change for individual public companies within a given sector could of course substantially exceed the average, depending on their current position and their ability to respond to new technologies, changes in consumer behavior, and regulation.

Varying levels of stress

We assessed company cash flows in each industry in three scenarios: a business-as-usual scenario, a

[1] The six sectors are aluminum, automotive, beer, construction, consumer electronics, and oil and gas. We tested their sensitivity to three levers for reducing emissions (regulatory moves, technological shocks, and shifts in consumer demand) and analyzed the potential impact of climate change events on the cash flows and 2008 net present value (NPV) of an archetype company in each sector under different climate change scenarios and assuming different climate change drivers and levels of impact. The events that might take place in these companies and sectors were examined in the short term (2008–11), the medium term (2011–16), and the longer term (2016 onward) in the context of their carbon intensity, geographic footprint, and ability to pass through costs and to redeploy capital.

scenario involving the greatest degree of change executives can now imagine (the executive scenario), and a scenario that many scientists believe would be required to stave off a high likelihood of catastrophic climate change–related events (the experts' scenario). We chose a basket of six industries to understand how the impact could vary. In some industries, the mitigation of climate change will become a significant corporate-investment theme, either creating fundamental shifts in demand or leading to new competitive dynamics and business models. In others, cash flows will be less stressed as short-term cost pressures are passed through to customers, thus allowing profit margins to revert to average levels in the longer run. The nature of the impact will depend on whether an industry shows underlying structural resilience or experiences fundamental shifts in demand or significantly changed competitive dynamics.

Fundamental demand shifts

In some industries, shifts in demand will have a broadly negative impact on company cash flows and therefore valuations. Oil and gas consumption, for example, would have to decrease by an average of around 0.2 percent a year from now until 2030 to meet emission reduction targets associated with success in stabilizing greenhouse gases. The upstream oil and gas industry would therefore experience falling demand over the long term (2016 and beyond) as the economy shifts toward cleaner sources of energy (including solar, wind, and carbon capture and storage), and as oil-consuming sectors (such as automotive and power generation) increase their emphasis on energy efficiency. Upstream companies could experience falling production and sales volumes by 2015, with a substantial impact on cash flows. If that happened, valuations would fall by around 5 percent in the executive scenario and by around 15 percent in the experts' scenario. The potential impact on value is relatively low because of the short-term nature of the valuations of upstream companies—which mostly reflect their current high-yielding discovered and developed reserves. These have an average lifespan of 10 to 15 years and will be largely depleted by the end of the next decade. The value of the cash flows affected could fall further if a dramatic decline in demand pushed down prices.

By contrast, other industries could enjoy considerable gains. Companies in the building-materials sector—particularly those that do business in places where building efficiency is not yet a major issue—will probably benefit from rising demand for improved energy efficiency and insulation products, which will increase their cash flows. In developed economies, more stringent building standards are already creating demand for such offerings, and the same thing will happen in developing markets as well.

The nature of the impact will depend on whether an industry shows underlying structural resilience or experiences fundamental shifts in demand or significantly changed competitive dynamics.

Analysts are already calculating the impact on demand of existing regulations and factoring it into company valuations. As compared with the business-as-usual scenario, the valuation of a representative building-materials company in the developed world increases by 35 percent in the executive scenario and by 80 percent in the experts' one. If more stringent regulatory measures do not materialize, valuations could fall by 10 to 20 percent as a result of possible short-term cost pressures.

Changing competitive dynamics

Efforts to offset climate change will structurally transform certain sectors—including automotive and aluminum—which will experience more volatile returns and increased rates of entry and exit as new technologies or regulatory restrictions emerge and the competitive landscape changes.[2] The way a company reacts to changing technologies and business systems will determine its performance.

In the automotive sector, novel technologies will create new competitive dynamics and transform business systems in the next one to five years. Cash flows could be affected both positively and negatively. In the short term, tighter emission standards will have an impact on the mix of cars sold, helping manufacturers with lineups of smaller, more fuel- and emission-efficient cars. Such standards will affect the margins of both winners and losers and thus their cash flows and valuations, which may already reflect some potential changes in value.

Changed fuel efficiency and emissions standards, combined with high oil prices, will spur the introduction of new drivetrain technologies, such as electric and hydrogen, which could start to reach scale by 2015.[3] A number of competing technologies, including more efficient internal-combustion engines and hybrids, will be introduced, and so will vehicles powered by compressed natural gas, hydrogen, or electricity. The impact on valuations will depend both on which of these proves dominant and on the ability of the automotive OEMs to pass along the costs of new technologies and parts to consumers or to capture value from other segments of the value chain.

While the actual impact on industry valuations is highly uncertain, it is not unimaginable that its discounted value could rise by 10 percent as compared with the business-as-usual scenario if the electric or hydrogen technologies become dominant, in combination with a new and cheaper way of generating power, which could let OEMs raise margins by charging higher prices. Certain types of regulatory interventions, however, could raise the industry's costs, with no concurrent price offsets. In that case, the industry's value could fall by as much as 65 percent. Nonetheless, well-positioned players with clear leadership in technologies and products should always be able to outperform their competitors.

In the aluminum industry, carbon reduction efforts will affect the cash flows and valuations of primary aluminum producers in three ways:

— *Direct effects.* Although the aluminum industry does not face direct emissions costs at present, they may be introduced in the European Union under phase III of the EU Emissions Trading Scheme. The impact on valuations will depend on carbon pricing and the extent to which the industry receives free emission allowances. Without any subsidies or offsets, a carbon price of $55 per metric ton would raise production costs by 11 percent.[4]

— *Indirect effects.* Since energy represents more than 30 percent of the costs of primary aluminum producers, more expensive power from higher carbon pricing will put significant pressure on margins. Without any subsidies or offsets, for example, a carbon price of $55 per metric ton would raise production costs by 17 percent.

[2] During similar periods of discontinuity in other sectors in the past, levels of entry and exit rose significantly. As the telecom sector moved to wireless, for example, only 17 of the top 30 global telecom companies (by market capitalization) in 1997 were still in the top 30 in 2007.
[3] In some scenarios, 1 percent of global penetration by 2015.
[4] Based on initial cash production costs of $1,853 per metric ton.

Consumer electronics represents a large and growing portion of residential electricity demand. Using technologies that exist today, the industry can make its products dramatically more efficient at low and diminishing costs.

— *Changing demand.* As cars become lighter to reduce emissions, demand for aluminum from the automotive sector is expected to rise. This increase, however, may be offset by lower demand from the packaging industry (as a result, for instance, of stricter regulation of nonreturnable containers) and by a shift toward the use of secondary aluminum from increased recycling. If carbon emissions are strictly limited, demand for primary aluminum may fall dramatically as less-energy-intensive materials replace it.

Regional regulatory differences and the access of companies in some areas to cheaper power will make margins in the primary-aluminum industry more volatile, creating both winners and losers. In the short to medium term, efforts to reduce carbon emissions will probably exacerbate the margin differentials between players with facilities in Asia, the Middle East, and North Africa, on the one hand, and in Europe (and potentially North America), on the other. Take, for example, a company with only coal-powered European production facilities. If carbon prices increase from $25 to $55 per metric ton, but the price of aluminum doesn't increase to cover them, the company's EBITDA[5] margins would fall to 7 percent from 19 percent.

In the long term, however, the short- to medium-term advantage enjoyed by aluminum producers in lower-cost regions like China, the Middle East, and North Africa will probably fall: the global standardization of carbon costs will erode margin differentials.

Structural resilience

Some sectors will experience minimal long-term stress from carbon-abatement efforts: they will be able to pass along any short-term cost pressures to customers and will not face substitution by other products or significant shifts in demand. In such cases, profit margins would revert to average levels over the medium to long term. The consumer electronics industry, for example, will probably have the technology to deal with regulation in a way that will not harm the bottom line.

Consumer electronics represents a large and growing portion of residential electricity demand. Using technologies that exist today, the industry can make its products dramatically more efficient at low and diminishing costs. We expect increased efficiency-improvement pressures, including limits on standby and active power consumption, as well as efficiency-labeling requirements. The overall impact on the value of the industry will in our view be limited. Some of its revenue and margin opportunities could have a positive impact of up to 10 percent on its discounted cash flows in the executive scenario, or up to 35 percent in the experts' one. Higher costs that could reduce the industry's value by 7 percent could, however, offset these opportunities.

[5] Earnings before interest, taxes, depreciation, and amortization.

The value of preparation

Much uncertainty remains over the course of regulation and the pace of change for the other climate change–related forces, such as technology, that will influence abatement levels. The value of companies is likely to change as these factors start to affect their performance. The immediate impact on cash flows (and therefore discounted valuations) might be limited, but it will eventually be significant in some industries.

As nations and companies start acting more aggressively to reduce carbon emissions, major shifts in the valuations of sectors and companies will start to become clearer and more predictable. Over the next 18 to 24 months, a number of regulatory and policy events, such as the December 2009 Copenhagen conference to replace the Kyoto treaty, will probably reduce the uncertainty and spark a rethinking of how carbon reduction efforts will affect valuations across a wide range of industries.

Several steps can help companies and their executives as they start to position themselves to thrive in a low-carbon economy.

Assess the impact of abatement efforts

A critical first step is reviewing a company's exposure to regulatory measures (such as carbon pricing, new standards, taxes, and subsidies), new technology, and changes in consumer behavior. In our experience, the strategy mind-set required for this analysis doesn't come naturally to most executives. They will have to ask themselves, for example, how specific changes would affect a company's competitive position if other companies adopted new business models or how a company can gain a competitive edge by moving more quickly.

Strengthen regulatory capabilities

Companies should ensure that they have a consistent strategy, informed by analysis, to participate in regulatory-policy discussions and to engage with policy makers effectively and coherently across business units. The best companies will bring public and private stakeholders together to shape the regulatory environment—both policy principles and specific regulations—so that socially efficient solutions are also economically attractive.

Build capabilities to deal with uncertainty

The type of analysis we have conducted only scratches the surface of what is possible. Sophisticated scenario-planning techniques can give managers an overall view of how the economy—and their markets, in particular—might evolve under different climate change outcomes. Many companies will succeed in managing the major transformations their sectors face only if they invest in generating more sophisticated forecasts and deeper insights into climate change–related developments.

Many companies will succeed in managing the major transformations their sectors face only if they invest in generating more sophisticated forecasts and deeper insights into climate change–related developments.

Adjust investment review processes

In accordance with the realities of climate change, decisions about new corporate investments should be geared toward carbon- and energy-efficient technologies that will remain competitive over investment life cycles. As part of a portfolio of options, companies may find it necessary to make bets (in new technologies, for example) that are specifically related to climate change.

Develop new external links

Venture capital firms, universities, and scientists are logical starting points in efforts to build external networks that can help companies understand and manage the impact of climate change. In the hope of developing new solutions, some companies in the electric-car segment, for instance, are creating consortia that include power companies, suppliers of high-tech car batteries, and local governments.

Review investor relations

Companies will need to focus on how and when to signal the value of their climate change bets so that investors can assess them. Each company will have to explain its overall level of preparedness for the future, the way climate change–related events could affect its specific cash flows, and what differentiates it from its competitors in these respects.

So far, companies have had limited success in communicating their climate change–related activities, often because these moves form only a small part of a larger portfolio. In 2008, for example, the Spanish power generator Iberdrola spun off part of its renewables division—among other reasons, to access greater value. BP has looked for ways to realize the value of its alternative-energy investments, proposing a partial flotation. However, very few public companies have succeeded in explaining the more deeply hidden effects of climate change on their cash flows and competitive strategies.

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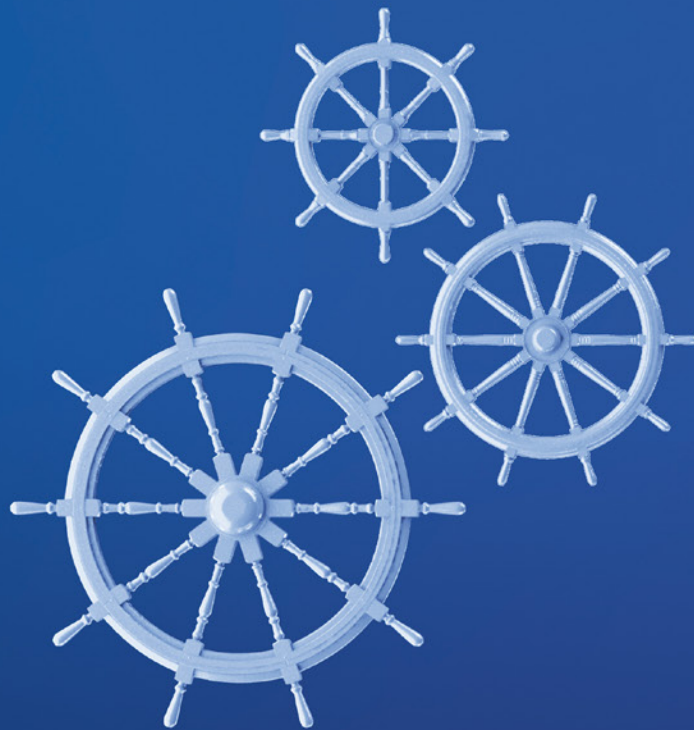
The authors wish to thank Elizabeth Bury for her contribution to this article.

This article is based on a project that McKinsey undertook jointly with the Carbon Trust during the spring of 2008 to assess the impact of climate change on investments. In September 2008, the Carbon Trust published a report on that subject, titled *Climate change: A business revolution?* It is available at carbontrust.com.

CFOs and the evolving finance function

Forty days after the end of a year's first three fiscal quarters, and 60 days after end of the fiscal year, the principal financial officer, or the chief accounting officer, of large US public companies must submit their signature to the company's financial reports. The US Office of Management and Budget estimates an average of 185.08 burden hours per response for quarterly reports and about 2,300 hours for annual ones. Similar reporting requirements, some of which are more exacting, are in place around the globe.

There's no doubt reporting is a critical element of an effective finance function, and it's a skill that every CFO must perfect. But distinctive CFOs don't solve for accounting, much less quarterly accounting. They solve for long-term value creation. They discern the company's unique value proposition, which is always relative to peers and potential disruptors. They partner with the CEO and the board to allocate resources toward value-maximizing projects within and across businesses over different time horizons.



CFOs understand their company's businesses as a complete portfolio and have an informed perspective on how those businesses could be grown, developed, or pared—both organically and by acquisitions, divestitures, and alliances. They are on top of their company's most important performance indicators and recognize how those can vary among businesses. They are deep in the details of the company's sources of risk and opportunity—and can communicate all these elements to investors (who are often a highly heterogeneous group).

CFOs do all this and manage the finance function. Doing so demands that they build a practice that is already ahead of the curve on data and analytics; bots have made "bean counting" a thing of the past. CFOs must also provide personal support and inspiration for their immediate and larger teams. They are leaders, regularly the de facto vice CEO, ideally the CEO's confidante and sounding partner, and often future CEOs themselves. They also have their own learning needs and far-ranging interests that are both professional and personal.

It adds up to a lot more than 185.08 hours per quarter.

2015

Profiling the modern CFO: A panel discussion

Seasoned finance chiefs explore revamping business models and coping with new competitors, currency risks, and changing capital structures.

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At McKinsey's annual Chief Financial Officer Forum, in London this June, CFO and chief operating officer Samih Elhage of Nokia Networks, Manik ("Nik") Jhangiani of Coca-Cola Enterprises, and former Alstom CFO Nicolas Tissot took up some of the challenges facing today's finance chiefs. Over the course of an hour, the panelists explored the pricing threat posed by a new breed of low-cost competitors now rising in emerging markets, the risks from the resurgent volatility of currency markets, and the brave new world of cheap debt financing and its implications for capital structures.

The discussion, moderated by *Financial Times* Lex column editor Robert Armstrong, shapes a profile of the skills and tactics that define the modern CFO. The edited highlights below begin with the question of whether CFOs should make challenging the existing business model part of their role.

Nik Jhangiani: A business never gets to the point where it has the ideal model. The world is changing so fast around us. Even in a business that you think is stable and predictable, the operating model needs to continue to evolve, just given what technology is doing. At Coca-Cola Enterprises, we don't conclude, at a single point in time, that the business model needs to change—that's something we challenge ourselves on through our long-range-planning process every year.

For example, we have probably the largest sales force in Europe of any packaged-goods company, and I almost *have* to challenge that. Is it really bringing us the value today that it did five years ago? How many people want a salesperson calling on their stores or outlets helping them to place an order and to merchandise when so much more can happen through call centers and technology? You definitely don't want to lose the human touch and the relationships, but you do want to allow your sales force to be more efficient, effective, and focused on what the customers view as an added value.

This is something you, as CFO, need to challenge almost every day—to ask if your company's business model is fit for purpose today and, more important, if it is fit for purpose for the future. What do we need to change, without suddenly having to make a wholesale change tomorrow? It needs to be constantly adapted.

Robert Armstrong: When you realize that a major change has to be made, how do you deal with your executive board?

Nicolas Tissot: Among the members of executive committees, CFOs are probably best positioned to challenge the businesses. They are independent from operations. And they are the only ones, apart from the CEO, who have a comprehensive vision of the company. The role of a CFO who goes beyond being a bean counter is clearly not only to be a business partner but also to be a business challenger. This is not the easiest part of the job, but it is definitely a part of the modern CFO role.

Samih Elhage: In a fast-moving industry like Nokia's, technology life cycles are becoming much shorter. In our case, the transformational aspect of the business is becoming a way of life. We can't say, definitively, that this is really my process; this is my business; this is how I sell; this is how I buy. We can say that we're in a continuous-improvement process—and the process itself has to evolve.

This isn't about squeezing the budget to reduce costs. It's about significantly changing the company's processes and mode of operation. In many cases, you have to change the way you sell certain products and the way you charge particular customers. And, in some cases, you have to exit specific areas of the business. When I first came to Nokia, we were operating in ten different segments. Since then, we've made incisive and, I think, courageous changes, divesting eight of these businesses to focus intensely on the two that would give us the operating performance we were looking for.

Competitive dynamics and pricing

Robert Armstrong: Let's talk a little about competitive dynamics. Samih, you are in a unique position there. How do you manage the company when you are constantly under pressure from large, low-cost emerging-market competitors?

Samih Elhage: Well, competition is undeniably an important element in our day-to-day operations because of its implications for our cost structure and for pricing. But we resist being driven reactively by the actions of competitors. We have a strong pricing strategy and controls to ensure that prices are being set at the right level—one that ensures our customers are getting value for money and that

Manik ('Nik') Jhangiani

Education
Holds a bachelor's degree in accounting and economics from Rutgers University

Career highlights
Coca-Cola Enterprises
2013–present
Senior vice president and CFO

2012–13
CFO, Europe

Bharti Enterprises
2009–12
Group CFO

Coca-Cola HBC
2000–09
Group CFO

Fast facts
Married, with 2 children

Lives in Central London

Nicolas Tissot

Education
Holds an MBA from École des hautes études commerciales (HEC) and graduated from École nationale d'administration

Career highlights
Alstom
2015
Adviser to the group chairman and CEO

2010–14
CFO and executive-committee member

Suez/GDF Suez/ENGIE
2008–10
Deputy CEO, global gas and liquefied natural gas

2005–08
CFO and executive-committee member, Electrabel

2003–05
CFO and executive vice president, Energy International

1999–2003
Head of group financial planning and control

French Ministry of Economy, Finance, and Industry
1995–99
Inspecteur des Finances, the senior audit and consulting body of the ministry

Fast facts
Married, with 4 children

Member of the French-American Foundation (and former FAF Young Leader) and the Société d'Economie Politique

Independent director at Euroclear Settlement of Euronext-zone Securities

we are able to fund investment in R&D and healthy performance for our stakeholders. And, in a competitive environment, our cost structure, which is extremely lean, gives us the means to fight when fighting is what's required.

Robert Armstrong: Let's explore that pricing theme a bit. Nik, how does pricing feed into the finances of Coca-Cola Enterprises?

Nik Jhangiani: It is a huge element. Fortunately, in the past couple of years, we've benefited from the more benign commodities environment. As recently as four or five years ago, inflation was high, and we had to find a way to pass that on to our customers and our consumers. Today, some markets in Europe are actually facing deflation, and customers and consumers are looking at that, too. What we're not able to achieve through pricing, we have to do by reducing costs—finding better ways to be efficient at what we do.

The answer isn't always about the absolute price the market will bear. Sometimes, it's much more about what you can do from an overall revenue-growth perspective. In addition to cutting costs and increasing prices, how do you get the right mix of products to generate more transactions? How might you change your packaging strategy to increase revenue growth? For example, would consumers want—and pay a slight premium for—a smaller or differentiated or more premium package?

Nicolas Tissot: In heavy industries, the pricing environment is always driven by the business cycle. For several years, we've been in a crisis that also has some structural components. So we've had to adapt structurally to the emergence of new competitors from places with a lower cost base. We also need to adjust to the interest of our clients in our services, as well as our technology. The CFO is instrumental, for example, in launching performance and restructuring plans, setting up partnerships, allocating R&D money, and reorienting manufacturing investment.

On pricing, we need to adapt rapidly or we'll lose every sale. At one time, deals targeted a level of profitability that fully rewarded our investments. But when there is overcapacity in the market and when—to break even—competitors fight to keep factories running, sometimes you end up settling for the second-best price. At Alstom, the CFO, who personally approves every bid above €50 million, has to take into account those specific periods and relax the margin targets appropriately.

Foreign-currency risk

Robert Armstrong: Currency risk has returned to the corporate world's attention over the past year, with the strong dollar and the fluctuations of other currencies. How do you manage the risks?

Samih Elhage: I start with how we should achieve our performance goals and then ask how we cope with the challenges of all external aspects, including currency fluctuations. In our business, we depend mainly on four currencies—the euro, the US dollar, the Japanese yen, and the Chinese yuan. We usually get our performance plan approved by the board in Q4 and make any changes at the beginning of the year. From there, I ask teams to develop their performance plans reflecting the impact of currencies. Their underlying business objectives have to be achieved from an operating-profit perspective, and that comes down to cash.

If the effect of currency shifts helps the top line, that's assumed to be in addition to the team's performance goals. If currency shifts affect

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Samih Elhage

Education
Holds a bachelor's degree in electrical engineering and in economics from the University of Ottawa, as well as a master's degree in electrical engineering from École Polytechnique de Montréal

Career highlights
Nokia Networks
2013–present
Executive vice president and CFO

2013–present
Chief operating officer, Nokia Solutions and Networks

Nortel
2009–10
President, carrier voice over Internet Protocol (VoIP) and applications solutions

2008
Vice president and general manager, carrier VoIP and applications solutions

2007–08
Vice president, corporate business operations

Fast facts
Married, with 2 children

Pastimes include world music, traveling, walking, and golf

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costs negatively, the team has to find some way of compensating for that.

Is that challenging? Absolutely. It adds to the pressure on teams to meet their goals. Are we making progress? Yes, we are. But costs associated with hedging have to be included in the accounting statements, and they have cash implications. Our teams know that they just have to make the numbers add up.

Nik Jhangiani: The countries in which Coca-Cola Enterprises operates give us a fairly natural hedge—because our revenues and a great deal of our cost base are local. In fact, we produce 90-plus percent of our products within a given market. It's difficult and expensive to transport water. Producing locally gives us another natural hedge.

The issue is more with our commodity exposures, which could be in different currencies. That's where we make sure that we're covering risk through transaction exposures, for which we hold teams accountable—having hedging policies in place and ensuring that all our transaction exposures are covered, at least on a rolling 12-month basis (with lower levels of coverage going out 36 months). Teams are responsible for making sure that currency risks are covered through pricing and cost structures and so on.

Our hedging strategy is very clear. We're not looking to beat the market. We are just trying to increase certainty around our cost structure. We do not hedge for translational currency conversion or exposure. When we communicate with the market, we actually give guidance and provide our performance data both on a currency-neutral basis and then with the impact of currencies. The transaction part is built into the information we provide.

You can't keep changing what you do in volatile times, as that volatility will always be out there. At times, translation or currency conversion works and has some benefits, and at times it doesn't. You have to try to ride through that cycle without being reactive and changing things, unless you see something that isn't working over the long term.

Nicolas Tissot: We see our business as being a supplier of industrial equipment and associated services, not playing games with the fluctuations of currencies. As soon as an order is firmed up, we have a full analysis of the currency flows. Then that exposure is systematically hedged over the horizon available in the market, with a rolling foreign-exchange strategy. We have pretty significant activity in that respect. To avoid paying too much in fees to the banks, we use an electronic platform. The banks own the platform, and it is competitive for any foreign-exchange trade that we handle to hedge our exposure.

Capital structure

Robert Armstrong: One of the ironic consequences of the financial crisis is that debt financing is cheap and easy to get unless you're a bank. It's so cheap, why have any equity at all? How do you make capital-structure decisions in this context?

Nicolas Tissot: Regarding debt financing, over the past few years there have been times when we've needed to think fast, act fast, and be opportunistic. There are imperfections in the market, and many of us have seized the opportunities they create. But at the same time, you always have to keep the long-term view in mind.

Alstom is in a very cyclical industry, and sometimes you can lose sight of your position in the cycle. When things are good, there's a risk of leveraging too much; when the hard times come back, you burn a lot of cash and quickly deteriorate your financial structure and therefore your rating, which leaves you little if no access to debt markets. We manage our financial structure—the structure of the balance sheet—with that in mind. At the peak of the cycle, we want to have almost no leverage, while at the trough we accept more.

Samih Elhage: At Nokia, our capital-structure decisions are guided by the principle that we should always do our best to give back to shareholders. In the past two years, as we purchased Siemens's share of Nokia Siemens Networks and sold the device business to Microsoft, we put in place a program to improve our capital structure and to return €5 billion to shareholders over three years.

Why have equity at all? Our philosophy is that there should be a balance. You should go to the market when you must, but you also need a very strong capital structure to defend the business and to drive the right investment at the right time.

Nik Jhangiani: We sold the US business back to the Coca-Cola Company in 2010 and formed the new Coca-Cola Enterprises. That included much of the debt we had, as well. We continue to generate a great deal of free cash flow, but at the same time we also realized that we were very underleveraged and didn't have the most efficient balance sheet. So we set a leverage target of two and a half to three times net debt to EBITDA, compared with where we were before the sale, which was closer to one to one and a half times net debt to EBITDA. It could have been lower, but we picked a level that we saw as the right starting point for the journey we wanted to make. We would slowly lever up toward that level, so this wasn't a big one-shot bang, and we wanted to make sure we had enough dry powder for potential activities.

The leveraging up, along with the free cash flow that we continue to generate and a strong focus on that cash-conversion rate, gives us a solid pool of free cash flow. In the absence of M&A, the best way to use it was to return it to shareholders. Over the last four years, from the formation of the new Coca-Cola Enterprises through the end of 2014, we have returned approximately $8 billion to shareholders.

2008

Starting up as CFO

There are a few critical tasks that all finance chiefs must tackle in their first hundred days.

by Bertil E. Chappuis, Aimee Kim, and Paul J. Roche

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In recent years, CFOs have assumed increasingly complex, strategic roles focused on driving the creation of value across the entire business. Growing shareholder expectations and activism, more intense M&A, mounting regulatory scrutiny over corporate conduct and compliance, and evolving expectations for the finance function have put CFOs in the middle of many corporate decisions—and made them more directly accountable for the performance of companies.

Not only is the job more complicated, but a lot of CFOs are new at it—turnover in 2006 for Fortune 500 companies was estimated at 13 percent.[1] Compounding the pressures, companies are also more likely to reach outside the organization to recruit new CFOs, who may therefore have to learn a new industry as well as a new role.

To show how it is changing—and how to work through the evolving expectations—we surveyed 164 CFOs of many different tenures[2] and interviewed 20 of them. From these sources, as well as our years of experience working with experienced CFOs, we have distilled lessons that shed light on what it takes to succeed. We emphasize the initial transition period: the first three to six months.

Early priorities

Newly appointed CFOs are invariably interested, often anxiously, in making their mark. Where they should focus varies from company to company. In some, enterprise-wide strategic and transformational initiatives (such as value-based management, corporate-center strategy, or portfolio optimization) require considerable CFO involvement. In others, day-to-day business needs can be more demanding and time sensitive—especially in the Sarbanes–Oxley environment—creating significant distractions unless they are carefully managed. When CFOs inherit an organization under stress, they may have no choice but to lead a turnaround, which requires large amounts of time to cut costs and reassure investors.

Yet some activities should make almost every CFO's short list of priorities. Getting them defined in a company-specific way is a critical step in balancing efforts to achieve technical excellence in the finance function with strategic initiatives to create value.

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[1] *Financial officers' turnover*, Russel Reynolds Associates, 2007.
[2] We surveyed 164 current or former CFOs across industries, geographies, revenue categories, and ownership structures. For more of our conclusions, see "The CFO's first hundred days: A McKinsey Global Survey," *McKinsey Quarterly*, December 2007.

Conduct a value creation audit

The most critical activity during a CFO's first hundred days, according to more than 55 percent of our survey respondents, is understanding what drives their company's business. These drivers include the way a company makes money, its margin advantage, its returns on invested capital (ROIC), and the reasons for them. At the same time, the CFO must also consider potential ways to improve these drivers, such as sources of growth, operational improvements, and changes in the business model, as well as and how much the company might gain from all of them. To develop that understanding, several CFOs we interviewed conducted a strategy and value audit soon after assuming the position. They evaluated their companies from an investor's perspective to understand how the capital markets would value the relative impact of revenue versus higher margins or capital efficiency and assessed whether efforts to adjust prices, cut costs, and the like would create value, and if so how much.

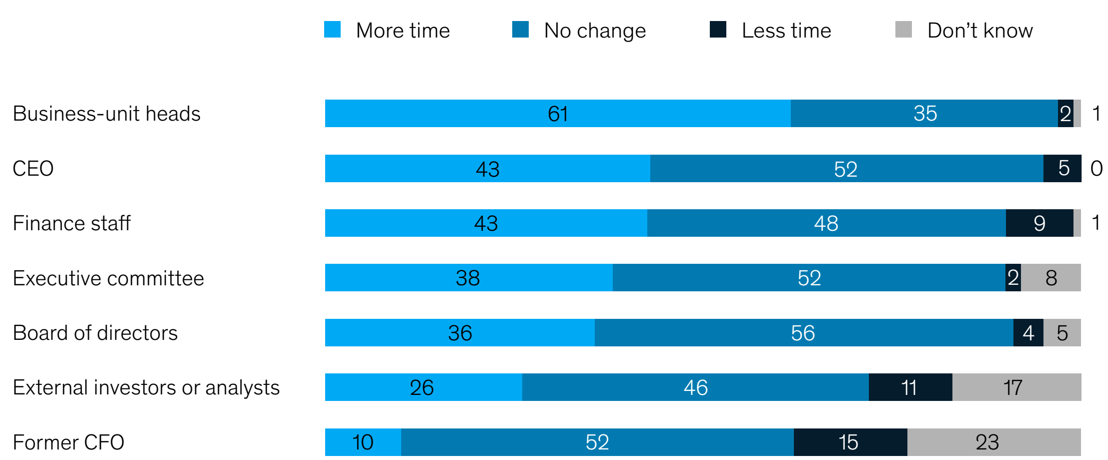
Although this kind of effort would clearly be a priority for external hires, it can also be useful for internal ones. As a CFO promoted internally at one high-tech company explained, "When I was the CFO of a business unit, I never worried about corporate taxation. I never thought about portfolio-level risk exposure in terms of products and geographies. When I became corporate CFO, I had to learn about business drivers that are less important to individual business unit performance."

The choice of information sources for getting up to speed on business drivers can vary. As CFOs conducted their value audit, they typically started by mastering existing information, usually by meeting with business unit heads, who not only shared the specifics of product lines or markets but are also important because they use the finance function's services. Indeed, a majority of CFOs in our survey, and particularly those in private companies, wished that they had spent even more time with this group (Exhibit 1). Such meetings allow CFOs to start building relationships with these key stakeholders of the finance function and to understand their needs. Other CFOs look for external perspectives on their companies and on the marketplace by talking to

Exhibit 1

The majority of surveyed CFOs wished to have had even more time with business-unit heads.

If you could change the amount of time you spent with each of the following individuals or groups during your first 100 days as CFO, what changes would you make? % of respondents[1] (n = 164)

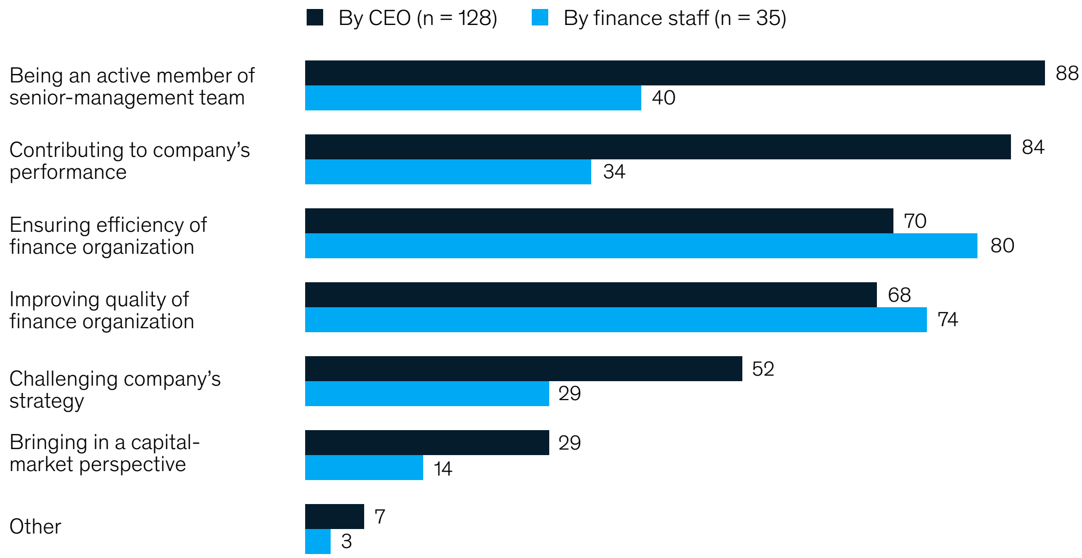


[1]Figures may not sum to 100%, because of rounding.

Exhibit 2

Many CFOs received very explicit guidance from their CEOs on the key issues of concern.

What was expected of CFOs, % of responses[1] from respondents who said CEO and finance staff gave explicit guidance on expectations (n = 163)



[1] Respondents could select >1 answer.

customers, investors, or professional service providers. The CFO at one pharma company reported spending his first month on the job "riding around with a sales rep and meeting up with our key customers. It's amazing how much I actually learned from these discussions. This was information that no one inside the company could have told me."

Lead the leaders

Experienced CFOs not only understand and try to drive the CEO's agenda, but also know they must help to shape it. CFOs often begin aligning themselves with the CEO and board members well before taking office. During the recruiting process, most CFOs we interviewed received very explicit guidance from them about the issues they considered important, as well as where the CFO would have to assume a leadership role. Similarly, nearly four-fifths of the CFOs in our survey reported that the CEO explained what was expected from them—particularly that they serve as active members of the senior-management team, contribute to the company's performance, and make the finance organization efficient (Exhibit 2). When one new CFO asked the CEO what he expected at the one-year mark, the response was, "When you're able to finish my sentences, you'll know you're on the right track."

Building that kind of alignment is a challenge for CFOs, who must have a certain ultimate independence as the voice of the shareholder. That means they must immediately begin to shape the CEO's agenda around their own focus on value creation. Among the CFOs we interviewed, those who had conducted a value audit could immediately pitch their insights to the CEO and the board—thus gaining credibility and starting to shape the dialogue. In some cases, facts that surfaced during the process enabled CFOs to challenge business unit orthodoxies. What's more, the CFO is in a unique position to put numbers against a company's strategic options in a way that lends a sharp edge to decision making. The CFO at a high-tech company, for example, created a plan that identified several key issues for the long-term health of the business, including how large enterprises could use its product more efficiently. This CFO then prodded sales and service to develop a new strategy and team to drive the product's adoption.

To play these roles, a CFO must establish trust with the board and the CEO, avoiding any appearance of conflict with them while challenging their decisions and the company's direction if necessary. Maintaining the right balance is an art, not a science. As the CFO at a leading software company told us, "It's important to be always aligned with the CEO and also to be able to factually call the balls and strikes as you see them. When you cannot balance the two, you need to find a new role."

Strengthen the core

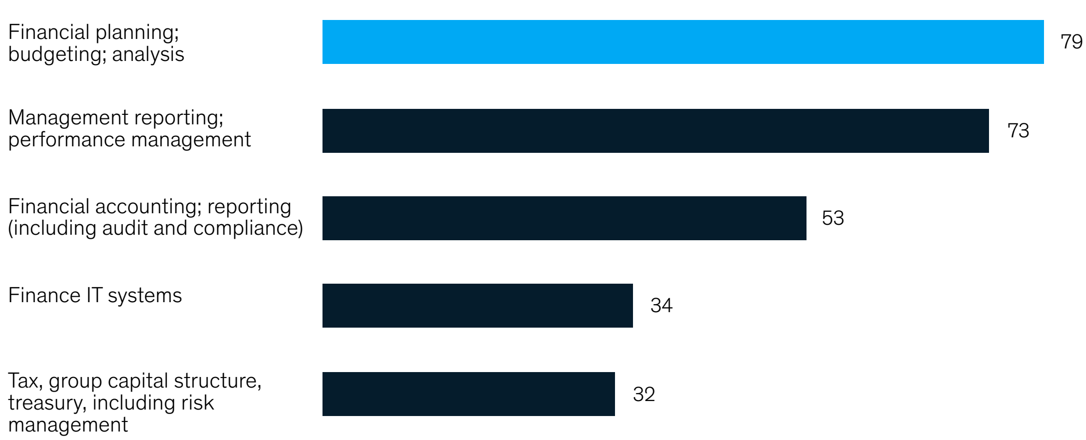
To gain the time for agenda-shaping priorities, CFOs must have a well-functioning finance function behind them; otherwise, they won't have the credibility and hard data to make the difficult arguments. Many new CFOs find that disparate IT systems, highly manual processes, an unskilled finance staff, or unwieldy organizational structures hamper their ability to do anything beyond closing the quarter on time. In order to strengthen the core team, during the first hundred days about three-quarters of the new CFOs we surveyed initiated (or developed a plan to initiate) fundamental changes in the function's core activities (Exhibit 3).

Several of our CFOs launched a rigorous look at the finance organization and operations they had just taken over, and many experienced CFOs said they wished they had done so. In these reviews, the CFOs assessed the reporting structure, evaluated the fit and capabilities of the finance executives they had inherited, validated the finance organization's cost benchmarks, and identified any gaps in the effectiveness or efficiency of key systems, processes, and reports. The results of such a review can help CFOs gauge how much energy they will need to invest in the finance organization during their initial six to 12 months in office—and to fix any problems they find.

Exhibit 3

New CFOs often initiated fundamental changes to core activities.

In which of the given areas did you initiate (or develop a plan to initiate) fundamental changes during your first 100 days as CFO? % of respondents[1] (n = 164)



[1] Respondents could select > 1 answer; those who answered "none of these" are not shown.

Transitions offer a rare opportunity: the organization is usually open to change. More than half of our respondents made at least moderate alterations in the core finance team early in their tenure. As one CFO of a global software company put it, “If there is a burning platform, then you need to find it and tackle it. If you know you will need to make people changes, make them as fast as you can. Waiting only gets you into more trouble.”

Manage performance actively
CFOs can play a critical role in enhancing the performance dialogue of the corporate center, the business units, and corporate functions. They have a number of tools at their disposal, including dashboards, performance targets, enhanced planning processes, the corporate review calendar, and even their own relationships with the leaders of business units and functions.

Among the CFOs we interviewed, some use these tools, as well as facts and insights derived from the CFO’s unique access to information about the business, to challenge other executives. A number of interviewees take a different approach, however, exploiting what they call the “rhythm of the business” by using the corporate-planning calendar to shape the performance dialogue through discussions, their own agendas, and metrics. Still other CFOs, we have observed, exert influence through their personal credibility at performance reviews.

While no consensus emerged from our discussions, the more experienced CFOs stressed the importance of learning about a company’s current performance dialogues early on, understanding where its performance must be improved, and developing a long-term strategy to influence efforts to do so. Such a strategy might use the CFO’s ability to engage with other senior executives, as well as changed systems and processes that could spur performance and create accountability.

First steps

Given the magnitude of what CFOs may be required to do, it is no surprise that the first 100 to 200 days can be taxing. Yet those who have passed through this transition suggest several useful tactics. Some would be applicable to any major corporate leadership role but are nevertheless highly relevant for new CFOs—in particular, those who come from functional roles.

Get a mentor
Although a majority of the CFOs we interviewed said that their early days on the job were satisfactory, the transition wasn’t without specific challenges. A common complaint we hear is about the lack of mentors—an issue that also came up in our recent survey results, which showed that 32 percent of the responding CFOs didn’t have one. Forty-six percent of the respondents said that the CEO had mentored them, but the relationship appeared to be quite different from the traditional mentorship model, because many CFOs felt uncomfortable telling the boss everything about the challenges they faced. As one CFO put it during an interview, “being a CFO is probably one of the loneliest jobs out there.” Many of the CFOs we spoke with mentioned the value of having one or two mentors outside the company to serve as a sounding board. We also know CFOs who have joined high-value roundtables and other such forums to build networks and share ideas.

Listen first . . . then act
Given the declining average tenure in office of corporate leaders, and the high turnover among CFOs in particular, finance executives often feel pressure to make their mark sooner rather than later. This pressure creates a potentially unhealthy bias toward acting with incomplete—or, worse, inaccurate—information. While we believe strongly that CFOs should be aggressive and action oriented, they must use their energy and enthusiasm effectively. As one CFO reflected in hindsight, “I would have spent even more time listening and less time doing. People do anticipate change from a new CFO, but they also respect you more if you take the time to listen and learn and get it right when you act.”

Make a few themes your priority—consistently
Supplement your day-to-day activities with no more than three to four major change initiatives and focus on them consistently. To make change happen, you will have to repeat your message over and over—

internally, to the finance staff, and externally, to other stakeholders. Communicate your changes by stressing broad themes that, over time, could encompass newly identified issues and actions. One element of your agenda, for example, might be the broad theme of improving the efficiency of financial operations rather than just the narrow one of offshoring.

Invest time up front to gain credibility

Gaining credibility early on is a common challenge—particularly, according to our survey, for a CFO hired from outside a company. In some cases, it's sufficient to invest enough time to know the numbers cold, as well as the company's products, markets, and plans. In other cases, gaining credibility may force you to adjust your mindset fundamentally.

The CFOs we interviewed told us that it's hard to win support and respect from other corporate officers without making a conscious effort to think like a CFO. Clearly, one with the mentality of a lead controller, focused on compliance and control, isn't likely to make the kind of risky but thoughtful decisions needed to help a company grow. Challenging a business plan and a strategy isn't always about reducing investments and squeezing incremental margins. The CFO has an opportunity to apply a finance lens to management's approach and to ensure that a company thoroughly examines all possible ways of accelerating and maximizing the capture of value.

As an increasing number of executives become new CFOs, their ability to understand where value is created and to develop a strategy for influencing both executives and ongoing performance management will shape their future legacies. While day-to-day operations can quickly absorb the time of any new CFO, continued focus on these issues and the underlying quality of the finance operation defines world-class CFOs.

Bertil Chappuis and **Paul Roche** are senior partners in McKinsey's Silicon Valley office; **Aimee Kim** is an associate partner in the New Jersey office.

2008

Communicating with the right investors

Executives spend too much time talking with investors who don't matter. Here's how to identify those who do.

by Robert N. Palter, Werner Rehm, and Jonathan Shih

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Many executives spend too much time communicating with investors they would be better off ignoring. CEOs and CFOs, in particular, devote an inordinate amount of time to one-on-one meetings with investors, investment conferences, and other shareholder communications,[1] often without having a clear picture of which investors really count.

The reason, in part, is that too many companies segment investors using traditional methods that yield only a shallow understanding of their motives and behavior; for example, we repeatedly run across investor relations groups that try to position investors as growth or value investors—mirroring the classic approach that investors use to segment companies. The expectation is that growth investors will pay more, so if a company can persuade them to buy its stock, its share price will rise. That expectation is false: many growth investors buy after an increase in share prices. More important, traditional segmentation approaches reveal little about the way investors decide to buy and sell shares. How long does an investor typically hold onto a position, for example? How concentrated is the investor's portfolio? Which financial and operational data are most helpful for the investor? We believe that the answers to these and similar questions provide better insights for classifying investors.

Once a company segments investors along the right lines, it can quickly identify those who matter most. These important investors, whom we call "intrinsic" investors, base their decisions on a deep understanding of a company's strategy, its current performance, and its potential to create long-term value. They are also more likely than other investors to support management through short-term volatility. Executives who reach out to intrinsic investors, leaving others to the investor relations department,[2] will devote less time to investor relations and communicate a clearer, more focused message.

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[1] Including a wide range of communications activities, such as annual shareholder meetings, conferences with sell-side analysts, quarterly earnings calls, and market updates.

[2] This article deals only with institutional investors, since management usually spends the most time with them. We also exclude activist investors because they represent a different investor relations issue for management.

The result should be a better alignment between a company's intrinsic value and its market value, one of the core goals of investor relations.[3]

A better segmentation

No executive would talk to important customers without understanding how they make purchase decisions, yet many routinely talk to investors without understanding their investment criteria. Our analysis of typical holding periods, investment portfolio concentrations, the number of professionals involved in decisions, and average trading volumes—as well as the level of detail investors require when they undertake research on a company—suggests that investors can be distributed among three broad categories.

Intrinsic investors

Intrinsic investors take a position in a company only after rigorous due diligence of its intrinsic ability to create long-term value. This scrutiny typically takes more than a month. We estimate that these investors hold 20 percent of US assets and contribute 10 percent of the trading volume in the US market.

In interviews with more than 20 intrinsic investors, we found that they have concentrated portfolios—each position, on average, makes up 2 to 3 percent of their portfolios and perhaps as much as 10 percent; the average position of other investors is less than 1 percent. Intrinsic investors also hold few positions per analyst (from four to ten companies) and hold shares for several years. Once they have invested, these professionals support the current management and strategy through short-term volatility. In view of all the effort intrinsic investors expend, executives can expect to have their full attention while reaching out to them, for they take the time to listen, to analyze, and to ask insightful questions.

These investors also have a large impact on the way a company's intrinsic value lines up with its market value—an effect that occurs mechanically because when they trade, they trade in high volumes (exhibit). They also have a psychological effect on the market because their reputation for very well-timed trades magnifies their influence on other investors. One indication of their influence: there are entire websites (such as GuruFocus.com, Stockpickr.com, and Mffais.com) that follow the portfolios of well-known intrinsic investors.

Exhibit

When intrinsic investors trade, they trade more per day than other investors do.

Investor segment	Annual trading activity per segment	Annual trading activity per investor in segment	Annual trading activity per investor in segment per investment	Annual trading activity per investor in segment per investment per day[1]
Intrinsic	$3 trillion	$6 billion	$72 million	**$79–109 million**
Trading-oriented	**$11 trillion**	**$88 billion**	**$277 million**	$1 million
Mechanical	$6 trillion	$6 billion	$17 million	$2 million

[1] Includes only days when investor traded.

[3] If this goal sounds counterintuitive, consider the alternatives. Clearly, undervaluation isn't desirable. An overvaluation is going to be corrected sooner or later, and the correction will, among other things, distress board members and employees with worthless stock options issued when the shares were overvalued.

Mechanical investors

Mechanical investors, including computer-run index funds and investors who use computer models to drive their trades, make decisions based on strict criteria or rules. We also include in this category the so-called closet index funds. These are large institutional investors whose portfolios resemble those of an index fund because of their size, even though they don't position themselves in that way.[4]

We estimate that around 32 percent of the total equity in the United States sits in purely mechanical investment funds of all kinds. Because their approach offers no real room for qualitative decision criteria, such as the strength of a management team or a strategy, investor relations can't influence them to include a company's shares in an index fund. Similarly, these investors' quantitative criteria, such as buying stocks with low price-to-equity ratios or the shares of companies below a certain size, are based on mathematical models of greater or lesser sophistication, not on insights about fundamental strategy and value creation.

In the case of closet index funds, each investment professional handles, on average, 100 to 150 positions, making it impossible to do in-depth research that could be influenced by meetings with an investment target's management. In part, the high number of positions per professional reflects the fact that most closet index funds are part of larger investment houses that separate the roles of fund manager and researcher. The managers of intrinsic investors, by contrast, know every company in their portfolios in depth.

Traders

The investment professionals in the trader group seek short-term financial gain by betting on news items, such as the possibility that a company's quarterly earnings per share (EPS) will be above or below the consensus view or, in the case of a drug maker, recent reports that a clinical trial has gone badly. Traders control about 35 percent of US equity holdings. Such investors don't really want to understand companies on a deep level—they just seek better information for making trades. Not that traders don't understand companies or industries; on the contrary, these investors follow the news about them closely and often approach companies directly, seeking nuances or insights that could matter greatly in the short term. The average investment professional in this segment has 20 or more positions to follow, however, and trades in and out of them quickly to capture small gains over short periods—as short as a few days or even hours. Executives therefore have no reason to spend time with traders.

Focused communications

Most investor relations departments could create the kind of segmentation we describe. They should also consider several additional layers of information, such as whether an investor does (or plans to) hold shares in a company or has already invested elsewhere in its sector. A thorough segmentation that identifies sophisticated intrinsic investors will allow companies to manage their investor relations more successfully.

Don't oversimplify your message

Intrinsic investors have spent considerable effort to understand your business, so don't boil down a discussion of strategy and performance to a ten-second sound bite for the press or traders. Management should also be open about the relevant details of the company's current performance and how it relates to strategy. Says one portfolio manager, "I don't want inside information. But I do want management to look me in the eye when they talk about their performance. If they avoid a discussion or explanation, we will not invest, no matter how attractive the numbers look."

Interpret feedback in the right context

Most companies agree that it is useful to understand the views of investors while developing strategies and investor communications. Yet management often relies on simple summaries of interviews with investors and sell-side analysts about everything from strategy to quarterly earnings to share

[4] For more on closet index funds, see Martijn Cremers and Antti Petajisto, *How active is your fund manager? A new measure that predicts performance*, American Finance Association meetings, Chicago, IL, January 15, 2007.

repurchases. This approach gives management no way of linking the views of investors to their importance for the company or to their investment strategies. A segmented approach, which clarifies each investor's goals and needs, lets executives interpret feedback in context and weigh messages accordingly.

Prioritize management's time

A CEO or CFO should devote time to communicating only with the most important and knowledgeable intrinsic investors that have professionals specializing in the company's sector. Moreover, a CEO should think twice before attending conferences if equity analysts have arranged the guest lists, unless management regards those guests as intrinsic investors. When a company focuses its communications on them, it may well have more impact in a shorter amount of time.

In our experience, intrinsic investors think that executives should spend no more than about 10 percent of their time on investor-related activities, so management should be actively engaging with 15 to 20 investors at most. The investor relations department ought to identify the most important ones, review the list regularly, and protect management from the telephone calls of analysts and mechanical investors, who are not a high priority. Executives should talk to equity analysts only if their reports are important channels for interpreting complicated news; otherwise, investor relations can give them any relevant data they require, if available.

Marketing executives routinely segment customers by the decision processes those customers use and tailor the corporate image and ad campaigns to the most important ones. Companies could benefit from a similar kind of analytic rigor in their investor relations.

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2021

The CFO's role in capability building

Organizations developing new skills for the next normal must determine exactly how and where to invest in them. The finance leader is uniquely suited to provide the necessary combination of insights.

by Rawi Abdelal, Kevin Carmody, Meagan Hill, and William J. Pearson

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It's becoming increasingly clear that some of the most critical responsibilities of CFOs in coming months will be supporting efforts to build new capabilities—the mindsets and behavior an organization needs to reach and sustain its full potential—and raising the bar on talent development.

A focus on capability building is especially relevant now as businesses attempt to rebound from the health and economic effects of the COVID-19 pandemic.[1] The pandemic has accelerated the use of automation, artificial intelligence, and other digital technologies to enhance or streamline processes. It has affected the management of supply chains and business partnerships. It has changed the priorities and demands of customers and investors in ways that haven't totally revealed themselves yet. And all this is happening as the world of work continues to change rapidly. It would be a lot for C-suite leaders—including the CFO—to navigate, even in the best of times.

However, many CFOs are likely to say that their experience with capability building has been both underdeveloped and underutilized. Over the past decade, the CFO's role—and that of the overall finance function—has expanded so that it now affects more parts of the organization directly. More functions now report to CFOs, who now have more oversight of tasks that traditionally hadn't been part of their mandate. In a 2018 McKinsey survey, four in ten CFOs said they created the most value for their organizations through their strategic leadership and performance management. But less than half of the CFOs surveyed reported having the time to focus on capability building, either within the finance function or across the organization.[2]

It's critical for companies to give CFOs enough space to play this role in capability building. They are uniquely positioned not only to ensure that business units get the resources they need to invest in the infrastructure, technology, talent, and organizational changes required to thrive in the next normal but

[1] "Rethink capabilities to emerge stronger from COVID-19," McKinsey, November 23, 2020.
[2] "The new CFO mandate: Prioritize, transform, repeat," McKinsey, December 3, 2018.

also to model critical cross-functional behavior and skill sets.

Other denizens of the C-suite are only now catching on to the CFO's growing and varied responsibilities and emerging profile as financial controller, value manager, *and* strategic partner. In this article, we look at the primary ways CFOs can help companies build capabilities to prepare for the future—as well as the skills and mindsets that finance chiefs may need to ensure that their recommendations are heard.

Capabilities: How the CFO can help the organization

As organizations shift from responding to the COVID-19 pandemic to recovering from it, many are discovering that the capabilities of the workforce no longer match the needs of the marketplace.[3] Grocers, restaurants, and retailers that quickly shifted to online ordering and sales during the crisis, for example, have had to rethink their systems, processes, and supply chains and, in many cases, had to incorporate new technical capabilities and skill sets. But at a time when executives need to double down on capability building, they are finding that their efforts are falling short. In a 2020 McKinsey survey, for instance, just one-third of the respondents reported that capability-building programs often or always achieve their objectives and business impact.[4] To improve the odds of success, companies should leverage the CFO's expertise in three critical ways: identifying opportunities to invest in capabilities that can create significant value, boosting financial acumen at all levels, and supporting the company's overall talent-development efforts.

Identify opportunities to invest in value-creating capabilities

Capability building and financial performance are inextricably linked—having the right people with the right skills in the right places can promote operational efficiency, customer satisfaction, and other elements that feed sales, revenues, profits, and many other measures of performance. The good news is that CFOs have most of the required financial and operational data, as well as a cross-functional understanding of the business, in hand. They can therefore help companies identify the capabilities that can differentiate them from competitors.

One stumbling block for the CEO and other C-suite leaders, however, is the idea that investments in capability building must show immediate payoffs. In reality, most of the value from human-capital investments accrues over time. As U.S. Bank's Tim

One stumbling block for C-suite leaders is the idea that investments in capability building must show immediate payoffs. In reality, most of the value accrues over time.

[3] Jon Garcia, Garrett Maples, and Michael Park, "Closing the capability gap in the time of COVID-19," *McKinsey Quarterly*, November 13, 2020.
[4] "Rethink capabilities," November 23, 2020.

Welsh has noted, "Capability building never ends. It's an ongoing task. So you have to look for markers along the way that make you feel comfortable you're moving in the right direction." Those markers of success might include an increase in the number and quality of customer engagements and higher employee-satisfaction scores. "The likelihood is that these markers will point to more tangible measures: sales, deposit growth, loan-balance growth," said Welsh.[5]

Indeed, one of the biggest mistakes we've seen companies make in capability building is a failure to link learning and other development efforts directly to performance improvements. The CFO must guide other C-suite leaders through the long- and short-term trade-offs associated with investing in capability building and help them define the means and metrics to monitor progress toward stated performance goals.[6] The CFO at one food manufacturer, for instance, has assigned financial analysts to work directly with the operations team to collect and interpret real-time data on consumer preferences. The CFO uses the data and cross-functional relationships to help C-suite leaders track the need (and build the business cases) for skills and capabilities in specific areas of the business: as online sales increase, more investments may be required for user-experience designers, supply-chain specialists, or other kinds of experts.

Boost the organization's financial acumen

Employees across an organization often use the same terms to mean different things. "Profit," for example, can refer to profit dollars, profit per unit, profit margins, or even gross margin; "costs" can mean overhead, marketing investments, or even capital. To reduce confusion and increase efficiency in both operations and communications, CFOs must ensure that leaders up and down the organization use a common language to discuss finance. In this way, the CFO can build core functional capabilities for monitoring cash flows, establishing base and momentum cases, and using a range of scenarios in decision making, which are all critical to understanding how an organization can unlock more value.

At one consumer-goods company, the CFO became concerned enough about the general lack of business acumen outside the finance group to design an internal mini-MBA program and curriculum for high performers. This program aimed to help business-unit leaders better understand their divisions' roles within the global organization, the function's value-creating role within the division, the importance of the individual roles of the business-unit leaders, and how key performance indicators were wired into the company's operating model and strategic plan. The business-unit leaders also learned how the company made resource-reallocation decisions, what trade-offs might be required, and how they themselves could contribute to the company's success.

After the first sessions ended, the CFO noted instances when teams "really seemed to get it." Some, for instance, accepted fewer resources in the short term so that resources could be applied to other initiatives, which the business-unit leaders now understood to be more important for the company over the long term—with the benefits ultimately redounding to their own units over time. The CFO also organized frequent town halls and presentations about the organization's strategy so all functions could understand how the business model worked and their role in it. In this way, the CFO celebrated wins and reinforced the kind of behavior that drives success.

Now—and, frankly, always—it's critical for the CFO and CEO to work together to empower business-unit leaders and other employees to take ownership of cash-related decisions.[7] Particularly in the wake of the COVID-19 pandemic, cash preservation remains a critical concern for most organizations. How are they managing receivables, payables, and inventory? Are they wringing the most value from the balance sheet? Are operating and

[5] "'An environment where everybody can thrive': A conversation with U.S. Bank's Tim Welsh," *McKinsey Quarterly*, November 20, 2020.
[6] "The capability-building imperative: Make 'purposeful investments' in people," McKinsey, February 26, 2021.
[7] Michael Birshan, Michael Park, and Matt Stone, "Transforming the culture of managing working capital," McKinsey, January 4, 2018.

CFOs should complete capability programs themselves. Apart from role modeling the desired mindsets and behavior, they can also help C-suite leaders think about strategic imperatives as a cohesive whole.

capital expenditures under control? To build and reinforce a cash culture, the CFO can help highlight the executives and teams tackling these questions and managing cash well—for instance, rewarding teams that have reduced spending during the COVID-19 crisis without sacrificing product quality or customer satisfaction.[8]

'Lean in' for talent development

CFOs and their executive peers have a critical postpandemic opportunity to develop talent by systematically reviewing the talent profile, identifying the skills needed now and in the future, and working with HR leaders to map skill sets to strategic and operating plans. Retailers that shifted to a digital-ordering model during the COVID-19 pandemic, for instance, may require more data analysts, programmers, or other types of digital talent to maintain or build new online capabilities. If so, the CFO and other senior leaders may want to establish a skills matrix that outlines key roles and responsibilities relevant to the changed business context. Using this tool, which will need to be refreshed continually, managers can have frank conversations (during performance reviews, for instance) about the new skills and mindsets required in various parts of the organization and understand the associated investments in them.[9]

The CFO can also make the argument for preserving some or all of an organization's employee-training budgets. According to industry reports, overall training expenditures dropped significantly in 2009 and 2010 (the Great Recession), followed by a surge in 2011 and a drop back to 2008 levels in 2012. Rather than sacrifice long-term efficiency and resilience for short-term gains, organizations might be wise to stick with their existing talent-development investment plans, to the extent possible.[10]

More broadly, CFOs should walk the walk and complete capability programs themselves.[11] Apart from role modeling the desired mindsets and behavior, they can also, better than most, help business-unit and fellow C-suite leaders think about strategic imperatives as a cohesive whole, the skills needed to execute the plans, and the impact of these activities on the financial health of the company.

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[8] "Cash preservation in response to COVID-19," McKinsey, May 26, 2020.
[9] Steven Eklund, Michele Tam, and Ed Woodcock, "New technology, new rules: Reimagining the modern finance workforce," McKinsey, November 2, 2018.
[10] Sapana Agrawal, Aaron De Smet, Sébastien Lacroix, and Angelika Reich, "To emerge stronger from the COVID-19 crisis, companies should start reskilling their workforces now," McKinsey, May 7, 2020.
[11] "Capability building in 2030," McKinsey, February 26, 2021.

Capabilities: How CFOs can help themselves

Along with increased responsibilities, CFOs have taken on a broader set of challenges, and many of them may feel less than comfortable. For that reason, CFOs may need to reskill themselves in two key areas before they can help others reskill.

Amplify their voices

Most CFOs likely don't need to learn new finance skills—they are already well versed in the mechanics of budgeting, forecasting, and planning. But they may need to take a closer look at how they communicate: What are the best ways for them to impart key strategic information or finance concepts to others? If CFOs get this part right, they have an opportunity to amplify their own voice within the performance dialogue.

In one European metals company, for instance, the CFO and finance managers were the first points of contact for transforming the data generated by the advanced-analytics team and data scientists into specific actions the business could take to improve production-volume forecasts, factory usage, and pricing. The CFO was seen as a clear communicator and independent arbiter and therefore gained the trust of general managers. The suggested changes were implemented, raising the company's overall profitability. Most important, the CFO led from the front, proactively shaping the corporate agenda in addition to managing the traditional responsibilities, such as closing the books, reconciling actuals to budget, and generating month-end reports.

Step outside the finance silo

The CFO's worldview—or sense of how macro trends affect micro decisions—is unique, for it includes a comprehensive understanding of where individuals fit within teams, where teams fit within the company, where the company fits within its industry, and where the industry fits within a national and global context. To construct (and reconstruct) that worldview, the CFO must step outside of the finance silo and continually scan company operations, the industry, and the ever-changing global, political, and economic context. The CFO can complement this outside view with a perspective on the company's organizational dynamics, its strategic principles, and how it creates returns for shareholders. With this information, the CFO can help other C-suite leaders create a compelling vision for the future and share that vision with inspiration and conviction.

One high-growth organization, for example, faced a range of threats, such as new entrants in the market, rapidly changing costs, and competitive pricing.

CFOs have access to data, a cross-functional perspective, and an expanding role as value manager and strategy partner. They have a critical role to play in ensuring that companies develop the skills, mindsets, and behavior for long-term success.

It responded effectively, in part because the CFO and other executives had such a clear view of the shifting landscape. They assessed their existing business model against those of the new entrants, identified its strengths and weaknesses, and retooled it to better meet changing demand. The team built an empirical case for change, drawing on data and insights from the company's analytics efforts. Then it shared a compelling narrative with the rest of the organization, highlighting the opportunities for improvement and gaining buy-in. Over time, the organization operated more efficiently, gained more value from its key assets, and boosted its ROI to all-time highs.

Capability building must be front and center in any company's plans to prepare for the next normal. CFOs have access to data, a cross-functional perspective, and an expanding role as value manager and strategy partner. They therefore have a critical role to play in ensuring that companies develop the skills, mindsets, and behavior required for long-term success.

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2018

Memo to the CFO: Get in front of digital finance—or get left back

Companies are still in the early stages of applying digital technologies to finance processes in ways that will create more efficiencies, insights, and value over the long term. Here is how the CFO can lead the way.

by Kapil Chandra, Frank Plaschke, and Ishaan Seth

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The digital finance organization remains an emerging concept in many organizations, and CFOs are still at one remove from the center of digital-transformation efforts, even though they own and manage much of the relevant business information that feeds such initiatives. There is a clear mandate for them to take the lead: today's CEOs and boards say they want CFOs and the finance function to provide real-time, data-enabled decision support. And, in our most recent survey of finance executives, CFOs themselves say they want to spend more time on digital initiatives and the application of digital technologies to finance tasks.[1]

But our research also shows that CFOs still spend less time on digital trends than they do on traditional finance activities. Why? There are few proven business cases of digitization in finance and few best practices to draw from, so CFOs are often content to let colleagues in IT, marketing, or other functions press the issue.

Many CFOs tell us they are unsure where to start; the rapid arrival of innovative technologies plus a general shortage of top technology talent won't make it any easier. CFOs must begin to experiment, however, or risk falling behind other functional groups in the organization and other companies in the industry whose digital transformations are already under way. They might lose a golden opportunity to help drive the business agenda.

A good start would be for CFOs to work with the CEO, the board, and others on the senior-leadership team to proactively and systematically identify tasks and processes within the finance function that

[1] "Are today's CFOs ready for tomorrow's demands on finance?," McKinsey, December 9, 2016.

would most benefit from digitization. They can then locate and invest in the technologies and capabilities required to improve these areas.

The digital future: Emerging use cases

Digitization is now a realistic goal for the finance function because of a range of technological advances. These include the widespread availability of business data; teams' ability to process large sets of data using now-accessible algorithms and analytic methods; and improvements in connectivity tools and platforms, such as sensors and cloud computing.

CFOs and their teams are the gatekeepers for the critical data required to generate forecasts and support senior leaders' strategic plans and decisions—among them, data relating to sales, order fulfillment, supply chains, customer demand, and business performance as well as real-time industry and market statistics.

There are four areas of technology that, right now, we believe show the most promise for use in finance (Exhibit 1):

— automation and robotics to improve processes in finance

— data visualization to give end users access to real-time financial information and improve organizational performance

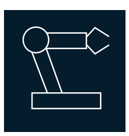
— advanced analytics for finance operations to accelerate decision support

— advanced analytics for overall business operations to uncover hidden growth opportunities

CFOs may decide to champion and pursue investments in one or all of these areas. Much will depend on the company's starting point—its current strategies, needs, and capabilities and its existing technologies and skill sets. It is important

Exhibit 1

Four digital technologies will reshape the finance function.



Automation and robotics: To improve processes

Enable planning and budgeting platforms in cloud-based solutions

Automate data reconciliation for single source of truth

Apply robotics to standardize report generation and allow for narrative commentary

Data visualization: To give end users real-time financial information

Generate user-friendly, dynamic dashboards and graphics tailored to internal customer needs

Deliver ubiquitous reports that can provide information at very detailed levels

Seamlessly combine information from multiple data sources[1]

Advanced analytics for finance: To accelerate decision support

Conduct top-down scenario analysis

Develop self-optimizing algorithms for preliminary sales forecasts

Develop demand models to improve working capital and inventory management

Advanced analytics for business: To uncover hidden shareholder value and growth opportunities

Support optimization of pricing and SKU lineup

Track resource utilization at detailed levels[2] and mirror against value creation and resource effectiveness

Create predictive models for early warning[3]

[1]Such as finance enterprise resource planning, customer relationship management, order volume, and market development.
[2]Such as sales force and marketing.
[3]On customer churn or credit risk, for instance.

to note that digital transformation will not happen all at once, and companies should not use their legacy enterprise resource planning and other backbone systems as excuses not to start the change. By working on small pilot projects and successfully digitizing the most critical tasks within finance, the CFO can establish proof points and ease the eventual rollout of digital technologies across the entire function and across other parts of the company.

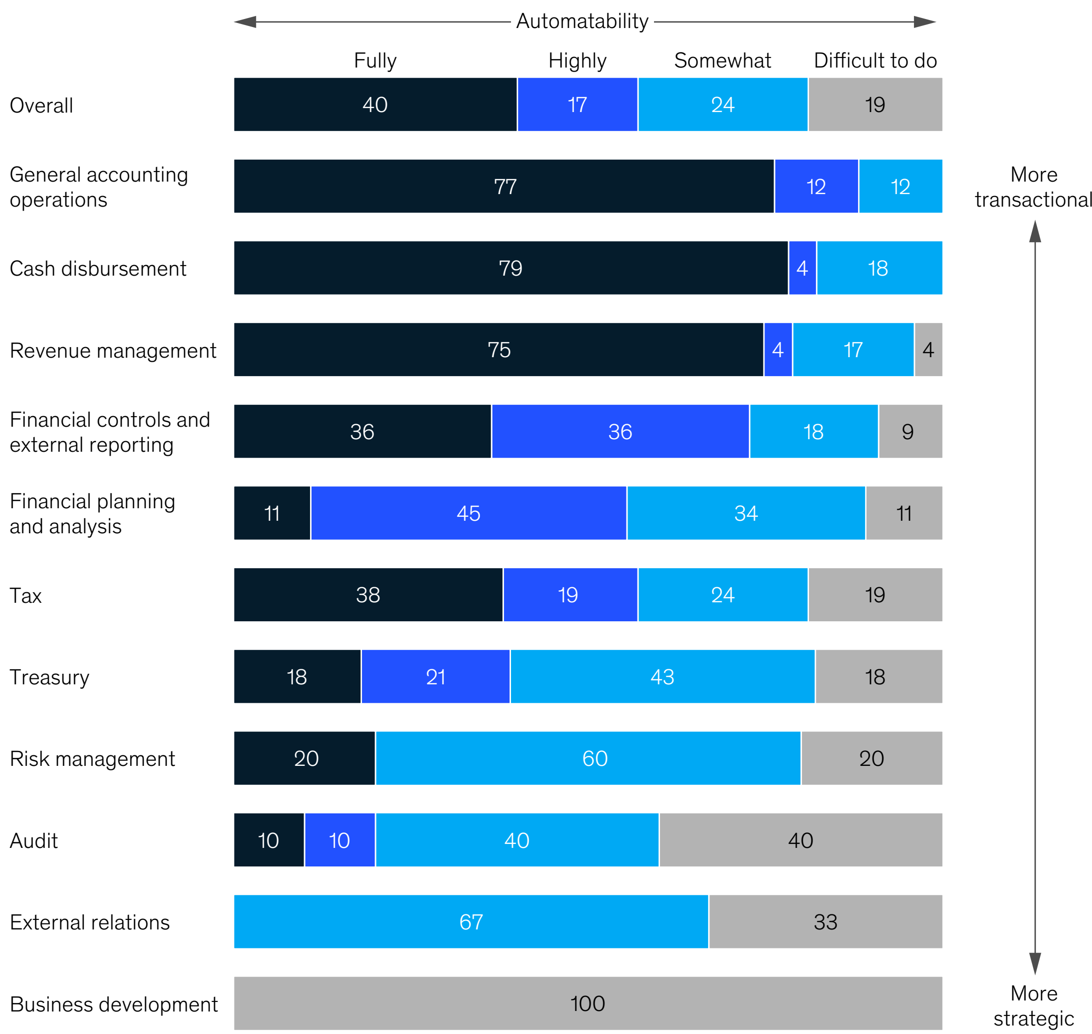
Simplifying processes through automation and robotics

Research from the McKinsey Global Institute concludes that 40 percent of finance activities (for instance, cash disbursement, revenue management, and general accounting and operations) can be fully automated, and another 17 percent can be mostly automated (Exhibit 2). Those figures demonstrate the degree to which CFOs and other

Exhibit 2

Many finance tasks and processes are at least somewhat automatable.

Potential for finance-function automation using demonstrated technologies, % share[1]



[1] Figures may not sum to 100%, because of rounding.
Source: McKinsey Global Institute analysis; McKinsey analysis

business leaders can simplify core internal transactions through automation, establish standardized reporting mechanisms, and work more efficiently.

A critical tool that leading-edge finance groups are already exploring is robotic process automation (RPA), a category of automation software that performs redundant tasks on a timed basis and ensures that they are completed quickly, efficiently, and without error.[2] Task-automation tools such as RPA have advanced to the point they are no longer applied only in discrete business activities but across multiple areas of the business. The companies successfully implementing RPA at scale have done so by altering their operating models and redesigning their processes. Finance staffers are receiving training on RPA technology, so they no longer need to throw workflow requests to an already overworked IT organization. That improvement has made it easier for some companies to move beyond RPA pilot tests and realize tangible outcomes.

After analyzing automation opportunities as a follow-up to a two-year lean-transformation process, a large European utility deployed RPA technology in several pilot areas, including “master data management.” Its process for creating system profiles for new vendors (or updating information on existing vendors), for instance, involved a series of manual tasks that could often take employees several hours a day to complete. But the end-to-end process steps were mainly rule-based, and all the data were in digital form, which made the “vendor-creation task” a key candidate for RPA. Ultimately, the utility increased overall productivity within the finance function in its shared-service group by about 20 percent, given time-and-cost savings associated with the deployment of RPA in this pilot area as well as several others.

The use of RPA at one European bank has created other advantages. The bank has combined RPA with natural-language-generation software to create monthly spending reports. A back-office system collects and analyzes the data and automatically builds the “spending story”—for example, listing key performance indicators and adding red flags in those instances with statistically meaningful changes in countries or product groups. Rather than having to take the time to generate such reports by hand, financial controllers can use the automated information to engage in higher-level tasks, such as considering how to address red flags.

Improving organizational performance through data visualization

If finance functions’ experiments with automation are largely about optimizing processes, their experiments with data visualization are about improving broader organizational performance. Indeed, to make good resource-allocation decisions, teams need real-time financial information. They often lack access to such data because stores of data are in different parts of a company, data formats are not comparable, or data are not available at all.

Some finance groups are pairing automation capabilities with data-visualization technologies, however, to create clear, timely, actionable business reports. These reports quickly push data to end users and present data in intuitive formats that encourage focused business discussions.

The finance organization at a large consumer-goods company, for instance, has deployed a self-service approach. Rather than wait for reports, sales staff can use visual dashboards (accessible from a laptop or mobile device) to get the data they need when they need it—by region, business unit, function, or other parameters as required. Sales managers and other executives pull the data from a central repository that is continually refreshed, so they can quickly get an accurate read on how demand is changing. This self-serve approach has decreased by more than 50 percent the need for the finance group to generate reports and has cut the cost of reporting by 40 percent.

Similarly, the executive board at a European technology company no longer uses PowerPoint. Business leaders instead use large touch screens to access real-time data about finances and operations. The information is presented in easy-to-

[2] Frank Plaschke, Ishaan Seth, and Rob Whiteman, “Bots, algorithms, and the future of the finance function,” McKinsey, January 9, 2018.

Digitization is now a realistic goal for the finance function because of a range of technological advances.

read graphs that highlight deviations from plan. The graphs are dynamic, redrawing themselves as users swap variables in and out.

The CFO and other business leaders will need to collaborate with the CEO, chief information officer, and IT organization to integrate data-visualization tools with a company's established systems. They will need to draw on expertise from data scientists and data analysts who might work in IT or directly with the finance function. Such experts can help the CFO rethink end-to-end finance processes (such as data-to-report, purchase-to-pay, and order-to-cash processes) and rebuild them using a visual, user-focused approach.

The CFO will also need to learn how to manage processes and communication within a "data democracy"—where business information is available anytime, anywhere, for everybody. It is inevitable in such an environment that the business units will request more and more data, not less. The CFO will need to work with the CEO and other business leaders to establish rules around data usage that reflect the specific information requirements of decision makers across the organization. They will also need to ensure that they are using the highest-quality data. Otherwise there will be analytical anarchy.

Finding value through advanced analytics

Companies in all industries are now experimenting with advanced analytics—mining troves of business data (on people, profits, processes, and so on) to find relevant insights that can improve business leaders' tactical decision making. Similarly, the CFO and the finance function can use advanced analytics to manage standard financial transactions and core processes more efficiently and shape (and accelerate) tactical discussions.

Once CFOs understand the role advanced analytics can play in improving financial processes, they can work with the CEO, the board, and other senior leaders to identify broader ways of applying advanced analytics to uncover new sources of business value. Indeed, every CFO should explicitly define the leadership role he or she wants to play in translating burning business questions into use cases for advanced analytics—whether to optimize pricing, identify customer churn, prevent fraud, manage talent, or explore a host of other applications.

Standard transactions

A truck manufacturer uses advanced analytics to monitor general sales of forklifts because it views this metric as an early indicator of its own sales. Finance teams at other companies are using advanced analytics to identify duplicate expenses and invoices or to connect the terms of procurement and payment schedules for a good or service with actual invoices so they can spot early or missed payments or opportunities to apply discounts.

Core finance processes

A chemical company uses advanced analytics to improve its demand forecasting. Traditionally, its forecasting models relied on basic, internal customer data and used historical trends to predict future demand. Furthermore, the forecasts were at an aggregate level—that is, for entire classes of chemicals rather than individual ones. The company cross-referenced internal customer data with external data sets, such as stock prices, revenues, weather, exchange rates, and business-cycle indexes, to generate forecasts for specific regions and SKUs. In this way, the company could examine whether existing forecasts were accurate or not and react accordingly.

Tactical discussions

A US consumer-goods company is exploring the use of advanced analytics in better predicting sales-volume changes associated with pricing moves for certain SKUs. The company is building a forecasting tool that will gather and analyze data on the SKUs in pilot testing; the data include macroeconomic factors, geographic factors, demographics, and other variables. Armed with this information, business leaders hope to be able to alter pricing decisions on the fly, as needed.

The digital agenda: Getting started

CFOs and their teams can kick-start the digitization process by taking inventory of core use cases and determining where they stand with each of the digital technologies cited here. They should ask themselves questions regarding the potential value gained from digitization of a finance process as well as the level of feasibility of doing so—a process that we call "performing a value scan." They should engage business-unit leaders in discussions about the pain points in various financial processes, such as slow reporting and incomplete data. They should undergo a systematic review of technology capabilities with members of the IT function to define system requirements and investments.

But to truly succeed in building a digital finance function, CFOs will need to address critical organizational and talent-related issues (Exhibit 3).

Exhibit 3

Executives typically face six obstacles to digitizing their finance functions.

Obstacle	Solution
Overall digital vision not clearly defined	Hold integrative discussions within your organization—bringing together representatives from all parts of organization—to come up with joint digital vision
Digital initiatives not linked to overarching business strategy	Link specific initiatives to elements of broader corporate strategy, identify linkages in strategy discussions, and monitor outcomes
Lack of clear, strong mandate to digitize processes across organization	Identify sponsor from top management who will openly promote the digital agenda,[2] and give owners of digital initiatives clear responsibility and authority over their projects
Backlash within finance function over changes resulting from digitization initiative[1]	Establish or redefine employee incentives so they align with digital agenda
Lack of understanding between digital-finance teams and business units	Work in cross-functional squads, integrating various business-unit perspectives as well as customer view
Gap between current capabilities and those required in digital-finance function	Set up a dedicated capability-building program in finance, and invest in top talent

[1]Such as process changes and role changes.
[2]Such as communicating successes.

It is important, for instance, to develop a clear vision of the desired target state for a digital finance function and how that links to the company's overall business and digital strategy. The CFO and other senior leaders will need to promote the digital agenda openly—for instance, by sharing success stories at town halls and team meetings and advocating for cross-functional collaboration between technology and business-operations teams.

The CFO should engage with other senior leaders to refine competency models, particularly those associated with the finance function, to recruit and retain the employees needed to carry out a digital agenda. Requirements might include a willingness to learn about new technologies or process-design expertise—skills that go above and beyond traditional finance tasks. CFOs and senior leaders might need to significantly redo incentives and compensation schemes to combat resistance to change and reward those who support the creation of a digital finance function. Such incentives can also help the company attract top digital talent.

Perhaps most important, CFOs will need to collaborate with other business leaders to ensure that any digitization and transformation efforts adhere to the company's cybersecurity standards. They might even invite members of the cybersecurity team to sit with members of the IT and finance functions to share objectives and discuss mutual concerns.[3] The CFOs who lead the charge toward digitization will not only help the finance function work more efficiently—potentially bolstering their candidacies for leadership positions inside or outside their organizations—but also become stronger partners of CEOs and business units.

For all the benefits of digitizing the finance function we have outlined, there are many issues a bot or an algorithm still cannot address, such as when you have collected scant data or when you are assessing strategies over a longer time horizon and more human judgement is necessary. But the possibilities far outweigh the obstacles at this point, and the mandate is clear: CFOs must develop and share with other senior leaders a vision for a digital finance function. They have a clear opportunity to shape the evolution of their companies and gain valuable insights and experiences along the way. But those insights and experiences will not come if CFOs don't take the first steps.

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[3] Jason Choi, James Kaplan, and Harrison Lung, "A framework for improving cybersecurity discussions within organizations," McKinsey, November 10, 2017.

2018

Bots, algorithms, and the future of the finance function

Automation and artificial intelligence are poised to reshape the finance function. Knowing what to automate and managing the disruption can lead to a new era of productivity and performance.

by Frank Plaschke, Ishaan Seth, and Rob Whiteman

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For years, a global pharmaceutical company had outsourced its procure-to-pay finance activities, such as processing invoices and paying suppliers. Savings from low-cost labor and improved processes had yielded savings, but managers were eager to explore whether automation could unlock new opportunities. After assessing for themselves how much work could be automatable, estimating the value at stake, and calculating the investment required, they challenged the company's offshore business-process outsourcer (BPO) to show that it could compete with an automated model. In the end, the pharmaco managers decided not to bring the outsourced elements home to automate. But they did renegotiate the company's BPO contract, saving 40 percent or more over the next three years.

Offshoring, outsourcing, and centralization have been the bread and butter of improving the finance function's productivity for decades. As the pharmaco's experience shows, tech-savvy CFOs are now considering automation to propel a new wave of efficiency and performance. By our assessment, the economics of automating many finance activities are already compelling—a resounding success in some areas, even if performance is mixed in others. Today's cheaper, better, and faster technology seems destined to reshape the finance function—and without the multiyear headaches that many CFOs associate with early enterprise-resource-planning (ERP) installations.

As in other business settings where automation has become increasingly viable, its implications in finance look to be disruptive for companies and outsourcers alike. The trend raises issues that executives must consider as they adopt a more automated finance operating model, whether internally or through outsourcing. For starters, automating the finance function may be enticing conceptually, but benefits can be elusive. CFOs will need a clearer understanding of what kinds of activities can be automated. To take full advantage of the opportunity, they'll also need to rethink processes and organizations around the technology in a fundamental way. And they will need to manage the disruption to get through the effort without breaking an already stretched function.

Understand what can be automated

Finance organizations perform a wide range of activities, from collecting basic data to making complex decisions and counseling business leaders. As a result, the potential for improving performance through automation varies across subfunctions and requires a portfolio of technologies to unlock the full opportunity. Applying the same methodology outlined in the McKinsey Global Institute's automation research, we found that currently demonstrated technologies can fully automate 42 percent of finance activities and mostly automate a further 19 percent.

About a third of the opportunity in finance can be captured using basic task-automation technologies such as robotic process automation (RPA). Working atop existing IT systems, RPA is a class of general-purpose software often referred to as "software robotics"—not to be confused with physical robots. RPA and complementary technologies, like business-process management and optical character-recognition tools, have been applied successfully across a number of activities in finance (exhibit).

Many of the technologies that enable basic task automation, including robotic process automation, have been around for some time—but they've

Exhibit

Many activities in the finance function can be automated.

Accounting	• Automating complex journal entries • Performing and documenting account reconciliations • Calculating and applying allocations • Maintaining fixed-asset accounts	**Financial planning and analysis**	• Building standard management reports • Consolidating and validating budget and forecast inputs • Gathering and cleaning data for analysis
Accounts payable	• Entering nonelectronic-data-interchange invoices • Performing 2- and/or 3-way invoice matches • Processing expense-approval requests • Completing audits (eg, duplicate supplier payments)	**Payroll**	• Flagging time-sheet errors and omissions • Auditing reported hours against schedule • Calculating deductions • Harmonizing data across multiple timekeeping systems
Accounts receivable	• Generating and validating invoices • Applying cash to outstanding balances • Analyzing and processing disputes • Creating reports (eg, accounts-receivable aging, credit holds)	**Other**	• Preparing external-reporting templates • Conducting transaction audits of high-risk areas • Preparing wire-transfer requests

been getting better, faster, and cheaper over the past decade. Moreover, many automation platforms and providers were start-ups a decade ago, when they struggled to survive the scrutiny of IT security reviews. Today, they're well established, with the infrastructure, security, and governance to support enterprise programs. Today's task-automation tools are also easier to deploy and use than first generation technologies. Where a manger once had to wait for an overtasked IT team to configure a bot, today a finance person can often be trained to develop much of the RPA work flow. We estimate that it makes sense from a cost/benefit perspective to automate about half of the work that can be technically automated using RPA and related task-automation technologies.

Capturing the remainder of the opportunity requires advanced cognitive-automation technologies, like machine-learning algorithms and natural-language tools. Although they are still in their infancy, that doesn't mean finance leaders should wait for them to mature fully. The growth in structured data fueled by ERP systems, combined with the declining cost of computing power, is unlocking new opportunities every day.

One technology company, for example, developed an algorithm that monitors internal and external data to audit expense reports. The algorithm cross-checks them against travel data and personnel data—since travel needs vary by role and rank—to highlight potentially fraudulent activity. In this case, the company uses the output to identify areas where policies may be unclear, not for enforcement. A similar effort enabled the company to audit vacation time continuously: an algorithm compared declared vacation days with data from badge swipes and computer-usage data to confirm whether employees were reporting vacation time accurately. Cases like these represent the beginning, not the end, of what's possible with cognitive-automation technologies.

Rethink people and processes around the technology

Today, processes in the finance function are purposefully designed to harness the collective brain power and knowledge of many people. The temptation for managers as they implement an automation program is to follow that same pattern, retrofitting a particular automation tool into the existing process. Moreover, managers often see automation as a technology initiative that can be led by the IT department. As a result, companies end up with a patchwork of incongruous technology tools that automate separate and distinct parts of the process. This approach is fine for capturing the first 5 percent or so of automation's impact. But unlocking the full potential requires a fundamentally different way of thinking.

To capture that potential, managers must be willing to reengineer their processes completely. At one global financial company, for example, team managers systematically went through each part of the record-to-report process, redesigning the activities and organizational structures around a portfolio of technologies. These managers used task-automation technologies such as robotic process automation for purposes such as preparing journal entries, as well as cognitive-automation technologies such as machine learning to reconcile differences among disparate accounting records. Although they haven't yet begun deploying natural-language tools to produce report commentary,[1] they have not only proved that these technologies work but also designed their processes to adopt them down the road. The result was a road map that these managers expect will unlock 35 percent savings from automation over the next two years.

At a heavy-equipment producer, managers had long used spreadsheets to forecast monthly sales and production. Frustrated with the time consumed and the imprecision of manual forecasts, they tasked a team of four data scientists with developing an

[1] As opposed to commentary written by people.

Especially in transactional functions, the hard reality is that automation—if implemented effectively—will inevitably lead to changes in organizational structures, redefined roles, and layoffs.

algorithm that would automate the entire process. Their initial algorithm used all the original sales and operations data, as well as additional external information (about weather and commodities, for example). In this case, within six months, the company eliminated most of the manual work required for planning and forecasting—with the added benefit that the algorithm was better at predicting market changes and business-cycle shifts.

Manage the disruption

In theory, finance has many opportunities to redeploy its people. Financial-planning and financial-analysis professionals could be retasked to support the business. Tax specialists could be refocused to maximize after-tax income.

But, especially in transactional functions, the hard reality is that automation—if implemented effectively—will inevitably lead to changes in organizational structures, redefined roles, and layoffs. At one global financial institution, the CFO is on pace to release a quarter of the company's 20,000-person shared-services organization over the next 24 months. That's bound to be disruptive, and there's no point in pretending these realities don't exist or trying to hide an automation program behind closed doors.

The leadership and vision of the CFO, in particular, are paramount, just as with any finance transformation. In our experience, the best approach is to manage automation systematically along these lines:

Start with the more mundane, transactional tasks, which inherently have higher turnover. Rather than releasing a lot of people, in many cases you just don't fill existing roles as people leave. Also, such roles usually don't require a major organizational redesign to capture automation's benefits. A team that currently requires 20 people could simply reduce its head count to ten by using a fully or partially automated solution. Going after basic tasks first allows the remaining employees to focus on the more professionally rewarding tasks, and early wins create the capacity and funding that help the finance function to fund other parts of the automation journey by itself.

One institution started by rolling out some 200 bots to automate work at its offshore shared-services centers. That allowed the company to develop a playbook, a governance model, and a workforce-management strategy that could be deployed elsewhere. It also created the foundation needed to consider automating more complex, higher-order processes, such as financial modeling and audit.

Create a human-resources and placement capability that works in lockstep with the CFO and the finance function.
Automating more complex activities, such as a company's controllership and tax functions, often means releasing people, since these areas have less turnover than more transactional work. For many companies, redeploying people has proved a challenge. Most just take the savings or, worse, incur new automation costs without a corresponding reduction in labor spending. Thoughtful workforce planning is critical.

Communicating a plan for the affected workers well before automation tools are introduced can help. The necessary steps include designing the future organizational structures, telling people exactly what you'll do to evaluate them fairly, and promising to do your utmost to create opportunities for redeploying personnel. Maintaining a constant lineup of open positions in finance and other parts of the company can further minimize the impact on people. Honesty and transparency are critical.

One North American bank, for example, explicitly mapped the automation solutions it was using to the approximately 200 finance employees affected. Before the organization introduced the technology, it had a plan to redeploy employees in more valuable roles. To date, the company has found ways to redeploy nearly 50 of them to other areas within and outside the finance function.

Adapt the recruiting and retention profile to get the finance professionals you need.
Even if technology intimidates some employees, a willingness—and ability—to learn new tools is important. Future leaders will be quite excited by a function on the leading edge of digitization and automation. And even CFOs of companies that aren't planning an automation program in the next year or two should seek out and recruit people who will be prepared for it when it happens.

One technology company undertook such an effort by creating an internship program to attract machine-learning talent to the finance function. The company maintains data sets that can be used to automate activities ranging from financial forecasting to internal audit. Each year, two or three students from a local university spend the summer building algorithms and bots. Not all of these efforts succeed, but the company has begun implementing at least half a dozen solutions developed by the interns. Similar programs will be critical to attracting talent that can lead an increasingly automated finance function.

Automation is already reshaping the future of work in the finance function, and the opportunity to boost performance will fuel the trend. Adapting to disruption is challenging, but CFOs who build a clear early perspective on the nuances of the automation journey will be well positioned to thrive.

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Debiasing investment and strategy decisions

Think fast: Who invented behavioral economics and behavioral finance? Pioneers such as Daniel Kahneman, Amos Tversky, and others brought an understanding of decision making, rationality, and biases to the mainstream by the end of the 20th century.

But three centuries earlier, Joseph Penso de la Vega—born to a family of Spanish–Portuguese Jewish refugees who resettled in Amsterdam—was already theorizing about how human decision making can influence financial choices. In his seminal 1688 work *Confusión de Confusiones* (*Confusion of Confusions*), de la Vega remarked that he often saw incongruities at the stock exchange. He observed that poor outcomes resulted from the way people tended to behave, and that good ideas could be muddled by common wisdom.

"If, for example," Penso de la Vega wrote, "there arrives a piece of news which would induce [someone] to buy, while the atmosphere prevailing at the stock exchange forces him to sell, his reasoning fights his own good reasons . . . his reasoning drives him to buy, because of the information that has just arrived," but he decides to sell nonetheless. Why? The risks, even considering the new information, can suddenly feel too high. Or because the market seems to know something, the market must be correct—right?

Not necessarily. As de la Vega pointed out, and as people and businesses continue to grapple with today, information can be incomplete. Perspectives can exist beyond those of any one person's immediate or broader circle, and different scenarios can lead to very different outcomes.

In a financial context, managers should work to maximize future cash flows, weighting scenarios by their assumed probabilities. Too often, even the smartest and best-informed managers wind up making decisions based on what feels comfortable—or more likely feels the least uncomfortable—even when they have a nagging suspicion that reasoning and reasons don't quite match up or that not all voices have been heard.

Biases are not just part of the human condition; they can also flourish throughout organizations. More and more, we've been pushing our own thinking about how to debias decisions, particularly with respect to resource allocation and strategy.

2012

Overcoming a bias against risk

Risk-averse midlevel managers making routine investment decisions can shift an entire company's risk profile. An organization-wide stance toward risk can help.

by Tim Koller, Dan Lovallo, and Zane Williams

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Here's a quick test of your risk appetite. Your investment team has approached you with two variations of the same project: you can either invest $20 million with an expected return of $30 million over three years or you can invest $40 million with an expected return of $100 million over five years (and a bigger dip in earnings in the early years). In each case, the likelihood that the project will fail and yield nothing is the same. Which would you choose?

Much of the commentary about behavioral economics and its applications to managerial practice, including our own, warns against overconfidence—that biases in human behavior might lead managers to overstate the likelihood of a project's success and minimize its downside.[1] Such biases were certainly much debated during the financial crisis.

Often overlooked are the countervailing behavioral forces—amplified by the way companies structure their reward systems—that lead managers to become risk averse or unwilling to tolerate uncertainty even when a project's potential earnings are far larger than its potential losses.[2] In fact, the scenario above is based on the experience of a senior executive in a global high-tech company who ultimately chose the smaller investment with the lower up-front cost. That variation of the project would allow him to meet his earnings goals, and even though the amount of additional risk in the second variation was small—and more than offset by a five-fold increase in the net present value—it still outweighed the potential rewards *to him*.

For projects of this size at a large company, the profit forgone by choosing a safer alternative—putting less money at risk with a shorter time to payoff—is modest: in this case, about $20 million. But the scenario becomes more worrying when you consider that dynamics like this play out many times per year across companies, where decisions are driven

[1] Daniel Kahneman and Dan Lovallo, "Delusions of success: How optimism undermines executives' decisions," *Harvard Business Review*, July 2003.
[2] Daniel Kahneman and Dan Lovallo, "Timid choices and bold forecasts: A cognitive perspective on risk taking," *Management Science*, January 1993.

by the risk appetite of individual executives rather than of the company as a whole. In a single large company making hundreds of such decisions annually, the opportunity cost would be $2 billion if this were to happen even 20 times a year over five years. Variations of this scenario, played out in companies across the world, would result in under-investment that would ultimately hurt corporate performance, shareholder returns, and the economy as a whole.

Mitigating risk aversion requires that companies rethink activities associated with investment projects that cause or exacerbate the bias, from the processes they use to identify and evaluate projects to the structural incentives and rewards they use to compensate managers.

A widespread challenge

The right level of risk aversion depends on the size of the investment. CEOs making decisions about large, unique investments are typically more risk averse than overconfident—and they should be, since failure would cause financial distress for the company.

In contrast, midlevel executives making repeated decisions about the many smaller investments that a company might make during the course of a year—expanding a sales force at a consumer goods company into a new geography, for example, or introducing a product-line extension at an electronics firm—should be risk neutral. That is, they should not overweigh negative or positive outcomes relative to their actual likelihood of occurrence. Decisions about projects of this size don't carry the risk of causing financial distress—and aversion to risk at this level stifles growth and innovation. Risk aversion is also unnecessary because statistically, a large number of projects are extremely unlikely all to fail (unless they are highly correlated to the same risks). Yet many managers at this level—who make many such investments over a career—exhibit an unwarranted aversion to risk.

In fact, we frequently run across CEOs stymied by their company's struggle with risk; decisions that may be in the best interest of individual executives, minimizing the risk of failure, are actually harmful for their companies. As the CEO at a manufacturing company observed, his company's business unit–level leaders gravitate toward relatively safe, straightforward strategies with earnings goals that seem reachable, even if these strategies mean slower growth and lower investment along the way. We have also heard from many nonexecutive board members that their companies are not taking enough risks.

Mitigating risk aversion requires that companies rethink activities that cause or exacerbate bias, from the processes they use to evaluate projects to the structural incentives they use to compensate managers.

Their anecdotal observations are consistent with findings we reported last year that suggested executives are as risk averse about small investments as they are about large ones.[3] When we tested how 1,500 executives from 90 countries reacted to different investment scenarios, we discovered that they demonstrated extreme levels of risk aversion regardless of the size of the investment, even when the expected value of a proposed project was strongly positive. Specifically, when presented with a hypothetical investment scenario for which the expected net present value would be positive even at a risk of loss of 75 percent, most respondents were unwilling to accept it on those terms. Instead, they were only willing to accept a risk of loss from 1 to 20 percent—and responses varied little, even when the size of the investment was smaller by a factor of ten. This is almost shocking, as it suggests that the level of risk aversion is remarkably constant within organizations, when it should vary based on the size of the investment and its potential to cause financial distress.

Understanding the source of risk aversion

Much of the typical risk aversion related to smaller investments can be attributed to a combination of two well-documented behavioral biases. The first is *loss aversion*, a phenomenon in which people fear losses more than they value equivalent gains. The second is *narrow framing*, in which people weigh potential risks as if there were only a single potential outcome—akin to flipping a coin only once—instead of viewing them as part of a larger portfolio of outcomes—akin to flipping, say, 50 coins. Together, these two biases lead to a distinctive set of preferences outlined in Daniel Kahneman and Amos Tversky's prospect theory, which was largely the basis for Kahneman's 2002 Nobel Prize in Economics.[4]

Consider a simple example of a risk-averse manager[5] weighing whether to invest $50 million today in a project that has an equal likelihood of returning either $100 million or $0 a year from now. If we were to ignore the time value of money, we would expect a risk-neutral manager to be indifferent to the project—because the potential gains are equal to the potential losses. If the upside were greater than $100 million, we would expect the same manager to make the investment. However, the upside would have to be almost $170 million to entice the typical risk-averse manager to make the investment. In other words, the upside would have to be about 70 percent larger in order for that manager to overcome his or her aversion to risk.

But what if we were to pool these risks across multiple projects? If the same manager faced not one decision but ten, the story would change. The manager's range of outcomes would no longer be an all-or-nothing matter of success or failure, but instead a matter of various combinations of outcomes—some more successful, some less. In this case, the same manager would be willing to invest if the upside were only $103 million, or only 2 to 3 percent above the risk-neutral point. In other words, pooling risks leads to a striking reduction in risk aversion.

Many of the managerial tactics used by companies in their capital allocation and evaluation processes fail to take note of these basic behaviors. By considering the success or failure of projects in isolation, for example, they fail to understand how each will add risk to the company's overall portfolio and institutionalize a tendency toward risk aversion, essentially recreating the narrow framing that occurs at the individual level. To make matters worse, many companies also hold individuals responsible for the outcomes of single projects that have substantial uncertainty and fail to distinguish between "controllable" and "uncontrollable" events, leaving people accountable for outcomes they cannot influence. As a result, many companies wind up with risk aversion at the corporate level that resembles that at the individual level—squandering the risk-bearing advantages of size and risk pooling that should

[3] Tim Koller, Dan Lovallo, and Zane Williams, "A bias against investment?," McKinsey, September 1, 2011.
[4] Daniel Kahneman and Amos Tversky, "Prospect theory: An analysis of decision under risk," *Econometrica*, 1979, Volume 47, Number 2.
[5] That is, a manager with a standard concave utility curve of the type U(x) = x.575 in the domain of gains.

Companies can reduce the effects of risk aversion by promoting an organization-wide attitude toward risk that guides individual executive decisions.

be one of their greatest strategic advantages. In fact, many companies seem to exacerbate loss aversion, which is the primary driver of risk aversion.

Toward a company-wide approach to risk

Companies can reduce the effects of risk aversion, where appropriate, by promoting an organization-wide attitude toward risk that guides individual executive decisions. More specifically, companies should explore the following:

Up the ante on risky projects. Risk-averse organizations often discard attractive projects before anyone formally proposes them. To encourage managers and senior executives to explore innovative ideas beyond their comfort levels, senior executives might regularly ask them for project ideas that are risky but have high potential returns. They could then encourage further work on these ideas before formally reviewing them. They could also require managers to submit each investment recommendation with a riskier version of the same project with more upside or an alternative one.

Consider both the upside and downside. Executives should require that project plans include a range of scenarios or outcomes that include both failure and dramatic success. Doing so will enable project evaluators to better understand their potential value and their sources of risk. These scenarios should not simply be the baseline scenario plus or minus an arbitrary percentage. Instead, they should be linked to real business drivers such as penetration rates, prices, and production costs. For example, when evaluating the introduction of a new consumer goods product, managers should explicitly consider what a “home run” scenario would look like—one with high market share or high realized unit prices. They should also look at a scenario or two that captures the typical experience of product introductions, as well as one scenario where it flops. By forcing this analysis, executives can ensure that the likelihood of a home run is factored into the analysis when the project is evaluated—and they are better able to thoughtfully reshape projects to capture the upside and avoid the downside.

Avoid overcompensating for risk. Managers should also pay attention to the discount rates they use to evaluate projects. We repeatedly encounter planners who errantly use a higher discount rate simply because an outcome is more uncertain or the range of possible outcomes is wider (see “Avoiding a risk premium that unnecessarily kills your project”). Higher discount rates for relatively small but frequent investments, even if they are individually riskier, do not make sense once projects are pooled at a company level.

Instead, if companies are concerned about risk exposure, they might adopt a rule that any investment amounting to less than 5 to 10 percent of the company's total investment budget must be made in a risk-neutral manner—with no adjustment to the discount rate.

Evaluate performance based on portfolios of outcomes, not single projects. Wherever possible, managers should be evaluated based on the performance of a portfolio of outcomes, not punished for pursuing more risky individual projects. In oil and gas exploration, for example, executive rewards are not based on the performance of individual wells but rather on a fairly large number of them—as many as 20 in one company. Hence, it may not be surprising to find that oil and gas executives pool risks and are more risk neutral.

Reward skill, not luck. Companies need to better understand whether the causes of particular successes and failures were controllable or uncontrollable and eliminate the role of luck, good or bad, in structuring rewards for project managers. They should be willing to reward those who execute projects well, even if they fail due to anticipated factors outside their control, and also to discipline those who manage projects poorly, even if they succeed due to luck. Although not always easy to do, such an approach is worth the effort.

The corporate center must play an active role in implementing such changes—in setting policy, facilitating risk taking, and serving as a resource to help pool project outcomes. It will need to become an enabler of risk taking, a philosophy quite different from that currently expressed by many corporate centers. The office of the CFO should also be involved in oversight, since it is particularly well suited to serve as manager of a company's portfolio of risks, making trade-offs between them and taking a broader view of projects and the effects of risk pooling.

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2018

Debiasing the corporation: An interview with Nobel laureate Richard Thaler

The University of Chicago professor explains how executives can battle back against biases that can affect their decision making.

by Bill Javetski and Tim Koller

Whether standing at the front of a lecture hall at the University of Chicago or sharing a Hollywood soundstage with Selena Gomez, Professor Richard H. Thaler has made it his life's work to understand and explain the biases that get in the way of good decision making.

In 2017, he was awarded the Nobel Prize for four decades of research that incorporates human psychology and social science into economic analysis. Through his lectures, writings, and even a cameo in the feature film *The Big Short*, Thaler introduced economists, policy makers, business leaders, and consumers to phrases like "mental accounting" and "nudging"—concepts that explain why individuals and organizations sometimes act against their own best interests and how they can challenge assumptions and change behaviors.

In this edited interview with McKinsey's Bill Javetski and Tim Koller, Thaler considers how business leaders can apply principles of behavioral economics and behavioral finance when allocating resources, generating forecasts, or otherwise making hard choices in uncertain business situations.

Write stuff down

One of the big problems that companies have in getting people to take risks, is something called hindsight bias—that after the fact, people all think they knew it all along. So if you ask people now, did they think it was plausible that we would have an African-American president before a woman president, they say, "Yeah, that could happen." All you needed was the right candidate to come along. Obviously, one happened to come along. But, of course, a decade ago no one thought that that was more likely. So, we're all geniuses after the fact. Here in America we call it Monday-morning quarterbacking.

One of the problems is CEOs exacerbate this problem, because they have hindsight bias. When a good decision happens—good meaning ex ante, or before it gets played out—the CEO will say, "Yeah, great. Let's go for that gamble. That looks good." Two years later, or five years later, when things have played out, and it turns out that a competitor came up with a better version of the same product that we all thought was a great idea, then the CEO is going to remember, "I never really liked this idea."

One suggestion I make to my students, and I make this suggestion about a lot of things, so this may come up more than once in this conversation, is "write stuff down." I have a colleague who says, "If you don't write it down, it never happened."

What does writing stuff down do? I encourage my students, when they're dealing with their boss—be it the CEO or whatever—on a big decision, not whether to buy this kind of computer or that one but

Richard H. Thaler

Vital statistics
Born September 12, 1945, in East Orange, New Jersey

Education
Holds a PhD and a master's degree in economics from the University of Rochester and a bachelor's degree in economics from Case Western Reserve University

Career highlights
University of Chicago, Booth School of Business
1995–present
Charles R. Walgreen Distinguished Service Professor of Behavioral Science and Economics, and director of the Center for Decision Research

Cornell University, Samuel Curtis Johnson Graduate School of Management
1988–95
Henrietta Johnson Louis Professor of Economics, and director of the Center for Behavioral Economics and Decision Research

1986–88
Professor of economics

1980–86
Associate professor

Rochester University Graduate School of Management
1974–78
Assistant professor

Fast facts
Awarded the 2017 Nobel Prize in Economic Sciences

Codirector (with Robert J. Shiller) of the Behavioral Economics Project at the National Bureau of Economic Research

Has written several books, including *Nudge: Improving Decisions about Health, Wealth, and Happiness* (Penguin Books, 2008), coauthored with Cass R. Sunstein, and *Misbehaving: The Making of Behavioral Economics* (W. W. Norton & Company, 2015)

Has published articles in prominent journals, such as *American Economics Review*, *Journal of Finance*, and *Journal of Political Economy*

Is a member of the American Academy of Arts and Sciences, a fellow of the American Finance Association and the Econometrics Society, and a former president of the American Economic Association career-building or -ending decisions, to first get some agreement on the goals, what are we trying to achieve here, the assumptions of why we are going to try this risky investment. We wouldn't want to call it a gamble. Essentially [we need to] memorialize the fact that the CEO and the other people that have approved this decision all have the same assumptions, that no competitor has a similar product in the pipeline, that we don't expect a major financial crisis.

You can imagine all kinds of good decisions taken in 2005 were evaluated five years later as stupid. They weren't stupid. They were unlucky. So any company that can learn to distinguish between bad decisions and bad outcomes has a leg up.

Forecasting follies

We're doing this interview in midtown New York, and it's reminding me of an old story. Amos Tversky, Danny Kahneman, and I were here visiting the head of a large investment company that both managed money and made earnings forecasts.

We had a suggestion for them. Their earnings forecasts are always a single number: "This company will make $2.76 next year." We said, "Why don't you give confidence limits: it'll be between $2.50 and $3.00, 80 percent of the time."

They just dropped that idea very quickly. We said, "Look, we understand why you wouldn't want to do this publicly. Why don't you do it internally?"

Duke [University] does a survey of CFOs I think every quarter. One of the questions they ask them is a forecast of the return on the S&P 500 for the next 12 months. They ask for 80 percent confidence limits. The outcome should lie between their high and low estimate 80 percent of the time. Over the decade that they've been doing this, the outcome occurred within their limits a third of the time, not 80 percent of the time.

The reason is their confidence limits are way too narrow. There was an entire period leading up to the financial crisis where the median low estimate, the worst-case scenario, was zero. That's hopelessly optimistic. We asked the authors, "If you know nothing, what would a rational forecast look like, based on historical numbers?" It would be plus 30 percent on the upside, minus 10 percent on the downside. If you did that, you'd be right 80 percent of the time—80 percent of the outcomes would occur in your range. But, think about what an idiot you would look like. People would say, "Really? That's your forecast? Somewhere between plus 30 and minus ten?" It makes you look like an idiot.

It turns out it just makes you look like you have no ability to forecast the stock market, which they don't; nor does anyone else. So providing numbers that make you look like an idiot is accurate. Write stuff down. Anybody that's making repeated forecasts, there should be a record. If you have a record, then you can go back. This takes some patience. But keeping track will bring people down to earth.

Nudging the corporation

The organizing principle of nudge is something we call choice architecture. Choice architecture is something that can be applied in any company. How are we framing options for people? How is that influencing the choices that they make? It can go anywhere from the mainstream ideas of nudge, so, say, it might involve making employees healthier.

One of the nice things about our (I call it) new building at Chicago Booth—I think it must be getting close to 15 years old, but to us it's still a new building—one of the things the architect did was the faculty is divided across three floors: third, fourth, and fifth floors. There are open stairwells that connect those floors, which does two things. One, it gives people a little more exercise. Because those stairs are very inviting, in a way that the stairwells that serve as fire exits are just the opposite.

Two, it makes us feel more connected. You can hear people. I'm on the fourth floor, so in the middle. If I walk down the hall, I may have a chance encounter not just with the people on my floor but even

There's lots of talk about diversity these days. We tend to think about that in terms of things like racial diversity, gender diversity, and ethnic diversity. Those are all important. But it's also important to have diversity in how people think.

with people on the adjacent floors. Because I'll hear somebody's voice, and I wanted to go talk to that guy.

There are lots of ways you can design buildings that will make people healthier and make them walk more. I wrote a little column about this in the *New York Times*, about nudging people by making stuff fun. There was a guy in LA [Los Angeles] who wrote to me and said that they took this seriously. They didn't have an open stairwell in their building, but they made the stairwell that they did have more inviting. They put in music and gave everybody two songs they could nominate. They put in blackboards where people could post decorations and funny notes. I was reading something recently about another building that's taken this idea.

Since you have to use a card to get in and out of the doors, they can keep track of who's going in and out. So they can give you feedback on your phone or your Fitbit on how many steps you've done in the stairwells. [The same principles of nudge can be applied to] every decision the firm is making.

On diversity

There's lots of talk about diversity these days. We tend to think about that in terms of things like racial diversity, gender diversity, and ethnic diversity. Those things are all important. But it's also important to have diversity in how people think.

When I came to Chicago in 1995, they asked me to help build up a behavioral-science group. At the time, I was one of two senior faculty members. The group was teetering on the edge of extinction. We're close to 20 now, and as we've been growing, I've been nudging my colleagues.

Sometimes we'll see a candidate and we'll say, "That guy doesn't seem like us." They don't mean that personally. They mean that the research is different from the research we do. Of course, there is a limit. We don't want to hire somebody studying astro-physics in a behavioral-science department. But I keep saying, "No, we want to hire people that think differently from how we do, especially junior hires. Because we want to take risks." That's the place to take risks. That person does things that are a little different from us.

Either that candidate will convince us that that research is worthwhile to us, or will maybe come closer to what we do, or none of the above, and he or she will leave and go somewhere else. None of those are terrible outcomes. But you go into a lot of companies where everybody looks the same and they all went to the same schools. They all think the same way. And you don't learn.

There's a quote—I may garble it—from GM's Alfred P. Sloan, ending some meeting, saying something like, "We seem to be all in agreement here, so I suggest we adjourn and reconvene in a week, when people have had time to think about other ideas and what might be wrong with this."

I think strong leaders, who are self-confident and secure, who are comfortable in their skin and their place, will welcome alternative points of view. The insecure ones won't, and it's a recipe for disaster. You want to be in an organization where somebody will tell the boss before the boss is about to do something stupid.

You need to figure out ways to give people feedback, write it down, and don't let the boss think that he or she knows it all. Figure out a way of debiasing the boss. That's everybody's job. You'd like it to be the boss's job, but some bosses are not very good at it.

Making better decisions through technology

There's lots of fear about artificial intelligence. I tend to be optimistic. We don't have to look into the future to see the way in which technology can help us make better decisions. If you think about how banks decide whom to give a credit card and how much credit to give them, that's been done using a simple model for, I think, 30 years at least.

What I can see is that the so-called moneyball revolution in sports—which is gradually creeping into every sport—is making less progress in the human-resources side than it should. I think that's the place where we could see the biggest changes over the next decade. Because job interviews are, to a first approximation, useless—at least the traditional ones, where they ask you things like, "What do you see yourself doing in ten years, or what's your biggest weakness?"

So-called structured interviews can be better, but we're trying to change the chitchat into a test, to whatever extent you can do that. We wouldn't hire a race car driver by giving them an interview. We'd put them in a car, or better yet, because it would be cheaper, behind a video game and see how they drive.

It's harder to see how people make decisions. But there's one trading company I used to know pretty well. They would recruit the smartest people they could find right out of school. They didn't care if they knew anything about options. But they would get them to bet on everything, and amounts of money that, for the kids, would be enough that they would think about it. So there's a sporting event tonight, and they'd all have bets on it. What were they trying to do? They were trying to teach them what it feels like to size up a bet, what it feels like to lose and win. This was part of the training and part of the evaluation.

That was the job they were learning how to do, how to be traders. Now that job probably doesn't exist anymore, but there's some other job that exists. Figure out a way of mimicking some aspects of that, and test it, and get rid of the chitchat. Because all that tells you is whether you're going to like the person, which may be important if it's somebody you're going to be working with day and night. If a doctor is hiring a nurse that's going to work in a small office, it's important that you get along. But if you're hiring somebody that's going to come to work in a big, global company, the chance that the person interviewing that candidate will work with that candidate is infinitesimal. So we don't really care what the interviewer thinks of the interviewee. We care whether the interviewee will add something to the organization.

On loss aversion

I was teaching a course for maybe 22 executives, all from the same company. It was a horizontally integrated publishing company. The executives were each the head of some publication—a magazine, newspaper, what have you, back when there were such things. The CEO of the company was also attending, sitting in the back. I asked each of the executives, "How would you feel about an investment that will have one of two outcomes: half the time it will make $2 million. Half the time it will lose

$1 million. How many of you would take that investment?" Two guys raised their hand. I turned to the CEO, and I said, "Suppose I gave you a portfolio of such investments. And let's assume they're independent. How many of them do you want?" He said, "All of them." I said to the CEO, "Then you have a problem. You want 23 of these investments. You're getting two. You're doing something wrong."

We started talking to the individual executives about why [most of them] wouldn't take that investment. They said, "Look, it wouldn't make any sense for me to take it. Suppose I get the good outcome. Maybe I get a $50,000 bonus and a pat on the back. But suppose it doesn't work out and I get fired. That's not a good gamble." The odds for the company were great, but the odds for each individual decision maker were lousy.

How can you solve that problem? The only way I know of really is to aggregate. That's what the CEO was doing, he was aggregating. You have to take that perspective—which is hard to do in life, because decisions come one at a time.

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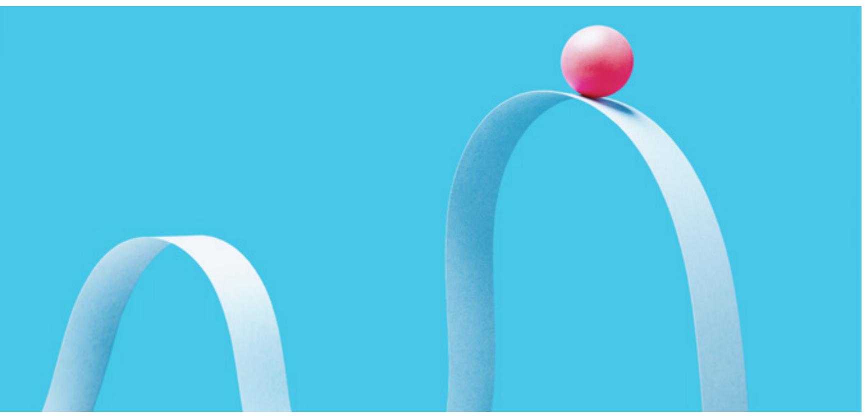
2018

Bias Busters

Taking the 'outside view'

Using a reference class can help executives gain much-needed perspective to inform their decision making.

by Tim Koller and Dan Lovallo



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Do you have enough data to make a decision? Maybe. Are the data enough to make the right decision? Probably not. Research shows that film executives overestimate potential box-office revenue most of the time.

The dilemma

You're the head of a major motion-picture studio, and you must decide whether to green-light a movie project. You need to predict whether it will be boffo (a box-office hit) or a bust. To make this decision, you must make two interrelated forecasts: the costs of production and potential box-office revenue.

Production costs are easy, you think: you know the shooting days, specific location costs, and computer-generated-imagery costs. You can enter these into a spreadsheet that reflects the film's production plan. Potential box-office revenue is harder to predict, but you know roughly how many screens the film will be on during opening weekend, how "hot" your stars are right now, and how much you're going to spend on advertising.

The research

That's because film executives often take what Nobel laureate Daniel Kahneman and colleagues refer to as the "inside view."[1] They build a detailed case for what is going to happen based on the specifics of the case at hand rather than looking at analogous cases and other external sources of information. (If they do look at other data, it's often only after they've already formed impressions.) Without those checks and balances, forecasts can be overly optimistic. Movie projects, large capital-investment projects, and other initiatives in which feedback comes months or years after the initial decision to invest is made often end up running late and over budget. They often fail to meet performance targets.

The remedy

One way to make better forecasts, in Hollywood and beyond, is to take the "outside view," which means building a statistical view of your project based on a reference class of similar projects. Indeed, taking the outside view is essential for companies seeking to understand their positions on their industries'

[1] Daniel Kahneman and Dan Lovallo, "Timid choices and bold forecasts: A cognitive perspective on risk taking," *Management Science*, January 1993, Volume 39, Number 1.

power curves of economic profit.[2] To understand how the outside view works, consider an experiment performed with a group at a private-equity company. The group was asked to build a forecast for an ongoing investment from the bottom up—tracing its path from beginning to end and noting the key steps, actions, and milestones required to meet proposed targets. The group's median expected rate of return on this investment was about 50 percent. The group was then asked to fill out a table comparing that ongoing investment with categories of similar investments, looking at factors such as relative quality of the investment and average return for an investment category. Using this outside view, the group saw that its median expected rate of return was more than double that of the most similar investments (exhibit).

The critical step here, of course, is to identify the reference class of projects, which might be five cases or 500. This process is part art and part science—but the overriding philosophy must be that there is "nothing new under the sun." That is, you can find a reference class even for groundbreaking innovations—something music company EMI (of the Beatles fame) learned the hard way.

In the 1970s, EMI entered the medical-diagnostics market with a computed-tomography (CT) scanner developed by researcher and eventual Nobel Prize winner Godfrey Hounsfield. The company had limited experience in the diagnostics field and in medical sales and distribution. But based on an inside view, senior management placed a big bet on Hounsfield's proprietary technology and sought to build the required capabilities in-house.

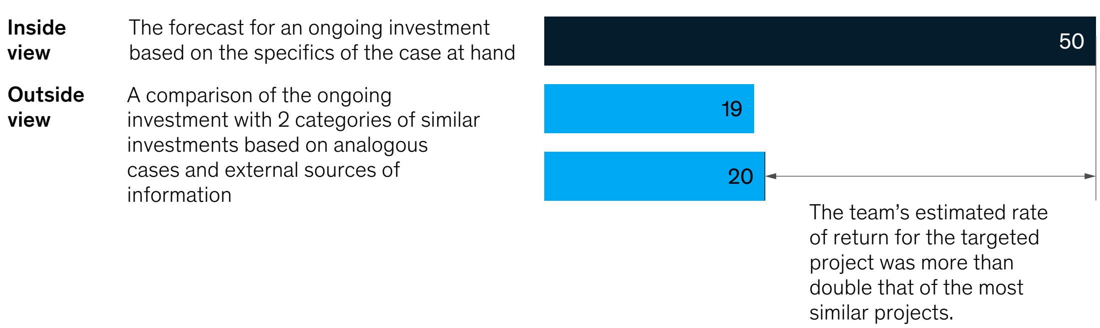
It took about five years for EMI to release its first scanner; in that time, competitors with similar X-ray technologies as well as broader, more established sales and distribution infrastructures overtook EMI. In seeking to do everything alone, EMI suffered losses and eventually left the market. Building a reference class would have allowed the company not only to predict success in the market for CT scanners but also to develop a more effective go-to-market strategy.[3]

Compared with EMI's situation, finding a reference class for a film project might seem like a no-brainer: you figure there will be lots of movies in the same genre, with similar story lines and stars, to compare with the focal project. And yet, when we asked

Exhibit

Private-equity teams built a more accurate forecast using the outside view.

Estimated rate of return, %



[2] The power curve is a global distribution of companies' economic profit. For more on this concept, see *Strategy & Corporate Finance blog*, "Is your strategy good enough to move you up on the power curve?," blog entry by Martin Hirt, McKinsey, January 30, 2018.
[3] John T. Horn, Dan P. Lovallo, and S. Patrick Viguerie, "Beating the odds in market entry," *McKinsey Quarterly*, November 1, 2005.

the head of a major motion-picture studio how many analogues he typically used to forecast movie revenue, he answered, “One.” And when we inquired about the most he had ever used, he said, “Two.” Research shows that using the correct reference class can reduce estimation errors by 70 percent.[4]

Companies often think it’s too hard and too time-consuming to build a reference class, but it isn’t. In an effort to improve the US military’s effectiveness in Iraq in 2004, Kalev Sepp, a former special-forces officer in the US Army, built a reference class of 53 counterinsurgency conflicts with characteristics of the Iraq war, complete with strategies and outcomes. He did this on his own in little more than 36 hours. He and his colleagues subsequently used the reference class to inform their decisions about critical strategy and policy changes. Other organizations can do the same—learning as much from others’ experiences as they do from their own.

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[4] Bent Flyvbjerg, Massimo Garbuio, and Dan Lovallo, “Delusion and deception in large infrastructure projects: Two models for explaining and preventing executive disaster,” *California Management Review*, Winter 2009, Volume 51, Number 2.

2017

The benefits of thinking like an activist investor

Whether or not your company is in the crosshairs of activists, assembling a team to take a good, hard look at your performance can deliver benefits.

by Joseph Cyriac, Snezhana Otto, and David Wells

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The rapid growth and influence of activist investors has many executives nervously looking over their shoulders. Even large companies are increasingly vulnerable. But there is a benefit to be had for those managers with the courage to take as hard a look at their own company's performance as a performance-minded outsider might. The objective isn't necessarily for managers to do what activists would do—activists' performance is mixed, after all. Instead, the goal is for managers to examine their own strategy, governance, and operations with an eye to unearthing opportunities to improve performance.

Doing so, of course, requires acknowledging vulnerability. Managers, like all good leaders, are often successful because once they've made a strategic decision, they commit themselves psychologically to following through. Even those who invite dissent to challenge unconscious bias expect dissenters to fall in line once a decision is made. And in the absence of an occasional external point of view, that singular commitment can blind executives and board directors to opportunities as their company, the industry, and the economy around them change.

Shining light on those blind spots also requires more than just a typical strategy review. In our experience, that's where an activist role play can help. Managers give participants in such exercises (often called a "red team") deliberate license to challenge their thinking across the board, including strategy, performance, governance, and even compensation, with no holds barred. That's the kind of exercise that many activists do when targeting prospective companies. For those who successfully emulate activist thinking, the opportunity can be striking: top-quartile activist campaigns are associated with sustained excess total shareholder returns of more than 9 percent even three years out. It can also better prepare managers, who seldom prevail in disputes with activists, to better respond to their overtures.

Deploying an activist role play

The activist mind-set is, at its heart, a hypersensitive focus on shareholder value creation. Learning to think that way is usually only possible if senior managers agree to subject themselves to a role play

The goal is to emulate the most constructive sort of activists who propose fundamental changes to improve long-term performance.

that bulldozes through established patterns of thinking and deliberately looks for gaps and missed opportunities. The goal is to emulate the most constructive sort of activists who propose fundamental changes to improve long-term performance—typically supporting their case with sophisticated outside-in analyses of strategic and operational performance.

Done well, an activist role-play approach is substantially more provocative than a standard strategy review. The tone can be aggressive, even confrontational. In one pharmaceutical company, the red team's efforts sparked a much more drastic portfolio conversation than the usual incremental shifting of resources among therapeutic areas. Where there was a highly heterogeneous portfolio, adopting the activist's perspective drove consideration of much more drastic portfolio actions for parts of the portfolio that were not a natural fit. This approach helped compel executives to take an outside perspective and be a catalyst for overdue changes.

The setup matters. In our experience, the activist role play can liberate management thinking by creating an environment where all options are on the table and there are no sacred cows. It is one thing to read a report that suggests some changes to the operating model, and it is quite another to be the CEO in the hot seat and be questioned on performance, competence, board composition, and compensation. Moreover, while many CEOs may believe that everyone in their organization is empowered to speak out openly and freely, it's frequently the case that, at some point during a role play, one of the CEO's direct reports will sheepishly raise a hand and recall the time that his opinion on an important item was unceremoniously quashed.

Focusing on strategy, performance, and governance

Mock activist role plays needn't cover the entire landscape of a company's business. It's possible to anticipate where the activists who care about long-term value creation will focus their attention. That can give companies a good idea of where to deploy this approach to examine performance through the external lens of an activist.

Portfolio strategy and capital allocation. It can be hard for companies to admit that a business unit in their portfolio would be better owned by another business, or that a turnaround isn't, as many managers like to think, "just two quarters away." In our experience, this isn't a sign of empire building as much as it is an indication that management teams honestly believe that they are a business unit's best owner. To them, asking them to divest a business is akin to asking a parent which of the children would be better parented by someone else?

But activists have no such misgivings. An activist will take a hard look at the synergies among a company's different businesses—excluding general and administrative synergies in corporate overhead, since another owner of similar scale could reap the same benefits. They will challenge the ability of the owner to manage well all businesses in a diverse portfolio. And for activists, past performance doesn't guarantee that a business stays in the portfolio; they will consider any unit that does not meet performance criteria as a candidate for restructuring, divesting, or harvesting.

At times, portfolio strategy may be right, but that may not be apparent to investors. One bank placed a significant premium on reporting the performance of each of its business units as if they were stand-alone businesses. While this approach aimed for transparency and business-unit accountability, investors saw it differently. The message they received was that these businesses were independent of one another and that the parent was effectively a conglomerate. By taking a skeptical outside-in perspective, managers realized they needed to change their communications with investors to highlight the value of cross-selling and other operational synergies among businesses.

Assuming that the right portfolio strategy and communication is in place, an activist would also evaluate whether capital was allocated to the most attractive parts of a company's portfolio. The skeptical view in an activist role play can highlight which businesses should be considered a growth and investment opportunity—or an efficiency and harvesting opportunity. It can also evaluate whether the company sufficiently redeploys resources to the businesses it intends to keep—new growth platforms or businesses with a clear competitive advantage in the market. Take, for example, the experience of one basic-materials company. By applying an activist's hypersensitive shareholder-value-creation perspective, managers realized that a legacy vertical-integration play had led the company to subsidize a unit that would have been loss making as a stand-alone entity. As a result, they diverted growth capital away from this unit and toward a unit further downstream that could generate more free cash flow.

Financial strategy. Among the most visible targets of activist demands are financial strategies that don't appear to be friendly to investors. Activists will evaluate a company's leverage or debt-to-equity ratios by benchmarking to likely market peers. They'll ask hard questions about tax efficiency and whether a business has too much or too little debt. And they'll weigh a company's deployment of excess cash—whether it could be invested or returned to shareholders.

Activist role plays should raise the same questions. Consider the example of one large, high-performing technology company. Managers and the board of directors firmly believed that they should be investing for growth—as they had done since the company was founded decades earlier. Indeed, the company

The activist lens can compel managers to take a different perspective on how a company conducts its benchmarking.

had never paid a dividend or done a large share-repurchase program. However, the company had grown to a market value of more than $30 billion and was enormously profitable. It took a hard push by the red team to make managers see that their commitment to the narrative behind the company's success had to change.

Operating performance. A savvy activist will use outside-in assumptions to benchmark each business segment in a company's portfolio against best-in-class peers, as well as the combined enterprise.

The activist lens can compel managers to take a different perspective on how a company conducts its benchmarking. For example, one large pharmaceutical company was accustomed to benchmarking performance against its peers. However, when it looked at individual business units in the role play, it uncovered a different story and highlighted a number of issues in the cost structure of different parts of the portfolio. It was also clear that in certain areas, such as consumer marketing, the company was underspending, and there was too much R&D spend on business units that would not yield the same return on investment. That challenged the company's legacy of spreading savings targets equally across all the business units, which was at the heart of the company's operating mind-set.

Similarly, adopting an activist perspective can help set a higher bar for operating improvements. At one consumer retail company, for example, managers took an activist perspective on operational benchmarking to review their performance goals. From the outside in, they realized, an activist would likely see incremental changes as insufficient. They then used that insight to build a case for change with expectations of doubling their margin improvement and improving working-capital efficiency by 50 percent. Companies could go even further. With a more radical margin aspiration and case for change, a company taking the activist perspective may contemplate going beyond industry benchmarks and applying a zero-based budgeting approach to fundamentally rethink parts of its cost base.

Governance. Activists will take a hard look at company boards to evaluate whether they constitute strong, competent oversight on behalf of shareholders relative to entrenched insiders. Companies will need to ensure board members have relevant, specific expertise. Ideally, boards would include both industry veterans familiar with what has historically determined success and functional experts from other industries that are ahead—in digital delivery, for example. Such functional experts can bring a perspective on the trends that will shape the industry's future. It is also critical that this expertise is communicated to shareholders.

Companies will also need to signal strong governance of the board of directors over management through the following measures:

— *Pressure-testing corporate strategy from an outsider's point of view.* Boards of directors often only think about the activist perspective reactively, after an activist has become involved. But considering an activist's mind-set proactively can also help directors to review their strategy more rigorously—and leave them better prepared to respond to activists when they show up. The board of one large healthcare company has found the outside-in activist role play so valuable in this regard that it involves the board in an activist role play as part of its annual strategy-refresh process.

— *Linking executive compensation to long-term value creation relative to the company's sector.* Compensation provisions can have the effect of encouraging executives to focus on near-term profits at the expense of long-term growth. An activist role play can help board directors compare compensation metrics with those of market peers to ensure that management compensation is aligned to performance that leads to growth, higher margins, and returns on capital. Where appropriate, they may also want to build in clawbacks to discourage short-term moves. That way, activists won't be able to argue that managers are being rewarded more than their peers for lower performance.

Thinking through these issues can help provide new insights into how to maximize business performance, and, in turn, deter activists. The process will also help companies develop a response should activists come knocking. By incorporating value-creating ideas into its plans and effectively communicating them to long-term shareholders, companies may find that even the most astute activists will be hard pressed to dazzle other shareholders with a better proposal.

Thinking like an activist can help managers improve their own performance before they attract activist attention. It can also give them the confidence to push back if activists attempt to intervene.

Joseph Cyriac is a partner in McKinsey's New York office, where **Snezhana Otto** is an associate partner and **David Wells** is a consultant.

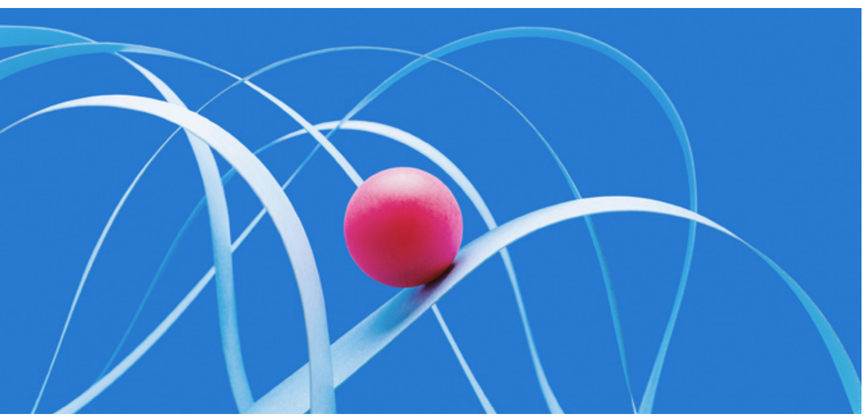
2019

Bias Busters

Up-front contingency planning

Avoid throwing good money after bad by developing "contingent road maps"—plans for updating your investment strategy based on unbiased feedback from the market.

by Hugh Courtney, Tim Koller, and Dan Lovallo



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The dilemma

Investing in a new process technology was supposed to breathe new life into an established business unit within your manufacturing company. It was supposed to be a sure bet, one that would reduce costs and allow your company to compete better on price. But it's a full year into the rollout, and those benefits haven't materialized. Meanwhile, your closest competitors have launched their own technology initiatives and are reducing costs, lowering prices, and growing market share.

You know that when it comes to implementing new technologies, early failures are common. It takes time to work out the kinks; maybe a redesign or redeployment of the technology to address the company's needs better would do the trick. You still see the potential upside here, but you can't afford to throw good money after bad. Given the uncertainties, should you continue to invest in this new technology and business unit? Research suggests that if you do, you may never stop.

The research

When making staged-investment decisions, managers should focus only on expected future returns from their investments, not the costs associated with previous investments. These sunk costs have already been spent and cannot be recovered and are thus irrelevant when deciding whether to continue investing. Yet research demonstrates that decision makers often focus inappropriately on them.[1] Studies also reveal the degree to which decision makers are subject to loss aversion, or putting greater value on avoiding losses than on acquiring equivalent gains. It is this combination—loss aversion and an inappropriate focus on sunk costs—that prompts managers to escalate their commitment to certain investments, even when there is evidence suggesting that the initial decision was probably wrong.

[1] Daniel Kahneman, *Thinking, Fast and Slow*, first edition, New York, NY: Farrar, Straus and Giroux, 2011.

The remedies

You can counter such irrational escalation and make better decisions by developing "contingent road maps," or plans for implementing and updating your strategy over time based on unbiased feedback from the market. Such road maps capture all the changes that may occur in uncertain markets and when they might occur. Most important, they prescribe specific changes your company must make to its strategy under different scenarios. Decision makers commit up front to follow the road map and take the actions required each step of the way—including, in some cases, killing a project entirely. The road map then becomes both a catalyst for change and a means to insulate decision makers from biases.

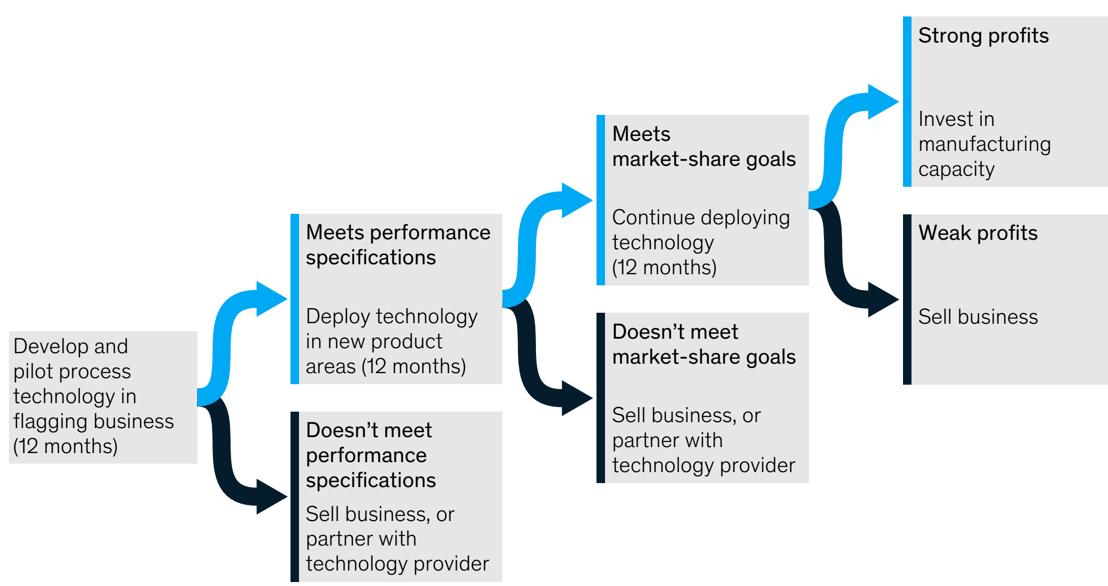
When considering the investment in the new process technology, for instance, you could define a series of "decision forks" (exhibit). At the first fork, either the technology would achieve well-defined performance specifications within the first year of use or the company would sell the business unit or link up with a partner that has superior technology. If the technology meets its performance goals, the company would continue using it in new, differentiated product segments.

The second fork in the road map would occur a year later: if the technology meets well-specified market-share goals by that time, the company would continue with its new strategy. If not, again it would look to sell the business or seek a partnership.

Exhibit

A company built a 'contingent road map' to assess investment in a new process technology.

Sample contingent road map



When making staged-investment decisions, managers should focus only on expected future returns from their investments, not the costs associated with previous investments.

The final fork would occur another year later, when the company has more information on competitive conduct and profit margins. Strong profits would result in the company investing in increased manufacturing capacity for this product, while weak profits would lead the company to divest the business line.

As this example illustrates, contingent road maps can help business leaders manage uncertainty by generating crucial insights about potential market outcomes, allowing business leaders to make the right decisions at the right times. More important, the tool can help senior leaders steer away from status quo strategies when the environment calls for bold new ones.[2]

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[2] Chris Bradley, Martin Hirt, and Sven Smit, "Eight shifts that will take your strategy into high gear," *McKinsey Quarterly*, April 19, 2018.

Bias Busters

A better way to brainstorm

Structured conversation during brainstorming sessions removes some of the risks that thwart an honest discussion.

by Tim Koller, Eileen Kelly Rinaudo, and Derek Schatz

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The dilemma

The regional CEO of a large US cosmetics company has invited all the business unit leaders to brainstorm about M&A priorities and potential opportunities in the new year. Everyone knows that digital acquisitions have been a pet project for the senior-leadership team. But some business unit heads believe the company should look at other targets as well—expanding overseas, for instance, where the cosmetics market is booming, or investing in organic beauty products or a men's grooming line. Ahead of the call, some of the business unit heads even prepare pages to support these ideas, citing links to current businesses, trend analyses, and so on. On the call itself, however, the regional CEO steers most of the conversation to digital-growth opportunities—again. Frustrated, some business unit leaders stay silent, and the brainstorming proceeds in a pro forma way, with little debate, as the group circles back to the same priorities and growth opportunities everyone has heard many times before.

How can the regional CEO convene a more productive brainstorming session?

The research

When it comes to group interactions in the workplace, individuals are particularly vulnerable to *motivations to conform*.[1] The reasons we conform are varied, but according to a five-part model developed by professors Paul Nail, Geoff MacDonald, and David Levy, they can include the need to avoid rejection and conflict, accomplish group goals, or establish one's identity.[2] After all, why undercut a superior's views or challenge an opinionated CEO if it means somehow diminishing one's own power, influence, or authority? This risk aversion is a big factor in the success or failure of brainstorming sessions. Consider the situation at the cosmetics company. The leadership team's desire to explore digital targets was well known in the company, and once that idea was propagated by the regional CEO, some business unit heads were deflated: to speak out against it could be viewed as a repudiation of existing priorities. Individuals' motivations to

1 "Conformity," *Psychology Today*, January 8, 2022.
2 David A. Levy, Geoff MacDonald, and Paul R. Nail, "Proposal of a four-dimensional model of social response," *Psychological Bulletin*, June 2000, Volume 126, Number 3.

conform created an environment in which mediocre ideas were allowed to flourish and true change was less likely to happen.

The remedy

Anonymous brainstorming, along with silent voting, can serve as a counterweight to individuals' motivations to conform and help contributors feel like their expertise and ideas are being fairly considered. To understand how this works, let's reconsider the brainstorming session at the cosmetics company. To ensure that all ideas are truly weighted equally, the regional CEO could appoint a facilitator to collect ideas written on pieces of paper, for instance, or submitted through a central software application. (This step would be managed ahead of the brainstorming session.) During brainstorming, ideas would not be presented in a specific order or tied to specific sources, which would free up business unit heads and other company leaders to offer proposals that may run counter to the senior-leadership team's well-known digital stance. The facilitator could then read aloud the list of submissions, and the business unit heads could vote on them independently (and anonymously) to reveal the degree of alignment behind each idea. Once the submissions have been vetted and reprioritized, the group could repeat the silent-voting process until a clear choice can be made.

No question, this type of structured facilitation will take more time and effort than a traditional brainstorming session—but it has the potential to reveal truly original business initiatives that may not have come to light had participants' reputations been on the line. Using a structured approach to brainstorming removes some of the risks that can thwart honest discussion.

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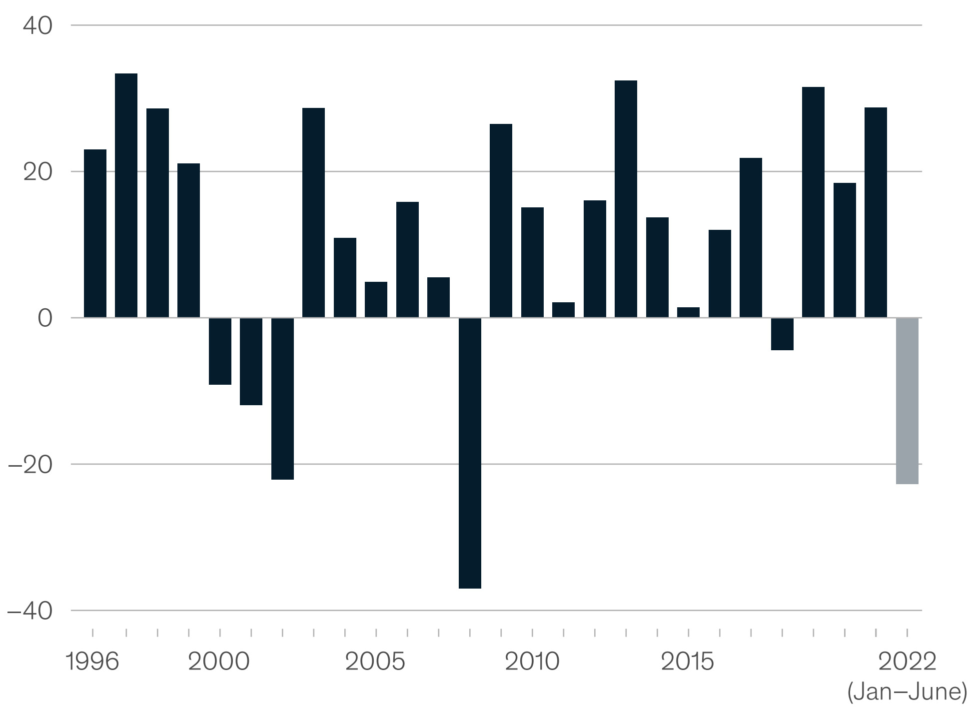
Looking back

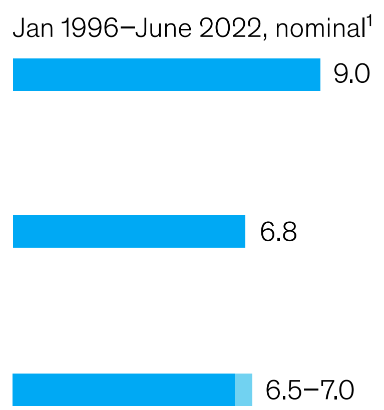
Exhibit

Despite volatility, stock markets continue to earn returns in line with those of the past two centuries.

S&P 500 Index total yearly returns (including dividends), %



Annualized total returns, %



[1] S&P 500 Index.
[2] US stocks.
Source: Damodaran Online; Federal Reserve Bank of St. Louis; S&P Global; Jeremy J. Siegel, *Stocks for the Long Run: The Definitive Guide to Financial Market Returns & Long Term Investment Strategies*, fifth edition, McGraw-Hill Education, 2014; McKinsey analysis

John Pierpont (J. P.) Morgan had a ready answer at the turn of the 20th century when asked how the stock market would perform: "It will fluctuate."[1] And so it has for decades, and overwhelmingly for the better. As Jeremy Siegel, professor at the Wharton School of the University of Pennsylvania, details, stocks over the long run have returned an average 6.5 to 7.0 percent per year (after inflation) since about 1800.[2]

When *McKinsey on Finance* was first released in 2001, the market capitalization of the companies that made up the S&P 500 Index was about $10 trillion. As of mid-June 2022—even after a bearish opening to the year—S&P 500 Index market capitalization was about $35 trillion. The mean total yearly returns (including dividends) of the S&P 500 Index from 1996 to mid-June 2022 is 9.0 percent in nominal terms, or 6.8 percent in real terms, right in line with Jeremy Siegel's historical results. On a nominal basis, returns for the MSCI World, Emerging Markets, and ACWI Indexes have had annualized returns of between 8 and 10 percent for decades as well.

While long-term TSR results have been in line with historical averages, Morgan was also *right*: the market does fluctuate. The S&P 500 Index declined in 2000, 2001, and 2002, followed by a 37 percent fall in 2008 and a 22 percent fall in the first half of 2022. But from 1996 to mid-June 2022, S&P 500 Index returns declined annually only five times (six if we assume that full-year 2022 will also result in an annual decline—as now seems likely).

A thriving stock market is a powerful, positive force for the economy. It creates wealth that can be reinvested in economic growth. Without this wealth creation and reinvestment, the economy (both around the world and in the United States) would be much poorer. Reasonable and largely stable long-term returns (as measured by low stock price volatility over ten-year periods) create conditions for greater opportunities. They encourage more individuals to invest in the stock market, which in turn provides capital for greater growth and broader wealth creation. This benefits not only investors but also society: returns are mostly reinvested, which drives even more economic growth.

It is a dynamic that generates more jobs—often ones that are less dangerous and more stable. For example, in the 1920s, about 25 percent of US jobs were in agriculture and about 40 percent were in manufacturing or other so-called blue-collar occupations. Today, only about 1 percent of US jobs are in farming or ranching, and only 20 percent of US jobs are blue collar.

Stock market returns foster competition and entrepreneurship as well, which leads to innovation and lower costs of products. Without the wealth creation and reinvestment encouraged by the free market, living standards both in the developed world and in emerging markets would be much lower.

[1] Jean Strouse, Morgan: *American Financier*, New York, NY: Random House Trade Paperbacks, 2014.
[2] Jeremy J. Siegel, *Stocks for the Long Run: The Definitive Guide to Financial Market Returns & Long Term Investment Strategies*, fifth edition, New York, NY: McGraw-Hill Education, 2014.

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