Disrupt, or be disrupted

Corporate strategies for an increasingly disruptive world

J.P.Morgan

Authored by the J.P. Morgan Corporate Finance Advisory team

1. The pace of disruption is being disrupted

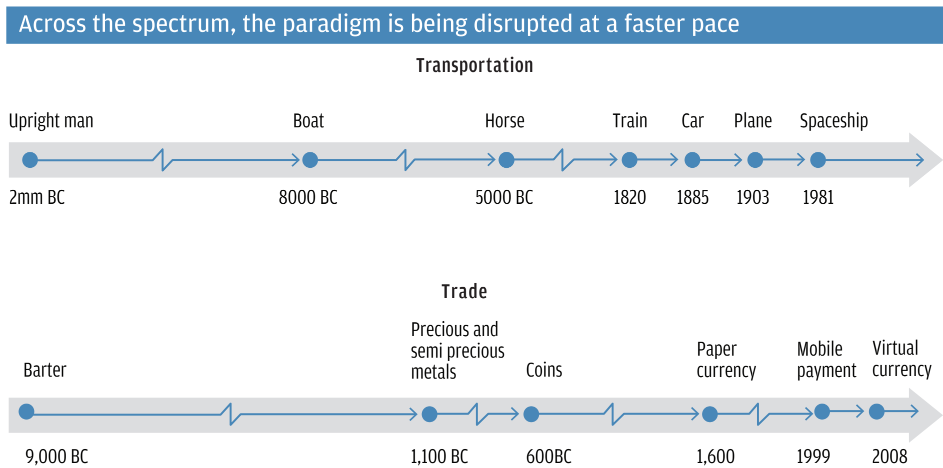
A typical smartphone today has more than four times the processing power of a typical supercomputer in the 1980s.

Humankind has created more data in the past two years than in all of previous human history.

These startling facts illustrate how quickly technology has changed in the last few decades, but the impact of technological change is not new. The way in which we now communicate, build, travel, and consume goods and services can be traced back through thousands of years of technological leaps and bounds. Consistent among all these changes is the quickening pace of change (Figure 1).

Figure 1

Across the spectrum, the paradigm is being disrupted at a faster pace

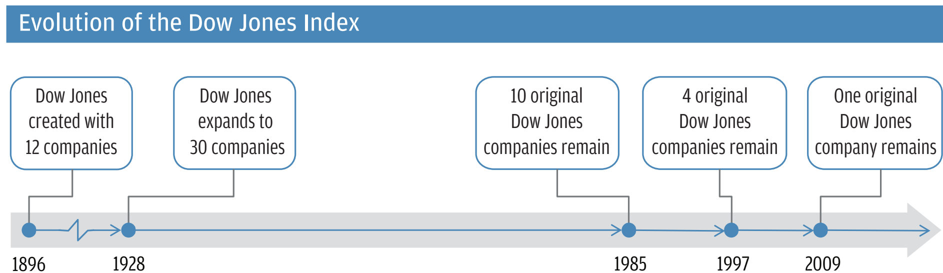


Sources: J.P. Morgan, NASA, news articles

While we do not know what the coming years will bring, the increasing speed of technology development suggests that the resulting changes are likely to be significant. For Boards and corporate decision-makers, changes that disrupt the status quo have implications on market share, capital allocation, and even core business models. One need look no further than the turnover in the Dow Jones index to appreciate how the corporate landscape has evolved over recent years (Figure 2).

Figure 2

Evolution of the Dow Jones Index

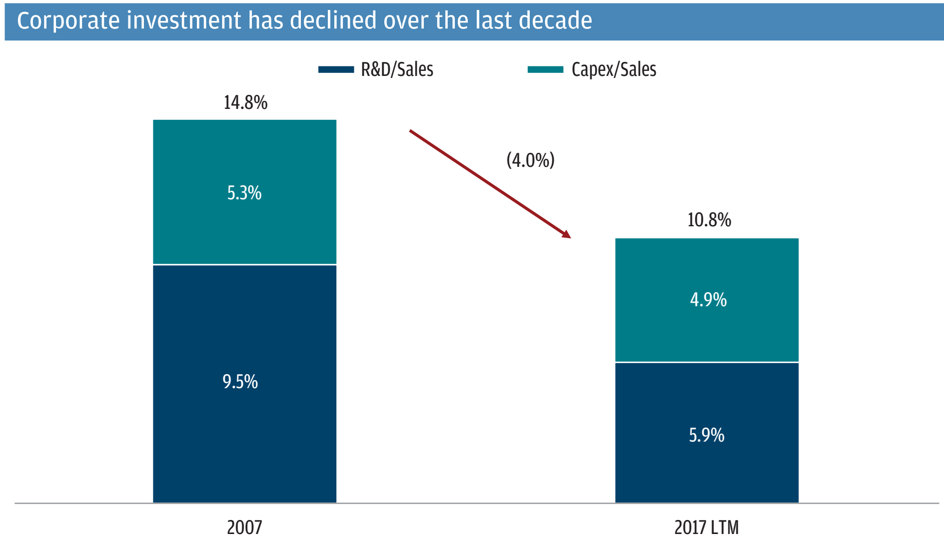


Sources: J.P. Morgan, news articles

With the backdrop of rapid changes in technology and, by extension, risk of business disruption, it is surprising that S&P 500 firms have actually reduced investment in capital spending and R&D over the last decade (Figure 3). This phenomenon could potentially signal an increase in the productivity of investments. However, as changes to productivity are slow-moving and unlikely to have budged much over the last decade, the figure likely suggests that firms are not taking the appropriate steps to invest in new initiatives that would catalyze growth and mitigate the risk of future business disruption.

Figure 3

Corporate investment has declined over the last decade

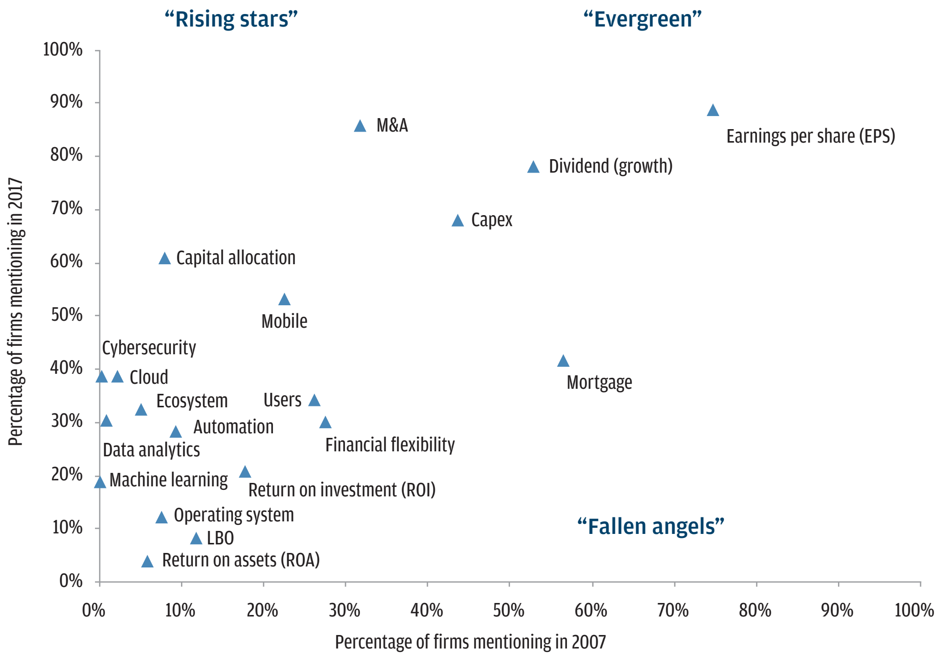


Sources: J.P. Morgan, Bloomberg as of 08/15/2017
Note: R&D, capex, and sales numbers are the average of S&P 500 companies ex. financials, energy and utilities

Although large firms may not have investment strategies that fully reflect disruption risk, these same firms have rapidly embraced a "high tech" vocabulary: Terms like "cloud" and "machine learning" now appear in earnings calls just as often as "financial flexibility" and "return on investment," (Figure 4). This trend suggests that capital allocation strategies may be lagging business strategies.

Figure 4

Corporate communication themes have evolved even in just the last decade



Sources: J.P. Morgan, Factset
Note: Data set is from Q1 2007 earnings and Q1 2017 earnings call transcripts

The increasing rate of technological change—and in turn, the ever-increasing risk of business disruption—cuts across all sectors. Revolutions around ride-sharing, for example, start with mobile app technology but quickly expand to have implications for car manufacturing and even civil engineering. Firms across all industries must embrace financial policies that support success in an ever more rapidly changing environment. In this report, we address several key questions:

- Are firms being rewarded for their investment decisions, specifically those in longer-duration opportunities designed to ensure they are disruptors rather than disrupted?
- What tools should be used to measure the long-term value creation potential of investments?
- What financing strategies should accompany these long-term "disruptive" growth investment strategies?
- How should "disruptive" capital allocation decisions be communicated to management teams, Boards, and investors?
- What are the risks and potential mitigating strategies of investing in growth "optionality" that can maximize the opportunity for a company to be a "disruptor," and may minimize the risk of being disrupted?

EXECUTIVE TAKEAWAY

As the pace of technology development continues to increase, the risk of disruption to all types of businesses will continue to rise. Boards and senior decision-makers must ensure that the financial policies and capital allocation strategies evolve to keep pace with business plans.

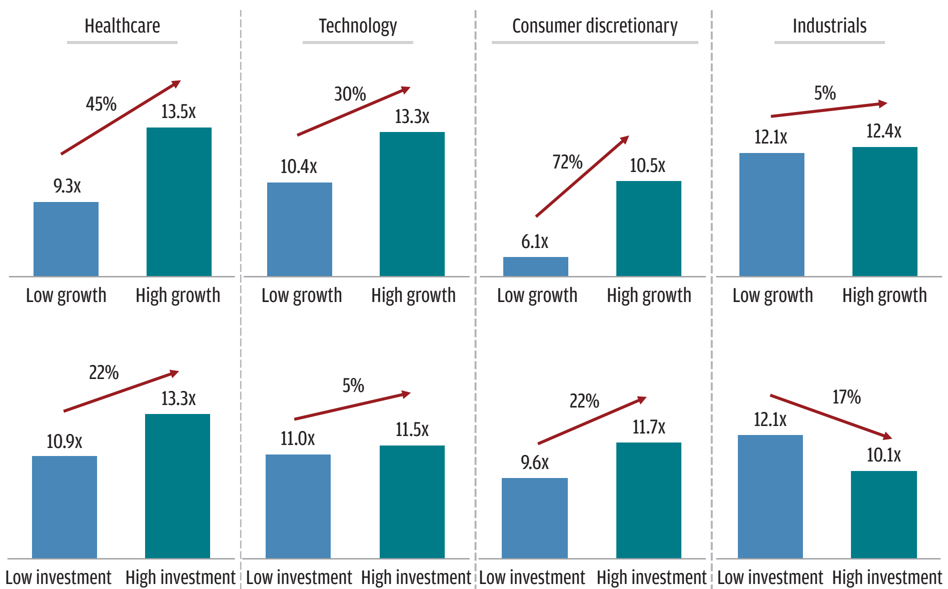
2. Investment has declined, but growth still drives valuations

The trend of lower relative capex and R&D investment over the last decade might indicate that capital markets are no longer rewarding firms with growth potential. To the contrary, firms with higher expected growth trade at "premium multiples" across numerous sectors. In most cases, firms that invest more are also expected to grow more and, by extension, trade at higher multiples (Figure 5). This trend is not universally true, however, and illustrates the challenge of translating investment intensity into credit for future growth.

Figure 5

Capital investment typically commands a premium valuation, but translating it to long-term growth is key

Valuation multiple (EV/EBITDA)



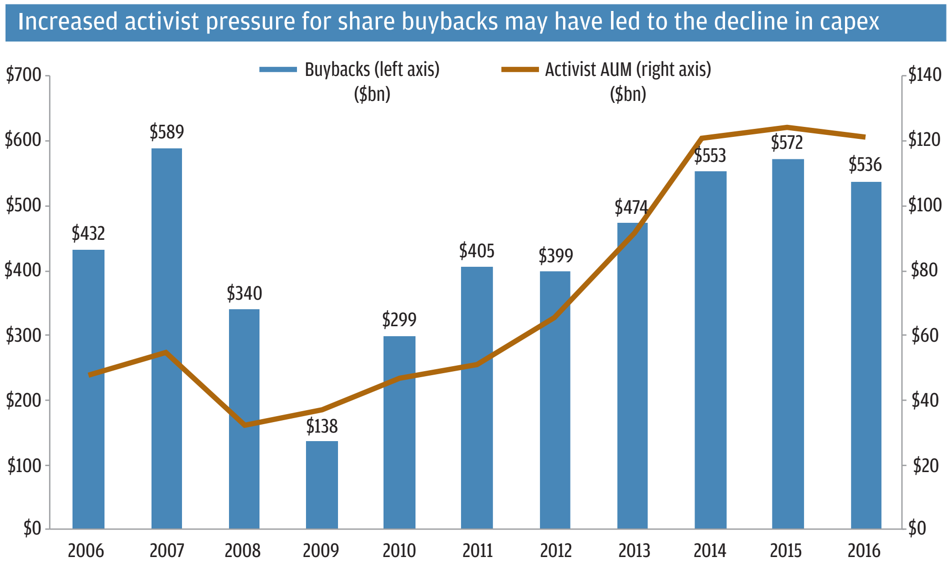
Sources: J.P. Morgan, Factset as of 12/31/2016
Note: Top graphs indicate median EV/EBITDA multiples of S&P 500 firms that fall below and above the median long-term earnings growth rate for each sector (long-term growth below and above median is 8% and 13% for Industrials, 8% and 15% for Consumer discretionary, 7% and 14% for Technology, and 8% and 13% for Healthcare)
Bottom graphs indicate median EV/EBITDA multiples of S&P 500 firms that fall below and above the median Capex + R&D/ Sales for last 3 years

All investment strategies are not created equal and higher levels of investment may not translate into higher growth expectations for a number of reasons. Firms in capital intensive industries typically must spend more just to maintain the effectiveness of current operations (i.e., high "maintenance" capex needs). New investment initiatives might also not produce tangible results within time horizons desired by investors. These factors highlight the challenges associated with investing in strategies designed to mitigate future business disruption.

Shareholder activists have likely exacerbated the market focus on short-term investments. Over the last several years, the rising influence of activists (as reflected by their Assets Under Management (AUM)) has been strongly correlated to share buybacks (Figure 6). While one could point to this trend as evidence of an improvement in capital allocation discipline, it also makes investing in innovative strategies designed to offer longer-term payoffs more difficult.

Figure 6

Increased activist pressure for share buybacks may have led to the decline in capex

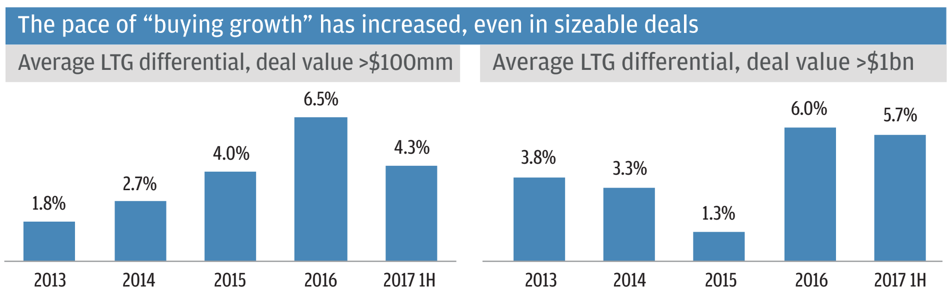


Sources: J.P. Morgan, Bloomberg, S&P, HFR Industry Reports © HFR, Inc.
Note: Buybacks for S&P 500 firms

This is not to say that firms haven't been focused on investing in growth. Data suggests that for acquisitions, firms have been seeking targets that offer higher relative growth rates versus their base businesses (Figure 7). Even for very large deals, the trend of seeking targets with substantially higher growth rates has increased, though the trend in these large "growth bets" is less defined.

Figure 7

The pace of "buying growth" has increased, even in sizeable deals



Sources: J.P. Morgan, Factset, Bloomberg
LTG differential (long term growth differential) denotes difference in estimated CAGR of earnings for companies over next business cycle (3 to 5 years)

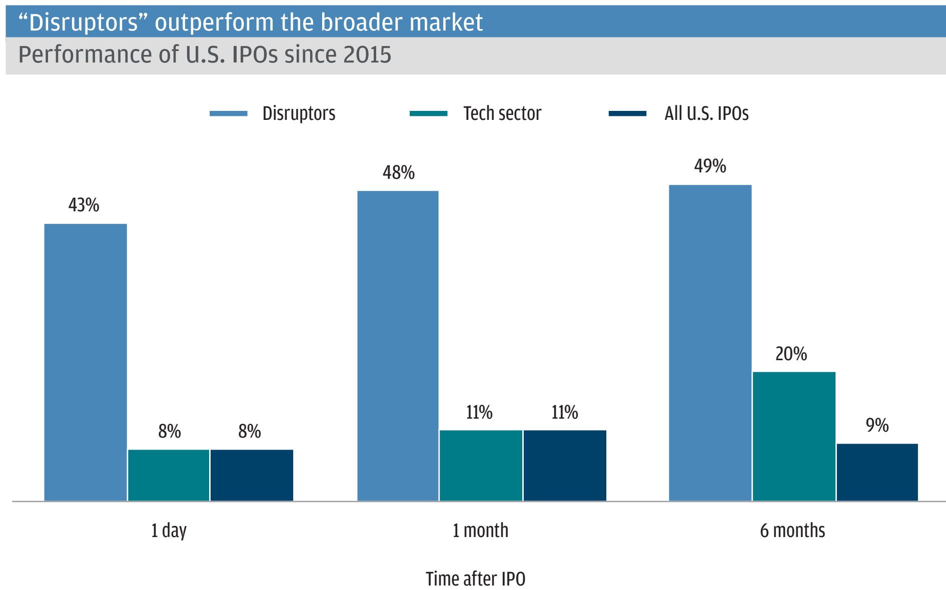
Taken together, these trends all seem to illustrate a corporate conundrum: Investing in long-term opportunities designed to maximize participation in the business disruption may be challenging. Growth is rewarded by investors, but investing in opportunities that don't deliver near-term benefits are likely to be met with skepticism either passively in the form of a lower multiple or actively through the interventions of a shareholder activist. M&A has increasingly become a source of growth as firms turn to targets that can supplement the underlying growth profile, but the feasibility of this strategy is highly dependent on available opportunities and acquisition multiples.

Despite these challenges, recent IPO trends suggest investors value firms that have a reputation for disrupting traditional businesses: Among recent IPOs, those that were labeled "Disruptors" by a major news organization experienced significantly outsized returns (Figure 8). Both the outperformance and the labeling may have been driven by an underlying superior business, but it is also likely that the strong stock market performance was at least partially due to the disruptive branding.

Figure 8

"Disruptors" outperform the broader market

Performance of U.S. IPOs since 2015



Sources: J.P. Morgan, Bloomberg, CNBC
Disruptors include publicly traded companies that have appeared on CNBC's "Disruptors" (companies "whose innovations are changing the world" and who have "identified unexplored niches in the marketplace") list since 2015
(IPO data from 01/01/2015 to 07/31/2017)

EXECUTIVE TAKEAWAY

The market continues to reward firms that can demonstrate future growth potential but investors also remain short-term oriented. M&A may offer a growth path for some but longer-term opportunities will likely need to be pursued organically, as well.

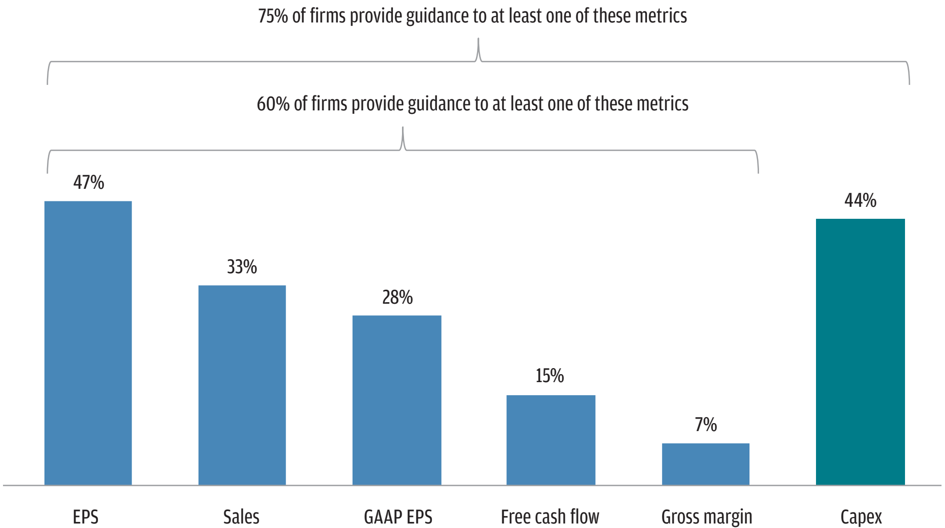
3. Capital allocation strategies for long-term growth

As is evident from the evaluation of corporate communication trends presented in Section 1, corporate strategies have evolved rapidly to reflect the quickening pace of technology development. Less clear is whether finance strategies have kept pace with these evolving strategies.

Most large firms provide some form of forward guidance, with a majority of S&P 500 firms providing near-term sales, EPS, or cash flow guidance (Figure 9). This focus on guidance explicitly increases the importance of short-term accretion as a result of investing decisions. This logic applies to EPS and all per-share metrics, cash flow, sales, ROIC, ROE, and just about any other "point-in-time" calculation and is further exacerbated by executive compensation techniques that similarly depend heavily on these near-term metrics.

Figure 9

S&P 500 firms continue to guide to EPS, capex, sales, and cash flow



Sources: J.P. Morgan, Bloomberg; most recent filings as of June 2017
Note: Shows total percentage of firms that provide guidance to each metric

While the metrics above are well-established tenets of modern corporate finance and capital allocation practice, there are a number of additional strategies that can help to ensure that opportunities with longer-term value creation potential are not prematurely dismissed:

- **Evaluate metrics over time** – Many investments may not immediately generate returns. Make sure investments are evaluated over the long-term – for both better and worse. Do investments that look better in the near-term actually suffer in the long-term?
- **One size does not fit all** – A metric that evaluates the success of an investment that boosts productivity and profitability may not be the same across industries
- **Don't get hung up on one metric** – There is no perfect capital allocation metric and all suffer from potential shortcomings. Always evaluate investments using a variety of different approaches to ensure a balanced perspective
- **Test hurdle rate assumptions** – With persistently low rates, cost of capital for many firms remains lower today than in the past. Are hurdle rates set too high?[1]
- **Employ a portfolio approach** – Many investment strategies rightly seek certainty above value creation potential. Growth "options" in the form of low-cost, low-probability, but high reward strategies can be an effective component of an investment portfolio, particularly if it provides access to people, technologies, and products a firm wouldn't be exposed to otherwise
- **Ask "What if?"** – The most effective strategy to "future-proofing" a business is to constantly ask "What if?" Consider new competitors and challenge traditional business "certainties"

EXECUTIVE TAKEAWAY

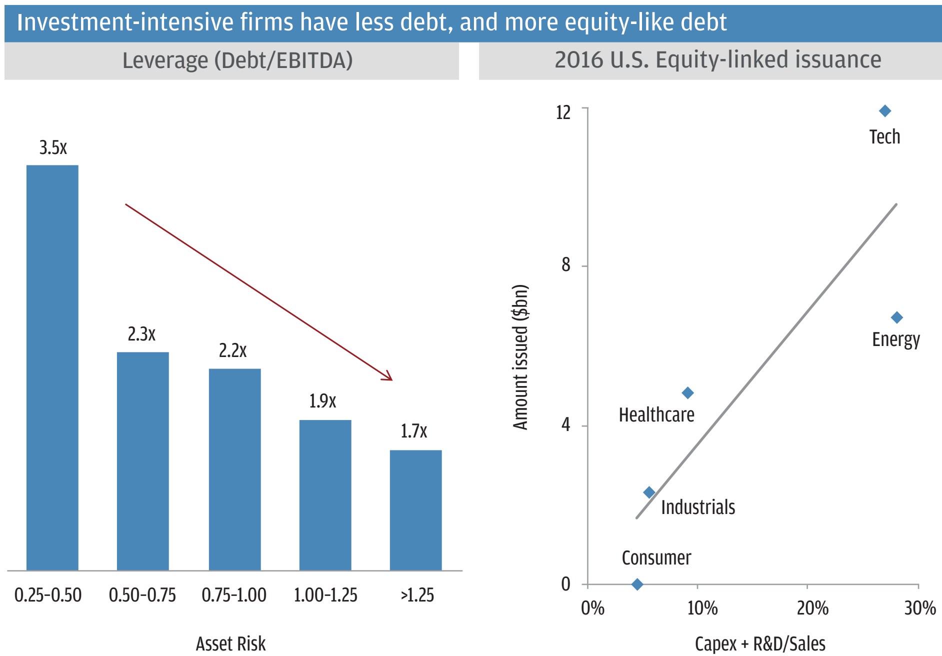
Equity investment horizons create a bias for capital allocation solutions that generate near-term returns. While the pace of technology is continuing to increase, strategies for harnessing these changes will take time. Capital allocation strategies must adapt to balance long-term perspectives and incorporate future "What if?" scenarios.

[1]For further reading on hurdle rates, please see our report *It's time to reassess your hurdle rates,* located at https://www.jpmorgan.com/directdoc/JPMorgan_CorporateFinanceAdvisory_ReassessHurdleRates.pdf

4. The more disruptive you are, the more financing matters

The prioritization and structural differences between debt and equity naturally make debt more conducive to firms whose cash flows exhibit greater stability and predictability. As a result, we observe that firms with lower levels of perceived “asset risk” (i.e., equity beta adjusted for leverage in the capital structure) also maintain greater amounts of leverage in their capital structures (Figure 10).

Figure 10



Sources: J.P. Morgan and Factset as of 12/31/2016
Note: S&P 500 firms ex. financials, real estate, and firms with leverage greater than 5.0x; asset risk refers to unlevered equity beta (i.e., asset beta); higher values on the horizontal access correspond to higher asset risk

Sources: J.P. Morgan and Factset as of 12/31/2016
Note: Excludes financials, materials, real estate, telecomm, and utilities; consumer represents staples and discretionary; 2016 U.S. marketed-deals; three-year median capital expenditures + R&D/sales for each sector

The pursuit of longer term and less certain investments is inherently risky and should be funded by a capital structure designed to reflect this risk. This means firms should likely incorporate more equity into the financing of disruptive investment alternatives. Empirically, we observe this trend across industries, with equity-linked issuance in 2016 the highest for the energy and tech sectors, where relative investment intensity (as measured by capex and R&D spending) was the highest. Equity may take many forms and may include common equity, equity-linked, or even just retained equity (i.e., retained free cash flow). We see this trend reflected in the debt markets, as well, where investors have remained more hesitant to extend credit to businesses with primarily intangible assets (such as certain kinds of technology firms). While this trend may ultimately change, it gives firms with a more tangible asset base a potential financing benefit when investing in more “intangible” opportunities.

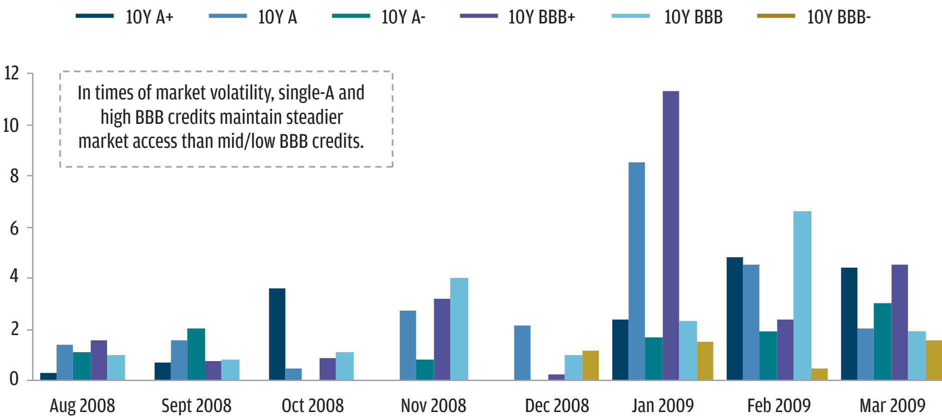
Although financing strategies should align with investment risks, firms should not feel overly constrained by their balance sheets. Particularly for large cap firms with investment grade ratings, the maturation of the capital markets over the last 10 to 15 years has consistently demonstrated the attractive financing capacity available to those with BBB credit ratings. For firms that continue to maintain A or AA ratings, a strategy of modestly increased risk through

disruptive investment could be worth a downgrade to a BBB rating with little-to-no practical impact to the business.[2]

While downside risks may be higher in the most extreme market scenarios, firms with strong credit profiles within their credit segment (IG and HY) typically incur minimal, if any, reduction in capital market access. Specifically, BBB and above-rated firms issued substantial amounts of capital through the financial crisis (Figure 11). Even firms with strong non-investment grade ratings benefit from low cost of capital, strong market access, and a supportive investor base in today's market.

Figure 11

Issuance trends through the great financial crisis ($bn)



Sources: J.P. Morgan, Bloomberg

Financing strategies should also properly reflect the time horizon of investments. Investments that are expected to return substantial cash flow in 2 to 3 years should be considered differently from those expected to only generate in 5 to 7 years. In all cases, a portfolio of investments with different time horizons can help to reduce risk and smooth the potential financing obligations associated with funding these projects.

EXECUTIVE TAKEAWAY

Firms should bolster their growth strategies with an appropriate capital structure. This is especially true as firms contemplate more long-term, disruptive investments. A higher-risk investment strategy should be financed with a greater portion of equity, and buttressed with an understanding of the potential downward pressure on credit metrics, ratings, or both.

[2]For further reading on recent trends in credit ratings, please see our report *The Great Migration,* located at https://www.jpmorgan.com/directdoc/JPMorgan_CorporateFinanceAdvisory_GreatMigration.pdf

5. Speak up, and get with the times

The translation from capex to growth is primarily achieved through having the right investment decision making framework.[3] Even if a firm has the right framework in place, however, it may not be clearly visible to investors. As a result, it is often necessary for firms to fine-tune their communication strategies to make clear the link between investment and long-term growth. Furthermore, as the corporate landscape evolves and growth strategies change, it is crucial that firms adopt best-in-class practices to convey their growth potential to investors.[4]

While some firms continue to orient themselves toward traditional metrics when articulating their capital allocation decisions, firms with innovative and disruptive reputations use a different vocabulary (Figure 12). Consistent with the challenges of using more conventional capital allocation metrics (as discussed in Section 3), many of these "disruptor" firms focus on communicating the future benefits to the customer experience or broader corporate platform.

Figure 12

In the midst of a shift in corporate communication

"Traditional" M&A deal announcements	"Disruptive" M&A deal announcements
"Financial synergies that make it a natural fit into our core business...will be ***immediately accretive to EPS, EBITDA margins and ROIC.***"	"***It's energizing to invent on behalf of customers*** and we continue to see many high-quality opportunities to invest this way."
"Expected to provide an ***excellent return on capital...will generate more than $1.2bn in annual cost synergies...will be immediately accretive for [company] shareholders.***"	"Provides better value, more choices, ***enhanced customer experience*** for over-the-top [internet-based] and mobile viewing"
"This represents a terrific opportunity to once again derive value from our ***stellar acquisition integration process.***"	"Now we're also getting ready for the ***platforms of tomorrow...the most social platform ever.***"

Sources: J.P. Morgan, recent company filings

[3]For further reading on investment decision-making frameworks, please see our report *It's time to reassess your hurdle rates,* located at https://www.jpmorgan.com/directdoc/JPMorgan_CorporateFinanceAdvisory_ReassessHurdleRates.pdf

[4]For further reading on corporate communication strategies, please see our report *To speak or not to speak,* located at https://www.jpmorgan.com/directdoc/JPMorgan_CorporateFinanceAdvisory_ToSpeakOrNotToSpeak.pdf

Simply adopting the language of a disruptor firm is not sufficient to garner credit from investors, and in some industries may not be relevant. However, firms can work to incorporate the following best practices into their communication strategies:

- **Publicly disclosed capital allocation criteria should not be overly constraining** – Clearly articulating capital allocation criteria can demonstrate management discipline to investors. Being overly prescriptive can limit management optionality and may contribute to a more near-term investment focus
- **Spell out a long-term vision and its risks** – Long-term investment is about both risks and opportunities. Management should be able to describe near-term guidance but also long-term vision for the company, and how investments (whether disruptive or otherwise) align with those views
- **Listen carefully** – Customers, competitors, investors, and sometimes even bankers can offer invaluable market intelligence about broader industry sentiment. A company whose communication strategy is generally viewed as "behind the times" is unlikely to receive credit for the long-term. Listening to others can be the most effective method of determining any shortfalls in the communication strategy
- **Bring the Board along** – Boards can be the best – and most challenging – test subjects for a cutting-edge communication strategy

Communication strategies are often the most company- and fact-specific aspects of a comprehensive capital allocation strategy. They are also the most crucial aspect of translating corporate investment decisions into tangible credit for future growth from investors.

EXECUTIVE TAKEAWAY

Communications of best-in-class, disruptive firms indicate that we are seeing a change in the paradigm. Effective communication strategies should incorporate a balance of a long-term plan, relatively flexible criteria, and feedback from various counterparties.

6. Unlock incremental value through structuring

Even the most effective capital allocation and communication strategies may still come up short when it comes to maximizing the value of disruptive investment for the long-term. Employing the right investment structure for is a key aspect of reducing risk and highlighting value to investors. Firms should revisit the full structural "tool box" of alternatives:

Figure 13

Structural alternatives to maximize credit for investments

	Benefits	Considerations
Joint Venture/ Partnership/ Sale	✓ Diversify risk ✓ Can help company enter into a new line of business ✓ Obtain synergies with another company	× Agree with partner on objectives × Resolve valuation and partner's contributions × Exit mechanisms
Tracking stocks	✓ Creates pure play investment vehicle ✓ Avoids need to legally fully separate businesses ✓ Maintains tax consolidation and current structure ✓ Aligns employee incentives	× Shareholder approval likely necessary × Complicates use as an acquisition currency × Mutual funds restrict ownership of tracking stocks in several cases × Index inclusion
Separation	✓ Increases clarity ✓ Potentially tax free structure ✓ Attract new investors ✓ Aligns employee incentives	× Cash proceeds may be limited × Potential loss of synergies × Governance considerations

Source: J.P. Morgan

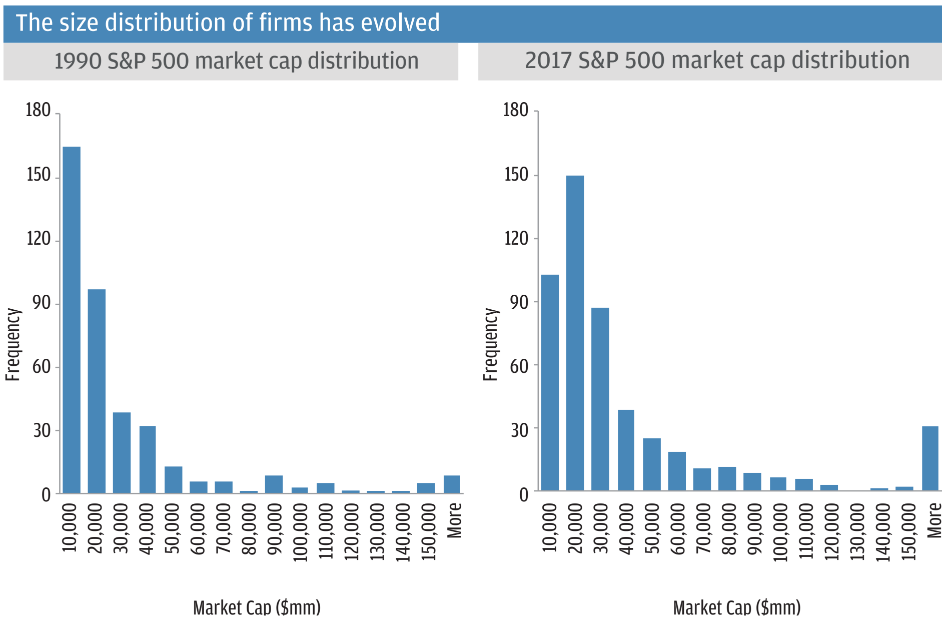
EXECUTIVE TAKEAWAY

Even the best capital allocation and communication plans may not be fully appreciated by investors. Re-evaluating various structural alternatives can help ensure that investments receive full credit for their potential.

7. The big get bigger... is this a winner-take-all environment?

Technology has helped to fuel a more rapid differentiation between the largest, most successful firms and the rest of the market. The last couple of decades have seen an evolution in the distribution of firms by size (Figure 14). The largest firms in the market now comprise a greater fraction of the economy relative to the past. The phenomenon of the big getting bigger indicates that we may be in a "winner-take-all" environment. With this in mind, firms evaluating new strategies should be cautious not to act too late because a successful competitor – or disruptor – may be able to establish an insurmountable lead, fueled by the rapid pace of technological change.

Figure 14



Sources: Bloomberg, J.P. Morgan
Note: 1990 data set as of 01/31/1990 and 2017 data set as of 01/31/2017. 394 companies in 1990 data set and 505 companies in 2017 data set. GDP multiplier of 3.1 applied to normalize 1990 data

EXECUTIVE TAKEAWAY

In a winner-take-all environment driven by technological change, successful firms are more able to establish formidable competitive positions. As a result, other firms must constantly push the investment frontier to most effectively compete in the marketplace.

8. Conclusion

With the pace of technology development continuing to increase, firms should prepare to disrupt first before they are disrupted. They can do this via proactive capital allocation, financial policies, communication, and structuring strategies that reflect this leadership role. We provide a list of questions to help companies on this journey.

Are firms being rewarded for their investment decisions, specifically those in longer-duration opportunities designed to ensure they are disruptors rather than disrupted?

Firms are rewarded for developing credible growth strategies. The investment horizon of many investors, coupled with the trend in shareholder activism, make investing in long-lead-time opportunities more difficult. Regardless, it is the role of Management and the Board to embrace and articulate a long-term strategy that keeps the company on the "disruptive edge." The right capital allocation decision-making, coupled with an effective communication and structuring strategy, will help to garner full value from investors.

What tools should be used to measure the long-term value creation potential of investments?

There is no perfect metric for measuring the potential value creation potential of investments designed to be disruptive. However, best practices include using a variety of metrics focusing on long-term benefits. Firms should also regularly re-evaluate their hurdle rates and consider the balance of investments in the ongoing business versus future opportunities as a portfolio of options that may minimize risk and maximize "disruptive" value.

What financing strategies should accompany these long-term "disruptive" growth investment strategies?

Long-term investments in disruptive opportunities are likely to be higher-risk than established lines of business. It follows that these opportunities be funded with a bias toward equity capital. Firms should also consider the financial flexibility embedded in their existing balance sheets, particularly given the debt capacity and market access certainty now available at BBB and even strong BB ratings.

How should "disruptive" capital allocation decisions be communicated to management teams, Boards, and investors?

Given the influence of technology across all industries, it will only be a matter of time before all firms are "tech firms," of a sort, speaking the language of disruption. Management teams should consider borrowing some of the vocabulary of today's best-in-class firms, clearly articulate their disruptive vision for the long-term, while acknowledging the risks to the business in the short-term, and listen carefully to feedback from customers, investors, and competitors.

What are the risks and potential mitigating strategies of investing in growth "optionality" that can maximize the opportunity for a company to be a "disruptor," and may minimize the risk of being disrupted?

In a winner-take-all corporate environment, it is of paramount importance for firms to constantly evolve and "disrupt." Even with a best-in-class capital allocation and communication strategy, investors may still discount the value-creation potential of disruptive investment opportunities. Structuring alternatives like JVs, tracking stocks, and even full business separations, are just a few of the ways firms can reduce risk perception and highlight value.

EXECUTIVE TAKEAWAY

Companies in every industry should be focused on the benefits of being the disruptor. With the right combination of investment, capital structure, communication, and structuring, firms can minimize their risk of being disrupted, and maximize their future value potential of being the disruptor.

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