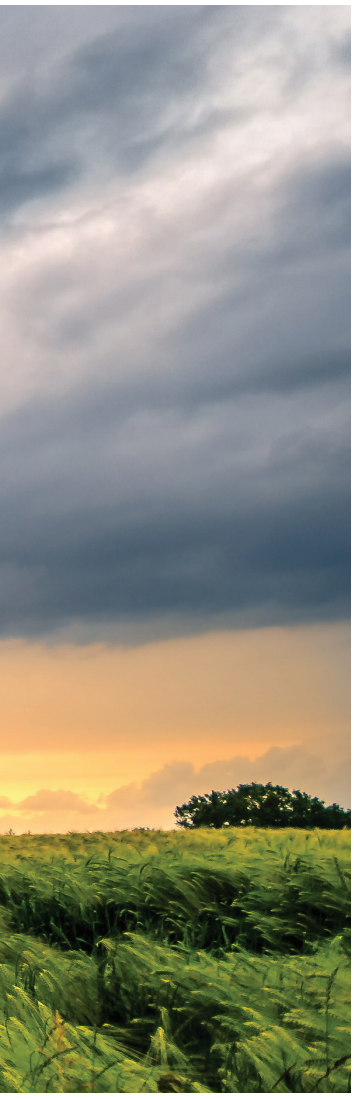
2020 Third Quarter
Corporate Insights

CREDIT SUISSE

Weathering a storm



Introduction

In just the last 20 years, we have seen multiple "once-in-a-lifetime" crises that have devastated economies, capital markets, businesses and personal lives. The nature of these events comes in all shapes and sizes: financial bubbles, global conflicts, natural disasters and viral pathogens are each shocks that habitually challenge the status quo.

A number of these respiratory virus outbreaks seemed to serve as a shot across the bow for what we collectively face this year. As the Covid-19 virus spread rapidly around the world, transforming into a deadly global pandemic, businesses shut, employees were laid off, economies went into free-fall and the equity markets fell. The outbreak of Covid-19 left market observers scrambling for ways to embed the term "Black Swan" into everyday dialog,[1] desperate to make the point that the current outbreak was unprecedented and entirely unexpected; businesses could not be expected to anticipate a viral pandemic!

Perceived once-in-a-lifetime market dislocating shocks have proven to be *less* rare than people assume them to be. Although no one can predict exactly when a global market dislocation will occur, it is an inevitable occurrence that still tends to catch our society off guard each time. These periods of market dislocation have been referred to as "Black Swans", an archaic term recently popularized by Nassim Nicholas Taleb: they are something believed to be impossible, based on the early European experience that all swans had white feathers. The term has become a metaphor for a once-in-a-lifetime sighting. However, "rare" events come to pass more frequently and can prove disruptive at best and deadly at worst.

The point is – we may all have short memories and failures of imagination. But from the relatively recent historical incidences of respiratory outbreaks and viruses (The Spanish flu, Ebola, MERS, SARS, etc.), all the way to Hollywood films ("Outbreak", 1995; "Contagion", 2011), the warning signs existed. In addition to history and Hollywood, the World Economic Forum listed a fast-spreading pandemic as one of the main risk factors in 2019.[2] Despite the highly-ranked risk factor, a recent report showed that less than a third of publicly listed corporates incorporated this risk in their annual reports.[3] Bill Gates, in a TED Talk in 2015 said "... we have invested very little in a system to stop an epidemic. We're not ready for the next epidemic."

But still, the coronavirus pandemic has not all been bad news – businesses have adapted and developed new, more efficient practices while working from home, new industries have emerged and decentralized decision-making has led to improved operational performance at times. This means that planning for the next "once in a lifetime crisis" or the next "once in a century flood" is not a waste of time, money and effort. Instead, such planning should become part of every company's strategic and financial toolkit.

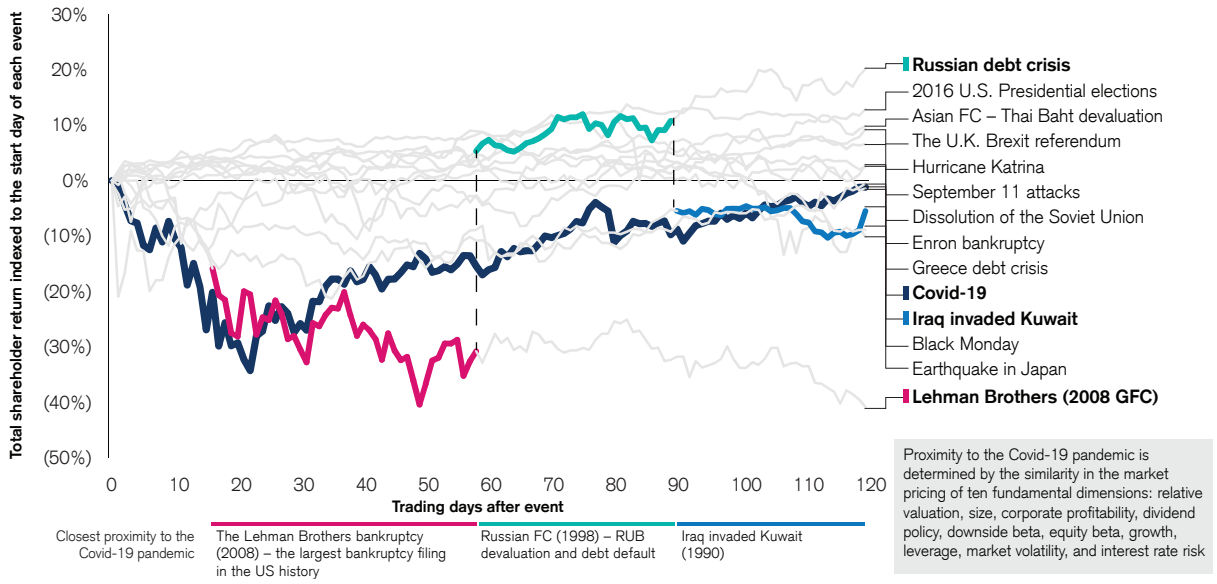
In this paper, the 16th in our ongoing series of **Credit Suisse Corporate Insights**, we look at some of the dominant themes that we've seen correlated with corporate success emerging from prior crises. We will challenge conventional thinking around cash management and question whether companies would be better off taking a long-term view on liquidity "through the cycle". Along with this defensive tactic to "weather a storm", we will also show that times of market dislocation can provide great opportunities to play offense, particularly when it comes to M&A. These two topics go hand-in-hand and should be viewed as holistic capital allocation planning. We hope to shed light as to when it is best not to follow the crowd, but rather to walk in the other direction through building a custom framework around your specific needs and vulnerability. Consistent with capital allocation and management themes we have touched on before,[4] we believe there are lessons to be learned, and paths to be taken to ensure that – the next time – you and your business will be better prepared.

Putting Covid-19 global pandemic market effects into perspective

So how far apart from other periods of macro-economic and market stress does the Covid-19 crisis stand? Is this crisis really different? In its early days, the global Covid-19 pandemic resembled a number of previous periods of market stress – it caused significant market disruptions with little room for countermeasures.

We compared this Covid-19 crisis to 14 prior periods of market dislocation from the perspective of how the market responded to corporate valuations, corporate profitability, financial policy, growth prospects, balance sheet strength, systematic and interest rate risk, relative valuation, the business complexity and tail risk.[5] By combining market valuation dynamics into one "score", we introduce a measure of the distance (or, difference) between the Covid-19 pandemic and other periods of market stress.

Exhibit 1: The evolution of the Covid-19 crisis relative to other periods of market stress
Timeline and similarity scores between the Covid-19 crisis and prior periods of market stress

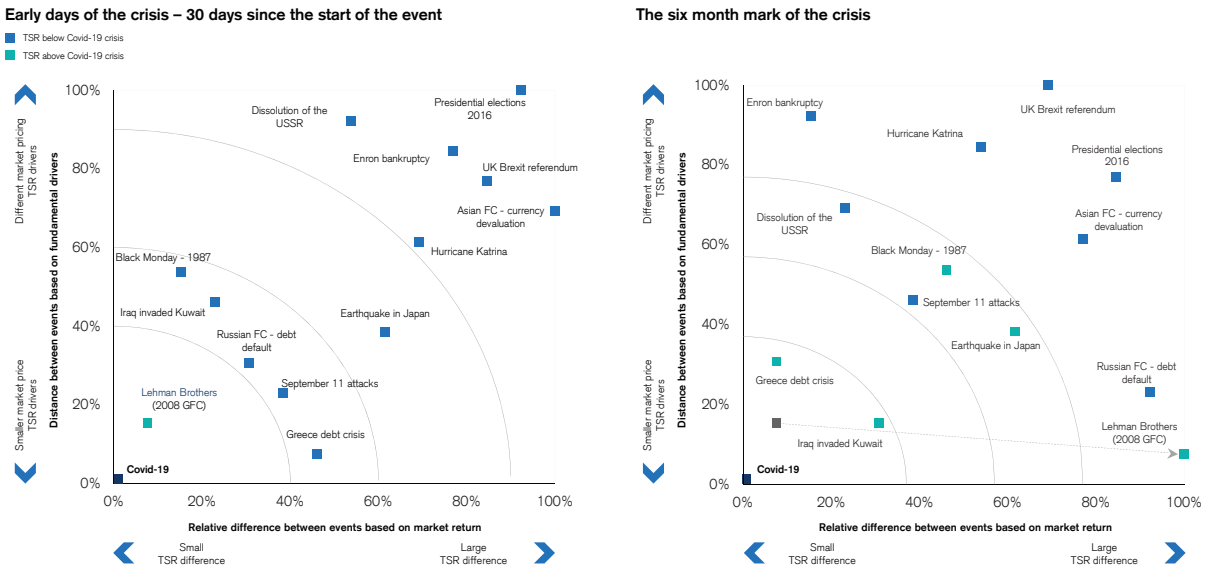


Proximity to the Covid-19 pandemic is determined by the similarity in the market pricing of ten fundamental dimensions: relative valuation, size, corporate profitability, dividend policy, downside beta, equity beta, growth, leverage, market volatility, and interest rate risk

In Exhibit 1, we illustrate cumulative TSRs from the start of each of the 14 events and highlight three prior events with the closest proximity to the Covid-19 pandemic, as determined by the differences in the market's pricing of the ten dimensions we just mentioned. For instance, during its first 60 days, the pandemic most closely resembled the Lehman Brothers bankruptcy in 2008. These two crises both originated in a leading world economy – China and the U.S., respectively – and subsequently spilled over to the rest of the world. Both had risk and uncertainty as the key driving force behind the initial market shock, which was very similar across the two crises. We found that the companies which underperformed in these crises had higher levels of total and systematic risk, higher leverage, lower relative valuation, lower returns on capital and less diversified business models.

Similarly to the Global Financial Crisis (GFC), in spring 2020 the real economy lost its footing on both the supply and the demand sides (the U.S. economy shrank by 31.7% in the second quarter of 2020 while the U.S. unemployment rate jumped from 3.5% to 13.3% from February to May of 2020). Unlike during the Global Financial Crisis, the core banking and financial system in 2020 has so far proved quite resilient against the various market shocks. Stronger balance sheets of major banks that form the core of the global financial system have thus far served as powerful mitigators rather than accelerators of these shocks.

Exhibit 2: Covid-19 similarity map: Distance to the Covid-19 crisis expressed in terms of TSR and its operational and risk drivers[6]



While at the six month mark of the pandemic, the 2008 financial crisis still had some similarities to the Covid-19 crisis along the pricing of the fundamentals dimension, it deviated quite a bit in terms of market performance. In fact, as can be seen from the similarity map in Exhibit 2, the majority of the previous periods of market dislocation that we analyzed have become more distant from the current crisis in this two-dimensional representation, putting the Covid-19 pandemic into its own category.

Despite its novel features, we still think the current crisis shares sufficient similarities with previous ones, so that we can still learn some common lessons.

Rethinking the value impact of liquidity

What is the value of a dollar?

We know a dollar in the left pocket is equivalent to a dollar in the right pocket. We know that dollar today is not worth the same in the future because of the time value of money. We also know that if that dollar gets invested into a riskier project, we would typically demand a higher rate of return to compensate for that risk. According to corporate finance theory, a company holding a dollar of truly excess cash should return it to its shareholders so that they can reinvest it themselves. Should the company hold onto that dollar instead of returning it to shareholders, the expected return would be in line with its risk profile... albeit a lower-risk marketable security. The perceived "value destruction" of a company holding onto excess cash is the *opportunity cost* for shareholders to invest that cash elsewhere – but a company holding cash does not destroy value to the firm itself. The cash balance a firm holds is an element of a much larger capital deployment framework where investment decisions, leverage levels, cost of capital considerations, shareholder distribution policies and cash all co-exist and have an influence on one another. Here, we want to focus on the cash balance decision and evaluate what the proper considerations should be as part of the overall capital deployment process.

Cash can be compartmentalized to fund operations, as a liquidity buffer or as dry powder for future acquisitions. Yet, when held on the balance sheet, the only measurable benefit that shows up on the profit line is the interest accrued – often leading to the perception that a dollar of cash on the balance sheet is a relatively unproductive asset. Given what we know about the frequency of market dislocations, should companies be managing their liquidity "through the cycle" in anticipation of another crisis? Might holding cash provide an additional benefit and help companies avoid a crisis-induced penalty? Some companies will be more vulnerable to value destruction than others, and understanding how that impacts the business should become an integral part to liquidity planning.

The "optimal" liquidity for a firm will be impacted by the volatility of the sources of cash, mainly in cash flows from operations and capital markets access. This means continuously monitoring the drivers of your own liquidity: cash flow volatility, seasonality, investment needs to fund growth, leverage as well as the capital markets to raise future cash if necessary. Of course, corporate cash flows and their volatility will depend on a combination of macroeconomic trends and company-specific operational performance. Let us compare total shareholder returns ("TSR") of two groups of companies with relatively strong liquidity versus relatively *weak* liquidity profiles — defined as a combination of cash balance and change in operating cash flow over-time. Does having a strong or weak liquidity profile influence TSR, and if so, when is it most pertinent?

Exhibit 3: Share price performance of more liquid companies vs. less liquid companies[7]

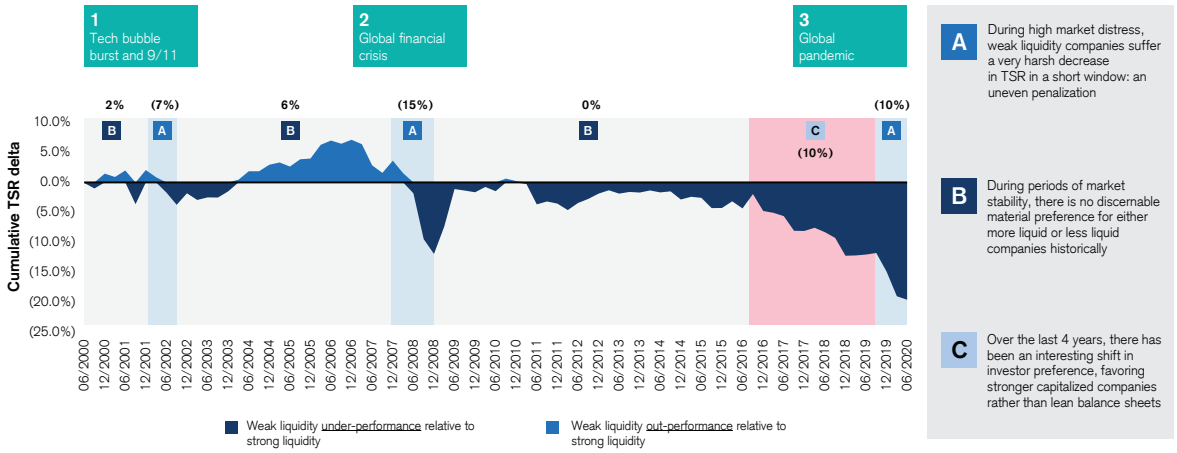


Exhibit 3 shows the cumulative relative performance of strong vs. weak liquidity. Increases in the chart indicate quarters of outperformance by weak liquidity companies and decreases indicate outperformance of strong liquidity companies in a given quarter.

When we look at periods of crisis – the tech bubble, the financial crisis of 2008 and the 2020 pandemic – we see companies with weak liquidity experience steep and rapid declines in relative TSR, representing a large *potential penalty* when these so-called "extreme" shocks happen. When companies with weak liquidity profiles see such steep share price decreases in a short timeframe, it can put the entire firm at risk. This type of collapse in share price doesn't just represent investment loss for shareholders, it also puts immediate pressure on the whole organization, particularly given the uncertain nature of the future at that point. It can adversely impact everything from funding the day-to-day operations all the way to the probability of default. In addition, an economic downturn can put pressure on a company's ability to not only fund future growth, but also to meet its fixed obligations. It becomes very easy to see how these types of events can create inordinate distress costs. In fact, matters get worse when we isolate the "hardest hit" companies in our sample, showing that 20% of companies with weak liquidity scores *lose at least half of their market value* in just one quarter.

Companies should evaluate cash management decisions throughout the cycle, rather than adhering to a somewhat conventional "wisdom" of maintaining a lean balance sheet. The economic and social impacts extend far beyond this notion when calculating the costs that insufficient liquidity have on employees, communities, government taxes and economic growth.

We don't believe that all companies should hold on to large cash balances when markets are rising and the economy is humming along, but we do think all companies should conduct their own *vulnerability assessment* to understand how they should incorporate event risk through the cycle in order to avoid that uneven penalty.

Airlines, for example, have had relatively low free cash flow compared to other industries, but have taken part in a flurry of share buybacks over the past decade. In fact, about 75% of airline companies that had *negative* annual operating cash flow in a given period used cash to repurchase shares in that same period.[8] One analysis pointed

out, "The biggest U.S. airlines spent 96% of free cash flow last decade on buying back their own shares."[9] Putting this all together, we should challenge the thinking around what "excess" cash really is and what should be available to be returned to shareholders. Traditionally, cash is considered operational cash, excess cash, or dry powder (cash held for acquisition). After recognizing this asymmetric penalty, perhaps we should also reconsider what the right level of "liquidity buffer" is to help weather periods of high market volatility.

Exhibit 3 also shows us the changing sentiment about balance sheets among investors. Up until 2016, there has been no permanent or long-term outperformance for "better" capitalized companies. But, for the last few years, equity investors have increasingly favored healthy, over-capitalized balance sheets for publicly traded companies. Looking ahead – and beyond the financial consequences of the Covid-19 crisis – equity investors could look much more favorably towards the financial strength and antifragility of enterprises. Companies with this extra financial resilience could be associated with higher valuation multiples and better return parameters relative to their less liquid peers.

After showcasing the benefits of liquidity strength, one would assume that companies with less predictable cash flow patterns would hold excess cash to protect their businesses. Oddly, we found the historical relationship of cash held and cash flow volatility to be far weaker than we expected.

Exhibit 4: Categorizing companies by cash flow volatility and cash balances over the long-term[10]

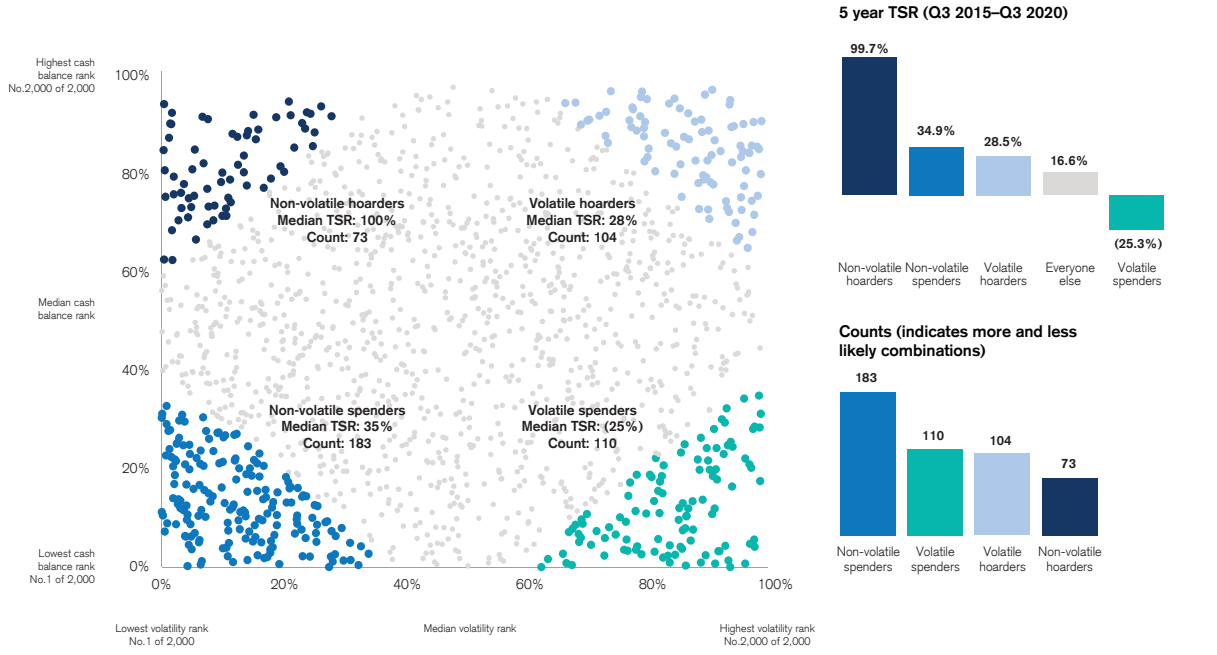


Exhibit 4 plots the rank for each of the 2,000 largest companies in the US on both the x- and y-axis – using five years of data (Q3 2015 – Q3 2020) of cash flow volatility and average cash balance (cash / total assets).

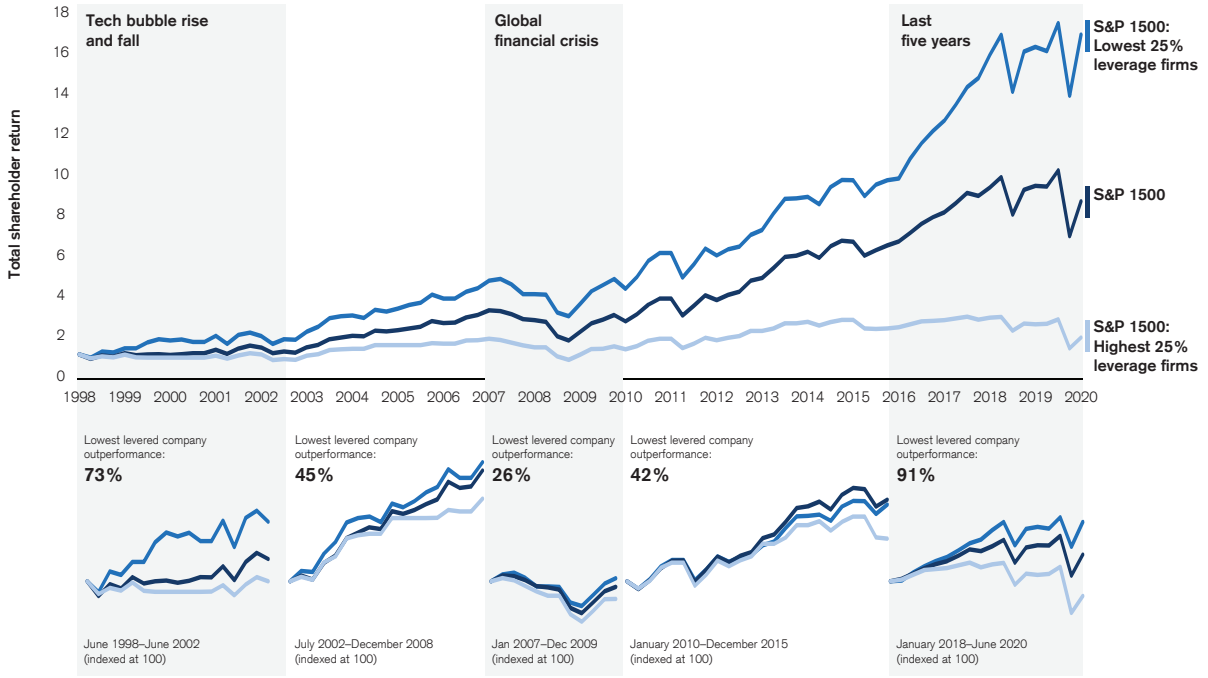
Initially, we expected to see a trend going from the bottom left to the top right, yet there does not appear to be a clear relationship between cash balances held and cash flow volatility. What we do observe is that investors appear to favor companies that have non-volatile cash flow profiles as the companies on the left side of the graph earn meaningfully higher TSR than those on the right.

Interestingly though, companies that are able to enjoy higher cash flow predictability *and* high cash reserves (top left dark blue shaded region) are scarcer, yet investors have heavily rewarded these companies with superior share price performance over the last five years. It seems that investors are increasingly favoring well-capitalized or stronger balance sheets – those with greater liquidity and predictability.

The final connection to make in this scatter plot is to contrast the top performers' operating profiles (top left) to bottom performers' operating profiles (bottom right). It is clear that investors have historically shied away from companies with low cash reserves and high cash flow volatility – as the typical company's shareholder in this cohort has lost about 25% of their investment in the last five years. Even more interesting is the number of companies. Of the four corners, "volatile spenders" represent the second highest number of companies. This is a poor combination, which is amplified during times of market distress. These companies are undoubtedly operating at suboptimal cash balances, and would benefit from making financial and operational changes to gravitate away from the bottom right corner.

After establishing the importance of understanding liquidity needs through cash balances and cash flow volatility, we must also consider leverage in the broader picture of a well-capitalized balance sheet. Exhibit 5 shows the long-term total shareholder returns for companies with high leverage and companies with low leverage in the S&P 1500. Here too, we see the same themes, namely, the benefit of having lower leverage during crisis events. Plus, there seems to be a secular trend of general investor preference towards lower leverage even in benign markets.

Exhibit 5: Long-term total shareholder return for low leverage and high leverage companies in the S&P 1500[11]



So what are some of the practical solutions for a company to improve its liquidity profile? To answer this question, we looked at the operating cash flow generation at a company's disposal after taking into account its investment needs and other variable expenses that in reality act more like fixed expenses.

Exhibit 6: Market variable expense contributors to cash flow, and how they have changed over time[12]

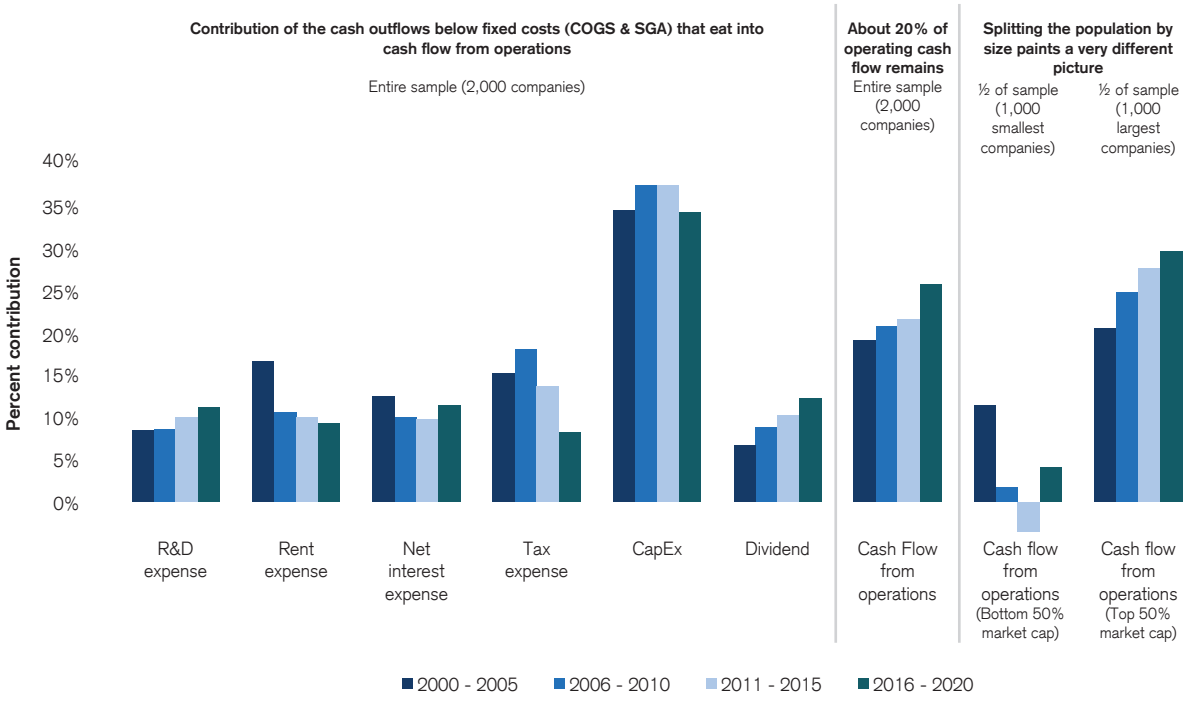
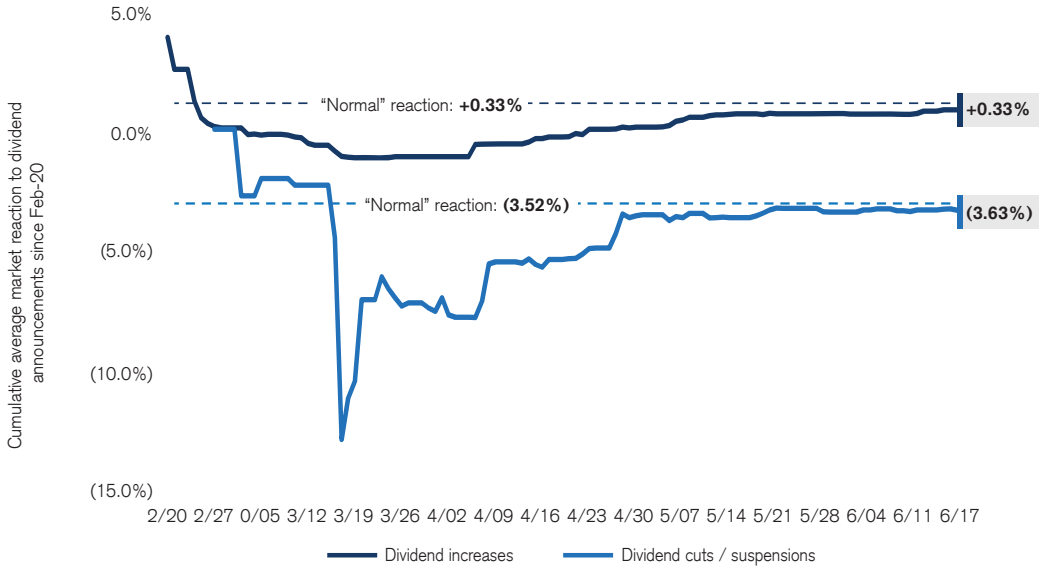


Exhibit 6 shows us that – relative to each of these cash flow contributors – capital expenditures represent about three times more than almost every other obligation. It is also interesting to note how these expenses have evolved over time. The increase in cash flows since the early 2000s has been a product of decreasing capex and decreasing tax expense, despite the uptick in R&D expense and dividend payments.[13] The market overall has consistently generated a healthy level of operating cash flow. However, when we split the data by size, the aggregates' operating cash flow of the 50% smallest companies hovers around zero. In fact, about 30%-40% of public companies historically earned negative cash flow on an absolute basis for *any given year*. In times of severe market stress, suspending or decreasing dividend commitments seems tempting as a relatively accessible source of cash for many cash-strapped companies. However, even though a dividend payment itself is a value-neutral event, the act of cutting or suspending a dividend program quite often leads to a negative share price reaction.

Exhibit 7: Quantifying the market reaction to dividend changes since 20 Feb 2020[14]



As Exhibit 7 shows, under "normal" market conditions the immediate announcement effects of dividend cuts have led to an average 3.5% loss of market value, but what we saw during the Covid-19 sell-off was that these announcements were penalized with much steeper declines in share prices. This is a common pattern: during market dislocations, investors' attitudes and reactions change from what we are used to seeing.

Because dividend cuts are among the most publicly noticeable actions a company may take, they are *more likely* to have an immediate negative market reaction as opposed to lowering R&D or capex investments behind the scenes – even if those would likely have a much bigger fundamental impact on the long term value of the business.

Ideally, companies can slowly build cash over time and otherwise a sale of assets or a capital market raise could add to a firm's liquidity position, but those are typically hard to do quickly during a period of market dislocation. The least painful would be to shut down any repurchase program, but after that the choices become much harder; defunding expansionary spending, cutting maintenance investments, dividends or the catastrophic option of suspending interest or tax payments.

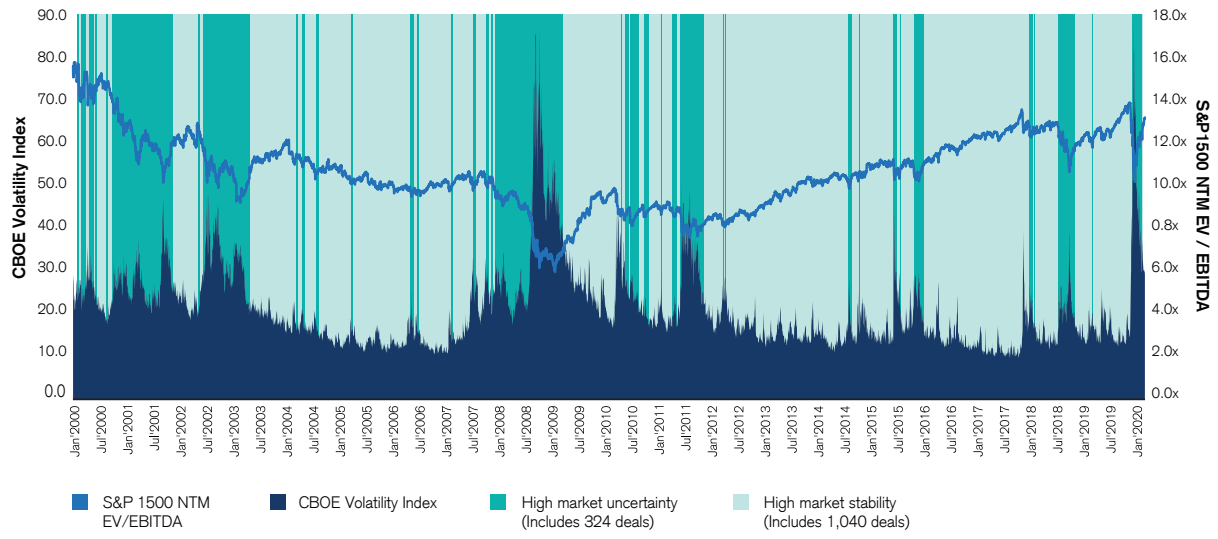
As part of the ongoing liquidity planning process, companies should incorporate a liquidity vulnerability assessment, which would include the evaluation of the probability of a liquidity shortfall over a short- to medium-term horizon. This process needs to be incorporated into the risk-aware culture of the firm and has to be dynamic in the face of a constantly changing risk environment that drives the operating uncertainty and cash flow volatility. Executives need to proactively ensure that their excess liquidity is set appropriately and is closely linked to the firm's risk tolerance level. Simulation of sources and uses of cash over the entire budget horizon can be applied to assess the risk of shortfall. It is not an easy task, as one must evaluate the theoretical trade-off between the cost of carrying cash and the cost of a liquidity shortfall due to an adverse market dislocation event. While the former is quantifiable, the latter is an event in which we don't know what it will entail exactly, only that it will inevitably happen. Our analysis suggests that *extra liquidity carries less of a stigma* for a business than many people think and can certainly help protect it. The payout is bigger than just the interest earned on cash. It is time to redefine how to value a dollar.

M&A opportunities in times of market dislocation

Should companies play offense through M&A when the market is less stable? In risk-off environments, it may be natural to assume that capital allocation decisions should be made conservatively. However, a market dislocation period could be exactly the right time to take advantage of the opportunities that chaos can bring along with it – in the form of pursuing a strategy of M&A.

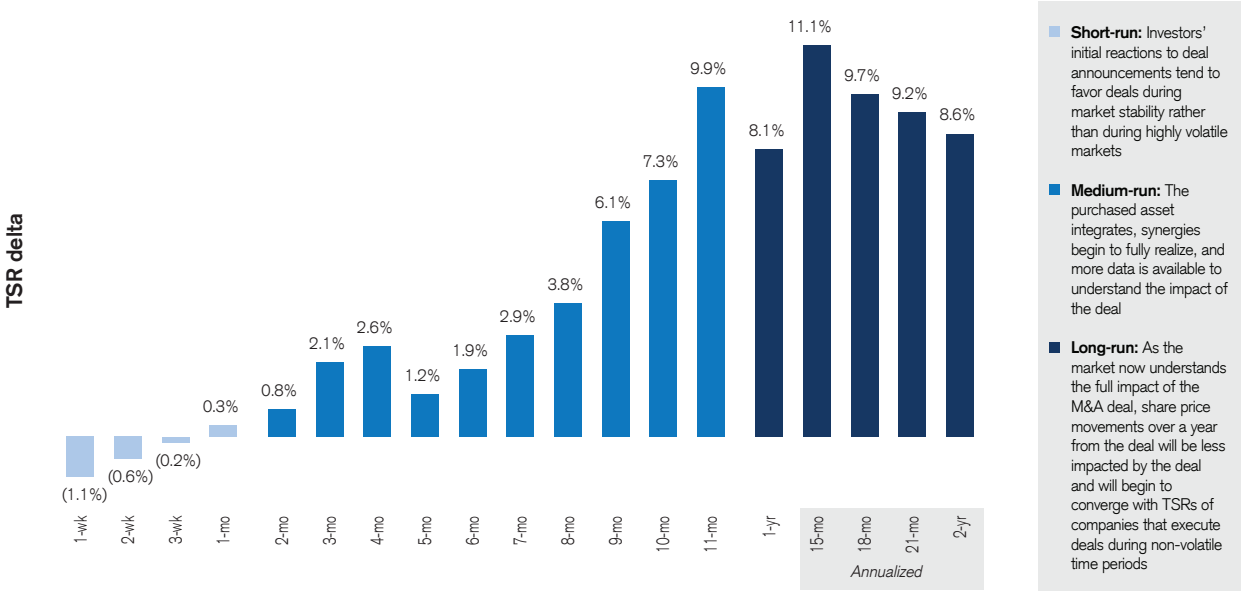
With valuations at lower levels and fewer competitors bidding for assets, companies with strong balance sheets can find the deck stacked in their favor. It may also be easier to convince a potential target to come to the table for discussions when their needs are higher. Market distress can breed introspection, but times of crisis could lead companies to reassess strategic alternatives that were not previously considered. Fortune may favor the bold; could M&A yield better results at times of market dislocation, and if so, what are the potential pitfalls of being contrarian?

Exhibit 8: Defining market dislocation periods since 2000 based on market multiples and volatility[15]



In our prior section, we looked at long-term share price performance forcing us to consider only the well-known longer crisis periods. Here we have the luxury to be more specific and identify market dislocation periods on a daily basis. These can be shorter periods when market shocks are temporary and quickly rebounded. Therefore we defined a "market dislocation event" by looking at a combination of market volatility (as defined by the VIX[15]) and market multiples over the last 20 years and isolating times where both the VIX was above its historical average and the market multiple was in the bottom 30% of its daily observations over the prior year. Exhibit 8 visualizes periods of relative dislocation and stability respectively based on these two factors. Now we can analyze the relative performance of acquisitions announced during dislocation periods versus the stability periods via tracking total shareholder returns.

Exhibit 9: The difference of acquirer TSR performance during periods of market dislocation vs. market stability



Delta calculated as volatile TSR less non-volatile TSR for each time period

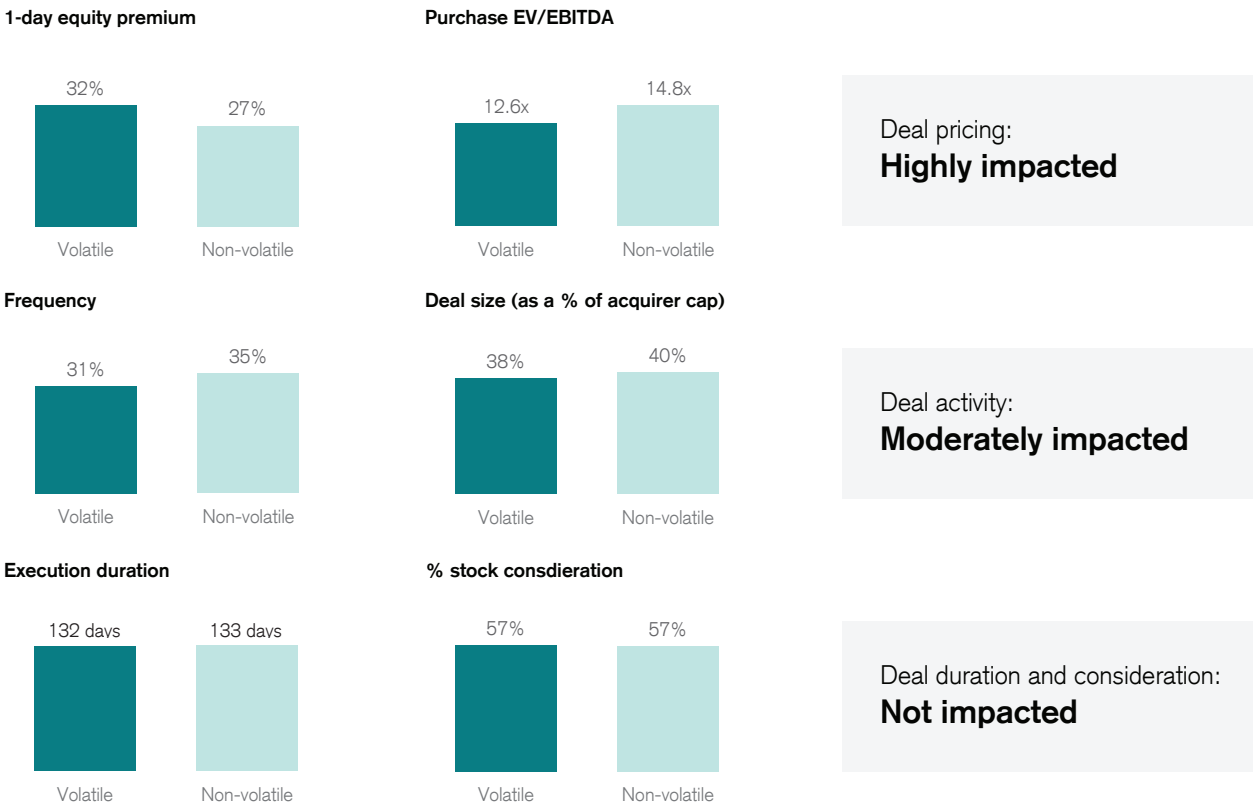
Exhibit 9 illustrates the difference in total shareholder returns for companies announcing deals in time periods of market dislocation versus stability over time.[16] Data points above 0% indicate outperformance of transactions executed during dislocation periods vs. periods of stability. We observe that the immediate impact – as measured by the relative TSR during the first two weeks after announcement – tends to result in about a1% lower TSR than deals announced during stable market conditions. This doesn't come as a surprise for companies engaging in risky transactions against a backdrop of uncertainty where general investor sentiment is much more risk-averse. However, those deals actually meaningfully outperform M&A announced during non-volatile times in the long-run, or more than a year from the deal announcement. On an annualized basis, these transactions outperform the transactions executed during stable periods by close to 10% – evidence that the risk may be worth the reward.

What explains the difference of acquirer TSR in both the short- and long-term during these periods of market dislocation? We believe it is primarily a reflection of market dislocations creating windows for companies to opportunistically purchase assets at relative discounts. We have also found that there are fewer deals occurring during market dislocations[17] suggesting less competition to drive up any prices in the bidding process. This can benefit potential sellers as well, as it is easier to

implement efficiency programs and facility consolidations that often accompany a take-over when times are bad versus when times are good. The need for change can be the catalyst for self-reflection that facilitates two parties to sit at the negotiating table together.

Another plausible explanation is that stronger companies with stable cash flows tend to be the ones that are able to afford large asset purchases during market dislocations – another key advantage of companies maintaining robust liquidity. On the flip side of the coin, those companies facing operational and financial challenges during market dislocations might be more open to negotiations compared to relative market stability due to their distressed position.

Exhibit 10: Qualitative differences of deals completed during high market dislocation vs. high market stability



A closer examination of deal characteristics allows us to uncover additional insights into the differences and commonalities of deals announced during market distress as opposed to stability ("Volatile" vs. "Non-volatile"). Firstly, we observe that the average premium is higher, reflecting the company's long-term view of the value of the target despite the relative discount in market prices. However, transaction multiples paid still end up being meaningfully lower – this can partially explain the superior long-term TSR performance of acquisitions done at these times of uncertainty. In addition, companies could get rewarded for taking action in an environment that is generally perceived as riskier and when information is more scarce or uncertain. For instance, during the Covid-19 crisis we saw increased volatility in EPS and EBITDA estimates compounded with companies withdrawing guidance. In the subsequent four months to the Covid-19 market crash in February 2020, over a third of S&P 500 companies withdrew 2020 guidance, making it more difficult to pinpoint the impact on company fundamentals.[18] Beyond the impacts on pricing come the size and frequency of deals during the two contrasting market periods. We see a slight difference in activity, with deals averaging larger sizes and occurring more frequently during periods of market stability. Lastly, there seems to be no material difference in how long an M&A deal takes to complete during market dislocation versus relative market stability. While one might intuitively assume additional complexities resulting from market dislocation would delay deal execution, we do not observe any differences in the average execution speed of deals announced in choppy markets versus calm. Nor do we see any difference in how the average deal is financed.

After considering the differences and similarities of executing a deal in different market conditions, it is clear that successful M&A can happen at any point in time. But, crises may present managers with opportunistic windows to purchase assets that can help generate NPV and drive outperformance. The value created through a deal always ultimately comes down to "winning" the price-value tension. Market conditions can have a material impact on the "price" side of the equation. We also identify transaction characteristics (part of the "value" side of the equation) that are stickier or more rigid at different points of the cycle – and understanding how much market conditions affect these characteristics can ultimately benefit the acquirer.

Conclusion

“By failing to prepare, you are preparing to fail” **- Benjamin Franklin**

Within any economic cycle, events are bound to take place that will demand a recalibration of your own plans. We believe it prudent to actually begin to expect crises, and even to integrate them into your strategies for how you run your businesses. The market seems to increasingly favor those companies that can weather the next storm. Although we may not know when – or from where – the next shock will emerge, we must be aware of a variety of possible threats. For example, we have only relatively recently begun to experience the environmental and economic impacts caused by climate change. But recognizing that threat – and others – are out there is the first critical step in ensuring that we don’t experience another episode of selective memory or failure of imagination. Consider that – while either weathering a storm or enjoying a bright and sunny day.

Endnotes

1 Taleb, Nassim Nicholas, The Black Swan: the impact of the highly improbable (2nd ed.), London: Penguin, 2010.
2 "The Global Risks Report 2019." World Economic Forum, 15 Jan. 2019, www.weforum.org/reports/the-global-risks-report-2019.
3 Pols, Martijn, "Van de grote beursbedrijven zag slechts een op de drie het risico van een pandemie." FD.nl, 2020. English translation of title: "Only one in three of the large stock exchange companies saw the risk of a pandemic."
4 Based on our 2019 1st Quarter White Paper – Building Resiliency – we discussed topics inclusive of developing a dividend strategy, using share buybacks as a tactical tool, company guidance and debt structures.
5 Corporate valuation defined by the forward p/e multiple, corporate profitability by CFROI, financial policy by forward dividend payout, growth prospects by LT growth estimates, balance sheet strength by leverage, systematic risk by 2-year equity beta, business complexity by total assets, tail risk by downside beta and interest rate risk is estimated in relation to the treasury yield curve.
6 First thirty days of the left-hand-side chart are expressed in business days. The six-month mark in the right-hand-side chart includes 168 calendar days. Relative distances on the x- and y-axis are expressed in terms of percentiles (with the furthest distance being 100%).
7 We defined 'strong' and 'weak' liquidity through an equally rank-weighted combination of cash held and historical operating cash flow volatility. A score was calculated based on the average rank on these two metrics across the broad US equity market and this ranked sample was split into either strong or weak liquidity based on a company's score.
8 Operating cash flow defined as (Net income + Depreciation and Amortization – Capital Expenditure – Change in Net Working Capital – Dividends Calculations based on all ten year historical negative cash flow from operations for of all US airlines.
9 Kochkodin, Brandon. "U.S. Airline Spent 96% of Free Cash Flow on BuyBacks." March 16 2020. www.bloomberg.com.
10 Exhibit 4 plots the rank for each of the 2,000 largest companies in the US on both the x- and y-axis – using five years of data (Q3 2015 – Q3 2020) of cash flow volatility (x-axis: standard deviation of 20 quarter period change in operating cash flow) and average cash balance (y-axis: average of 20 quarter period [cash / total assets]). No two x coordinates share the same value. No two y values share the same value. Each axis coordinates are each ranked in an even scale [1, 2, 3, ..., 1999, 2000].
11 Leverage defined as (Total debt / NTM EBITDA). S&P 1500 excludes financials, real estate and utility companies. Sourced from FactSet and HOLT global database.
12 We define cash flow from operations here as the additional cash generation. The buffer of a company after paying for its capital expenditures, rent, R&D, interest, taxes and dividends. While some of these expenses such as capex and dividends may be flexible, we want to understand the true excess cash generation of a company after it fulfills all its ideal investment needs. We rank each expenses' contribution to cash flow (and future cash flows), changeability and volatility. This method will yield different results for each company as managers look to optimize and steady its cash flows through a capital allocation decision tree. Understanding how individual expenses contribute to cash flow, and how these expenses have changed over time can help set rules in the decision tree.
13 Based on historical actual quarterly LTM figures:
R&D - Represents LTM expenditures on research and development, specifically intended for the development of concepts or ideas for new products or services by which the company can increase revenues and includes the full cycle of testing before the same products or services are launched commercially.
Rent – Represents LTM expenses for leases on land, buildings and other tangible assets that do not qualify as capital or finance lease.
Net interest expense - Represents LTM interest expense, net of interest capitalized for the period and date(s) requested in local currency by default.
CapEx - Represents LTM total capital expenditures.
14 Define "normal times". Includes announcements by all US companies since 20 Feb 2020. 1-day, beta-adjusted excess return to the S&P 500 from the day before the announcement.
15 Daily NTM EV/EBITDA and CBOE Volatility Index are sourced from FactSet.
16 Figures on the chart are calculated as the difference of TSR performance for companies that completed deals during high market uncertainty versus companies that completed deals during high market stability as defined in Exhibit 8. TSR calculations begin to weeks after the announcement of the deal to avoid any deal rumors or expectations within the price.
17 Sourced from Credit Suisse Mid-year 2020 global M&A review.
18 Sourced from Bloomberg. Credit Suisse Corporate Insights analysis "Corporate actions in the height of Covid-19".

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