2021 Equipment Leasing & Finance U.S. Economic Outlook

EQUIPMENT LEASING & FINANCE FOUNDATION

Your Eye on the Future

EQUIPMENT LEASING & FINANCE ECONOMIC OUTLOOK

December 2020

Key Trends to Monitor

- Vaccine Deployment
- New Lockdowns
- Federal Fiscal Stimulus Efforts

EXECUTIVE SUMMARY

Equipment and Software Investment: E&S investment growth fared better than overall GDP growth in 2020 as businesses invested to adapt to the pandemic. The worst of the economic downturn appears to be in the rearview mirror, and E&S investment growth should remain well into positive territory in the beginning of 2021. However, the recovery has been uneven, and while most industries will fare better in 2021 than they did in 2020, some will continue to struggle under the weight of the pandemic until a vaccine is widely available in mid-2021.

Momentum Monitor: While investment momentum readings are below the long-term average in 6 of 12 verticals tracked by the Foundation's Momentum Monitors, all 12 are showing signs of strong acceleration, suggesting that investment activity should be elevated in early 2021.

Manufacturing Sector: The manufacturing sector recovery continued in late 2020. Shipments and new orders of core capital goods rose to record levels as firms in several industries responded to elevated demand. Though output is relatively close to pre-pandemic levels, manufacturing employment remains significantly depressed.

Small Businesses: On Main Street, the fragile equilibrium of the late summer and early fall faces another serious threat this winter. Record COVID cases and deaths have forced several major cities to impose new lockdowns, and the effects are beginning to show. Small business revenues are falling while Main Street awaits the vaccine and another targeted federal relief effort.

Fed Policy: The Federal Reserve remains committed to keeping interest rates at or near zero for several years. The Fed also intends to continue its liquidity-boosting measures, though Fed officials have stated that monetary policy alone is likely insufficient to prop up the US economy.

U.S. Economy: The pandemic's economic effects have been uneven: lower-income households and certain industries have borne the brunt of the pain. Despite the ongoing recovery, millions of households are struggling to meet basic needs and many small businesses are in survival mode. While financial stress will likely rise in 2021, a targeted stimulus bill in the coming weeks could provide a bridge for consumers and businesses until a vaccine is widely available this spring or summer — paving the way for an economic surge in the second half of the year.

2021 Annual Projections

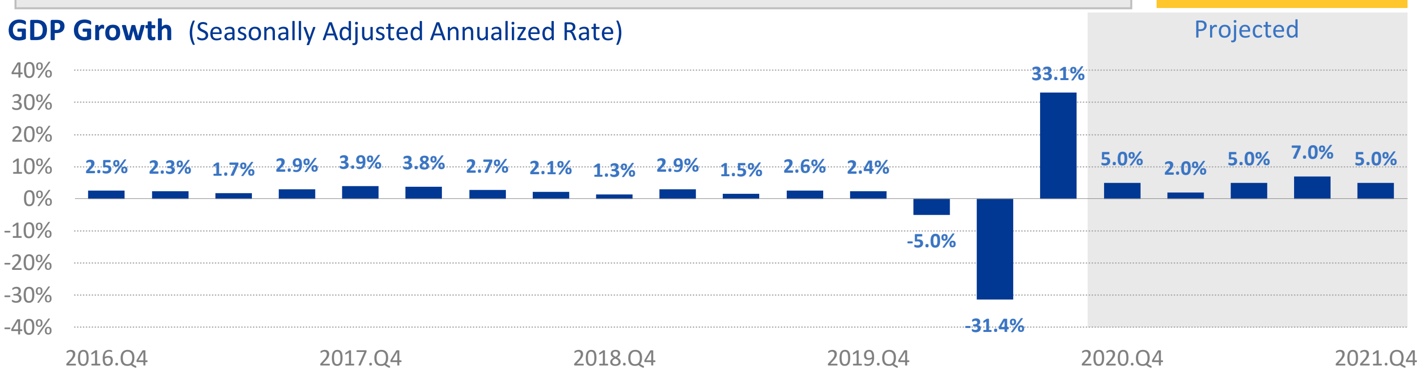
4.7%
GDP Growth

7.8%
E&S Investment Growth

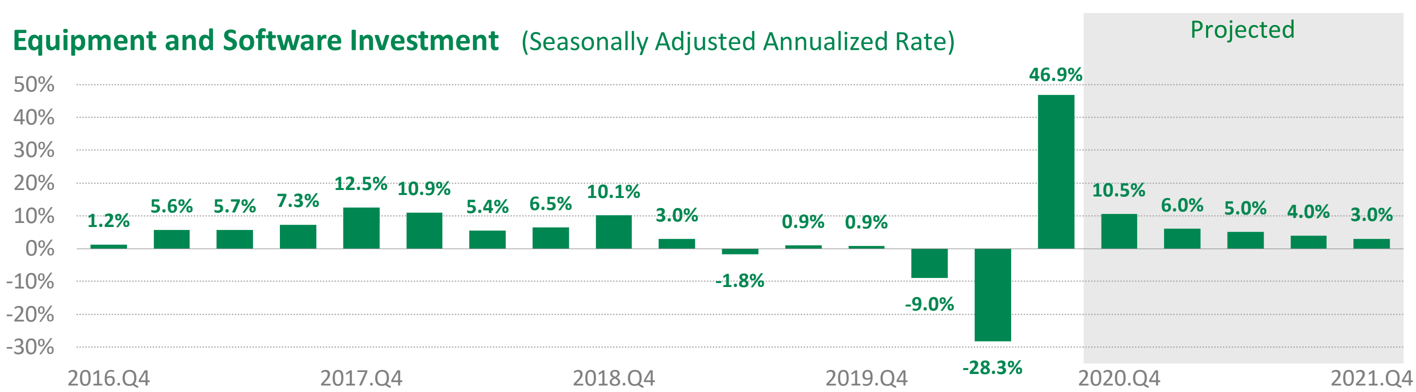
1.8%
Inflation

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

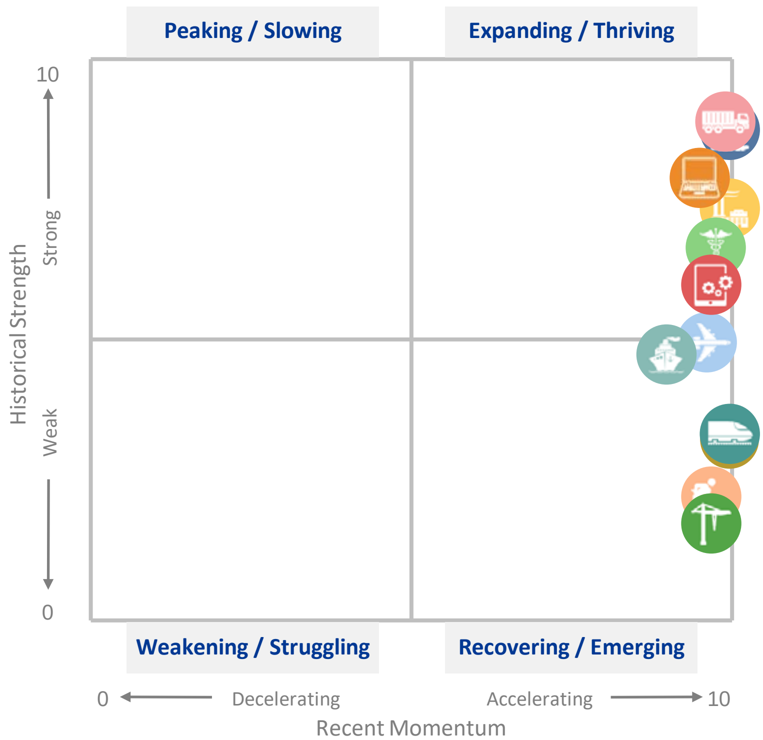
E&S underperformed expectations last quarter

Equipment and Software investment surged 46.9% (annualized) in Q3 2020, a historic expansion after an unprecedented 28% decline in the second quarter.

Of the 12 investment verticals tracked by the Foundation, only Mining & Oilfield Machinery investment fell in the third quarter. Investment in the other 11 verticals improved, and nine experienced double- or triple-digit growth, including Agricultural, Construction, Materials Handling, Medical, Aircraft, Ships & Boats, Railroad, Trucks, and Computers.

All 12 verticals are showing signs of accelerating investment after the pandemic-fueled collapse, according to the Foundation's Equipment & Software Momentum Monitors. Although these positive signals are a welcome development, investment activity in several verticals may fall short of Momentum Monitor projections in early 2021 if the virus continues to spread unabated. However, prospects of a widely-distributed vaccine in spring or summer 2021 should provide an investment boost, particularly in transportation-focused industries.

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		Next 6 Months	Short-Term Outlook
	Q/Q	Y/Y		
Other Industrial Equipment	6.7%	-9.0%	▲	Although industrial equipment contracted significantly in the second quarter due to a broad-based economic shutdown, it has since shown promise as a potential bright spot.
Medical Equipment	+42%	+13%	▲	Medical equipment investment experienced solid quarterly growth in Q3 and remains one of the few industries with double-digit annual growth.
Mining & Oilfield Machinery	-37%	-18%	▲	Mining & oilfield machinery has struggled due to reduced demand for jet fuel and gasoline. However, widespread vaccine distribution could spur a rebound.
Trucks	296%	-19%	▲	Trucks investment is showing signs of a resurgence after struggling for more than a year. The explosion in online retail is a key driver of growth.

Credit Supply

Tighter standards for business and consumer loans

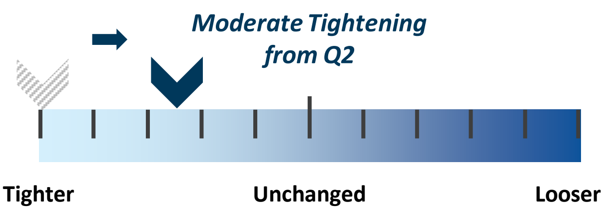
Lending standards tightened in the third quarter, though at a slower pace than Q2, reflecting improved economic activity.

- A net 38% share of banks reported tightening lending standards on C&I loans to large- and middle-market firms, while a net 31% reported tightening standards for small firms. Although standards are still tightening, there is evidence this trend is slowing somewhat.
- Likewise, banks continue to tighten standards on commercial real estate ("CRE") loans, though at a slower pace. A net 47–57% share of banks reported tightening standards across several types of CRE loans in Q3, compared to 70–80% in Q2.

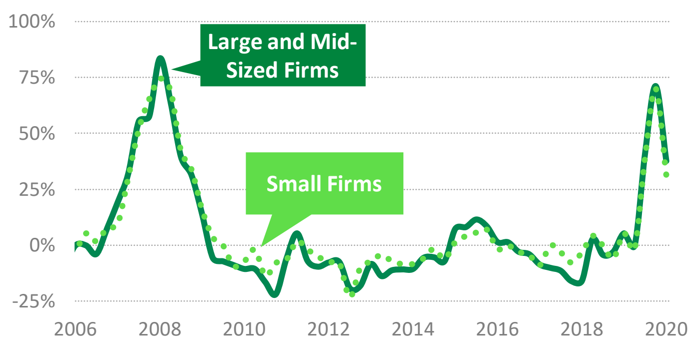
Consumer credit conditions also tightened in Q3, though at a slower pace than in the previous quarter.

- A net 12% share of banks reported tightening standards on auto loans, while a net 20% share reported tightening standards on credit card loans.
- Meanwhile, roughly 10–20% of banks on net reported tightening standards across residential real estate ("RRE") loan types, compared to a net 53–70% share in Q2.

Net Change in Credit Supply Conditions
Fed Senior Loan Officer Survey

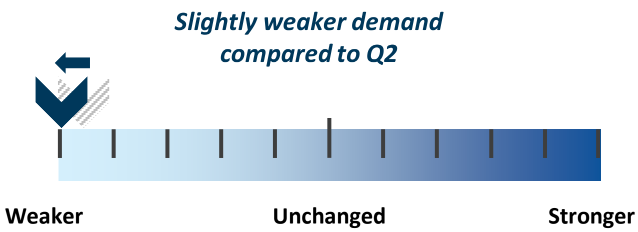


Tightening Standards on C&I Loans
Percent of Respondents

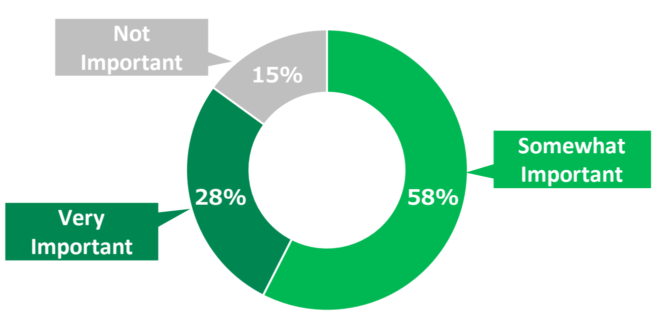


Source: Federal Reserve Senior Loan Officer Survey

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

Credit Demand

Demand weakened in the third quarter

Demand for business loans fell further as many business maintained their "wait-and-see" position in the third quarter.

- On net, 35% of banks reported weaker C&I loan demand among medium & large firms in the second quarter, while 45% reported weaker demand among small firms. Of those reporting weaker demand, 85% reported reduced investment as important in the decline.
- Meanwhile, a significant net share of banks reported weaker demand for CRE loans, particularly loans secured by nonfarm nonresidential properties and construction & land development.

Among households, demand for loans remains mixed.

- Demand for GSE-eligible RRE loans surged in Q3, with 63% of banks on net reporting stronger demand compared to Q2.
- Meanwhile, on net, a modest 7.7% share of banks reported stronger auto loan demand, while just 2.2% reported stronger demand for credit card loans.

KEY FINANCIAL INDICATORS

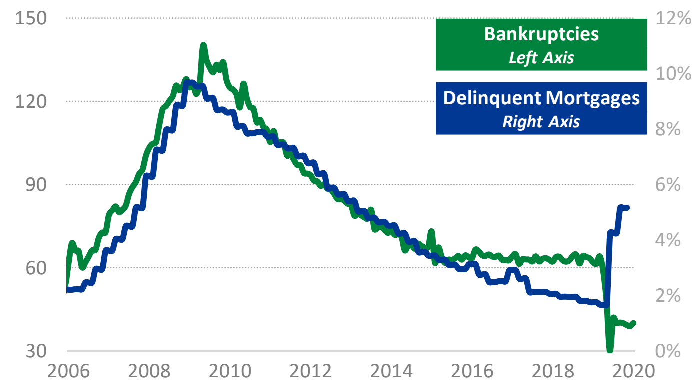
Consumer Finances

Consumers sending mixed signals on financial stress

Federal stimulus measures and payment assistance programs at the onset of the pandemic have kept measures of financial stress in healthy territory. Although successful in mitigating bankruptcies and foreclosures for the time being, these policies muddied the waters when it comes to accurately measuring financial stress, as demonstrated by two indicators:

- On one hand, bankruptcies remain near historic lows, largely due to debt relief programs and trillions of fiscal stimulus at the onset of the pandemic. As of November, consumer bankruptcies are down 39% Y/Y.
- However, per the Mortgage Bankers Association, the share of mortgages that are seriously delinquent is up from 1.7% in Q1 to 5.2% in Q3. This measure considers some loans in forbearance as late, painting a grimmer picture for consumers should assistance measures expire.

Bankruptcies* vs. Seriously Delinquent Mortgages
Thousands | Percent



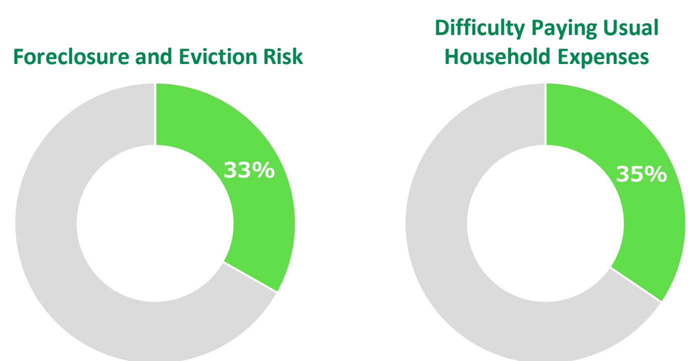
Source: The American Bankruptcy Institute | Mortgage Bankers Association
*Seasonally Adjusted

Headline numbers mask some underlying weakness

Though consumer debt delinquencies remain low overall and bankruptcies are muted, there are other signs that a sizable percentage of Americans are struggling to make ends meet.

- Despite improving headline numbers, there are signs of rising financial stress due to falling wage income, which is down 0.9% from February according to the BEA. This impact will be felt more heavily if CARES Act UI programs are allowed to expire and unemployed workers exhaust benefits from traditional state programs.
- Per the Census Bureau Household Pulse Survey, in mid-November a third of households faced eviction and/or foreclosure risk in the next two months, while nearly 35% experienced difficulty covering usual household expenses.

Foreclosure Risk vs. Difficulty Paying Household Expenses
Percent of households



Source: Census Bureau Household Pulse Survey

Fed Policy Corner

Fed shifts policy framework

- Consistent with its pledge to keep interest rates at their lower bound, the Fed held the fed funds rate steady between 0% and 0.25% in 2020.
- At the same meeting, the Fed established thresholds for raising rates, including evidence of robust labor market, annual inflation over 2%, or inflation forecasts over 2%.
- Fed officials have indicated that the virus continues to weigh on U.S. economic prospects and that further federal stimulus is needed to keep the economy afloat.

"The Federal Reserve is committed to providing sustained accommodation to achieve a broad-based recovery. Further targeted fiscal support will be needed alongside accommodative monetary policy to turn this K-shaped recovery into a broad-based and inclusive recovery."

— Fed Governor Lael Brainard

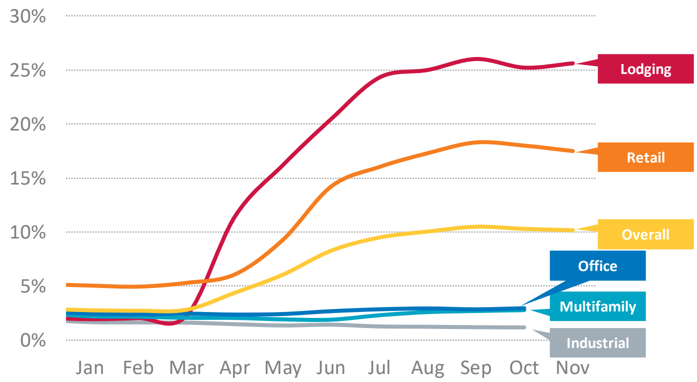
Business Performance

Financial stress is heightened in specific industries

Overall, financial stress among businesses is quite low. However, certain industries — particularly the lodging and retail sectors — are struggling.

- C&I loan delinquencies rose in Q3 to 1.30%, while charge-offs eased to 0.55% — the third highest reading since 2012, but still far below 2008-2010 levels.
- However, financial stress has not been experienced evenly across industries. Consumer-facing industries have been especially hard-hit during the pandemic.
- According to commercial real-estate data provider Trepp, the share of commercial mortgage-backed securities in "special servicing agreements" (i.e., loans where borrowers are seeking restructuring) in Lodging and Retail were 25.6% and 17.5% in November, respectively.

Commercial Mortgage-Backed Securities in Special Servicing
Percent of securities



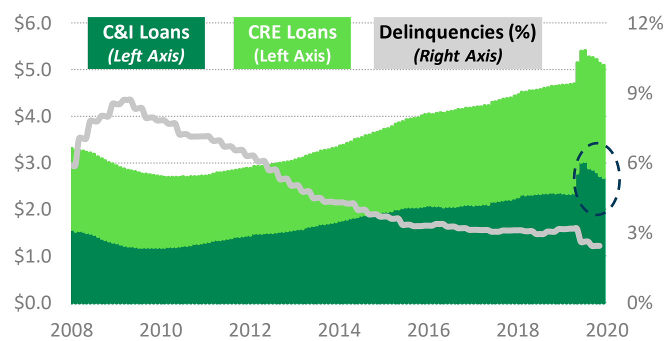
Source: Trepp

Business lending remains elevated

After surging at the onset of the pandemic, C&I loan volume has moderated as businesses take a wait-and-see approach to investment decisions.

- C&I loan volume jumped in March and April as businesses ramped up borrowing to build cash buffers. After holding steady in November, C&I loan volume remains nearly 15% above February levels. Meanwhile, nonfinancial corporate debt is up 11% from a year-ago.
- Despite elevated lending activity, financial stress remains low for the time being. Indeed, year-to-date commercial bankruptcies are the lowest in nearly 5 years.
- Looking ahead to 2021, should the virus and subsequent restrictions on businesses continue to depress economic activity, financial stress is likely to rise, particularly among small businesses.

Business Loan Volume
$ Trillions



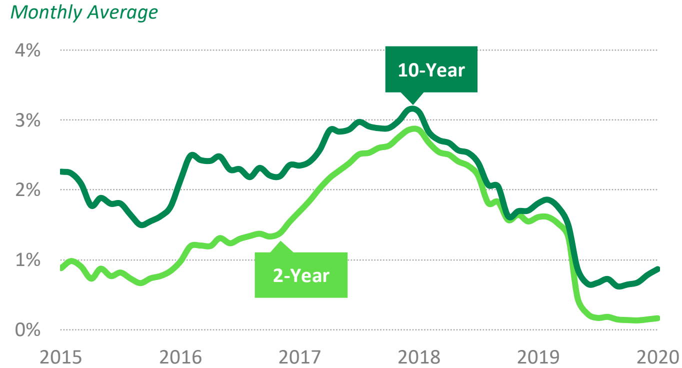
Source: Federal Reserve Board

Treasury yields hold steady at all-time lows

Treasury yields remain exceptionally low, in large part due to the Federal Reserve's forward guidance of a federal funds rate at 0-0.25% through at least 2023.

- At 0.97%, the 10-year Treasury yield has risen 30 basis points from its mid-September level and is close to breaking 1.0% for the first time since mid-March.
- Meanwhile, 2-year Treasuries have continued to hold near 0.10-0.15% since March.
- Another round of fiscal stimulus could lead to an increase in Treasury yields in early- to mid- 2021, though a divided government may make it difficult to ramp up federal spending beyond what is needed for pandemic relief.

Treasury Yields
Monthly Average



Source: U.S. Treasury

Main Street Outlook

Rising virus cases threaten Main Street COVID equilibrium

Throughout most of Q4, the outlook on Main Street was primarily one defined by stabilization, with the winners and losers of the COIVD economy well-entrenched (*see call-out box below*) and little movement in the sector's macro trends:

- PayNet's Small Business Default Index (SBDFI) rose just 4 bps from August to October (compared to an increase of 42 bps over the preceding three months).
- From August to the end of October, the share of small businesses open was flat, holding between 25% and 27% below January levels per Homebase.

However, spiking COVID cases have weighed on this fragile equilibrium. As states reimposed mobility restrictions and consumers reverted to more cautious behavior, pain returned to Main Street at levels unseen since the first half of 2020.

- Per Womply, in the third week in November small business revenues fell to 33% below January levels – the lowest point since the first week in May *(see chart)*.
- A mid-November analysis of Homebase data by University of Chicago economists found total hours worked at small businesses fell for several consecutive weeks for the first time since April.
- Per the Census Bureau Small Business Pulse Survey from the week of November 29, nearly 27% of small business owners think they will need to obtain financial assistance or additional capital over next 6 months — the highest level since early August.

As the public health situation deteriorates and fears of a double-dip recession rise, the need for additional stimulus grows more urgent. Without action, small business financial stress is likely to intensify just as 12 million Americans are set to lose their unemployment benefits after Christmas. As such, early 2021 could be a difficult period for Main Street.

Percent Change in Small Business Revenue

Compared to January 2020; 7-day moving average

Source: Womply via Opportunity Insights | as of November 16

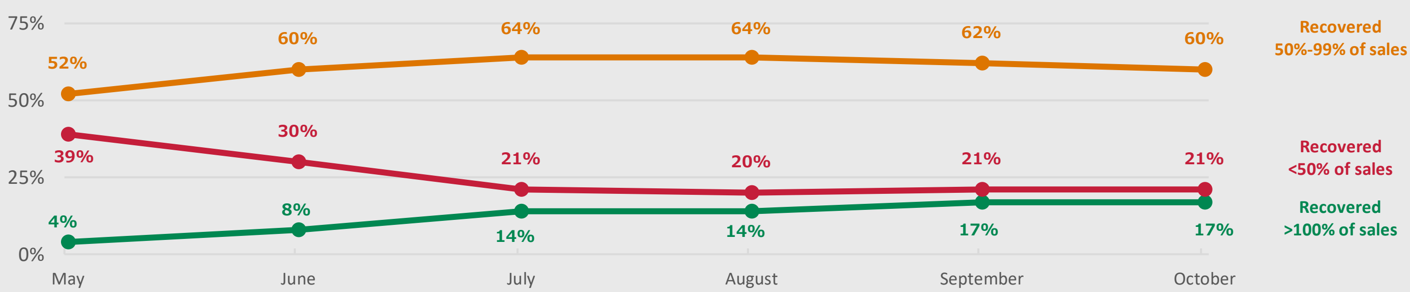
Given these headwinds, pressure is mounting on Congressional Democrats to forego size for speed and agree to a smaller stimulus package before they recess for the holidays. Though a lame duck deal is far from certain, an agreement would likely provide additional support to consumers (either through extended UI benefits or means-tested direct payments) and small businesses, both of which would give Main Street a boost (and also share bipartisan support). Time will tell whether a deal will be hashed out by lawmakers before a new Congress and Administration is sworn in.

In the meantime, the elevated uncertainty of the last several months is beginning to ease. Election-related uncertainty has receded and the transition to the Biden administration is underway, while the news on vaccine development is now providing a light at the end of the tunnel for the pandemic. However, the length of that tunnel is unknown, and the winter months will pose a serious challenge to the survival of many small businesses, absent additional relief.

The Small Business Recovery: A Three-part Story

Most are surviving and some are thriving — but a significant minority are in dire straits

How does your current sales volume compare to pre-crisis levels?



Source: NFIB COVID Surveys

MLFI-25

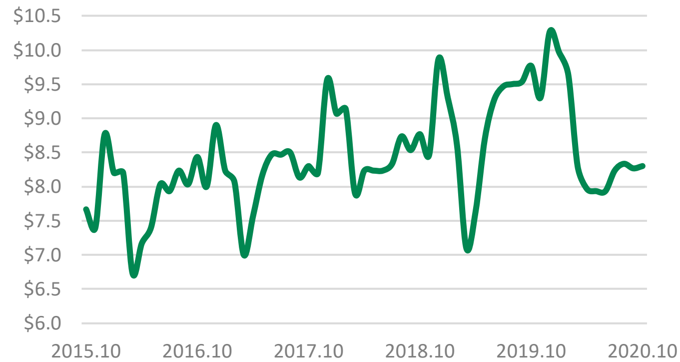
NBV improves, but recovery still sluggish

ELFA's Monthly Leasing and Finance Index (MLFI-25) rose 6% in October — the second consecutive monthly increase — but is down 9% from year-ago levels. While the headline numbers continue to rally, the industry has struggled to reclaim its pre-pandemic level of new business (*see chart at right*).

- New business volume rose to $9.2 billion in October, the highest level of the pandemic. However, cumulative new business volume (year-to-date) continued to decline: NBV is now 5.6% lower than in 2019.
- 30-day delinquencies ticked up 20bps to 2.2% after falling 40bps to 2.0% the prior month. This is the first monthly increase since May, and while 2.2% is only slightly elevated by historical standards, it will be important to monitor as more deferral periods close (*see COVID impact survey below for further discussion of deferrals*).
- More positively, charge-offs fell significantly, decreasing by 22 basis points to 0.60% after rising 7 bps the prior month. Charge-offs are now at their lowest level since May.

MLFI-25 New Business Volume

Billions, 3-month moving average

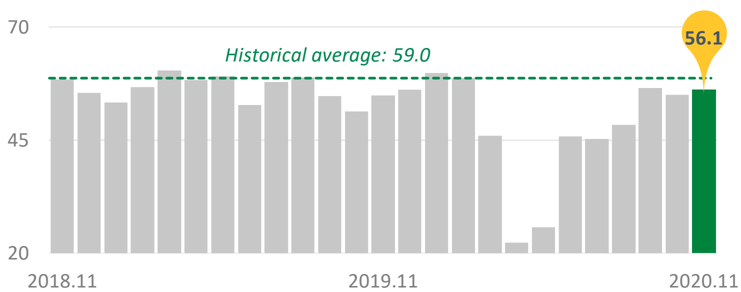


Source: ELFA

> *"The equipment finance industry shows resilience in the face of a worsening health pandemic and uneven economic performance…hopefully, this struggle to get back to a sense of normalcy will not be overtaken by a double-dip recession."*
>
> — Ralph Petta, President and CEO, ELFA

MCI-EFI

Industry confidence flat as executives eye post-election business climate



Source: ELFF

The November Monthly Confidence Index for the Equipment Finance Industry ("MCI-EFI") improved 1.1 points to 56.1. After a strong bounce-back in September, confidence has held at levels slightly below the historical average.

- In good news, 31% expect to hire more employees over the next four months, up from 26% in October and 18% in September.
- Similarly, 77% now evaluate the U.S. economy as "fair," up 21 percentage points from the prior month.
- However, executives again moderated their outlook: 27% believe business conditions will improve over the next four months (down from 30% in October and 36% in September).

Meanwhile, some highlights from the November ELFF COVID-19 Impact Survey include:

Declining levels of deferrals

- 22% of respondents have zero active deferrals in their accounts, up from 18% in September.
- Meanwhile, the number of respondents with more than 5% of their portfolio in deferral dropped to 8% in November, down sharply from 22% in October and 33% in September.

Mixed signals from end of deferral periods

- Nearly four-in-five respondents now have 90%+ of their portfolio paying as agreed at the end of the period (up from 64% in September).
- However, 14% of respondents now have 10%+ of their portfolios becoming delinquent or defaulting at the end of their deferral period, an increase from 7% in October.

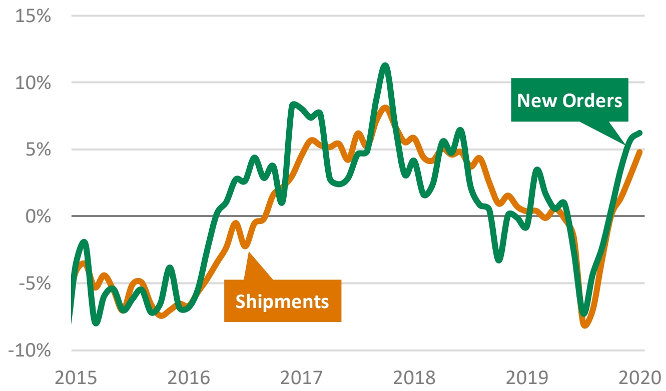
Manufacturing Focus

New Orders and Shipments Continue to Impress

In October, key metrics of manufacturing sector performance continued to impress. Both shipments and new orders of core capital goods have recovered from pandemic lows and are now experiencing strong Y/Y growth.

- New orders for nondefense, non-aircraft capital goods (a leading indicator of industry performance) rose 0.8% in October and are now up 6.2% compared to last year.
- Shipments of nondefense capital goods excluding aircraft (a concurrent indicator of industry performance) jumped 2.4% in October and are up 4.8% compared to year-ago levels.
- These developments suggest that the quick recovery of business investment remains on track to continue into early 2021.

Shipments vs. New Orders of Core Capital Goods
Year-on-year percent change



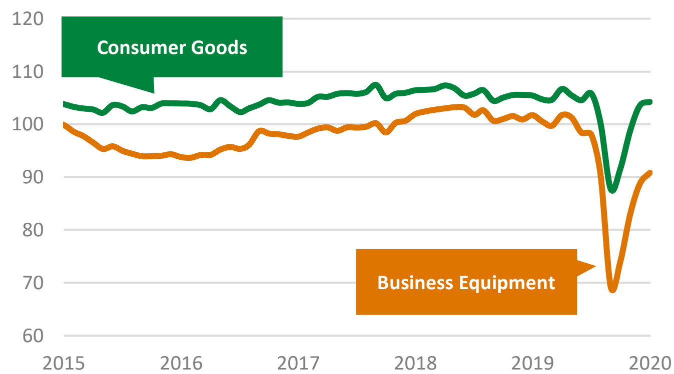
Source: Census Bureau

Uneven Industrial Production Recovery

After declining in September, headline Industrial Production rose in October to 103.2, though the index remains below pre-pandemic levels (109.3). Notably, the industrial production recovery has diverged for different market groups:

- Industrial production for consumer goods increased to 104.0 in October, just 0.6 below its January level. Consumer spending patterns have shifted toward purchasing goods instead of services during the pandemic, boosting demand for consumer-oriented manufacturers.
- Meanwhile, industrial production for business equipment was 90.8 in October, 7.6 points below its January level. Manufacturers still face weak demand for business goods due to high rates of remote work, tepid mobility, and reduced operating capacity.

Industrial Production
Consumer Goods vs. Business Equipment



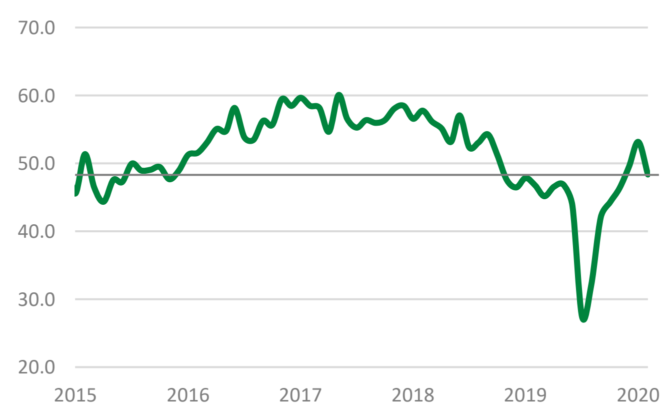
Source: Federal Reserve Board of Governors, G17 report

Employment Turning a Corner?

In November, the ISM Manufacturing PMI Employment Index fell to 48.4, a month after the index climbed above 50 for the first time since July 2019 (a sustained reading over 50 typically signals an expansion in manufacturing employment).

- It remains to be seen whether the ISM Employment Index's return to "contractionary" territory is just a blip or a beginning of a worrying trend for sector employment. Regardless, manufacturing employment levels remain 599K below February levels.
- Parts of President-elect Biden's platform include billions of dollars in incentives for domestic EV manufacturing and clean energy technologies. If these priorities come to pass in an infrastructure package or other legislation, they would likely boost job creation in the manufacturing sector.

Manufacturing PMI Employment Index
Above 50.8 = expansion



Source: Institute for Supply Management

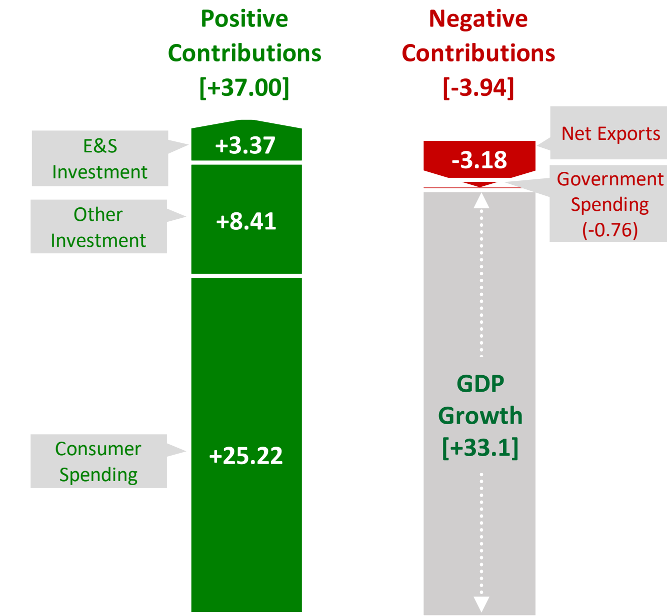
Record Expansion in Q3 But Full Recovery Remains Elusive

Economy expands at 33.1% annualized rate in Q3

The U.S. economy expanded at an unprecedented 33.1% (revised) annualized pace in Q3 as the nation partially reopened following the pandemic-induced shutdowns of early 2020. However, GDP is still 3.5% below its level at the end of 2019, reflecting the long road ahead to a full recovery.

- **Consumer spending**, the economy's largest component, surged 41% (annualized) in Q3. The rebound in spending was led by expenditures on durable goods, which rose 82%. Growth in spending on services (+38%) and nondurable goods (+29%) were also robust.
- **Equipment and software (E&S) investment**, a subset of overall business investment and the lifeblood of the equipment finance industry, jumped 47%.
- **Net exports** made a significant, negative contribution to GDP in Q3, reflecting the fact that domestic demand has rebounded more quickly than demand for US exports.
- **Government spending** fell at a -4.9% rate in Q3 as federal stimulus programs began to expire and state/local governments grappled with budgetary shortfalls.
- **Other investment** rose in Q3 due to a sharp increase in residential investment (+62%). Nonresidential structures investment fell -16%.

Contributions to GDP Growth
Q3 2020



Source: Bureau of Economic Analysis (BEA)

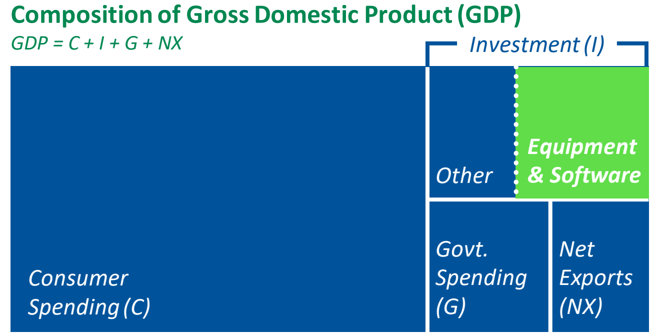
As K-Shaped Recovery Sets in, Promise of Vaccine Offers Hope

New shutdowns pose downside risk

At the time of this report's publication, the US economy has settled into a "K-shaped" recovery. It has become increasingly evident that there is a group — likely even a majority — of businesses and households that has already recovered from the recession. However, there is a significant minority of businesses and households struggling to pay utility bills, service debt, or otherwise make ends meet. Federal stimulus efforts to date have kept the bottom leg of the "K" from suffering a wave of delinquencies, bankruptcies, and even evictions, but more help likely will be needed.

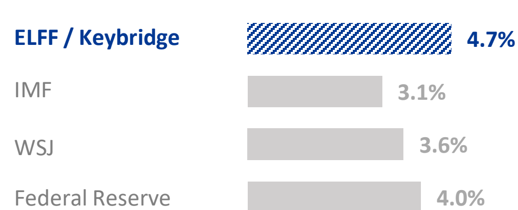
While millions of consumers and businesses wait for another relief bill, several pharmaceutical firms have announced breakthroughs on COVID-19 vaccines. Two leading vaccines are expected to enter production and distribution in 2020, but they are unlikely to provide near-term relief for the most-affected industries and households. Economic growth likely will be restrained by the ongoing pandemic during the winter before the combination of warmer weather and a widely available vaccine allows economic activity to ramp up. As such, Keybridge expects that GDP growth will be weighted toward the second half of the year, and annual growth is projected to reach **4.7%.**

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



Source: Keybridge LLC, based on BEA data

2021 Growth Forecasts



Labor Market

Recovery showing signs of deterioration

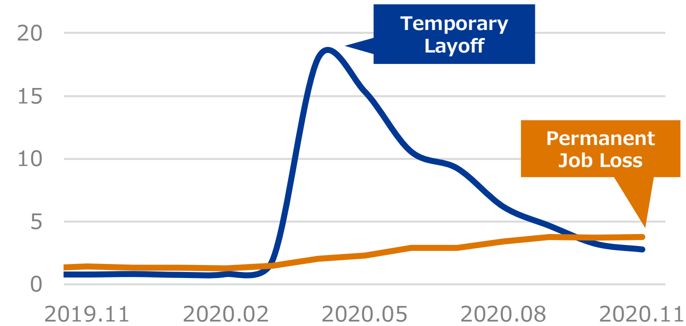
The U.S. labor market has offered conflicting signals in recent months, but the November Employment Situation report offered the clearest sign yet that the labor market recovery is slowing. Though headline numbers like payroll growth and the unemployment rate have continued to improve, a look beneath the surface reveals a more worrying situation:

- The November jobs report showed the unemployment rate fell from 6.9% to 6.7%. However, this decline was entirely due to unemployed Americans halting their job search and leaving the labor force.
- Those discouraged Americans leaving the labor force now join the more than five million workers who were in the labor force in February but are no longer employed or searching for work. If these workers who are no longer in the labor force were counted as unemployed, the unemployment rate would be nearly 10%.

The labor market recovery has slowed to the point that at the current pace, the U.S. economy would not return to February employment levels for another two years. Though a vaccine may help jumpstart the recovery, rising permanent layoffs and falling labor force participation will be substantial hurdles to overcome.

Unemployed Persons by Reason for Unemployment

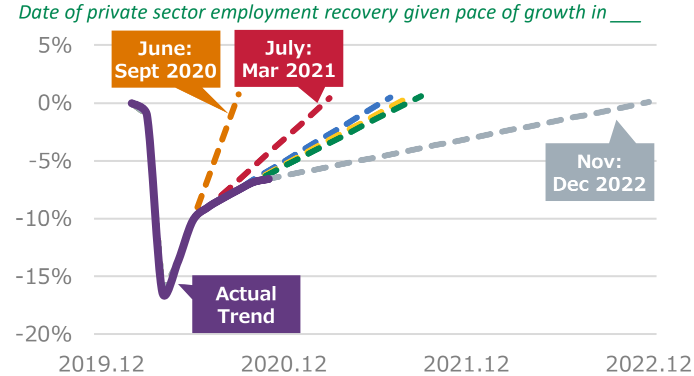
Millions SA



Source: Department of Labor

Labor Market Recovery Trajectories

Date of private sector employment recovery given pace of growth in ___



Source: Bureau of Labor Statistics

Confidence and Mobility

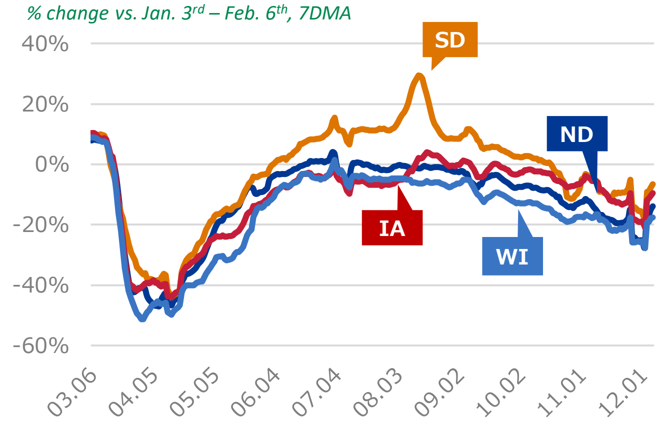
Signs that rising cases have weighed on activity

The U.S. was home several of the worst regional COVID outbreaks in the world at the end of 2020, with the worst of the outbreak centered in the Midwest. Although these states have not imposed stringent restrictions on business operations, data suggest that consumers have become more cautious and are increasingly avoiding retail and recreation establishments.

- In South Dakota, mobility in the retail and recreation sector rose as high as 30% above January levels during the Sturgis Motorcycle Rally in mid-August. Now, mobility is nearly 10% below January levels.
- North Dakota, Iowa, and Wisconsin saw similar stories play out over the summer. Mobility came very close to or exceeded pre-pandemic levels, but as the weather cooled and case counts soared, mobility steadily trended down. Though the Thanksgiving holiday likely impacted the most recent readings somewhat, the longer-term trend is clear.
- Morning Consult survey data from early December show that 38% of American adults are comfortable going out to eat, 32% are comfortable going to a shopping mall, and 23% are comfortable going to the movies.

Google Retail & Recreation Mobility by State

% change vs. Jan. 3rd – Feb. 6th, 7DMA



Source: Google

In the near term, the renewed shutdowns of nonessential businesses that have taken place in some cities pose a significant risk to the consumer outlook. However, even if states eschew lockdown (or "lockdown-light") policies, the mobility and spending habits of most Americans will be lower until infection levels recede. The light at the end of the tunnel, of course, is the vaccine: if efforts to ramp up production and distribution over the next few months are successful, economic activity should rebound in Q3 and Q4.

A Tale of Two Halves Continues

Those Most in Need Face an Uncertain Future

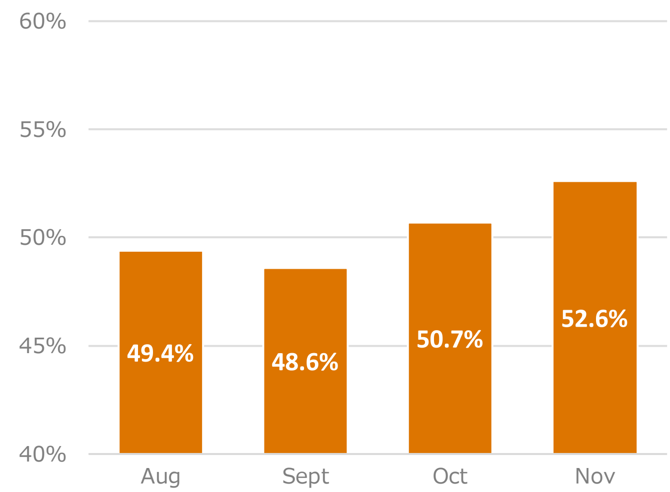
As discussed in prior outlooks, the CARES Act likely prevented a wave of consumer delinquencies and bankruptcies. The $1,200 direct payments, enhanced unemployment insurance (UI) benefits, and expanded UI eligibility via new federal programs supported consumers across the income spectrum. However, CARES Act UI programs will expire at the end of the year (enhanced UI benefits have already expired), leaving the roughly 14 million consumers currently receiving benefits through these programs in a difficult position, particularly given the slowdown in hiring.

Additional evidence of rising financial hardship can be seen in the Census Bureau's weekly Household Pulse Survey. As of the end of November, among households with less than $50,000 in annual income — a group that comprises more than one-third of the country — nearly 53% are struggling to pay their usual household expenses. As the chart at right shows, this share has risen steadily since the late summer.

While many households have already fully recovered from the recession, rising financial stress among lower-income households is a significant concern. A wave of delinquencies, evictions, and foreclosures is possible absent additional relief.

Very/Somewhat Difficult Paying Usual Household Expenses

% of households with income <$50,000, over the last seven days



Source: Census Bureau Household Pulse Survey

Vaccines Offer Hope But Not Silver Bullet

Major upside potential for second half of 2021

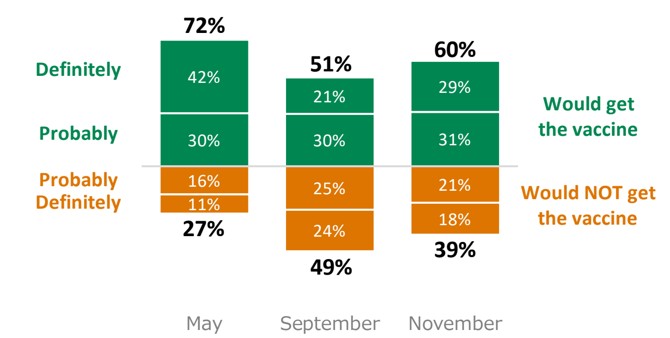
The COVID-19 vaccines announced in recent weeks have attracted much attention, and rightly so given that they appear to be highly effective. After spending most of the year avoiding large public gatherings, indoor dining, and air travel (among other things), this is the news Americans have been waiting for. An effective vaccine is the best hope for a return to normalcy, and a surge in economic activity may follow.

However, several logistical hurdles remain before people can be inoculated on a wide scale. First, even with an emergency FDA approval, the vaccines must complete their trials and safety tests. Then begins the task of mass-producing the vaccine and distributing it to health care facilities across the country, which will be complicated by the need for high-grade medical freezers — though distribution also will likely boost demand for medical equipment. Health care workers and high-risk populations will be targeted first, so the general population will need to wait a few months.

The logistical challenge of coordinating among myriad private and public sector entities at the federal, state, and local level will be substantial, and hiccups along the way should be expected. However, one of the biggest challenges may be behavioral: convincing the public to get vaccinated.

Majority of Americans now say they would get vaccine

% of adults saying they would get a vaccine today if available



Source: Pew Research Center

Politicization of the pandemic has sown mistrust and could hamper inoculation efforts. Per a November Pew survey, just 29% of Americans would definitely get vaccinated (down from 42% in May), while 21% do not intend to get vaccinated and are "pretty certain" more information will not change their mind. There is evidence of a partisan split in these results, with Republicans less trusting of scientists and more trusting of the military to act in the public interest. Public acceptance of the vaccine's safety and effectiveness is critical to ending the pandemic and jumpstarting the economy.

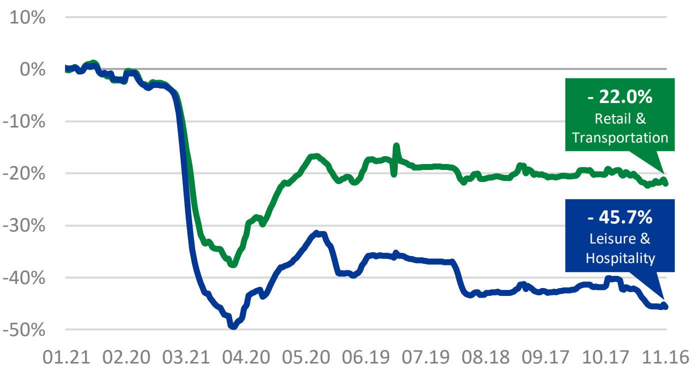
Industry Impact

Retail and travel industries still struggling

The retail and services industries have improved since bottoming out in the spring, but many businesses are still closed. Indeed, as of mid-November, 22% fewer retail and transportation businesses were open than in January. However, the ISM non-manufacturing index was at 55.9 in November, down slightly from its October reading but still signaling sector expansion. Looking ahead, retailers' longer-run prospects in 2021 likely hinge on the availability of vaccines. In the short-term, new lockdown measures would likely slow the sector's recovery.

Share of Local Businesses Open vs Same Day in January

Weekly Average, Percent



Source: Womply via Opportunity Insights

The travel and tourism industries still face challenges from the pandemic, including elevated rates of remote work, weak demand for air travel, and increased sanitation costs. The number of leisure and hospitality businesses that are open is currently more than 45% below January levels.

- While the holiday season is typically a profitable time for airlines and will bring an increase in travelers, passenger volume will fall far short of typical numbers. More people traveled by plane for Thanksgiving than at any other time during the pandemic, but the total number of passengers was still less than half of last year's level.
- The hotel industry is also suffering. The largest hotel chains have laid off tens of thousands of workers during the pandemic, and a recent survey from the American Hotel and Lodging Association found that 77% of hotels expect further layoffs.

Even with a vaccine, prospects for the airline and hotel industries in 2021 are uncertain. One on hand, Americans' cautiousness toward travel could continue, and it may take time for people to feel comfortable in crowded spaces again. On the other, many Americans will be anxious to travel after building up savings and eschewing vacations in 2020.

Growth During Pandemic

Some industries have thrived during the pandemic

Online retailers have seen success as many Americans remain hesitant to shop in person. Amazon's Q3 revenue was up 37% compared to last year, and holiday shopping should provide an even bigger lift to Amazon and other major e-retailers. The shift to online shopping began before the pandemic started but was accelerated by it. While it remains to be seen whether in-store shopping will quickly bounce back after a vaccine is widely available, it appears likely that online retailers will continue to gain market share as consumers grow more comfortable with shopping remotely.

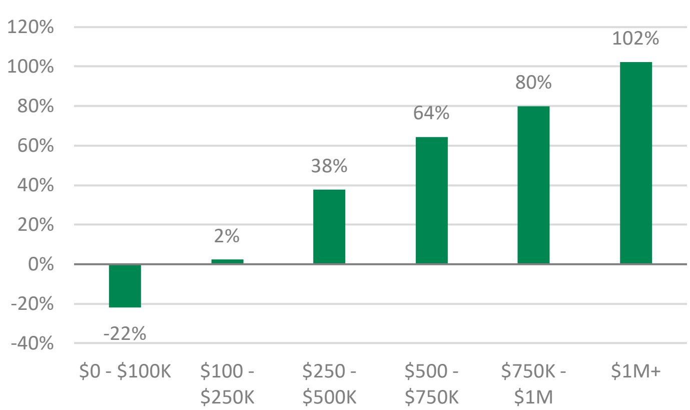
Demand for **personal protective equipment** (PPE) has predictably surged during the pandemic, but even after a vaccine is distributed and the pandemic wanes, public mask-wearing may become more common. In countries that experienced the SARS epidemic in 2002, masks remained relatively commonplace in the years after to avoid spreading more common illnesses. PPE manufacturers may thus see continued success in 2021 and beyond.

The **housing sector** continues to flourish, with new home sales up almost 42% year-over-year in October. In the northeast, people are leaving denser cities for suburban areas and new home sales have nearly doubled Y/Y. This trend will likely continue into 2021, supported by rock-bottom interest rates and more common work-from-home policies.

Homeownership remains the primary way that households build wealth, but not all consumers are benefitting from the boom. While sales of homes priced above $250K have surged 30% or more since last year, purchases of homes priced below that level are down or flat compared to a year ago. The housing recovery is also K-shaped: wealthy homeowners are seeing a surge in housing values, while less affluent homeowners have seen little, if any improvement.

Existing Home Sales, by Price Range

Year-Over-Year Change, Percent



Source: National Association of Realtors

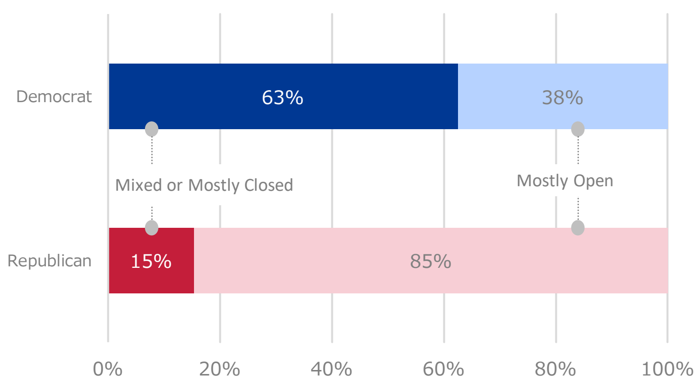
State & Local Government Response

Fall viral surge leads to renewed restrictions

The late fall surge in COVID-19 has led some state and local governments to reimpose restrictions on businesses and gatherings. While no localities have enacted full lockdown measures (as many did during the spring), several states have tightened restrictions on indoor dining and limited the number of people allowed at social gatherings.

As pandemic restrictions have become increasingly politically polarized, a clear divide has emerged between states and cities with Republican and Democratic leaders. As of late November, businesses were mostly open in 85% of Republican-led states and only 38% of Democrat-led states. Still, if cases continue to rise, even Republican governors may be forced to reimpose restrictions, at least to some degree, to avoid a demand-driven collapse of their health care systems.

Business Closures by Governor's Political Affiliation



Source: New York Times (as of 11/25/20)

State & Local Government Impact

States and cities expect revenue shortfall in 2021

While state and local governments are expecting $500 billion or more in revenue shortfalls over the next two years, federal government assistance from the CARES Act helped offset deficits in 2020. In 2021, however, it will take time for tax revenues to recover. The national unemployment rate is still nearly 7%, and some states (including Nevada and Hawaii, which rely heavily on travel and tourism) still have unemployment rates above 10 percent. The unemployment rate is even higher — near 10% nationally — if people who left the labor force during the pandemic and have not returned are counted as unemployed. Weak consumer spending has reduced sales tax revenue, though this may rebound more quickly as vaccines are distributed and businesses reopen.

Federal Government Response

Senate control is uncertain

Most of the programs funded or enacted by the CARES Act will expire by the end of 2020. Additional federal stimulus is likely, but the timing, nature, and scale of the relief package are all uncertain.

Party control of the Senate is dependent on the outcome of two runoffs in Georgia, which will take place in early January. If the Republican candidate wins in either election, then Republicans will retain control of the Senate chamber. Under a divided Congress, priorities would likely include:

- **Small business support:** Additional funding for small businesses is likely via the PPP and EIDL programs. Eligibility requirements are likely to be more stringent, with funds prioritized for small firms most in need.
- **State and local government funding:** Both Republicans and Democrats have shown a willingness to provide additional funding to state and local governments, though the funding would likely be lower if the GOP retains control of the Senate.
- **Unemployment benefits:** Both parties have expressed interest in extending enhanced UI benefits (which expired in August). A compromise bill would likely amount to around $300/week for 3–4 months.
- **Business liability protection:** Republican lawmakers want to shield businesses, schools, and healthcare providers from lawsuits if an outbreak occurs as they reopen.
- **Infrastructure:** After a relief package is passed, focus may shift to a bipartisan infrastructure bill that funds urban and rural priorities (e.g., mass transit and rural roads and highways) and is aimed at jumpstarting the labor market.

If both Democratic candidates win, Democrats would have 50 seats and the tie-breaking Vice-Presidential vote. In this scenario, a federal relief package would likely include all the items listed above (with the possible exception of liability protections) and could also include:

- **Student loan forgiveness**: The Biden transition team has signaled a willingness to forgive some student debt during the pandemic (potentially means-tested).
- **Paid emergency sick leave**: The Biden administration may likely provide fully-paid sick leave for anyone sickened by the pandemic or caring for a sick family member.
- **Increased Social Security checks:** Biden has also called for additional monthly benefits for Social Security recipients.

China Setting the Pace for Recovery

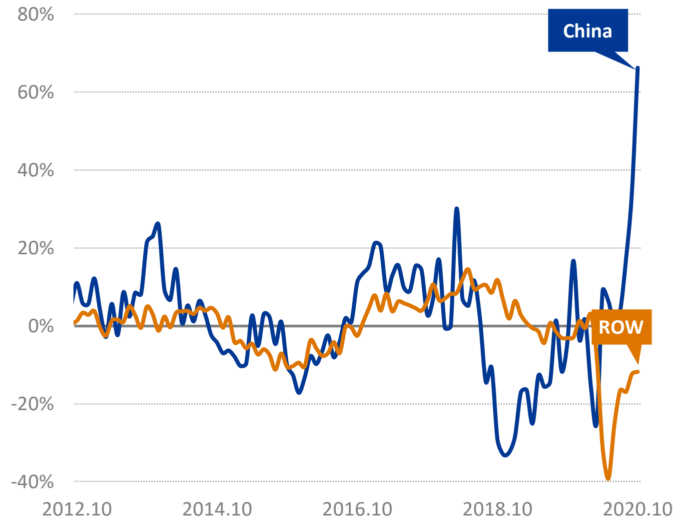
Export demand recovery will likely be slow

After falling to nearly a decade low in early 2020, U.S. exports of goods to China have surged in the second half of the year. Goods exports to China now stand 66% above year-ago levels and are at their highest level ever in dollar terms. U.S. goods exports to the rest of the world, meanwhile, are still 12% below year-ago levels. This stark divergence reflects the fact that China has been more successful in containing the virus in recent months than most western nations through draconian lockdown measures, widespread testing, and strict travel restrictions.

Though the U.S. economy is still the largest in the world, China's economy accounts for a larger share of global GDP growth. In fact, China is the world's only major economy that the IMF expects will have expanded in 2020. Looking ahead to 2021, China will play an outsize role in determining global demand for exports from several key end-use markets, including agricultural equipment and medical devices and equipment. A strong recovery in China will support demand for U.S. exports and should be a tailwind for American manufacturers and the broader economy.

U.S. Goods Exports to China and Rest-of-World

% change Y/Y



Source: Census Bureau

Europe in Lockdown Again

Resurgent pandemic will slow global recovery

Europe is now responsible for approximately a third of all daily new COVID-19 cases around the world, and all of the major E.U. economies, including Germany, the U.K., France, Italy, and Spain, resorted to renewed nationwide lockdowns this autumn in response. Although Europe had previously been considered by many to be a model for containing the virus while also encouraging economic activity, the trade bloc was unable to avoid a second wave. As a result, the E.U. will likely suffer a "double dip" recession: GDP will almost certainly contract again in Q4 after Q3's strong rebound. Europe accounts for 15-20% of global economic output, so these renewed lockdowns will have a significant negative effect on U.S. exports, even while the Chinese economy expands.

Europe should serve as a cautionary tale for the rest of the world, as lockdowns will once again weigh on economic activity and likely delay a full recovery until at least 2022. Though there may not be political appetite for such measures in the U.S. again — and indeed, the economic consequences would be severe — the alternative isn't attractive either, as some local healthcare systems are reaching a breaking point. Once a vaccine is widely available, the economic outlook will improve considerably.

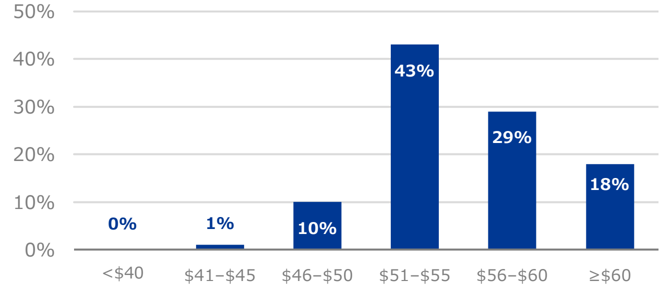
Oil Market Hits Speed Bumps

Demand recovery delayed even further

2020 was a rocky year for the oil sector. In fact, global oil consumption fell more sharply than previously expected due to new lockdowns at the end of the year. 2021 should be slightly better. Though the International Energy Agency does not expect a vaccine to support oil demand in the first half of 2021, wide distribution of a vaccine could provide a boost to oil demand later in the year. Regardless, drilling activity in the U.S. is unlikely to ramp up in the first half of 2021 as consumers and businesses grapple with the effects of record levels of new COVID cases and deaths.

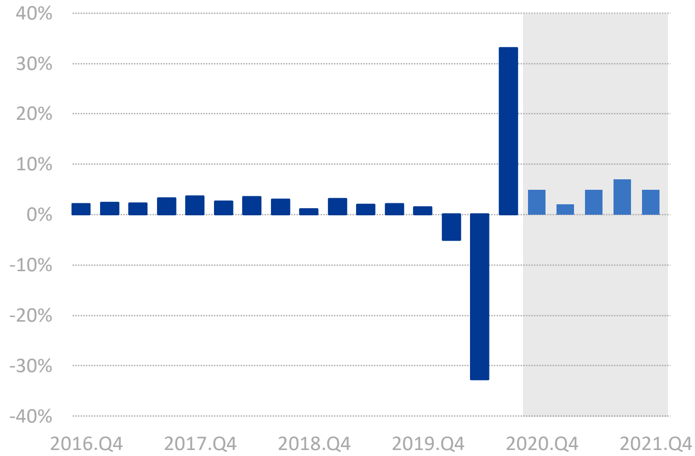
WTI Price at Which US Oil Rig Count to Increase Substantially

% of oil & gas executives in Q3 Dallas Fed Energy Survey



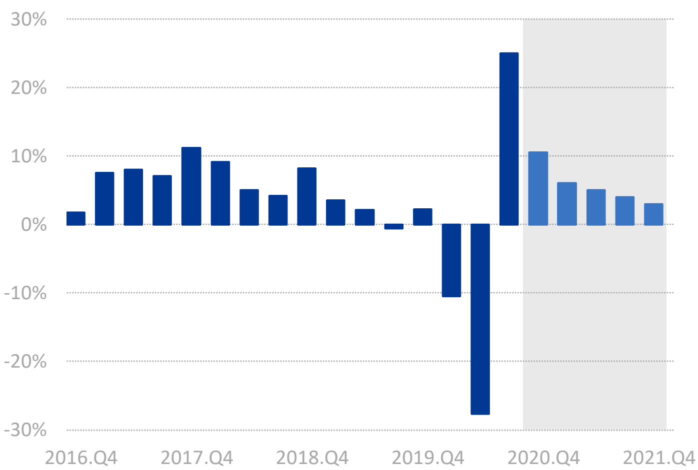
Source: Dallas Fed

Real GDP Growth (% SAAR)



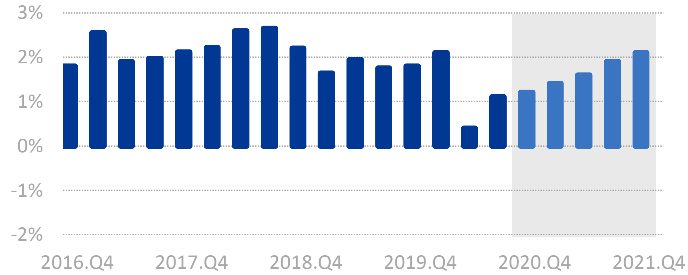
Source: Bureau of Economic Analysis; Keybridge LLC

Real E&S Investment Growth (% SAAR)



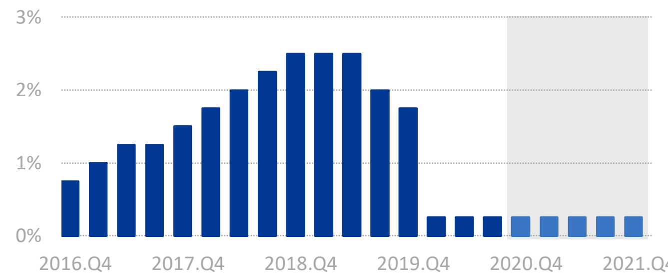
Source: Bureau of Economic Analysis; Keybridge LLC

CPI Inflation (year-on-year %)



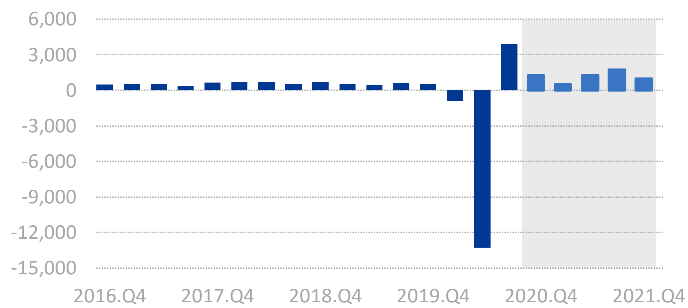
Source: Bureau of Labor Statistics; Keybridge LLC

Fed Funds Target (upper bound, end of period)



Source: Federal Reserve Board of Governors; Keybridge LLC

Total Payroll Growth (thousands)



Source: Bureau of Labor Statistics; Keybridge LLC

INDICATOR,	2019	2020e	2021 QUARTERLY ESTIMATES				2021e
			Q1e	Q2e	Q3e	Q4e	
Real GDP (SAAR %)	*2.2%*	*-3.5%*	2.0%	5.0%	7.0%	5.0%	**4.7%**
Real Investment in Equipment & Software (SAAR %)	*3.5%*	*-2.9%*	6.0%	5.0%	4.0%	3.0%	**7.8%**
Inflation (year-on-year %)	*1.8%*	*1.3%*	1.4%	1.6%	1.9%	2.1%	**1.8%**
Federal Funds Target Rate (upper bound, end of period)	*1.75%*	*0.25%*	0.25%	0.25%	0.25%	0.25%	**0.25%**
Total Payroll Growth (thousands)	*2,133*	*-9,174*	750	1,250	1,750	1,000	**4,750**

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.