As a member of the RSM US Alliance, we would like to share the following with you:

The Real Economy 81

Bay City Office
1600 Center Ave.
Bay City, MI 48708
(989) 893-5577

Clare Office
601 Beech St.
Clare, MI 48617
(989) 386-3481

Gladwin Office
1312 W. Cedar Ave.
Gladwin, MI 48624
(989) 426-8482

West Branch Office
108 N. Third St.
West Branch, MI 48661
(989) 345-3404

THE REAL ECONOMY

VOLUME 81

AN ECONOMY IN TRANSITION: SUPPLY CHAIN BOTTLENECKS AND CHURN IN THE DOMESTIC LABOR MARKET

INTEREST RATE UPDATE: INFLATION EXPECTATIONS REMAIN SUBDUED

BOOMING FIRST HALF FOR PRIVATE EQUITY ACTIVITY SETS STAGE FOR A RECORD YEAR

THE ALTERNATIVE: THE RETURN TO OFFICE SLOWS IN THE TECHNOLOGY SECTOR

INDUSTRY SPOTLIGHT: TECH IPOS HAVE BEEN WHITE-HOT, BUT WILL THE TREND CONTINUE?

MIDDLE MARKET TREND WATCH: CONFIDENCE IN THE ECONOMY, BUT CONCERNS LINGER

THE POWER OF BEING UNDERSTOOD
AUDIT | TAX | CONSULTING

RSM

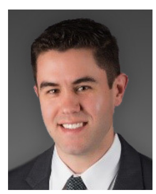
ABOUT THE **AUTHORS**

Our thought leaders are professionals who strive to help you and your business succeed. Contributors to this issue include:

JOSEPH BRUSUELAS
CHIEF ECONOMIST, RSM US LLP

TUAN NGUYEN
U.S. ECONOMIST, RSM US LLP

KENNEDY CHINYAMUTANGIRA
SENIOR MANAGER
FINANCIAL SERVICES SENIOR ANALYST



KURT SHENK
SENIOR MANAGER
TECHNOLOGY SENIOR ANALYST

NELLY MONTOYA
SENIOR MANAGER
FINANCIAL SERVICES SENIOR ANALYST

AN ECONOMY IN TRANSITION: SUPPLY CHAIN BOTTLENECKS AND CHURN IN THE DOMESTIC LABOR MARKET

BY JOSEPH BRUSUELAS AND TUAN NGUYEN

THE ROBUST ECONOMIC EXPANSION that is underway is unfolding in a unique fashion, and it is not for the fainthearted. Everything from semiconductors to employees is in short supply as the economy recovers from the shock of the pandemic and as some workers, especially those in lower-paid service jobs, rethink their place in the labor force.

Now, these bottlenecks are leading to a reconsideration of how quickly the global and domestic economy can move beyond 2019 levels. That reassessment, in our estimation, is the primary factor behind the recent volatility across equity and other financial markets.

The disruptions linked to the delta variant are sufficient to represent risks to our growth forecast of 5% for the global economy and 6.6% for the U.S. economy this year and could lead to further price volatility.

Throughout the global health crisis, we have consistently made the case that for the economy to fully recover, the pandemic must be contained. For this to happen, vaccines must be made globally available.

Until then, consumers will find themselves choosing between higher prices for goods and services and delaying purchases until supplies are back to normal. Each has the potential to dampen overall spending and suppress growth.

It all prompts a question: How did we get here? A closer look at the rising virus cases in Southeast Asia and their effect on supply chains and the labor market can offer some insight.

Southeast Asia

To get a sense of the far-reaching impact of the delta variant on the global supply chain, consider the case of Southeast Asia.

Once viewed as a reliable import portal for the U.S. during the pandemic, Southeast Asia has been hit hard by the resurgence of COVID-19.

Nations are now in various levels of economic shutdown, leading to drastic cutbacks in production and severe shortages in vital goods sent to the rest of the world.

WHETHER YOU'RE WAITING FOR YOUR BMW TO BE SHIPPED FROM EUROPE OR A PLASTIC SLIP 'N SLIDE TO ARRIVE FROM ASIA, IT'S GOING TO TAKE LONGER AND COST MORE THIS YEAR THAN IT DID LAST YEAR.

MIDDLE MARKET INSIGHT

The disruptions linked to the delta variant are sufficient to represent risks to our growth forecast of 5% for the global economy and 6.6% for the U.S. economy this year.

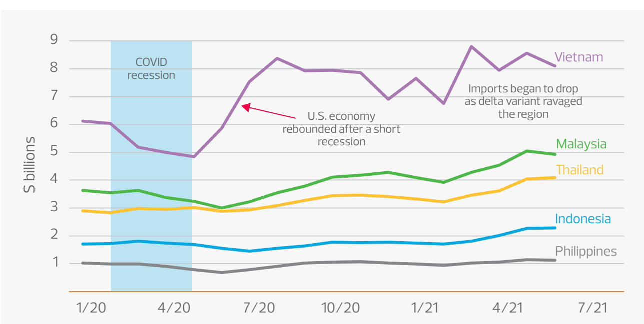
This is no small matter to the American middle market economy. The U.S. relied on Southeast Asia for about 21% of its food imports, 12% of machinery and appliance imports, and 10% of consumer goods imports in 2019, before the pandemic. In addition, Southeast Asia shares the same trade route with China, Japan and South Korea, which combine for 27% of all U.S. imports.

For this reason, firms with direct and indirect exposure to Southeast Asian supply chains should prepare for further disruptions later this year that are likely to spill over into next year. Middle market firms may need to look to local U.S. and North American producers as possible substitutes to meet increases in demand.

The third quarter in particular has been a challenge as COVID-19 cases continue to rise and prompt economic shutdowns in major countries, including Indonesia, Thailand, Vietnam, Malaysia and the Philippines. Local governments, in turn, have swiftly enacted strict stay-at-home policies as hospitals contend with a surge in patients. As a result, U.S. imports of goods from these countries started to show signs of decline in June.

U.S. imports of goods by customs basis

THREE-MONTH MOVING AVERAGES



Source: Bloomberg

Vietnam, the sixth-biggest import partner of the United States, will remain in lockdown until at least September, and this is already hitting production. One energy firm in Vietnam reported that sales of oil and petroleum products have plunged by 70% to 80% since the lockdown started.

Companies with major operations in Vietnam, like Samsung, Foxconn, Nike and Intel, have slashed their output in recent months, disrupting the supplies of electronics, garments, textiles and especially semiconductors to the U.S. Vietnam is the second-largest provider of semiconductors to the United States.

In Malaysia, the largest provider of semiconductors to the U.S., new COVID-19 cases have hit a record despite 53.3% of the population having received at least one vaccine dose. At least 1.2 million workers have lost their jobs since the pandemic broke out, while the nation's political crisis has hindered the country's COVID-19 response.

The pandemic and its resurgence have shown that strict lockdown policies cannot be the entire answer to the pandemic, but that vaccinations can. Nonetheless, vaccination rates throughout Southeast Asia, except for Singapore, still lag other regions because of scarcity.

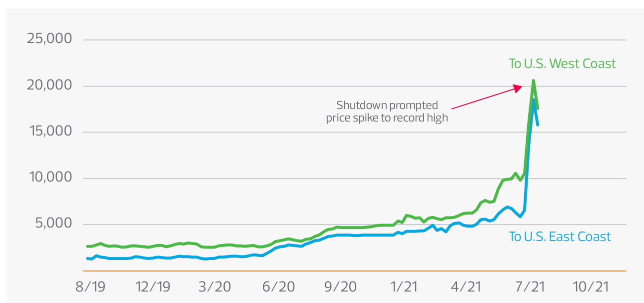
Indonesia, the hardest-hit country in the region, is struggling with slow vaccine rollout rates as it tries to vaccinate 182 million people.

Thailand, despite signing a deal with AstraZeneca last year to produce vaccines, has only about 7.5% of its population fully vaccinated and has been considering restricting its vaccine exports to neighboring countries.

The end result is added pressure on the global supply chain as the U.S. heads into the year-end shopping season. And this pressure extends to China. The world's third-busiest container port, Ningbo-Zhoushan in China, remains partially closed, pushing container shipping rates for the China-U.S. route to a record $20,000 per 40-foot box.

China to U.S. container shipping rates

USD PER FEU



Source: Bloomberg

MIDDLE MARKET INSIGHT
Firms with direct and indirect exposure to Southeast Asian supply chains should prepare for further disruptions later this year that are likely to spill over into next year.

Prices of imports, as a result, have continued to rise. In July, the price index for imports from China rose 0.7%—the largest one-month rise since July 2008—pushing the three-month moving average up to 0.5%. Southeast Asia's import price index was also up by 0.3% in July after dropping to negative territory in April.

Although the ripple effect of such increases in prices is subtle and will not be felt immediately, it will contribute to the higher inflation rate in the U.S. for the remainder of the year.

Supply chains under strain

As the coronavirus has spread through the world, fault lines in everything from public health preparedness to the transportation infrastructure have been exposed.

The surge in U.S. consumer demand is leading to delays at seaports and rail yards. Warehouses near those seaports are reaching capacity, and there are reports of loaded trains sitting idle alongside single-track routes.

The increase in savings during the pandemic suggests that U.S. consumers have the patience to do without for a little longer. That suggests that increases in the cost of living will exist for as long as the pandemic affects production and shipping among our trading partners.

In recent months, the increase in activity along the supply chain appears to have decelerated because of labor market constraints and infrastructure bottlenecks.

While the infrastructure can be repaired and modernized, disruptions in the labor market have uncovered dissatisfaction with working conditions and income that may accelerate investment in both automation and improvements in employment conditions.

International shipping: Whether you're waiting for your BMW to be shipped from Europe or a plastic Slip 'N Slide to arrive from Asia, it's going to take longer and cost more this year than it did last year.

According to data from Drewry Supply Chain Advisors, prices for shipping a 40-foot container from Shanghai to Los Angeles had increased for 18 straight weeks by the end of July. By the end of August, it was costing more than $10,000 to ship a container from Asia—225% higher than last year based on four-week moving averages—and more than $6,000 to ship a container from Rotterdam to New York, an increase of approximately 175% relative to a year ago based on four-week averages.

Intermodal rail freight: Once the shipping container gets to a North American seaport, it needs to be unloaded and then sent to a warehouse somewhere along our train routes or highway system. Intermodal rail freight—shipments of those containers on tractor-trailers or railroad cars—reached an all-time high this spring before tapering off in May and June.

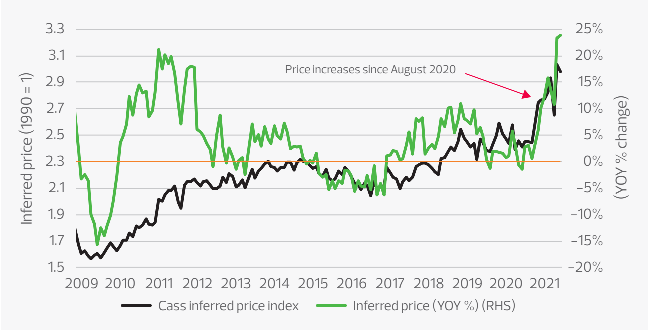
Domestic trucking: If shipments out of Asia are once again halted, we anticipate an easing in the demand for trucking as well as all freight transportation services.

The Truckstop.com Market Demand Index, which measures the ratio of load postings to truck postings, has already dropped 32% from its recent peak in May. This suggests either a tapering of the initial surge in demand or a supply chain reaching its limit.

Analysts at Cass Information Systems are suggesting that the drop in July freight shipments was because of capacity constraints of the U.S. freight network. They point to slowdowns in rail and LTL (trucking) volumes attested to by "the 121 container ships anchored off North American ports," and they view freight price increases as likely to continue because of demand pressures.

Cass freight prices

INFERRED FROM CASS INFORMATION SYSTEMS INDICES (1990 = 1)



Source: Cass Information Systems; Bloomberg; RSM US LLP

COMPANIES WITH MAJOR OPERATIONS IN VIETNAM, LIKE SAMSUNG, FOXCONN, NIKE AND INTEL, HAVE SLASHED THEIR OUTPUT IN RECENT MONTHS, DISRUPTING SUPPLIES.

Delivery times and prices: The result of supply chain bottlenecks and the resurgence of demand is slower delivery times for manufacturers (and retailers) and increased prices as demand outstrips supply.

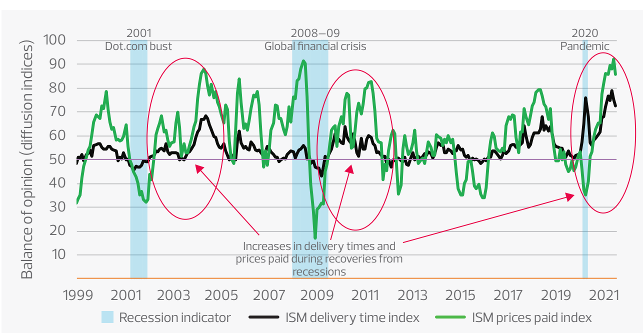
The Institute for Supply Management surveys of manufacturing conditions illustrate the difficulty of supply catching up to demand in the wake of an economic slowdown. This seemed particularly true after the economic shock of the financial crisis in 2007-09 and now after the shock of the pandemic.

These trends conform to findings of the third-quarter RSM US Middle Market Business Index survey, in which 76% of senior executives at middle market firms anticipated higher input prices and supply chains overwhelmed by the surge in demand over the next six months.

While those expectations have eased from the last quarter, when 85% expected higher prices paid for raw materials and intermediate goods, the survey found that only in the current quarter did a majority of executives, or 62%, report passing through higher costs downstream.

ISM delivery times and prices paid in recoveries from recessions

INSTITUTE FOR SUPPLY MANAGEMENT SENTIMENT SURVEYS



Source: Cass Information Systems; Bloomberg; RSM US LLP

The labor market in flux

Thanks to the government's response to the disruptions of the coronavirus, American workers have had more than a year to reconsider how they want to continue their employment. Although tracktherecovery.org reports that low-wage employment remains nearly 21% below the pre-pandemic levels of January 2020, and total job postings remain 11% lower, there is a segment of the labor force intent on not returning to the same old jobs at the same old salary.

MIDDLE MARKET INSIGHT

Disruptions in the labor market have uncovered dissatisfaction with working conditions and income that may accelerate investment in both automation and improvements in employment conditions.

You can see this in the signs posted at local restaurants looking for workers in every position. The shortage of labor is not as obvious, however, in the domestic supply chain.

In the transportation and warehousing industries, which are essential to the just-in-time supply chain, hiring exceeded vacancies throughout the expansionary periods from 2001 to the end of 2014. From 2017 until the pandemic shutdown, however, vacancies exceeded hiring, indicating late-cycle opportunity for career changes as the unemployment rate pushed down to 3.5%.

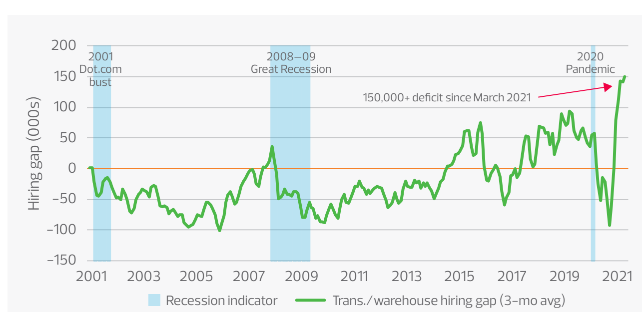
The hiring gap in the transportation and warehousing industries—similar to the labor shortage at your local restaurant—suggests the difficulty of restaffing in the middle of a pandemic and the overriding issue of finding workers for difficult and low-wage employment.

Should we just expect to flip the switch and bring back the low-wage segments of the labor market when government subsidies end? Or has this once-in-a-lifetime pandemic given us a reason to rethink how we staff our train yards and warehouses, and why we expect restaurant, health care and school staffs to continue accepting low wages?

There is good reason to think that the shakeout of the labor market is not yet over as jobs go unfilled and workers demand higher wages.

The gap between vacancies and hires in the transportation/warehousing industry

BLS JOBS OPENINGS AND LABOR TURNOVER SURVEY



Source: U.S. Bureau of Labor Statistics; Bloomberg; RSM US LLP

The labor market over the long term

Beyond what we consider to be temporary supply-chain issues—which are hampering the immediate recovery from the pandemic—is the overriding issue of a shrinking labor force.

After a decades-long burst of energy sparked by women entering the labor force beginning in the late 1960s, the labor force participation rate has been on a downtrend since the 2001 dot.com recession. Much of that decline was likely because of a confluence of events that included the shrinking of the manufacturing sector, the peaking of women voluntarily joining the workforce, and the retirement of baby boomers.

But there are other factors pushing people to the sidelines. These likely include diminished prospects for earnings as service sector jobs became the dominant source of income. Why work for next to nothing at an otherwise unrewarding job? People tend to make rational decisions, and as the pandemic continues on, many are reconsidering the place of work in their lives and what is reasonable compensation for that work.

The history of the employment-to-population ratio suggests that employment decisions are indeed rational, with the ratio moving higher during recovery periods as the demand for labor increases and wages are pressured higher to meet that demand.

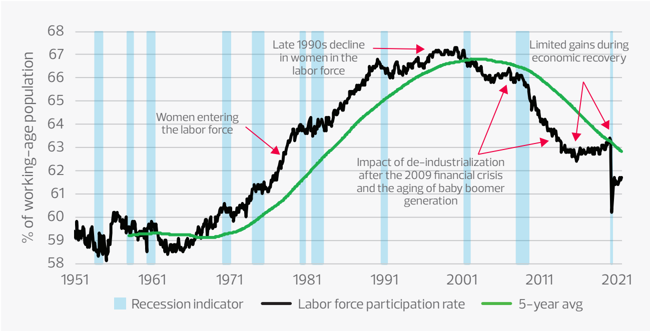
Data show that the long-term increase in the employment-to-population ratio topped out in 2001, and managed to approach that level again only when the unemployment rate moved to 3.5% in 2019, at the end of a decade-long recovery following the 2008-2009 financial crisis.

This most recent shock to the economy, however, is like no other. Not since the Great Depression have so many people been out of work so quickly and for so long. And during that time, they were able to keep food on their table with a roof over their head for the most part.

It gave your barista serving coffee to higher-paid people or the waitress making $2.39 per hour plus tips time to think that maybe their position wasn't the best long-term option. That seems to account for the gaps between job vacancies and hiring rates for restaurant workers and the transportation sector.

Long-term trends in the labor force participation rate

PERCENT OF POPULATION WHO ARE 16 YEARS AND OLDER



Source: U.S. Bureau of Labor Statistics; Bloomberg; RSM US LLP

Is this a short-term phenomenon? Chances are the pandemic put a spotlight on a long-term trend toward employees creating their own opportunities for advancement. The U.S. census reported an extraordinary jump in the number of startups during the pandemic as measured by applications to open a business.

So if there is any economic good resulting from the pandemic, it may be that 300,000 new entrepreneurs make a good case for free enterprise. In addition, the growing call for better pay and working conditions may lead employers to partner with their employees, providing tuition benefits and flextime and immigration support, while their business earns goodwill and a loyal and productive workforce.

Demographic changes

Absent a productivity miracle, economic growth cannot happen without a growing population—it takes more people and new ideas to grow an economy. The alternative is stagnation of output and a paucity of ideas.

Recent data show an aging population and a declining birthrate, all without a sensible and robust effort to replace those missing from the labor force or to provide the next generation of innovators. These trends have the potential to flatten the U.S. economy.

MIDDLE MARKET INSIGHT

The RSM US Middle Market Business Index survey found that 76% of senior executives at middle market firms anticipated higher input prices by the surge in demand over the next six months.

AFTER A DECADES-LONG BURST OF ENERGY SPARKED BY WOMEN ENTERING THE LABOR FORCE BEGINNING IN THE LATE 1960s, THE LABOR FORCE PARTICIPATION RATE HAS BEEN ON A DOWNTREND SINCE THE 2001 DOT.COM RECESSION.

An aging population: Workers who are 55 and older now comprise 30% of the population, up from 25% in 2011. That number will strain the social safety net and drain resources that might otherwise be directed at the prime-age working population.

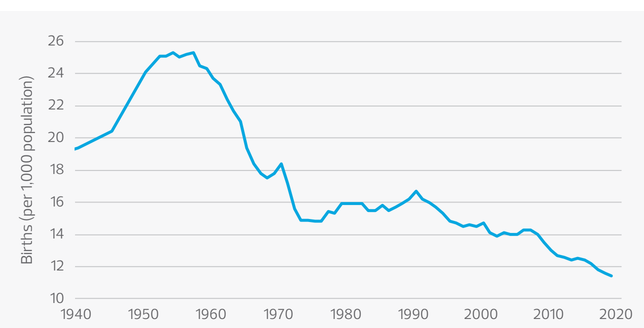
At the same time, those 25 to 54 whom we consider as being in their prime working age are in decline, falling to 39% of the total population from 41% a decade ago. And their replacements, or those who are 24 and younger, have also dropped, to 31% of the total population, down from 34% in 2011.

A decline in birthrate: Adding to this aging of the population is a declining birthrate. Last year was the sixth consecutive when the number of births in the U.S. declined, according to the National Center for Health Statistics—at an average rate of 2% per year.

This decline has become a generational issue. Hypothetically, it would take 2.1 births per woman for a given generation to replace itself. The provisional total fertility rate for the United States last year was only 1.6 births per woman, which is down 4% from the rate in 2019 for another record low. The report adds that the total fertility rate has generally been below replacement since 1971 and has consistently been below replacement since 2007.

An analysis of data from the Centers for Disease Control and Prevention by the Brookings Institution finds that "women are both delaying childbearing and having fewer total births," which implies that "below replacement level fertility rates in the U.S. are probably here to stay for the foreseeable future."

U.S. births per 1,000 of population



Source: Infoplease.com; Statista.com; RSM US LLP

Immigration: There are essentially two ways a labor force can have the productivity to meet the needs of an economy: through a growing population or with increased automation.

Consider then the issues presented by a declining birthrate, an aging population and a restrictive immigration policy—all a recipe for limited growth and the potential for the "Japanification" of the U.S. economy.

A brief history of immigration shows that by the time the Johnson-Reed Act of 1924 imposed quotas on immigration from most parts of the world, many European families had already made their way to the United States.

The impact was a diminishing role of immigrants, with the percentage of foreign-born residents falling from 15% of the total U.S. population to less than 5% by the 1960s.

That restrictive legislation was changed by the Immigration and Nationality Act of 1965, which by 2019 had restored the presence of foreign-born residents to 14% of the total population.

Still, there has been a deceleration in the growth of the foreign-born population in recent years, according to data from the Migration Policy Institute. Note that these data include people residing in the United States both with and without authorization.

Looking ahead

The shocks unleashed by the pandemic will almost certainly lead to a period of innovation. It is hard to imagine moving forward without significant immigration reform to address the clear challenges in the American labor market.

Moreover, as the global supply chain bottlenecks are unclogged and the economy eventually moves past the pandemic, demand will remain robust, and this will require a different mix of labor and technology.

For too long, basic reforms in the United States have been delayed. The infrastructure package recently approved by the Senate is one ray of hope that those reforms will be addressed.

Most important, as the churn in the labor market continues, this will result in what will be a rethinking of the relationship between society and work. In our estimation, the outcome is most likely to produce more sustainable changes necessary to address what will be a different economy once the pandemic eases.

INTEREST RATE UPDATE: INFLATION EXPECTATIONS REMAIN SUBDUED

BY JOSEPH BRUSUELAS

IN THE MODERN ERA of monetary policy and moderate growth, global authorities have shown twice in the past decade their ability to counter horrific shocks to the financial sector and economic activity. Therefore, inflation expectations remain remarkably well anchored despite the recent five-month surge in topline inflation.

Investors understand and believe that if the transitory nature of the current increase in inflation turns out to be more persistent, central banks possess the tools and the will to change policy to address those challenges. That is why expectations for moderate rates of inflation are crucial for the orderly and sustained growth of an economy.

By the end of 2020 and before the vaccination program was fully implemented, expectations were for inflation to average 2.15% over the next 10 years. At present, and because of greater price volatility due to the sudden reopening of the economy, the surge in consumer demand and subsequent supply chain issues, expectations are for the inflation rate in the next few years to move above 2.3% before settling down to roughly 2.25% over time.

Recent history

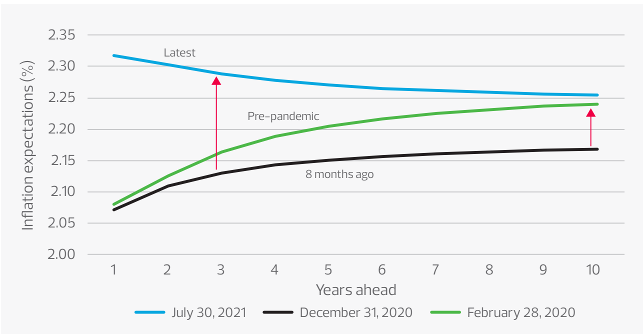
There are numerous examples in recent history where inflation has reacted to shocks, ranging from Spain and Italy—prior to going under the wing of the European Central Bank—to Argentina, where misguided monetary policies led to episodes of rampant inflation and currency devaluations. But current and forward-looking inflation expectations do not imply anything comparable happening in the domestic economy.

Just before the pandemic in February 2020, expectations for near-term inflation were pushed downward as concerns grew that the global manufacturing recession would push the U.S. economy into recession. Still, expectations were for the Federal Reserve to successfully engineer the 1.2% inflation rate toward a healthier level of 2%, and for the economy to sustain a 2.25% rate over the next 10 years.

EXPECTATIONS ARE FOR THE INFLATION RATE IN THE NEXT FEW YEARS TO MOVE ABOVE 2.3% BEFORE SETTLING DOWN TO ROUGHLY 2.25% OVER TIME.

Inflation expectations during the recovery from the pandemic

ARUOBA TERM STRUCTURE OF INFLATION EXPECTATIONS (ATSIX) FOR 1–10 YEARS AHEAD AS OF FEBRUARY 2020, DECEMBER 2020 AND JULY 2021



Source: Federal Reserve Bank of Philadelphia; RSM US LLP

The Fed's preferred metric of inflation expectations has been the market-based five-year/five-year forward rate. Currently, the bond market is pricing in the context of increased risk to the economy from the spread of the delta variant, but a projected long-term inflation rate of less than 2%.

Rationalizing short-term moves in interest rates

As of the middle of August, the yield on 10-year Treasury bonds has dropped again to below 1.25% from its local peak of 1.7% in mid-April. If the initial move up to 1.7% can be rationalized as a response to higher growth and inflation concerns, then this recent move below 1.25% in the midst of an economic recovery must be the converse.

The factors in this down cycle likely include:

- **Politics** (Expanding the social safety net—and approving a soft stimulus package—becomes more difficult every day.)
- **Public health** (A highly infectious coronavirus variant is spreading.)
- **Increased demand for bonds** (Treasurys are recognized as providing a risk-free return in an increasingly risky economic and national security environment.)

Regardless, sub-2% interest rates by any degree are not what a healthy economy would support and suggest the need for additional government response. A fiscal stimulus that invests in productivity and competitiveness of the U.S. economy will pay for itself when interest rates are this low.

10-year interest rates

WEEKLY YIELD OF 10-YEAR TREASURYS

Source: Bloomberg; RSM US LLP

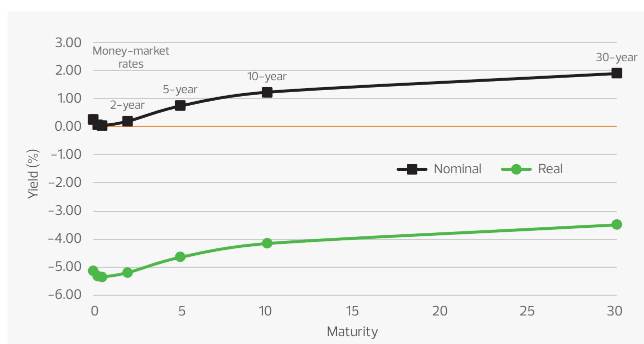
Changes in real yields

The increase in inflation to above 5% has pushed the real (inflation-adjusted) yield on 10-year Treasury bonds even lower, to negative 4%. We expect inflation to have peaked and to normalize toward a 2% rate as the surge in economic demand moderates and supply chain issues are resolved.

The goal of the monetary policy is to facilitate investments by pressuring interest rates lower. A negative real yield curve and expectations for a growing economy and sustained normal levels of inflation will allow those investments to be paid back in inflation-depreciated dollars.

Nominal and real U.S. Treasury yield curves

NOMINAL TREASURY YIELDS AND INFLATION-ADJUSTED YIELDS AS OF AUG. 17, 2021



Source: Bloomberg; RSM US LLP calculations

SUB-2% INTEREST RATES BY ANY DEGREE ARE NOT WHAT A HEALTHY ECONOMY WOULD SUPPORT AND SUGGEST THE NEED FOR ADDITIONAL GOVERNMENT RESPONSE.

Growth concerns, inflation risks and interest rates

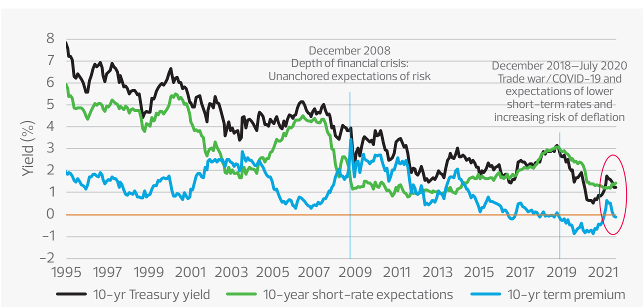
Confidence in the recovery—which had nearly eliminated the perceived risk of economic collapse and deflation—once again turned sour over the summer months. While that could be the result of summertime trading, it is most likely due to the resurgence of COVID-19 cases among the unvaccinated American public and the potential for additional shutdowns overseas, in Japan and China in particular.

There are never straight lines in asset pricing, but the recent drop below zero priced into the term premium for 10-year Treasury yields and the decline in expectations for short-term rates over the next 10 years both reflect a rethinking of the recovery's trajectory.

At the same time, Fed guidance consistently calls for lower-for-long money market rates. If all goes to plan, the result will be an economy that can support higher long-term interest rates, while monetary policy pressures short-term interest rates lower. That would create a steep yield curve out to 10 years that would be conducive for bond trading as an alternative to riskier investment in other assets.

Expectations and risk components of 10-year yields

EXPECTATIONS OF SHORT-TERM RATES AND THE TERM PREMIUM BUILT INTO 10-YEAR TREASURY YIELDS



Source: Federal Reserve Bank of New York; Adrian, Crump & Moench; Bloomberg; RSM US LLP

Interest rate normalization?

Because of structural shifts in the global economy—the rise of automation, the advent of the global supply chain and the adoption of inflation-targeting by central banks—the expected return on investment has trended lower, particularly in the aftermath of the global financial crisis and the Great Recession. As such, developed economies arguably can no longer support the high real (inflation-adjusted) rates of return in earlier decades.

MIDDLE MARKET INSIGHT

Currently, the bond market is pricing in the context of increased risk to the economy from the spread of the delta variant, but a projected long-term inflation rate of less than 2%.

According to an analysis by Holston, Laubach and Williams at the San Francisco Fed, the natural rate of interest is defined as "the real short-term interest rate that would prevail absent transitory disturbances." According to Lubik and Matthes at the Richmond Fed, the natural rate of interest is a hypothetical interest rate that is "consistent with economic and price stability."

Holston, Laubach and Williams maintain that the natural rate provides a benchmark for monetary policy. Real short-term rates below the natural rate indicate an expansionary policy, while real short-term rates above the natural rate indicate a contractionary policy. According to Lubik and Matthes, "it is not the level of the natural rate that matters but its value relative to other interest rates."

During the decade-long recovery from the Great Recession, U.S. real short-term interest rates were negative and below the natural rate estimates for all but a few periods. That indicates monetary policy has been accommodative, even during the period of interest rate normalization near the end of the 2010—2019 business cycle that drew so much criticism.

In our estimation, the decline in the natural rate from the Great Recession to the present and the concurrent secular decline in 10-year yields and GDP growth suggest structural issues in the economy that we have yet to overcome. Despite the best efforts of the monetary authorities, fiscal authorities may need to do more to avoid becoming the Japan of this century.

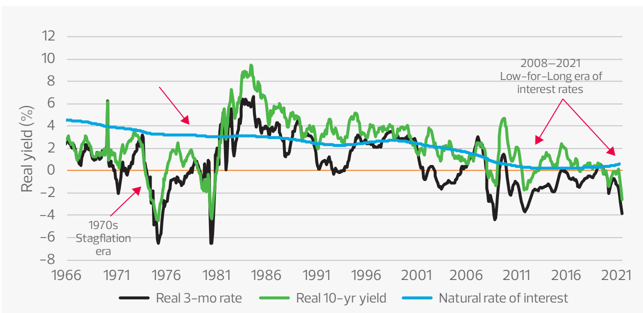
We need to create the foundation for the next economy, both in physical terms—via traditional structural improvements based on rethinking of the energy and broadband grids—and in intellectual terms, by addressing deficiencies in the education and health of the labor force. The United States is no longer the leading exporter of the world. Efforts to rebuild the old economy are likely to turn out shortsighted and be a waste of resources.

AN INCREASE IN THE NATURAL RATE IN THE FIRST QUARTER IS A POSITIVE FIRST STEP TOWARD NORMALIZATION OF INTEREST RATES AND OFFERS THE POTENTIAL FOR A SUFFICIENT RETURN ON INVESTMENT.

As our analysis indicates, an increase in the natural rate in the first quarter is a positive first step toward normalization of interest rates and offers the potential for a sufficient return on investment and the re-imagining of the U.S. economy.

Real interest rates and the natural rate of interest

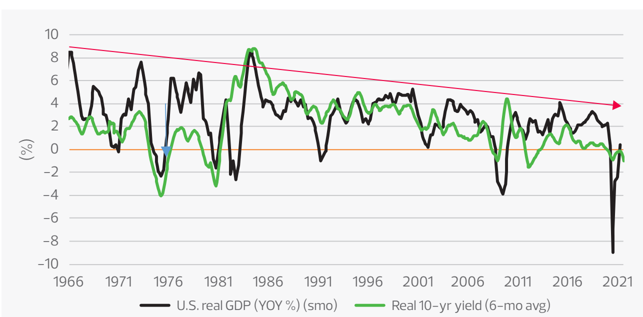
3-MONTH T-BILL RATE AND 10-YEAR TREASURY YIELDS LESS INFLATION



Source: Laubach-Williams; Bloomberg; RSM US LLP

Long-term trends in real GDP growth and real 10-year interest rates

10-YEAR TREASURY YIELDS LESS INFLATION



Source: U.S. Bureau of Economic Analysis; U.S. Bureau of Labor Statistics; Bloomberg; RSM US LLP

MIDDLE MARKET INSIGHT

A negative real yield curve and expectations for a growing economy and sustained normal levels of inflation will allow investments to be paid back in inflation-depreciated dollars.

Bond market developments

High-yield bond spread: The confidence in the vaccination program and the subsequent economic recovery is evident in the reduced spread between high-yield corporate bonds and U.S. Treasury bonds from March 2020 to the present. A growing economy indicates diminished risk of corporate default, and a reduced premium required to hold those bonds.

The recent uptick in the spread is a reminder that the population is far from fully vaccinated.

The bid-to-cover ratio: This ratio in the Treasury market has remained comfortably above 2, an indication of the demand for Treasury securities despite their lack of return relative to riskier assets.

Foreign purchases of U.S. Treasurys: Purchases of Treasury bonds by foreign investors continue to increase. We attribute this to increased commercial demand for parking profits (from trading with U.S. importers) in U.S. securities, and the implied demand for safe-haven purchases. Increased demand in any form will help keep a lid on increases in yields and will allow the Fed to think about reducing its purchases of long-term bonds.

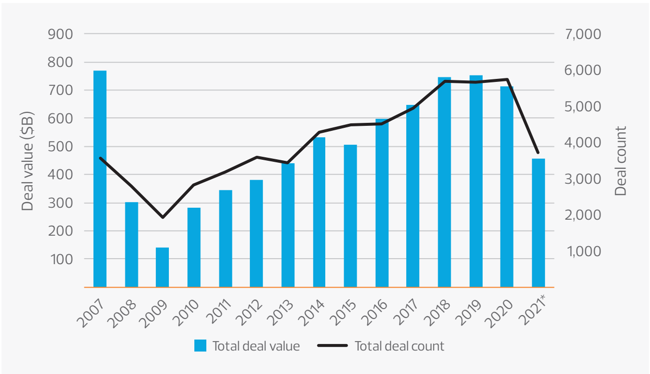
Foreign issuance of negative debt: The financial markets are international and interconnected. As such, the health of foreign economies plays a substantial role in the attractiveness of U.S. securities. When the debt is issued at negative interest rates in order to limit loss, the demand for U.S. debt issued at positive interest rates would be expected to rise.

BOOMING FIRST HALF FOR PRIVATE EQUITY ACTIVITY SETS STAGE FOR A RECORD YEAR

BY NELLY MONTOYA AND KENNEDY CHINYAMUTANGIRA

PRIVATE EQUITY deal activity is on pace for its best year on record. With $457 billion worth of deal activity recorded over the first half of the year, according to data from PitchBook, the cumulative activity midway through the year is the strongest it has ever been in terms of both deal value and deal count. Deal activity in the middle market (typically deals valued between $25 million and $500 million) leads the way, making up over 62% of the deal volume by both measures—the highest proportion ever recorded.

U.S. private equity deal flow



Source: RSM US LLP, PitchBook *As of 6/30/2021

A resurgent U.S. economy in the first half of the year and forecasts for strong growth in the back half sustained the momentum that started in the fourth quarter of 2019. Deal-making sentiment was bolstered by growing confidence as more people got vaccinated, and financial conditions remained largely accommodative, with the Federal Reserve keeping liquidity plentiful and interest rates low.

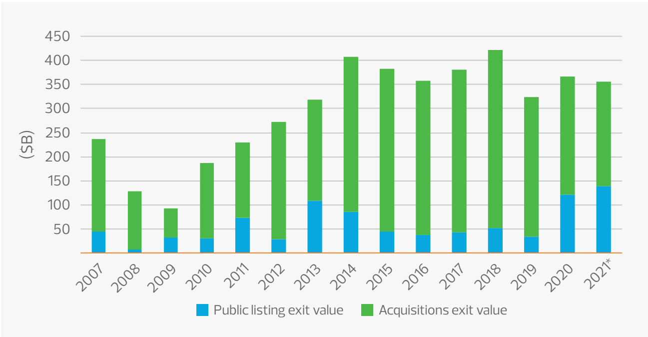
"The Olympic magnitude of deal flow is on track to set new records in 2021 based on the relentless demand we are seeing from our clients for M&A advisory services," says Joe Ring, national mergers and acquisitions integration and separation practice lead at RSM. "The current deal pace requires careful planning and execution to realize the deal thesis outcomes."

Incentives to pursue deals also remained elevated on both sides, with ample private equity dry powder encouraging buyers to seek avenues to deploy capital and business owners motivated to sell due to the possibility of capital gains taxes being raised as the Biden administration seeks to fulfill its agenda.

Exits

Exit activity ran even hotter than overall deals, driven by the most active half-year of initial public offerings on record. As of the end of June, exits in 2021 nearly matched the total for all of 2020 and already exceeded the full-year total for 2019. Cumulative exit activity at the end of June totaled $356 billion compared to the annual total of $367 billion and $323 billion for 2020 and 2019, respectively, according to PitchBook data.

U.S. private equity exit activity



Source: RSM US LLP, PitchBook *As of 6/30/2021

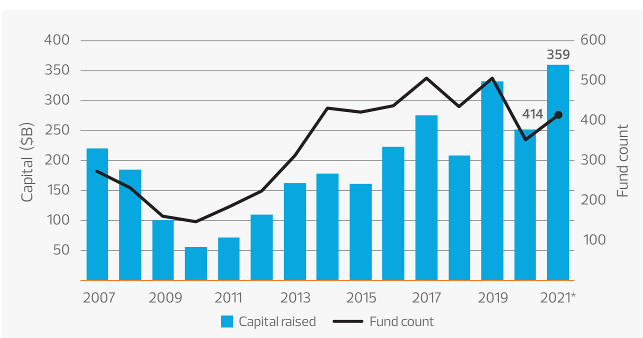
With stock market valuations soaring, exits via public listing have been on a tear and were the main driver behind the explosion in exit transactions in the first half of the year. Activity has already generated a record total in dollar terms for private equity exits via initial public offering, with another six months still to be recorded. Approximately $140 billion in IPO activity was recorded by the end of June, contributing 39% of the total private equity exits over this period. These are staggering numbers coming on the back of the annual IPO exits total of $122 billion from 2020, which in itself set a new record.

A total of 60 IPOs of private equity-backed portfolio companies came to market through the end of June, representing approximately 9% of the total count, compared to an average of only 5% prior to this year, according to PitchBook data going back to 2007.

Fundraising

While fundraising is healthy and might break records for capital raised, it is not on track to beat fund count records. As of June 30, $180 billon of capital was raised across 207 funds, per PitchBook. Annualizing this data translates to a potential $359 billion of capital raised in 2021, which would be slightly better than the previous record of $332 billion raised in 2019. Annualizing the fund count translates to 414 funds for 2021, which would be higher than 2020 but not compared to 2019.

U.S. private equity fundraising activity



Source: RSM US LLP, PitchBook

*As of 6/30/2021, annualized

The pickup in fundraising in 2021 reflects the move away from the "putting out fires" mentality brought on by the pandemic toward more stability this year, with firms better able to revert to fundraising. When looking at PitchBook data for the total dry powder available at the end of the second quarter, U.S. private equity firms likely have $1 trillion in capital available to deploy.

Outlook for second half of the year

Based on July data from Bloomberg, it appears that this breakneck pace in private equity deal activity, exits and fundraising may persist through the end of the year.

A key factor that points to continued strength in deal-making is the fact that fund managers have learned to conduct deals and some aspects of the due diligence process virtually. One benefit of virtual deal activity is that U.S. funds have increased their investment in portfolio companies outside the country. Another factor that will continue to support deal activity is that the U.S. economy has largely opened up, resulting in more in-person meetings. While knowing how to conduct a deal virtually is helpful, having the option of holding more in-person meetings will be beneficial in the long term.

Additionally, private equity as an asset class continues to be in high demand. Accordingly, Private Equity International's December 2020 LP Perspectives Study showed that 80% of limited partners were confident the asset class would continue to perform in 2021. About 40% of the limited partners surveyed indicated they were underallocated in private equity and planned to increase or maintain their commitments. This, coupled with strong exit activity, indicates the second half of 2021 will be as hot as the first.

While tailwinds are expected to continue stimulating private equity activity for the second half of the year, some downside risks could still arise.

After plummeting from peak levels in January, new reported COVID-19 cases and related hospitalizations and deaths have been rising again in the United States since early July. The spread of the delta variant of the virus has led some companies to push back return-to-office timelines and reinstate mask-wearing guidance. If the curve continues its upward trend and more restrictive measures are implemented to minimize the damage, there is a risk that economic activity and business sentiment will drop to levels that may lead to a slowdown in private equity activity.

Financial conditions have been very accommodative, with strong support from the Federal Reserve. A shift in conditions for the worse might put a damper on the frenetic pace of private equity deal activity and capital raising. While the risk currently seems low, this is worth watching, as it can change should markets look to test the Fed's resolve and patience in normalizing monetary policy from the current ultraloose stance.

This happened in the first half of the year, when fears that inflation might overrun benchmark interest rates led to a rise in market yields and a spike in stock market volatility, briefly sending financial conditions on a downward trend before the Fed regained the narrative. Fears of policy error as the Fed starts contemplating plans for slowing down its asset purchase program may trigger similar bouts of market panic.

THE **ALTERNATIVE**

ALTERNATIVE ANALYSIS FOR INFORMED MIDDLE MARKET DECISION-MAKING

THE RETURN TO OFFICE SLOWS IN THE TECHNOLOGY SECTOR

BY KURT SHENK

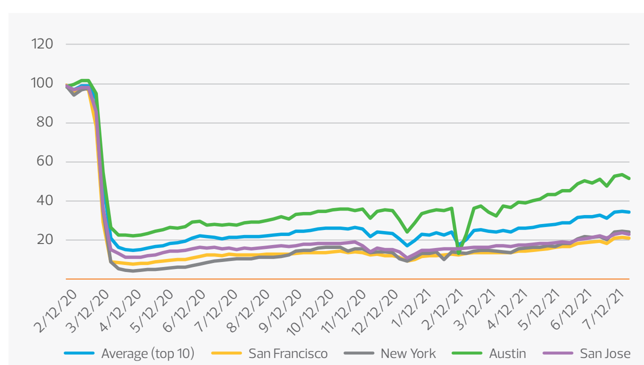
LIKE MANY BUSINESSES across the economy, technology companies continue to reassess the timing and scale of their return-to-office plans as COVID-19 cases rise around the United States. During the second quarter of this year, pandemic data in many parts of the country was improving; hospitalizations were going down and more people were getting vaccinated. Then, in July, the news turned as concerns over the new delta variant spiked.

Data from Kastle Systems, a security management company, sheds some light on what the return to the office looks like across 10 major U.S. cities. The company tracks access card swipes in its commercial buildings in these cities, and this information shows how building occupancy plummeted in March 2020 and has in recent months been gradually increasing.

This data—shown in the accompanying chart—spans multiple industries. The share of people returning to in-person work in the technology sector is likely lower, given that many tech workers can do their jobs remotely.

Two of the largest technology hubs in the United States—the Bay Area (comprising San Jose and San Francisco) and New York—have had a below-average number of workers returning to the office. Austin, Texas, another technology hub, has had the most significant return-to-office percentages; more than 1 of every 2 workers—across the economy as a whole—returned to in-person work during several weeks in July. (While keeping in mind that many factors are at play in rising COVID-19 cases, it is notable that Texas has had a higher number of cases per capita than California and New York, according to CDC data from Aug. 16.)

Weekly occupancy rates in major tech markets



Source: Kastle Systems, Bloomberg

TWO OF THE LARGEST TECHNOLOGY HUBS IN THE UNITED STATES—THE BAY AREA AND NEW YORK—HAVE HAD A BELOW-AVERAGE NUMBER OF WORKERS RETURNING TO THE OFFICE.

MIDDLE MARKET INSIGHT
Middle market tech companies may have the flexibility to remain more nimble navigating between remote work and returning to the office.

Tech companies respond

Tech companies, like many individual Americans, are tracking and assessing the latest COVID-19 information in order to manage risk. Each month that the pandemic continues, workers continue to get more accustomed to working from home. Within the last two weeks, several big technology companies have discussed their plans for returning to the office:

- Microsoft, Google and Uber have delayed their companywide return to office from September to October.
- Amazon, Lyft and Roblox have delayed the return to office until sometime in the first quarter of next year.
- Twitter had already opened its offices in July of this year, and has subsequently paused its reopening. (Twitter also announced in 2020 that employees could work from home indefinitely.)

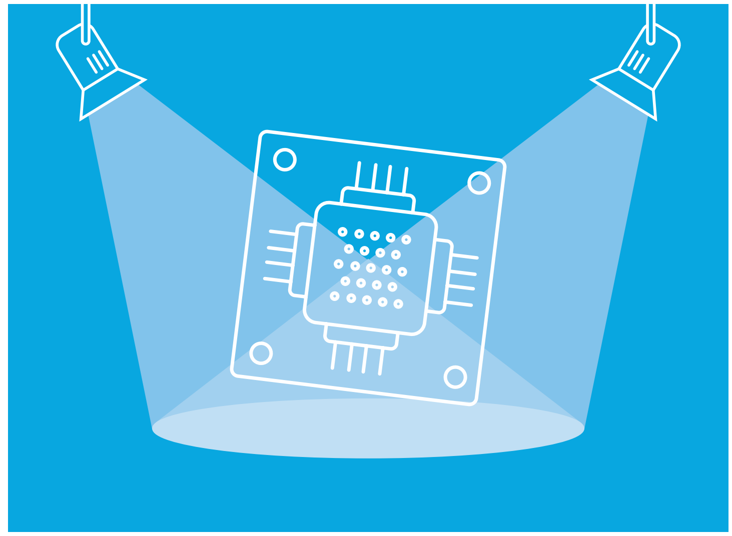
There is also the question of whether companies will require employees to be vaccinated against COVID-19 in order to return in person. Here is how several large companies—in tech and beyond—have handled this matter:

- Beginning in September, Microsoft will require employees to show proof of vaccination when entering the office.
- Facebook and Google are requiring their employees visiting an office to be vaccinated.
- Walmart, the largest private employer in the United States, is requiring back-office employees to get vaccinated by Oct. 4 and continues to provide cash incentives for frontline store workers to get the vaccine.
- Walt Disney employees will be required to be vaccinated. Additionally, the company has entered into conversations with unions about requiring vaccines for those working under collective bargaining agreements.

Middle market implications

Some early-stage technology companies have never had an office and employees will continue to work remotely after the pandemic. Other technology companies, particularly late-stage or more mature firms, have already been back in the office for months. Middle market tech companies may have the flexibility to remain more nimble in navigating between remote work and returning to the office.

History has shown that management teams at midmarket tech companies will look to what Big Tech companies in Silicon Valley are doing to inform their approach. Companies of all sizes will have to be strategic about how they navigate returning to in-person work, given the battle to attract and retain top talent. Whether it's after Labor Day or sometime in 2022, it will be interesting to see how the sector continues to address this issue—and how employees will respond.



TECH IPOS HAVE BEEN WHITE-HOT, BUT WILL THE TREND CONTINUE?

BY KURT SHENK

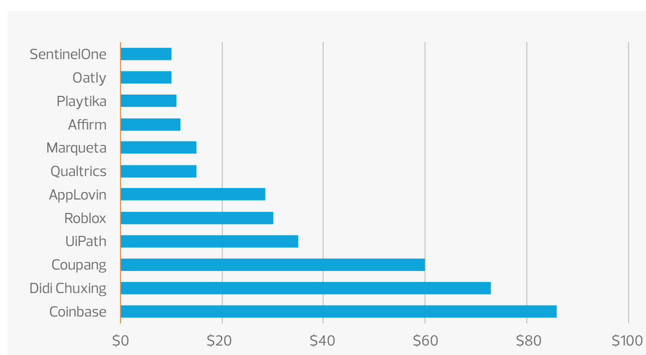
INITIAL PUBLIC OFFERINGS in the technology sector have performed quite well so far this year, particularly in the fintech and biotech sectors. Some of the most notable tech IPOs to date include Coinbase, UiPath, Affirm and Roblox.

The traditional IPO has historically been the most frequently used vehicle for tech companies that decide to go public. But Coinbase, Roblox and Squarespace—three of the year's largest IPOs—chose a direct listing, and other companies such as SoFi chose a special purpose acquisition company (SPAC). Subsequent to their public debuts, these companies largely continue to provide investors with robust returns, as the weighted average offer-to-date performance of 2021 IPOs within the technology sector is 19.1% as of Aug. 9, according to Bloomberg.

After a busy July, the tech IPO market appears to have gone on vacation. The first week of August had four IPOs and four postponed, according to Renaissance Capital. This is a noticeable slowing in the IPO market, compared to 28 IPOs the last week of July. SPAC registrations continue to show strength, with seven of these "blank-check IPOs" announced in the first week of August.

2021 IPO market cap valuations over $10B

$ BILLIONS



Source: Crunchbase, Visual Capitalist

Eyes on the second half

As with many years in recent history, it is possible that some of the biggest companies going public are lined up for the second half of the year. Instacart, Databricks, Nextdoor, Rivian and Discord IPOs are some of the most highly anticipated debuts that are reportedly slated for the back half of this year.

Additionally, Stripe, one of the largest venture capital-backed companies in the United States, is reportedly considering going public. Stripe has had a robust growth journey through the pandemic. In March 2021, the company raised $600 million in a Series H funding round, putting the company's pre-money valuation at $94.4 billion. That's nearly three times the company's pre-money valuation of $35.15 billion 11 months earlier in April 2020, when the company raised its $850 million Series G round. Though Stripe's debut as a public company may not take place in 2021, fintech investors will keep its expected eventual debut top of mind.

MIDDLE MARKET INSIGHT
It is possible that some of the biggest companies going public are lined up for the second half of the year.

In summary, the IPO window appears to remain open in the back half of this year. Many of the technology companies that have provided crucial digital foundations of the U.S. economy's infrastructure over the last 18 months are expected to cash in. Even beyond 2021, as a result of the rise of SPACs within the last year, we anticipate more technology companies will turn to the public markets for additional capital as well as liquidity for early investors.

RSM US AND U.S. CHAMBER OF COMMERCE ECONOMIC FORUM:

WEBCAST
THE **REAL ECONOMY**

POLICY, ECONOMICS AND YOUR BUSINESS

MONDAY, SEPT. 27 | 1–2 P.M. EDT

Join Joseph Brusuelas, RSM US LLP chief economist, and Neil Bradley, executive vice president for the U.S. Chamber of Commerce, for The Real Economy webcast on policy, economics and your business. Get a current-state economic overview as well as key insights on top policy issues affecting middle market businesses. Register now!

JOSEPH BRUSUELAS
RSM US CHIEF ECONOMIST

NEIL BRADLEY
U.S. CHAMBER OF COMMERCE EVP

MIDDLE MARKET TREND WATCH

CONFIDENCE IN THE ECONOMY, BUT CONCERNS LINGER

AMERICAN MIDDLE MARKET business conditions point to continued robust economic growth, with rising revenues and net earnings during the third quarter and over the next six months, according to the proprietary RSM US Middle Market Business Index survey for the third quarter. The top-line business conditions index increased from 133.6 in the second quarter to 145.5 in the third quarter of 2021, an all-time high in the MMBI survey's history. But the latest wave of U.S. COVID-19 cases, largely driven by the rise of the delta variant of the coronavirus, denotes a measure of risk in the otherwise encouraging outlook.

Senior executives are feeling good about the economy...

64% of senior executives surveyed said the broader economy improved in the current quarter.

65% said they expect the economy will do well over the next six months.

... and are preparing for busier times ahead...

48% of executives surveyed indicated they have started to rebuild inventories, in contrast with the **34%** who reported doing so in the previous quarter.

54% said they expect to rebuild inventories through the end of the year.

... but higher costs remain an issue, and that may continue as the delta variant spreads.

74% of executives reported they had paid higher prices for inputs.

76% noted they expect to pay higher prices for inputs over the next six months—though that figure is a decline from the **85%** in the previous quarter's survey.

For more on the middle market and infrastructure, read the full report.

For more information on RSM, please visit **rsmus.com**.

For media inquiries, please contact Terri Andrews, national public relations director, +1 980 233 4710 or terri.andrews@rsmus.com.

For more information on RSM thought leadership, please contact Deborah Cohen, thought leadership director, +1 312 634 3975 or deborah.cohen@rsmus.com.

TRE-NT-ALL-ALL-0921