RockCreek

Turning the Corner

Q1 2021

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TURNING THE CORNER

Covid-19 is not yet behind us. But the Coronavirus Recession that was caused by Covid-19 ended in Q1 2021, at least in the United States.

As we look ahead, the world economy will be more and more affected by the other pressing global issue of the day: climate change. The focus this week, designated as US Climate Action Week, is the Leaders Summit on Climate hosted by US President Biden. As well as government commitments to ambitious goals, climate activists and investors will be watching governments' action plans to foster greening of the economy, for example in the US infrastructure proposals now being considered in Congress. Look for commitments from businesses also, including traditional oil and gas businesses. As we discuss later in this note, the renewed spur to action will create important investment opportunities. At RockCreek, we have long been leaders in this space, with ongoing investments across climate related sectors, transitioning to a sustainable and more eco-friendly office in 2016 and being early signatory to the NetZero Asset Managers Initiative.

Back to Covid-19! Thanks for the progress so far goes first to the modern miracle of the invention, production and distribution at scale of safe and effective vaccines. There is a long way still to go — not least in ensuring swift access to vaccines around the globe as well as in harder-to-reach communities in the United States. Worrying side effects, however rare, will likely add to vaccine hesitancy and will curtail the speed with which the world can get adequate vaccine supplies. New infections have been rising again recently in the United States, as well as elsewhere. But in the first quarter of 2021, after a long year of disease and death, it became clear that the virus could be contained, even if not beaten. At the same time, policymakers, particularly in the United States, left no doubt about their determination to keep up extraordinary support for the economy. Swift passage of a further $1.9 trillion spending bill was coupled with continued Fed insistence that monetary policy will remain unchanged until the economy reaches full employment and/or the Fed observes inflation in the data — making monetary tightening a distant prospect. Small wonder that Q1 marked an inflection point for the economy, as Federal Reserve Chair Jerome Powell noted. RockCreek called for "The Coming Boom" in our March 15 letter, before the data for March was in. Now, recovery is confirmed in the numbers — from an increase of nearly a million jobs in March to a nearly forty year high recorded in the Institute of Supply Management's (ISM) closely watched manufacturing index and a jump in retail sales to above pre-pandemic levels.

Two big questions for investors surfaced in Q1. Will a surge in inflation force the Federal Reserve to tighten sooner than expected, perhaps bringing recovery to an early end? And if, as RockCreek expects, the economic expansion continues apace, will the benefits of faster growth and increasing job opportunities be felt on Wall Street as it will be on Main Street?

INFLATION OR GROWTH?

Investors and analysts worried from the beginning of 2021 whether fiscal and monetary policy could revive growth without triggering dangerous inflation. Bond markets had their worst quarter since 1980.

Warnings about inflation came from unexpected quarters, including Democrats as well as from more conservative commentators. Some argue that the recent rapid increase in liquidity makes an inflationary period down the road inevitable. It is true that M2 has risen sharply in relation to GDP. But experience — and economics — suggests that this will only trigger an inflationary spiral if companies and individuals try to spend all the money more quickly than output (or imports) can ramp up to meet demand — and that is perhaps unlikely. Rising yields at the longer end could stall recovery — or they may act as a natural speed limit, slowing growth through their impact on interest-rate sensitive sectors of the economy, from housing to net exports, but not reversing the recovery. The Fed appears to be taking the latter view, resisting cries in Q1 from bond investors to embark on yield curve control.

As the quarter unfolded, the data suggested that investors more broadly might be getting more comfortable with President Biden's argument that it is better to err on doing too much than too little. Strong payroll numbers for March show that companies may be able to build up capacity more quickly than expected. Other indicators are also showing more strength than they did at this time in the aftermath of the Global Financial Crisis (GFC). At the same time, however, millions of Americans are still without jobs. Many businesses, especially small and medium-sized ones that provide lifeblood to neighborhoods, have been shuttered. With growing demand, and financial help, they — or successors to them — may be able to reopen, adding to supply. These factors suggest that there is still room for further output gains, without pushing wages and prices into an uncontrollable upwards spiral.

Inflation fears, however, should not be dismissed. An uptick in prices is likely in coming months. Yields may likely rise further at the long end, and if inflation expectations rise to uncomfortably high levels, financial markets will be calling for the Fed to tighten. So far, the central bank has stuck to its view that it sees room for more jobs and growth before it tightens, which a majority of Fed decision-makers expect to put off through 2023. If above target inflation is sustained, the Fed may eventually bring forward its planned timetable for tightening. But that will only happen against a background of strong growth and declining unemployment. We are in for an extraordinary economic rebound in the United States from what has been an extraordinary downturn. China is also set to grow rapidly this year, and together the world's two largest economies will pull along the rest of the global economy — now projected by the IMF to grow by 6 percent this year, and close to 4.5 percent in 2022, with Asia outpacing other regions.

THE DISCONNECT

Last year was notable for many things. One of those was a disconnect between financial markets and the real economy. The pandemic-induced recession hit the US economy with great force a year ago. An early rebound in jobs and output stalled as Covid-19 surged again, and then again, whenever states and localities eased restrictions. But financial markets went from strength to strength, powered by the twin engines of easy monetary policy that promised low rates for longer, and large fiscal stimulus.

As long as the threat from Covid-19 persisted, schools remained largely closed, travel and vacations were curtailed and many of those who could isolate stayed shut in their homes; the fiscal and monetary boost had limited places to go. But towards the end of the first quarter things began to change. As vaccinations spread and "herd immunity" comes within sight, more of this money was being spent in March. There has been a lot of focus on how consumers may use the government stimulus checks, higher unemployment benefits and — for some — stock market wealth. A jump in spending in 2021, but with some savings left for later, is the most likely outcome. We are already seeing a housing boomlet, helped by low rates as well as increased income. Another important element — especially for the longer-term outlook — will be how companies behave. The past decade has seen under-investment in many sectors. A lasting recovery will require more investment in productive capacity, which in turn will support earnings. In that world, a reverse disconnect between financial markets and the real economy can be avoided.

Three other macro trends of interest in Q1: US-China; Europe and Tech.

1. A NEW US ADMISTRATION, BUT THE SAME DISTRUST OF CHINA

The United States and China are the two countries where an upswing can help the rest of the world recover. Diplomatic relations, however, remain tense between the two largest economies in the world. That much became clear as the first meeting between Biden Administration officials and their Chinese counterparts in Alaska in March began with a spat about how long each should speak at the opening. Secretary of State Anthony Blinken and National Security Adviser Jake Sullivan felt that it was more important to demonstrate US concerns about China's human rights record, and its security posture, than to begin to cooperate on global issues. This is very different from after the GFC, when US and Chinese officials — and leaders — recognized that a strong and stable global economy and financial system was in the interests of both countries. Security concerns in the United States have also become more acute as the crackdown in Hong Kong has led to concerns in Washington about Taiwan and its future. A straw in the wind: Admiral James Stavridis has just written a novel — 2034 — about a future war between the US and China. He and fellow author Eliot Ackerman say it is a cautionary tale, not a prediction.

One sign of potential rapprochement for the relationship came from Secretary John Kerry — in charge of climate diplomacy — deciding to attend a climate meeting with China. Climate — and public health — are the two most obvious areas for cooperation. The Chinese government is also reaching out to former US officials to promote dialog. It is unlikely that any such discussions will get the Administration's blessing. But in the meantime, American business and the venture community continues to see opportunity.

2. WHAT IS THE MATTER WITH EUROPE?

As forecasters busily revise up their projections for global growth, they are predicating their optimism on a stronger than expected recovery in the United States. For much of the rest of the world, the hangover from Covid-19 remains. For poorer countries, with less room for government spending and limited access and finance for vaccines, it is understandable to depend on the United States — and China — as locomotives out of the Coronavirus Recession. Both Europe and Japan disappointed last quarter in the race between vaccine and virus. By the end of March, vaccine shots reached only 17 percent of the population in Europe and less than one percent in Japan.

With new virus variants spreading rapidly, France and Italy moved back into lockdown in Q1, pushing back prospects of economic growth. German leaders also warned of potential exponential increases in infections unless public health measures of isolation, distance and mask wearing were observed. The problem: centralized negotiations with pharma companies led by the European Commission in Brussels failed to secure adequate, and timely, vaccine supplies. Concerns about safety from the Astra Zeneca, and now Johnson and Johnson, vaccines worsened the situation. And new restrictions on exports did not help. The blow to EU solidarity from the vaccine failure should not be underestimated. Across the Channel, the UK government is riding a wave of popularity as its vaccine strategy appears to be succeeding. Nevermind that the death toll per capita from Covid-19 remains higher in the UK than in any other major country, and that the UK economy remains far below trend, after suffering the sharpest contraction recorded in the last three centuries during 2020. The political fallout from Brexit is so far hurting Brussels more than London.

Nonetheless, and reflecting a disconnect with the public health situation, both European and Japanese equity markets posted strong returns for the quarter. In Europe, Swedish and Italian equities led the way, up 18 percent and 11 percent for the quarter. On a one-year basis, most European markets are back to pre-Covid levels and have begun to price in further good news hoped for in coming months.

3. TECH UNDER FIRE

It had to happen. The backlash against Big Tech is taking shape in the United States, as President Biden appointed anti-trust critic Lina Khan to the Federal Trade Commission. Europe continues to press forward with a broader crackdown on successful and profitable American tech companies, including with new digital taxes. Treasury Secretary Janet Yellen has suggested a better alternative: that countries work together to make it harder for all international companies to avoid taxes. That will not be so popular in Europe, but it makes a lot of logical sense.

The prospect of higher interest rates also reduced interest in technology stocks during Q1. In contrast to 2020, when a few tech stocks pulled up the whole S&P 500 index, smaller companies outperformed larger companies in the first quarter. While the overall index was up by 7 percent in the quarter, the Big Six rose by less than 2 percent. Still — the ability to build on last year's strength even as the economics shifts, bodes well for these large companies. The divergence between cyclical and non-cyclical stocks may abate if the rebound in growth stocks more recently is any indication of how Q2 will shake out.

ESG AND IMPACT INVESTING

Covid-19 accelerated efforts across environmental and social factors over the last year and a half while also piquing institutional and retail interest, as evidenced by inflows in Q1 2021. Since RockCreek's inception, we have deployed over $5.5 billion in impact and ESG strategies and companies, recognizing early on the return and impact potential. Our investments continued during the first quarter of this year as RockCreek deployed approximately $70 million in ESG and impact investments across public and private markets. Notably, RockCreek launched a World Bank Sustainable Development Bond linked to Gender Equality. RockCreek also launched a gender lens investment strategy in the fixed income space and is soon launching a similarly intentioned strategy focused on private debt opportunities. We also put capital to work to increase internet access for rural communities in the US, promote affordable housing in both the US and Europe, support education in India, among other investments in healthcare, education and renewables.

Policy support around climate-related considerations was a notable hallmark in the quarter for ESG and impact focused investors. The Biden Administration is making climate change a major theme of its presidency. The president's proposed $2.3 trillion infrastructure plan includes $650 billion for clean energy transition over the next decade. For reference, this is more than seven times larger than the $90 billion committed to clean energy back in 2009 as part of the American Recovery and Reinvestment Act. "President Biden's program is very ambitious when it comes to using green investments as a source of employment [and] as a source of really restarting the economy," said RockCreek Founder and CEO Afsaneh Beschloss at the Bretton Woods Committee 2021 Annual Meeting. "I think that that will have a huge impact," she continued. This will create opportunities for investors to generate attractive returns while doing good for the world.

The need for innovative ways to reduce emissions is clear. Last year, due to Covid-19 lockdowns, the world saw a 6.4 percent reduction in carbon emissions. To put that into perspective — in order to meet the objective of reducing emissions by 50 percent by 2030 simply by reducing global growth, we would need the equivalent of eight consecutive Covid-19 years. In order for China to become carbon neutral by 2060, as pledged, it will likely cost over $13.5 trillion. In short, it cannot be business as usual and there is a global demand for innovative solutions.

As flows increase into ESG and impact opportunities, we see a proliferation of sector-focused investments across asset classes and active management strategies seeking to capture value from the integration of ESG factors. Hydrogen is one environmental area that continues to be top of mind for investors and policymakers alike, as it will likely play a key role in the decarbonization of transportation already being used for trains and ships across Europe and Asia. Biofuels, a sector to which the US Department of Energy has recently made a $60 million commitment, is another interesting source of energy that is carbon friendly, requires minimal infrastructure and has a comparable cost to gasoline. Renewable energy accounted for just 11 percent of US energy primary consumption in 2019. President Biden's plan calls for 100 percent renewable energy in the power sector by 2035, leaving a lot of room for growth and positive impact during the next decade.

PUBLIC EQUITIES

Equity Markets	Q1 2021
US Large Cap (S&P 500 TR)	6.2%
Nasdaq	3.0%
US Small Cap (Russell 2000)	12.7%
Japan (TOPIX)	9.1%
Europe (MSCI Europe)	8.5%
China (CSI 300)	-3.1%
Global EM (MSCI EM)	2.2%

Bond Markets	Q1 2021
US 2yr	3.9
US 10yr	82.7
US 30yr	76.6
German 10yr	27.7
German 30yr	41.6
UK 10yr	64.8
UK 30yr	64.7
JGB 10yr	7.4
JGB 30yr	1.8

Currency Markets	Q1 2021
DXY	3.7%
EUR	-4.0%
GBP	0.8%
JPY	-6.7%
MSCI EM Currency Index	-1.1%

Commodity Markets	Q1 2021
Crude Oil (WTI)	21.9%
Nat Gas	2.7%
Gold (Spot)	-10.0%
Steel (Rebar)	14.5%
Ag & Livestock (Bloomberg)	7.7%

RCG HF Indices	Q1 2021
All Hedge Funds	6.0%
Equity Hedge	7.1%
Absolute Return	0.7%
Equity Market Neutral	2.7%
Event Driven	8.2%
Global Macro	4.1%

While everyone was eager to turn the page on 2020 with regard to the virus, equity investors were perhaps wishing they could go back in time. 2021 got off to a rocky start with active equity investors struggling against stiff factor rotations and large-scale liquidations. January was punctuated by the WallStreetBets community taking aim at heavily shorted stocks like GameStop, leading to severe losses for hedge fund Melvin Capital and peripheral losses for other investors with overlapping exposures. Then, in March, Bill Hwang's family office, Archegos Capital, suffered large losses from positions in ViacomCBS, Baidu and Farfetch among others leading to margin calls and a forced liquidation of positions in excess of $30 billion in value. This also led to collateral damage as prime brokers re-examined counterparty risks and investors looked to get out of the way of the forced selling. RockCreek portfolios had no exposure to Melvin or the other hedge funds that were affected by the tumultuous moves in Q1. Both the January short squeeze and the Archegos saga, however, serve as cautionary reminders of what can happen when concentration, especially within a single factor, is combined with too much leverage.

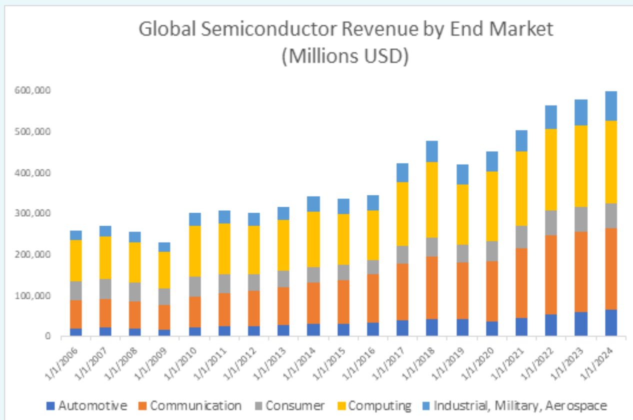
Macroeconomic forces have been driving a rotation away from growth stocks towards cyclicals and the overriding question is to what extent this will continue in the second quarter. The growth factor will be challenged by inflationary forces in the near-term but this seems likely to taper off later in the year and provide select opportunities to add to attractive growth businesses at discounted prices. There are certainly areas of excessive froth — certain spots in software and technology as an example — which are highly susceptible to a re-rating. But assuming inflation does not run rampant and the Fed is able to maintain its accommodative policies, fundamental investors will still benefit from companies at the forefront of innovation that are able to surprise to the upside. It would be premature to make a wholesale rotation away from growth, but at the same time, rebalancing and ensuring portfolios have ample exposure to a cyclical recovery is warranted.

Value investing also requires a discerning eye at this stage. Goldman Sachs recently reported that while its Reopening Scale — a composite score quantifying where consumers are on the path to economic recovery — is at a 5 on a scale of 1 to 10, its "reopening basket" of stocks benefitting the most from a return to normal have already recovered more than 75 percent of their decline. With "reopening" stocks no longer trading at depressed levels, active management is key to generating value in this segment of the market. Europe's recovery, as noted above, has been held back by slow progress in the face of Covid-19. But it could also prove to be fertile ground for value investors as the year progresses. Much will depend on speeding up vaccinations and avoiding further lockdowns. EU officials are still predicting more than half the population will be vaccinated by the end of the summer but that will be too late for the holiday season. A more sanguine view believes Europe could ramp up quickly as and when the tide turns on the disease, and therefore, it is possible that Europe will be able to bounce back quickly once Covid-19 is more clearly under control.

Looking across sectors, there is also value in financials where banks are benefiting from the release of excess capital reserves, improved net interest margins and fees earned from investment banking divisions due to robust capital markets activity. The community bank industry in the US should benefit from increased consolidation. We have already seen more than $10.7 billion worth of bank M&A this year and investors in the space are hearing of substantial pent-up demand to execute deals after last year's dip.

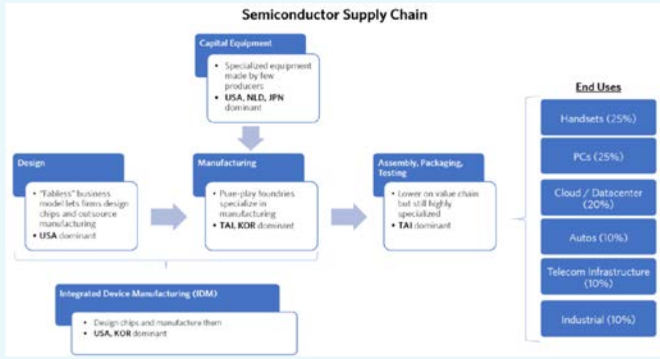
A SPOTLIGHT ON SEMICONDUCTORS

The well-documented shortage of semiconductors results from both an unanticipated pull-forward in semiconductor demand, from the auto sector in particular, as demand held up more than expected during the pandemic, and growing demand as the world becomes more digitally integrated and "smarter." This has caused numerous supply chain issues, slowing auto production in the United States and getting attention from the White House. As demand grows so should revenue. So, which part of the supply chain is best positioned to benefit? The semiconductor industry can be broken down into four sub-groups: design, manufacturing, capital equipment and testing and assembly.



Source: RockCreek, Bernstein

Design firms tend to be household names in the semiconductor industry and include companies such as Nvidia. This segment is highly competitive and reliant on intellectual property (IP), meaning the risk of disruption due to technological innovation is greatest in this segment. Manufacturing (or foundry) is an increasingly specialized, standalone function. TSMC and Samsung currently dominate. The foundry is attractive for incumbents as it is protected by barriers to entry through customer captivity and economies of scale. The suppliers to foundries, the capital equipment companies, are also high margin businesses that benefit from their specialization in different parts of the manufacturing process. For example, Dutch company ASML, which manufactures photolithography equipment needed to physically make the chips, is the sole provider of extreme ultra-violet (EUV) photolithography machines, which are essential for cutting-edge chip production. Assembly, testing and packaging companies are also crucial to chip production, but these tend to be lower margin businesses.



Source: Bridgewater, Semiconductor Industry Association, Credit Suisse

As demand grows so does the need for additional capacity. Semiconductor manufacturers have announced a slew of capital spending. TSMC announced $100 billion of capital expenditures over 2021 to 2023, while Samsung is in the early phases of a more than $110 billion, 10-year investment plan, after which it hopes to be on par with TSMC. After an initial unsuccessful attempt, Intel is reentering the standalone foundry business with the creation of Intel Foundry Services (IFS) and plans to spend an initial $20 billion on an EUV-ready plant in Arizona. Additionally, Intel has lagged technological innovations for its own chips for some years, forcing it to outsource some of its own production. Finally, it remains to be seen if chip designers will trust a rival (Intel) with their IP. Additional capacity, however, cannot be turned on with the flip of a switch or the signing of a check, building chip foundry plants is a multi-year and multi-billion-dollar process. In addition, new capacity may not completely solve existing issues.

There are ongoing risks to semiconductor procurement around the world. These include geopolitical tensions, with sanctions on Chinese companies impacting supply and demand globally. The blacklisting of SMIC is the most obvious example, but additional restrictions on other Chinese supercomputing entities will likely impact orders to manufacturers. Building a new factory across the globe in Arizona will be a challenge for TSMC. Political issues extend beyond the Sino-American sphere — Italian Prime Minister Mario Draghi recently announced that his government had blocked Shenzhen Investment Holdings from buying a 70 percent stake in Milan-based semiconductor company LPE. Weather and climate change have also compounded supply problems. The freak February snowstorm in Texas temporarily shuttered semiconductor factories operated by Samsung, NXP and Infineon. Meanwhile, an ongoing drought in Taiwan — the worst in half a century — is threatening its water-intensive chip production.

The whole semiconductor and semiconductor services industry has benefited from the global shift towards digitalization with the MSCI ACWI Semiconductor and Semiconductor Equipment index outpacing the total ACWI by more than 50 percentage points since the end of 2019, leaving valuations elevated. Regardless, it is tough to bet against the overall industry's tailwinds, and companies protected by barriers to entry are likely to perform best over time.

EMERGING MARKETS EQUITIES

Index	Q1	YTD	1-Year
MSCI Emerging Markets	2.3%	2.3%	58.4%
MSCI Emerging & Frontier Markets	2.3%	2.3%	58.1%
MSCI EM Asia	2.2%	2.2%	60.1%
MSCI EM EMEA	8.1%	8.1%	52.2%
MSCI EM Latin America	-5.3%	-5.3%	50.1%
MSCI Frontier Markets	0.8%	0.8%	39.3%

Source: MSCI as of 3/31/21.

Similar to developed market equities, emerging markets witnessed a rotation away from growth and into value, particularly during the second half of the quarter. The MSCI EM Value Index closed Q1 3.5 percent ahead of the MSCI EM Growth Index. Not surprisingly, basic materials, financials, industrials and energy names led returns and a second consecutive quarter where value beat growth. Putting this quarter into perspective, over the last ten years, value outperformed growth in EM for only three quarters: September 2020, December 2016 and March 2016.

This quarter's rotation away from growth coincided with Chinese equities underperforming the rest of emerging markets. This reflects two things: the phenomenal 2020 run in Chinese equities, driven by defensive and technology names, led to profit taking in Q1 and non-China emerging market countries benefited in Q1 from a relatively larger representation of cyclical sectors.

MSCI Country Index Sector Weights (%)

	China	Brazil	Russia	South Africa	India
Financials	14.2%	23.8%	20.3%	24.9%	25.4%
Energy	1.2%	11.6%	41.8%	1.3%	11.9%
Materials	2.3%	26.4%	20.8%	28.6%	10.5%

Source: RockCreek, MSCI

Chinese, Korean and Taiwanese markets are likely one to two quarters ahead of the rest of the world when it comes to domestic recovery from the virus with current valuations pricing this in. Over the quarter, based on North Asian valuations, we rebalanced into more cyclically oriented economies such as Brazil, India and South Africa. Albeit, deliberately slowly, keeping in mind both valuation opportunities and the deteriorating public health conditions in these countries.

Irrespective of geography, we believe companies tied to the secular domestic growth story remain one of the most exciting medium-term investment opportunities. This includes investments in technology-related consumer, healthcare, education, financials and green energy solutions. We continue to make investments in telemedicine and biotech companies, payment platforms tied to the launch of China's digital currency (see inset), online education companies and solid-state EV battery manufacturers.

A SPOTLIGHT ON CHINA'S DIGITAL YUAN

An interesting development is China's "beta testing" of its digital cryptocurrency or Digital Currency Electronic Payment (DCEP). Chinese authorities launched a pilot program across various Chinese cities, including China's tech hub Shenzhen where the local government gave away virtual gift packets and allowed residents a fixed period to spend it. The private sector is keen to get involved in the DCEP pilot program. The country's largest ride-hailing company Didi Chuxing, food delivery giant Meituan Dianpin and streaming platform Bilibili were reported to be in talks with major Chinese banks to explore applications of the DCEP.

Screenshot of the DCEP Digital Wallet

Source: The Ledger Insights

For the rest of 2021, additional rollouts are planned to 28 cities and provinces, including Beijing, Shanghai, Guangzhou and Hong Kong — the four largest consumer spending markets in the country. DCEP will also come with payment options that do not require users to be online for transactions. In addition, DCEP does not require the user's smartphone to be connected to a formal bank account — a fundamental distinction when compared to WeChat and AliPay payment platforms — meaning China's unbanked population will also have access to the digital currency. Initial results of the pilot programs seem to indicate few technical glitches. DCEP enables the Chinese government to track individual spending patterns in real time as it does not provide anonymity to the end user. DCEP also has the potential to severely curtail tax evasion, counterfeiting and other fraudulent practices, facilitate monetary and fiscal policy with unprecedented precision and speed and, conveniently, help China transfer digital money across borders without needing to go through a dollar-based international payment system like SWIFT. With the USD being the dominant reserve currency for international transactions, China seems intent on building its own network of private trading channels with select countries, particularly those that are part of the Belt and Road Initiative. Chinese authorities can leverage the country's existing platform of mobile payment applications and facilitate financial access to populations along the Belt and Road to be connected, including the 20 percent of China's population that remains unbanked. According to the World Bank, 1.7 billion adults around the world use cash because they do not have bank accounts. However, two-thirds of this population own a mobile phone, which can be used to make monetary transactions. In China, mobile payment applications such as Alipay or WeChat Pay have more than 1.7 billion customers across the country. Currently, the two online payment companies handle more payments monthly than PayPal did in the entirety of 2017 (approximately $451 billion).

The US and other Western countries have not acted to counter China's attempt to build an alternative international payments system. The Fed and other major central banks, as well as the BIS, are examining the question of Central Bank Digital Currency (CBDC). But this avenue is rather different from incorporating private currencies into the financial system. The Fed has not lent much credence to the idea of integrating existing private digital currencies like Bitcoin into the US financial system. Time will tell if this approach pays off. One thing is certain, the Chinese will not wait.

FIXED INCOME

The first quarter of 2021 marked the worst quarter for the US bond market since 1981. Performance was driven by interest rate duration as the Treasury curve shifted higher and steeper. The 10-year yield rose 81 bps to 1.74 percent, while the spread over the 2-year point widened by 78 bps to 158 bps. Real yields were also higher during the quarter, but outperformed nominals — the 10-year yield on TIPS rose 43 bps to -0.63 percent. As a result, breakeven inflation rates (a measure of expectations for annual CPI growth based on the spread between nominal Treasuries and TIPS) were decidedly higher along the curve. The rise was most acute in the front end where 5-year breakevens increased 59 bps to 2.54 percent. Credit had an incrementally positive effect with US investment grade corporate spreads declining 6 bps to 97 bps during the quarter. Global bond markets participated in the sell-off albeit to a lesser extent. Germany's 10-year yield rose 28 bps to -0.30 percent, while peripheral European bond yields tightened modestly to Bunds.

The market and Federal Reserve were largely in sync in 2020. The market believed the FOMC would remain accommodative for an extended period without spurring inflation in excess of its new policy objective. This harmony seemed to break down in Q1 with the economic outlook brightening. Important shifts in the bond market signaled that investors grew increasingly skeptical that the Fed will be able to hold rates at current levels through 2023. First, the driving force behind rising implied inflation rates pivoted from falling real yields to rising nominal yields. Second, inflation expectations have been pulled forward with front-end breakeven rates rising above long-term projections. Third, after being well anchored to frontend rates, nominal maturities of 2- to 5-years began to edge higher with longer maturities. The bond market has been the "tail wagging the dog" in recent years, as low interest rates have helped to boost stocks, so it will be important to monitor how this relationship evolves during the remainder of 2021.

While the setup for fixed income continues to look unattractive, it is also looking better than it did three months ago. Bonds are yielding more and the roll down of a steeper curve will cushion any further move higher in rates. The short bond trade has also become crowded as reflected by the 10-year cost to borrow repo rate falling negative at times during March — a soft indicator that the trend is at risk of being overextended.

EMERGING MARKET DEBT

The steep move in Treasury yields made for one of the worst calendar-year starts in decades for emerging markets debt. The table below summarizes the performance of hard and local currency emerging market debt for the quarter.

	Q1 2021
Hard Currency Sovereign	-4.5%
Investment Grade	-5.3%
High Yield	-3.7%
Hard Currency Corporate	-0.8%
Investment Grade	-1.7%
High Yield	0.4%
Local Currency	-6.7%
FX	3.6%

Source: JP Morgan

The asset class rallied strongly in late 2020, as a result of many positive macroeconomic factors, such as optimism about vaccine rollouts, easy global financial conditions, higher commodity prices, and improving bottom-up fundamentals. This euphoria, however, shifted in Q1 2021 as emerging markets debt felt the headwinds of rising Treasury yields. In the early part of the quarter, the more cyclically sensitive parts of the asset class — high yield bonds and currencies — continued to outperform, while the parts most sensitive to US interest rates — namely, investment grade sovereign bonds — underperformed due to their longer duration profile and tighter spreads.

EM local currency debt returned -6.7 percent for the quarter with performance attribution evenly split between bond and currency (FX) returns. Markets adjusted for fiscal and policy credibility issues in Latin America countries, some idiosyncratic risks in Turkey, and higher US rates volatility through a repricing of local rates premia and a depreciation of currencies. The largest underperformance was from Turkish local bonds that sold off significantly as a result of the unexpected removal of the central bank governor Naci Agbal by President Erdogan that hurt policy credibility.

EM hard currency sovereign debt also had a difficult quarter delivering a -4.5 percent return. Although spreads were resilient over the quarter, a large bear steepening in US Treasuries weighed on total returns. In terms of specific issuers, Argentinian and Ecuadorian bonds were the worst performers. Argentinian bonds sold off not only because of the steeper US yield curve but also because the country's fiscal outlook has deteriorated, and markets are pricing in potential risk that an IMF program is delayed. For Ecuador, the international reserve levels are relatively high, and oil prices have increased; however, Ecuador continues to face structural, institutional and economic challenges. Corporate hard currency debt was relatively more resilient which is not surprising given that emerging market corporations entered the pandemic with balance sheets stronger than US corporates and have not been impacted by the fiscal spending issues faced by EM sovereign counterparts.

Given these dynamics, we believe a more cautious approach is warranted moving forward. From a bottom-up perspective, fundamentals are attractive and should benefit from the better global growth outlook and supportive commodity prices. The macroeconomic outlook, however, is mixed as a result of continuing uncertainty regarding the vaccine roll-out and re-opening of economies. We believe active management, focusing on short-duration hard currency debt in selective sovereign and corporate issuers, should continue to provide opportunities for generating attractive returns.

PUBLIC CREDIT

Q1 saw a reversal in flow dynamics for bonds and loans as the rate back-up led to a focus on the floating rate characteristics of the leveraged loan market. Leveraged loan funds saw a nearly 20 percent increase in assets in Q1, much at the expense of corresponding bond funds. While this has tapered off, we would expect this trend to restart if inflation data shows any signs of accelerating. The retail-driven frenzy of flows mostly impacted the equity and capital markets (namely SPACs). However, in a few instances they had meaningful balance sheet impact in the form of equity capital raises, which led to a meaningful recovery in the associated debt complex. AMC was a primary beneficiary, seeing its second lien loans move from the 20's into the 70's after the company took advantage of its equity price spike to raise fresh capital. While GameStop did not similarly capitalize on its equity price activity during the quarter, it recently announced plans for an upcoming capital raise. Overall, the quarter was marked by unusual flow activity, but a continuing trend of falling yields (to record lows) across the debt spectrum.

Along with the fall in yields we have seen a shrinking of the distressed universe, which now stands at a 5-year low, with energy-related debt accounting for half the paper. Investment banks have continued to lower their default estimates, with many now assuming a 3 to 5 percent range for 2021. Covenant lite loans now make up 87 percent of loan issuance over the past four years, bringing the index weight to 85 percent. This is a new record and compares to 24 percent in 2013 and just 17 percent pre-GFC. Along with the increasing number of covenant lite loans comes record debt issuance (both in HY and loans) to new highs ($160 billion for HY), 75 percent of which was driven by refinancing or repricing. With maturity walls pushed out, fewer investor protections (covenants), and a shrinking opportunity set (universe), the distressed space looks unattractive.

Looking forward, we see opportunity in the smaller-issue debt market (i.e., those that are not the 200 largest issuers). The smaller issue or SMID cap market accounts for only 35 percent of par value of bonds outstanding (compared to 65 percent for the top 200 issuers) but includes 90 percent of outstanding bonds (from a count perspective). The average issue size of approximately $350 million is about half of the average issue size of HY ETFs and mutual funds, which makes for a much less efficient market. The space is also "under-followed" by sell-side research houses and rating agencies. In both cases, these firms tend to spend time in "scalable" capital structures (where work rating or evaluating a bond can be used for other bonds issued by the same company). For small issuers who often have only one bond or loan outstanding, it simply is not economical for sell-side firms to spend time on them. Currently this segment of the market provides an additional ~100 bps to yield pickup versus the larger issuers, but with a higher level of dispersion/volatility.

PRIVATE CREDIT

Private credit markets did not escape the impact of Covid-19 when the pandemic first hit the global economy in March 2020. As with other financial markets, private credit also bounced back by year's end. The strong finish to year-end has left GPs and investors both with a clear sense of optimism that private credit might fully rebound in 2021. Instead, the year began with disappointment. Distressed credit investors that excitedly awaited the prospect of a 2008-scale cycle saw it disappear as a result of the scale of fiscal and global monetary stimulus. Most distressed funds have raised significantly large pools of capital and deployed only a fraction of capital raised. As markets rebound and corporate spreads are nearing record tight levels, some investors have begun conversations with GPs to return committed but uncalled capital. While distressed investors have paused, the thirst for yield has accelerated flows into direct lending-oriented strategies.

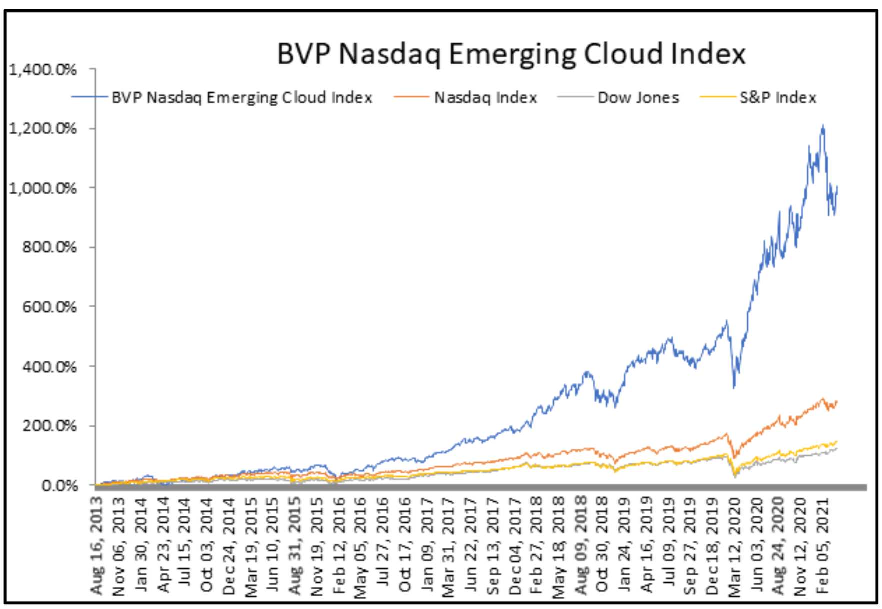
Within the direct lending ecosystem, investors are increasingly focused on lending to technology companies, expanding to even those companies that are not profitable. More specifically, private credit firms are targeting non-profitable software firms that have adopted the Software-as-a-service (SaaS) recurring revenue model given their attraction for the 'stickiness' of this top-line revenue. This has led to a new financing model that seeks to raise debt through asset-backed securitizations backed by the cash flows of a portfolio of such companies. Unlike traditional debt financing, this structure amplifies the amount that is lent out and provides private credit firms with term leverage on their investments. Surprisingly, ABS investors have been snapping up these new issue securitizations and the all-in interest rates have fallen close to 3 percent. Another area that has seen increased investment activity, especially in Q1, has been the purchase of single or multiple asset commercial real estate loan portfolios from community or regional banks. Prior to the pandemic, some banks became overexposed to commercial real estate and to the hospitality sector. Despite increased visibility into the re-opening of the economy, banks have been trying to reduce balance sheet exposure to hotel loans thereby providing an opportunity for investors to buy sub-performing-to-performing loans at a discount to face value.

As we look forward, the roadmap has changed significantly over the course of a few months. We see some of the most promising private credit opportunities outside of the United States, primarily in Europe and Asia. The continued spike in Covid-19 cases and slow vaccine distribution in Europe has created pockets of stressed and distressed opportunities especially for smaller and mid-sized companies. Within the United States, we believe the opportunity for corporate distressed investments is long gone. The current opportunity can be defined as follows: (i) providing capital to small and medium sized businesses (many of whom have not reached pre-pandemic revenue levels) to pursue growth initiatives and/or right size their balance sheet and (ii) consumer finance as their balance sheets have been strengthened by the recent stimulus payments and the gradual reopening of the economy. Select specialty finance strategies with GPs that continue to be steadfast in their underwriting continue to be well positioned.

PRIVATE EQUITY & VENTURE CAPITAL

As noted earlier, inflation concerns weighed on growth stocks during the first quarter. The public equities of software companies were particularly impacted, as the BVP Nasdaq Emerging Cloud Index, an equal weighted index of 58 leading SaaS stocks, declined by 10 percent for the quarter versus a 2.8 percent increase for the broader Nasdaq Index. As a whole, the public SaaS sector saw a re-rating from approximately 25x revenue in late 2020 to 17x revenue by early April 2021. Despite these public market headwinds, software continued to "eat the world" in private markets, with record amounts of private capital flowing into the sector across all stages, from venture capital to growth equity to leveraged buyouts. In venture capital, software deals represented more than a third of the capital deployed during the quarter and accounted for nearly 40 percent of capital deployed at the growth stage. The figures are harder to ascertain for buyouts, but the IT sector more broadly accounted for 26 percent of deal volume in Q1, an increase of more than 1,000 points from a decade ago. Much of this activity is being driven by the growth prospects of the sector, as a recent report from Gartner states that enterprise IT spending on software is expected to grow nearly 9 percent in 2021 to more than half a trillion dollars.

Valuations also continued to rise in the private markets, with Stripe raising $600 million of new funding at a $95 billion valuation and Plaid raising $425 million at a $13 billion valuation, while UiPath raised $750 million at a $35 billion valuation representing ~57x trailing revenue. Exit volume also remained robust for private technology companies as several notable public offerings priced during the quarter, including Affirm, Coupang, Digital Ocean, Olo, Oscar Health and Roblox. After starting the year off with a boom, the wave of new SPAC filings began to slow during the end of the quarter, though Southeast Asia-based super-app Grab announced plans to be acquired by a SPAC sponsored by Altimeter Capital Management at a rumored valuation of $35 billion, which would be twice the size of the prior largest SPAC merger.



Looking forward to the second quarter and beyond, the wave of public exits is expected to continue, with the likes of Coinbase (successfully began trading on April 14 with an initial market cap of around $95 billion), Databricks and Robinhood expected to join the previously mentioned Stripe and UiPath in pursuing public listings, continuing the surge of liquidity to private equity and venture capital firms. While Q1 data was not yet available at the time of this note, anecdotally RockCreek observed a rapid pace of investment in venture capital far exceeding prior periods. According to Crunchbase, venture funding in January alone hit at an all-time monthly high of nearly $40 billion. The combination of record liquidity and investment activity has accelerated the fundraising cycle for the venture capital asset class. Private equity volume was steadier, though RockCreek has observed a trend of traditional buyout firms increasingly focusing on non-control venture capital and growth equity-oriented transactions.

RockCreek is investing in innovations at the intersection of climate, education, healthcare and property technology. We look cautiously at the Chinese healthcare sector, as China is emerging as an outsourcing hub for many pharma and biotech companies, resulting in reduced costs and faster development cycles. In addition, capital markets in the region have been highly supportive, as the Hong Kong Stock Exchange has become the leading exchange for biotech IPOs. The typical IPO valuation for Chinese biotech companies is approximately $2.0 billion, versus $500 million in the United Sates, while the pre-IPO step-up is nearly 3x in China versus approximately 1.3x in the United States. As a result, many generalist and traditional public equity funds have moved into the pre-IPO biotech space, which is pushing private equity and growth equity funds earlier into the Series B and C range. Moreover, the best Chinese biotech companies are now going public after their Series C rounds, so the classic Series D strategy is disappearing, creating fewer opportunities for investors to access these opportunities. This capital markets momentum has largely been driven by the institution of Chapter 18A in 2018, which allows for pre-revenue companies that are at a relatively advanced stage of development to seek a public listing on the Hong Kong Stock Exchange. Since Chapter 18A was instituted, approximately 30 companies have listed pursuant to rule raising nearly $10 billion, and as of December 31, 2020, the share prices of those companies had increased by an average of 67.1 percent.

REAL ESTATE

While the residential real estate markets are at historical highs in some areas, the impact of Covid-19 on the global economy and on the commercial real estate industry made 2020 the most memorable year in recent history. Asset owners needed to digitize operations and close physical facilities due to extensive lockdowns, and then prepare for reopening, while ensuring the health and safety of employees and occupiers and considering the financial health of the tenants and users. One of the more noteworthy events during the quarter was the release of the results from the 5G spectrum auction.

From December 2020 to January 2021, the FCC C-Band auction took place where frequencies between 3.7 and 3.98 gigahertz (GHz) within the C-band were sold. This auction was perceived as critical to developing 5G because the frequency is exceptionally well suited for supporting the internet over a broad area with low latency. The C-Band Auction was the largest auction of mid-band 5G spectrum and the highest grossing spectrum auction ever held in the United States. Gross proceeds from in- auction bidding finished at $81.2 billion for 280 megahertz (MHz) of spectrum, or $0.95/MHz Pop. The largest winner was Verizon who purchased 3,511 licenses in 406 geographic areas paying well over $50 billion. RockCreek participated in the auction on behalf of its investors through a co-investment.

The full results of the auction are shown in the table below:

C-Band Auction Results (Top 10)

Company	Building Entity	Net Payment
Verizon	Cellco Partnership	$45,454,843,197
AT&T	AT&T Spectrum Frontiers LLC	$23,406,860,839
T-Mobile	T-Mobile License LLC	$9,336,125,147
UScellular	United States Cellular Corporation	$1,282,641,542
Grain Management (Private Equity)	NewLevel II, LP	$1,277,395,688
Canopy Spectrum	Canopy Spectrum, LLC	$172,021,760
C Spire	Cellular South Licenses, LLC	$49,850,284
Widespread Wireless	Widespread Wireless, LLC	$48,455,001
Pioneer Telephone Cooperative	Pioneer Telephone Cooperative, Inc	$20,104,200
Carolina West Wireless	Carolina West Wireless, Inc	$15,780,658

Source: FCC

This past year has amplified the existing bifurcation in the market, with some property types thriving and others struggling in this Covid-19 environment. As Covid-19 begins to dissipate, we believe generating strong returns will largely rely on identifying which property types and markets present opportunities. An important element will be to expand to alternative real estate sectors that are poised to benefit from long-term demographic, technological and social changes. An opportunity of focus is telecommunication real estate assets such as fiber, spectrum cell towers and data centers. The pace of digital data creation and storage has been accelerating and will only increase as a result of new technologies (e.g., AI, VR, IoT, autonomous vehicles) on the horizon. The value of telecommunication real estate and infrastructure should continue to appreciate for the foreseeable future.

An area RockCreek has been an early investor and continues to hold conviction is affordable housing. This sector should benefit from the Biden Administration's infrastructure plan, which allocates $213 billion for a wide variety of housing initiatives designed to help low-income households. The objective of seeking to preserve and develop over two million affordable housing units should provide a tailwind for private capital seeking to construct or rehabilitate such assets. Moreover, increased support for low-income renters through a combination of tax credits or subsidies should further improve performance by reducing delinquency and foreclosure rates.

Single family residential is a sub-sector that has been institutionalized over the past decade evolving from individual units owned and rented out by small landlords to large scale operations by public institutions such as Invitation Homes and American Homes 4 Rent with significant portfolios of houses for rent. While the supply of capital may erode the attractiveness of this opportunity, it is likely to stay compelling for the next 10 to 12 months as cap rates continue to trade at a premium to other property types, because of the optionality from continued home price appreciation.

High Throughput Industrial Real Estate Assets should be well positioned going forward as e-commerce increases, all industrial warehousing assets should benefit, especially high-throughput assets that will become critical to retailers seeking to manage fulfillment expenses on a cost-effective basis. Strategically located in and around major population centers and primary distribution hubs, these assets are the “last mile” freight distribution transfer points facilitating the efficient flow of goods to consumers at the final stage of the supply chain.

Self-storage has been a defensive and resilient investment that has consistently performed well relative to other real estate property types. The self-storage industry is characterized by high margins, low operating costs and stable cash flows. Despite increased institutionalized interest, the sector remains fragmented creating portfolio aggregation opportunities as a large fraction of Mom-and-Pop self-storage property owners of the Baby Boomer generation look to retire.

ROCKCREEK UPDATE

Last week, RockCreek Senior Advisor Caroline Atkinson discussed at the Peterson Institute for International Economics (PIEE) Global Connections how emerging markets will fare as the world recovers from the Coronavirus Recession alongside Gita Gopinath, Chief Economist at the International Monetary Fund and Peter Orszag CEO, of Financial Advisory at Lazard.

RockCreek Managing Director Sherri Rossoff spoke on the importance of transparency and the future of emerging manager programs at the Standards Board for Alternative Investments (SBAI) launch of their program for new and emerging managers, SPARK, last week. She was joined by Kirk Sims of Teacher Retirement System of Texas — a leader in emerging managers, Robert Sachs (Whitebox Advisors) and Adrian Sales (Albourne). Read the full press release here.

As part of RockCreek's focus on providing meaningful opportunities for students to obtain exposure to finance, we are excited to announce the RockCreek Young Professionals Program. This is a unique opportunity designed to provide interesting exposure to the many facets of global asset management. It can be the starting point to pursue educational opportunities related to finance as well as an exciting career in finance or other professions. This is a great opportunity to meet members of the RockCreek team who can be helpful mentors as your education continues and your careers develop. If you are interested, please send your resume and cover letter to youngprofessionalsprogram@therockcreekgroup.com

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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.