2020

Update Q4 - October

Equipment Leasing & Finance U.S. Economic Outlook

EQUIPMENT LEASING & FINANCE FOUNDATION

Your Eye on the Future

EQUIPMENT LEASING & FINANCE ECONOMIC OUTLOOK

October 2020

Key Trends to Monitor

- Vaccine development
- Small Business Closing Risks
- Consumer financial stress

EXECUTIVE SUMMARY

This outlook acknowledges the substantial uncertainty stemming from both the epidemiology of COVID-19 and the U.S. economy's response to social distancing measures. As such, projections for certain economic indicators are provided as ranges.

Equipment and Software Investment: E&S investment collapsed in Q1 and Q2 but bounced back in Q3 as the economy reopened. Looking ahead, while there is a great deal of uncertainty given the pandemic, annualized investment growth appears more likely than not to remain positive in the fourth quarter — though there will be an unusual amount of variability across sectors.

Momentum Monitor: Investment momentum readings are below the long-term average in all 12 verticals. While the majority of vertical, including software, trucks, medical equipment, are on the mend, others (e.g., construction, aircraft, and materials handling) remain weak.

Manufacturing Sector: The U.S. manufacturing sector has bounced back more quickly than expected. Though just over half of the 1.4 million lost manufacturing jobs have returned, job growth was stronger in September than in July and August, and other industry indicators suggest that the manufacturing sector will strengthen in late 2020 and early 2021.

Small Businesses: On Main Street, a fork has emerged in the road to recovery. The majority of small firms are managing to get by, for now. Some — perhaps 10-20% — have been minimally impacted by the recession and are thriving. But at the same time, a sizable and growing minority of firms are at heightened risk of closing their doors for the foreseeable future.

Fed Policy: The Federal Reserve has continued its massive quantitative easing program through 2020, and financial markets have responded favorably. Meanwhile, the FOMC has unveiled a new policy framework that will allow inflation to run above the usual 2% target for some time.

U.S. Economy: The contraction in Q2 was unprecedented, with high-contact service industries bearing the brunt of the damage. Although Q3 growth will set records, growth in Q4 and beyond is more uncertain. Labor market health and the availability of federal stimulus will be critical factors to watch, as will the pandemic's trajectory — if another wave hits, growth will suffer.

2020 Annual Projections

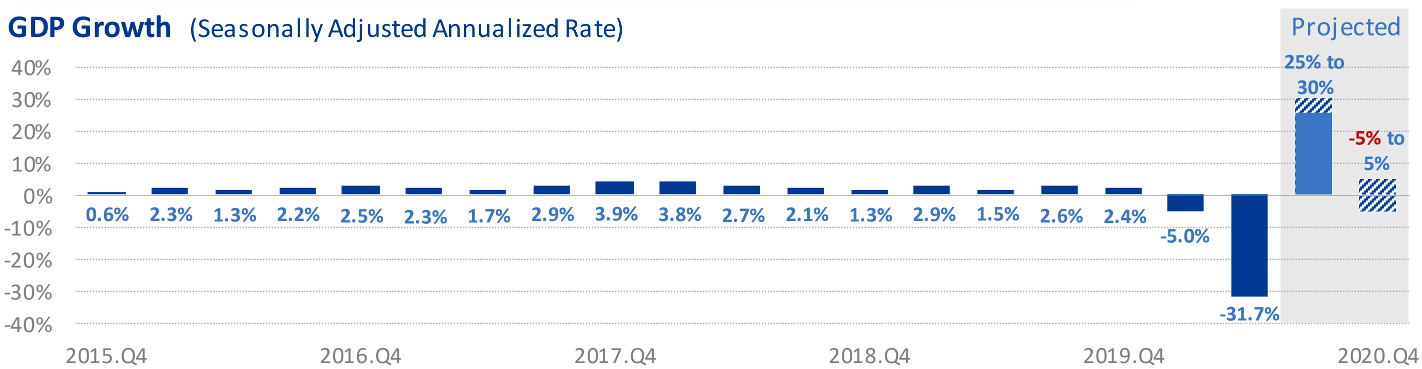
-3.8 to -4.8%
GDP Growth

-4.9 to -6.4%
E&S Investment Growth

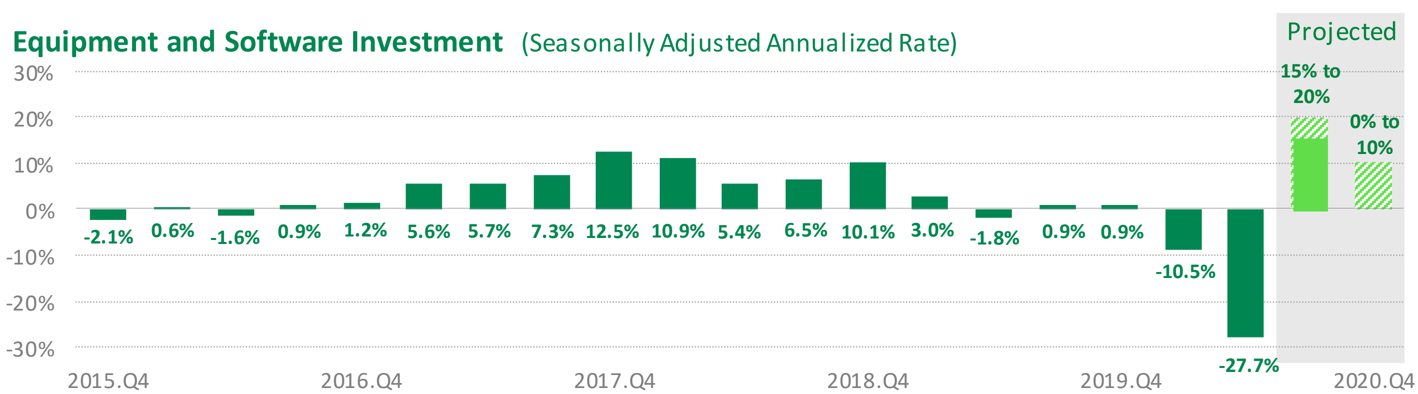
1.4%
Inflation

0 bp
Change in Fed Funds Rate from Current Range

GDP Growth (Seasonally Adjusted Annualized Rate)



Equipment and Software Investment (Seasonally Adjusted Annualized Rate)



Source: U.S. Bureau of Economic Analysis; Keybridge LLC

Sectoral Performance

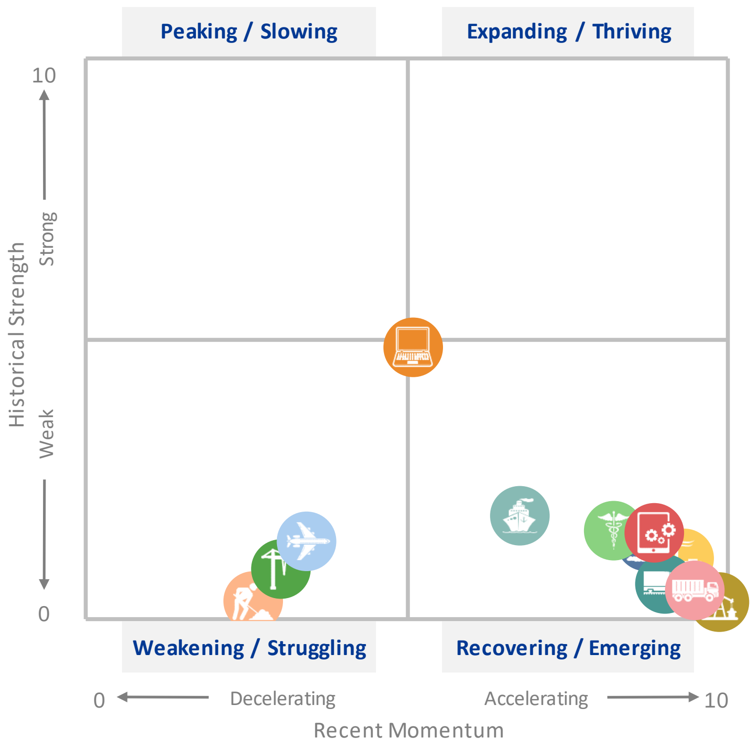
E&S underperformed expectations last quarter

Equipment and Software investment dropped 27.7% (annualized) in Q2 2020, the sharpest contraction since the Great Recession.

Of the 12 investment verticals tracked by the Foundation, ten contracted in Q2 and nine posted double-digit declines (Agriculture, Construction, Materials Handling, Other Industrial Equipment, Mining & Oilfield, Aircraft, Ships & Boats, Railroad, and Trucks). Medical equipment and Computers experienced positive annualized growth in Q2, with Computers surging at an 85% annualized pace.

Based on the Foundation's U.S. Equipment & Software Investment Momentum Monitor, most verticals are showing historically weak momentum after the virus abruptly pumped the brakes on investment in the first half of the year. However, annualized growth should be strong in Q3 due to the historic collapse in Q2. Verticals that are highly affected by a standstill in consumer mobility, particularly Aircraft, are likely to remain weak. Meanwhile, other verticals have the potential for a stronger recovery, including Trucks, Other Industrial Equipment, and Medical Equipment.

Momentum Monitor Sector Matrix



For more information on how to interpret the Momentum Monitor, please refer to the Appendix B (p. 17). A full breakdown of each industry vertical is available at https://www.leasefoundation.org/industry-resources/momentum-monitor/

Movements to Monitor

Equipment Vertical	Q2 Investment Growth Q/Q	Q2 Investment Growth Y/Y	Next 6 Months	Short-Term Outlook
Aircraft	-99%	-72%	▼	The abrupt disruption in passenger transportation due to the pandemic has led to an even steeper contraction in Aircraft investment that is likely to persist as long as consumers remain hesitant to fly.
Medical Equipment	+15%	+2.5%	▲	Medical equipment investment experienced solid growth in Q2 and appears likely to remain solid in the months ahead.
Other Industrial Equipment	-28%	-11%	▲	While investment in industrial equipment was weak in Q2, recent momentum appears quite strong, and other manufacturing sector indicators also point to a rebound.
Trucks	-82%	-41%	▲	Trucks investment may be experiencing a V-shaped recovery — evidenced by the vertical's impressive acceleration in recent months — especially as demand for home package delivery surges.

Credit Supply

Consumer and business conditions tighten in Q2

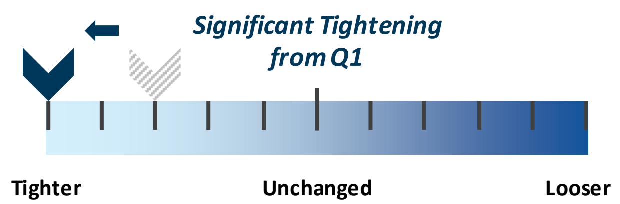
As the pandemic raged and economic growth collapsed in Q2, banks tightened lending standards significantly according to the July 2020 Fed Senior Loan Officer Survey.

- Roughly 70% of banks tightened standards on C&I loans to both large- & middle-market firms and small firms, similar to banks' response during the Great Recession.
- Likewise, a significant net share of banks tightened standards for commercial real estate ("CRE") loans for construction and land development (81%) and nonfarm nonresidential properties (77%).

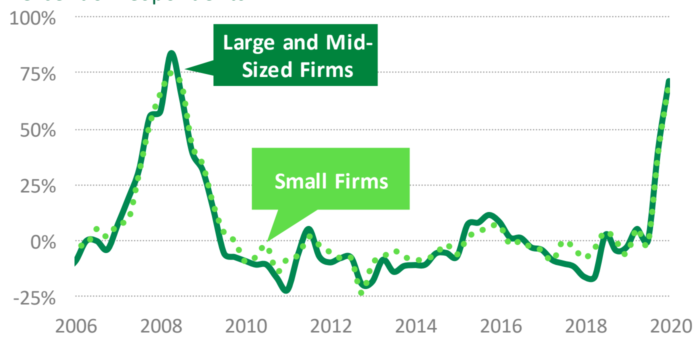
Consumer credit conditions also tightened considerably.

- A majority of banks reported tightening lending standards on auto loans (55%), while nearly three-quarters of banks on net reported tightening standards for credit cards.
- Likewise, a net 53–70% share of banks tightened lending conditions across all seven categories of residential real estate ("RRE") loans.

Net Change in Credit Supply Conditions
Fed Senior Loan Officer Survey



Tightening Standards on C&I Loans
Percent of Respondents



Source: Federal Reserve Senior Loan Officer Survey

Credit Demand

Demand conditions were largely weaker in Q2

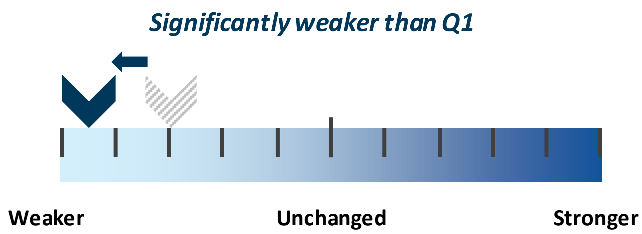
Demand for business loans fell significantly in the second quarter as firms adopted a wait-and-see approach to weathering the recession.

- On net, 23% of banks reported weaker C&I loan demand among medium & large firms in the first quarter, while 28% reported weaker demand among small firms. More than three-fourths of banks cited "falling business investment" as a reason for the decline.
- Meanwhile, a major net share of banks reported weaker demand across the board for CRE loans, particularly for nonfarm nonresidential properties (69%)

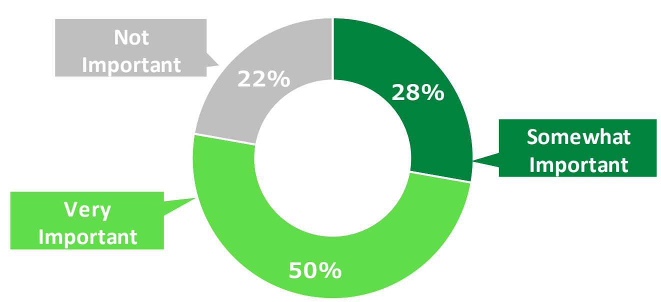
Among households, demand for loans was mixed.

- Demand for residential real estate loans has risen, with a major net share of banks (51%) reporting stronger demand for GSE-eligible mortgages as interest rates fell.
- However, significant net shares of banks reported weaker demand for credit card loans (65%), auto loans (49%), and other consumer loans (43%).

Net Change in Credit Demand Conditions
Fed Senior Loan Officer Survey



Falling Business Investment as Reason for Weaker Demand
Fed Senior Loan Officer Survey, Percent of Respondents



Source: Federal Reserve Senior Loan Officer Survey

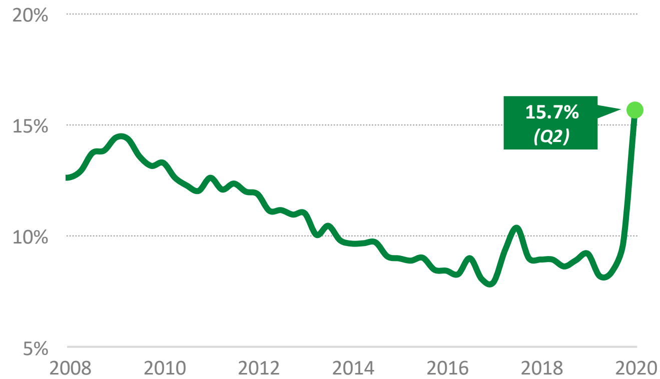
Consumer Finances

Financial stress is low despite weak labor market

Federal stimulus measures for consumers provided robust support to those who had lost their jobs. However, millions of consumers were thrust into financial uncertainty after the additional $600/week in unemployment benefits made available through the CARES Act expired on July 31.

- The expanded unemployment benefits allowed jobless workers to cover basic expenses and have played a significant role in keeping financial stress low.
- However, there are signs of rising stress among some consumers. For example, delinquent FHA mortgages (which are intended for first-time and lower-income homebuyers) spiked in Q2 to the highest level since 1979.
- Given that millions of workers who lost their jobs in March and April remain unemployed, financial stress is poised to rise in absence of additional federal support.

FHA Mortgage Total Delinquency Rate
Percent



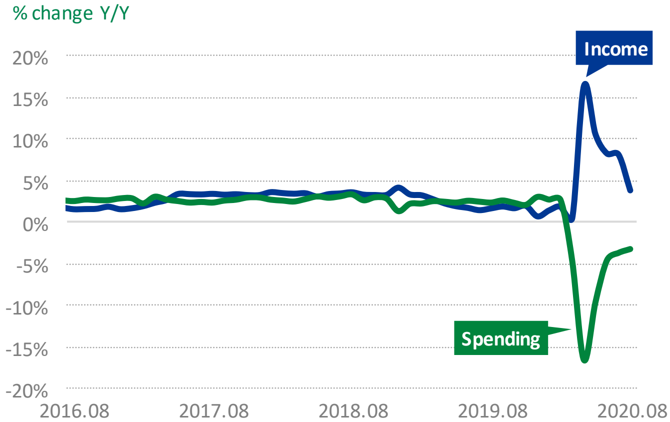
Source: Mortgage Bankers Association

Income growth and spending levels stabilize

After a massive boost in Q2, real disposable personal income growth fell further in August. Meanwhile, consumer spending partially recovered in May and June after cratering in March and April, but improvements were modest in August.

- Reflecting one-time $1200 stimulus checks and enhanced UI benefits, real disposable income growth surged in Q2.
- After plummeting in March and April, spending partially rebounded in May and June — even as the savings rate spiked and credit card debt fell.
- However, these trends moderated in August: disposable income contracted 2.7% M/M, while spending growth slowed to 1.0% M/M.

Disp. Personal Income and Personal Consumption Expenditures
% change Y/Y



Source: Bureau of Economic Analysis

Fed Policy Corner

Fed shifts policy framework

- In a historic shift to its policy framework, the Federal Reserve indicated it would "aim to achieve inflation moderately above 2% for some time" and would keep interest rates at zero through at least 2023.
- The Fed has indicated it will rely primarily on asset purchases and forward guidance as its main policy tools moving forward.
- Small firms continue to ignore the Fed's Main Street Lending Program. In mid-August, less than $1 billion of the fund's $600 billion were committed or under review.

> *"We have seen this adverse dynamic [low-inflation expectations] play out in other major economies around the world and have learned that once it sets in, it can be very difficult to overcome. We want to do what we can do to prevent such a dynamic from happening here."*
>
> — Fed Chair Jerome Powell

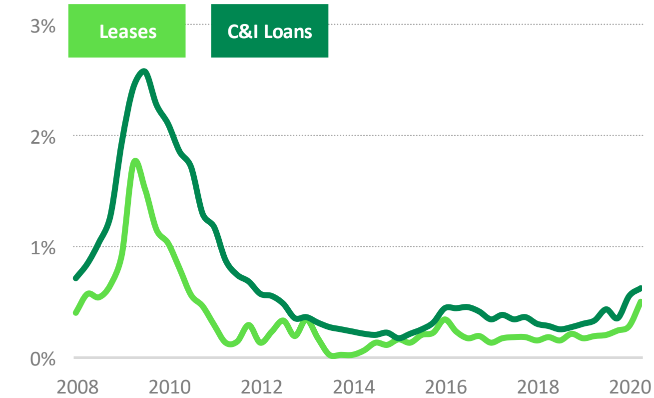
Business Performance

Financial stress inching up and likely to rise further

Measures of financial stress continued to climb steadily in Q2 as the effects of the pandemic-induced recession took hold.

- C&I loan delinquencies increased 14 bps to 1.27% in Q2 while charge-offs rose to 0.62% — the highest readings since late 2011, but still far below 2008-2010 levels. Likewise, lease delinquencies are near a 10-year high.
- Nonfinancial corporate debt climbed to another all-time high in Q2, but the St. Louis Fed Financial Stress Index remains near pre-pandemic levels and below its 10-year average.
- Though business performance data do not yet point to heightened financial stress despite the historic decline in Q2 GDP, there are signs on the horizon that business financial health may be weakening.

Charge-Off Rates on Leases and C&I Loans



Source: Federal Reserve Board

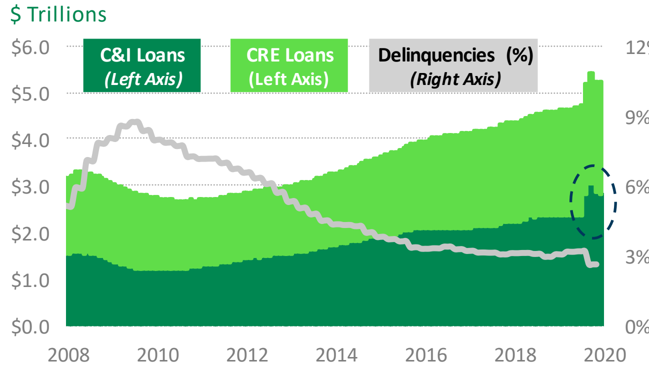
Business lending spiked in run-up to pandemic; remains elevated despite economic downturn

C&I loan volume surged at the onset of the pandemic. However, lending has since moderated, and many businesses are likely to take a wait-and-see approach to new investment.

- C&I loan volume jumped in March and April as businesses ramped up borrowing to meet cash flow needs. Lending fell somewhat in June, July, and August but remains 20% above pre-pandemic levels.
- Despite economic weakness, financial stress remains low. Year-to-date commercial bankruptcy filings are nearly 14% below 2019 levels and are at their lowest point since 2015. Loan forbearance and payment deferral activity could be masking financial stress, however.
- Looking ahead, it is likely that business loan health will deteriorate unless economic conditions quickly improve.

Business Loan Volume

$ Trillions



Source: Federal Reserve Board

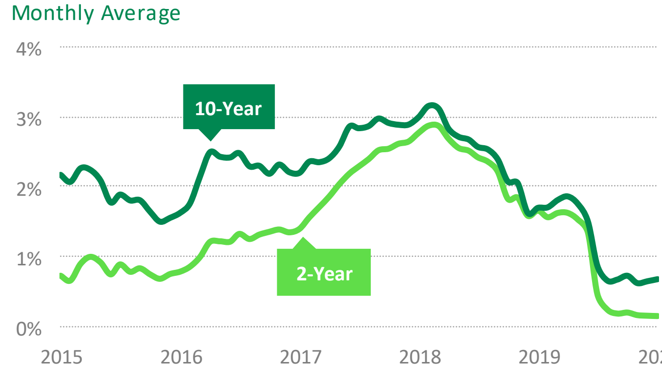
Treasury yields hold steady at all-time lows

Treasury yields remain historically low after plummeting in Q2 due plunging economic growth and the Fed's rapid expansion of its balanced sheet.

- At 0.68%, the 10-year treasury yield is down 100 bps since January, while the 2-year yield (0.14%) is down more than 130 bps.
- Treasury yields are expected to remain low as the Fed's balance sheet has grown over 70% since early January and now stands above $7 trillion.
- However, Fed officials have expressed an unwillingness to intentionally allow treasury yields to fall below zero.

Treasury Yields

Monthly Average



Source: U.S. Treasury

Main Street Outlook

As the recovery bifurcates on Main Street, financial stress climbs rapidly among those left behind

Recessions tend to impact small businesses more negatively than large corporations. This is especially true in the current downturn given the overrepresentation of smaller firms in high-contact service industries and reduced access to Fed-supported capital markets. While most (though not all) withstood the initial COVID-triggered lockdowns, spiking case counts over the summer and the expiration of PPP funds have reintroduced major financial stress for many small businesses. Six months into the pandemic, a divergence has emerged on Main Street with some businesses showing strong signs of recovery while others are struggling to keep the lights on.

On the positive side, a majority of small firms has been able to adjust to the business realities of the pandemic — and some are thriving as a result:

- Half of small businesses have recovered at least 75% of pre-crisis sales levels, and for 14% of firms, sales currently exceed pre-COVID levels, per an NFIB survey.
- 16% of small businesses in the retail trade industry report that the pandemic has had a moderate to large positive effect on their business, according to the Census Bureau.

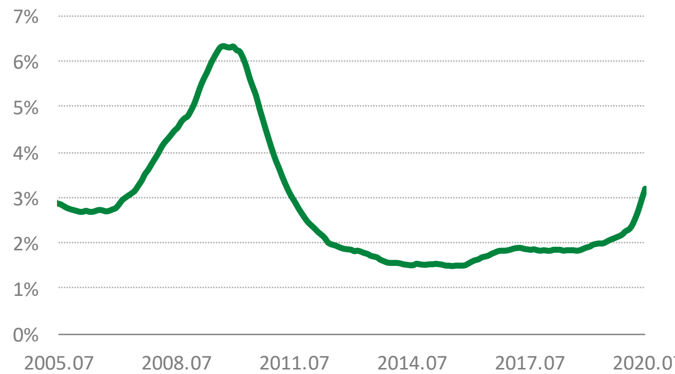
On the negative side, for a sizable minority of Main Street firms, the situation is far less encouraging:

- 16% of firms have recovered less than one-fourth of pre-COVID revenues according to Goldman Sachs.
- 3.2% of small business loans were in default in July according to PayNet, up 90 bps from February (*see chart*).
- 21% of small businesses expect to close in the next six months unless conditions improve, per NFIB.

PPP provided substantial financial support to small businesses into the early summer, and 96% of applicants were at least somewhat satisfied with the program per NFIB. However, the program was not intended to prop up small firms indefinitely, and according to late-September data from the Census Bureau, 68% of small business owners do not expect business operations to normalize until at least 2021. NFIB also found that roughly one-third of small business owners expects to begin laying off workers or cutting hours soon, and 30% will exhaust cash reserves by the end of the year without additional Congressional support.

PayNet Small Business Default Index (SBDFI)

Default percentage of small business loans and leases; SA



Source: PayNet

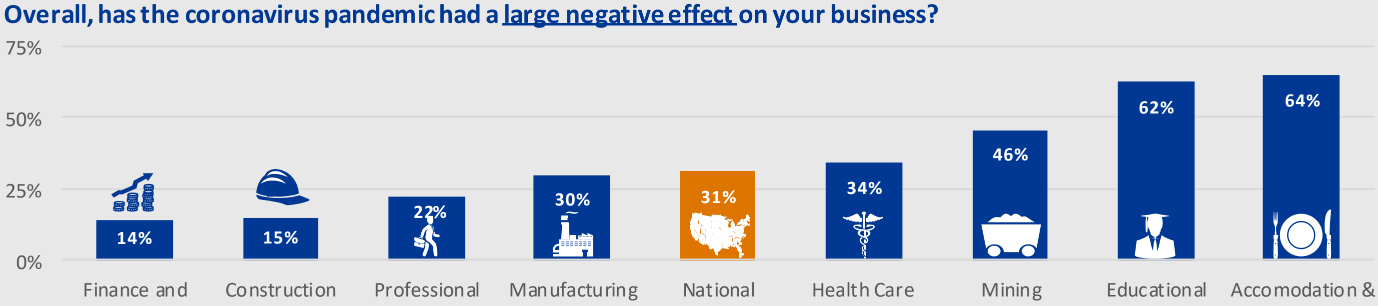
On Main Street, a fork has emerged in the road to recovery. A majority of small firms is managing to get by, for now. Some — perhaps 10-20% — have been minimally impacted by the recession and are doing quite well. But a sizable and growing minority of firms appears to be at heightened risk of closing their doors for the foreseeable future (and potentially permanently), particularly if colder weather complicates outdoor operations or triggers a new wave of illnesses.

While there is a great deal of uncertainty in the economy at present and breakthroughs in testing, treatment, or a vaccine could flip the narrative, business conditions are currently trending in the wrong direction.

A Tale of Two Pandemics

Source: Census Bureau Small Business Pulse Survey (Week of 9/26)

Overall, has the coronavirus pandemic had a large negative effect on your business?



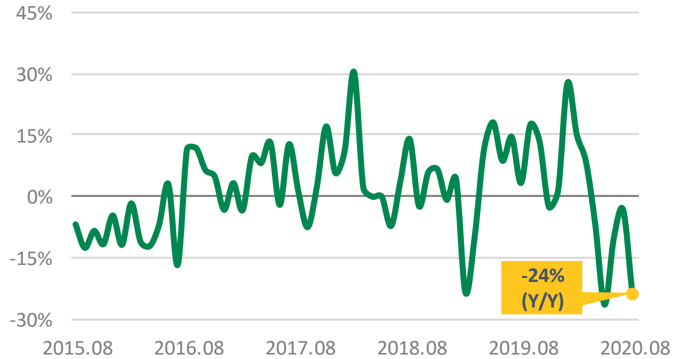
MLFI-25

NBV normalizes, but underlying weakness remains

ELFA's Monthly Leasing and Finance Index (MLFI-25) dropped 23% in August and is down 24% from last year, driven by soft demand for certain industry verticals.

- New business volume nosedived 23% in August to $7.0 billion and is now 24% below its year-ago level. However, cumulative new business volume (year-to-date) is down only 4.3% compared to 2019.
- 30-day delinquencies held at 2.4% and are now nearly 200 bps below the April peak of 4.3%, though they remain 40 bps above August 2019 levels.
  - Note: this decline could be related to accounts being temporarily reclassified as "payment deferred." This bears monitoring: per ELFF's COVID-19 Impact Survey, more than half of respondents indicated that some portion of deferred accounts became delinquent after the deferral period expired — and for roughly one in ten respondents, the delinquency rate exceeded 10%.
- Charge-offs ticked up two basis points to 0.75%, roughly double the year-ago reading but down 5 bp from April.

MLFI-25 New Business Volume
% change Y/Y



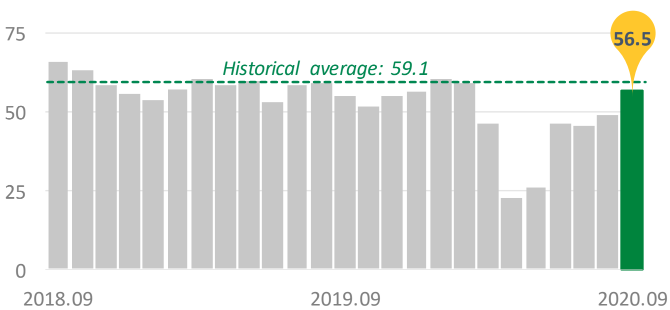
Source: ELFA

"The sizeable drop in new business volume is a testament to an economy that continues to struggle in certain industry sectors. Seasonality also plays a role in the noticeable decline in equipment investment in the month of August."

— Ralph Petta, President and CEO, ELFA

MCI-EFI

Industry confidence improves to pre-pandemic levels



Source: ELFF

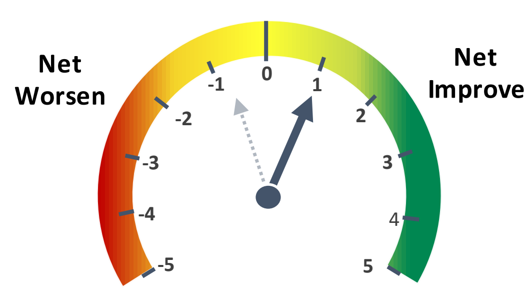
The September Monthly Confidence Index for the Equipment Finance Industry ("MCI-EFI") improved 8.1 points to 56.5. After bottoming out in April, the index bounced back over the summer and has now returned to its pre-pandemic level.

- Business conditions expectations rose substantially: 36% of respondents anticipate conditions to improve over the next four months (vs. 24% in August).
- While September results were nearly identical to August with respect to current economic conditions, 50% of respondents now expect the economy to improve in the next four months (up from 31% in August), while just 11% expect it to worsen (down from 24% in August).

Highlights from the September ELFF COVID-19 Survey include:

- 91% of respondents have offered payment deferral plans.
- Roughly one-in-six respondents have more than 15% of their portfolios under deferral, though two-thirds have less than 5% of their portfolios under deferral.
- Two-thirds of respondents have 90+% of their portfolio paying as agreed at the end of their first deferral period.
- However, one-third of respondents indicated they are granting additional deferrals for at least 10% of accounts.

Demand expectations for loans / leases to fund capex*



Source: ELFF. *Diffusion index of the difference in the share of respondents who believe demand for loans / leases will increase vs. decrease.

Manufacturing Focus

Strong New Orders and Shipments Growth

The manufacturing sector has been notably resilient during the recession. After bottoming out in April, demand for new orders and shipments has mostly recovered and both indicators are approaching year-ago levels.

- New orders for nondefense, non-aircraft capital goods (a leading indicator of industry performance) rose 1.9% in August and are now up 3.0% from a year ago.
- Shipments of nondefense capital goods excluding aircraft (a concurrent indicator of industry performance) rose 1.5% and are up 1.3% from a year ago.
- The rapid recovery in demand for manufactured goods has been a unique aspect of the current crisis and has helped much of the equipment finance industry weather the storm thus far.

Shipments vs. New Orders of Core Capital Goods
$ billion SA

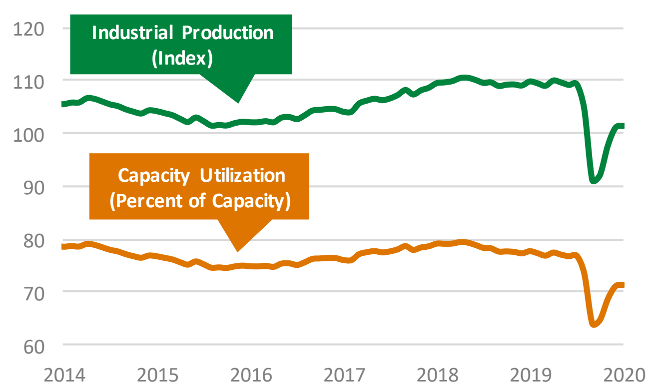
Source: Census Bureau

Key Measures of Production Rebound — Then Stall?

Broader measures of industrial production and capacity utilization paint a similar picture of a strong recovery in U.S. manufacturing — though progress may have stalled since July.

- Industrial production rose for the fourth straight month to 101.4 (up from 91.0 in April). However, the improvement in August was modest compared to the July reading of 101.0, and the index is down nearly 8% compared to a year ago.
- Similarly, capacity utilization has increased for four months in a row and ticked up from 71.1 in July to 71.4 in August. Capacity utilization is significantly stronger than its all-time low of 64.1 in April but is still down 6.4% compared to a year ago.

Industrial Production and Capacity Utilization



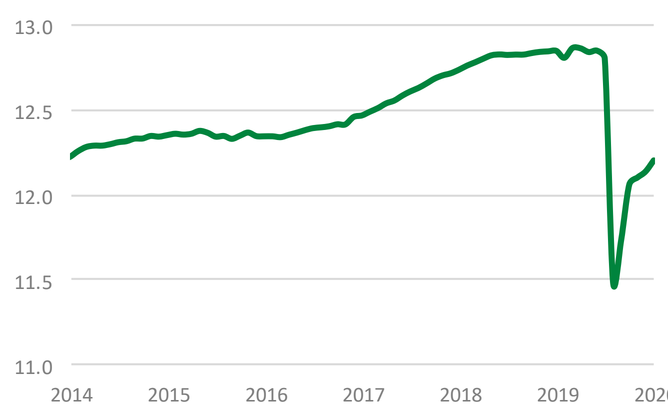
Source: Federal Reserve Board of Governors

Manufacturing Employment Recovery Slows

While the manufacturing sector has fared better than it normally does during a recession, employment remains below pre-recession levels and improvements have slowed markedly.

- After manufacturing employment fell by 1.36 million in March and April, over to half of those jobs (716,000) have returned. However, the lion's share of the gains occurred in May and June; September saw a gain of just 66,000 manufacturing jobs despite higher manufacturing output.
- A possible silver lining: both Donald Trump and Joe Biden have advocated for policies to bolster U.S. manufacturing, which could bode well for the sector's medium-term trajectory.

U.S. Manufacturing Employment
Millions of persons



Source: BLS Current Employment Statistics (CES)

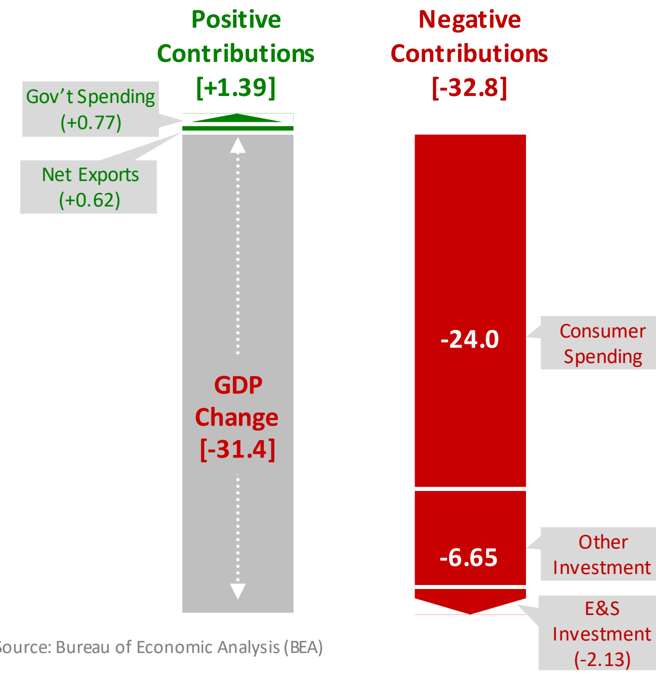
Recession Causes Deep Pain for Businesses and Consumers

Economy contracts at -31.4% annualized rate in Q2

The U.S. economy contracted at an unprecedented -31.4% (revised) annualized pace in Q2 as economic activity collapsed due to the pandemic. A dramatic pullback in consumer spending drove the massive Q2 decline, with high-contact service industries bearing the brunt of the damage.

- **Consumer spending**, the economy's largest component, plunged -33.2% (annualized) in Q2. Spending in the service sector bore the burnt of the impact and fell -41.8%, while nondurable goods declined -15.0% and durable goods slid a more modest -1.7%.
- **Equipment and software (E&S) investment**, a subset of overall business investment and the lifeblood of the equipment finance industry, fell 28.3% in Q2, the steepest decline since 2009.
- **Net exports** made a weak, positive contribution to GDP in Q2, though both imports and exports fell at an annualized rate of more than 50%.
- **Government spending** rose 2.5% in Q2, driven by a 16.4% surge in federal stimulus spending.
- **Other investment** fell in Q2 as nonresidential structures (-33.6%) and residential investment (-35.6%) cratered.

Contributions to GDP Growth
Q2 2020



Source: Bureau of Economic Analysis (BEA)

Q3 Growth Will Be Historically Strong, but Future Growth Highly Uncertain

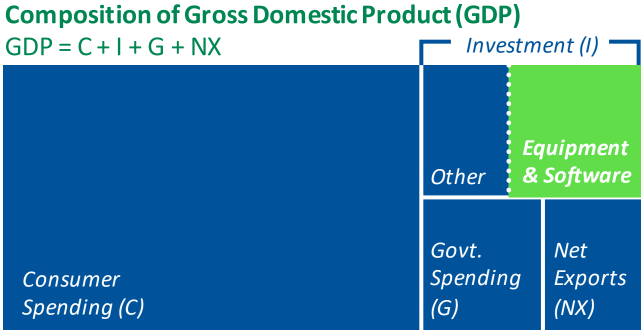
Labor market signals may help with Q4 uncertainty

Given the unprecedented contraction in Q2 caused by the pandemic-driven economic shutdown, growth in Q3 will be unprecedentedly strong. However, the near-certain historic Q3 growth rate, while a positive development given the circumstances, is more a reflection of how quarterly GDP growth is calculated (i.e., compared to the prior quarter, when many businesses were closed) than it is a clear-eyed view of the broader economy's relative health. A better indicator will be Q4 growth, as this will signal whether the recovery that began in May has been sustained.

However, the unpredictable nature of the public health crisis is clouding Q4 GDP projections, which are all over the place. For example, CBO has projected a 10.4% annualized growth rate, while the Conferenced Board's base case forecast projects a -1.6% annualized contraction in the fourth quarter.

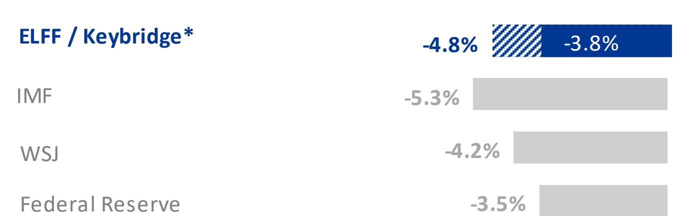
While a lot can happen between now and the end of the year, a key metric to watch is the unemployment rate. Persistently high unemployment limits the economy's growth potential, as it constrains consumer spending (GDP's largest component). So far, the labor market has exceeded most economists' expectations, but recent data is less sanguine.

Composition of Gross Domestic Product (GDP)
GDP = C + I + G + NX



Source: Keybridge LLC, based on BEA data

2020 Growth Forecasts



*Range reflects heightened uncertainty due to the trajectory of the pandemic.

Labor Market

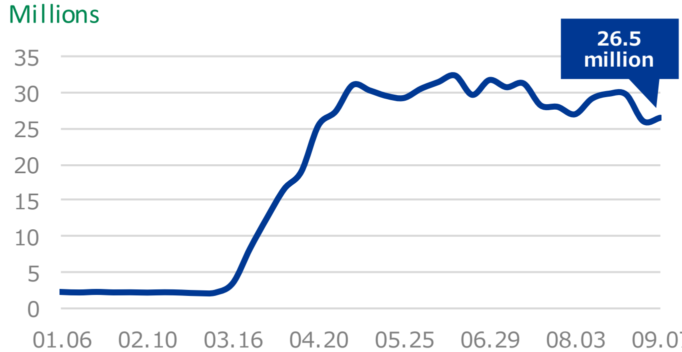
Persistent weakness may lead to new layoffs

The U.S. labor market remains under severe stress. Though 11.4 million jobs were added from May to September, this hiring represents roughly half of job losses that occurred in March and April. As feared in the early months of the recession, temporary job losses are increasingly becoming permanent, which is likely to trigger recessionary knock-on effects in late 2020 and 2021.

- The September jobs report showed a gain of 661k jobs, lackluster compared to previous months. Job growth continues to be driven by improvement in the leisure & hospitality and trade, transportation, & utilities industries. Permanent job losses rose to 3.7 million, and over 25 million Americans continue to receive unemployment benefits each week.

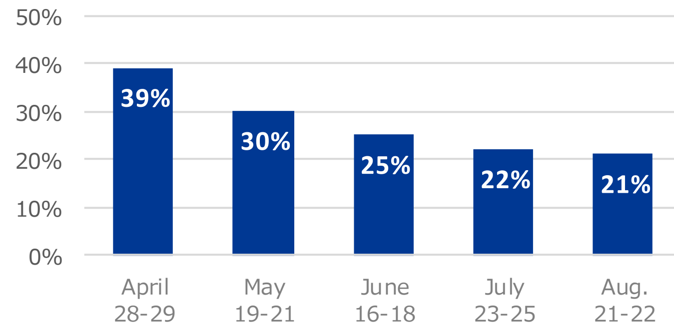
- The steady rise in permanent job loss suggests that U.S. firms will likely face weaker demand in 2021 and that the unemployment rate is likely to remain stubbornly elevated for months to come. A mid-August survey conducted by Morning Consult drives this point home: 21% of employed U.S. adults expected to experience a loss of employment over the next 4 weeks, little changed since mid-June.

Persons Claiming Benefits on All Unemployment Programs
Millions



Source: Department of Labor

Share Expecting Loss of Employment in Next 4 Weeks
% of employed U.S. adults



Source: Morning Consult

Consumer Confidence and Spending

Confidence hits a new low as mobility stagnates

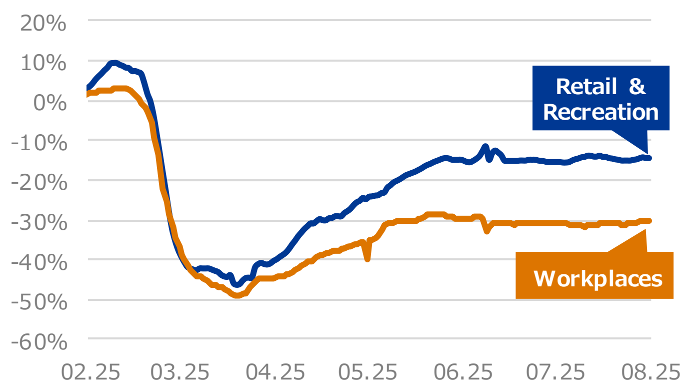
The Conference Board's Consumer Confidence Index rose the most in 17 years, improving to 101.8 in September. While this improvement is welcome, the Index remains 23% below pre-pandemic levels. Given the importance of consumer spending to U.S. economic growth, muted confidence sends a concerning signal.

- The increase in confidence was mostly due to improving short-term economic expectations and, based on demographic differences, to rising home values. However, concerns about the virus clearly still remain.

- Per Morning Consult, consumer attitudes towards public activities like eating out, going on vacation, shopping, and going to the movies are mostly unchanged since late May, suggesting that a majority of consumers have not yet resumed typical consumption patterns.

- Real consumer spending rose again in August for the third consecutive month but remains 3.9% below February's level. Spending appears to have held up reasonably well in September despite expiration of key CARES Act provisions, but current labor market conditions present a real concern for Q4 and 2021.

Google Mobility by Reason for Travel
% change vs. Jan. 3rd – Feb. 6th



Source: Opportunity Insights

Looking ahead, consumer spending is the make-or-break factor for a full U.S. economic recovery. Stimulus measures have been largely responsible for propping up spending to date, but further fiscal support appears to be a long shot until after the election. The good news is that half of Americans who lost their job this spring have returned to work. The bad news is that half haven't — and with each passing week, the ranks of the permanently unemployed continues to rise.

Financial Stress Rising Among the Jobless

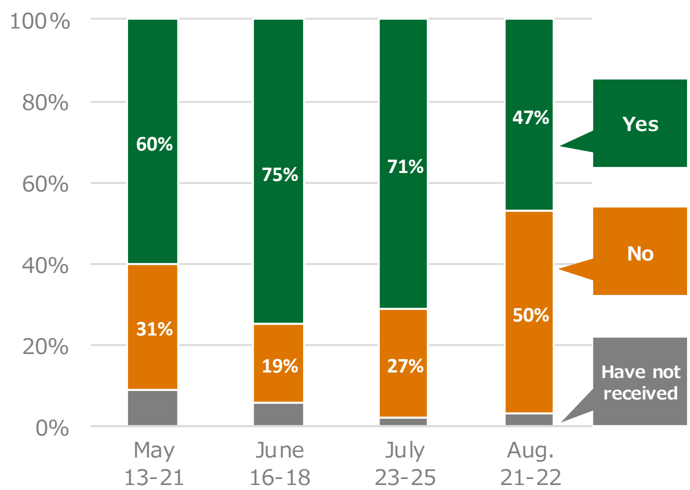
Expiration of UI benefits felt acutely

In response to unprecedented job loss last spring, Congress expanded eligibility for unemployment assistance through the CARES Act and provided an extra $600/week benefit for jobless workers. Given that several economic analyses have illustrated the importance of these funds in keeping the economy afloat this summer, many economists were concerned when Congress allowed the enhanced benefits to expire at the end of July — even if doing so might lead to marginal improvements in the unemployment rate.

The good news is that, overall, consumer financial stress remains low: credit card delinquencies, bankruptcies, and evictions are all down, and spending among lower-income consumers has held up thus far. This may be partially due to the White House's decision to provide $300/week to the unemployed using money from the Disaster Relief Fund, though it is worth noting that the program's eligibility criteria are more restrictive than the CARES Act program and is only expected to provide 4–6 weeks of payments for states that participate. Other policy measures, including eviction and foreclosure moratoria and lender-provided payment flexibility programs, have also helped.

Looking ahead, however, the outlook for the unemployed and underemployed is concerning. Morning Consult survey data show that as of August, 50% of jobless workers said that UI would not cover basic expenses (e.g., food, clothing, housing, transportation), up from just 19% in June. This sharp upward shift highlights the important role the federal government, along with state unemployment insurance programs, have played in keeping financial stress in check. However, with Congress unlikely to provide additional support until after the election, the most directly impacted consumers may need to significantly curtail spending if they cannot find work.

Will Unemployment Benefits Cover Basic Expenses?
% of jobless workers

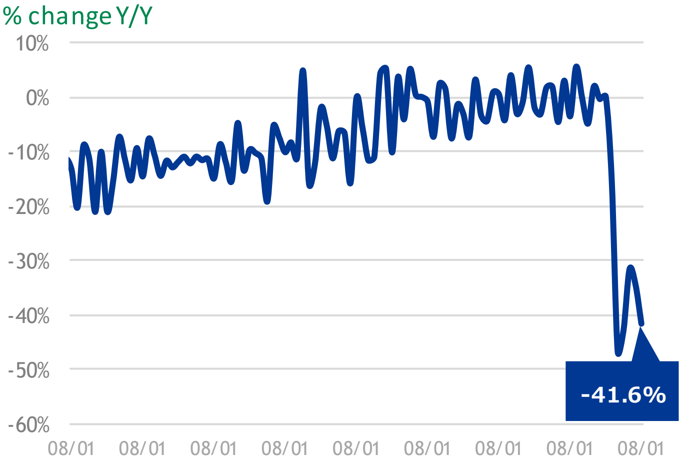


Source: Morning Consult

Bankruptcies Remain Historically Low

Debt forbearance programs propping consumers up

U.S. Consumer Bankruptcies
% change Y/Y



Source: Macrobond Financial

Severe economic downturns are typically not the environment in which consumer bankruptcies plummet, but the 2020 recession is anything but typical. All the usual drivers of financial stress are still a major concern for individuals most exposed to the pandemic's unique economic toll, but the response from policymakers and private lenders to help consumers through financial assistance or payment flexibility has kept the anticipated surge in bankruptcies at bay thus far. These policies have been so successful, in fact, that consumer bankruptcies have fallen to historic lows — more than 40% below year-ago levels.

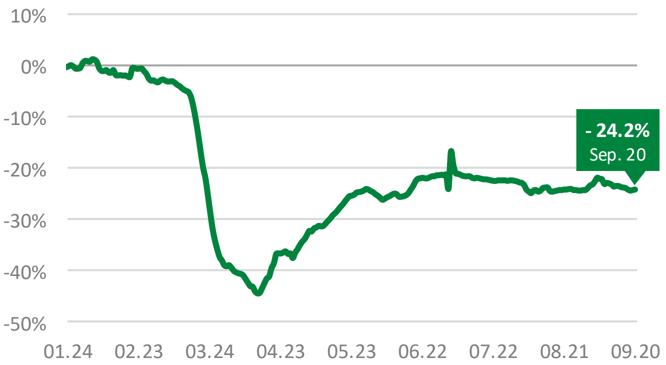
However, many of the extraordinary federal support measures in place during the spring and summer have run their course, and the private sector will not be willing to offer payment flexibility *ad infinitum*, particularly if labor market improvements slow in the months ahead as expected. In short, bankruptcies will almost certainly rise in Q4 and 2021, and they may rise quickly.

Industry Impact

Retail and commercial real estate continue to suffer

The service industry appears to be expanding after bottoming out in early spring, as the ISM non-manufacturing index was at 56.9 in August (>50 = expansion). With the exception of large grocery stores and supercenters, however, in-person retailers continue to suffer. More than a dozen large merchants have filed for bankruptcy and closed all locations since March, while Yelp reports that as of August 31, 164,000 U.S. businesses on the platform had closed since March 1 (up 23% from mid-July), with nearly 100,000 of these closures believed to be permanent

Share of Local Businesses Open vs Same Day in January
Weekly Average, Percent



Source: Womply via Opportunity Insights

Employees who can work remotely continue to do so: BLS recently found that 25% of employed people across the country teleworked in August. In the New York area, fewer than 10% of office workers have returned. Even as employees are phased back to in-person work, office buildings are unlikely to be at full capacity; a recent survey of Washington D.C. employers found that more than one-quarter of office workers are expected to remain remote until next summer.

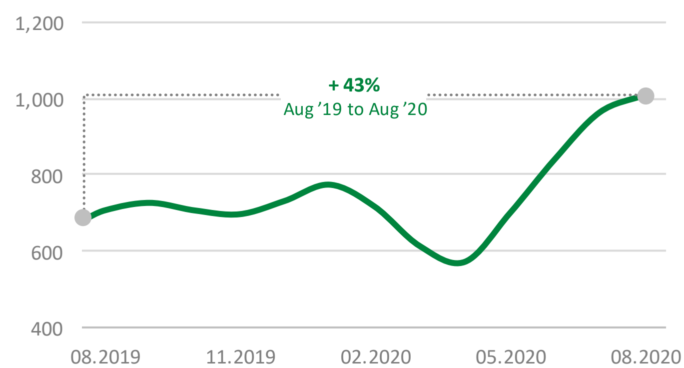
While the rapid rise in remote work has helped combat the pandemic, it has had a severe effect on the commercial real estate market. According to real estate firm Colliers International, the number of office lease signings has fallen by half relative to a year ago, and fewer workers in the office has negative effects on urban commercial centers. Interestingly, concerns about commercial real estate have not yet translated into worries that building owners will not be able to pay their bills: after a slight dip in the spring, the commercial mortgage backed security index (CMBX) is now above its January reading.

Growth During Pandemic

Housing sales jump and online retailers expand

With the Fed keeping both short- and long-term rates low, the average 30-year fixed mortgage rate has fallen to a 40-year low — and the housing sector is making the most of the resultant demand boom. According to the National Association of Realtors, existing home sales jumped 25% in July and climbed again in August, and are now 10.5% above year-ago levels — despite the fact that median home prices are up more than 11% annually. Notably, the jump in sales is concentrated among high-value homes: sales rose dramatically compared to last year for houses priced at more than $250,000 but have fallen for less-expensive homes.

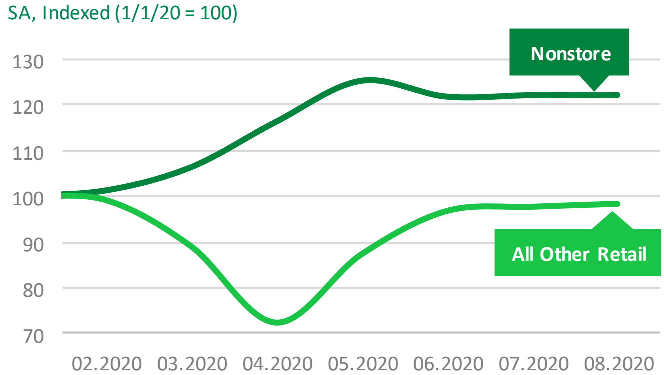
New Home Sales
SA Annual Rate, Thousands of Homes



Source: Census Bureau

In addition to the housing sector, many online retailers are thriving in the pandemic environment. Amazon doubled its profits in the past 6 months, reported a 40% increase in net sales compared to pre-pandemic levels, and hired an additional 100,000 workers. Brick-and-mortar supercenters are also experiencing success, with Target's profits up 80% and Walmart's sales revenue up 97% compared to last summer.

Nonstore (Online) Retail Sales vs. All Other Retail Sales
SA, Indexed (1/1/20 = 100)



Source: Census Bureau

COVID-19: IMPACT ON FEDERAL, STATE, & LOCAL GOVERNMENTS

Federal Government Response

Fiscal stimulus sends deficit and debt skyrocketing

Following the passage of the CARES Act this past spring, Democrats and Republicans have diverged over the amount of fiscal relief necessary to support consumers and businesses during the pandemic. The act spent nearly $2 trillion on plans like unemployment insurance and the Paycheck Protection Program, without specifying revenues to offset the funding.

The legislative response, along with reduced revenue due to the pandemic-induced recession and the 2017 tax-reduction bill, is projected to push the 2020 budget deficit to nearly $3.3 trillion. While the federal government generally runs a deficit during recessions, the deficit this year would be more than double its previous record during the Great Recession in 2009. Combined with demographic changes and reduced economic growth, sustained deficits will increase the debt-to-GDP ratio significantly in the coming decades.

CBO Projection of Federal Debt Held by the Public
Percent of GDP

What's Next?

Although the two parties have narrowed the gap between their competing stimulus proposals in recent weeks, they remain far apart on the final price tag and specific components and appear to be at an impasse. Among several points of contention:

- **Business liability protection**: Republican lawmakers want to protect businesses, schools, and healthcare providers from lawsuits if an outbreak occurs as they reopen.
- **State and local government funding:** Democrats favor providing substantially more assistance to shore up state and local budgets in light of plummeting tax revenues. Republicans prefer a more scaled-back package and also argue that states should be given more flexibility to spend funds already allocated in the CARES Act.
- **Unemployment benefits:** Democrats prefer extending the $600/week CARES Act payments to reduce financial stress, while Republicans favor reducing the weekly payments to encourage people to return to work. A compromise in which weekly payments start at a higher level and scale back automatically based on labor market conditions is conceivable.

With the Supreme Court battle taking up a lot of oxygen on the Hill and the election looming, a compromise before November 3rd looks unlikely. At this point, the most likely outcome is a compromise bill in late 2020 / early 2021, shaped in part by the election outcome.

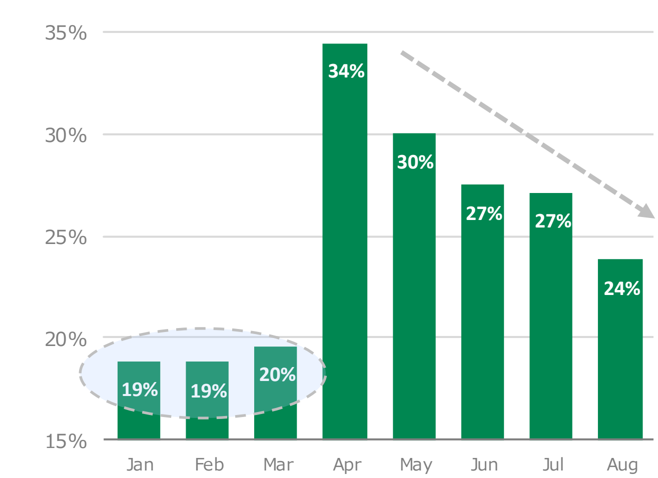
State & Local Government Impact

States and cities face significant budget pressure

City and state governments depend on sales and income tax revenue to fund programs, pay employees, and perform essential tasks (e.g., infrastructure maintenance and repair). In a normal recession, lower consumer spending and higher unemployment have a predictably negative impact on these revenues, but the pandemic has taken an additional toll by impacting other sources of revenue, such as public transportation fares.

Thus far, state revenues are down but have not cratered: from March – July, total tax revenues declined 7.5 percent ($28 billion) across 40 states, per the Urban Institute. However, the effect on state/local tax revenues is typically lagged, and according to estimates developed by the National Association of Counties, the National League of Cities, and Moody's Analytics, state and local governments may lose a combined $1 trillion in revenue due to the pandemic.

Government Transfers as a Share of Disposable Income
Percent



Source: BEA

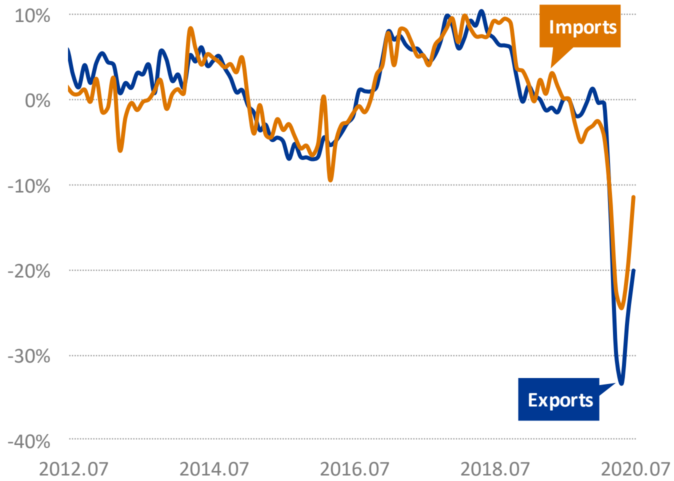
Global Recovery Falters

U.S. exports face tepid demand

The U.S. trade balance widened to the largest deficit in twelve years in July, a result of weak demand for U.S. exports. In July, imports had nearly recovered to March levels (likely due in part to massive U.S. fiscal stimulus) and were down 11.4% year-over-year. Meanwhile, exports remained 10% below March levels and were down 20% from a year ago.

The diverging paths of imports and exports speak to the uneven global recovery. The United States enacted one of the largest fiscal stimulus programs in the world at the outset of the pandemic, which helped alleviate some of the immediate recessionary pain. Other countries have also pursued stimulative policies, but they have generally been less robust than U.S. efforts, and demand for U.S. exports has faltered. The issue is particularly acute among emerging markets, including Mexico (the second-largest market for U.S. goods exports). As discussed in previous outlooks, emerging markets are expected to be a key drive of growth for U.S. export demand in the years ahead, so this trend should be monitored as it could impact several equipment verticals, including agriculture, aircraft, industrial equipment, and automobiles.

U.S. Imports and Exports
% change Y/Y



Source: Census Bureau

Tourism Recovery Remains Elusive

Travel industry data highlight long road ahead

Though travel and tourism are not usually primary leading indicators of activity in the equipment finance industry, the nature of the pandemic has forced experts to look beyond traditional indicators of sector performance for insight into the future of the U.S. and global economies.

Globally, international arrivals are expected to decline 57% this year, according to Oxford Economics. International arrivals at North American destinations are expected to be 70% below 2019 levels this year, a historic decline. Among the worlds largest twenty economies, travel and tourism account for anywhere from 5% (South Korea) to 22% (Thailand) of GDP. In the U.S., travel and tourism accounted for about 8% of GDP in 2018, amounting to more than $200 billion — by far the largest tourism industry in dollar terms.

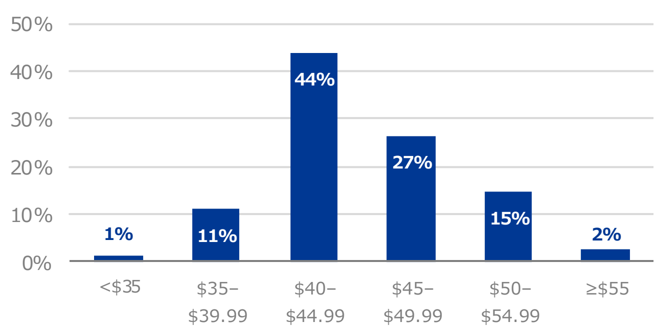
Travel and tourism will be one of the last industries to emerge from the coronavirus-induced recession, and the recovery is expected to take years. As such, travel and tourism weakness will remain a drag on the U.S. and global economies and may contribute to elevated unemployment and subdued spending for a protracted period.

Oil Market Recovery Stagnating

Demand forecasts point to muted investment

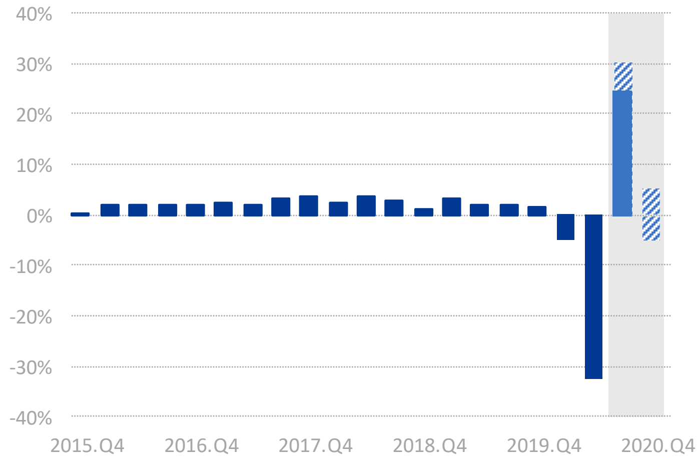
Oil prices have held mostly steady since early June, hovering in the $37-42 range, well below the $50-60 range of 2019 and early 2020. The International Energy Agency recently revised its demand forecast for 2020 down further, reflecting an increase in crude oil supply as OPEC+ production cuts expire. While production costs have fallen in recent years for U.S. producers, given current prices it appears likely that investment growth in the oil sector will remain muted for the remainder of the year.

WTI crude oil price expectations, end of 2020
% of oil & gas executives in Dallas Fed Energy Survey



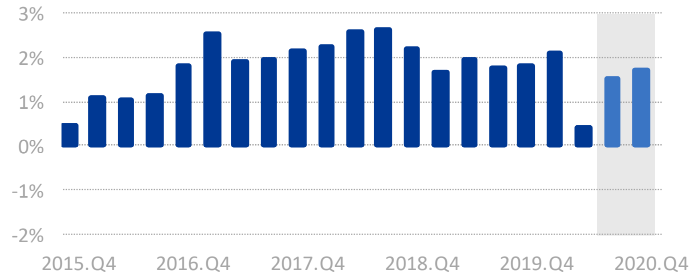
Source: Dallas Fed

Real GDP Growth (% SAAR)



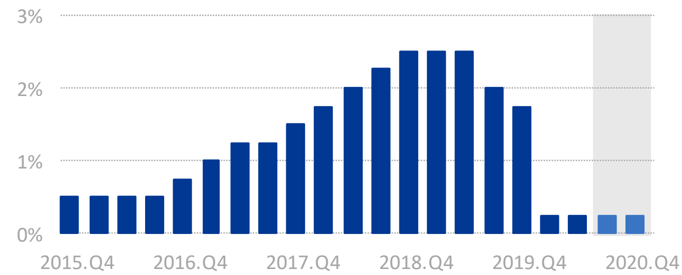
Source: Bureau of Economic Analysis; Keybridge LLC

CPI Inflation (year-on-year %)



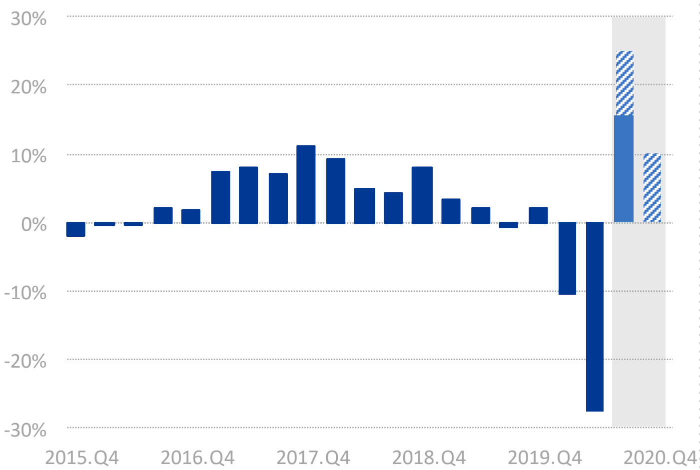
Source: Bureau of Labor Statistics; Keybridge LLC

Fed Funds Target (upper bound, end of period)



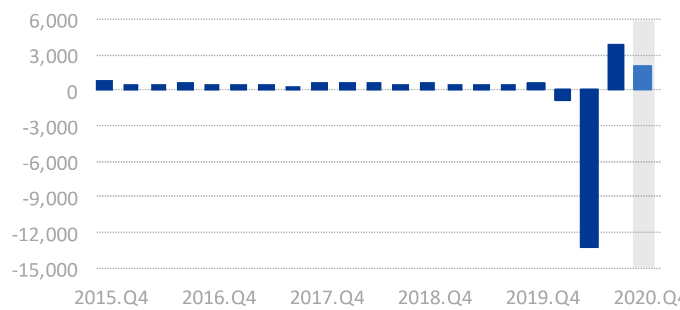
Source: Federal Reserve Board of Governors; Keybridge LLC

Real Investment Growth (% SAAR)



Source: Bureau of Economic Analysis; Keybridge LLC

Total Payroll Growth (thousands)



Source: Bureau of Labor Statistics; Keybridge LLC

INDICATOR	2018	2019	2020 QUARTERLY ESTIMATES				2020e
			Q1	Q2	Q3e	Q4e	
Real GDP (SAAR %)	*2.9%*	*2.3%*	-5.0%	-31.4%	25 to 30%	-5 to 5%	**-3.8 to -4.8%**
Real Investment in Equipment & Software (SAAR %)	*7.7%*	*3.4%*	-10.5%	-28.3%	15 to 25%	0 to 10%	**-4.9 to -6.4%**
Inflation (year-on-year %)	*2.4%*	*1.9%*	2.1%	0.4%	1.5%	1.7%	**1.4%**
Federal Funds Target Rate (upper bound, end of period)	*2.5%*	*1.75%*	0.25%	0.25%	0.25%	0.25%	**0.25%**
Total Payroll Growth (thousands)	*2314*	*2133*	-908	-13,281	3,911	2,000	**-8,278**

Note: SAAR% refers to the annualized rate of change in seasonally adjusted data from one quarter to the next, which is the Bureau of Economic Analysis' standard method for reporting growth in the national accounts data.

About the Momentum Monitor

Business leaders require actionable forward-looking intelligence to make strategic decisions. Accordingly, the Foundation commissioned Keybridge LLC to develop a series of custom leading indicators for the equipment sector. The Foundation-Keybridge Equipment & Software Investment Momentum Monitor consists of indices for 12 equipment and software investment verticals. These indices are designed to identify turning points in their respective investment cycles with a 3–6-month lead time.

The Momentum Monitor is based on Keybridge's extensive research which shows that not all movements in economic data are reliable signals of future economic trends. Keybridge has operationalized its research by constructing indices, each comprised of between 10 to 20 high-frequency indicators. These indicators undergo rigorous testing to determine the optimal thresholds at which their short-term fluctuations are economically meaningful. In simpler terms, the Momentum Monitor sifts out the "noise" in the data and identifies the dominant trends. As a result, each Momentum Monitor index is statistically optimized to signal turning points in the investment cycle without giving false readings of shifts in momentum.

How to Read the Momentum Monitor

The Momentum Monitor Matrix summarizes the current values of each of the 12 Equipment & Software Investment Momentum Indices based on two factors: Recent Momentum (x-axis) and Historical Strength (y-axis):

- "Recent Momentum" indicates a vertical's recent acceleration or deceleration in the past month relative to its average movement during the previous 3 months. Ratings closer to "0" indicate rapid deceleration, while ratings near "10" represent rapid acceleration.
- "Historical Strength" reflects a vertical's strength in the past month relative to its typical level since 1999. Ratings closer to "0" represent an indicator that is weaker than average, while ratings closer to "10" represent an indicator that is stronger than average.

The matrix consists of four quadrants based on readings for each vertical's recent momentum and historical strength. If a vertical falls in the top-left quadrant, its momentum reading is higher than average, but positive movement has slowed (and perhaps reversed) in recent months — suggesting that investment levels may fall over the next 1-2 quarters. Verticals in the bottom-right quadrant, however, have momentum readings that are below average, but recent movement shows promise — suggesting that investment levels may rise over the next 1-2 quarters.