RockCreek

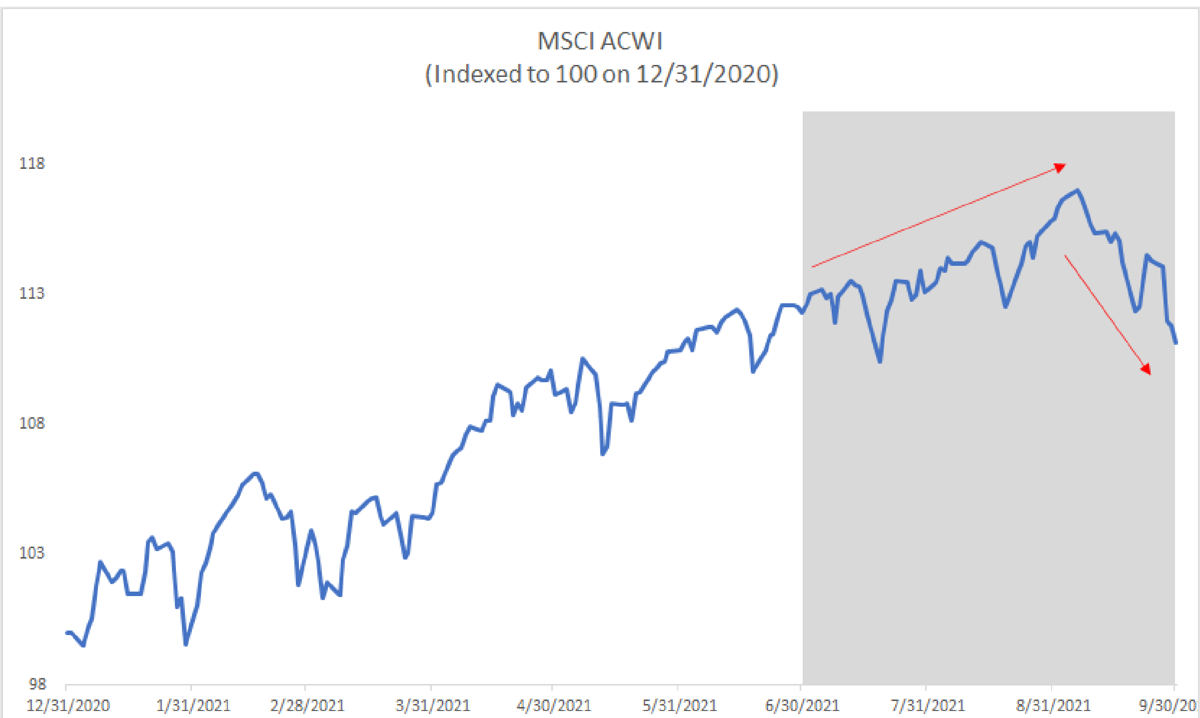
A Tale of Two Parts

Q3 2021

Table of Contents

The third quarter began on an upswing. Covid-19 was in the rear-view mirror – or so it seemed. Growth was accelerating. Across America and Europe, holidaymakers eagerly planned summer vacations. Expectations were high for a "normal" return to work and school in the fall. Financial markets continued to rise to new records.

The picture changed sharply during the quarter – as the ravages and uncertainties of Covid-19 continued to bedevil the global economy. By the quarter's end, economic indicators showed a mostly flat summer – supply chain disruptions and labor shortages hampered production. In China, growth slumped to just 0.2 percent from Q2 (4.9 percent on a one-year earlier) with power shortages and a property slowdown adding to Covid woes. Health concerns across the globe led to a pullback in travel and other services and in the US probably contributed to disappointing jobs numbers. Payrolls rose by only 194,000 in September, after 366,000 in August. Both fell far short of the million plus increase recorded in July. But inflation stayed persistently high. Consumer price increases hovered between 5.2 and 5.4 percent year-on-year through the third quarter, a 13 year high. As whispers of stagflation grew louder, equity markets slipped across the globe. After stocks hit new peaks in July and August, September followed with the first negative month since January.



The growth outlook for the global economy in Q4 is more promising, particularly for advanced economies. Vaccination rates are rising there and the Delta variant, which raged across the world, seems to be subsiding, following an as-yet unexplained pattern of two-monthly cycles of disease. The IMF, in its [World Economic Outlook](), released October 12, lowered its global growth projection for 2021 very slightly, to 5.9 percent. Underlying the global figure were larger shifts in projections for individual countries. In particular, the IMF has downgraded its 2021 projections for the United States and other advanced economies, in light of the summer surge in Delta. But it still sees a healthy recovery going into next year, with the US forecast to grow 6 percent this year and a little over 5 percent in 2022. Markets have also cheered up a bit, although bond traders are on the lookout for earlier than expected monetary tightening.

Caution is still warranted – and investors should remain ready to be flexible. Much as we might wish it, the pandemic is not yet behind us. With winter coming, and economies—and travel—gradually opening up, there could be another rise in infections and perhaps linked to new variants of the virus. After all, Covid-19 has confounded forecasters with its twists and turns for nearly two years now. What also matters is the reaction function of policymakers.

THE DISEASE IS THE SAME, BUT HOW COUNTRIES REACT IS NOT: HOW THE COVID RESPONSE COMPLICATES THE OUTLOOK

In Q3, the Delta variant spread across the world. As it did so, unexpected interactions between the pandemic and the responses of governments and their citizens came to the fore, shaping developments in the quarter. Demand was bolstered in the West, at the same time as hiccups in supply emanated from the East and were amplified by transportation bottlenecks.

In Asia and the Pacific, even small outbreaks of disease have typically led to widespread lockdowns, halting output in factories dotted across the region. This, in turn, has triggered some of the worst global supply disruptions in recent memory—with inputs coming from many different countries and regions—illustrating the fragility of “just-in-time” supply chains, developed over decades, which now span the world. In Europe, health concerns over the summer led to ups and downs in demand for services, including travel and dining out, in tourism-dependent countries. As Delta spread, so did acceptance of vaccine mandates, including for entering restaurants, theaters, and other public spaces. At the same time, the global bottlenecks in production and transport of inputs weighed on businesses, notably in Germany, the manufacturing and economic heavyweight of the continent. Industrial production there dropped -4 percent in August, with companies blaming supply shocks rather than the kind of weak demand that characterized the aftermath of the 2008 global financial crisis and subsequent euro crisis.

Developments in the United States stand out for the impact of the extraordinarily large fiscal stimulus implemented in 2020 and 2021, alongside monetary ease. Last quarter, the fiscal push waned as stimulus checks and temporary boosts to unemployment benefits ended. But as a result of those measures, consumers were in a stronger position to spend over the summer than they usually are post-recession. Savings had built up during earlier stages of the pandemic, as incomes were largely maintained, even with sharp declines in employment. Over the summer months, consumers began to dip into these funds. But bucking the decades-long trend of a growing service economy, what consumers wanted to buy this summer was different. Instead of splurging on services, consumer demand rose for goods purchases – think home improvement, clothes, and furniture. And this added demand came just as the linkages around the world that supported easy, cheap manufacturing were fracturing.

THREE BIG MACRO TRENDS EMERGED IN Q3

It is still too soon to know the long-term impact of the Covid-19 pandemic on the global economy. But three macro issues stood out in the third quarter: persistent inflation, widespread supply bottlenecks, and a shift in views of China – the world's second largest economy.

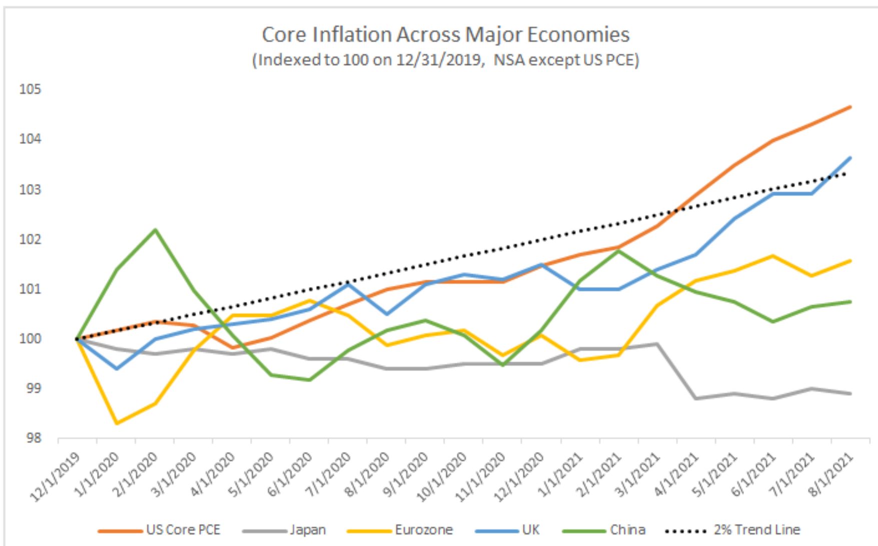
On **inflation**, it became clear over the summer that something important has changed from the pre-pandemic world. Just a year ago, major central banks still despaired of being able to push inflation up to reach the typical 2 percent targets. To get there, officials expected—and promised—to hold interest rates low for longer, with continued asset purchases to bolster the impact. When price increases surprised on the upside in the spring, the Federal Reserve labeled the inflation as "transitory" and scarcely moved its projections for this year and next.

Between June and September, the mood shifted. The Fed increased its inflation forecast from 3 percent to 3.7 percent for 2021 and acknowledged that interest rates were likely to "lift off" in 2022 rather than 2023. Even the new inflation number may be hard to reach. It implies a sharp slowdown in the monthly inflation rate from the 0.4 percent average during the third quarter to 0.1 percent for the rest of the year. Ahead of the September jobs data, Chair Powell had said that a "decent" report was all that was needed for the Fed to begin to taper asset purchases, perhaps as soon as in November. The disappointing data created what CEO Afsaneh Beschloss characterized for the FT as a "conundrum": 5 million more Americans are still out of work than at the start of the pandemic, suggesting that the labor market recovery lost steam over the summer. The Fed's November policy meeting comes before the next monthly labor market report, for October, is released. Policy makers will have to scrutinize the weekly data for unemployment insurance claims to get a sense of the latest labor market developments. The report for the first week in October was the best since the beginning of the pandemic. If the downward trend in weekly claims continues, this may give the Fed enough cover to move —especially given inflation worries.

For some, the increase in inflation brings back memories of the infamous "stagflation" of the 1970s, brought to an abrupt end by Paul Volcker's monetary tightening and the steep recession that followed. Rising energy prices have played into this concern (more on energy below). But the Fed has been right to push back on the need for immediate monetary tightening. For one thing, the US recovery has further to go to pull more workers into the labor force, raise productivity, and address some of the underlying concerns that have led to political and social division. A tight labor market usually leads to more jobs for marginalized workers.

One bright spot in recent labor market indicators is that lower income wage earners appear to have been getting above average pay increases as labor shortages appear, although pandemic shifts in the composition of the workforce make it harder than usual to interpret earnings data. The decision of 10,000 workers at John Deere to strike—for the first time in 35 years—suggests that companies may need to accede to greater demands from labor than has been usual for a long time. On average, earnings were up by 4.6 percent in the year to September, less than the headline rise in consumer prices which includes the impact of energy and food prices. The recent sharp increases in those two categories hit real incomes of workers and families. Experience shows that these volatile prices can also move down. Inflation—in the

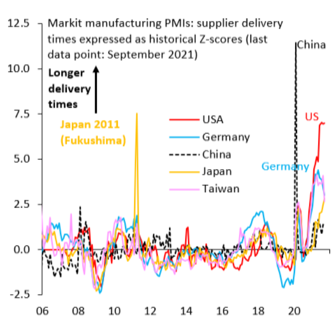
United States and to some extent in the United Kingdom—is proving higher and longer lasting than most expected. It is not yet signaling a danger level where wage and price setters shift expectations and behavior, although it will be important to watch the outcome of the John Deere strike and other contract negotiations in coming weeks and months. Unlike in the 1970s, there is widespread acceptance today of central bankers' interest rate tools, and ability to use them to cool the economy if needed. The Fed will be hoping that pressures ease gradually without requiring a sharp policy tightening.

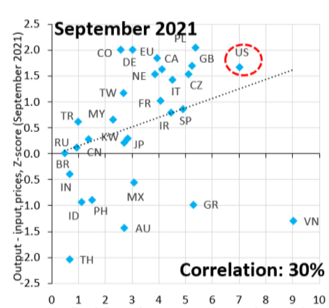


Indeed, as inflation stayed high in the third quarter, a number of economists began to fear that tightening might come too soon, arguing that the 2 percent target is too low. They believe that in a world of ample savings and inadequate investment—as the pre-pandemic world was—a 2 percent target tends to put interest rates dangerously close to the zero bound, beyond which traditional monetary policy loses traction. In today's world of unexpected price shocks from temporary pandemic-related frictions, the target may encourage the Fed to tighten prematurely. The argument for a change in target does not give full weight to the importance of expectations and credibility. It is likely that in the context of the more flexible targeting regime introduced by the Fed just over a year ago, and more recently by the ECB, the market can more easily understand forecast revisions and policy adjustments than an unexpected change in the numerical target itself. As the post-pandemic world becomes clearer, look for the Fed to remain attuned to incoming data.

Supply chain disruptions, the second big macro theme of the quarter, made their way into company reports and attracted the attention of markets and policy makers alike. As the quarter wore on, it became clear that pandemic-induced disruptions were going to last longer and have a bigger impact than expected on the global recovery and inflation. Late last month, Chair Powell argued that the current inflation spike is a consequence of supply constraints meeting very strong demand. “That is all associated with the reopening of the economy, which is a process that will have a beginning, middle, and an end,” Powell said. “It’s very difficult to say how big the effects will be in the meantime or how long they last.”

Bottlenecks have led to extraordinary scenes in recent weeks of empty supermarket shelves and circling ships at sea, unable to dock and unload. Companies, from auto manufacturers to light bulb suppliers, found themselves scouring for inputs and explaining to baffled customers that they could not meet demand. Anticipating shortfalls in production, Apple has announced a cut in supplies of its latest iPhone. While the beginning of the summer saw a shortage of semiconductor chips, by summer's end it had become clear that disruptions in transportation—particularly at ports, as well as at manufacturing plants—were causing more complicated and widespread problems. These will take time to fix, with prices and supplies continuing to be subject to the vagaries of complex systems whose smooth functioning we used to take for granted. In some countries—notably the United Kingdom, with the impact of BREXIT on top of the pandemic—domestic distribution channels are also disrupted, with a shortage of long-distance truck drivers exacerbating problems. Within the United States, delivery systems are also under some strain, with businesses pointing to labor shortages. As discussed above, wage increases may be needed to pull workers off the sidelines.





Source: Robin Brooks, IIF

China's widening regulatory crackdown, and its potential impact on investment returns and growth, was another theme of Q3. Surprise announcements of stringent new guidelines for private companies, including shutting down the formerly profitable edu-tech sector, frightened off many foreign investors in the third quarter. As the impact of restrictions on mortgage and construction companies has threatened the enormous Evergrande property company and toppled mortgage company Fantasia, concerns have spread about the possibility of a deeper growth slowdown, as described later. Slower growth in housing could spill into other parts of the economy, affecting consumer spending and employment. While the Evergrande situation has had a significant impact on the residential property sector, the commercial real estate sector has been insulated and in fact has rebounded strongly so far in 2021 with significant demand in sectors such as healthcare, logistics, and industrial and data centers.

POLICY MATTERS: CENTRAL BANKS BEGIN TO MOVE; FISCAL FIGHTS IN THE US

The third quarter is traditionally when budget crises threaten. This year was no exception, with an impasse between Democrats and Republicans over funding the government and raising the debt ceiling and an internal fight among Democrats on President Biden's big Build Back Better plan. Markets did not take the debt ceiling flap too seriously – and they were right. The can has been duly kicked down the metaphorical road, but only for two months. There may be fireworks in Q4.

Q4 is also when monetary tightening is likely to begin in earnest, after the Federal Reserve signaled in September that its tapering is about to begin. The bond market had only a mini tantrum at the end of Q3. With Treasury 10-year yields still below 1.75 percent at the end of September and leading Fed officials, including Jay Powell and Lael Brainard, promising a higher bar for interest rate "lift off" than for tapering asset purchases, financial markets are mostly taking the expected tapering in stride.

Future Fed action may become somewhat more complicated by personnel shifts. As of this letter's publication, President Biden had not announced whether he would re-appoint Powell to a second term as Fed Chair, a prospect widely expected—and welcomed—by investors, even as Senator Elizabeth Warren called Powell "a dangerous man." Whoever helms the Fed into next year will have to do so without two experienced hands. As we mentioned in our Weekly Letter on Oct. 4, the sudden departures of Regional Bank Presidents Robert Kaplan and Eric Rosengren leave open slots, one of which is due to rotate onto the policymaking FOMC in 2022. Pile on an Oct. 1 Bloomberg report that Fed Vice Chair Richard Clarida traded between $1 million and $5 million out of a bond fund into stock funds the day before Chair Powell announced possible policy actions, which prompted Sen. Warren to call for an SEC investigation.

Across the Atlantic, the Bank of England also signaled that it expected to tighten soon, although Governor Andrew Bailey has said that rate rises come before undoing QE. Japan and Europe still have much less inflation than the United States and United Kingdom and, as ECB President Christine Lagarde assured markets, "The Lady's not for tapering".

STUMBLES ON THE WORLD STAGE

The pandemic revealed fragilities in the global economy – as well as great strengths. Medical advances involved global coordination, as PIIE researcher Chad Bown noted in *Foreign Affairs*. And a better understanding of economics and finance helped guide governments to policies that turned the threat of a Depression into a short-lived, albeit steep, recession. By the end of the third quarter, output in most major countries was above its pre-pandemic level and other countries were on trend.

Summers are often a time of geopolitical upheaval. This year delivered shocks and changes that will continue to reverberate. The chaotic withdrawal of American and allied troops from Afghanistan in August was one, even though it may already be fading from US minds. The spat between the United States and France over nuclear submarine sales to Australia has been smoothed over—or perhaps papered over—with the recent visit of Secretary of State Tony Blinken to Paris and his support of French President Emmanuel Macron's vision of a stronger, more independent defense force for Europe. Germany, traditionally more cautious about defense spending, is not in its usual role of continental leadership as Angela Merkel gets ready to step down after 16 years as Chancellor. The September elections were so close that it will likely take weeks or even months for a new government to be formed. Current Finance Minister and leader of the Social Democratic Party Olaf Scholz is focused now on forging a governing coalition.

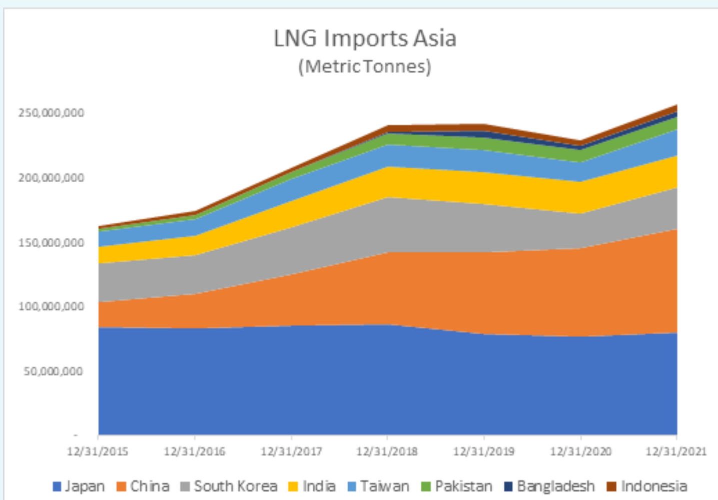
Spotlight: Natural Gas

Natural Gas and Energy

Energy prices have been on a tear since mid-2020, and none has had a more spectacular run than European natural gas. This price action could be seen as somewhat positive for a successful energy transition as higher carbon prices encourage investment in alternative generation sources. In the meantime, this price action coupled with natural gas's role as a bridge fuel is causing serious growing pains in the form of higher electricity prices. How did we get here, and what are the key events to watch going forward?

Demand Rises in the East

In 2017, China released its 13th Five-Year Plan, with energy generation targets to increase the proportion of energy generated from Natural Gas to 10 percent by 2020 and 15 percent by 2030. By 2020, imports of liquified natural gas (LNG) to China were up 160 percent from end 2016 levels, but natural gas contributed only 6 percent of total energy production – missing the country's target. The recently released 14th Five-Year plan emphasizes a continued transition away from coal power, indicating that demand for LNG should remain robust as the country transitions to greener energy generation and positive environmental impact.

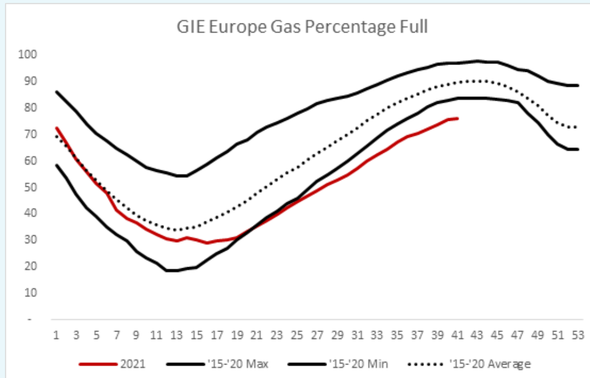


Source: RockCreek, Bloomberg, HIS, Genscape

Europe Out in the Cold

European Gas stores never really recovered from the exceptionally cold "COVID" winter, with 2021's gas fill lagging since May. This low level of reserves is creating a tight market in Europe as the weather chills again. The rise in demand for LNG in Asia has diverted supplies away from Europe while domestic production in the first half of 2021 lagged its 2020 and 2019 numbers (-6 percent and -19 percent, respectively). Pressures from these shortages have been exacerbated by outages from renewable energy generation, which are likely to appear sporadically over the medium term with the switch to greener energy sources and as nuclear power is decommissioned in Germany. Europe and the international community have turned toward Russia for relief. On October 6, President Vladimir Putin indicated he was happy to help balance the market in Europe—"This speculative craze doesn't do us any good"—though some have argued that Russia has been intentionally restricting gas supplies to facilitate a swift approval of its newly completed NordStream2 pipeline.

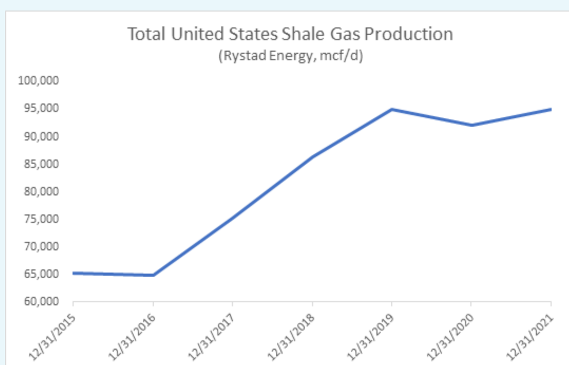
MACRO REVIEW & OUTLOOK



Source: RockCreek, Gas Infrastructure Europe, Bloomberg

Roughnecks not Riding to the Rescue

Meanwhile US shale producers have been exhibiting discipline, distributing free cash flow to shareholders rather than pouring it into new wells. Rising prices of both oil and gas internationally have increased speculation of another boom in the US market. While activity has picked up slightly, some executives continue to espouse capital discipline above all else. Pioneer Natural Resources CEO Scott Sheppard said recently, "All the shareholders that I've talked to said that if anybody goes back to growth, they will punish those companies." US natural gas production has remained around its end 2019 level. Even if production increased, there may not be sufficient LNG infrastructure to make a major difference to global balances.



So, what should investors watch for? Key developments in Europe relate to Russia. Putin's comments cooled the run in European prices; the approval and commencement of NordStream2 commercial operations would likely have an even bigger impact on prices. An unseasonably warm winter could ease demand pressures as well. Other slower-acting drivers include increased production and export capacity from the US and other gas sources for China. For example: China can also import gas from Russia, and does so currently via the Power of Siberia pipeline. Other potential sources include Iran, which has the world's second largest proven reserves of natural gas behind Russia. Additionally, it is possible that China develops its own gas fields. According to an IEA analysis, China has the largest technically recoverable shale gas reserves in the world. The development of these fields may prove physically challenging, and capital allocation that is driven from the top down may be slow in materializing. Finally, improved storage for renewables could also alleviate various stresses in the system.

SUSTAINABLE INVESTING

The third quarter of 2021 continued to demonstrate increased investor interest in sustainable investing – perhaps as a result of the upheaval from Covid-19 over the last 18 months. Across the plethora of new pledges, initiatives, flows, regulations, research, and other related efforts, it is clear that investors are being driven for financial, economic, and social reasons toward this area of investing. Tailwinds for investments in sectors and companies related to sustainable themes have never been greater and help support the case for institutions like RockCreek that have been investing in some of these global trends—education, job creation, climate, healthcare, affordable housing, financial inclusion—for years.

The political environment globally has been increasingly supportive of sustainable investing with a particular focus on climate related issues. Europe, which is already a leader in many ways on this, recently released the EU Sustainable Finance Disclosure Regulation (SFDR). A hot topic for many investors, SFDR requires all asset managers to publicly disclose climate risks and also any adverse impacts their investments may have on environmental or social factors – regardless of whether the strategy is being classified as sustainable. Products that are marketed as sustainable will face additional disclosure requirements. Similarly in the United States, the SEC established the Task Force on Climate-Related Financial Disclosures (TCFD) in order to review misleading ESG claims and develop clearer legal standards for asset managers. Discussions about regulations and disclosures are escalating, given the ongoing concerns around greenwashing, as sustainable investment products proliferate, and flows continue to move towards both ESG public strategies and private impact funds. The increase in products, strategies, and dollars toward ESG and impact comes with the dilemma of reporting and global standards. Having a clear set of guidance from regulators and other stakeholders is essential, so that thoughtful investors can demonstrate their ESG outcomes and not be penalized needlessly from conflicting bodies of oversight.

RockCreek continues to work with partners to invest in sustainable areas. Most recently, during the third quarter, RockCreek held a Climate Summit "Marshalling Finance for Climate Action." Watch the innovative ideas from our speakers such as Gina McCarthy, White House National Climate Czar; and Andrew Steer, President and CEO of the Bezos Earth Fund here. This month, RockCreek Founder and CEO Afsaneh Beschloss spoke alongside John Kerry and Mark Carney at the World Bank Group-IMF 2021 Annual Meetings on financing solutions to support a successful transition from fossil fuels to cleaner energy sources. Our investments in climate related themes continue to grow as we find new technologies, approaches, and economic and financial benefits in opportunities for our portfolios.

Across the broader sustainable investment opportunity set in public markets, approximately $225 billion of fund inflows have gone toward ESG labelled equity and bond funds year to date. The interest in climate related ESG investments is one of the largest sources of growth. Climate Bonds Initiative, a London based non-profit that provides certification for climate bonds, noted that there have been $348 billion green bonds issued year to date, with $105.5 billion in Q3 alone. For reference in 2020, $297 billion of green bonds were issued during all of 2020. With this proliferation of green bond issuance, data on the returns of these bonds versus the general market will be beneficial in structuring and investing in the green bond space in the future.

Sustainable investing in the private markets has been just as attractive for investors, especially those institutions that are already heavily invested in venture capital and growth equity strategies. Not surprisingly, a recent survey by Pitchbook indicated that investors have been focused more on these asset classes for their sustainable investment efforts rather than real assets or real estate. RockCreek has found high returning opportunities in venture and growth that fall within our highest conviction sectors and themes. From investing in the supply chain changes needed to reduce food waste; or financing the infrastructure project to install electric vehicles for a city's public transportation system; or an overhaul of a municipality's organic waste management system; to opportunities for growth in tools to support aging populations, such as the Amazon home robot – these are just a few examples of why investors looking to increase their sustainable investments are doing so through private markets.

Moving forward, areas to focus on in sustainable investing, outside of the growing opportunity set, include the compliance, reporting, and regulatory frameworks that need to be clear and concise. We anticipate much more work to be done in these areas over the coming quarters so that investors can adopt the necessary tools to demonstrate the value of sustainable investing.

PUBLIC EQUITIES

Equity Markets	Q3 2021
US Large Cap (S&P 500 TR)	0.6%
Nasdaq	-0.2%
US Small Cap (Russell 2000)	-4.4%
Japan (TOPIX)	5.2%
Europe (MSCI Europe)	0.8%
China (CSI 300)	-6.0%
Global EM (MSCI EM)	-8.0%

Bond Markets	Q3 2021
US 2yr	-2.7
US 10yr	-1.9
US 30yr	4.1
German 10yr	-0.8
German 30yr	1.4
UK 10yr	-30.6
UK 30yr	-14.0
JGB 10yr	-1.4
JGB 30yr	1.4

Currency Markets	Q3 2021
DXY	-1.9%
EUR	2.4%
GBP	2.6%
JPY	0.1%
MSCI EM Currency Index	0.9%

Commodity Markets	Q3 2021
Crude Oil (WTI)	-2.1%
Nat Gas	-37.8%
Gold (Spot)	0.7%
Steel (Rebar)	-16.1%
Ag & Livestock (Bloomberg)	1.2%

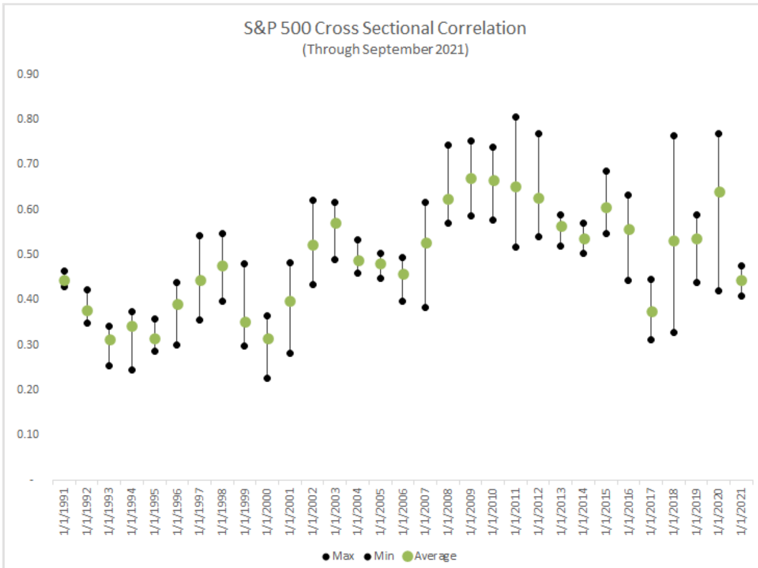
RCG HF Indices	Q3 2021
All Hedge Funds	0.0%
Equity Hedge	-0.4%
Absolute Return	-0.6%
Equity Market Neutral	1.3%
Event Driven	-0.5%
Global Macro	0.0%

Third quarter results for public equity strategies were mixed, with flat performance across markets. Despite less than roaring results, a positive first half of the year means developed market year-to-date returns still look strong. The slowdown in economic growth in Q3 led to a rotation toward secular growth companies with large-cap outperforming small-cap equities across developed markets. Sector performance was mixed as financials led the way on the back of inflationary pressures and the prospect of higher rates while industrials and materials clearly suffered from global supply chain disruptions and higher input costs.

Performance in Europe was largely on par with the United States, but Japanese equities saw a significant bounce back following weak performance in the first half of the year. The primary catalyst was Yoshihide Suga's decision to step down as prime minister and new prime minister Fumio Kishida's renewed mandate to combat Japan's sagging economy with fiscal and monetary stimulus. After a slow start with vaccinations, the country is now catching up with other developed nations and is on course to approach an 80 percent vaccination rate by year-end. Notably, after lagging other developed equity markets in recent years Japan now trades at a significant discount to global averages. Japanese equities are trading at 15x 2022 earnings and 1.5x Price/Book compared with a forward P/E of 19.5x and Price/Book of 3.3x for the MSCI ACWI.

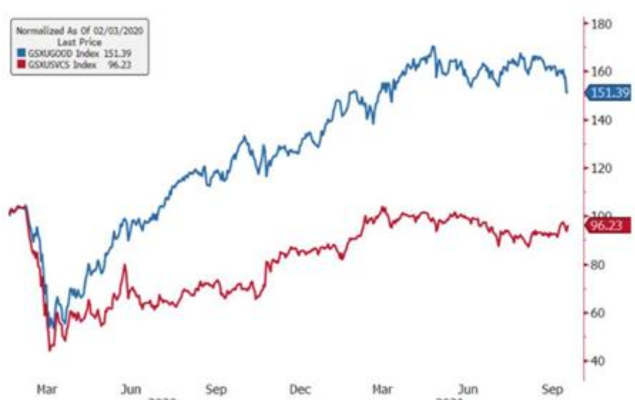
As we noted in last quarter's letter, November 2020 through May 2021 saw broad gains across sectors led by cyclicals – indicative of an early-cycle economy. Since then, economic growth has moderated and equity returns have diminished with performance favoring non-cyclicals. Signs are pointing to more of a mid-cycle environment alongside the delta variant coming under control and the labor market seeing gradual improvement. US consumer balance sheets remain in excellent shape with around $2.4 trillion in excess savings accrued and economic indicators are pointing to plenty of demand for goods and services. As long as things improve on the supply side of the equation, factors appear to be in place for an extended mid-cycle recovery.

Historical analysis shows mid-cycle economies coincide with lower stock price correlations and better performance for active investors versus passive. Market action so far this year is reflecting such an environment. Year-to-date, average cross-sectional correlation for the S&P 500 has been 0.44 on a month-over-month basis with very little variation in readings, as can be seen in the chart below. This contrasts with 2020, when the unfolding pandemic led to a 0.64 average correlation with a much higher dispersion between high and low readings. In fact, this year's correlation reading is the second lowest dating all the way back to 2001. The last time when correlations were this low – in 2017 – active management put in a good showing amid a period of corporate tax cuts and economic expansion. Interestingly, the widest dispersion in monthly correlation readings occurred the very next year. At that point, a surprising drop in China's economic growth, rising trade war tensions, and diminishing fiscal stimulus made for a challenging year for equity investors. Today's biggest risks to the economy may not look all that different.



Source: RockCreek, Bloomberg

Pandemic-related lockdowns since early 2020 led to a sizable performance gap between consumer durables and services. Service spending is now recovering but remains well below past levels while spending on goods continues to be elevated. This is likely unsustainable and offers an opportunity for equity investors. In fact, consumer services stocks saw a nice rebound relative to durables in September. Travel and leisure stocks posted solid gains despite a weak broad market. Although this presented only a partial rebound following a poor summer, it points to a possible turning point now that we are past the summer Delta peak.



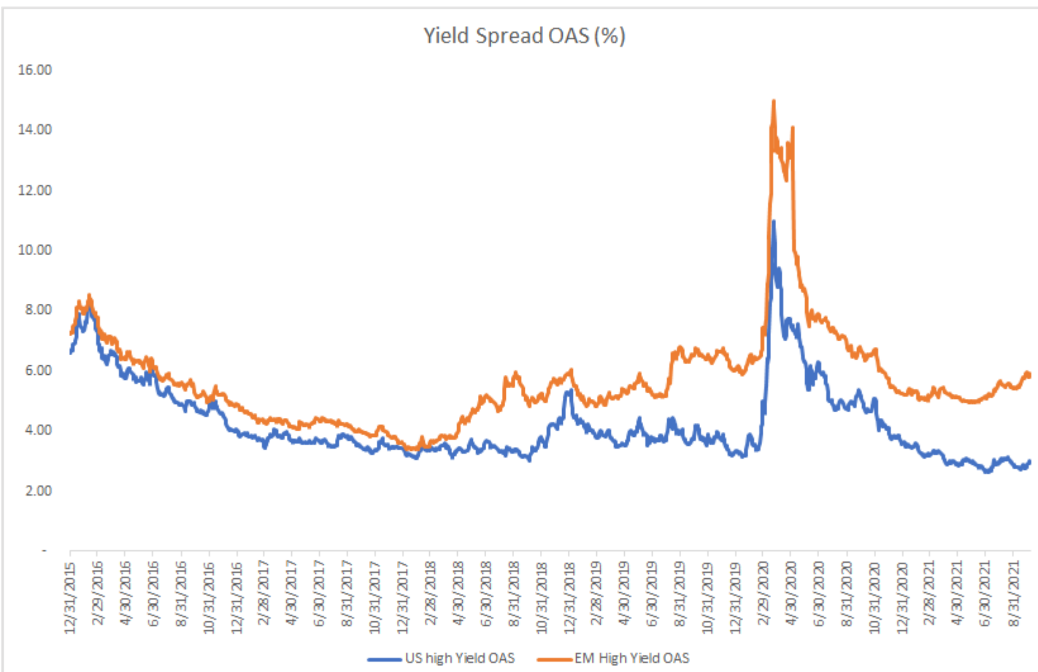
Source: Goldman Sachs Global Markets Division, Bloomberg

We believe being nimble and having the ability to change your mind will be critical in the months ahead. There remain tremendous dislocations left over from the Covid-19 crisis, uneven policy responses, and prevailing global economic uncertainties. There are no doubt very compelling investment opportunities not captured by the momentum crowd and investors will need to watch carefully for how, when, and to what extent consumer confidence improves and excess savings get unleashed. Also, companies' exposure to rising input prices and ability to pass on those costs, susceptibility to inventory disruptions, and ability to navigate fast-changing regulatory environments will have enormous implications on realized earnings. Meanwhile, the collapse in interest rates and massive central bank asset purchases we've seen since the GFC have pushed equity multiples to uncomfortable levels. This makes it difficult to express strong bullishness despite having a reasonably optimistic view towards overall economic growth. An ability to adjust quickly to changing market dynamics and having the ability to play offense when others are on defense, we believe, will be key.

EMERGING MARKETS

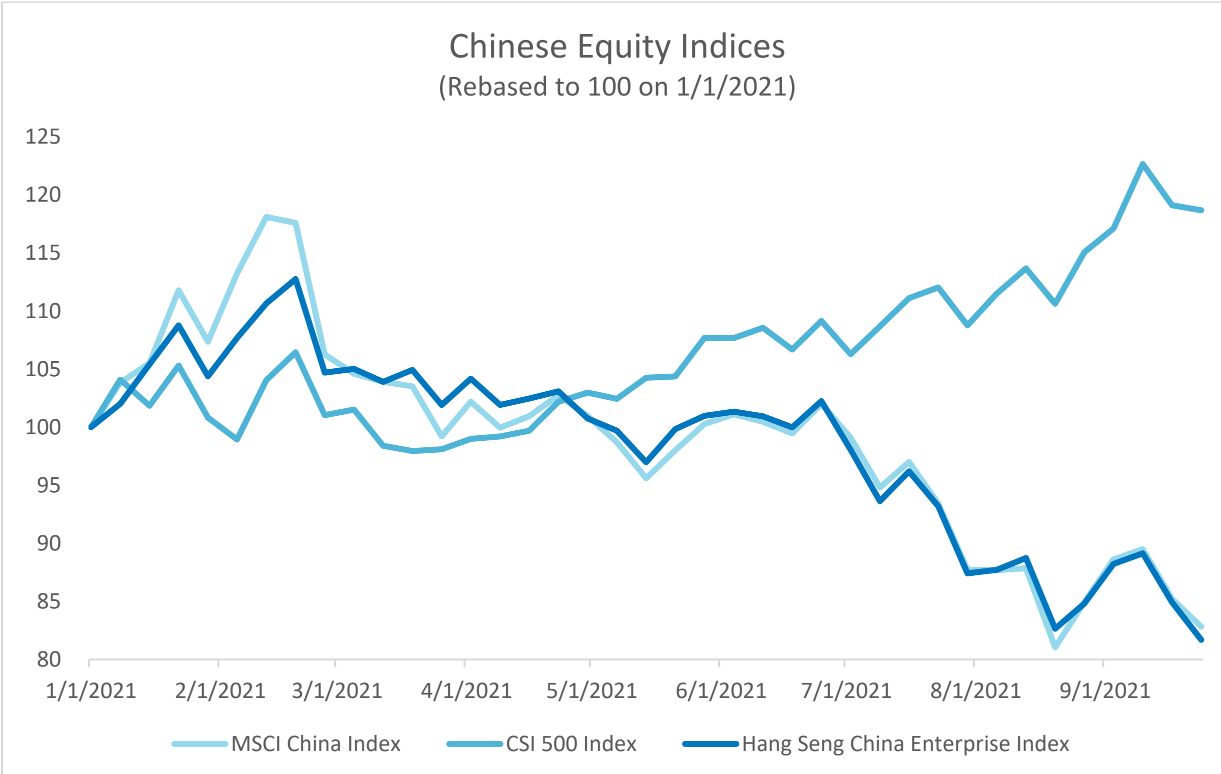
It was a difficult third quarter in emerging markets, with most countries experiencing equity weakness on the back of renewed concerns that Covid-19 cases would derail the global recovery, and an unprecedented series of corporate crackdowns in China that caught global investors somewhat flatfooted. The notable exception was India, which continues an impressive run outperforming all major developed and emerging markets indices year-to-date. This despite its tragic pandemic related death toll, rising fuel costs, border clashes with China, and volatile domestic politics. Looks can be deceiving – more on this later.

The main story during the quarter was undoubtedly China. Just when investors dared to think the crackdown on technology giants had reached its apotheosis, the Evergrande bond default provided a booster shot to investor anxiety. EM high yield spreads, normally correlated with US high yield spreads, widened on the news and are currently trading some 300 bps above US corporates, about double the average of the past five years.



Source: RockCreek, Bloomberg. As of 9/30/2021

The erosion of foreign investor confidence in China is already having wide-ranging consequences, with EM equity outflows being led by Asia ex-Japan funds and commitments to private investments slowing down to a trickle. President Xi's administration may not be too bothered. As we have highlighted before, foreign investors are a relatively small percentage of the country's capital markets base and have focused investments in sectors of China's economy that are very much under scrutiny. Perhaps this explains the large discrepancy between the mega-cap centric indices like the Hang Seng and MSCI China, and the all-cap mainland indices. As always, stability is the government's priority, and this includes avoiding a repeat of past local equity market drawdowns.

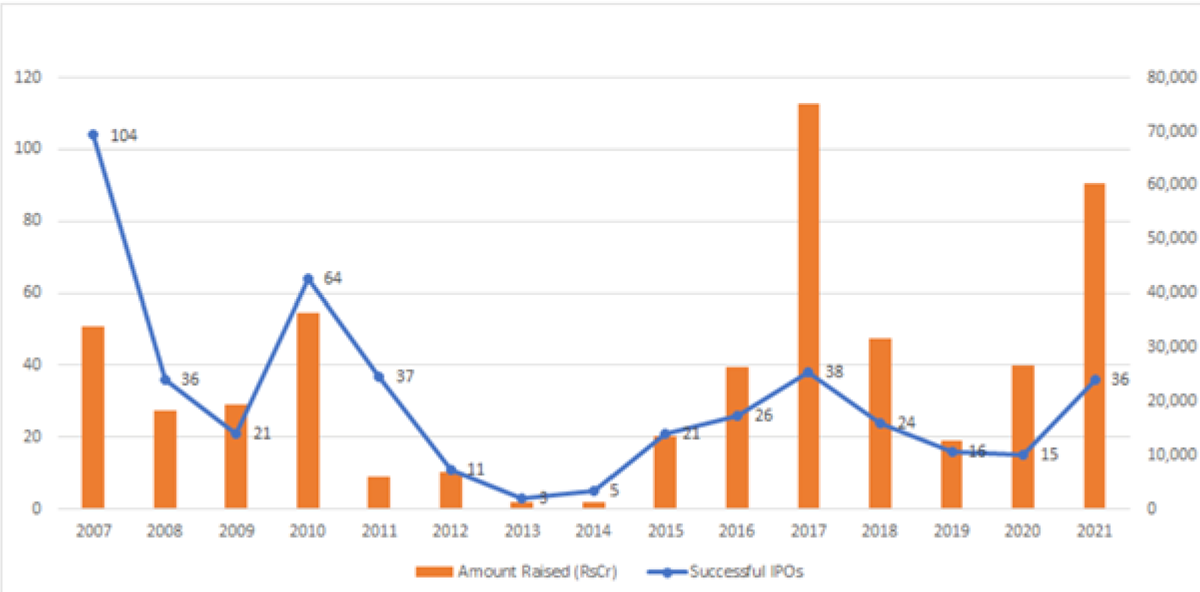


Source: Google Finance

China's global ties could be felt in other emerging markets reliant on commodity exports to the world's second largest economy. Brazil, Chile, Peru, and South Africa experienced a difficult quarter, as China's economic slowdown put pressure on base and precious metals' prices. This development came at an inopportune time, as these countries' central banks wrestle with the ghosts of inflation, record droughts, and domestic investors opting to de-risk from equities. Despite lower metals prices, overall commodity indices had a very strong quarter, led by oil and natural gas. Soft commodities also had a strong quarter, with coffee performing well and corn and pork prices having a strong quarter in Brazil. Members of OPEC+ maintained a historically high compliance rate to self-imposed production targets, while natural gas shortages in Europe led to hyperbolic moves in the commodity's winter contracts. Russian and Saudi markets joined Indian markets in printing a positive third quarter.

Higher energy prices have, for now, not impeded India's record rise, yet another consequence of the seismic changes taking place in China. It might not be a coincidence that IT and consumer stocks have led the rally, and it may not be too farfetched to conclude some of the foreign capital leaving China has found a new home in India's rapidly growing tech ecosystem. With an impressive number of IPO's, planned IPO's, record VC flows, rapidly improving ease of doing business conditions, and favorable demographics, it is tempting to conclude India could be a new world center of innovation in years to come. Much needs to go right and India, with its complicated politics, may not match the speed with which China built its tech giants. However once established, it may prove to be longer lasting.

Indian IPO's & Capital Raising



Source: Chittorgarh

Spotlight: China

Red Storm Rising?

Soon after the Chinese Communist Party's 100th birthday celebration on July 1, abrupt changes in the rules surrounding the education sector by Chinese authorities prompted a sharp correction in the Chinese new economy and tech sectors, especially those listed in Hong Kong and the United States. As the central government increased its focus on "common prosperity", specific sectors—those deemed to be in the way of affordable housing, affordable healthcare, and affordable education—came under pressure.

And tensions extended beyond the economy. Since the start of China's national holiday on October 1, the People's Liberation Army has flown fighter planes into Taiwan's air defense zone every day, including Taiwan's national holiday, October 10. Geopolitical analysts widely believe that China is expressing its discontent over Taiwan stepping up international activities, which range from establishing a new representative office in Lithuania to seeking Australia's support for its bid to join the Trans-Pacific Partnership. Tensions between China and Taiwan have been on the rise for the last several years, and each escalation deepens the fears of a devastating war between the two countries. Taiwan is also often seen as a potential trigger for a "hot conflict" between the United States and China; however, it is unclear if the United States will defend Taiwan militarily, should the time come. Past and current US administrations have avoided directly answering that question.

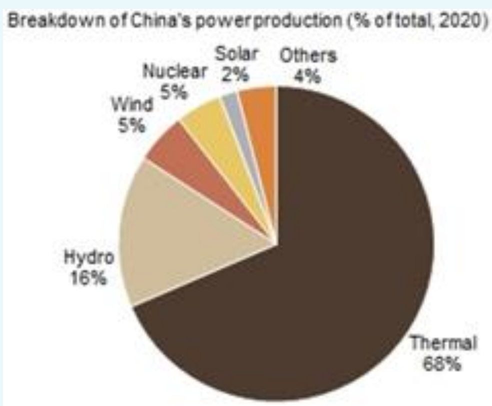
From the China watchers' perspective, the country is not ready militarily for such a war – not yet anyway. President Xi has reiterated that a peaceful reunification with Taiwan is in China's best interests. In the meantime, the Taiwan market continues to outperform the broader Emerging Market index by 6 percent in Q3, and it is up 16 percent YTD. We continue to expect tensions between the two countries to remain high going forward, which is something we always keep in mind when investing in China and Taiwan.

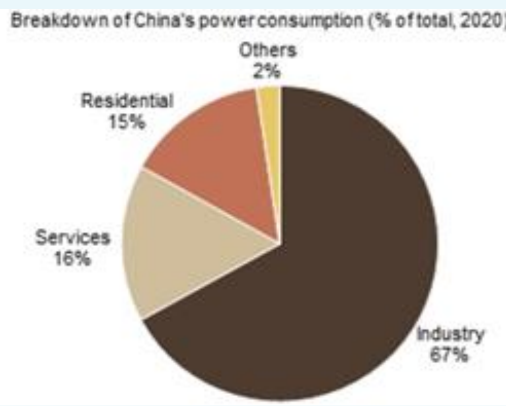
Investors struggled to digest the rapidly evolving developments that seemed to involve a widening number of industries and sectors, as the market also began to witness the impact of the government's tightening grip. The three red line rules put in place in limiting debt for the property developers were the key catalyst that triggered the Evergrande crisis. And the ongoing crackdown on pollution has led to reductions in coal production, which is responsible for 70 percent of power production in China, exacerbating the power shortage across the nation.

China's ongoing power cuts are due primarily to increased regulatory pressure on provinces to meet annual environmental targets. This new phenomenon could be a repeated constraint on economic growth in the years to come if the central and local governments can't balance the two priorities well.

As a part of the country's longer-term goal to have carbon emissions peak by 2030, policy makers formulated shorter term targets for 2021 in this year's government working report, which includes a 3 percent reduction in energy intensity of GDP. The implementation of these goals has been designated to local governments, a binding requirement for local officials' performance evaluations. These targets are monitored at the provincial level on a quarterly basis by the National Development and Reform Commission (NDRC). China saw strong power demand as its economy continued to grow in the first half of 2021. In the NDRC August report, nine provinces were in category "red", meaning that not only had they missed their H1 2021 targets, but the energy intensity in these provinces actually increased. Another 10 provinces were classified as "yellow", meaning they fell behind schedule in reducing the growth of emissions. Due to the slow progress in H1, the NDRC began in Q3 to pressure these underperformers to curb their energy use.

Meanwhile, a coal shortage added to pressure on output in July-August. Domestic coal production only grew 4.4 percent year-to-date, while coal imports declined by 10.3 percent year-over-year due to limitations on Australian imports and the suspension of Indonesian coal exports. Both the supply and demand issues have driven coal prices to the extreme. Many manufacturers have been forced to shut down their production facilities as power shortages became more and more severe starting in the second half of August, and the recent sharp cuts to production in a range of high-energy-intensity industries add to the already significant downside pressures in the growth outlook.





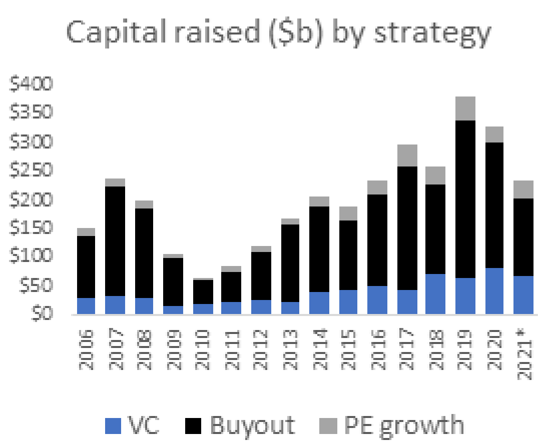
Source: UBS, RCG

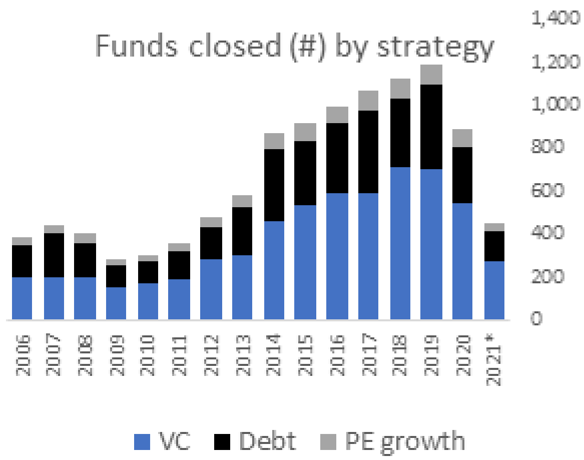
Based on last winter's experience, the Chinese government will prioritize residential demand for heating and power during the upcoming winter season by restricting the power consumption of industrial sectors and some services. However, the government has now instructed coal miners to increase production again. This, coupled with the expected slowing in domestic demand for the rest of the year, may limit shortages, with a smaller impact on industrial production for export than many originally feared.

To prevent a repeat of this year's confusion over climate and energy policy, China will need to speed up steps toward reshaping its grid and power supply, increasing both energy reserves and the share of renewable energy. In the short term, as the market continues to struggle to find a firm footing, considerable uncertainty remains about how the government will manage enforcement of its environmental targets and the degree of policy easing more generally. It seems the government is keenly aware of the impact the ongoing regulatory actions have on the real economy and investors' confidence. As we come closer to the 2022 Winter Olympics in Beijing and the 20th Party Congress, we should expect more proactive communication from the government to investors in the hope of providing more clarity on its initiatives. The government is also looking to more accommodating economic policies to help ease the ongoing economic slowdown. Both of these initiatives may potentially help rebuild investors' confidence in China once again.

PRIVATE EQUITY & VENTURE CAPITAL

The frenetic pace of private equity deal making continued in the third quarter, with buyouts surging 133 percent to $818 billion. Fundraising is also rebounding, as the number of funds closed in 2021 is on pace to exceed 2020, though still falling short of 2019. Total capital raised, however, is on pace to set a record by the end of 2021. This will add even more dry powder on top of the already record levels, which stood at $850 billion at the end of 2020.





Source: PitchBook, as of June 30, 2021

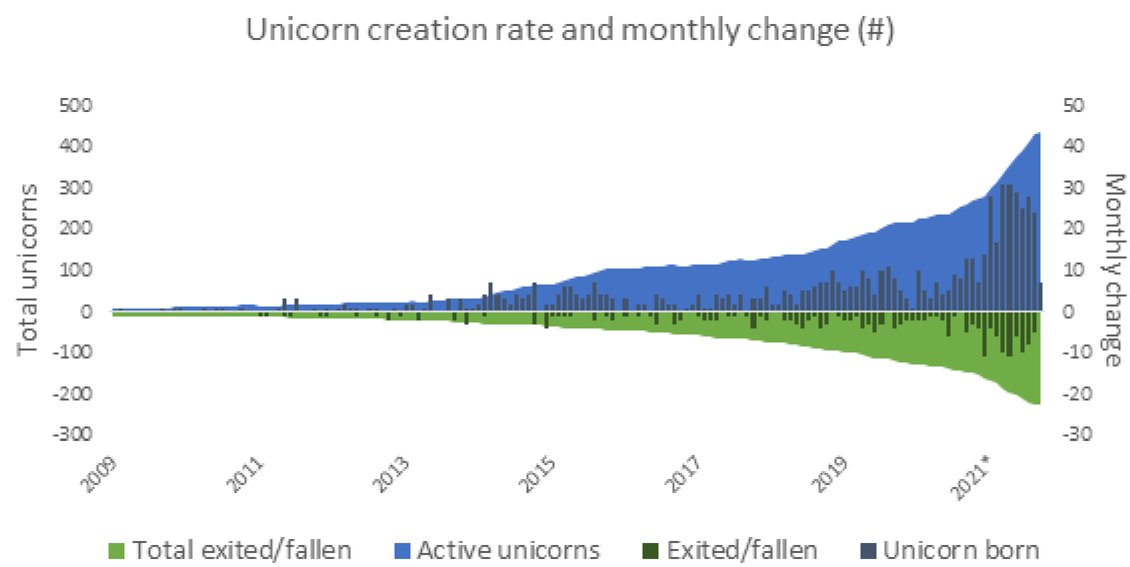
In early-stage companies, angel and seed deals have continued to grow in size, and the median seed deal in 2021 has now surpassed the median Series A round in 2010.

The trends are much the same for mega-venture deals ($100+ million deal size), which have already set records. This means that unicorns (venture-backed companies valued at over $1 billion) are now fairly common, with 127 achieving status this quarter, the second-highest quarterly increase on record.

Median VC Deal Size ($M) by Stage

Stage	2010	2020	2021*
Seed	$0.5	$2.0	$2.5
Series A	$2.5	$10.0	$12.3
Series B	$7.0	$20.0	$28.0
Series C	$10.0	$36.7	$60.0
Series D+	$12.0	$59.1	$101.5

*As of June 30, 2021; Pitchbook



Source: Pitchbook

Record levels of fundraising have also resulted in a return of the mega deal. Mega-buyouts (those over $500 million in deal size) and mega-growth deals ($100+ million deal size) are both on pace to set records for total deal volume and deal count this year; 110 mega-growth deals have already closed through Q3 2021, shattering the previous annual record of 94 in 2020.

Rising rates of unicorns have also coincided with eye-popping returns from venture capital for limited partners. Institutions with large exposure to private equity and venture capital significantly outperformed those underweight the exposure. RockCreek's private equity investments have been biased to growth and venture over the last seven years or so and have been strong drivers of returns for our endowment and foundation partners. Investments in the intersection of tech and sectors including healthcare, finance, and the consumer continue to see tailwinds, especially in the US. Our investments with accelerator platforms highlight the innovation and continuous needs to be at the forefront of the newest trends taking hold in the economy.

The fact that both fundraising and valuations are at all-time highs also underscores the need to be selective when it comes to investing in private markets. Our investors have been able to achieve outperformance because we are invested with the top-performing GPs, and there remains significant dispersion of returns across the asset class. Access to top investors remains the name of the game. This is an area in which RockCreek continues to add value for clients, leveraging our long-standing relationships to build portfolios of top-quartile GPs.

Globally, private investments continue to be challenging. In China, private markets were roiled in the third quarter when the government announced a crackdown on the previously lucrative education and after-school tutoring market. This industry has received significant venture investment, and the impacts of the sudden shift in the regulatory environment are still being processed, with investors recalibrating the risk/return profile for China within education and across private markets broadly. While private valuations have dropped in China, local investors believe that the best assets continue to be available for fair prices, while lower-quality companies are now trading at a significant discount.

RockCreek expects private market conditions to continue apace in the fourth quarter, particularly with regards to deal volume. Fundraising may slow somewhat, as many LPs are close to having fully committed their 2021 private markets allocations and are asking GPs for January 2022 fund closings, rather than December 2021. RockCreek expects another robust round of GPs coming back to market in Q1 2022.

In the medium term, private markets will carefully watch how the Federal Reserve responds to inflation indicators. Rising interest rates have historically put the brakes on the tech sector broadly, and could slow the industry's explosive, VC-fueled growth. Rising costs of borrowing would also have significant impacts on leveraged buyouts.

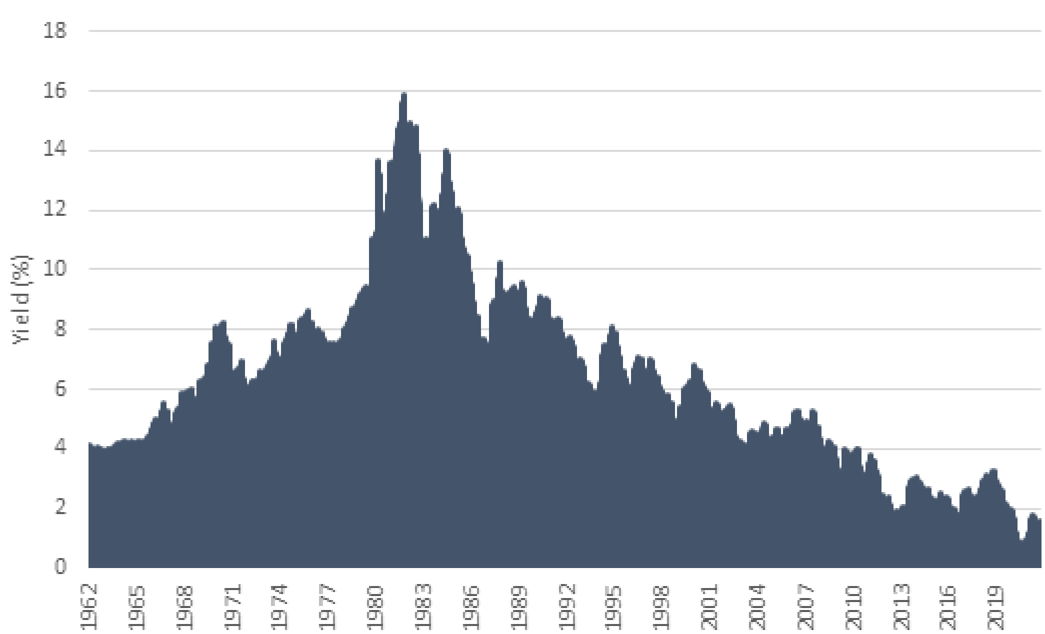
FIXED INCOME

A normal review of third quarter moves in the bond market would draw one conclusion: nothing to see here. The headline 10-year Treasury yield increased seven basis points to 1.52 percent with even more muted moves at the ends of the curve - 1-month and 30-year yields each ticked up by two basis points. The Bloomberg US Aggregate Bond Index returned 0.05 percent for the quarter. The total return for investment grade corporate bonds was zero as credit spreads widened three basis points.

The intra-quarter market moves weren't much to write home about until the last week of the quarter, following the Fed meeting that concluded on September 22nd and included an update to the dot plot. Three months prior, a slim majority of FOMC members expected the first rate move in 2023. Now, the balance has shifted earlier and higher: the group is now evenly split between 2022 and 2023; only one policymaker still expects rates to stay where they are through the end of 2023 (from five in June) and ten of the eighteen see rates reaching 1-1.5 percent by then. Reacting to the release, over the last six days of the quarter, the Treasury curve shifted higher and steeper with the 30-year yield rising 24 basis points and its spread over the 5-year increasing 12 basis points.

The end of the quarter also coincided with the 40th anniversary of the peak in the 10-year yield. On September 30, 1981, the headline yield closed at 15.84 percent. We hear often about the "four-decade bull market" in bonds, which is often accompanied by an interest rate chart (such as that below) to show how the secular decline in interest rates has driven returns and that as we approach the zero bound the run is over. These narratives are especially popular when the Fed is contemplating initiating a hiking cycle.

10-Year Treasury Yield (January 1962-September 2021)

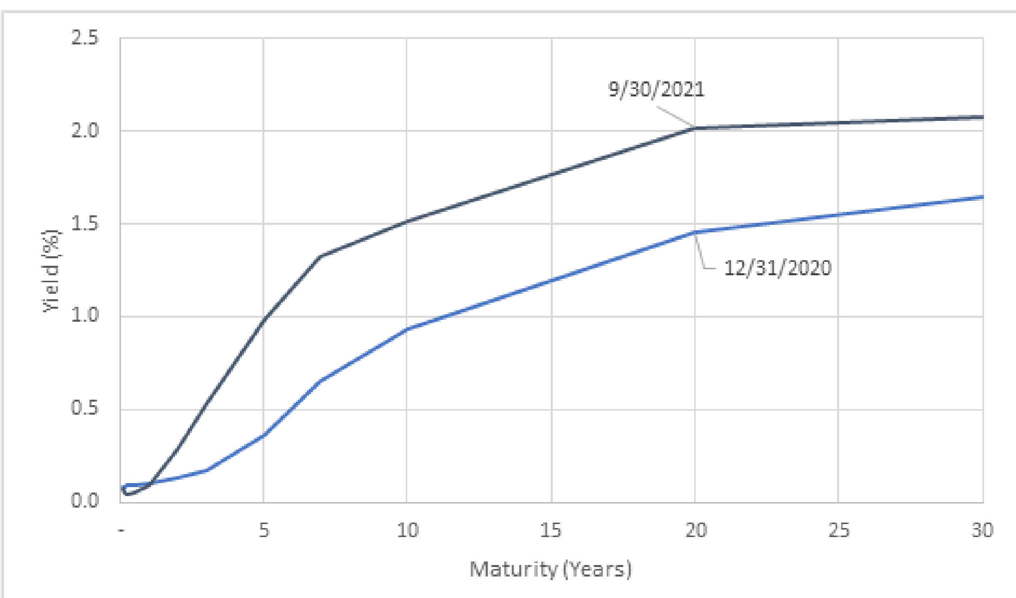


Source: Federal Reserve Board

It would seem then to be a good time to offer a reminder that structurally declining interest rates had little to do with the strong performance of fixed income over this period. Changes to yields and the resulting re-pricing of bonds simply pull forward or push back in time the income generated by bonds. If you bought a 10-year Treasury 40 years ago and held it to maturity, you earned 15.84 percent annually on your principal amount. Over those ten years the 10-year yield plummeted by eight percentage points to 7.83 percent, but that didn't matter except that you were reinvesting the coupon payments at lower rates. Sure, some of that income was pulled forward along the way by the mark-to-market, but ultimately the total return at maturity was the beginning yield. For this reason, it's misleading to say that the bull market was driven by structurally declining interest rates when it was actually the high starting yield-to-maturity.

As we review our asset class assumptions going forward, it's also worth noting that the price of a bond isn't just impacted by changes in the level of yields but also the shape of the yield curve. Typically, longer maturities offer higher yields, i.e., the yield curve has a positive slope (see chart below). As time passes and the maturity of a bond declines, so does its yield-to-maturity. The re-pricing of the bond to this lower yield (i.e., rising price) is the "roll down" yield. The total expected return ("carry") is a combination of the yield and roll. With the steepening of the curve seen year-to-date the roll-down yield has become a larger proportion of the carry and thus positioning along the curve should be a more significant consideration for investors. This is particularly true in the intermediate (5- to 7-year) portion of the curve where the curve is steepest and thus roll-down yield is greatest. Investors should be considering how they can use the curve to their advantage, buying bonds in the belly of the curve and using cash or leverage to dial in their desired interest rate duration.

Treasury Yield Curve

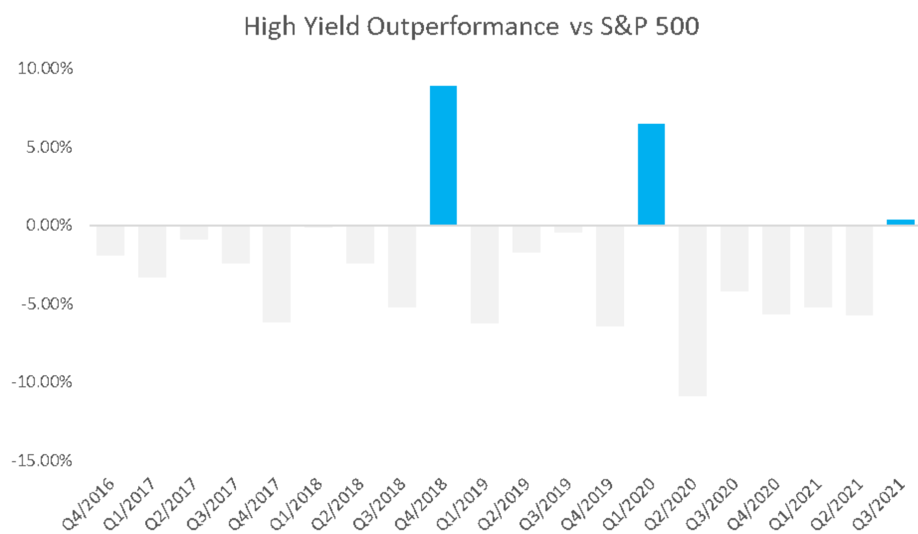


Source: US Department of the Treasury

PUBLIC CREDIT

This was only the third quarter in 5 years where the ML High Yield Index outperformed the S&P 500 TR Index. And this was the only quarter where the High Yield index outperformed when both indices finished in positive territory (HY at 0.9 percent and the S&P at 0.6 percent). Although not definitive, it may suggest that the relative attractiveness of equities versus bonds has started to shift. With Fed tightening on the horizon, perhaps a marginal real yield in the high yield markets is preferable to a period of negative returns in equities as margins come under pressure and multiples re-rate lower.

Either way, given both equities and debt are at historically high valuations (the S&P Cape Ratio is at its 2nd highest level of all time, and HY spreads were only lower for very brief periods before the dot-com bust and the GFC), and few market participants have lived through a meaningful hiking cycle, it's unclear how these asset classes will perform in the medium-term. Additionally, the traditional diversification benefits of debt vis-à-vis equities have mostly broken down in recent years. The 1-year correlations of HY and IG with the S&P 500 as of September-end are 0.9 and 0.6 respectively. A few short years ago (2017), this was just 0.5 and 0.3 (HY & IG), offering much better diversification benefits.



Companies continued to bolster their balance sheets with new issuance during the quarter, with the majority remaining focused on refinancing activity. However, while the quarter saw heavier volume than the 10-year average, it was markedly slower than the record-setting pace in previous quarters. For context, September saw issuance of $44 billion ($22 billion refinancing-related), slightly higher than the 10-year September average of $36 billion, but well below the H1 average of ~$50 billion (and September is typically one of the 2 most active months). We are still on track to set a new yearly issuance record, and so far in 2021 HY issuance has reached $410 billion, compared to $350 billion during the same period last year.

The backdrop for distressed assets continues to look benign. During the quarter, just $1.1 billion of bonds and loans saw distressed activity (defaults or exchanges), the lowest level of activity since early 2013 (and the 7th lowest over the past 20 years). This brings the trailing 1-year default rate to just under 1 percent. The amount of new issuance and refinancing activity has also pushed out the maturity curve, alleviating pressure over the coming years. Sell-side estimates suggest a modest uptick in defaults next year, but only to the tune of 1.25 percent (JP Morgan) or so. For context, this compares to the long-term average of ~3.5 percent.

As we look forward, we continue to underweight public credit, especially high yield given the negative convexity and the increased sensitivity to interest rates. Active management is critical and managers that have the ability to trade around primary new issuance and company-specific catalysts should continue to outperform.

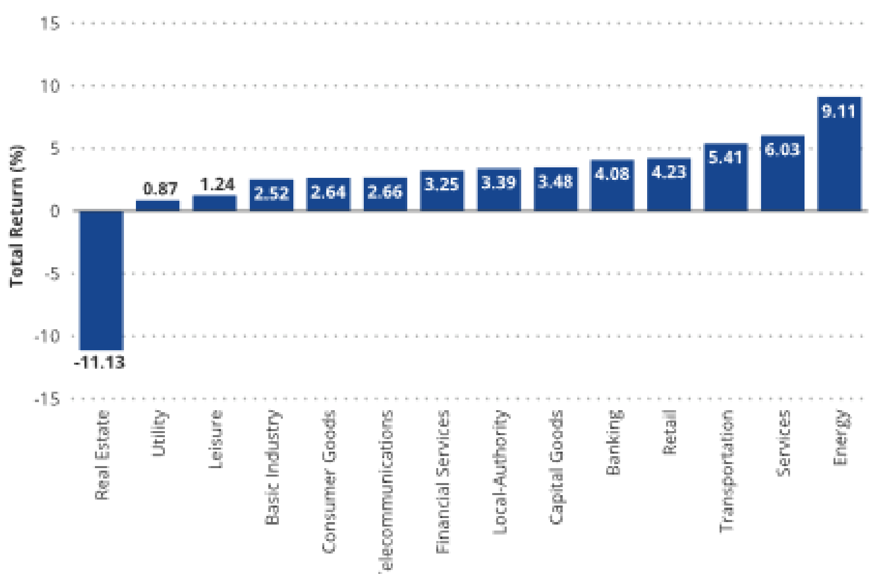
PRIVATE CREDIT

Private credit strategies had another strong quarter alongside an improving economy, surging liquid credit markets, and low default rates. At the outset of the pandemic, private debt strategies experienced their worst quarter over the last decade, but portfolios have recovered quickly.

Given the changing market landscape, investors have been turning away from distressed funds given the shrinking number of opportunities to profit from troubled companies. After the distressed credit opportunity set almost quadrupled to $1 trillion at the height of the pandemic in March 2020, the share has since fallen to less than 1 percent of the high yield universe. The supply is unlikely to increase anytime soon as S&P is forecasting the 12-month US high yield default rate to as low as 2.0 percent by June 2022. According to Preqin, distressed debt funds are already sitting on $15 billion of dry powder as of the end of the second quarter. With so much cash lying idle, it's likely that future returns will be under pressure from the limited opportunities that do arise. This contrasts with investor enthusiasm for other private debt strategies most notably direct lending strategies which account for a majority of capital raised in the space most recently.

One area within distressed debt that is becoming interesting is China, where the looming default of Evergrande has created significant volatility and widening credit spreads. China's regulatory push and the resulting credit concerns have driven a significant correction in spreads across Chinese high yield credits as they have widened almost 300 bps to 900 bps. The spread differential between China high yield (average rating BB-) and the broader EM high yield corporate index (average rating BB-) of 400 bps is at historical highs vs. a longer-term average of 150 bps. However, as depicted in the graph below, much of the spread widening has resulted from the sell-off in the Chinese real estate sector and has not spread to other sectors within China, all of which have positive total returns year to date.

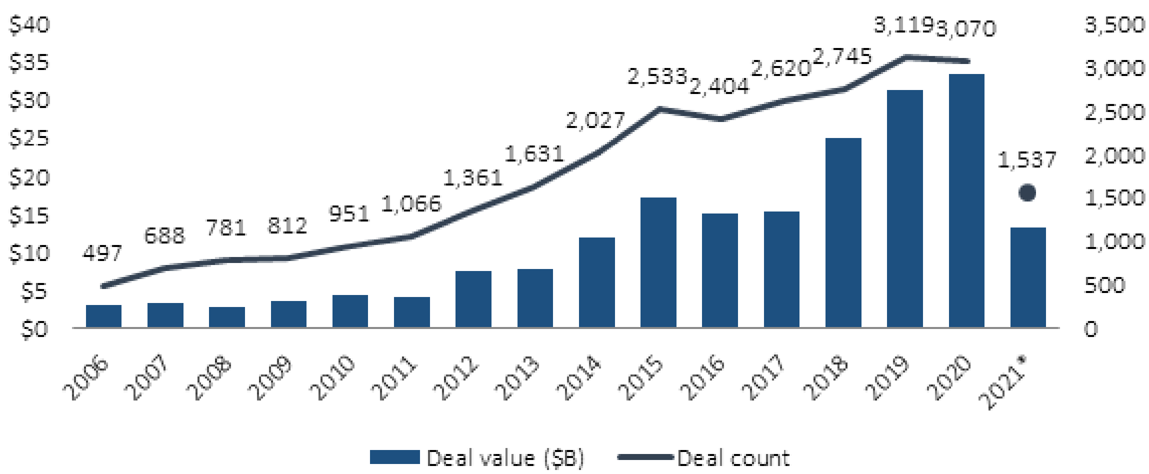
China: Returns by Sector (12/31/2020 – 8/13/2021)



Source: Bloomberg, ICE BofA Diversified High Yield US Emerging Markets Corporate Plus Index

As we look forward, areas of focus include more niche areas of the market such as venture debt and homebuilding finance where we believe the secular outlook is strong and there is a significant demand for capital.

US Venture Debt Deal Activity



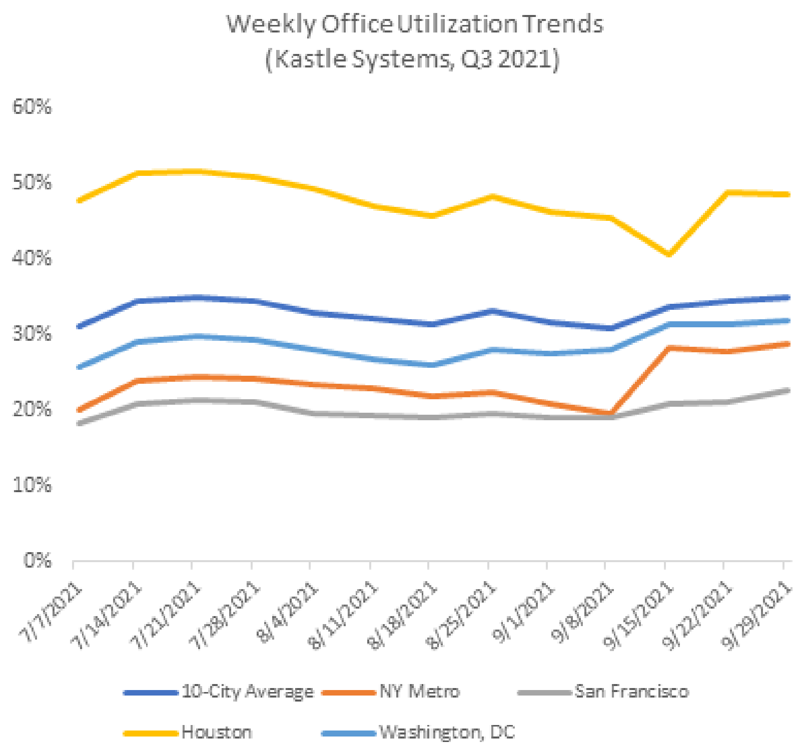
Source: Pitchbook H1 2021 Global Private Debt Report

As shown above, over the past decade, venture debt has emerged as a major alternative source of financing for high-growth startups that have traditionally opted to solely finance through equity. This market has grown significantly with more than $20 billion loaned to VC-backed companies in the United States during each of the past three years. The non-dilutive properties of venture debt will continue to benefit companies as they grow. On the homebuilding finance side, all-time low availability of housing inventory and developed lots, coupled with demographic shifts and millennials entering prime homebuying age has resulted in at least a 5.5 million housing unit deficit which should support the long-term opportunity for homebuilding finance.

REAL ESTATE

Real estate markets are continuing to recover across all major property types. As fixed income returns have compressed, investors have looked to commercial real estate in search of yield. Traditional fixed income investors have made big pushes into the sector, launching new strategies aimed at cash-flowing assets with long duration as a replacement for lower fixed income yields. This flood of capital into real estate has improved the outlook for stabilized core assets and should present a strong opportunity set for investors. Of the main property types, industrial continues to lead the pack, riding a sharp increase in e-commerce spending during the pandemic. Double-digit rent growth expectations over the next decade are being considered as consumer spending habits continue to shift online. Multifamily has shaken off concerns of tenants not being able to pay rent and the sector has surged forward, with rents and occupancy rates surpassing pre-Covid levels in almost every major market. Even retail and office—the most impacted sectors during the depths of Covid—have shown positive signs of recovery, with increases in foot traffic and leasing velocity pointing to the potential for cap rate stabilization and even compression in certain markets.

The one area where investors have been unable to reach a consensus is in the office sector and specifically in the central business districts of gateway markets. Labor Day marked the return to the office (albeit hybrid), post-Covid, for many firms including RockCreek. But the Delta surge in the United States has pushed a number of big employers to continue their virtual or hybrid work models. A measure of office utilization compiled by Kastle Systems indicates that there was not an overwhelming return to the office after Labor Day, but there was a promising trend during September suggesting that employees have begun to return. After a mid-July peak, utilization rates declined before a bottom in the week of September 8 and subsequently had a promising rise to close out the month. The chart below plots the 10-city average with key cities also highlighted.



As capital flows into the sector as institutions rethink their fixed income exposure, competition for core stabilized assets will command a premium price. This leaves more transitional and development-oriented exposure for investors that are looking for a higher return, but as with all development strategies, the risk increases along with the hold period. At RockCreek this has led us to prefer development opportunities that have shorter time horizons such as industrial development where a project can take 9 to 18 months to complete. We have been avoiding residential and other commercial development strategies as the duration and risk does not justify the return expectations. Our real estate portfolios have been focused on areas including affordable housing and digital infrastructure strategies, particularly in the regulated and cell tower space, where waves of institutional capital have not compressed returns.

For the rest of 2021, we are continuing to monitor office utilization data where there have been promising upticks pointing to a broader return to office. We also expect the industrial sector to outperform as market rent growth has widened the spread from in-place to market, leaving room for organic NOI growth as leases renew without relying on appreciation or leverage to drive returns.

ROCKCREEK UPDATE

RockCreek participated in several areas of the World Bank Group-IMF Annual Meetings this month.

CEO Afsaneh Beschloss spoke at the World Bank's event, *Trillion Dollar Question: How Can the World Finance Energy Transition?* on Oct. 12, along with US Special Presidential Climate Envoy **John Kerry**; Indonesian Finance Minister **Sri Mulyani Indrawati**; and former Bank of England Governor **Mark Carney**. "The private sector is moving very, very rapidly, and the market is ready," Afsaneh Beschloss told the audience of Annual meetings delegates and invited guests. "There is a lot of potential. There is a lot of positive energy, and I hope that the private sector can work with the public sector and the multilaterals—particularly, the World Bank—to get on with the energy transition in front of us."

Also on Oct. 12, Afsaneh Beschloss moderated a discussion on the future of digital currencies for the Bretton Woods Commission, along with former New York Fed President Bill Dudley. Panelists **Hyun Song Shin**, Head of Research at the Bank for International Settlements; **Tomicah Tillemann**, Global Head of Policy at Andreessen Horowitz Crypto; and **Caitlin Long**, Chairman and CEO of Avanti, discussed how to establish the regulations and digital infrastructure that will be required to harness the potential of crypto currencies, central bank digital currencies, and other innovations using blockchain technology. "We need to encourage innovation and support innovators, in order to prevent the next crisis before it happens and build the inclusive infrastructure we need," Afsaneh said. The key will be to "guide policies so crypto and digital currencies can help maintain a stable financial system in the years and decades to come." Given some of the outsized returns reported by endowments with early investments in these areas, they will be increasingly studied by more institutional investors

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The volatility of any indices referenced herein may be materially different from that of an investor's account's portfolio. In addition, an account's holdings may differ significantly from the securities that comprise the indices. The indices have not been selected to represent appropriate benchmarks to compare an account's performance, but rather are disclosed to allow for comparison of the performance of accounts and managers in general to that of well-known and widely recognized indices. Information contained herein regarding performance of any index or security is based on information obtained from the indicated sources as of the specified dates, but there is no guarantee as to the accuracy of such information.

The quantitative methods that may be included and described herein are tools used in selecting investments and controlling risk, but such methods cannot alone determine investment success.

Discussions and calculations regarding potential future events and their impact on the account are based solely on historic information and estimates and/or opinions, are provide for illustrative purposes only, and are subject to further limitations as specified elsewhere in this report. No guarantee can be made of the occurrence of such events or the actual impact such events would have on the account's future performance. In addition, the opinions, forecast, assumptions, estimates and commentary contained in this report are based on information provided to RockCreek on both a formal and informal basis. Further, any such opinions, forecasts, assumptions, estimates and commentary are made only as of the date indicated, are subject to change at any time without prior notice and cannot be guaranteed as being accurate.

Please note that the investment outlook and opportunities noted above (and throughout this letter) are prospective and based upon the opinion of RockCreek and there is no guarantee of success in our efforts to implement strategies that take advantage of such perceived opportunities.