

VOLUME 8 | SUMMER 2021

THE REAL ECONOMY

INDUSTRY OUTLOOK

THE POWER OF BEING UNDERSTOOD
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The Real Economy: Industry Outlook provides a collection of sector-specific insights developed by our RSM US LLP senior industry analysts, a select group of professionals dedicated to studying economic and industry data, market trends and the emerging issues faced by middle market businesses.

Each outlook offers a data-driven approach to industry research, examining the effect of economic factors, including the impact of COVID-19, earnings, competitive landscapes, consumer behaviors, capital flows, mergers and acquisitions, supply chains, labor and more.

Should you have questions about any of the following content, please [contact us](#).


Sincerely,

JOSEPH BRUSUELAS, CHIEF ECONOMIST, RSM US LLP

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Firms continue to focus on how spending more on technology could minimize inefficiency, increase operating profits and protect their firms against the growing threat of cyberattacks.

INDUSTRY OUTLOOK:

BUSINESS AND PROFESSIONAL SERVICES

BY MICHAEL GERLACH, SONYA KING, STEPHANIE JOHNSON AND CAMERON MCMILLIAN

AS WORKFORCE SHORTAGES continue, business and professional service firms are still fighting the return-to-work battle. Many aim to reopen their offices, so to speak, around Labor Day with hopes that productivity can return to pre-pandemic levels. With operational shifts at the forefront of strategic planning, many firms continue to focus on how spending more on technology could minimize inefficiency, increase operating profits and protect their firms against the growing threat of cyberattacks.



KEY TAKEAWAYS

- Law firms focused on efficiency are seeking quick wins by improving back-office processes, while technology implementation and cloud migration remain key challenges.
- Despite increased awareness of cybersecurity risks and challenges, there is little evidence of elevated measures to combat them.
- Government contractors anticipate growing opportunities to address broad national needs relating to information technology, cybersecurity, and research and development.
- Introduction of the Cyber Response and Recovery Fund signals the federal government's pointed focus on cyber response and provides a powerful vehicle for future investment.
- Increased deal size and fundraising levels involving human capital management services reflect how the nation is placing an emphasis on employees.

Based on our conversations with law firm executives, while the desire to grow a firm's top line is preferred over continuing to cut costs, many firms still don't know where or how to start.



LAW FIRMS

Firms will operate through the remainder of 2021 with a heightened focus on efficiency, as they look to achieve quick wins by improving back-office processes. Technology implementations and cloud migrations continue to be key challenges, but they are more likely to be investments in 2022, as firms prioritize lower-investment and less-disruptive improvements in the short term. There is also more awareness around cybersecurity risks and challenges, but little evidence of elevated measures to combat them.

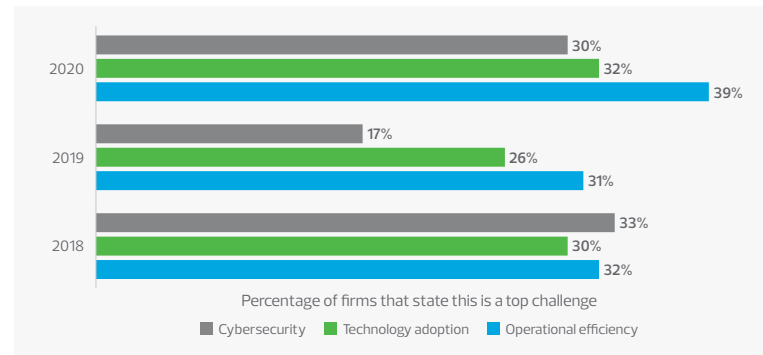
Further reduction in real estate spending

Although many law firms have been downsizing their office spaces for the last decade, the pandemic's remote-work model has accelerated the opportunity for further reduction. Almost two-thirds (64%) of law firms plan to spend even less on real estate in the next three to five years, according to the Aderant Business of Law and Legal Technology Survey, conducted in late summer 2020. This indicates the decade-long downsizing trend will continue, with more firms making remote or flexible working arrangements permanent.

It also signals that a significant amount of space subleased by law firms will be coming to most U.S. markets. While law firms accounted for 5.9% of all office leases signed in the United States in 2019, according to CBRE Group, a 15%–25% reduction in space occupied by law firms is expected in the near term, Vice Chairman Stephen Bay told WMRE magazine in October.

This long-term adoption of a remote-work environment is probably driving the top challenges of 2020 cited in the Aderant survey. Operational efficiency (39%), technology adoption (32%) and cybersecurity (30%) were the most frequently cited challenges in a list of 15.

Top challenges facing law firms



Source: Aderant Business of Law and Legal Technology Survey

Operational efficiency in the back office through process improvement

The pandemic has boosted business at many law firms, exposing the long-overdue need to improve operations in order to scale efficiently. However, only 48% of law firms plan to achieve these efficiencies by spending more on software, while 70% plan to do so by increasing investment in process improvement, according to the Aderant survey, which was published in May.

This shows that law firms are looking to optimize current processes using the technology stack in which they already have invested. Process improvement also is usually less disruptive to internal operations than technology implementation and is preferred when looking for quick wins or a short-term return on investment.

But what about growing revenues?

Firms might finally be ready to address many of the front office operational issues they have been avoiding or putting off. This realignment of priorities is evident in how Aderant survey respondents identified the top three challenges facing their firms: 29% said retaining and growing existing business from clients, up from 19% in 2019. It is the first time in the four-year history of the survey that more firms cited this challenge than pricing pressure (28%). In other words, firms are seeking to improve profits by growing revenue instead of by just cutting costs.

However, based on our conversations with law firm executives, while the desire to grow a firm's top line is preferred over continuing to cut costs, many firms still don't know where or how to start.

Because of the pandemic, firms have a litany of opportunities to embrace the change that has been forced upon their leadership teams, and they should incorporate these opportunities into their strategic planning sessions at their partner meetings this summer and fall. Whether it's addressing go-to-market approaches, sales, networking, training of rising stars, building cross-functional working teams, understanding the profitability metrics and opportunities within their current client mix, or even the continued importance of succession planning, firm leaders have finally reached a point where these difficult conversations must be on the agenda.

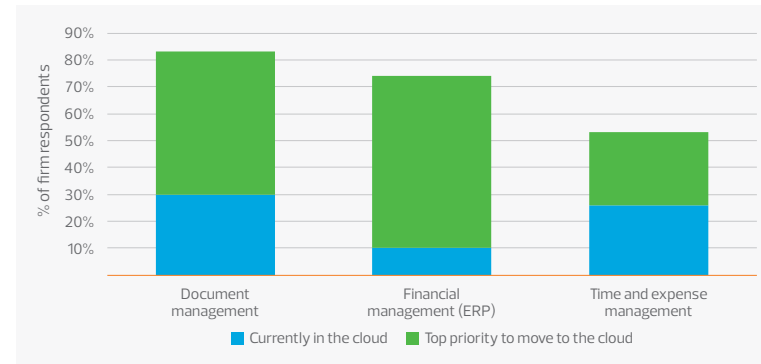
Cloud migration: Immediate challenge but long-term solution

The top three technologies with the biggest impact on efficiency at a firm continue to be document management (82%), financial management/enterprise resource planning (75%), and time and expense management (74%), as determined in the Aderant survey. We expect a [sizable portion of technology investment](#) will be to move these technologies and similar ones to the cloud.

MIDDLE MARKET INSIGHT

The pandemic has boosted business at many law firms, exposing the long-overdue need to improve operations in order to scale efficiently. However, firms' strategic approach to this varies.

Moving valuable legal technologies to the cloud



Source: Aderant Business of Law and Legal Technology Survey 2020

Although many firms desire to move document management and time and expense management systems to the cloud, they are reluctant to make this investment until their older, on-premises financial management (enterprise resource planning, or ERP) systems are updated or migrated—and migrating the ERP system can immediately disrupt daily operations. With operational efficiency being a top challenge, even a short-term disruption for long-term improvements is not palatable, given the tumult caused by the pandemic. This reluctance is creating a bottleneck of technology improvements, which will continue to hold firms back from the operational efficiencies they desire.

The current focus on process improvement over tech adoption shows that although a cloud migration may be on the road map, implementation may be delayed in order to tackle less daunting process improvements in the short term. Aderant reports that only 8% of firms plan to move their practice management solution to the cloud within the next 12 months, and 31% plan to at least a year from now. But firms can't afford to wait much longer to join the



Firms' reluctance to invest in strategic technology and revenue-growing activities might negate cost-management efforts relative to other firms that are strategically aligned to grow revenue, scale, and gain market share.

MIDDLE MARKET INSIGHT

A significant amount of space subleased by law firms will be coming to most U.S. markets.

cloud migration. Some are annually spending tens of thousands of dollars—or even more—to maintain on-site server rooms and the associated salaries for technicians, security upgrades and other related support. Firm leaders need to recognize that migrating to the cloud benefits their attorneys and balance sheets more than maintaining the status quo.

Cybercriminals take aim

Cybersecurity is increasingly challenging law firms, a trend consistent with what [the entire middle market has experienced](#) during the pandemic. The number of firms that rate cybersecurity as a top challenge increased to 30% in 2020 from 17% in 2019, according to the Aderant survey. The American Bar Association's 2020 Legal Technology Survey found that 29% of respondent firms experienced a security breach last year, compared to 26% in 2019.

Cybercriminals probably will continue to target law firms with ransomware, as firms are becoming increasingly paperless and hold terabytes of highly sensitive and valuable information. For firm executives, the associated operational and reputational risks are worth losing sleep over.

To deter and repel hackers, firms can implement technologies such as firewalls and two-factor authentication, ensure that software

is updated, patched and maintained, and back up files in secure repositories. However, many firms face a pair of challenges: deciding which technology makes the most sense depending on the makeup of the firm, and obtaining approval for increased spending to protect the firm. We have found that if a firm can align its security programs to an [appropriate security framework](#), it is much more likely to obtain the funding and support it needs to sufficiently secure the firm.

The view forward

It's clear that law firm leaders continue to look to [manage expenses in the back office](#) as a strategy to increase profits, especially through identifying quick wins and making any relatively easy changes. However, we are seeing a reluctance to invest in strategic technology and revenue-growing activities—which might negate cost-management efforts relative to other firms that are strategically aligned to grow revenue, scale, and gain market share.

GOVERNMENT CONTRACTING

Government contractors are looking forward to increased federal spending under the Biden administration and more opportunities to work across agencies to address broad national needs relating to information technology, cybersecurity, and various forms of research and development. The comprehensive need for innovation, modernization and security across the government will require collaboration, agile procurement and aligned missions. The federal government continues to lean on its partnerships with private commercial businesses to tap into the brightest minds and ensure the flexibility and agility to innovate in an economical manner.

IT modernization across the federal enterprise

President Biden's fiscal year 2022 budget request, released in late May, includes \$58.4 billion of top-line spending on information technology at civilian agencies. The White House Office of Management and Budget said this is intended to encourage the "strategic use of IT to enable mission outcomes" and, more specifically, "support the modernization of antiquated and often unsecured IT; agency migration to secure, cost effective commercial cloud solutions and shared services; the recruitment, retention and reskilling of the federal technology and cybersecurity workforce to ensure higher value service delivery; and the reduction of cybersecurity risk across the federal enterprise."

Large public government services contractors, as well as small and middle market contractors, are positioning their businesses for related proposals to drop. Specifically, contractors continue to acquire the experts, technology and capabilities needed to beat the competition and ensure delivery of cost-effective solutions for the government.

The top five agency requests as a percentage of the \$58.4 billion top-line figure are from the Department of Veterans Affairs (14.5%), Department of Homeland Security (13.9%), Department of Health and Human Services (11.9%), Department of the Treasury (10.2%) and Department of Transportation (6.3%). The recent uptick in telemedicine and related digital services for the Department of Veterans Affairs alone supports its allotment of the lion's share. However, a continued focus on pandemic recovery and national security also makes DHS and HHS expected leaders of the pack.

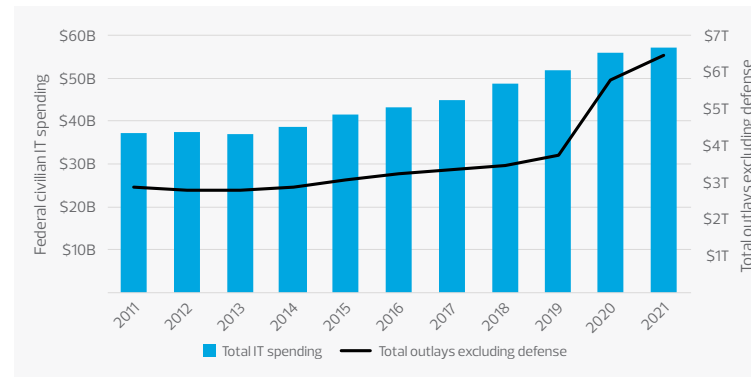
A significant increase in federal outlays (excluding defense) in fiscal years 2020 and 2021 resulted from a combination of COVID-19 response and recovery, low interest rates and a new administration supportive of bigger government. However, federal civilian IT spending has been on a steady upward trajectory over the last decade. Contractors should be confident that government services

MIDDLE MARKET INSIGHT

Under a Biden administration intent on increasing federal spending, contractors continue to acquire the experts, technology and capabilities needed to beat the competition and ensure delivery of cost-effective solutions for the government.

related to IT modernization and security will continue to be in demand, with even greater upside associated with new issues or those exacerbated by the pandemic.

Federal spending at civilian agencies



Source: White House Office of Management and Budget; RSM US LLP

The president's budget request includes an additional \$500 million for the Technology Modernization Fund (TMF), a program targeting investment in critical IT modernization and innovation efforts. The TMF received a \$1 billion dollar boost via the American Rescue Plan and recently announced greater prioritization and looser payback requirements for programs focused on cybersecurity and COVID-19 response. The TMF was created in March 2019 and has awarded \$79.4 million in funding to date, underscoring the significance of the recent large influx of TMF funding and signaling a commitment to long-term technology modernization efforts spanning the federal government.

A consistent, unified approach to cyber

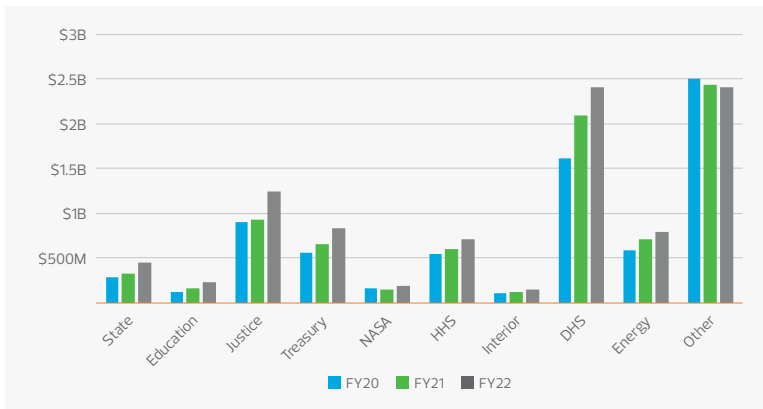
With any IT modernization effort come cybersecurity implications; \$9.8 billion of the \$58.4 billion civilian IT budget request is for cybersecurity-related activities, 14% greater than the estimated expenditure for FY 2021. Nine major agencies expect double-

digit growth in cybersecurity spending in FY 2022. The Departments of State, Education and Justice lead, each with expected spending growth exceeding 30%; Treasury and NASA each project spending growth of more than 20%; and HHS, Interior, DHS and Energy each expect percentage growth in the teens.

Government contractors are looking forward to increased federal spending and more opportunities to work across agencies to address national needs relating to information technology, cybersecurity, and various forms of research and development.



Civilian federal cybersecurity spending by agency



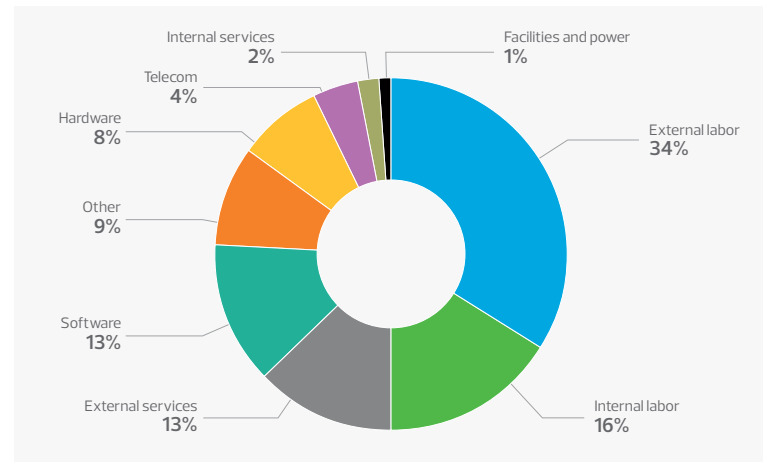
Source: White House Office of Management and Budget; RSM US LLP

Not included in these figures is cyber defense spending, which is also supported by the new administration, as well as a proposed \$20 million investment for a new Cyber Response and Recovery Fund focused on strengthening critical infrastructure and the federal government's ability to respond to cyber threats and attacks. While \$20 million isn't a huge number, the introduction of this fund signals a pointed focus on cyber response and provides a vehicle for future investment that could grow meaningfully, like we saw recently with the Technology Modernization Fund. The president's budget and related OMB documents regularly mention the SolarWinds hack as an impetus for accelerated investment in and a laser focus on protection and security.

Contractors ready to execute

During the FY 2021 budget cycle, agencies were required for the first time to report IT spending data categorized by cost pools and IT towers via the Technology Business Management (TBM) framework in an effort to better understand the federal government's spending and results in a holistic manner. Contractors provide nearly all products and services related to each cost pool except for internal labor, which reflects the work performed by government employees. Per the FY 2022 budget request (excluding defense), only 16% of costs are allocated to internal labor, leaving roughly 84% as open opportunity for contractors.

2022 budget request cost pools



Source: Bloomberg Government; RSM US LLP

The federal government continues to lean on government contractors to execute on strategic initiatives in a way that is innovative, secure and efficient. We expect great opportunity for contractors serving the federal government in the coming year as IT modernization, cyber and COVID-19 recovery initiatives continue.

MIDDLE MARKET INSIGHT

Private equity funds that target the human capital services sector raised \$5.2 billion in capital between October 2020 and May 2021, according to PitchBook. That eight-month total is almost \$2 billion more than any annual total dating to 2012.

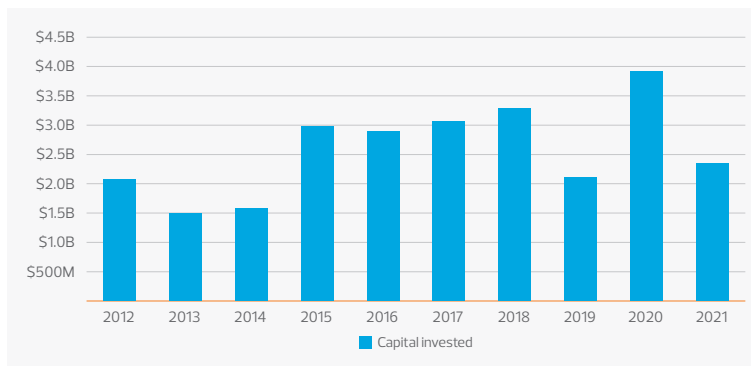
WORKFORCE SOLUTIONS

Human resource management and technology has been a thread in macroeconomic conversations since the pandemic began, with topics ranging from unemployment rates and wages to digital solutions that connect the labor force and enhance employee-related efficiencies. Halfway through 2021, workforce solutions providers are capitalizing on widespread opportunities to help businesses in all industries position themselves for their post-pandemic state.

Opportunity and demand meet private equity

Investments in human capital tools and resources are on the rise as companies aim to improve the talent experience at their organizations. Private equity funds that target the human capital services sector raised \$5.2 billion in capital between October 2020 and May 2021, according to PitchBook. That eight-month total is almost \$2 billion more than any annual total dating to 2012. It reflects how the nation is placing an emphasis on employees by investing in employment services, recruitment, training, career development and human resource technology.

Capital invested



Source: PitchBook Data Inc.

Of the \$3.9 billion these private equity funds raised in 2020, \$2.9 billion was raised in the fourth quarter as the nation neared the release of COVID-19 vaccines and began to see how the post-pandemic workforce environment might be structured. The momentum continued with \$2.3 billion raised from January through May—more than was raised in all of 2019 (\$2.1 billion). As the country continues to evaluate what our workforce will look like, one thing is clear: The tools and technologies in place at our organizations are becoming increasingly vital to their success.

Valuations and growth

As companies become more permanently dependent on virtual meetings, and even as some return to work in a hybrid format, many organizations are relying on search firms to replenish and strengthen their workforce. Companies are engaging with firms that offer training and professional development to help their employees and executives be better skilled to deal with the next crisis.

Valuations of companies operating in these spaces and providing these services are steadily increasing as they go to market, leading to larger deals and ultimately an influx of capital. The average deal size of organizations operating in the human capital services sector from the start of 2020 until May 2021 increased from \$365 million to \$468 million, according to PitchBook. The average post valuation over that same period increased from \$357 million to \$765 million. This represents a great opportunity for those businesses to invest in technological advances and expand service offerings.



Companies offering human capital services and related technologies can expect to grow in the near term as demand for them rises and the supply of workers normalizes. The long term appears bright, as well, as technology becomes ingrained.

The ‘magic’ combination

Even for human capital services providers not seeking to transition ownership, opportunities are inspiring executives to pursue new ideas and capabilities.

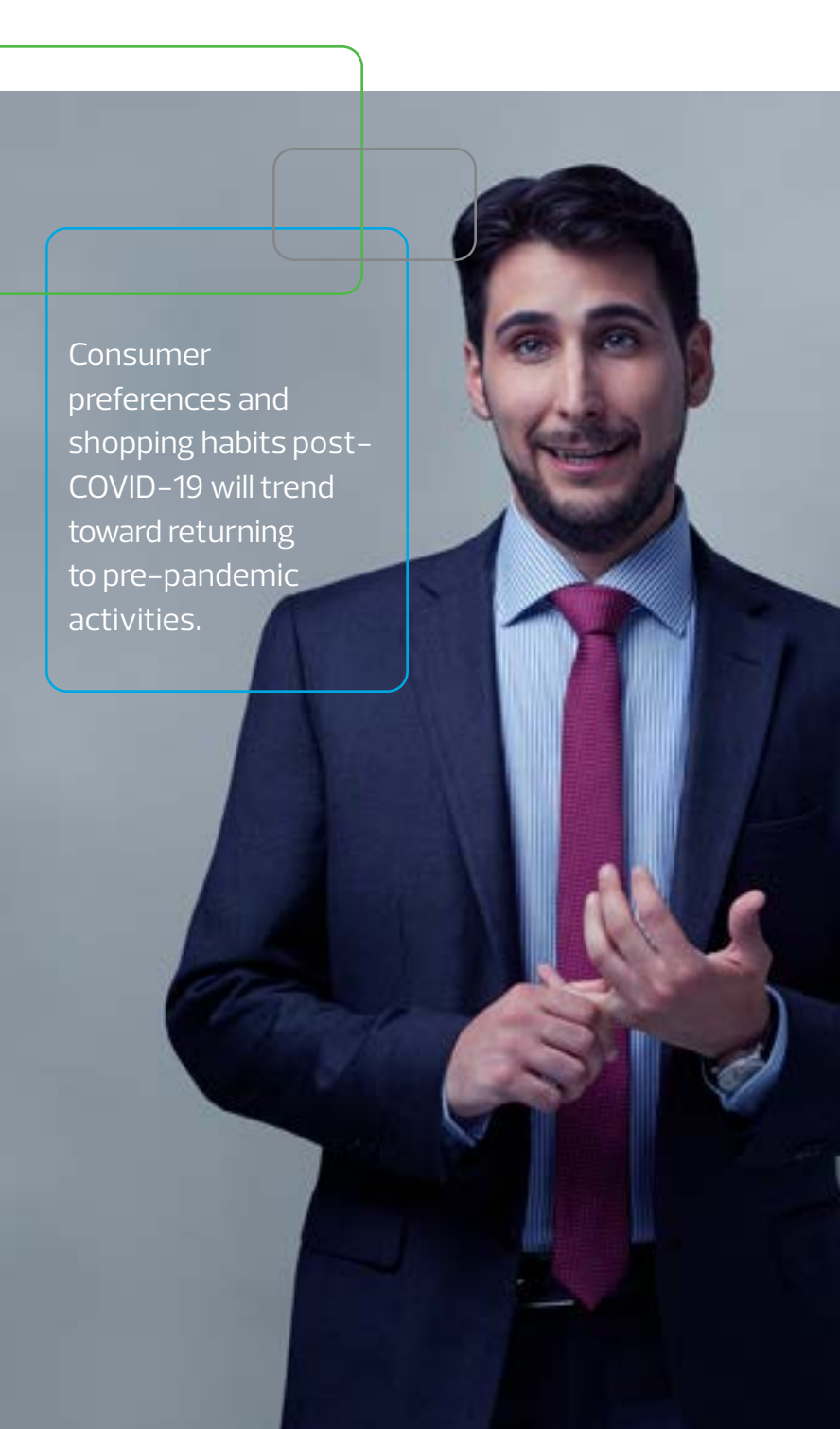
Krishnan Rajagopalan, president and CEO of Heidrick & Struggles, on an April 26 earnings call described that push within his firm. “This involves broadening our service offerings across search and consulting while moving into adjacent and complementary areas with an increasingly tech-driven approach,” he said. “We see technology as the backbone for our expanded service offerings, allowing us to deliver our solutions in a more rapid, automated and scalable way.”

For example, digital solutions that leverage data and artificial intelligence to identify and rank job candidates are enabling recruiters to proceed more quickly with the interpersonal components of the recruitment process—and do so remotely. Transactional activities that used to require a lot of time are becoming more efficient as technology helps providers fill orders faster and match job openings with quality candidates.

“It’s the combination of the human talent with the enabling technology that’s creating the magic,” Jonas Prising, chairman and CEO of ManpowerGroup, said on an April 20 earnings call. “And we think we are still at the very early stages of this. So we still have a long way to go growing our business, as well as gaining further efficiencies.”

Renewed and improved

As the economy strengthens, we can expect a refurbished work environment that invests heavily in workforce needs and efficiencies. Companies offering services and technologies to fulfill those needs and increase those efficiencies can expect to grow in the near term as demand for them rises and the supply of workers normalizes. The long term appears bright, as well, as technology becomes ingrained and gives longevity to improved human capital management practices and processes. ■



Consumer preferences and shopping habits post-COVID-19 will trend toward returning to pre-pandemic activities.

INDUSTRY OUTLOOK:

CONSUMER PRODUCTS

BY SETH BACON, PETER CADIGAN, KAREN GALIVAN
MIKE GRAZIANO AND CHRISTOPHER SHAKER

CONSUMER PREFERENCES and shopping habits post-COVID-19 will trend toward returning to pre-pandemic activities, with the last six months of the year fueled by the American Rescue Plan for middle- and low-income families and a return to experience-focused spending.

RETAIL AND RESTAURANT

U.S. consumers are returning to their pre-pandemic 2019 level of purchasing food away from home. During the pandemic, quick serve and fast casual dining benefited the most as consumers preferred delivery or curbside pickup, while fine dining lagged due to seating restrictions and health concerns. Customer engagement through digital channels in both the quick serve and casual dining segments has led to increases in same-store sales and helped maintain customer loyalty. Domino's Pizza continues to be a leader, with 70% of U.S. 2020 sales coming through digital channels.



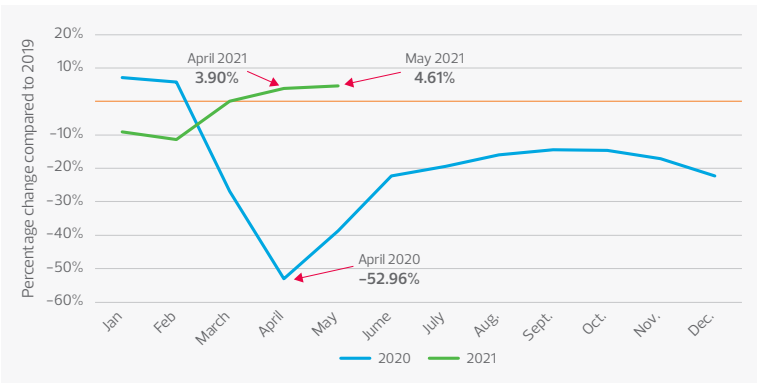
KEY TAKEAWAYS

- One of the strongest headwinds facing the industry is a challenging labor market.
- Strong consumer spending is expected, led by back-to-school spending early in the fall.
- By selling directly to consumers, apparel companies get better access to consumer data, allowing them to predict and adapt to behaviors and preferences.
- Continued production disruptions due to weather and increased demand will keep prices higher in food and other consumer products.
- Increasing transparency to meet evolving ethical, environmental and clean label consumer demands is paramount for food and beverage businesses.



Those retailers and restaurants that are able to focus efforts on being nimble, and negotiating and re-negotiating pricing, will have the best opportunity to project margins.

Food and beverage sales away from home compared to 2019



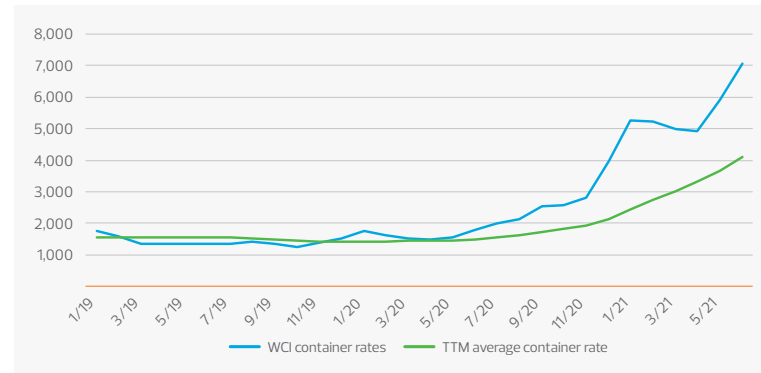
Source: Bloomberg; RSM US LLP

Inventory strains

As retailers work to replenish their exhausted inventory levels and look to return to their just-in-time supply chain over the next year, they will continue to face increases in prices from the strain on manufacturers in their supply chain. One of the main drivers of rising inventory costs is the increase in transportation costs, as well as a surge in storage costs due to shipping delays.

Large importers are securing current shipping container rates in contracts highlighting that the demand for the transportation of goods will be here at least for the next year. Businesses that are forced to rely on spot rates will be impacted the most as they have limited negotiating leverage. Those retailers and restaurants that are able to focus efforts on being nimble, and negotiating and re-negotiating pricing, will have the best opportunity to protect margins.

Container spot rates vs. 12-month average

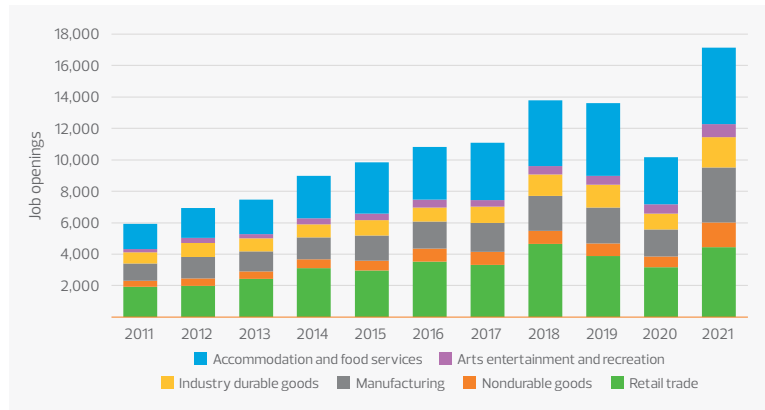


Source: Bloomberg; RSM US LLP

Labor challenges

The strongest headwind facing the retail and restaurant sector is a challenging labor market. The total job openings of 9.286 million in April were the highest of any one month. When comparing January through April for sectors in which retail and restaurant commonly compete for talent, the data shows the highest number of job openings in the last 10 years. The demand across all industries is giving employees an opportunity to be more selective in the roles they take and the industries they want to engage. Companies are working to increase benefits and compensation and looking for any new or creative ways to be more attractive to potential employees. The entire ecosystem is hopeful that finding good help will become easier as supplemental unemployment benefits expire.

U.S. job openings by industry, January–May



Source: Bloomberg; RSM US LLP

Margin pressures

Retailers and restaurants continue to face margin pressure as both labor and inventory costs have risen in the last nine months. The [minutes from the Federal Open Market Committee](#) stated that while January and February of 2021 saw decreases in manufacturing production due to weather in some parts of the country, "new orders indexes in national and regional manufacturing surveys pointed toward solid increases in factory output in the coming months." The minutes added that while goods are being produced, "reports of shortages in materials and labor, as well as bottlenecks in transportation, signaled some potential restraints on the pace of the manufacturing recovery."

These constraints in manufacturing have a direct impact on retailers and restaurants. In addition, with the challenges on the cost side of the equation, retailers and restaurants are looking to increase sales to help preserve margins.

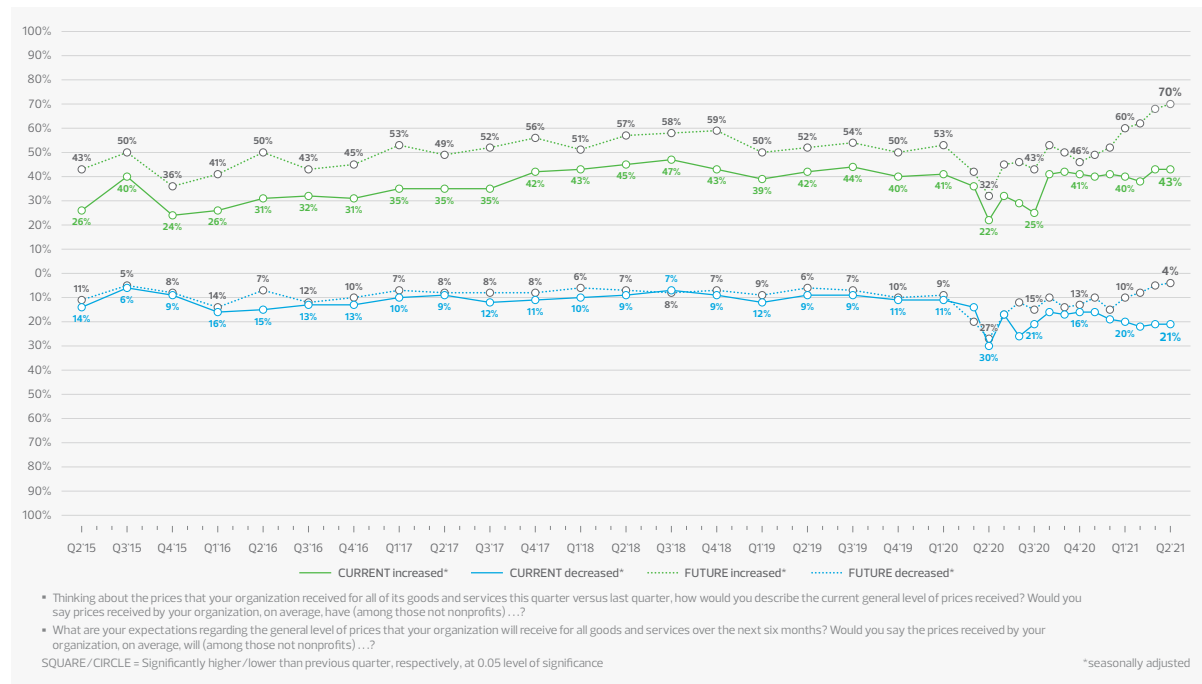
MIDDLE MARKET INSIGHT

Those retailers and restaurants that are able to focus efforts on being nimble, and negotiating and re-negotiating pricing, will have the best opportunity to protect margins.

The [RSM US Middle Market Business Index](#) identified in November 2020 that more of the middle market is anticipating raising consumer prices in an effort to pass along some of the increase in costs. Six months later, the same respondents had yet to actually implement this strategy, but even more are anticipating doing so as costs continue to rise. Passing along the costs via a price increase will be a challenge for companies that compete solely on price as their competitive advantage. Both retailers and restaurant operators are hopeful that pent-up demand after the pandemic will be strong enough that consumers will accept price increases.

AMOUNT RECEIVED FOR GOODS AND SERVICES

Seventy percent of executives expected their organization to charge more for goods and services over the next six months, up from 60% in January.



Source: RSM US Middle Market Business Index, Q2 2021



Shortages in container and truck supplies, as well as increased freight costs, are limiting the ability of many companies to accumulate inventory and bring available products into the country, or get them to retailers and ultimately to consumers.

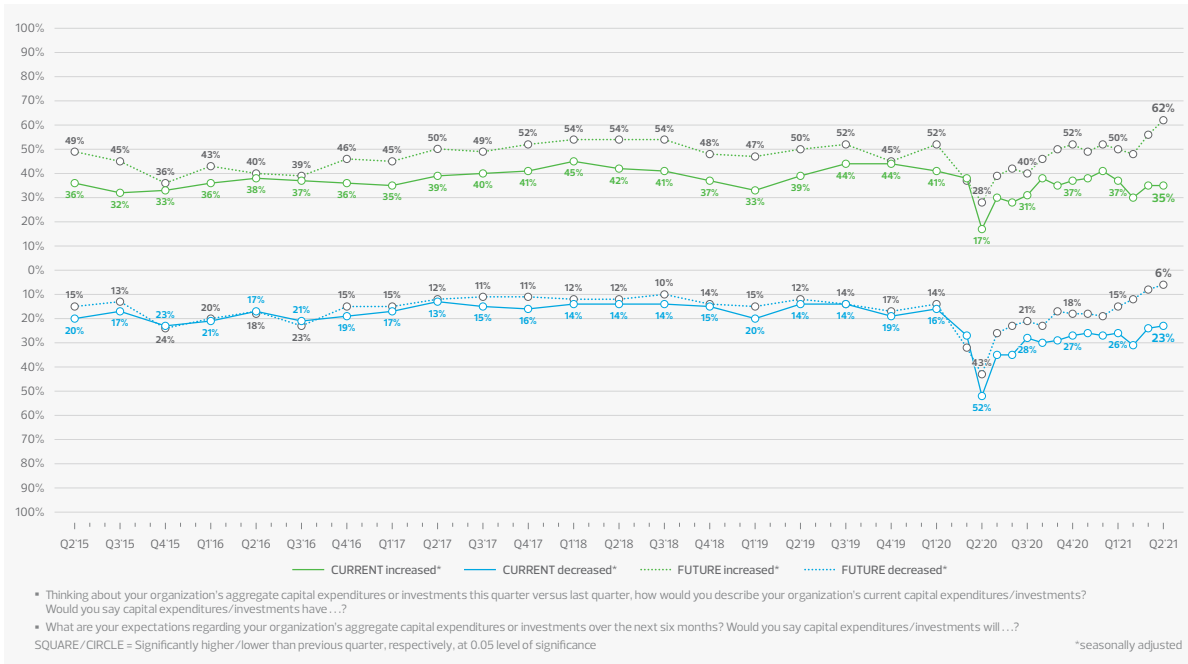
Another strategy middle market companies are exploring to improve margins on existing sales channels is better and smarter use of customer data. The effectiveness of this approach has already been proved by larger retailers, such as Nike, which recently experienced one of its strongest quarters in 50 years. On their Q4 2020 earnings call, John J. Donahoe, president and CEO at Nike, said that technology investment has allowed the company to create a "digital supply chain," and that [data analytics](#) enables execution on an age-old retail adage to deliver "the right product in the right place at the right time, so that we can deliver that product in a low-cost, convenient and speedy and ... climate-friendly way." Donahoe noted that creating a virtuous cycle with customers has also led to an increase in returning customers. This combination of more efficiency through the supply chain in an increasingly digital ecosystem, along with stronger customer loyalty, is a critical component of a successful strategy for both retail and restaurants as we emerge from the pandemic.

Looking ahead

The American Rescue Plan Act of 2021 changed the child tax credit by increasing the amount along with making it fully refundable, allowing more families to claim the child tax credit. The IRS estimates that 39 million households and 88% of children in the United States

AGGREGATE CAPITAL EXPENDITURES/INVESTMENTS PERFORMANCE

Thirty-five percent of executives said their businesses made capital investments in April, on par with the month prior; however, 62% expected to increase expenditures over the next six months—an all time high for the MMBI.



Source: RSM US Middle Market Business Index, Q2 2021

will see the monthly payments. As with the past stimulus, income limits are applied. Families making less than \$112,500 for head of household or less than \$150,000 if married and filing jointly are able to claim the increase in the child tax credit. Families making over the thresholds will see their amount phased out up to the thresholds of \$132,500 and \$170,000, respectively.

For the first time with the child tax credit, families will receive part of the credit in monthly payments starting on July 15 and running through the remainder of 2021. The monthly credit ranges from \$300 for each dependent under six years old to \$250 for each dependent between the ages of six and 17 years old for families able to receive the full increased child tax credit.

This boost to household income over the last six months of the year will likely have a similar impact on spending that we have seen with the last three stimulus checks with increases in spending on consumer discretionary items.

Many questions remain, including how long the pent-up demand will last, how the hybrid working environment will affect the economy, and the impact when the existing moratoriums on rent and mortgage payments are lifted. However, the current economic fundamentals still support a very strong second half of 2021 for the retail and restaurant ecosystem. Winners and losers will be separated by how well they can manage margins through the use of data and [technology](#) to employ smarter pricing tactics and mitigate labor shortages and supply chain challenges.

CONSUMER GOODS

Home furnishings demand continues even as pandemic drivers begin to reverse

Demand for furniture and home furnishings continues to surge even as the underlying forces that drove demand early in the pandemic subside. Furniture and home furnishings consumption growth through the first five months of 2021 increased 31% from the same period the previous year and was well above pre-pandemic growth rates of 5%. Demand accelerated last summer as consumers redirected savings from government assistance as well as services spending to outfit their homes for new lockdown lifestyles. They also sought out the space offered by larger homes farther away from urban centers.

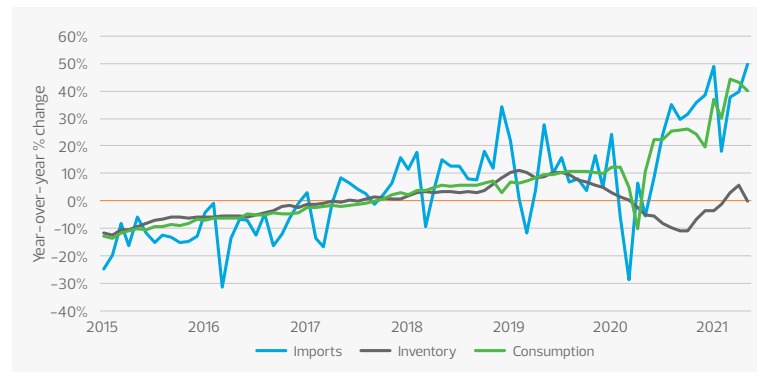
MIDDLE MARKET INSIGHT

This combination of more efficiency through the supply chain in an increasingly digital ecosystem, along with stronger customer loyalty, is a critical component of a successful strategy for both retail and restaurants as we emerge from the pandemic.

With many offices reopening after slower spring months, rental markets in urban areas are heating up again as consumers reprioritize their living and working proximities. As consumers are drawn back into urban lifestyles, home furnishings companies with compact and affordable offerings of furniture and appliances should see continued strength from millennial and Gen Z consumer bases that may have cohabitated with parents or relatives during the pandemic. Likewise, consumers who have permanently moved to the suburbs will once again rethink living spaces and outfit their homes for more permanent work-from-home lifestyles.

As supply constraint and input prices continue to drive up the cost of existing and new homes, consumers are turning to remodeling and renovations to address space and lifestyle needs. The National Association of Home Builders future market indicator reached a new high in the first quarter of 2021, signaling that demand for remodeling projects will have sustained momentum for the near term.

Home furnishings—Imports, inventory and consumption



Source: IHS Markit; U.S. Census Bureau; Bureau of Economic Analysis; RSM US LLP



While many brands invested in recreating high-touch in-store experiences online, the appeal of the physical store experience is drawing customers back.

Supply chain disruption with stretch demand for home furnishings

While demand for home furnishings products continues to increase, [supply chain](#) struggles stand in the way of businesses' ability to tap into opportunities. While the impact of the pandemic on the U.S. consumer is subsiding, it continues to affect factories in key production areas in South Asia, and their ability to keep up with demand. Shortages in container and truck supplies, as well as increased freight costs, are limiting the ability of many companies to accumulate inventory and bring available products into the country, or get them to retailers and ultimately to consumers. Airfreight has provided an expensive alternative for some importers, but is cost prohibitive for heavier furniture items.

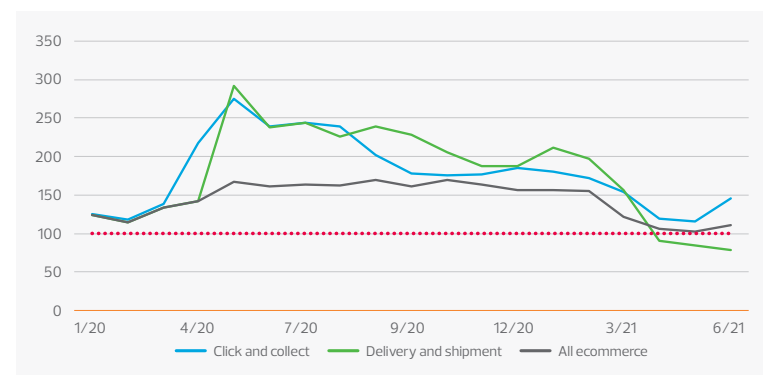
Businesses are continuing to adapt in a variety of ways. Products are being rethought so that customization, a popular offering in the furniture space, can be performed at domestic warehouses rather than at foreign manufacturing sites. Some businesses are continuing to invest in new products and diversify sourcing to avoid being overdependent on one particular supplier or geographic region. Consumers are likely to see fewer seasonal items, as suppliers will be reluctant to invest in increased logistics costs for products that may ultimately need to be discounted.

The supply chain disruption will stretch the demand for home furnishings longer and provide an opportunity for innovative companies to capture market share from larger players by providing high-quality items with shorter lead times.

Beauty, bricks and clicks

Beauty is back in a big way thanks to widespread vaccinations, reopenings across much of the United States and pent-up consumer demand. Consumers are reengaging with color cosmetics such as lipstick, as well as other categories that saw sales bottom out during the height of the pandemic. Brands are responding to the surging demand and renewed energy by repackaging product launches that were planned for 2020 to appeal to 2021 consumers eager to travel, meet with family and friends, and return to work and school. Also hitting the market is a flood of multipurpose products that combine the appeal of color cosmetics with wellness attributes popularized in the skin-care category during the pandemic.

Beauty ecommerce demand by fulfillment type



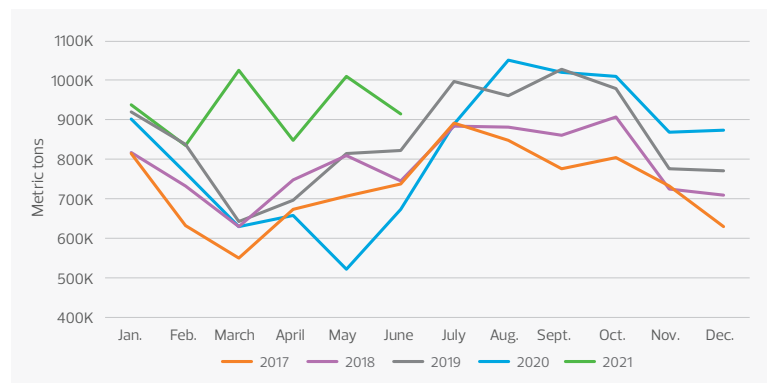
Source: IRI total store view; RSM US LLP

Product combinations aren't the only example of pre-pandemic trends merging with new habits; beauty businesses are having to rethink channel and marketing strategies to respond to changes in consumer preferences. Beauty sales counters were not immune to the proliferation of e-commerce over the past 18 months; however, with businesses reopening, physical stores are playing an important role in the beauty rebound. While many brands invested in recreating high-touch in-store experiences online, the appeal of the physical store experience is drawing customers back. According to the IRI E-Commerce Demand Index, which measures consumer spending changes from the previous year across e-commerce sales channels and fulfillment types, growth through click and collect has outpaced that of shipment and delivery as the economy continues to reopen. While beauty brands will need to calibrate their investments in online marketing campaigns that carried them through the pandemic, in-store displays and promotions will create immersive [customer experiences](#) in the physical and digital worlds.

Apparel imports get ahead of a busy back-to-school season

The apparel industry is positioning to stay ahead and maximize the value of what's predicted to be a strong holiday season amid new supply chain challenges. The summer of 2021 is seemingly the inverse of where fashion businesses found themselves 12 months ago, when they heavily discounted available product offerings to free up cash flow amid historically weak demand. With consumers

Apparel and footwear imports



Source: IHS Markit

MIDDLE MARKET INSIGHT

Some apparel companies are taking the expected demand surge into their own hands by circumventing traditional department stores and apparel retailers and riding the direct-to-consumer wave.

preparing to get back to offices, schools and restaurants over the remainder of 2021, apparel companies are navigating supply chain disruptions stemming from material shortages, COVID-19-related factory closures, shipping container availability, surging freight costs, and geopolitical tensions—all factors that have contributed to exasperatingly long lead times.

Apparel businesses with popular pandemic styles, such as athleisure, saw these issues lead to out-of-stock items and lost sales opportunities. The industry is responding by bringing product into the United States earlier than ever. Through May 2021, apparel and footwear imports surpassed 4.9 million metric tons, a 21% increase from a pre-pandemic peak for the same period in 2019. The surge demonstrates apparel brands' and retailers' willingness to take on additional inventory risk.

U.S. businesses seeking to mitigate risk are also bringing manufacturing closer to consumers. The concept of nearshoring has been attractive to businesses looking for the agility to respond to changing consumer preferences and restock popular styles without significant investment in underperforming products. In the past, high production costs and lack of reliable infrastructure in Central America and the Caribbean basin have led U.S. businesses to favor sourcing in South and East Asia. However, the importance of speed to market, the lure of reduced waste, and human rights concerns in traditional manufacturing nations are beginning to change that outlook.

Lastly, some apparel companies are taking the expected demand surge into their own hands by circumventing traditional department stores and apparel retailers and riding the direct-to-consumer wave. By selling directly to consumers, apparel companies get better access to consumer data, allowing them to better predict and adapt to behaviors and preferences and avoid margin-eroding fees and returns. The channel migration also gives brands better control of their inventory, allowing them to get products in front of the consumers most likely to buy them.



While still strong, food-at-home purchases are now returning to pre-pandemic levels.

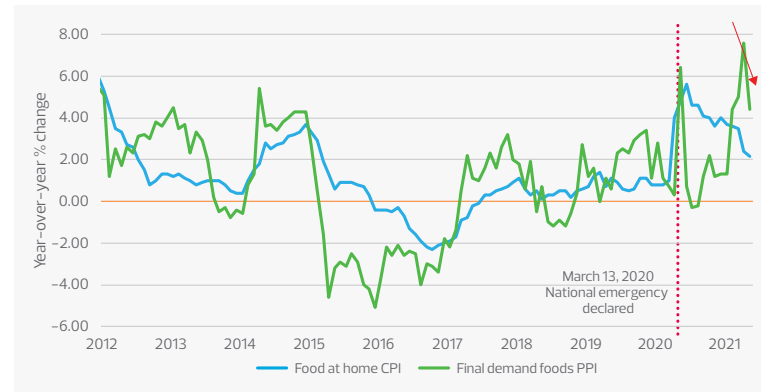
FOOD AND BEVERAGE

In the last 12 months, the consumer price index (CPI) rose 5%, its largest increase since 2008, according to the U.S. Bureau of Labor Statistics (BLS). A majority of food items experienced price gains for the 12 months ended May 2021, with pork and fresh foods and vegetables increasing 3.2% each. Food purchase for consumption at home is beginning to plateau, as shown in its year-over-year increase of 0.7% at the end of May compared to 1.2% at the end of April. Food away from home continues a strong recovery with a 4% increase. Most notably, limited-service meals, defined as pickup, takeout and delivery, increased 6.1% year over year at the end of May 2021. While still strong, food-at-home purchases are now returning to pre-pandemic levels.

Rising costs

According to Nielsen IQ data, the average price of all grocery store food purchases as of April 2021 increased 5.7% from the same period in late April of 2020. Although recent data from the [United Nation's global index on food costs](#) has eased slightly, grocery margin pressures remain as food producer prices continue to outpace the CPI for food at home purchases as seen in the latest releases by the BLS.

Food at home producer and consumer prices



Source: Bloomberg, Bureau of Labor and Statistics, RSM US LLP

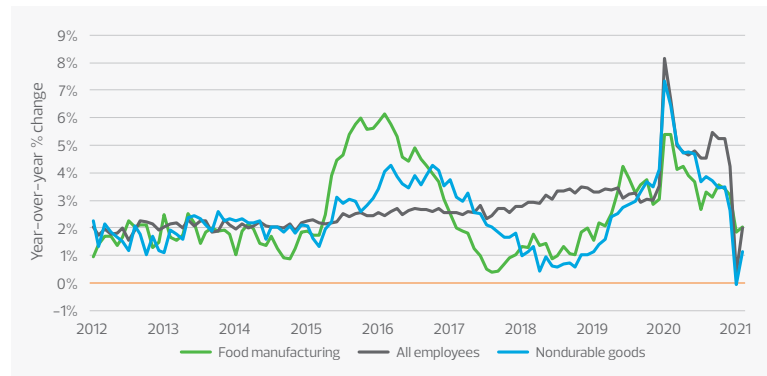
Many factors are causing pricing pressure in food and beverage. For example, the U.S. producer price index (PPI) for transportation and warehousing of final goods is up 11% year over year as of May 2021. Higher transportation and warehousing costs continue to be an issue, as limited freight capacity cannot keep up with increased demand.

Weather conditions are also affecting food prices. According to the U.S. Drought Monitor, as of the end of June 2021, "much of the West is classified as severe drought or worse." The extreme heat continues to dry out soil and vegetation. Farmers do not have enough water for crops and livestock, and in some of the high plains states, ranchers are having to sell entire herds as conditions worsen. There have even been fishing restrictions placed in certain areas where water levels are low and warm. After the supply chain shocks from the pandemic, continued production disruptions due to weather and increased demand will keep prices higher.

Hiring challenges

Food and beverage producers, processors and distributors still struggle to attract and retain labor as stimulus funds remain available into the fall. Labor wage-rate growth for food manufacturers has lagged that of other industries; however, increased scrutiny around safety and retraining may require food manufacturers to increase compensation to bring workers back to production floors.

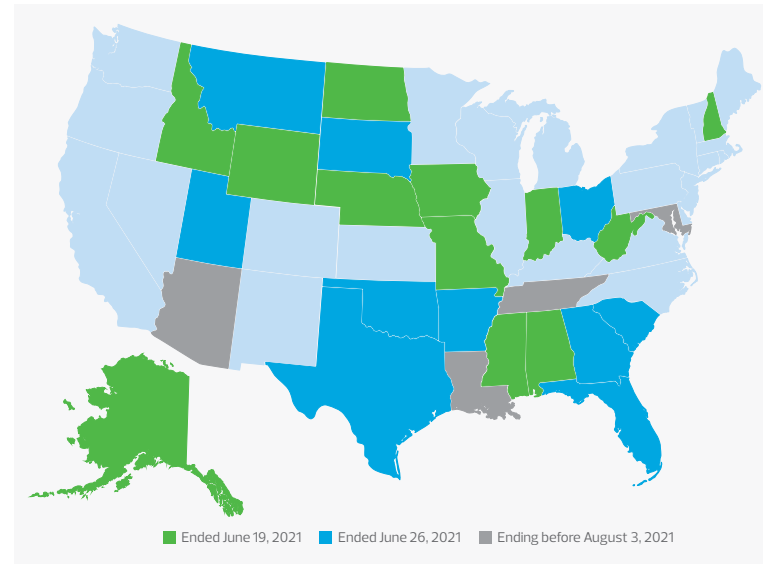
Change in hourly employee wages



Source: Bloomberg; Bureau of Labor and Statistics; RSM US LLP

Middle market companies may see some relief, as many states are ending the \$300 unemployment benefit before the government's September deadline. Conversely, for many employees the cash is not the deciding factor. Many Americans have difficulty returning to work without access to adequate child care or remain concerned about COVID-19.

States ending federal pandemic unemployment payments



Source: Forbes, July 7, 2021, "Which States Are Ending Federal Unemployment Payments Early?" by Lisa Rowan

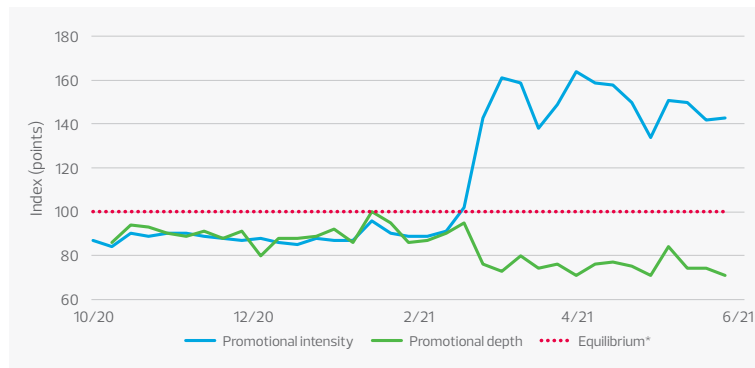
Consumers see promotions in grocery aisles but not bills

Grocery store shelves are getting crowded again, and brands are reengaging for consumers' attention, appetite and wallet share. The change is captured by the IRI CPG Promotions Index, which measures promotional activity such as displays and temporary price reductions for food and beverage products against the same period in the prior year. The second quarter saw a surge in promotional activity in March 2021 compared to the onset of the pandemic, when brands focused on getting products on shelves as consumers loaded their pantries. With in-store promotions as the dominant form of brand recognition, the return of promotional activity signals supply constraints beginning to ease. However, while consumers may see more promotions in the aisles, the impact won't show up on their weekly grocery bills. The promotional depth index, a measurement similar to the IRI that tracks the discounting level consumers are seeing from promotional discounts, hasn't rebounded like the overall activity. Discounts are below prior year levels as brands unleash their marketing budgets but continue to pass along rising input costs to the end consumer.



Increasing transparency to meet evolving ethical, environment and clean-label consumer demands is critical.

Food and beverage promotional activity



Sustainability, security and innovation

According to data from ADM, a multinational food processing and commodities trading corporation, more than two-thirds of consumers want to have a positive impact on the environment, and over 30% purchase sustainably produced items. Increasing transparency to meet evolving ethical, environmental and clean-label consumer demands is paramount. In July 2020, the Food and Drug Administration (FDA) released its "New Era of Smarter Food Safety Blueprint" to keep up with the changing food system. To meet the goals of safer and traceable food, Frank Yiannas, deputy commissioner for food policy and response at the FDA, launched the traceability challenge. He is calling on food technology solutions providers, public health advocates and innovators to create affordable traceability solutions for use from farm to table, connecting primary producers, importers, manufacturers, processors, distributors, retailers and food service providers throughout the food supply chain. He also hopes that using technology will prevent supply chain disruptions, providing for a more agile and robust food system. The results from this challenge could be meaningful to middle market food and beverage companies, which often lack the resources to implement this type of technology. ■



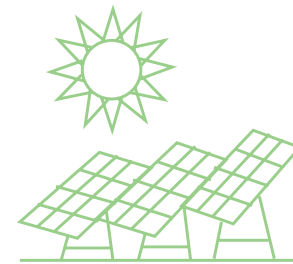
As the U.S. economic recovery is set to accelerate, financial services firms are assessing the shifts of the last year and how they will impact business strategy moving forward.

INDUSTRY OUTLOOK:

FINANCIAL SERVICES

BY BRANDON KOESER, DAVID MAMANE, MARLENE DAILEY, BRANDON HOLLIS, NELLY MONTOYA, KENNEDY CHINYAMUTANGIRA AND JAMISON SITES

AS THE U.S. economic recovery is set to accelerate, financial services firms are assessing the shifts of the last year and how they will impact business strategy moving forward. Banks are reevaluating the purpose of branch locations, insurers are using data in innovative new ways to keep up with changing consumer demands, and more growth is expected from the “buy now, pay later” boom. Secondary funds have gained in popularity, the renewed focus on clean energy brings new opportunities for lenders, and decentralized finance has shown signs of growth.



KEY TAKEAWAYS

- As the economy picks up steam, bank leadership teams may determine that branch reduction or consolidation makes sense. But the decision cannot be made in a vacuum and executives need to consider a broader scope of factors.
- As insurers use emerging technologies in new ways, the roles of chief information officer, chief technology officer and chief data officer are also evolving to be more data-driven.
- The financing of residential solar installations is an emerging category of interest for lenders, and one that is forecast to grow significantly.
- “Buy now, pay later” options still represent a small percent of total e-commerce spending in the United States, but the segment is growing.
- We expect secondary funds will become a bigger feature of private capital funds.
- The use of decentralized finance is growing at a rapid pace. To understand DeFi as a whole, it’s crucial to understand the concepts of the smart contract, the token, and the exchange.

REVIEWING BRANCH STRATEGIES IN A POST-PANDEMIC WORLD

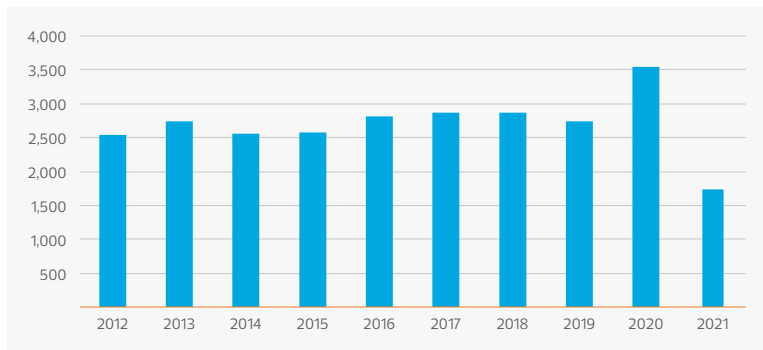
As bankers have sought to address barriers to growth and increasing operational costs in recent years, many have historically turned to eliminating branch locations as a way to manage the bottom line, whether through a merger or acquisition or otherwise.

Then, a global health pandemic hit.

To be sure, banks were shuttering branches at a significant pace prior to the pandemic. But data from S&P Global Market Intelligence indicates the pandemic likely created an acceleration in branch consolidations and closures.

Between 2012 and 2019, banks eliminated approximately 2,700 branches a year. In 2020, as the global health pandemic set in, banks shuttered more than 3,500 branches. And if the pace of branch closures—more than 1,700 so far in this calendar year through May—continues to hold, 2021 could see more closures than 2020.

Bank branch closures through May 31, 2021



Source: S&P Global Market Intelligence; RSM US LLP

With the onset of the pandemic, banking operations went almost entirely remote overnight. Now with branches around the country beginning to gradually reopen, the only meaningful number of “regulars” returning to the branch are the employees. Consumers and borrowers have continued to stay home.

And since the beginning of the pandemic, countless organizations and groups have surveyed bank customers to not only gauge when or if they will return but what type of banking activities they might return for.

One such survey, performed by S&P Global Market Intelligence in February and March 2021, indicated that of the more than 3,800 people surveyed, 52% of respondents were visiting branches less frequently than before the pandemic.

The survey also noted that only 36% of respondents had visited a bank branch in the last 30 days, compared to 100% of respondents indicating they logged into their bank’s mobile app in that same 30-day period. The trend in mobile usage during the pandemic is likely to stick, as 88% of respondents indicated they were using their mobile app more frequently and would likely continue to do so or increase their usage once the pandemic is over.

Still, to say cost management as a result of the pandemic is the sole, or even major, reason more branches were eliminated in 2020 compared to prior years would be inaccurate. More and more, a significant contributor to branch consolidations and closures is the increasing acceptance by bank consumers and borrowers of digital channels, such as mobile and internet banking.

The evolving digital journey

As customers and borrowers look to continue using digital banking channels, the ability to reduce branch count while simultaneously increasing engagement creates a real and profitable opportunity for banks.

As banks look to the next normal, here are three important questions for leadership teams to ask when considering a branch reduction strategy:

What is the data telling us? Analyzing branch foot traffic and the type of transactions being conducted in those branches is incredibly important. So is analyzing the vast amount of data available about how—and how frequently—customers are using digital channels. Further, gathering input through surveys, or even through conversations with customers in the branch, can help inform which services can be provided digitally versus which benefit from in-person interaction.



As customers and borrowers look to continue using digital banking channels, the ability to reduce branch count while simultaneously increasing engagement creates a real and profitable opportunity for banks.

Do we have the right technology in place? Driving growth through new-customer acquisition even while closing branches will require an extensive review of the digital banking technologies customers use, as well as the technologies used by frontline workers and back-office support in the performance of their jobs. Closing a branch can drive growth while concurrently reducing expenses only if the appropriate technologies are in place to optimize or improve existing processes, and if paired with capable digital banking channels.

If we need the branch, does it need to be full service? If reducing branch count is not a viable means for a given company to allow for growth while reducing costs, senior leadership should determine whether the business needs to offer every service at every branch. A branch may be able to “shrink” without disappearing altogether.

Branch strategy in action

As consumer preferences have shifted and the use of digital technologies has grown across all industries, the ripple effects continue. Huntington National Bank and People’s United Bank both announced in early 2021 that they would be closing more than 330 combined branches in grocery stores across their banking footprint. In Q4 earnings calls held in January, executives at both Huntington and People’s cited declining traffic in these branches along with increasing adoption of digital banking solutions as key reasons why the branches no longer made financial sense.

This shift in strategy fits with customer behavior. Bank of America reported that of its 66 million customers, more than 52 million have signed up for mobile or online banking, with roughly 40 million reportedly using these digital banking services frequently, according

to a [June article in American Banker](#). This increase in digital adoption has led to roughly 40% of all deposits customers make with Bank of America being done through the bank’s mobile channel.

But just because digital channels are seeing increased use doesn’t mean the branch will become obsolete. There are opportunities to deliver a positive client experience by shifting branch services or interactions. For example, while both U.S. Bank and PNC Bank have reported branch closure plans in 2021, they have also rolled out their new branches of the future—which put less emphasis on a transaction (such as making a deposit) and more focus on a solution (how to utilize digital technologies for banking or planning for retirement). Such pivots create new uses for branches by providing a more tailored customer experience.

The takeaway

With net interest margins remaining compressed, bank consolidation restarting after a pause, and digital channels continuing to see broad acceptance, leadership teams will look to branches even more so than before for cost control measures as the economy picks up steam. But simply looking at branch consolidation or closures as a means to improve the bottom line without considering the impact on other areas of the bank and its potential growth could have unintended negative consequences.

Through analysis of branch activity and other branch-related data, as well as the use or implementation of the appropriate technologies, shrinking the size of a branch or even reducing branch count may make sense. But the decision cannot be made in a vacuum, and executives need to consider a broader scope of factors, not just those centered on expense management.

THE DATA REVOLUTION IN INSURANCE

Data is like oil: Unless refined, it has no value. To serve their customers profitably, insurance executives understand that optimizing the huge amounts of data within their systems to realize the full value of emerging technologies is key to making better-informed decisions and better allocating resources. Insurers of all sizes are searching for sustainable solutions—technology that can allow the business to scale and keep up with [changing customer demands](#), while maintaining a competitive advantage in the marketplace. Insurance companies have been focusing more on data transformation in the past decade, in the hopes of laying a solid data foundation to transition from a traditional business model to providing a defined omnichannel approach tailored to customer needs.

Here are five crucial ways data is changing insurance:

- 1. Treating data as an asset:** Insurers' data collection has expanded beyond policy and claims data, thanks to the rise of telematics, usage-based insurance products, and smart devices. Companies are beginning to use modern, self-service analytics tools to empower business users in order to operationalize this data. This expanding data ecosystem provides an ideal environment for insurers to increase revenues and accuracy, while reducing operational costs. Companies can leverage artificial intelligence technologies and predictive modeling tactics to improve capabilities such as:
 - Pricing and risk selection
 - Fraud prevention
 - Claims triage
 - Trend and forecast analysis
- 2. Evolving role of the CIO, CTO, CDO:** As insurers use emerging technologies and advanced data analytics in new ways to identify risks, detect fraudulent claims, and settle reconciliations (to name just a few applications), existing roles in technology and information management are also evolving to be more data-driven. Chief information officers, chief technology officers and chief data officers need to understand this landscape to make better, data-informed decisions.

MIDDLE MARKET INSIGHT

In the years ahead, insurance companies will greatly expand the universe of data they work with—whether through partnerships or acquisitions—and in turn will have access to new pools of potential customers. To capitalize on the resulting opportunity, insurers need to deliver an exceptional customer service experience.

3. Enterprise information management as part of data strategy:

As artificial intelligence has improved over the years, the predictions it can deliver have also become more powerful for business applications. Executives can use this predictive power—which can help reduce the influence of human-user biases—to improve and develop a data strategy that increases data efficiencies and provides accurate and timely information to enable real-time decision-making.

- 4. Shifting cloud strategies.** Overcoming data security and management challenges of legacy systems is not a trivial exercise for insurance companies, but such challenges should not be an impediment to moving to a cloud environment. Historically, companies have made significant investments in data foundation and data management in order to securely extract data from legacy IT systems, migrate data to the cloud, and transform the information into usable data assets. It is no longer a question of if a company will move to the cloud, but when. For cybercriminals, the return on investment for attacking financial institutions is too great to resist. [With a cloud environment](#), information can be accessed securely, providing the right combination of connectivity to data and data access controls.

- 5. Advanced analytics for middle market.** Advanced analytics enables insurers to improve the customer experience and reduce costs. [Companies can utilize it](#) to mine big data for relevant insights used in predicting claims and assessing customer behavior and preferences to better mitigate risks and personalize bundled offerings and loyalty programs. Advanced analytics in insurance is rapidly enabling drastic innovations in product offerings, operating models, and customer service across the entire value chain.

The United States is in the midst of an energy revolution as the Biden administration prioritizes the shift from fossil fuels toward clean and renewable sources of energy. The transition to solar power in particular presents opportunities for lenders and investors to join in this revolution.



Establishing a data foundation starts with process

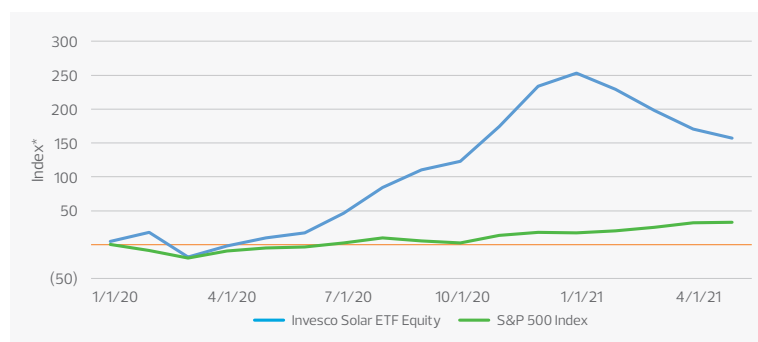
Before a company can apply transformative technologies, it's important to understand what the data is saying. Process intelligence is a growing platform that allows organizations to understand what they do and how they do it. It is the first step to analyzing transactional data to better understand workflows, visualize patterns, and identify gaps. This is how an organization begins to connect the dots to know where to apply automation, predictive analytics, and other technologies.

In the years ahead, insurance companies will greatly expand the universe of data they work with—whether through partnerships or acquisitions—and in turn will have access to new pools of potential customers. To capitalize on the resulting opportunity, insurers need to deliver an exceptional customer service experience. Breaking through data management barriers and harnessing the full potential of advanced analytics will be central to providing that optimal experience.

FINANCING THE SOLAR REVOLUTION

The United States is in the midst of an energy revolution as the Biden administration prioritizes the shift from fossil fuels toward clean and renewable sources of energy. The transition to solar power in particular presents opportunities for lenders and investors to join in this revolution. As demonstrated below, the Invesco Solar ETF—an exchange-traded fund that includes securities in the solar energy industry—has generated a return outpacing the S&P 500 index over the last 17 months, highlighting the growth and opportunities in this sector.

Invesco Solar ETF Index vs. S&P 500 Index



Source: Bloomberg; RSM US LLP

*0 = December 31, 2019

There have been many catalysts for the recent growth in solar energy, including improvements in technology that make solar more cost-effective; political support for clean energy sources; investment and renewable energy tax credits; growing environmental, social and governance investment opportunities; and concerns around the sustainability of the traditional power grid as magnified by the widespread power outages in Texas in February. According to the U.S. Energy Information Administration, 39% of new electricity generating capacity in the United States in 2021 will be solar powered, which is greater than any other energy-generating source. This expansion presents opportunities for specialty lenders to play a role in financing this growth.

The cost of a residential solar installation can range up to \$50,000, depending on size, creating the opportunity and need for installers to offer financing options for residents. The residential solar loan market more than tripled from \$1.4 billion in 2016 to almost \$5 billion in 2020, according to Kroll Bond Rating Agency. The asset-backed

securitization market for solar loans has also increased; KBRA rated public and private deals totaling \$3.6 billion in 2020, up 22% from 2019 despite deal volume for most asset classes being disrupted by the COVID-19 pandemic.

So what makes the solar loan market an attractive venture for specialty lenders and investors in solar loan asset-backed securitizations? Below are two key characteristics that distinguish this market from other forms of financing and make it an attractive segment.

- **Collateral:** Solar loans are similar to home improvement loans, except that the latter are generally not secured by a security interest in the property. Solar loans are secured by the solar energy system, which typically includes the solar panels, inverters, energy storage and charging equipment, monitoring equipment, prepaid maintenance arrangements, and certain installation costs. The loan is also typically secured by a Uniform Commercial Code (UCC) filing. The nature of the collateral, and the security interest available to the lender, make this an attractive loan when compared to unsecured consumer credit or loans collateralized by personal property or automobiles where the collateral is more susceptible to damage and may be harder to secure or locate upon nonpayment.

Compared with other types of consumer lending, solar loans tend to have higher recovery rates because creditors have the ability to disconnect service for delinquent borrowers. Residents therefore have the incentive to remain current on this obligation. Furthermore, the UCC filing will appear on any title search, requiring the borrower to resolve any delinquent or defaulted solar loan prior to selling the residence.

- **Value proposition for customers:** Other forms of consumer lending represent incremental debt and an additional monthly obligation to the borrower. Conversely, solar loans replace one of the borrower's existing obligations: their monthly utility bill. Electricity is viewed as an essential service, and solar loans are designed so that the monthly payment is less than the customer's preexisting monthly electricity payment. Homeowners who purchase qualifying solar energy technologies may also be eligible for the Residential Renewable Energy Tax Credit, which is based on the cost of the solar energy system and may be used to offset the homeowner's

There have been many catalysts for the recent growth in solar energy, including improvements in technology that make solar more cost-effective; political support for clean energy sources; investment and renewable energy tax credits; and growing environmental, social and governance investment opportunities.

federal income tax liability. The tax credit was initially intended to be phased out by 2022, but Congress passed an extension in December 2020 whereby the credit will now be phased out by 2024 for residential installations.

The financing of residential solar installations is an emerging category of interest for lenders, but one that is forecast to grow significantly as society continues to focus on clean, renewable forms of energy. Specialty lenders can play a role in financing this transformation.

THE 'BUY NOW, PAY LATER' BOOM

"Buy now, pay later" (BNPL) installment plan options for online purchases have grown during the pandemic and because of shifts in how younger consumers think about credit. But is the trend here to stay?

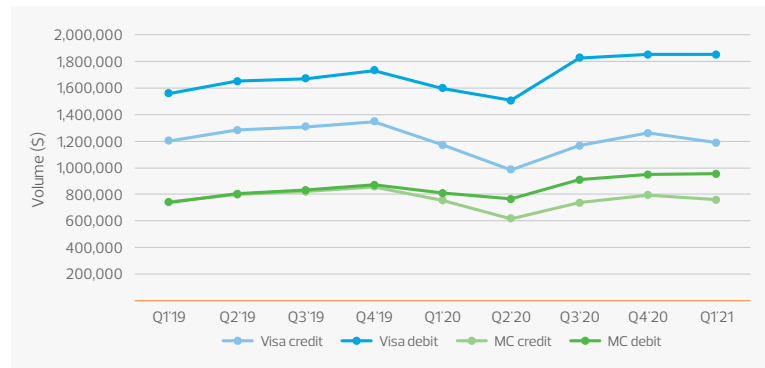
BNPL offers consumers the option of paying for a purchase in typically three to four installments and has grown because the pandemic forced many people—even those who enjoy brick-and-mortar experiences—to shop online. The use of BNPL resulted in \$1.1 trillion in e-commerce sales in the United States in 2020, according to the 2021 Global Payments Report from FIS. This reflects a 78% increase from the prior year and translates to 1.6% of total e-commerce spending. Additionally, despite the reopenings happening across the country and the continued vaccine rollout, that figure is expected to grow to \$1.78 trillion by 2024, which signals the trend is here to stay.

Also fueling the trend is the generational shift toward the use of debit cards instead of credit cards, the move away from cash as a method of payment to noncash options, and the rise of digital wallet payment options. Research from various traditional financial institutions shows that younger generations are less comfortable using a credit card to finance a purchase. Credit card use as measured

The use of BNPL resulted in \$1.1 trillion in e-commerce sales in the United States in 2020, according to the 2021 Global Payments Report from FIS.

by volume in 2020 dipped 10% from 2019 levels. At the same time, the use of debit grew by 4%. The Global Payments Report from FIS also shows that the use of mobile wallets at the point of sale grew 60% last year, from 6% in 2019 to 9.6% in 2020.

Visa and Mastercard credit and debit volume



Source: Bloomberg; RSM US LLP

There's no doubt that Americans still prefer to pay for online purchases with credit cards. But BNPL stands to gain more market share because it offers customers access to credit at the time of need, the approval process is fast, and it lessens the burden of a large purchase. BNPL also increases the chances of a company making a sale, and basket sizes grow. Additionally, engaging with a BNPL provider, such as Affirm, can be a way to gain new customers. For example, if a user—typically a millennial or Gen Zer—is looking to buy a new pair of running shoes, they can go to the Affirm app and select one of the many retailers featured there. Suppose they select Adidas and select “shop now,” which takes the user to the Adidas site. The

user is usually pre-qualified by Affirm ahead of the purchase, and then pays for the shoes via Affirm. In this example, Adidas doesn't spend a penny acquiring the new customer, but rather gets exposure through Affirm's two-sided platform.

According to a recent company earnings call, Affirm has over 12,000 merchants on its platform and more than 4.5 million users. These are customers who might be looking to engage in revenge spending—people eager to shop again after a pandemic-induced hiatus—and are looking to do so online. Afterpay, another BNPL provider, directed an average of 27 million leads to its 75,000 retail partners in December of last year, the company said during an earnings call in February. On the merchant side, it is more expensive to use a BNPL provider instead of a traditional credit card. But the benefits of lead generation, access to new-customer demographics, and the ability to offer credit without actually being a credit card issuer offset the additional cost. The numbers reflect it: for Affirm, gross merchandise volume grew 83% in the company's FY 2021 third quarter, compared to the same period in FY 2020. Similarly, Afterpay's sales grew 106% in the first half of 2021 compared to the first half of 2020.

Without a doubt, BNPL is credit at the point of sale, but because the option to use it appears in a consumer's online checkout, plenty of people see it as harmless. Consumers might view this as a preferable option to a credit card because they can use BNPL for specific purchases rather than opening a larger line of credit, and terms for interest and late fees might be more favorable and clearly disclosed. But the potential risks to consumer credit scores are worth tracking. Any time another party gets added to the mix of a transaction, there are potential data security and privacy implications, and consumers should be aware that another company—in this case the BNPL platform—will also have access to their information.

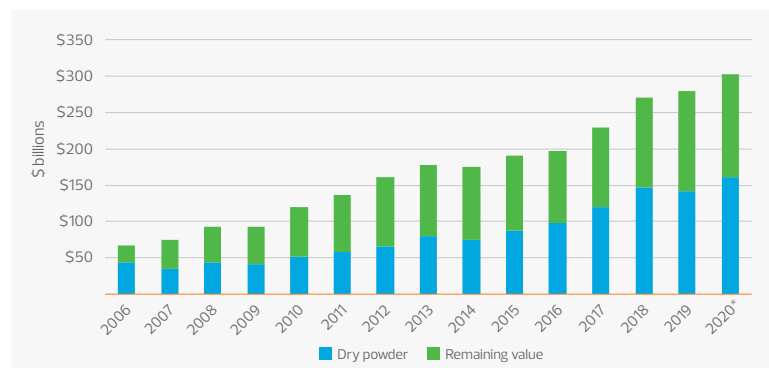
BNPL still represents a small segment as a percent of total e-commerce spending in the United States, but it is growing. What's more, these companies are looking to become a bigger option for in-store purchases to meet customers where they are, especially as the economy reopens. At Home Depot, for example, customers can use PayPal's BNPL option to pay, and stores such as American Eagle and Nine West now accept this type of payment as well.

Given this growth, merchants should assess the type of customer experience they're offering. Is it frictionless? Is it attracting millennials and Gen Zers (two key tech-savvy demographics whose earning power will continue to grow)? If the answer is no, merchants leave money on the table. Traditional financial institutions, whether payment providers or issuers of credit, also need to think about rolling out products like BNPL to cater to younger demographics who are digitally oriented by default.

SECONDARY FUNDS WILL BECOME A BIGGER FEATURE OF PRIVATE CAPITAL FUNDS

Private equity is generally recognized as an illiquid investment strategy best left to those with investment horizons distant enough to tolerate the lockup period. Secondary funds (known as "secondaries") that acquire private equity interests from limited partners in private equity funds who wish to exit their investment before the end of a fund's term have long been

Secondary fund assets under management



Source: PitchBook

*As of September 2020

MIDDLE MARKET INSIGHT

Traditional financial institutions, whether payment providers or issuers of credit, need to think about rolling out products like BNPL to cater to younger demographics who are digitally oriented by default.

a feature of private equity investments. As assets in private equity have grown, secondaries have also gained popularity, but they have continued to be a small segment of private capital assets. This is expected to change going forward as the evolving landscape of private equity makes secondaries a more prominent feature of private capital markets.

Capital flowing into private capital funds should continue to increase given its track record of outperforming public markets, the current low interest rate environment, and—on a transient basis—the recent concerns about inflation. As more investors seek exposure to private capital funds, the growth in assets will be accompanied by an increasingly diverse profile of investors, which can only spur a greater need for more liquidity in the asset class. Secondary funds meet this need by providing liquidity to investors in primary funds. An established secondary market in private equity should be the culmination of a maturing marketplace as private capital markets continue to grow and evolve.

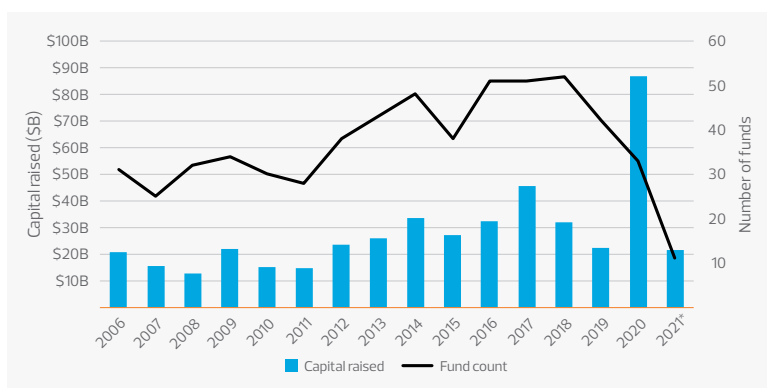
Secondary funds also cater to investors with different needs for the timing of cash flows because they generate cash sooner relative to primary funds. By investing in primary funds that are in the later stages of their life cycle, secondary funds acquire interests that are typically in the harvest stage and are already returning cash to underlying investors. This alters the risk-return, duration and cash-flow profile of exposure to private equity, which can be attractive to a different universe of investors.

Secondaries had a record fundraising year in 2020. COVID-19 may have had some part to play in this. Given that secondary funds can provide liquidity to investors that may be forced to sell in a distressed environment, expectations for this to happen in the aftermath of the pandemic might have attracted investors to the strategy. The large publicly traded private equity asset managers have increased their focus on secondaries in recent years and drove much of the fundraising success in 2020 with a number of mega-fund launches, resulting in the growth in capital raised while the fund count dropped.

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Secondary fundraising



Source: PitchBook

*As of March 2021

The quick economic recovery has meant that the opportunities that secondary funds may have been expected to cash in on might not have materialized as expected. However, the increasing popularity of secondaries should endure as focus shifts to secondary funds that are led by general partners of private funds (GP-led secondaries) instead of secondary funds created by independent fund managers to buy interests from limited partners wishing to liquidate their holdings in existing private funds (LP-led secondaries).

GP-led secondary funds have gained in popularity, primarily through the creation of continuation funds by general partners seeking to achieve two goals. The first is to give liquidity to existing limited partners that cannot go beyond the fund's term in a maturing fund and need to cash out their investment. The second goal is to allow investors that have the ability to endure a

longer holding period to renew their commitment to a portfolio of companies that would benefit from staying in the general partner's portfolio for a while longer.

General partners with high-performing or high-potential assets in their portfolio that have room to appreciate further may find themselves forced to sell these assets prematurely if the fund is nearing the end of its life. Continuation funds and GP-led secondary processes have gained in popularity as they solve this problem by allowing the general partner more runway to capture this additional value for themselves and their limited partner base. For example, companies that have strong long-term prospects but were severely impacted during the pandemic and are expected to rebound as the economy recovers would be prime candidates for a GP-led secondary process via a continuation fund.

Secondaries bring liquidity to private equity investment, an alternative way of gaining exposure to private equity and faster access to some prized private equity assets. These features make this strategy an important supporting feature of a growing asset class and a compelling investment proposition for investors with a certain profile. As a result, growth in secondary funds is expected to persist. While currently dominated by larger asset managers, this trend is also expected to take hold among midsize asset managers driven by the increasing flow of capital into private equity across the size spectrum and as the type of investors seeking exposure to private equity as an asset class continues to expand and diversify.

WHAT IS DEFI AND HOW WILL IT RESHAPE CAPITAL MARKETS?

Decentralized finance (known as DeFi) refers to a new financial infrastructure—built on [blockchain technology](#)—that allows for transparent, permissionless and borderless financial interactions in which the fees traditionally charged by intermediaries are fed back to the DeFi participants. Using distributed ledger technology and smart contracts, decentralized applications built on blockchains like Ethereum enable trustless, peer-to-peer financial transactions that remove centralized entities and intermediaries. From simple prediction markets to the tokenized factoring of trade receivables, DeFi is booming.

To understand DeFi as a whole, it's crucial to understand the concepts of the smart contract, the token, and the exchange. This piece is the first in a series that will explain these elements of DeFi, explore their transformational potential, highlight associated risks and consider the impact DeFi may have on traditional market structure.

Core elements

The backbone of DeFi is the smart contract. Unlike the Bitcoin blockchain, Ethereum and other smart contract-enabled blockchains run like a large decentralized computer with network participants that process transactions of Ethereum's native currency ether (ETH) and also run the lines of code for smart contracts and to power decentralized applications. Smart contracts can range from a simple "if this, then that" self-executing contract, or they can run complex computer programs and replace centralized broker-dealers.

Tokens, another key element of DeFi, are created and managed with smart contracts. They allow for assets other than ETH to be traded on top of the Ethereum network. Tokens come in many different flavors, from utility tokens that operate as a form of payment within their own unique ecosystem to tokens that intend to represent an asset in the physical world.

Using distributed ledger technology and smart contracts, decentralized applications built on blockchains like Ethereum enable trustless, peer-to-peer financial transactions that remove centralized entities and intermediaries.

One example of the latter is stablecoins, which are central to the DeFi ecosystem. Most commonly pegged to the dollar, stablecoins can maintain their peg through centralized reserves held by the issuer or programmatically with a smart contract. Over the past 18 months, the market cap for stablecoins tied to the U.S. dollar [has grown](#) from \$5 billion to over \$100 billion, according to Coin Metrics. In a mid-July meeting of the President's Working Group on Financial Markets, Treasury Secretary Janet Yellen stressed the need for a U.S. regulatory framework for stablecoins. The working group "expects to issue recommendations in the coming months," according to the Treasury Department.

The third piece of critical infrastructure for the DeFi economy is the exchange. DeFi has largely replaced the functions of centralized entities with smart contracts. With a decentralized exchange (DEX), a smart contract operates the platform and enables the trading of tokens. The largest DEX, Uniswap, launched in November 2018 and its trading volume grew from \$330 million in June 2020 to a peak of \$83 billion in May 2021, according to data from CoinGecko and [The Block](#).

DeFi's growing impact

The use of DeFi is growing at a rapid pace. The share of DEX trading volume compared to centralized exchanges has risen from 1% in January of 2020 to over 9% as of June 2021, [according to CoinGecko data](#). Another sign of growth is that the gross value of assets locked in Ethereum smart contracts has swelled from \$845 million on June 1, 2020, to \$57.1 billion one year later, [data from DeBank and The Block shows](#). DEX trading volume was [\\$162.5 billion](#) in May, but that number is a drop in the bucket compared to the \$10.9 trillion in U.S. equities trading volume for the same month, according to [data from Cboe](#).



The question remains as to whether DeFi can continue its rate of capital inflow. While attention from traditional capital market participants is likely to fuel continued DeFi growth, in order to maintain its exponential rate of growth DeFi will need to overcome some of its traditional limitations.

DeFi is also rapidly expanding beyond lending and exchanges. The recent rise of non-fungible tokens has broadened DeFi into the world of collectibles and art trading. DeFi is also expanding into more complex financial instrument markets as well, from derivatives, futures, and swaps to complex platforms enabling the tokenization of factored trade receivables.

The question remains as to whether DeFi can continue its rate of capital inflow. While attention from traditional capital market participants is likely to fuel continued DeFi growth, in order to maintain its exponential rate of growth DeFi will need to overcome some of its traditional limitations.

One criticism of DeFi has been its inefficient use of capital; historically most decentralized lending apps have required 150% to 200% overcollateralization. Newer platforms such as Liquity are offering stablecoin loans with as little as 110% collateral. Uniswap has even recently launched a new version of its app to allow liquidity providers to make their capital available within specific price ranges rather than among all possible prices, thus enlarging their percentage of the liquidity pool within their specified price range and allowing them to earn more in terms of trading fees.

What to do?

It is difficult to gauge whether DeFi will ultimately become a significant disrupting force to the traditional capital market structure. Given its rapid growth, it is likely worth some level of attention, and those active in the current capital market structure will likely see some effects from this growth. Continued education on more advanced DeFi topics may yield insights and opportunities to leverage this innovation into a first-mover advantage. Those with just a passing interest may want to simply stay alert for news coverage of DeFi trends, and evaluate when a more serious study may be necessary. ■



From evolving consumerism needs to a robust deal environment, key areas are heating up for health care organizations this summer and in the coming months.

INDUSTRY OUTLOOK: **HEALTH CARE**

BY JESSIKA GARIS, LORI KALIC, RICK KES
AND MATT WOLF

FOR MILLIONS of health care consumers in the United States, the cost to deliver their care is significant and on the rise. The proof is in the data.

In 2019, national health care expenditures (NHE) grew 4.6% to \$3.9 trillion, representing 17.7% of gross domestic product. Spending per person was \$11,582, and according to the Centers for Medicare and Medicaid Services (CMS), the NHE is projected to grow to 19.7% by 2028.

Further, according to NCR Health, three out of four consumers feel their health care decisions are the most important—and expensive—decisions they'll ever make, yet four out of five admit to finding it difficult to compare cost and quality during the decision-making process. This is in stark contrast to other industries where a consumer can access cost, benefits and features to guide their purchasing decisions.

From evolving consumerism needs to a robust deal environment, key areas are heating up for health care organizations this summer and in the coming months.



KEY TAKEAWAYS

- Health care consumerism is here to stay and will force significant changes in the way providers deliver care as well as market and charge for services.
- Cybercriminals are voraciously attacking health care organizations and continue to infiltrate their security protocols via ransomware attacks.
- The health care deal market is robust and will remain so through at least the balance of 2021.
- Updated guidance provides further clarity and requirements on Provider Relief Fund reporting.



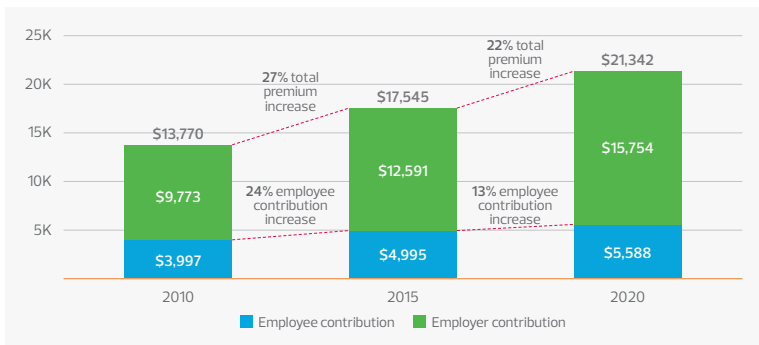
One size does not fit all. It is wrong to presume that all health care consumers want the same services.

CONSUMERISM

Delivering consumerism: Personalization, access, incentives, innovation

Health care consumerism is [defined](#) as people proactively using trustworthy, relevant information and appropriate technology to make better-informed decisions about their health care options within and outside the clinical setting. As the chart demonstrates, health care costs are growing, with consumers paying more for premiums and out-of-pocket expenses—a signal that providers need to consider significant changes in the way they deliver care, as well as market and charge for services, to more closely align with other industries that strive to operate like retail businesses.

Average annual worker and employer premium contributions for family coverage



Source: KFF Employer Benefit Survey, 2020

Patients want high-quality, easily accessible care at an affordable price. With that in mind, how can providers attract and engage consumers to better meet their needs and preferences? Results of McKinsey's 2018 Consumer Health Insights (CHI) Survey identified four areas of opportunity for providers, payers and other stakeholders:

Personalization. One size does not fit all. It is wrong to presume that all health care consumers want the same services. Payers and providers can better meet consumer needs with personalized services and information, delivered when, how and where they need it. The CHI survey identified six consumer segments that dictate the frequency and degree of personalization required, including the constrained chronic care consumer, disadvantaged disconnected user, busy convenience user, engaged traditionalist, loyal informed consumer, and the healthy convenience seeker.

Access. In all consumer segments identified, most survey respondents indicated they want access to care when they need it, and if it's not delivered, they will go elsewhere. Those results suggest providers should change the way they think about access, moving beyond traditional delivery methods and better utilizing digital tools. As a result of COVID-19, many providers did expand digital solutions for consumers—primarily through telehealth services—but there is still significant opportunity for growth in this area.

Incentives. Survey results suggest providers and payers need to provide consumers with well-designed incentives, rewards and penalties, in conjunction with tools and information, to better enable consumer decision-making. Respondents named incentives as one of the top three new industry product concepts that might encourage them to take actions that would reduce costs.

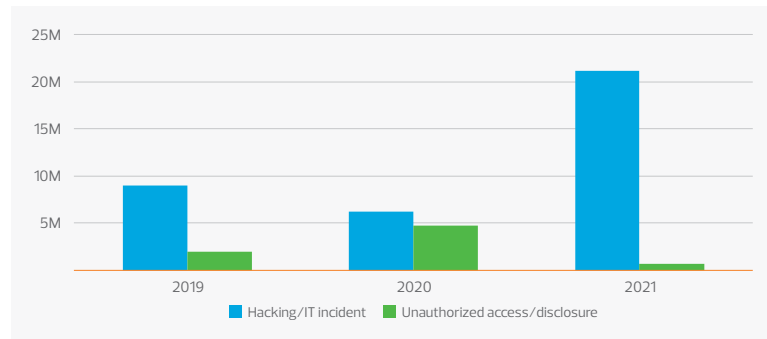
Innovation. The survey indicated that consumers want innovation in and changes to the current health care system. Twenty-one percent of respondents mentioned system reform as a top priority, and 55% want increased benefit coverage for medical services. When asked to rate measures that would most improve hospital and outpatient care, respondents most often selected greater cost transparency and increased insurance acceptance and coverage.

CYBERTHREATS

Cyberthreats remain top industry risk; costly for many

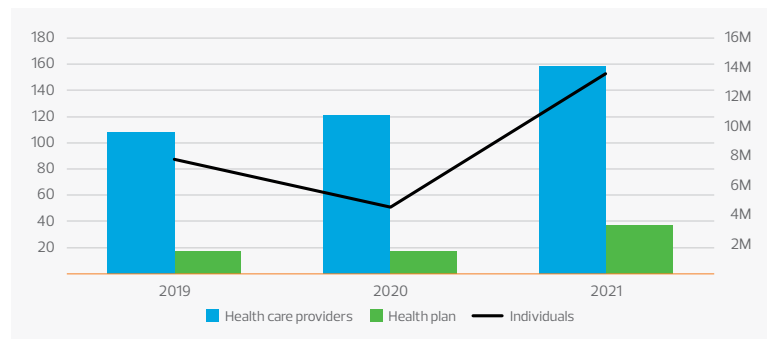
[Cyberattacks](#) within health care continued to surge during the first half of 2021. Breach reports to the Office for Civil Rights (OCR) from January through June include 225 hacking-related incidents affecting over 21 million individuals. Hacking incidents remain the most common type of OCR-reported breach and have more than

January 2019–June 2021 breach comparison



Source: Office for Civil Rights

Reported hacking incidents 2019–2021



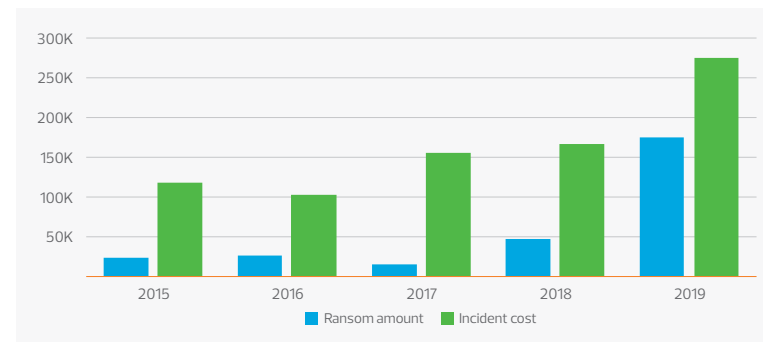
Source: Office for Civil Rights

tripled compared to 2020. One hundred fifty-eight health care organizations fell victim to a hacking incident, affecting 13 million patient records, during January to June of 2021.

Cybercriminals are voraciously attacking health care organizations and continue to infiltrate security protocols via ransomware attacks. An attack involves stealing valuable patient information, locking the organization out and requiring payment to retrieve the stolen information. While many health care organizations have increased their investments in cybersecurity, efforts so far have been insufficient to keep attackers at bay.

According to the NetDiligence Cyber Claims Study 2020, ransomware was the leading cause of losses among middle market companies last year, a trend we expect to continue through the remainder of 2021. On average, ransomware attacks in 2019 cost organizations \$275,000 per incident and \$175,000 in ransom demands, according to the same report.

Average costs by year, 2015–2019



Source: NetDiligence Cyber Claims Study–2020 Report

The health care industry continues to generate headlines reporting ransomware attacks, gaining the attention of the Biden administration, which issued new regulatory guidance in order to help organizations protect themselves from cyber criminals. The executive orders, issued on June 2, state five practices for organization consideration which include:

- 1. Backup your data, system images, and configurations, regularly test them, and keep the backups offline.** Ensure that backups are regularly tested and that they are not connected to the business network, as many ransomware variants try to find and encrypt or delete accessible backups.

Cybercriminals are voraciously attacking health care organizations and continue to infiltrate security protocols via ransomware attacks.



- 2. Update and patch systems promptly.** This includes maintaining the security of operating systems, applications and firmware, in a timely manner. Consider using a centralized patch management system; use a risk-based assessment strategy to drive your patch management program.
- 3. Test your incident response plan.** Run through core questions and use those to build an incident response plan: Are you able to sustain business operations without access to certain systems? For how long? Would you turn off your operations if business systems such as billing were offline?
- 4. Check your security team's work.** Use a third-party penetration tester to test the security of your systems and your ability to defend against a sophisticated attack.
- 5. Segment your networks.** It's critically important to employ network segmentation and to carefully filter and limit internet access to operational networks, identify links between those networks, and develop workarounds or manual controls to ensure they can be isolated and continue operating if your corporate network is compromised. Regularly test contingency plans such as manual controls so that critical safety functions can be maintained during a cyber-incident.

We expect more scrutiny around health care cybersecurity and believe cyberthreats will continue to escalate unless organizations take aggressive measures to ensure data safety. Health care organizations should evaluate their cybersecurity playbook and determine where their gaps remain. In addition, cyber insurance should be evaluated to determine contract contingencies and security requirements to be managed by the insured. For more, RSM

explored the insurance topic as well as other insights in a [special report on cybersecurity](#) earlier this year.

DEAL-MAKING

Deals are hot in health care

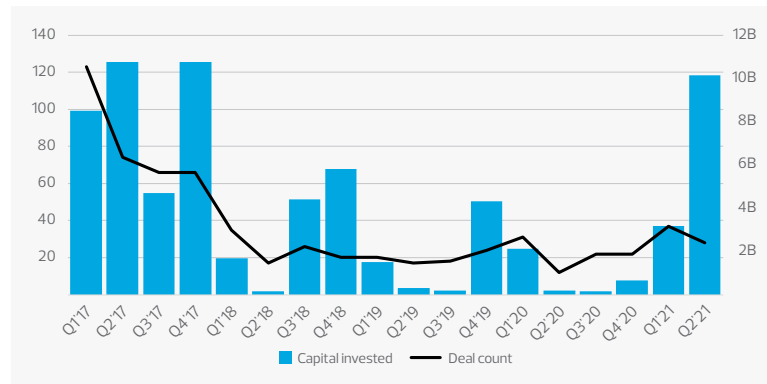
The health care deal market is robust and will remain so through at least the balance of 2021. Private equity and strategic buyers have capital to deploy, and the challenges of the COVID-19 pandemic have pushed incumbent organizations to consider new acquisitions or divestitures. Growth in demand for new health care investments is outpacing growth in supply of quality assets across most subsectors, which is pushing up multiples. These elevated multiples have also led to a historic number of health care service initial public offerings (IPOs) in 2021 so far.

Deal activity is particularly high among more traditional clinical outpatient and hospital inpatient service providers. Though health care technology remains an active area for investors and a popular topic in the news media, the reliable strategy of horizontal and vertical integration of organizations that directly provide clinical care remains alive and well.

In the first half of 2021 we have seen 65 deals of hospital or other inpatient care providers, as compared to 87 in 2020 and 79 in 2019, according to data compiled by Pitchbook. Even more remarkable than the number of deals is the capital invested: \$13.3 billion so far in 2021, compared to only \$3.1 billion in 2020 and \$6.3 billion in 2019. This year has so far seen the most capital invested in hospital and inpatient providers since at least 2017, and the year is only half over.

The \$13.3 billion investment in hospitals and inpatient services has been buoyed by several large deals involving Iora Health, New Hanover Regional Medical Center, and LifePoint Health's acquisition of Kindred for \$9.5 billion, among others. While many of these deals are still subject to shareholder or regulatory approval, we may see more mega-hospital and inpatient deals in Q3 and Q4.

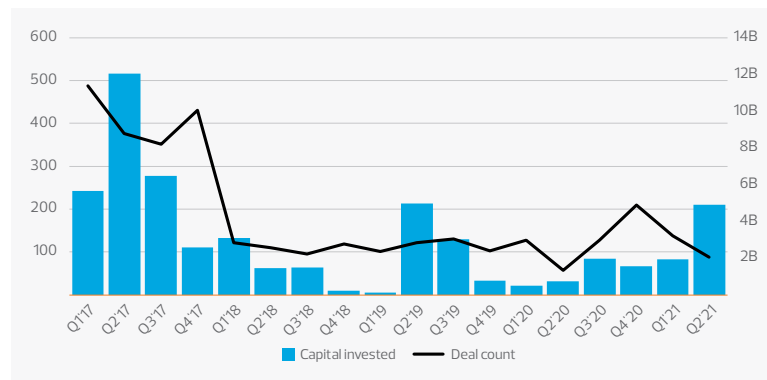
Hospital deal activity buoyed by megadeals and COVID-19



Source: PitchBook

The volume of outpatient provider deals has tapered somewhat since the peak in Q3 of 2021, but investment dollars have surged. In Q2 alone, the clinical and outpatient sector saw \$4.9 billion invested across 88 deals. The sector remains approximately on pace to match 2020, which itself was a busy year despite the pause on deal flow over the summer.

Acquisitions of outpatient services January 2017–June 2021



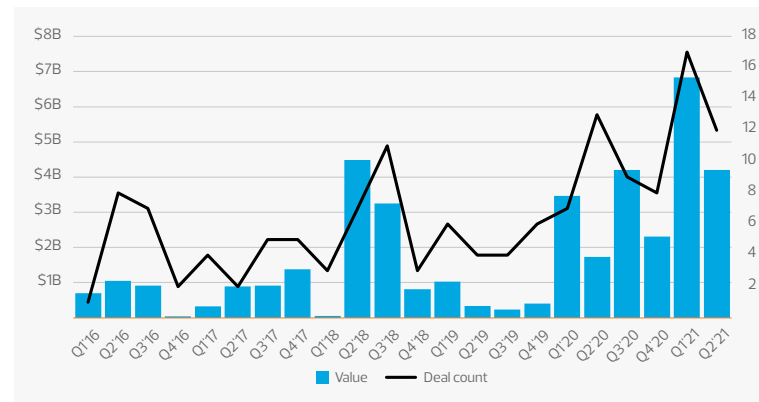
Source: PitchBook

According to data compiled by Bloomberg, private equity investors have \$224 billion in dry powder aimed at health care in the United States. For context, this amount could purchase approximately 17 aircraft carriers. Some strategic players, such as hospitals and health care systems, also find themselves with cash to invest in acquisitions.

The amount of money earmarked for health care acquisitions or other deals is increasing faster than new hospitals, physician groups or health care suppliers are being formed. As more money chases fewer companies, valuation multiples—i.e., the prices of deals—are increasing across most health care sectors. Of deals with publicly available data, recent outliers in Q2 include Partner Group's \$800 million acquisition of Axia Women's Health at 20 times EBITDA and Gainwell's \$3.2 billion acquisition of HMS's at 22.6 times EBITDA; and in Q1, Centene's \$2.2 billion acquisition of Magellan at 12.5 times EBITDA. Anecdotally, across the private health care deals we see multiples regularly in the low- to mid-teens in many sectors.

This environment of elevated multiples, along with low interest rates and other macroeconomic considerations, has led to a surge in health care IPOs. 2021 has so far seen 29 of these transactions, more than 2019's total (20) and quickly approaching 2020's (37).

Health care IPOs January 2016–June 2021



Source: Bloomberg

The 2021 listings have also raised \$11 billion, which is more capital than the 2018 and 2019 listings of \$8.6 billion and \$2 billion combined. The 2020 listings raised \$11.7 billion, an amount 2021 will likely exceed. These figures exclude biotech and pharmaceutical listings, which have also been red-hot.

We expect health care deal activity to remain robust at least through the rest of 2021. Investors and executives are seeking to reposition themselves for post-pandemic growth, interest rates will remain low, and some investors and founders are eager to close deals before any potential changes to the capital gains or carried interest tax codes.

REGULATORY

Regulatory and legislative outlook

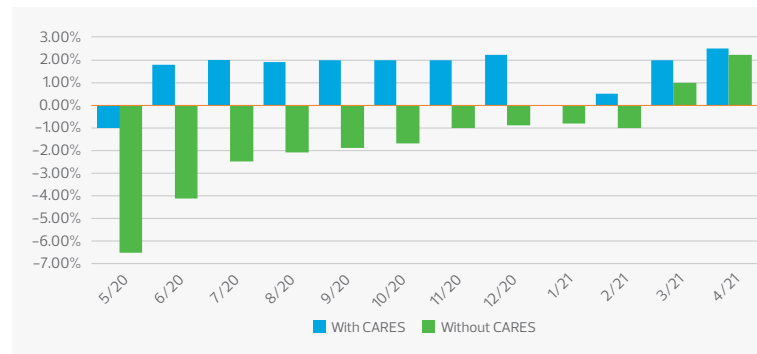
As many health care providers emerge from the effects of COVID-19, some issues perhaps overlooked during the pandemic are coming into focus. One is the reporting requirements for grants from the U.S. Department of Health and Human Service's (HHS) Provider Relief Fund (PRF).

On June 11, HHS released an updated version of the Post Payment Notice of Reporting Requirements extending the period for the use of funds; unfortunately, the extension is limited to payments received after July 1, 2020.

Many health care providers, in particular hospital systems, received a large portion of their PRF funds before June 30, 2020. Those payments still have the same period of availability, which expired on June 30, 2021. The June 11 guidance also introduced a new reporting concept based on when the funds were received, creating an additional, unexpected burden on recipients.

Lastly, on July 1 the reporting portal opened with yet more guidance, regarding lost revenue—a critical component in how recipients will demonstrate their adherence to the terms and conditions of the grant. The HHS guidance now provides the opportunity to measure lost revenue on a quarterly basis for the period of availability. Although only quarters with a loss can be added together to determine lost revenue, lost revenue not reported in one reporting period can be carried forward to future periods. These changes to the measurement and permissibility of a carryforward were generally positive to most health care providers. As seen in the chart, for many health care systems, [PRF funds](#), which are a significant portion of the Coronavirus Aid, Relief, and Economic Security Act funding, are the difference between losing money and making money.

Operating margin year-to-date by month



Source: Kaufman Hall National Hospital Flash Report June 2021

Other legislative and regulatory issues we continue to monitor include:

- What's next for the Affordable Care Act? It recently survived yet another legal challenge. We will continue to watch for any legal challenges that arise through 2022.
- Surprise billing: CMS recently released their interim final rule related to surprise-billing reform. We anticipate a potential widening of the rule through future legislative efforts.
- Congress continues to focus on private equity's role in health care, an issue we're tracking as well. ■



From technology advancements and new business models to evolving patient populations, life sciences companies eye a changing ecosystem.

INDUSTRY OUTLOOK: **LIFE SCIENCES**

BY JUSTIN CULBERTSON, ADAM LOHR,
STEVE KEMLER AND DAVID STUART

MARKETS

Contrasting market conditions appear in life sciences new economy



Considering the role life sciences companies have played throughout the pandemic, and their increased prominence in economic and political commentary, it may come as a surprise that the biotechnology and pharmaceutical sectors are being outperformed by the broader market, and that the consumer price index for prescription drugs (CPI-drugs) continues an 18-month decline.

KEY TAKEAWAYS

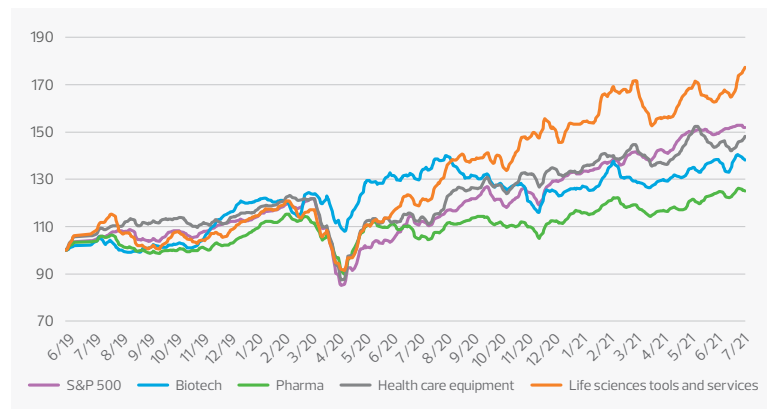
- Public markets have recently favored medtech and life sciences services companies for near-term stability and established revenue streams; private capital continues to flow into biotechnologies and new drug development.
- Continued investment in new technologies and therapies is an encouraging driver for the long-term health of the industry.
- Clinical trial starts have rebounded and now exceed historic levels. The widespread adoption of decentralized trials is clear; however, the economic and efficiency trade-offs must be more thoroughly vetted.
- Companies are choosing to commercialize their own drugs rather than license them or be acquired, but challenges must be considered too.
- On a proportionate basis, branded drugs continue to increase in price, and it is these drugs that garner media attention and drive concern over drug prices, even when the latest reading of the consumer price index indicates a 2% decrease in prescription drug prices overall.
- The adoption of robotic surgical techniques continues to grow as labor challenges in health care persist and advanced technology enables a wider range of robotic assisted procedures.

Ever resilient, the life sciences ecosystem is facing its own unique set of opportunities and challenges involving capital markets, clinical trials and a complex development pipeline impacted by new business models and technologies.

Capital markets: Shifts and rebounds

As of June 30, 2021, all major indices are up 35% to 40% year over year, and all are outperforming the life sciences ecosystem, except for the life sciences tools and services sector, which has continued its upward trend, fueled by diagnostics, drug discovery and contract outsourcing efforts. The initial boost to biotech from its response to the COVID-19 pandemic has tapered as the sector regains focus on the core development of next-generation treatments of immunology, as well as cell and gene therapies. Biotechnology continues to receive the lion's share of public and private investment, but the high risk and long development cycle remain even post-pandemic. Medtech and health care supply stocks have rebounded along with the resumption of non-COVID-19 medical treatments and surgeries, and we expect this trend to continue as the economy recovers and patients are increasingly comfortable pursuing elective surgeries and preventive care.

Performance of S&P 500 vs. life sciences sectors*



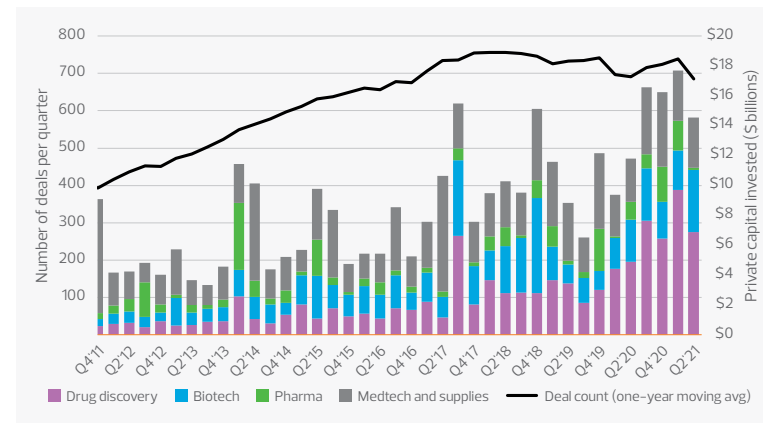
Source: Bloomberg; RSM US LLP

*Normalized to 100 as of June, 30 2019

Public markets have recently favored medtech and life sciences services companies for near-term stability and established revenue streams; private capital continues to flow into biotechnologies and new drug development.

The first half of 2021 has seen as much private equity and venture capital investment as the preceding six months and 50% more capital raised than the first half of 2020. The total number of deals taking place has decreased by roughly 10% from the second half of 2020, but considering the broader economic recovery and the fact that investors have many other sectors to choose from, we see current-year performance as a positive indicator that investment will continue to flow into the life sciences ecosystem. The most significant change seen in 2021 so far is a waning preference for drug discovery companies, which likely peaked due to the pandemic. To be fair, the interconnection between drug developers and discovery companies continues to blur, and the important takeaway is that continued investment in new technologies and therapies is encouraging for the long-term health of the industry.

Private capital invested in life sciences—by sector



Source: PitchBook; RSM US LLP

Mergers and acquisitions (M&A) in life sciences have not been robust through the first half of the year, but it does appear that deal flow will rebound to pre-pandemic averages. As discussed in our previous outlook, the Federal Trade Commission's announcement of [a working group](#) focused on evaluating pharmaceutical company mergers, and the March lawsuit to stop the [acquisition of Grail Inc. by Illumina Inc.](#), is creating a chilling effect on life science's M&A landscape. Our analysis excludes mega deals over \$10 billion, of which there were only four completed in 2020, and none through June 2021. Several mega deals are pending or proposed, including deals between Thermo Fisher Scientific and PPD Inc., and AstraZeneca and Alexion Pharmaceuticals, which would serve as encouraging catalysts for further activity in the global life sciences ecosystem.



The interconnection between drug developers and discovery companies continues to blur, and the important takeaway is that continued investment in new technologies and therapies is encouraging for the long-term health of the industry.

MIDDLE MARKET INSIGHT

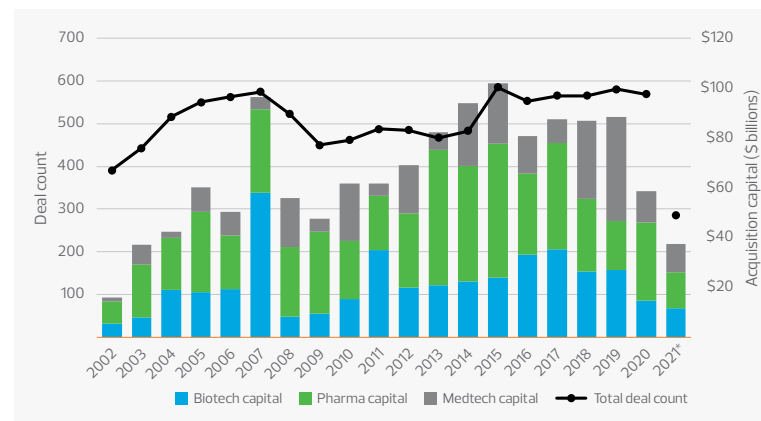
Technology advancements, new business models and evolving patient populations highlight the importance for middle market life sciences companies and their stakeholders to understand their changing ecosystem.

Going into 2021 there was concern that the life sciences initial public offering (IPO) market could face headwinds as the broader economy recovered and investors had a wider range of investment vehicles to choose from, including special purpose acquisition companies. But the life sciences industry has remained strong and is on pace to exceed 2019 and match 2020 in terms of completed IPOs, while 2020 may prove to be the high-water mark for total capital raised.

While the performance of public markets indicates that medtech and life sciences services companies are providing the greatest near-term value, we believe that private investment and [IPOs](#) provide a forward-looking view into the health and direction of the ecosystem. As shown in our analysis of life sciences IPOs, biotech continues to be the dominant sector for new market entrants; through June 2021 biotech has made up roughly 70% of all life sciences IPOs and capital raised.

High capital requirements, long development cycles and low probabilities for successful launches are key factors that make investment in life sciences a high-risk, high-reward proposition. Technology advancements, new business models and evolving patient populations highlight the importance for middle market life sciences companies and their stakeholders to understand their changing ecosystem.

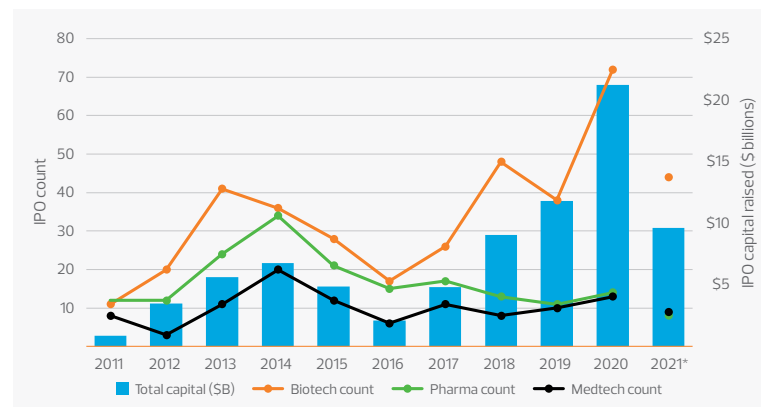
U.S. life sciences M&A—deals under \$10 billion



Source: Bloomberg; RSM US LLP

*June 2021

U.S. life sciences IPOs—by trading date



Source: Bloomberg; RSM US LLP

*June 2021

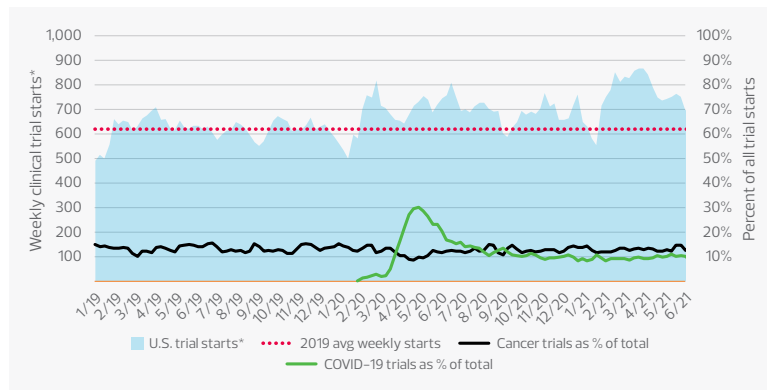
TRIALS

Clinical trials: Emerging from the crucible and leading the pack

Eighteen months after the start of the pandemic, clinical trial starts have rebounded and now exceed historic levels, according to data analyzed from [Scientist.com's Trial Insights database](#). The data suggests an overall recovery across the majority of indications, but much like what we have seen in the broader economic recovery, some pockets of the therapeutic landscape are outperforming their peers. Oncology, for example, had maintained its long-term pace of new trial starts, with the total number increasing by 8% from 2019 to 2020. We expect another strong year in 2021 as the industry continues to shift focus to oncology and immunotherapies. This is compared to indications with lower mortality risk, such as infections, which saw a 17% decrease in total trial starts from 2019 to 2020.

New trial starts are a bellwether for industry focus in the long term, and late-stage trials provide insight into what will happen in the near term. According to the National Institutes of Health's [ClinicalTrials.gov](#) database, COVID-19 trials made up 13% of industry-funded phase 3 trials in 2020. That number dropped to 8% for the first five months of 2021. Between September 2020 and June 2021, the indications with the greatest proportion of trials moving into phases 3 and 4 are oncology, pathological conditions, cardiovascular diseases, and infections, according to Trial Insights data.

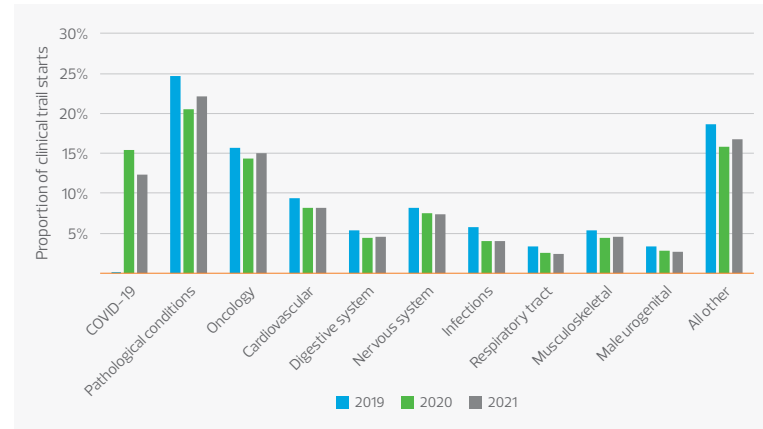
U.S. clinical trial starts per week



Source: Trial Insights; RSM US LLP

*4-week moving avg.

Distribution of U.S. clinical trial starts by indication

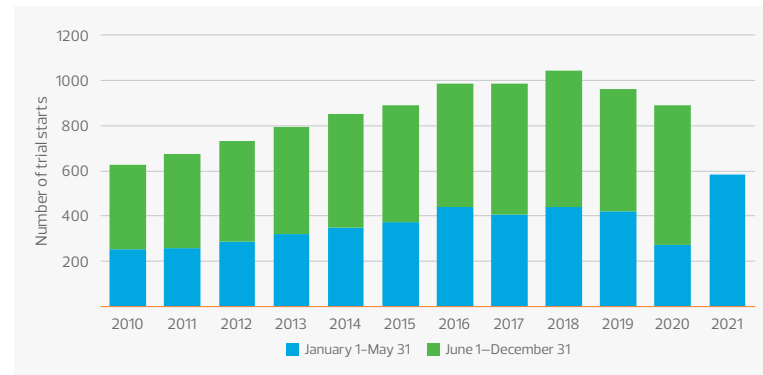


Source: Trial Insights; RSM US LLP

Medical device trials set historic pace

During 2020, industry-funded medical device trial starts decreased 7% year over year, and fell below historical trends. However, 2021 looks to be the sector's strongest year ever in terms of new trial starts, with a 114% year-over-year increase for the period January through May.

Industry-funded device trial starts



Source: National Institutes of Health

We acknowledge that the increase in the first five months of 2021 likely includes trials that were delayed because of the pandemic, but the breakout pace as well as the apparent public market interest in medical device and supplies companies indicate a positive outlook for the sector. Additionally, we've noted several portions of the

medical device space, specifically surgical devices, are surging with new investor interest. These capital market indicators, as well as recent Supreme Court decisions to uphold the Affordable Care Act, indicate that growth in medical devices is far from transitory.

Decentralization – A lasting impact?

One of the greatest challenges the pandemic presented for the life sciences industry was the ability to conduct clinical trials, which were frequently forced to switch from an on-site to highly remote model. Fortunately, the industry had already been exploring decentralized trial models and was able to quickly adapt to the remote environment and absorb a surge of COVID-19-focused new trial starts. As businesses and individuals return to the physical economy, the life sciences industry plans to retain many of the decentralized activities it has adopted over the last 18 months. The long-term economic and public health impacts of this shift remain unclear, but recent investments and deal activity suggest this shift in business models will not be temporary.

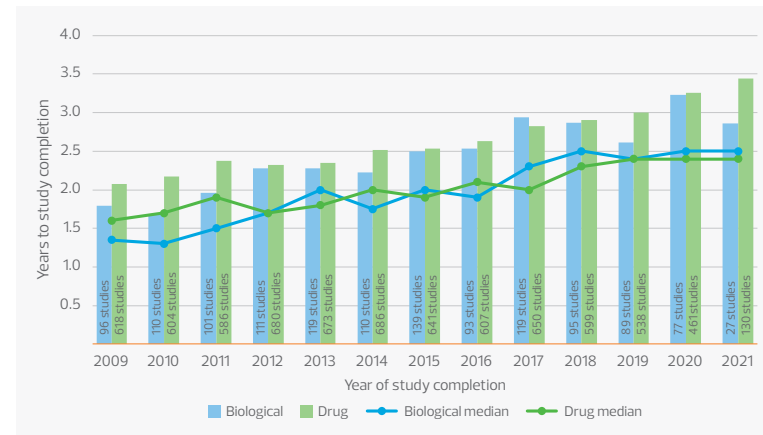
In February 2021, ICON plc announced plans for the [\\$12 billion acquisition of PRA Health Sciences](#), a merger predicated on synergies between the organizations, including PRA's robust, decentralized trial platform. According to management meeting highlights published by Mizuho Securities LLC, ICON expects 80% to 90% of its future trials will require some form of remote monitoring.

This sentiment toward investing heavily in decentralized trial models is consistent across the industry. In March 2021, Syneos Health announced its partnership with Science 37, a decentralized trial platform provider, and in April 2021, Syneos Health announced a separate partnership with Medable, another decentralized trial platform provider and direct competitor to Science 37. In its Q1 2021 earnings call, IQVIA stated that it is expanding therapeutic areas in decentralized trials and had [recruited almost 170,000 patients](#) using its decentralized trial solution. In its fiscal year 2020 earnings call, PPD took a more measured stance, stating that remote monitoring will be utilized more frequently than prior to the pandemic but wasn't expected to fully replace on-site monitoring.

The widespread adoption of decentralized trials is clear; however, the economic and efficiency trade-offs need to be more thoroughly vetted. Fully virtual trials have a [completely different cost structure](#), according to PPD in a Q1 2021 earnings call. While number of sites and travel to those sites are reduced, there is an increase in point-

to-point solutions to serve patients in their homes as well as a much more decentralized supply chain. Though any increased costs may be offset by future savings, more promising is the potential to increase the efficiency and success rates of clinical trials, thus reducing the development timeline and overall cost of new drugs.

Average years to industry-funded study completion*



Source: National Institutes of Health

*Phase 3 studies only; excludes COVID-19

As a result of increased FDA regulation and complexity in clinical trials, we noted that the average years to completion for industry-funded phase 3 studies has been steadily trending upward. We specifically excluded COVID-19 trials given unique regulatory conditions that are unlikely to persist across all indications on a go-forward basis. We believe this trend highlights the opportunity and importance of driving efficiencies in the clinical trials, especially as new therapies become more targeted on smaller populations, and more middle market companies develop and launch drugs on their own.

LAUNCHES AND PRICING

The changing face of who launches new drugs

The Goldilocks scenario for drug developers is that they find a successful drug candidate, shepherd it through clinical trials, and bring it to market to help patients. Along the way, they face countless challenges and must raise staggering amounts of capital. However, over time, the types of drugs being approved and the developers taking them to market is shifting from small-molecule

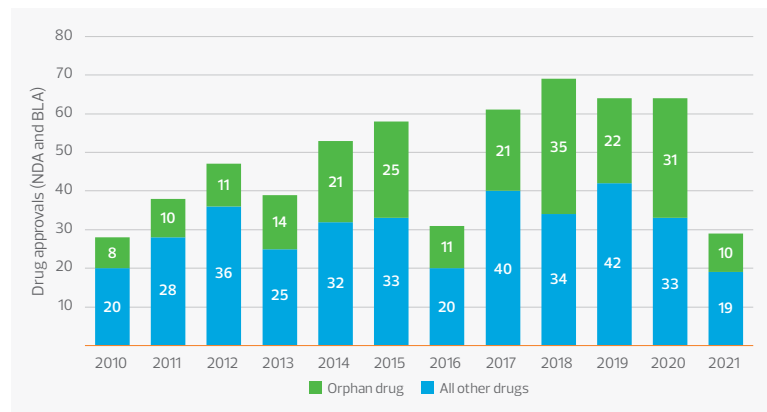


The mix of drugs being approved is also changing as biologics gradually make up a larger proportion, and more drugs are targeting rare diseases.

pharmaceuticals to biologics, and large pharma companies to middle market startups. While this shift is in the early stages, it is worth reexamining what it takes to bring a drug to market and how much capital executives, and investors, should plan on raising.

Looking at drug approvals over the past decade, we see that the number of novel drugs approved increased from 28 in 2010 to 61 in 2017. The number of annual approvals has since stabilized at 60 to 70. This held true even in 2020, when 64 new drugs were developed (excluding emergency use authorizations granted during the pandemic); 2021 is on track for a similar number, with 29 approved in the first half of the year.

More new drugs are targeting rare diseases



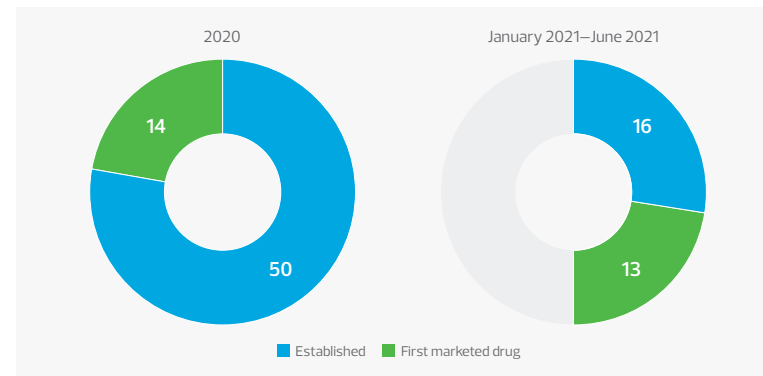
Source: Evaluate Ltd.; RSM US LLP

The mix of drugs being approved is also changing as biologics gradually make up a larger proportion, and more drugs are targeting rare diseases. A rare disease is one affecting fewer than

200,000 people, and these “orphan drugs” often receive special considerations by the FDA. In 2010, only 28% of new drug approvals had an orphan designation. In 2020 that figure had grown to 48%. This may be an important consideration when determining whether a company should launch on its own, since drugs for rare diseases are sold in lower volumes and don’t require sales and distribution networks as extensive as those of other drugs, but likely require a substantial price tag to be commercially viable.

This leads to the question of who is launching new drugs into the market. To determine this, we looked at all drug approvals from January 2020 through June 2021, and determined if the company responsible had any other drugs on the market or had licensed out any early stage drugs. In 2020, 22% of newly approved drugs were the first commercial product for their sponsor. That number has increased to 45% through the first half of 2021.

New drug approvals by experience of developer



Source: Evaluate Ltd.; RSM US LLP

There are numerous reasons that companies are choosing to [commercialize](#) their own drugs rather than license them or be acquired. First, these companies have access to outsourcing partners to handle everything from manufacturing to distribution to sales. Add to this a growing pool of executives with extensive experience in large pharma who've left those organizations to [run biotechs instead](#). These two trends mean that smaller companies now either have the expertise in-house or can outsource key processes involved in a drug launch.

Understanding the cost of developing a new drug

Worldwide, research and development spend by biopharma companies is expected to be \$244 billion this year, according to Evaluate Ltd., with the vast majority of this spend going into the development of new drugs. The most commonly used metric for the launch of a new drug is [\\$2.6 billion to get to approval, rising to \\$2.9 billion](#) when accounting for post-market research and development. However, when we look at the total capital raised by life sciences companies from founding until their first drug is launched, on average they've raised only \$330 million. What explains this enormous difference?

Before jumping to conclusions, it is important to understand how the \$2.6 billion is calculated. A great deal of research has gone into that figure, and it represents a holistic way of thinking about the overall cost of developing one drug. First, we calculate the actual out-of-pocket R&D cost as \$1.4 billion (2013 dollars). This includes the cost of successful as well as failed compounds. We then look at the opportunity cost of that R&D spend over the time it takes to actually develop a drug. This results in a cost adjustment from \$1.4 billion to \$2.6 billion, based on a discount rate of 10.5%.

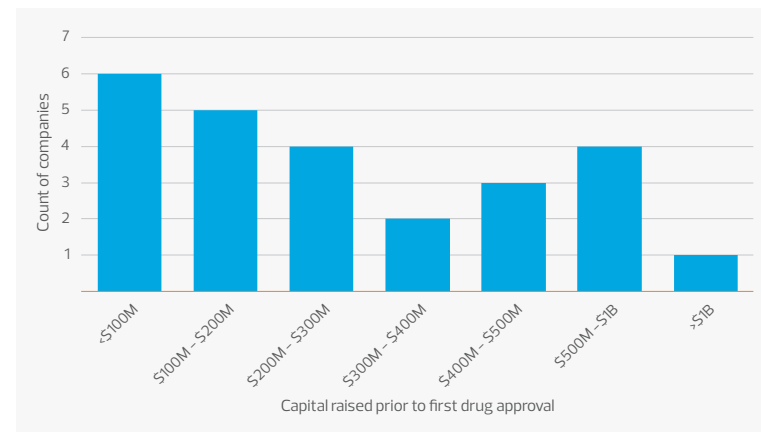
This approach makes a great deal of sense from a developer's perspective because it takes into account industry costs overall. It even makes sense for an investor who is considering an array of companies developing new drugs, because in reality most drug candidates will fail and never make it to market.

However, if you are a CEO or CFO of a new development stage biopharma deciding how much money to raise in your next round and how much equity to give up in exchange for financing, this isn't a very helpful metric. For you, the cost of your lead candidate failing is unlikely to just be rolled into the cost of the next candidate in

the pipeline. Since a candidate failure could very well be a terminal event for the company, the only practical way forward is to assume future success.

In doing so, it is important to understand that the established cost structures for R&D programs at large biopharma companies don't apply to smaller companies. Large companies are better able to survive a failed drug approval, so including those costs makes sense for them.

Distribution of capital raised prior to first approved drug



Source: Evaluate Ltd.

To understand the cost for a small to midsize biopharma company to develop a novel drug (either small molecule or biologic), we need to consider an alternative approach. Building off the analysis and giving specific consideration to companies taking their first drugs to market, we can estimate the cost for them to reach that commercialization milestone.

Between January 2020 and June 2021, 25 companies successfully launched their first commercial drug. For each we determined the amount of capital raised between founding and FDA approval, and calculated the average amount as \$330 million. More remarkable is that six drugs reached approval having raised \$100 million or less. The one company that has raised over \$1 billion so far is BridgeBio Pharma, which in addition to launching its first two drugs in 2021, has 18 other candidates at some stage of preclinical or clinical development in the pipeline.

Based on the much lower average cost of development for an individual biopharma company and the increased likelihood that it will be able to launch its first drug itself, this is an ideal time for small to midsize biopharma companies to strategically plan for capital requirements—especially given the flow of private capital available, and the persistently high multiples seen in the life sciences ecosystem.

The capital requirements for new drug development admittedly do not consider failed drugs or the cost of commercialized operations and manufacturing. Factoring in those costs, as well as the size of the patient population and the health impact of a drug, are critical components of drug pricing—but these factors are often ignored or misconstrued in the public discourse on pricing.

Drug pricing and the consumer price index

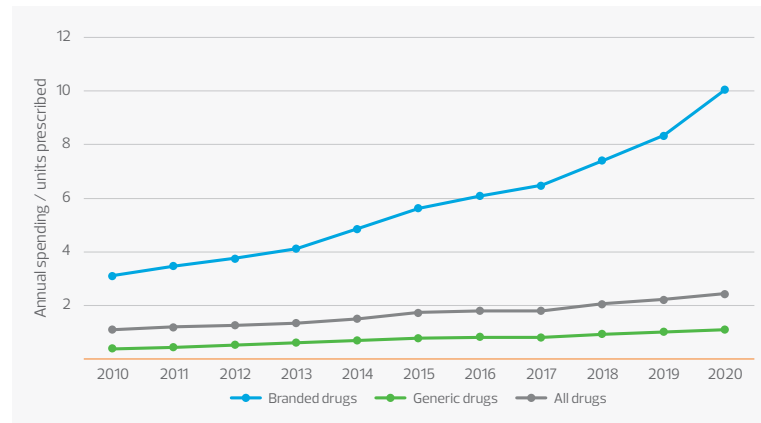
The expiration of patents and introduction of generics and biosimilars have greatly expanded access to lower cost prescription drugs, and competition in the generics space has kept generic drug prices in a relative state of equilibrium for the last decade. Branded drugs have taken an opposite trajectory as they focus on smaller populations and more targeted indications. In 2007, branded drugs accounted for 37% of all prescribed units and 81% of sales, according to prescription drug data compiled by Bloomberg. In 2020, branded drugs made up only 15% of all prescriptions, but still accounted for 62% of sales.

On a proportionate basis, branded drugs continue to increase in price, and it is these drugs that garner media attention and drive public concern over drug prices, even when the latest reading of the CPI indicates a 2% decrease in prescription drug prices overall.

Since 2016 the total CPI has been growing at a faster rate than CPI-drugs, and the overall rate of out-of-pocket spending on prescription drugs has remained lower than CPI-drugs. Why is this happening, and what does it mean for the drug pricing conversation?

Common criticisms of CPI are that the overall basket of goods being measured is not representative of what consumers are actually buying, and that it does not react quickly enough to changes in new market entrants and substitutes. This concern extends to CPI-drugs as well, especially given the rapid advances in biotechnologies and cell and gene therapies.

Ratio of prescription drug spending to number of units prescribed



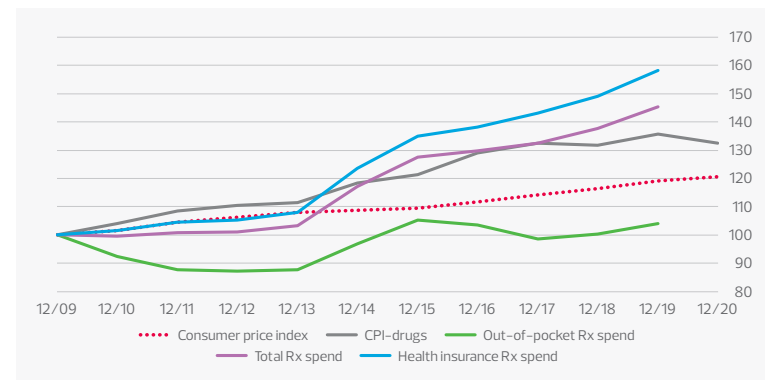
Source: Bloomberg; RSM US LLP

Branded drug sales as % of all drug sales

Year	Units sold	Sales dollars
2020	15%	62%
2019	16%	62%
2018	17%	62%
2017	17%	63%
2016	19%	63%
2015	19%	63%
2014	19%	62%
2013	21%	63%
2012	22%	66%
2011	24%	71%
2010	26%	73%
2009	30%	76%
2008	33%	80%
2007	37%	81%

Source: Bloomberg; RSM US LLP

CPI for prescription drugs vs. national health care spending*



Source: Bureau of Labor Statistics; Centers for Medicare and Medicaid Services; RSM US LLP

*Normalized to factor 100 at 12/31/2009



Branded drug prices will continue to be a flashpoint for politicians and consumers.

For context, the methodology behind the CPI-drugs calculation involves a rotating group of retail pharmacies in roughly 100 urban areas, and a sample population of the most recent drugs prescribed in each of those pharmacies. The prices of those sample drugs are measured monthly for five years, and each year one-fifth of the sample pharmacies and their respective drugs is replaced with new pharmacies. As there is a regular refresh of the measurement basket, CPI-drugs likely reflects changing availability, prices and preferences for drugs. However, because the measurement is based on retail pharmacies, the product basket is by default full of lower-cost generics and drugs and therapies that do not need to be administered in a health care setting. Absent from the measurement are the specialty therapies and biologics that are administered in health care settings.

Herein lies the challenge for drug companies, regulators, payers and providers as they navigate the economic and political landscape around drug pricing. There are significantly more and higher quality generics and biosimilars available in the market every year, and because of this competition, prices and out-of-pocket spending have been increasing at a slower rate than overall CPI. At the same time, advancements in scientific technology are generating breakthrough therapies and personalized medicines that meet previously unmet needs. How are regulators going to manage the low cost of 85% of drugs prescribed that cover the majority of ailments, while also considering the high cost of orphan drugs that could cure a child's blindness or treat Alzheimer's disease?

There is no doubt that branded drug prices will continue to be a flashpoint for politicians and consumers—but given how closely divided Congress is, and the significant number of other priorities for the Biden administration, we do not expect any significant movement on drug pricing during 2021. As more developers bring their own drugs to market, and find more efficient ways to do so, perhaps pricing will reach a turning point.



Companies are spending large amounts of capital to expedite the final development and commercialization of their products in hopes of being first.

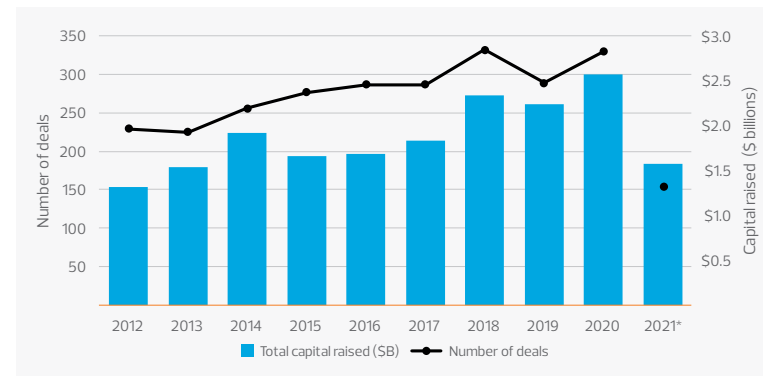
Venture capital embraces the next phase in surgical devices

As technology becomes more advanced, nimble and physically smaller, and the demand for surgical procedures grows in aging and more affluent populations, the adoption of robotic surgical techniques continues to grow.

The benefits of robotic surgery often include enhanced precision, flexibility and control during operations. Additionally, emerging technology—including remote-operated systems, miniaturized devices and fully autonomous systems—continues to improve and offer additional benefits. As a result, venture capital investment continues to pour into the surgical device sector; and with \$1.5 billion raised through June it is on track to eclipse 2020's record year of \$2.57 billion.

Competition to be first to market is heating up. Companies are spending large amounts of capital to expedite the final development and commercialization of their products in hopes of being first. Late-stage raises, including investments in eCential Robotics (\$122 million) and Memic (\$96 million), have pushed median deal size and post-money valuation for surgical devices to record highs in 2021. We expect this trend will continue as more and more of the benefits of robotically assisted surgeries are realized.

VC investment in surgical device companies

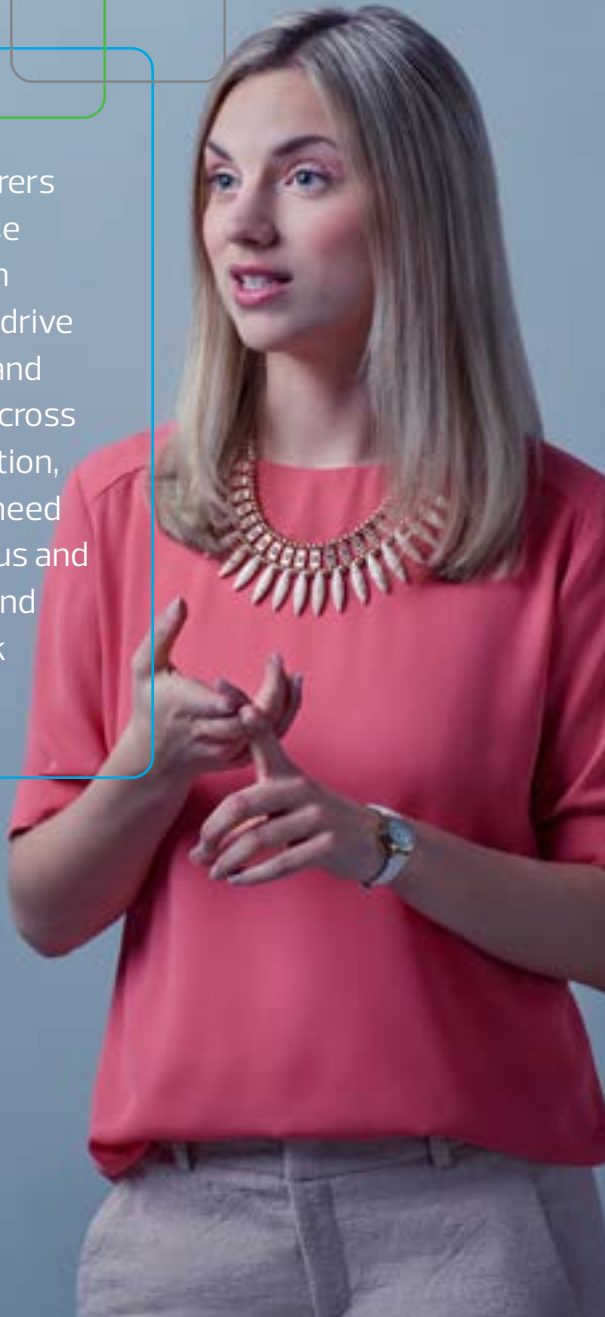


Source: PitchBook

*June 2021

Low-cost, minimally invasive and personalized procedures are the goals many health care providers are currently seeking. Surgical devices, including robots that leverage artificial intelligence, will be the key to achieving these goals. The development and commercialization of these devices is costly and requires significant capital to fully realize the promise of these technologies. ■

As manufacturers rapidly increase investments in technology to drive collaboration and productivity across their organization, they will also need concerted focus and formality around enterprise risk management.



INDUSTRY OUTLOOK: **MANUFACTURING AND ENERGY**

BY SHRUTI GUPTA, ANNE SLATTERY, KATIE LANDY
AND JAMES WARD

AS MORE PARTS of the United States and other countries have eased pandemic restrictions, manufacturers continue to recalibrate in order to best serve their customers in the months and years to come. Middle market companies reevaluating the resilience of their supply chains will need to pay close attention to evolving government policies on trade, tax and the environment, as these shifts will have implications for global operations. The energy sector continues to deal with volatility and an elevated level of uncertainty as the industry both rebounds from the pandemic-driven recession and continues to transform in order to meet changing demand dynamics. As this uncertainty continues, manufacturing and energy companies alike need to ensure they have an updated, robust approach to risk management.



KEY TAKEAWAYS

- Manufacturing companies should factor in new proposed tax costs while reevaluating and modeling their supply chain strategies.
- Western countries are increasingly aware of the need to invest in infrastructure, manufacturing capabilities and advanced technologies. The United States and others are providing incentives to companies in key sectors in order to modernize infrastructure.
- We don't expect \$100-a-barrel oil would impact today's world the same way it did 20 years ago, mostly due to structural changes underlying demand.
- As the energy mix changes from fossil fuels to renewables, the direction of capital spend will need to change along with it. Agility, diversification and preparation will be key for energy organizations to take advantage of opportunities in the post-pandemic, lower-carbon future.
- As manufacturers rapidly increase investments in technology to drive collaboration and productivity across their organization, they will also need concerted focus and formality around enterprise risk management in order to respond with speed and agility to growing cybersecurity and supply chain risks.

GOVERNMENTS FOCUS ON TRADE, TAX, AND ENVIRONMENTAL POLICY

Governments around the world are focused on bringing back critical supply chains and achieving strategic autonomy by rebuilding their domestic capabilities.

The rebuilding is also taking on a "green" color as environmental concerns get factored into national, industrial and corporate objectives, and significant investments are needed at the national level to achieve these objectives. Accordingly, government policies and proposals are focused on trade, tax, infrastructure, and environmental policies that will better enable these goals.

These changes will introduce new opportunities for prepared middle market manufacturers, especially alongside expectations for significant economic growth. RSM forecasts U.S. gross domestic product to grow by 10% for the second quarter of 2021 and by 7.5% for the year. Bloomberg forecasts world GDP to grow by 6% in 2021 and 4.5% in 2022.

"The American economy is on the cusp of growth not seen in decades, but the sustainability of that growth will depend on decisions made today concerning taxes, spending and infrastructure," says Joseph Brusuelas, chief economist of RSM US. Industrial companies should [harness technology](#) and take into account the lessons learned from the pandemic and shifting government policies to position themselves to take advantage of what some are calling [the Roaring '20s of the 21st century](#).

Trade

Countries are targeting self-sufficiency in critical supply chains such as semiconductors and advanced materials used in the production of electric vehicles and batteries. Western countries are increasingly aware of the need to invest in manufacturing capabilities and new-age technologies such as artificial intelligence and microelectronics. Countries want to win the technologies-of-the-future race since they understand the winner will have a national security advantage. Significant investments are needed at the national level to achieve these objectives.

MIDDLE MARKET INSIGHT

Middle market companies reevaluating the resilience of their supply chains will need to pay close attention to evolving government policies on trade, tax and the environment, as these shifts will have implications for global operations.

In the wake of COVID-19, various countries are investing in advanced manufacturing capabilities and providing incentives to companies in key sectors. The Australian government, for instance, is now funding companies that operate in areas such as critical minerals, defense and space, and advanced technologies. Japan is investing in alternative manufacturing locations to help its companies shift facilities out of China. Europe, which traditionally does not provide favorable tax and other incentives due to state aid concerns, is specifically providing incentives to promote research, innovation and manufacturing of semiconductors and microelectronics.

The Biden administration is taking a whole-of-government approach to assess vulnerabilities and strengthen supply chains in areas including semiconductors, advanced packaging, large-capacity batteries, and critical minerals and materials. The approach includes financing programs, updating restrictive regulations and statutes, strengthening engagement with domestic and foreign partners, and creating policies that give preference to domestic manufacturing. Biden's \$1.2 trillion infrastructure proposal aims to modernize the country's aging infrastructure and enable growth. This will not only provide opportunity for industrial manufacturers that can cater to modernization efforts but will also enhance the country's competitiveness in global trade.

These policies will affect the choices that manufacturers catering to these key sectors should make while considering global expansion, including whether to establish new manufacturing operations or export to new locations, as well as their determination of the best regions to expand to. While manufacturing companies setting up operations in these countries can benefit from such incentives, companies that are currently only exporting to these countries and don't have plans to manufacture there should monitor the journey to self-sufficiency, with the goal of reducing reliance on overseas suppliers.



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Taxation

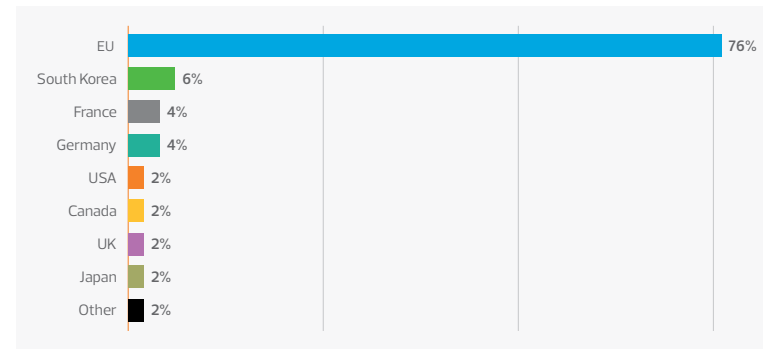
Corporate taxes are arguably the preferred method to finance the above initiatives. The Biden administration wants to bring back manufacturing, but few U.S. tax proposals target reshoring. This makes sense because reshoring decisions encompass much more than tax policy and are based on operating costs and accessibility to talent, suppliers and markets. At the same time, the global tax policy framework—i.e., how to tax and how much to tax—is itself undergoing a paradigm shift, toward taxing companies based on the location of their customers instead of the taxpayer’s country of residence. Also, countries that have long competed with one another to attract corporations by lowering tax rates are coming together to agree on a [global minimum](#) tax proposal to stop this race to the bottom.

Should a global minimum tax be implemented, it would even out the playing field to a large extent as far as taxes are concerned. The United States is a proponent of this global minimum tax and has been able to garner support from the G-20 countries. While companies obviously don’t favor higher taxes, they probably favor simplicity and certainty as much as, or sometimes more than, a tax rate reduction. There is a long way to go before these proposals may be finalized, but given the focus on building back their economies, governments will be increasingly focused on discouraging tax base erosion.

Infrastructure and environmental policy

Environmental, social and governance issues continue to get attention and are shaping countries’ regulatory, economic and tax policies as they race to meet their net-zero emission targets. The recently released [tax proposals](#) from the Biden administration provide a host of credits and incentives for investments in clean energy and eliminate existing tax preference items for companies in the oil and gas and coal industries. The European Union is considering a carbon border tax—a tax on imported goods based on the greenhouse gases emitted to make them—initially for steel, aluminum, cement and fertilizers. The EU has garnered broad support from its members and has been more aggressive on environmental policy initiatives—but its trading partners that don’t have robust environmental policies to begin with may find these measures unsettling.

\$949B in green stimulus* approved to date—by country



Source: BloombergNEF; RSM US LLP

*Green stimulus refers to stimulus policies that drive clean growth

MIDDLE MARKET INSIGHT

Looking to the future, understanding demand undercurrents will be key for players at all points in the energy value chain. As the energy mix changes from fossil fuels to renewables, the direction of capital spend will need to change along with it.

Carbon pricing policies—aimed at applying a market price or a monetary value to carbon emissions—are already in place in many countries, including Canada, Europe and even some parts of the United States, forcing companies to take the impact of these emissions into account in their decisions to make carbon-intensive goods. Making green products can be more expensive than the status quo, but also creates the opportunity for companies to invest in advanced technologies to garner a greater share of the market. But given the focus on sustainability by countries around the world, companies ranging from glass to steel to automotive are left with no choice but to rethink product design and process.

Here are some key strategies for middle market manufacturers to keep in mind:

- Factor in new proposed tax costs while reevaluating and modeling supply chain strategies.
- Be aware of the impact of changing environmental policies on operations and factor this into product design, pricing, and supply chain structuring given the various green regulations in each country.
- If considering global expansion, be aware of various countries' sector priorities, not only to take advantage of any incentives but also to understand where specific sectors might be out of favor, thus potentially affecting company operations and customer base.

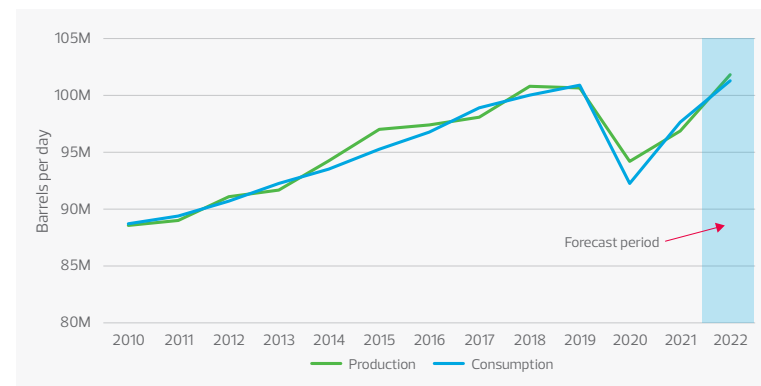
\$140 IS THE NEW \$100

The world is watching as oil prices continue to climb, with Brent crude exceeding \$75 a barrel in mid-June for the first time since April 2019. This price hike is underpinned by a swift increase in demand as the pandemic has eased in many countries, coupled with concern around supply-side ability to meet these extraordinary

needs—a typical supply-demand imbalance in a period of economic recovery. While many market watchers anticipate \$100-a-barrel oil as global demand outstrips supply, the more pressing issue is how long prices will stay elevated and at what level high prices will significantly affect the economy.

“\$140 oil is the new \$100 oil,” says RSM Chief Economist Joe Brusuelas. In other words, we don't expect \$100-a-barrel oil to impact today's world the same way it did 20 years ago, mostly due to structural changes underlying demand. Specifically, the composition of demand today is fundamentally different than in recovery periods of the past. The global economy is now more diversified than ever, thanks to the accelerating energy transition that has brought with it many options for energy sources not directly linked to oil, such as wind energy, solar power and natural gas. Additionally, the increased efficiency of oil products we enjoy today reduces the effect of high prices. For example, the use of gasoline, the most consumed petroleum product in the United States, has become significantly more efficient in the past decade, allowing consumers to travel farther with less fuel. So while we may see \$100-a-barrel oil on the horizon as a result of current supply-demand conditions, we expect the duration and impact of such a price spike to be moderate.

Global oil production and consumption—annual average



Source: EIA; RSM US LLP

Organizations need to consider investments in technology that will help them identify all their critical suppliers and also continuously evaluate the performance of other providers and sub-suppliers throughout the supply chain.



Conditions behind rising prices

Global oil demand is expected to return to pre-pandemic levels of 100 million barrels per day in the second half of 2022, according to the International Energy Agency. Economic growth and related expectations drive demand, and we are certainly living in a period of recovery and growth, especially as many COVID-19 restrictions have eased. That said, there is still significant uncertainty around the trajectory of the global recovery, given the varying vaccination rates across the globe. Variables such as different strains of the COVID-19 virus can lead to a less-than-synchronous recovery across the globe. This type of uncertainty will temper long-lasting price surges.

The supply side of the equation is laced with uncertainties and complexities as well. OPEC+ continues to cap production limits for its member countries while U.S. shale producers—specifically public exploration and production (E&P) companies—have shown production constraints as they focus on capital discipline and free cash flow due to pressure from investors. OPEC+ is considering easing oil cuts starting in August, which will in effect raise supply, in reaction to demand recovery. The extent and velocity of the resulting supply increase will depend on the ability of the member countries to ramp up production.

On the U.S. shale side, a major hurdle to overcome is the underinvestment, or decrease in capital expenditure dollars, in the E&P space over the past year. Companies will need to overcome this stifling of investment in supply in order to make up for the natural decline in shale production, and this cannot happen overnight. Another wild card in the supply outlook is geopolitical and trade

issues, such as the ongoing negotiations to revive the nuclear deal between the United States and Iran, which could result in Iran exporting an extra 1 million barrels of oil per day—or 1% of global supply—for up to six months, according to Reuters.

While there is a risk that demand may outstrip supply, causing a price boom in the short term, we expect the duration and impact of the surge to be moderate. Nonetheless, it is clear that the industry is still dealing with an elevated level of uncertainty and will face continued volatility as it both rebounds from the pandemic-driven recession and continues to transform in order to meet changing demand dynamics.

Middle market considerations

Looking to the future, understanding demand undercurrents will be key for players at all points in the energy value chain. As the energy mix changes from fossil fuels to renewables, the direction of capital spend will need to change along with it. Agility, diversification and preparation will be key for energy organizations to take advantage of opportunities in the post-pandemic, lower-carbon future.

HINDSIGHT IS 2020: HOW MANUFACTURERS ARE RETHINKING RISK

In the wake of navigating significant supply chain disruptions and a rise in cyberattacks over the past year, organizations need to find a path forward that helps them become more resilient. Doing so starts with rethinking entity-wide risk management.

As middle market manufacturers recover from the pandemic and take advantage of robust economic growth prospects through new business models and technologies, they should also reassess their approach to risk governance. This will involve modernizing their risk management practices to critically evaluate risk more broadly across the enterprise and beyond their own sphere of influence. A 2019 Forrester Research report found that only 36% of organizations had a formal risk enterprise program. This means companies need a concerted focus and formality, as well as speed and agility, in the areas of third-party and supply chain risk management, cybersecurity, and overall risk governance practices.

Third-party and supply chain risk management

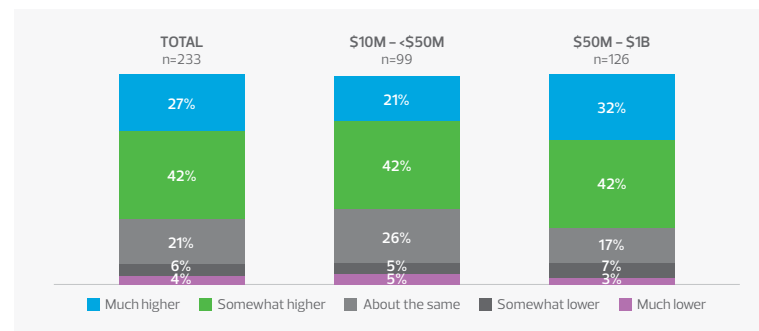
Companies with complex operations and extended supply chains have borne the burden of the challenges posed by engaging suppliers that also rely on third parties. We commonly see this structure with the automotive industry's original equipment manufacturers (OEMs), which rely on tier 1 suppliers, which in turn contract with tier 2 and other suppliers for vehicle components. The current semiconductor chip crisis in the auto industry is one recent example, which in several ways resulted from OEMs' reliance on tier 1 suppliers to work with chip manufacturers rather than directly involving the manufacturers in the production planning process.

As seen from this example, it can be difficult to fully assess risk and potential exposure in these deep, multilayer supply chain networks, and most middle market manufacturers have not invested in the necessary technology to gather the data to efficiently perform this analysis on a continuous basis. Therefore organizations need to consider investments in technology that will help them identify all their critical suppliers and also continuously evaluate the performance of other providers and sub-suppliers throughout the supply chain. With industrial companies relying heavily on third parties throughout the supply chain, visibility and connectivity across the extended ecosystem will be essential in mitigating future disruption and building resiliency.

Cybersecurity

Along with the rapidly changing landscape of manufacturing supply chains, organizations are facing new cybersecurity challenges. Although companies have greatly benefited from advanced technologies that have driven operational efficiencies, innovation and collaboration, [these technologies](#) have also created new opportunities for potential cyberattacks. Hackers have had more susceptible networks to attack, a captive audience and more time on their hands to create chaos, as noted in our [RSM US Middle Market Business Index 2021 Cybersecurity Special Report](#).

Total number of attacks in 2020 compared to 2019



Source: RSM US Middle Market Business Index Cybersecurity Special Report, Q1 2021

With a surge in the remote workforce, a significant increase in the use of Internet of Things devices, and a general drive toward greater connectivity to utilize data-driven decision-making, traditional cyber measures and tools are not always enough for an organization to manage visibility and control of security. In the last year, 28% of middle market executives claimed that their company experienced a data breach, according to first-quarter 2021 MMBI data used in the cybersecurity report. That is the highest level since 2015, when RSM began tracking this data, and a sharp rise from 18% just last year.

MIDDLE MARKET INSIGHT

As middle market manufacturers recover from the pandemic and take advantage of robust economic growth prospects through new business models and technologies, they should also reassess their approach to risk governance.



Manufacturers will need to continue prioritizing and developing competencies in areas of third-party, supply chain and cyber risk management, as well as enhancing their overall risk governance practices.

Manufacturers and third parties alike need to continue to evaluate cybersecurity protocols and programs in order to protect intellectual property and critical data. While an attack or even a pandemic is an unforeseen risk, being prepared begins with having a strong plan or program in place. And given the continuous news of ransomware attacks, including the recent attack on [Colonial Pipeline](#), the importance of this could not be greater.

Risk governance

As the economy picks up steam, it is essential for organizations to not only assess the lasting, material impact of COVID-19 but also evaluate the future of their overall [risk governance practices](#). More specifically, risk management functions will have to be able to better identify, measure, monitor and control existing as well as new and emerging risks. Beyond merely categorizing and quantifying an individual risk, companies must think critically, evaluate complex relationships, and consider upstream and downstream effects of risks within the universe to establish an enterprise view. We are already seeing middle market organizations reappraising their approach to risk management, with many now adopting a more agile strategy. This can include a continuous monitoring approach in the evaluation of existing, new and emerging risks. Staying agile not only allows for earlier detection of risk, but enables a speedy and accurate response.


In order to embed and execute an effective risk management program, there needs to be a clear value proposition to drive buy-in from leadership. While executives often recognize the importance

of risk management's role in value creation, it is not common for value creation to be cited as a goal of an organization's risk management strategies. With the proper governance, buy-in and strategy alignment, organizations are able to truly unlock the value of enterprise risk management and improve overall resilience.

Manufacturers will need to continue prioritizing and developing competencies in areas of third-party, supply chain and cyber risk management, as well as enhancing their overall risk governance practices. This will ultimately improve resiliency and provide a competitive edge as the economy picks up steam. Each of these priorities should be viewed as a leg of a stool—without one, operations or even the entire company can fall.

How middle market manufacturers should approach risk:

- In response to the changes and challenges brought by the pandemic, manufacturers have accelerated investment in and adoption of technology, and now must work to understand the new and emerging risks in order to build resiliency across their organization and entire value chain.
- To combat rising third-party, supply chain and cyber risks, companies need concerted focus and formality around risk management in order to respond with speed and agility to the changing and competitive manufacturing landscape.
- Prioritizing risk management can boost performance and continuity, giving an organization the ability to maintain a competitive edge. ■



Residential demand remains the driving force behind the real estate market, but faces challenges in the supply chain as the effects of the pandemic linger.

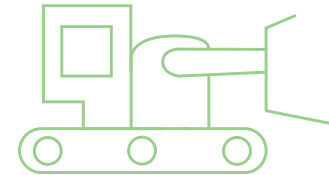
INDUSTRY OUTLOOK:

REAL ESTATE AND CONSTRUCTION

BY LAURA DIETZEL, NICK GRANDY,
SCOTT HELBERG, RYAN McANDREW
AND TROY MERKEL

Building 'boomtown' USA

Residential [construction](#) has been leading the economic recovery for over a year, a trend accelerated by the COVID-19 pandemic. Stay-at-home orders forced Americans to adapt to an environment of limited human contact, as work, school and recreation all moved into virtual space. This dramatic shift left many families seeking more from their residences—bigger layouts, dedicated offices and additional outdoor space—leading to the sharp boost in residential demand and a migration away from expensive urban centers.



KEY TAKEAWAYS

- Residential construction remains hot, leading recovery in real estate.
- Nonresidential construction is poised for a rebound as pent-up demand and savings are unleashed.
- Rising costs for core building materials and a shortage of skilled labor have been among the biggest challenges for residential and nonresidential contractors in recent months.
- The post-pandemic new work model may call for a hybrid of office and remote work, and most companies are using the pandemic to closely examine their real estate footprints.
- Despite declines in demand for university housing, investors are poised to benefit from the need to refurbish aging dormitories.
- Pent-up demand is helping to drive an uptick in travel, where trips combining leisure and business are set to be the next trend.

It's all happening during a time of limited supply, as the industry faces challenges ranging from higher material prices to a dearth of available lots.

Meanwhile, nonresidential construction has tapered off, as projects were put on hold amid the economic slowdown. From traditional offices to retailers and hotels, businesses are reevaluating their footprints amid heightened safety protocols and an uptick in online transactions. Many former office employees are pushing to continue remote work, at least some of the time.

Despite the divergent paths within the real estate market, we expect that nonresidential construction will pick up ground in the second half of 2021 and into 2022, while residential development will maintain its bullish pace.

HOMEBUILDING

The residential construction market has been firing on all cylinders, as explosive demand outstrips supply. The initial shock from the pandemic, which sent housing starts and permits to three-year lows, was short-lived; demand for space began to rise in June 2020, bolstered by low mortgage rates, increased household savings and the desire for more space, creating greater imbalance in the equilibrium, which had started years before with a so-called underbuilding gap.

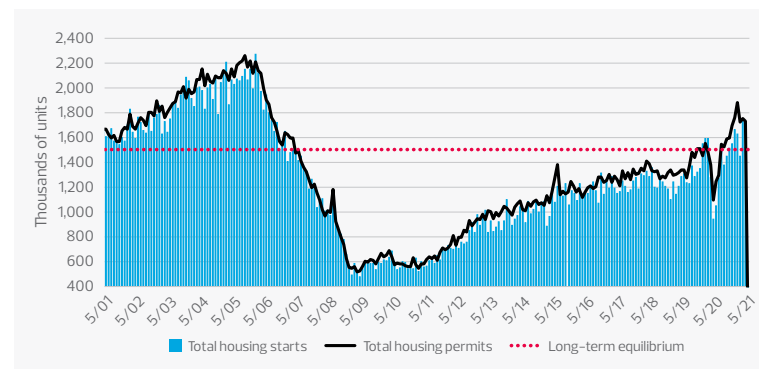
"The demand environment is outstanding," Ryan Marshall, CEO at PulteGroup, said during a homebuilding conference sponsored by JPMorgan Chase in May. In the first quarter, the homebuilder boosted its guidance to 32,000 closings for the year from 30,000.

Prior to the pandemic, the housing market experienced nearly two decades of underbuilding when demand surpassed supply. The shortfall was highlighted during the period following the Great Recession, as new home starts and permits fell below 1.5 million annualized units, the rate necessary to sustain market equilibrium. The limited building of new residential construction was a result of recent bias in the market caused by fears of housing instability. Builders have fallen short of sustainable supply by an estimated 5.5 million to 6.8 million housing units since 2001, according to a June report by the National Association of Realtors.

MIDDLE MARKET INSIGHT

The pandemic left many families seeking more from their residences—bigger layouts, dedicated offices and additional outdoor space—all bolstering demand for new homes.

The underbuilding gap



Source: U.S. Census Bureau

Throughout 2021, existing home inventory has been below 1.5 million units, representing record low levels and adding additional stress to the market. Government estimates based on May 2021 inventory levels and the pace of sales show it would take only about 2.5 months to exhaust current existing home inventory. This is extremely worrisome, considering a six-to-seven-month supply is typically viewed as healthy. Subsequently, home prices have soared; nationwide, the median price of an existing home has risen to \$350,300, while that of a new home is up to \$374,400. Both are record highs.

To address the housing market's limited supply issues, builders must look to outpace the long-term equilibrium level of 1.5 million annual units built. Due to the scarcity in inventory, homebuilding should remain strong for the remainder of 2021 into 2022, despite potential building supply-side issues impacting residential construction.



"The snapback of recovery is pleasing to observe," Bruce Flatt, CEO of the global commercial builder Brookfield, said during a May call to discuss first-quarter results. He added: "Capital markets today are very robust. Interest rates remain low, and the demand for the type of assets we own is strong and getting stronger."

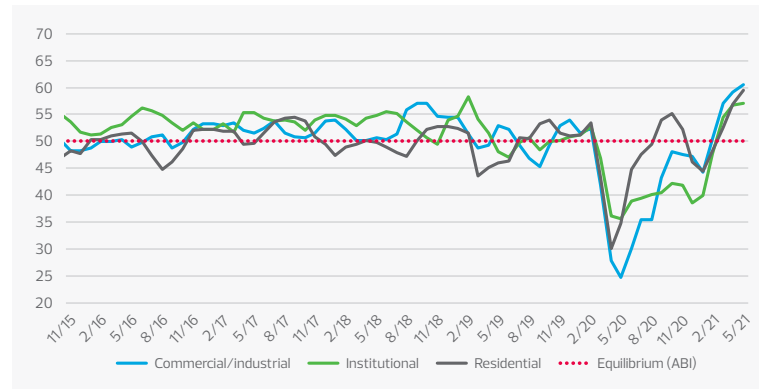
NONRESIDENTIAL CONSTRUCTION

Unlike residential construction, nonresidential construction has limped along since the start of the pandemic, as many companies suspended or canceled projects due to uncertainties facing their businesses. However, in recent months, with vaccination rates climbing and most states and municipalities reopening, the nonresidential construction industry is poised for a rebound as pent-up demand and savings are unleashed into the economy.

"The snapback of recovery is pleasing to observe," Bruce Flatt, CEO of the global commercial builder Brookfield, said during a May call to discuss first-quarter results. He added: "Capital markets today are very robust. Interest rates remain low, and the demand for the type of assets we own is strong and getting stronger."

The Architecture Billings Index, a nine-to-12-month leading indicator of construction work, turned positive in February and has continued to push higher, reaching a peak of 58.5 in May. Each of the index's sub-indices, which measure the type of construction work being performed (commercial, institutional and residential), has seen significant growth since the start of the year, and in May was above the equilibrium reading of 50. Based on the previous four months of positive readings, it is expected that nonresidential construction will experience a significant increase in demand beginning in the second half of the year and continuing into 2022.

Architecture Billings Index



Source: American Institute of Architects

The positive momentum in the marketplace will be welcome news for the construction industry. While the pandemic impact has not been as severe as in other sectors, many contractors were forced to chip away at their existing backlog to survive. According to data from the trade group Associated Builders and Contractors, throughout 2019 most contractors had a backlog of work averaging between 8.5 and 9 months. At the start of the pandemic, backlog fell below eight months and has remained there for much of the past year.

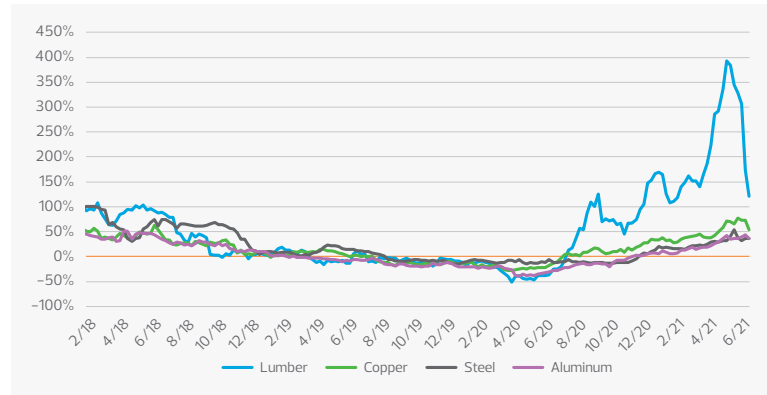
Adding to the positive momentum is the hotly debated infrastructure bill that President Biden and a bipartisan group of senators have agreed upon. Regardless of the legislation's final shape, it is expected to result in a significant contribution to construction spend and further brighten the outlook beyond 2022.

But here are some headwinds contractors will have to face.

BOOMTOWN CHALLENGES

[Rising costs](#) for lumber and other core building materials have been among the biggest challenges for residential and nonresidential contractors in recent months. While prices may remain elevated for the rest of the year, expectations are for price volatility to begin to subside. This should relieve some of the stress contractors have experienced in the bidding and estimating processes.

Materials futures percent change in price, year-over-year



Source: Bloomberg

A second major challenge contractors face is a shortage of skilled labor. Contractors have already begun reporting difficulties finding skilled workers to complete necessary work. According to data from the Bureau of Labor and Statistics' Job Openings and Labor Turnover Survey, or JOLTS, the construction industry had 357,000 open positions in April 2021, its second-highest reading in the past five years. The data underscores the current lack of skilled labor; the challenge of finding employees will only get worse as demand for construction services picks up. Contractors should be evaluating other ways to augment their labor force through the adoption of technology to help satisfy future demand.

MIDDLE MARKET INSIGHT

Rising costs for lumber and other core building materials have been among the biggest challenges for the construction industry in recent months.

OFFICE AND STUDENT HOUSING: BACK TO THE FUTURE?

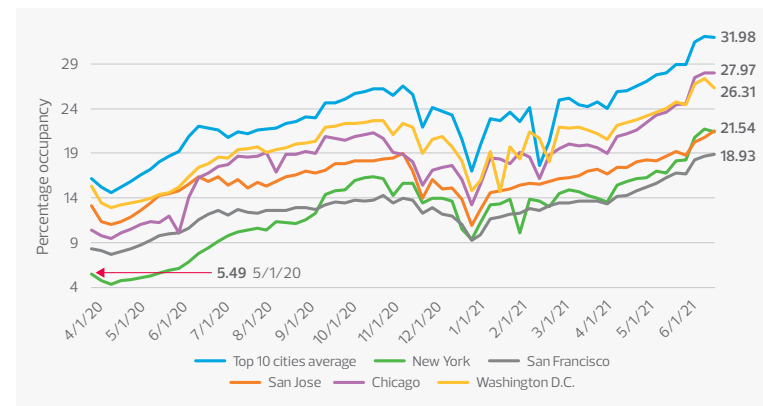
The office is calling—and it wants workers back.

Many employees have become increasingly fatigued by the onslaught of virtual meetings brought on by remote work. And some large corporations, including JPMorgan Chase, Goldman Sachs, Amazon and Google, are reportedly taking a bold stance to promote an office-centric culture post-pandemic. While employers want their workers back in the office to drive collaboration and spur innovation, they realize the office of the future will need to be more flexible than it was pre-pandemic.

Recognizing the new work model may call for a hybrid of office and remote work, most companies are using the pandemic to closely examine their real estate footprints. In his annual letter to shareholders, JPMorgan Chase Chairman and CEO Jamie Dimon stated: "Remote work will change how we manage our real estate. We will quickly move to a more open seating arrangement." He went on to add: "This will significantly reduce our need for real estate."

The return to office life presents a host of new challenges for businesses, including how to handle employee vaccinations. Most U.S. employers aren't taking a hard stance on vaccination requirement. Some, however, including Morgan Stanley, BlackRock Inc. and Bank of America, are for now allowing only vaccinated employees in their offices, a protocol that permits maskless interaction.

Commercial real estate occupancy rate



Source: Kastle Back to Work Barometer; Bloomberg Intelligence

The commercial office market looks profoundly different in the wake of a pandemic that has redefined how we work and live.

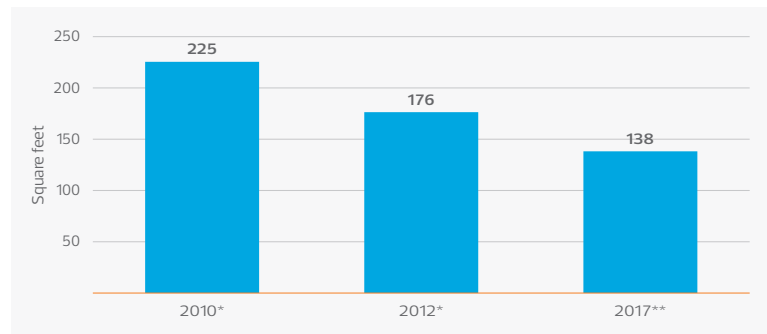


Employers can make a strong argument that remote work hinders collaboration. A study by Ethan Bernstein and Ben Waber highlighted in the December 2019 issue of the Harvard Business Review found that remote work, while more cost-effective, tends to significantly inhibit collaboration, even with enhanced digital channels and communication tools. The study reviewed the workforce of a major technology company, following its employees from 2008 to 2012; it found that remote workers communicated around 80% less about their assignments than did team members located in the same office. On 17% of their projects, remote workers didn't communicate at all!

MIDDLE MARKET INSIGHT

The return to office life presents a host of new challenges for businesses, including how to handle vaccinations. However, employers can make a strong argument that remote work hinders collaboration.

The shrinking office—sq. ft. per employees over time



Source: *CoreNet Global, **Statista

In addition to office footprints, companies are also rethinking their broader real estate strategies. Some are trading in high-tax jurisdictions and poor weather for sunshine and business-friendly venues. Texas has been the top relocation choice for some former

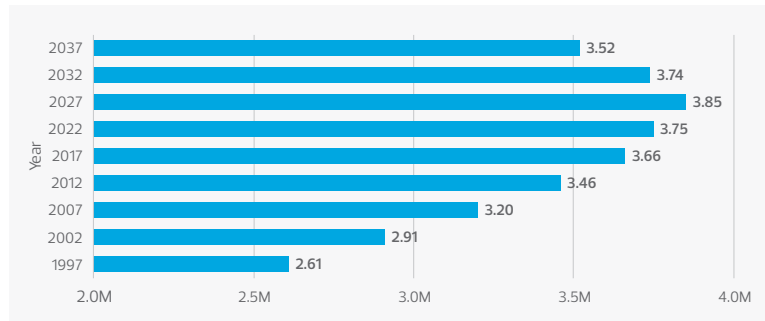
California-based companies, while Florida is attracting New York private equity shops. Arizona and Kentucky are also beneficiaries of the post-COVID-19 corporate relocation trend, according to Bloomberg data. With states like Illinois looking to eliminate or restrict corporate income tax breaks and New York proposing a temporary high-income surcharge, some companies are deciding the benefits of big cities like Chicago and New York are no longer commensurate with the costs of doing business there.

As employers set plans for the return to office, the multifamily sector has been benefiting, too. Apartment rents were up 160 basis points in April and 140 basis points in May, significantly higher-than-usual gains for those months, according to CoStar data. The storyline that cities are dead has itself been laid to rest, as downtown rentals set records in the first quarter in 2021, and overall national vacancy rates of 5.6% dipped below pre-COVID levels. San Francisco, New York and other major coastal cities have begun to recover as restaurants, museums and other urban destinations reopen. And despite media reports otherwise, higher home prices in the United States [are not fueling rentals](#). Instead, would-be buyers are seeking rentals due to the limited supply of homes for sale in what is expected to remain a hot housing market through the remainder of 2021.

THE CALL BACK TO CAMPUS

It's been a [long strange trip for students](#) during the pandemic, with many attending class virtually in far-flung locales. Colleges and universities are trying to figure out the right formula for real estate investment as a future that combines in-classroom and asynchronous learning unfolds. Higher-ed institutions, whose revenue streams were gutted by the loss of residential income and food hall sales, face a multiyear recovery at best. Forbes' annual review of college and university financials shows that around 20% now have a "D" rating. Adding insult to injury is a looming demographic squeeze; by 2026, smaller high school graduating classes will result in even greater competition by colleges for students.

High school graduates on the decline



Source: Western Interstate Commission for Higher Education; Knocking at the College Door, 2020

With money tight and hybrid education set to stay, the need for on-campus housing and dining will continue to decline. However, in good news for investors, existing housing stock at many schools is severely outdated and lacking modern amenities, making it ripe for an overhaul. These institutions continue to prioritize their limited capital on infrastructure, and developers are partnering directly with college and universities to upgrade on-campus housing.

MIDDLE MARKET INSIGHT

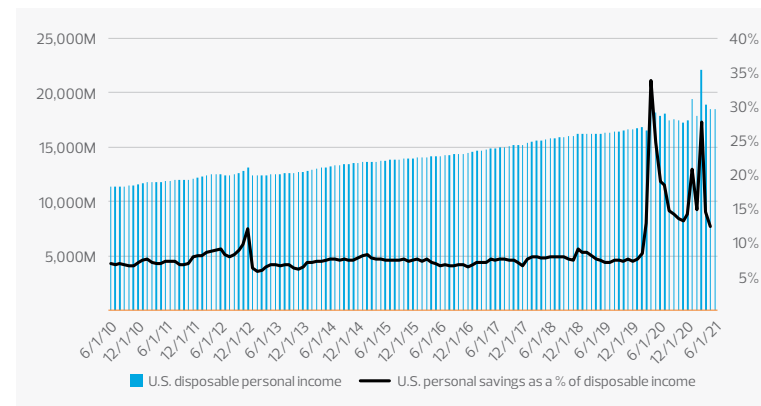
Despite waning demand, developers are partnering with universities to improve outmoded university dorms.

EARLY-TO-OPEN STATES LEAD HOSPITALITY REBOUND

The travel industry is heating up! Fueled by rising vaccination rates and higher personal savings, discretionary spending has shifted from goods and services to [hospitality](#). U.S. weekly hotel occupancy hit 68%, its highest level in 21 months, in the week ended June 19, according to STR data. In addition, the average daily rate of \$128.90 and revenue per available room (RevPAR) of \$87.62 reached pandemic-era highs. The recovery is nationwide, with more than 72% of all U.S. hotel markets posting RevPAR at 80% of 2019 levels or better—and 45% of all hotels posting RevPAR higher than the comparable week in 2019.

Tourist cities in states that experienced less severe pandemic lockdowns such as Florida and Texas are seeing significantly more improvement than their urban counterparts with tighter restrictions. Tampa and Miami's 12-month occupancy through May 2021 was greater than 50%; by comparison, Chicago was 36% and New York

U.S. personal savings as a % of disposable income



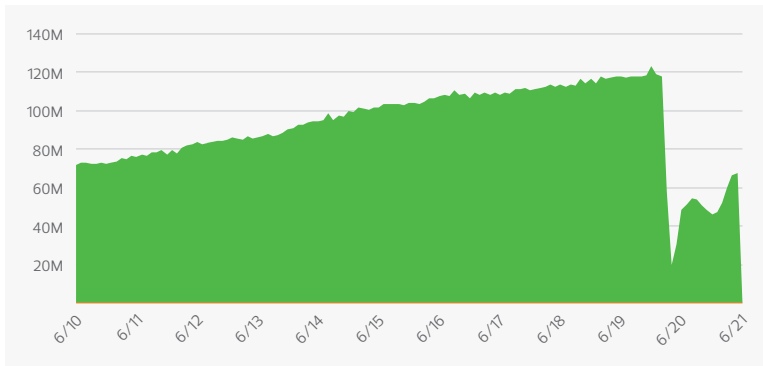
Source: U.S. Bureau of Economic Analysis

City was 43% for the same period. Moreover, RevPAR for Tampa and Miami (at \$70 and \$97, respectively) significantly outpaced Chicago's \$31 and New York City's \$58. The higher-performing markets were able to return from lockdown more quickly and attract new talent on-site.



“Economic recovery is already underway, although very uneven across countries and sectors. The continued rollout of the vaccine will be central to recovery globally, as will decisions the new Biden Administration makes regarding global trade and border and quarantine policies.”

U.S. hospitality spending



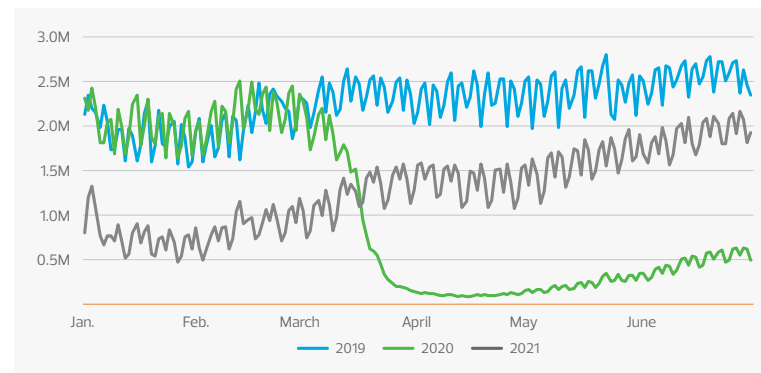
Source: Bureau of Economic Analysis

Dave Hilfman, interim executive director of the Global Business Travel Association (GBTA), characterized the current hospitality environment in a February 2021 release on the state of the industry: “Economic recovery is already underway, although very uneven across countries and sectors. The continued rollout of the vaccine will be central to recovery globally, as will decisions the new Biden Administration makes regarding global trade and border and quarantine policies.” In its policy response, the U.S. Department of Commerce is planning to announce a \$750 million investment in travel and tourism, Gina Raimondo, department secretary, told a virtual forum hosted by the American Hotel and Lodging Association. The noticeable disruption in the travel industry will require continued government support until full recovery.

Leisure travel boosts demand

Pent-up demand is driving a strong uptake in bookings, as leisure travel shows indications of a rebound in the United States. June throughput measured by the Transportation Security Administration is more than four times higher than a year ago. As such, all facets of hotel business, including branding, products and services, customer experience, and loyalty programs will need to recalibrate for a predominantly leisure-driven market. New customers and loyalists alike will need to be targeted using personalized marketing content that inspires leisure travel based on specific needs and desires. Hotel marketing departments will continue to dive into data from customer insights to tailor experiences that capture a wider array of leisure travelers.

TSA throughput



Source: TSA

Meanwhile, concern that business travel will suffer permanent losses continues following the successful shift to virtual meetings by many businesses during the pandemic. The GBTA forecasts that business travel will see a 21% increase in 2021, with most gain expected to come at the end of year as vaccinations increase globally and consumer confidence returns; next year, GBTA expects a significant increase in group and international travel, while in 2023 and 2024, it projects business travel growth to slow back to pre-pandemic levels. Full recovery is expected by 2025.

Post-pandemic travel is likely to look very different, as some lifestyle shifts driven by the pandemic linger. According to survey data released in April from Accenture, after a year of lockdowns, 95% of respondents said they made at least one change to their lifestyle they expect will be permanent; 79% would like to work from a location other than their home or office; and 46% either will not travel at all for work or will reduce their business travel by half. The survey, which polled more than 9,600 people in 19 countries, revealed that more than half of respondents would be willing to personally pay up to \$100 per month to work from a café, bar, hotel or retailer with a dedicated space. Given that business and group travel will continue to lag in the short-run, front-of-mind strategy will need to focus on re-imagining travel and hospitality, specifically for high-value travelers.

MIDDLE MARKET INSIGHT

Pent-up demand is driving a strong uptake in bookings for leisure travel. As work and recreational life continue to blend, business travel will increasingly take on leisure components.

'Bleisure' may represent the future of travel

In the era of increasing work-life integration, travel will blend aspects of work and play. The so-called bleisure traveler—who combines business and leisure—will become the focus as the travel industry looks to capture the market's newest entrant. The bleisure traveler's customer profile focuses on personal health and wellness, local communities, sustainability and unique opportunities to connect with friends and family.

The stress and anxiety of the global pandemic has shifted the mindset of travelers to an all-inclusive travel experience. "This year, more than any other, has highlighted the importance of looking after your health and wellness," said Paul Joseph, founder of Health and Fitness Travel, a travel booking platform, in a December article published on Lonely Planet.com. "The various global restrictions coupled with the outbreak of the pandemic in 2020 have only made people appreciate any opportunities to better their health both physically and mentally." ■



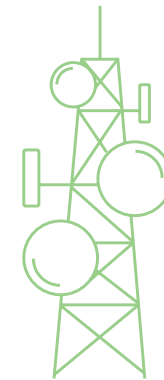
Technology, media and telecom companies have exciting growth opportunities, but they also must continue to monitor cybersecurity risks.

INDUSTRY OUTLOOK:

TECHNOLOGY, MEDIA AND TELECOM

BY NATE FARSHCHI, VICTOR KAO, DAVIS NORDELL, KURT SHENK AND KEN TINNES

THE TECHNOLOGY, media and telecom industry continues to evolve quickly, especially as interest from investors continues to increase. This sector has significant opportunities for growth, with capital flow continuing at a record pace. In addition, the future is bright for 5G, as expanding network infrastructure and adoption paves the way for transformative data processing and access. However, these industries must keep an eye on emerging risks, because cyberattacks are increasing—especially against media companies—and could cause significant harm.



KEY TAKEAWAYS

- Following a record year, technology, media and telecom companies continue to attract large capital investments from a variety of sources.
- Adoption of 5G networking and devices continues to build, with the potential of more efficient data processing, reduced network costs and increased network density on the horizon.
- Technology, media and telecom companies are prime targets for cyberattacks that could result in considerable costs and loss of intellectual property.

TECHNOLOGY

Capital flow into technology sector shows no sign of slowing

On the heels of a record year, the technology sector continues to attract large amounts of capital from a growing pool of interested investors. Venture capital is making large bets at all stages, private equity (PE) is looking to software for outsized returns, [special purpose acquisition companies](#) (SPACs) are seeking to bring promising emerging technology companies to the public markets, and nontraditional investors are participating in a growing number of TMT fundings. Here, we take a look at the current trends for these key technology investment vehicles and provide an outlook for the coming months.

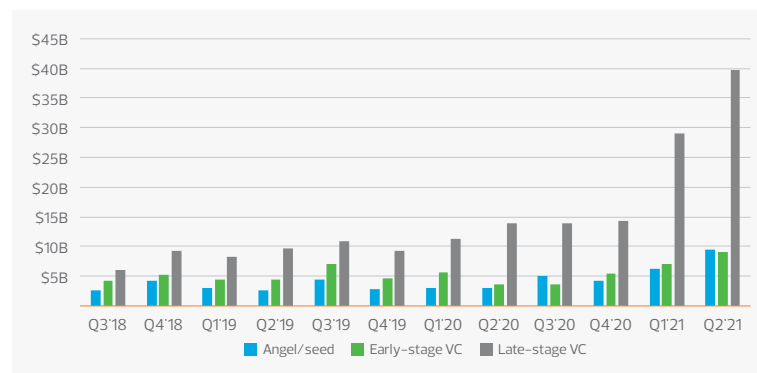
Venture capital: Following a year that saw U.S. venture capital activity exceed \$150 billion for the first time, 2021 shows no signs of slowing down, and the trends we witnessed in 2020 have persisted through the first half of 2021. The technology, media and telecom industry attracted approximately 52% of all U.S. VC investment in 2020 and accounted for 57% of investment through the first six months of 2021.

We expect trends observed in 2020 that fueled the record amount of invested capital to continue through 2021. Late-stage venture deal-making already saw a strong resurgence in the first half of the year, growing 154% from the same period in 2020, with the median deal size growing from \$10 million to \$20 million. The growth of median deal size is driven by a growing number of mega-rounds observed, with 167 deals totaling nearly \$42 billion in capital, more than half of which were focused on TMT companies.

Technology companies that have raised \$100 million rounds this year include Clubhouse, the voice-only social media platform that raised \$100 million in January and another \$200 million in April. In addition, Plaid, the fintech company that had a \$5.3 billion acquisition by Visa called off in January, closed a \$425 million dollar round that valued the company at nearly \$13 billion. Gaming platform company Epic Games also closed a \$1 billion funding round, valuing the developer at more than \$27 billion.

We expect fintech, gaming and e-sports, health technology, and education technology to continue to see strong interest from venture capital investors over the remainder of 2021 as they look for high-growth areas in which to deploy the record amount of funds raised during the pandemic year of 2020.

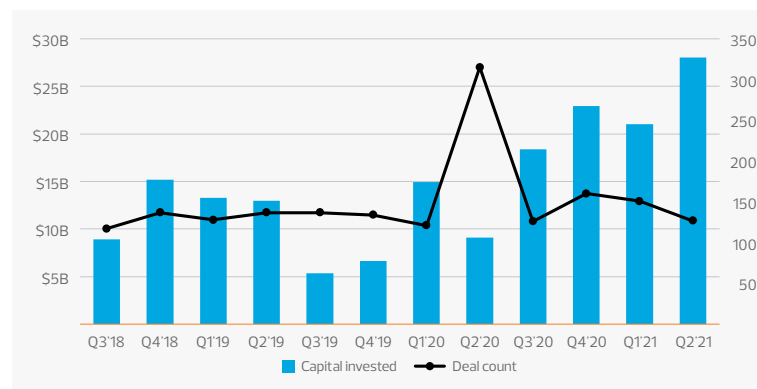
North American TMT venture capital deal values



Source: PitchBook; RSM US LLP

Private equity: Following a strong year of U.S. tech-focused investment, 2021 has seen momentum continue with a heavy focus on software as a service companies. According to deal statistics tracked by PitchBook, private equity firms have spent more than \$49 billion acquiring U.S.-based software companies in the first half of 2021, an increase of 100% over the same two quarters last year. Across the entire TMT industry, deal-making is strong and on pace through the first half of the year to far surpass the deal value of 2020.

U.S. private equity software deal activity



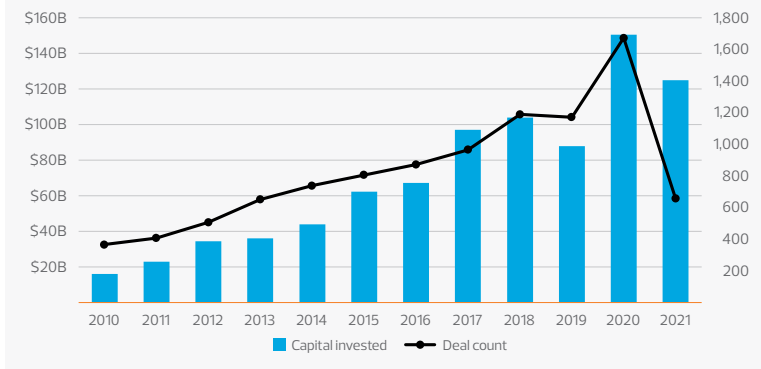
Source: PitchBook Data, Inc.; RSM US LLP



Through the first half of 2021, North American private equity investments in TMT companies have totaled \$125 billion, up 115% from the same two quarters last year and more than double the annual totals from 2015 and 2016.

In fact, as the second quarter of 2021 has come to an end, PitchBook data reveals that overall PE investment experienced its highest-ever quarter for capital invested in North American-based companies, with over \$181 billion of investment, a good portion of which was directed to TMT companies. Through the first half of 2021, these investments have totaled \$125 billion, up 115% from the same two quarters last year and already more than double the annual totals from 2015 and 2016.

North American private equity TMT deal activity



Source: PitchBook Data, Inc.; RSM US LLP

As companies adapt to a [hybrid work environment](#) and continue to adopt innovative and necessary digital technologies to complement video calling and other communications tools widely implemented during the

pandemic, private equity investment in rapidly growing B2B and enterprise software companies will be a trend that continues long after the health crisis subsides.

SPACs and public markets: Although newly listed SPAC activity has slowed, the reverse merger process known as de-SPACing continues to move into 2021 on a steady pace. While de-SPACing may lag behind [IPO activity](#), appetite for this exit strategy looks promising. Since the start of 2020, 137 reverse mergers have been completed, with 95 happening in 2021. Fifty-three of these mergers have been completed with TMT operating companies.

The focus of the SPAC investors has largely been on emerging technologies like autonomous and electric vehicles, fintech, and health technology companies with established brands. For instance, 23andMe, Hims & Hers Health, Clover Health, SoFi and Metromile have all chosen a SPAC merger since the start of the year.

The competition and likely [valuations](#) will continue to heat up as VC, PE and SPAC investors converge on the best of the best private technology companies with record amounts of deployable capital. Founders and current shareholders will have many exit and investment opportunities to explore and will see no shortage of available capital well into 2022.

MIDDLE MARKET INSIGHT

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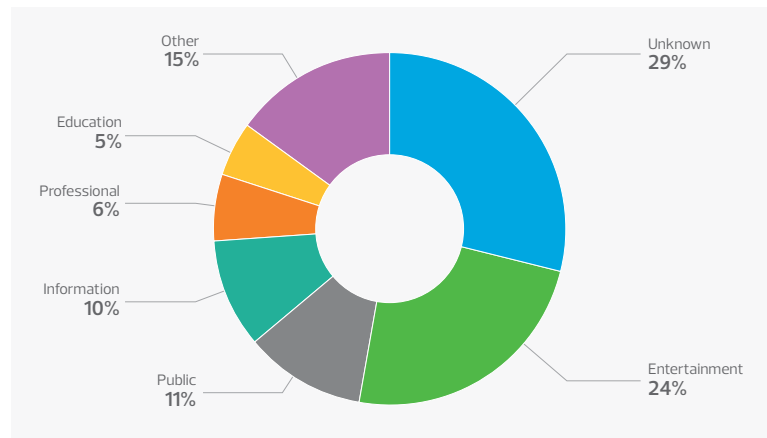
Data compiled from Bloomberg shows 96 TMT-related IPOs since the start of 2020, with 46 of those occurring in the first half of this year—nearly matching the total capital raised in all of 2020. Established tech leaders like UiPath, Marqeta, Monday.com and Poshmark have all taken advantage of investor interest in the public markets since the start of 2021.

MEDIA

Cyber vulnerabilities of media and entertainment companies

Cyberattacks have shifted from rare misfortune to persistent reality of conducting business in the modern world. According to the [2020 Cyber Readiness Report](#) published by the insurer Hiscox, technology, media and telecom companies were one of the three most targeted areas, "with 44% of firms in each sector reporting at least one incident or breach." Further, according to Statista, [almost a quarter of cyberattacks in 2020 were against entertainment companies](#).

Cyberattacks by industry



Source: Statista, Inc.; RSM US LLP

Cyberattacks, like many other crimes, are perpetrated for many different reasons, but most of the time it's for money, and they almost always represent a significant cost to the victim. Cyberattacks against large national or global companies such as Colonial Pipeline, SolarWinds, Microsoft, Sony and Deloitte are the ones that receive the most media coverage. However, cyber risk is not limited to large public entities. According to data in the [RSM US Middle Market Business Index 2021 Cybersecurity Special Report](#), "larger middle market organizations were most at risk, as 42% of executives at such companies reported a breach."

In the media and entertainment space, June was a trying month, especially for Cox Media Group, which owns several television and radio stations, and Electronic Arts, one of the world's leading video game publishers. [Cox was the victim of a ransomware attack on June 3](#), and [Electronic Arts suffered a data breach on June 6](#), during which "hackers claimed to have obtained 780 gigabytes of data from EA, including the Frostbite source code, which is the game engine that powers the FIFA, Madden, and battlefield series of video games, among others," reported CNN.

Whether companies are developing products, broadcasting, reporting, publishing, or producing films, TV or music, protecting IP and ensuring total control of launch and release are paramount. While all media and entertainment companies represent a potential ransomware target, product developers are also likely targets for data theft.

To a product developer, a breach can be much more significant than a few days or weeks of lost profits; it can jeopardize years of work and millions of dollars of investment. Similar to the attack suffered by Electronic Arts, the Sony hack in 2014 was one of the more significant in recent memory. [According to Time](#), hackers "made off with a vast amount of data (reports suggest up to 100 terabytes), wiped company hard drives and began dumping sensitive documents on the Internet." *Time* added that this same breach compromised the release of *The Interview*, a film starring Seth Rogan and James Franco, when theaters, including "AMC and Regal...chains that control about half of the country's movie screens," played it safe and "decided against" playing the film.

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Ransomware, the likes of which Cox Media Group was targeted with, can pose a devastating threat to middle market companies. [A recent Forbes article](#) found that the average ransom in 2020 was more than \$300,000 and the typical cost of downtime was more than \$270,000. For a massive studio such as Sony or a large national media group such as Cox, a breach largely means a hit to the bottom line, but for a middle market company a similar breach can mean closing its doors.

How hackers are getting in and how to stop them: According to [CSO Online](#), "94% of malware is delivered by email," primarily through phishing and spear-phishing attempts. So companies that use email are potentially vulnerable to an attack—meaning just about every company in operation today. The best way for middle market companies to fortify themselves against a potential attack is to first acknowledge an attack is possible, and then adequately recognize this possibility in the budget.

Companies can set aside capital to invest in cybersecurity talent, systems and products. In addition, time and resources should be properly allocated to ensure teams are adequately trained on cyber risks and methods of identifying potential breach attempts. (Parenting 101: Don't open the door for strangers.) Insurance solutions that specifically cover cyberattacks should also be explored.

Former Cisco CEO John Chambers once said, "There are two types of companies: those who have been hacked, and those who don't yet know they have been hacked." Cyberattacks continue to pose a real threat to the middle market in today's business environment, and cybersecurity is a fundamental cornerstone to running a successful business.

TELECOM

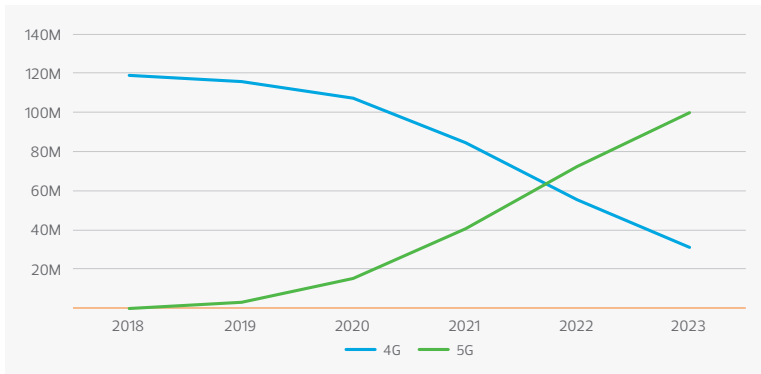
Widespread 5G adoption moves closer to reality

This year, sales of 5G devices will surpass 4G sales as consumer demand for increased data speeds continues to grow. This shift indicates that network technology and bandwidth are nearing the point at which many of the transformative [5G enterprise changes](#) may be possible. However, the move to 5G is already in progress as wireless carriers, equipment manufacturers and software developers race to develop, test and deploy key use cases.

MIDDLE MARKET INSIGHT

The convergence of SD-WAN networks; the high-speed, low-latency, high-capacity capabilities of 5G networks; and the emerging use of edge computing capabilities is creating a favorable landscape for increased enterprise adoption of 5G.

U.S. wireless unit sales



Source: Bloomberg LP; RSM US LLP

One of the most highly anticipated changes is multi-access [edge computing](#). According to the FCC, edge computing refers to locating applications—and the general-purpose computing, storage and associated switching and control functions needed to run them—relatively close to end users and/or Internet of Things (IoT) endpoints. By locating the applications and computing assets closer to the end users, organizations will be able to access and process critical data more quickly. For many industries, including retail and health care, this will present significant new opportunities.

MIDDLE MARKET INSIGHT

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In addition, software-defined wide area networks (SD-WANs) are not new, but are gaining in popularity in enterprise applications. Telecom market research firm [TeleGeography](#) surveyed 125 WAN managers and found that the number of respondents who have installed the service in the past two years grew from 18% to 43%. SD-WANs may allow organizations to reduce network costs, increase network capacity and performance, and improve security.

Network density will be dramatically improved on 5G networks. Theoretically, 5G technology will be able to support 10 to 100 times as many connected devices as 4G—[up to 1 million devices](#) per square kilometer. Increased network density capabilities are crucial for continued expansion of IoT. Transforma Insights, a digital transformation research firm, [estimates](#) that there will be 24.1 billion IoT devices by 2030. Those devices may allow organizations to immediately monitor field and front-line operations, including supply chain performance and quality, customer insights, and critical health care data.

The convergence of SD-WAN networks; the high-speed, low-latency, high-capacity capabilities of 5G networks; and the emerging use of edge computing capabilities is creating a favorable landscape for increased enterprise adoption of 5G. ■

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