RockCreek

When the World Changed

Q1 2022

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The beginning of 2022 was a time of firsts. War in Europe, inflation at 40-year highs, and the start of a monetary tightening cycle across major economies coincided to knock equity markets back and trigger a sharp correction in bond prices in Q1. The traditional bond market hedge against stock market declines did not work to safeguard portfolios.

Looking ahead, investor caution remains warranted. Opportunities can, nevertheless, be found. Russia's shocking invasion of Ukraine has accelerated the energy transition that is urgently needed to address climate change, increasing the focus on sustainable investing. In addition to the clean energy space, investors can find opportunities in real estate, infrastructure, food and water related areas, and minerals, which *will increasingly be in short supply.*

***Three macro themes** emerged in Q1 that will dominate going forward:* geopolitical tensions*;* inflation and monetary tightening*; and a* softening of the global economy*, caused in large part by the first two factors as well as by continued weakening in China. All have been widely discussed in gatherings of finance officials in Washington for the Spring Meetings of the International Monetary Fund (IMF) and World Bank.*

The unprovoked Russian invasion of Ukraine triggered the first major war in Europe after seventy years of peace. Brutality unleashed by President Vladimir Putin led the United States, Europe, and many other countries to impose punishing sanctions more swiftly than ever before. For the first time, many private companies went beyond legal requirements to sever their economic ties with Russia.

Even before the invasion and sanctions accelerated energy and food price inflation, central bankers on both sides of the Atlantic were grappling with record high price rises. During Q1, warnings of earlier and steeper monetary tightening grew stronger. Unsurprisingly, financial markets – which had stayed upbeat through the end of 2021 – did not like what they heard. In the US, Treasury yields backed up dramatically in the quarter – the 2yr yield rose 160 basis points, the biggest quarterly move since the early 1980's. The curve also flattened – and inverted briefly – as markets bet on tight conditions that will need to be eased eventually. Equity markets also broke their winning streak, with the worst quarterly decline since the onset of the pandemic two years ago**.**

Monetary tightening and the further hit to supply chains from the war and sanctions will dampen – and could even extinguish – recovery from the pandemic-induced recession, pushing up unemployment. The most direct hit to growth is likely to be felt in Europe. High commodity prices will also hurt many emerging economies. Growth in China is also being marked down significantly on the back of Q1 developments. In addition to the impact of the European war on commodity prices and trade, Covid outbreaks across China have led to new drastic lockdowns in major cities. The hangover from last year's steps to curb the property sector and high-flying private companies in consumer tech continues to dampen demand. For the global economy as a whole, the IMF marked growth down significantly in its semi-annual outlook, published April 19th, to 3.6% this year and next, after the 6.1% post-pandemic jump in 2021. Other forecasters are similarly bringing down their growth forecasts.

Investor concern is understandable. Shocks to the global economy – first from the pandemic, and now the war – have reminded us that "unknown unknowns" can quickly render obsolete even well-grounded expectations. To borrow the words of Fed Chair Jerome Powell – it's a time to be both humble and nimble.

But not all the surprises have been bad. Most strikingly, the staunch resilience of Ukraine's fighters, armed and resupplied with modern weapons by the US and allies, thwarted Russia's advance on the capital, Kyiv. Ukraine's President, Volodymyr Zelensky, is proving to be an extraordinary war-time leader. Putin's initial military plan failed and has shown Russia to be a less formidable rival – or helpful ally – than most thought. As the war moves to the East, where terrain may be more advantageous to Russia, the US and others are stepping up arms shipments.

Fears of recession and "stagflation" may also be overdone, at least in the US. The rapid demand growth that has pushed up inflation has also led to more jobs and higher wages for the lower paid, more in the US than elsewhere. Unemployment has dropped sharply, almost down to pre-pandemic levels, and is now pulling more vulnerable workers into the labor force. So the Fed is tightening into a strong economy without visible signs so far of the financial cracks that have exacerbated recessions in the past.

GEOPOLITICS AND THE GLOBAL ORDER: REGIME SHIFT?

Many believe that we're living through a regime shift, accelerated but not created by Russia's invasion of Ukraine. President Putin's aggression has brought together European countries and the US and other allies. But the war also illustrates the divide between these nations and other major economies – notably China but also India, Indonesia, and Brazil, as well as Saudi Arabia and the United Arab Emirates (UAE) – who have been reluctant to join in Western criticism of Russia or impose sanctions. This distancing has implications for the global financial order, as evidenced by a walkout from this week's meeting of G20 finance officials led by US Secretary Janet Yellen and Canada's Chrystia Freeland when the Russian finance minister joined virtually to speak.

Even before the invasion, there were signs that the world was moving into a more divided, more protectionist, higher inflation regime. US policy – think "Buy American" and continued tariffs on China – may even be exacerbating the move towards more nationalist policies, which in turn will dampen productivity growth over time.

The globalized world that took shape this century, including China and Russia, as well as other big emerging economies, held down inflation and interest rates and buoyed financial markets and incomes more broadly. It fueled an unprecedented reduction in global poverty, notably with the growth unleashed in China by the leadership's decision to allow private enterprises to prosper and export, and private citizens access to consumption goods and property ownership. As China joined the global economy, productivity and living standards grew worldwide. Emerging markets were helped by the commodity boom from China's surging demand for raw materials. European industry, notably in Germany, benefited from Chinese imports of industrial inputs. Consumers, especially in the US, enjoyed lower prices for many goods.

But globalization also led to strains. In advanced economies, inequality grew as the labor share of income declined and company profits climbed. The other side of the coin of cheap imports involved concentrated job losses in certain industries and regions, especially in manufacturing. Slow recovery from the Global Financial Crisis – itself a demonstration of financial excesses – left many workers and their families feeling left behind.

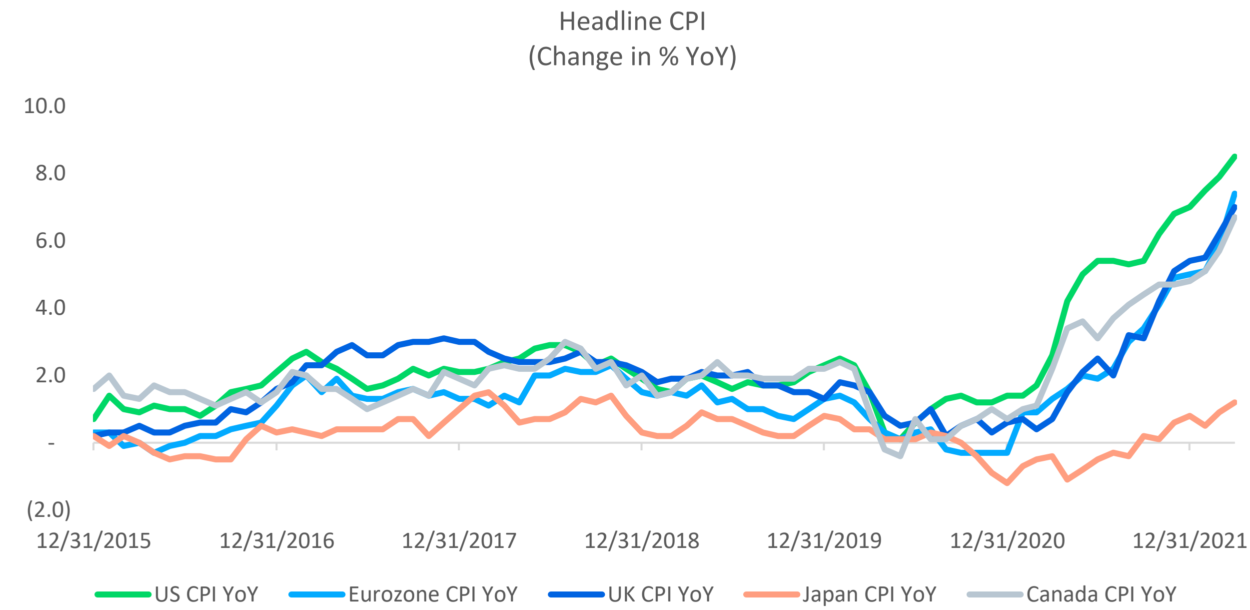
Increasingly, blame has fallen on "globalization" and politicians have sought ways to bring jobs back home and keep foreign workers at bay. Covid, war, and financial sanctions have solidified these trends, as argued by Adam Posen, President of the Peterson Institute for International Economics, in the latest issue of *Foreign Affair*s. Richmond Fed president, Thomas Barkin, agrees. Like Posen, he sees dangers for global growth and inflation, noting in a recent speech, "We're likely to see some deglobalization, as countries rethink their trading relationships and firms redesign their supply chains to prioritize resiliency, not just efficiency."

At RockCreek, we expect that the terrible war in Europe is unlikely to end swiftly. Even if President Zelensky can find common ground on peace terms with Putin, the latter would demand an end to sanctions. That decision rests with the US, not Ukraine. An American Administration and Congress that are wary of being seen as soft will be reluctant to welcome Putin's Russia back into the fold. Companies and investors need to build Russian isolation and continued sanctions into their expectations.

A much greater risk for the global order is growing tension in the world's key relationship: China and the US (read more on this in the spotlight section). It's clear, eight weeks into the war in Ukraine, that China is maintaining close ties with Russia, despite US and European entreaties. If the world is dividing into different camps, China will not be on the US side. So far, Chinese firms and banks have observed the letter of the sanctions. There are still links between economic and financial officials of the two countries. But with little to no productive contact between diplomats and national security officials, Secretary Yellen is hard pressed to maintain a working relationship with President Xi Jinping's key adviser Liu He. Ahead of the IMF and World Bank meetings, Yellen delivered a stark warning that the world's "...willingness to embrace further economic integration may well be affected by China's reaction to our call for resolute action on Russia."

US-China relations matter for the global economy, as well as for peace. Joint action by China and the US helped the world to come together after the global financial crisis, under the auspices of the G20, to rescue the international system and preserve open trade. Contrast that with today's G20 divisions over Russia. This split comes on top of the failure of major countries to take joint action on issues ranging from pandemic preparedness to unsustainable debts across the developing world, much owed to China. It's hard to see this year's G20 meeting in October, under Indonesia's presidency, bringing leaders together to confront the current macro threats of rising global inflation amid energy and food shortages.

INFLATION: BACK TO THE 1970s?



Q1 marked the start of a critical tightening cycle for major central banks, challenged by an upward shift in inflation for which none of them was prepared. Markets have also been slow to catch up. At RockCreek, we agree with the view now espoused by economists from across the political spectrum – from Harvard's Kenneth Rogoff to New York Times columnist Paul Krugman – that rates will have to rise further and faster than now priced in, if inflation is to come down as the Fed projects. The message is feeding through to some markets: mortgage rates on 30-year loans hit 5% in mid-April. It's too soon, however, to conclude that the post-pandemic inflation shock heralds a regime shift back to a high-inflation world like the 1980s.

It was clear some months ago that the continued easy monetary policy in place in the US, Europe, and the UK was no longer appropriate. Federal Reserve chairman Jerome Powell acknowledged back in November that the word "transitory" should be retired. Fed action was, nevertheless, delayed until March, when policy rates were increased by 25 basis points and quantitative easing finally stopped. Since then, and including this week, Chair Powell has signaled that the Fed will move more decisively when it meets in early May, with a bigger rate increase, and a switch from asset purchases to sales likely. Powell's support this week for "front-end-loading" the removal of monetary stimulus suggests multiple 50 basis point moves are coming.

RockCreek believes that these potential actions are appropriate. In recent months, the US data have shown price increases broadening beyond the initial sectors impacted by the pandemic and beyond the most volatile elements of energy and food. Today's inflation is a global – or at least a western – phenomenon. By the end of Q1, US headline CPI reached a 41 year high of 8.5%, while eurozone inflation hit 7.5%, the highest recorded during the life of the single currency. The financial shockwaves in Q1 only worsen the outlook. The IMF now projects US inflation at 7.7% percent this year, up from 4.3% expected last fall, and well above the latest Fed forecast released a little over a month ago, for a 4.1% rise in their preferred inflation measure, personal consumption expenditure (PCE).

Not surprisingly, economists who were almost – though not quite – unanimous in downplaying inflation risks a year ago are now examining where they went wrong. As one analyst put it in a recent mea culpa, "I unfairly dismissed the most boring, Econ 101 explanation for why inflation happens" – too much demand for the supply that the economy could produce. Another way to look at it, as former US Treasury Chief Economist Karen Dynan put it, "The models really let us down." Perhaps most importantly – the conditions that central banks and investors have been facing in the past two years have been extraordinary. In such times, it's wise to remain vigilant and not to rely too heavily on one model or one interpretation of events.

The trajectory of three key factors in the coming months will determine whether the Fed and other central banks can bring inflation down with a "soft landing": rising demand, curtailed supply, and shifting inflation expectations. Optimists point to the still anchored long-term inflation expectations from market data to argue that once supply bottlenecks ease and the Fed has tightened financial conditions moderately, wage and price setters will bring down their expectations of future price increases. Demand and supply conditions may well improve during Q2, with the annual inflation rate peaking and beginning to decline on this side of the Atlantic. Headline inflation in Q2 will be based on comparison with a period of large price increases in April-June 2021. Will that facilitate the Fed's job?

Pessimists note that once inflation becomes a concern, households and businesses lose track of how best to ensure the increase in real wages or profits that they seek. In other words, the anchor of price stability is lost. It's true that investors need to look for ways to guard against continued above target inflation and rising interest rates – not just this year, but into 2023. With the Fed now focused firmly on fighting inflation, the odds are against further acceleration of price increases. What monetary tightening will mean for economic growth and jobs is more in question. The Fed is aiming for a soft landing, but that will require not just skill but luck – which has been in short supply in recent times.

GROWTH IS SLOWING: BUT SHOULD WE FEAR RECESSION?

There is increasing doubt over the strength and sustainability of the global recovery, in the face of monetary tightening and the shock of the war in Ukraine on demand, as well as on prices. Private and official forecasters agree: global growth will be slower and inflation higher this year than seemed likely just a few weeks ago. The rise in energy and food prices triggered by Russia's invasion acts as a tax to dampen demand, as well as pushing up inflation. Germany, the usual engine of the European economy, is particularly vulnerable to the impact of the war on the economies of Ukraine and Russia and of sanctions. Weakness in the Chinese economy is also damaging to Germany's traditional export machine.

By now, it's well understood that Europe's energy dependence on Russia is hobbling the attempt by the US and others to stop the flow of funds into Russia that Putin needs to wage war. What is more controversial is whether it would be feasible for Germany, and to a lesser extent Italy, to absorb the economic costs of halting energy imports from Russia. Increasingly, economists agree that the damage to

Germany's economy would be significant, perhaps 1-2% of GDP, but it would by no means be catastrophic or unprecedented in recent times. Officials in key European capitals are now working quietly but intensively to plan for the distribution of scarce supplies of oil and gas, together with a rapid buildup of stocks to cushion the blow of a halt to energy imports from Russia.

The main political difficulty for German Chancellor Olaf Scholz is the distributional aspect: the core of German industry depends on gas supplies, and job losses could be up to half a million. A halt to oil imports would be less damaging economically than cutting off gas, while also crippling to Russia. Either way, the German government – and the ECB – would likely look to offset some of the costs for the vulnerable, even if this means accepting looser fiscal policy, usually a red line for Germany.

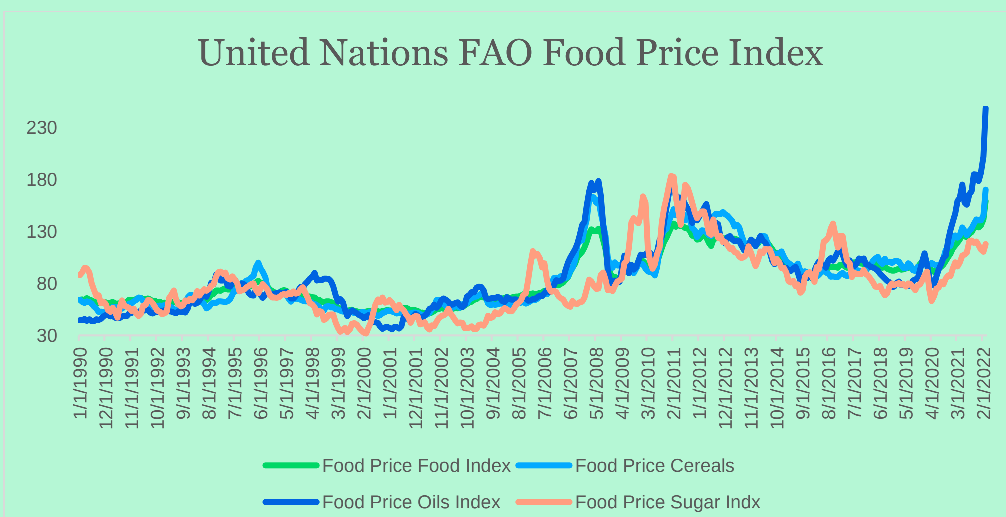
The picture is different in the US. Consumers helped keep growth going in Q1, dipping into savings from the 2020/21 rescue packages. The first official GDP release for the quarter, due in late April, is likely to show a weaker economy than was expected late last year, as indicated in the Nowcast from the Atlanta Fed and the blue chip consensus of professional forecasters.

Spotlight: Food

Long before Russian tanks rolled into Ukraine, global food prices were on the rise. The United Nations FAO Food Index had risen nearly 50% between May 2020 and January 2022. In February of this year, when prices had only a few days to react to developments in Eastern Europe, the index rose 4.3% to set a new all-time high. Then in March, as markets had time to digest Ukraine and Russia's role in wheat markets, the impact of impeded transit in the Black Sea, and potential planting disruptions, the index rose another 12.6% (a five-sigma move) to set a second all-time high in as many months.

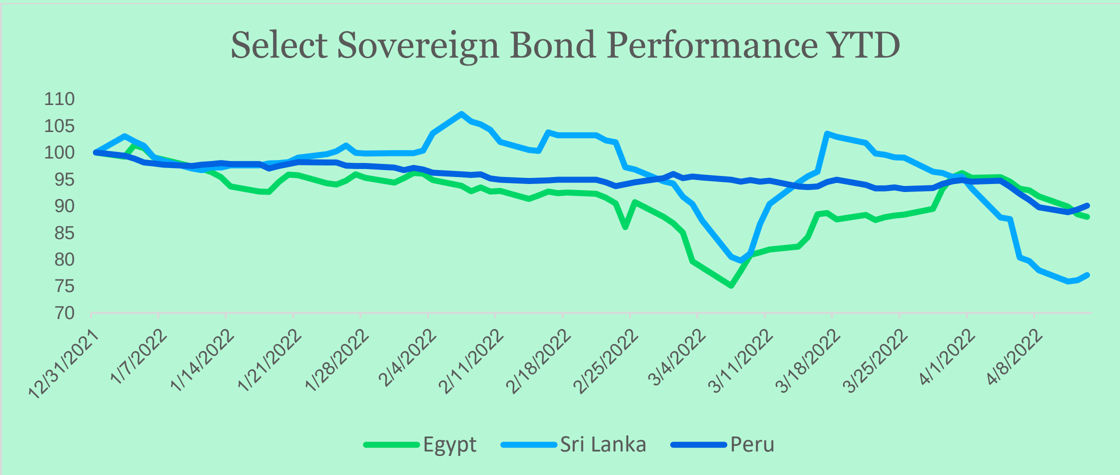
Russia and Ukraine, together, account for 30% of global wheat exports, and Ukraine accounts for 10% of global corn exports. Russia's role in global oil markets also has knock-on effects on food prices. The Food Oil and Sugar sub-indices have risen 139.1% and 66.1%, respectively, since May of 2020 and 23.2% and 6.7%, respectively, from February to March 2022. Higher petroleum prices drive demand for ethanol, which diverts soy and sugar from food usage to biofuel production. This drives up prices, not only for those foodstuffs and their derivatives, but also for substitutes, such as palm oil or soybean oil. There is also the spillover effect from more expensive crude oil as an energy input to food production, which will continue to put cost pressures on food producers and transporters.

Another source of input cost pressure comes from fertilizer. Together, Russia and Belarus account for approximately 25 million tons – roughly 35% – of the world's Potash fertilizer production. Potash prices have been on a sharp rise since Belaruskali, one of the world's largest potash producers, declared force majeure in mid-February (prior to the invasion) in response to US sanctions, saying they would not be able to fulfill their contracts. These prices are unlikely to reverse in the near future, so supply disruptions, substitute shortages, and high and potentially rising input costs will likely conspire to keep food prices elevated and on an upward trajectory.



Today's supply disruptions and price increases have demonstrated the importance of food, energy, and supply chain security. Surging food prices have a history of sparking civil unrest including, for example, the Arab Spring and in Syria. The International Fund for Agricultural Development (IFAD) indicates that the Middle East and North Africa are particularly exposed today, with half the region's cereal imports coming from the Black Sea region.

Other emerging markets, such as Sri Lanka, are suffering from food inflation, despite less direct links to disrupted supplies. Sri Lanka has suspended government bond payments as foreign reserves dwindle. In some, perhaps many, instances the rise in food prices is the proverbial straw snapping the camel's back. Still, (at the risk of mixing metaphors) food security can leave one less match next to a domestic powder keg.



According to data, VC investments in AgTech have been on a strong and steady rise since 2011. The number of deals per year has grown at a compound annualized growth rate (CAGR) of approximately 22% and deal size has grown at a CAGR of roughly 30%. Total deal value in 2021 was $10.5 billion spread across 751 deals.

AgTech investments have become more interesting given domestic security. Businesses related to the nearshoring of production and increasing yields/efficiency, such as indoor farming and precision agriculture are increasingly interesting. MIT Technology Review recently profiled Smart Acres, a Dubai-based vertical farming company that is helping the desert Emirates grow its own food. In the US, AeroFarms is an example of an indoor vertical farming business, and Gotham Greens is another working to localize food production, placing its greenhouses on the rooftops of buildings in some locations.

On a more industrial scale, precision agriculture increases farm efficiency by employing software solutions and "smart" equipment, broadly. One of the most visible examples of precision agriculture in public markets is John Deere. The company's recent focus has been driving delivery of precision ag solutions, such as automated tillage and weeding. These are merely a few examples of such opportunities, but there are scores more out there, and the interest is only likely to grow as geopolitical and climate security are factored into food supply.

Investing in today's environment

Against this background, it's clear that volatility across equity and bond markets will continue for the foreseeable future. The question remains whether curbing inflation will require the Fed to raise interest rates to such a degree that recession is inevitable. And how will Europe, the rest of Asia, and other parts of the world fare, given such a confluence of factors?

At RockCreek, we're mindful of cautious investor sentiment in this environment even as we look for opportunities. We remain focused on long-term themes, diversification across asset classes, and robust portfolio positioning for a higher inflation, higher interest rate, slower growth world.

The dilemma for investors is determining what has been priced into the market and whether fundamental analysis will be rewarded in the long term. All signs point to markets being driven more by macro/thematic factors than at the single name level. This dampened the returns of even the strongest active managers during Q1. Looking forward, balancing portfolios across equity factors (value, growth, momentum, cyclical and non-cyclical) and being mindful that, in this market, there is no single silver bullet will be important.

Fixed income failed to serve as a buffer during Q1, as the Bloomberg US Aggregate Bond Index underperformed global equities (ACWI Index) during the period. Off-benchmark sectors that are less interest rate sensitive were least affected. As the Fed tightens policy, investors must be mindful of the downside risks within fixed income, while also looking for shorter term opportunities that may arise in areas such as emerging market debt, high yield, and structured credit. Overall, investors might benefit from prioritizing liquidity and maximizing the probability of outperforming in different interest rate scenarios.

The economic uncertainty and volatility that have been the hallmark of 2022 are likely to remain in the next few quarters. Opportunities may be more defensive in nature to safeguard portfolios against persistently elevated inflation, including through careful positioning in areas such as gold, real estate, and infrastructure. At the same time, we believe there are themes that will be long-term sources of return and diversification. For example, food and agriculture – part of the sustainable investments we have sought for many years – are looking even more attractive now. Recent events and, more importantly, expected future trends have highlighted the need for more investment in this sector, given increasing food prices; food security issues; and the need for new technology to improve the efficiency, sustainability, and effectiveness of agriculture. This has translated to ideas across the public and private space that can generate strong returns alongside positive impact.

The coming weeks will offer new data points from businesses' future guidance on earnings calls. Investors should look out for data on inflation, inventories, manufacturing, and labor reports for insights into the eventual direction of the global economy and what it means for markets. Given the heightened uncertainty about global prospects, flexibility to pivot with new information will be rewarded. Many factors – US and UK central bank meetings, China's continued struggle with Covid, military developments in Ukraine – may affect the longer-term direction of the sectors, geographies, and markets that investors need to consider.

SUSTAINABLE INVESTING

The ESG sector encompasses $40 trillion in assets globally, and the label can be found on anything from an exchange-traded fund to a credit default swap. While it's a little more difficult to quantify private sector flows related to ESG, fund flows into ESG-labeled public market funds across equity and fixed income markets provide an interesting indicator of investor appetite for the sector. While there is still potential for greenwashing to impact these numbers, the direction of flows has continued to be positive.

Flows into fixed income ESG funds were flat in March after experiencing their first month of outflows in two years in February. A potential negative reaction to ESG may reflect the robust price action in commodity- and particularly hydrocarbon-linked investments over the past few quarters. Similarly, on the equity side, while broad market equity inflows slowed across the board by the end of the first quarter, the decline in ESG specific fund inflows was much more pronounced. These flows fell to their lowest levels since the pandemic began. Even markets that have seen steady interest, such as European ESG equity funds, saw outflows for the first time this quarter. We view these developments as temporary.

Geopolitical events in Q1, and the resulting impact across the commodity complex, have made it clearer than ever that fossil fuel dependence has created or exacerbated geopolitical instability. It's proving to be unsustainable in the long term – not just environmentally but socially, politically, and economically, as Germany is witnessing. Investors and policymakers alike are navigating a period of transition, with increasing renewable energy but also moves away from politically less reliable sources of hydrocarbons to more reliable energy sources in the US, Europe, and Asia.

For investors, tailwinds in energy transition and ongoing development and investment in adaptive technologies will continue to accelerate, providing more attractive investment opportunities and a boost to existing and ongoing advancements in the space. Longer term energy efficiency, renewable energy, and related sectors are the biggest beneficiaries from the aftermath of Russia's invasion of Ukraine, as this terrible tragedy has shed a light on the implications of fossil fuel dependence in a way that climate summits – including COP 26 – did not.

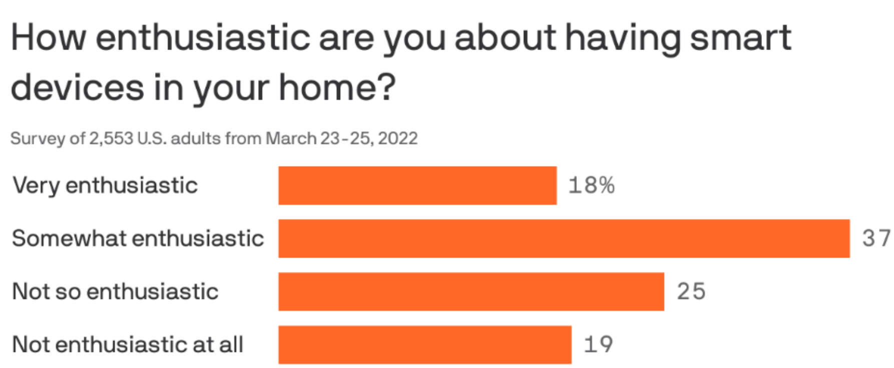
Interim solutions and paths to reducing fossil fuel reliance that were previously shunned by policymakers, stakeholders, and climate activists are coming back and now seem necessary for a faster transition. For example, discussions on the appropriate use of natural gas and nuclear power – always sources of complex debate – are returning to the forefront. A March 2022 Nikkei poll in Japan found that a narrow majority of citizens now support restarting idled nuclear reactors. The survey marks the first time in the decade since the 2011 Fukushima disaster that an increasing role for nuclear energy has been favored.

Some 53% said nuclear reactors should restart if safety can be assured, while 38% said they should remain shut. That's up from 44% support for nuclear restarts in a similar survey late last year. The opinion shift is likely a direct result of events in the first quarter that have negatively affected the energy complex, and it's no surprise that it comes amid surging power prices and warnings of electricity shortages in Tokyo.

Similarly, Germany has had to wrestle with the implications of diversifying away from Russian gas, which last year accounted for half of the gas the Germany used to heat homes and power factories and a third of the oil. The Green Party has been increasingly supportive of the possibility of extending the lifespans of coal and even nuclear plants to cut dependency on Russia. While this puts Germany's ambitious plans to exit from coal by 2030 in jeopardy, the country needs an immediate solution to the energy crisis that cannot be solved entirely by wind and solar. Germany has had a longstanding aim to shift entirely to renewable power sources by 2045, but given recent events, the Green Party has also promised to stockpile coal and gas reserves and build two new terminals to import liquefied natural gas from countries other than Russia.

Such shifts by major countries have made LNG projects more interesting. Carbon capture, together with increased natural gas production, may also increase in the short term. There are more opportunities in companies focused on the transition to green energy such as wind and solar power. Energy security, as well as food and water security, continue to be growing themes across RockCreek investments.

Interestingly, there is significant coordination between US and European government entities to help implement short term energy efficiency across everyday life. Smart homes have been a rapidly growing investment theme, including everything from devices to let households know how much energy they are consuming to technologies that encourage consumers to reduce their energy needs. Existing smart home devices such as programmable thermostats, energy monitors, eco chargers, and smart sockets are all the future of potential investment returns for smart devices. The transition to smart homes, as well as electric vehicles and other related areas, is proceeding quickly, with consumers slowly starting to digest the magnitude of the opportunity.



Source: Momentive; Chart: Thomas Oide/Axios

PUBLIC EQUITIES

Equity Markets	Q1 2022
US Large Cap (S&P 500 TR)	-4.6%
Nasdaq	-8.9%
US Small Cap (Russell 2000)	-7.5%
Japan (TOPIX)	-1.2%
Europe (MSCI Europe)	-5.2%
China (CSI 300)	-14.5%
Global EM (MSCI EM)	-7.0%

Bond Markets	Q1 2022
US 2yr	160.2
US 10yr	82.8
US 30yr	54.4
German 10yr	72.5
German 30yr	46.9
UK 10yr	63.9
UK 30yr	64.6
JGB 10yr	14.9
JGB 30yr	24.8

Currency Markets	Q1 2022
DXY	2.8%
EUR	-2.7%
GBP	-2.9%
JPY	-5.4%
MSCI EM Currency Index	0.6%

Commodity Markets	Q1 2022
Crude Oil (WTI)	33.3%
Nat Gas	51.3%
Gold (Spot)	5.9%
Steel (Rebar)	12.5%
Ag & Livestock (Bloomberg)	17.6%

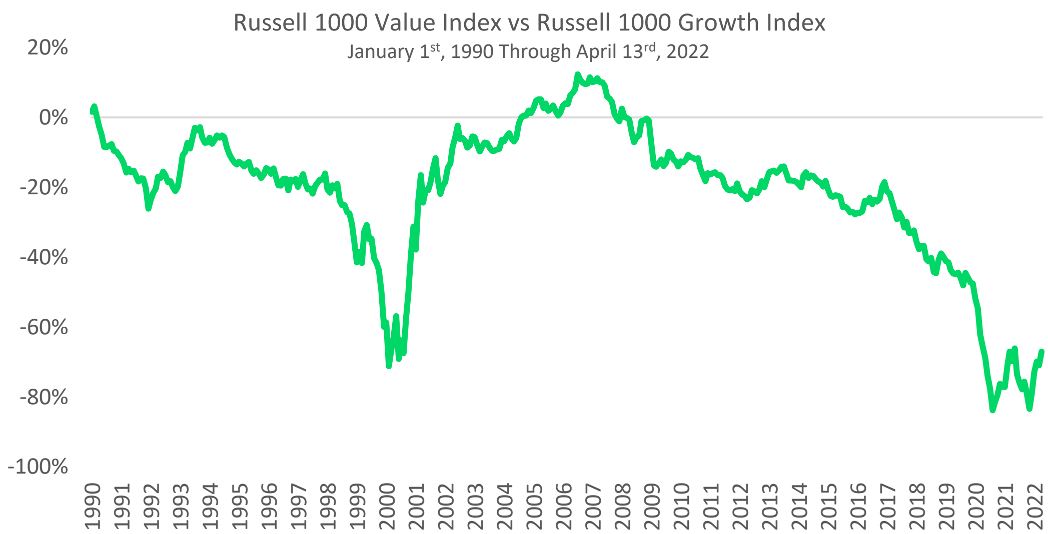
RCG HF Indices	Q1 2022
All Hedge Funds	-1.0%
Equity Hedge	-4.3%
Absolute Return	0.1%
Equity Market Neutral	-0.5%
Event Driven	-1.3%
Global Macro	6.7%

Global equities retreated a little over 5% in the first quarter. Investors' flight to safety led the US market to outperform both Europe and Japan in USD terms; however, the best performing markets were those of commodity-rich countries Norway, Australia, and Canada. Over the past two quarters, equities have reflected a clear regime change from growth supremacy to an environment ripe for cyclicals and natural resources. At the very least, technology is no longer "the only game in town." With large government and private spending on energy and supply chain independence, and with the colossal resource and infrastructure investments needed to reach zero carbon, we could be looking at a decades-long trend.

In this period of heightened inflation and rising interest rates, investors are, once again, starting to show a preference for the value/cyclical part of the market, reflecting its protection against rising prices. Although Europe usually does well in such a scenario, it's justifiably reflecting a high war risk premium than other developed markets because of its greater reliance on Russia for natural resources. Energy-related sectors have performed well but there is likely a long runway ahead for industrial, infrastructure, materials, and other sectors geared to Europe's drive towards energy independence and zero carbon. The war in Ukraine has only pushed Europe further in the direction of more fiscal spending. This is the opposite of the previous decade of austerity we saw following the Great Financial Crisis and bodes well for European equities over the medium- to long-term.

Another potential opportunity in Europe is in dividend-paying equities, which are currently offering unusually high yields compared to bonds. In the event high inflation remains with us, investors will increasingly gravitate towards higher yielding strategies. European banks, for example, trade at relatively inexpensive multiples, offering attractive yields on capital.

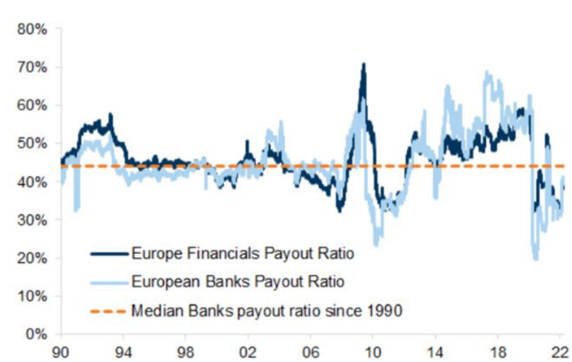
Japan traded in line with the US in Q1, but a large drop in the yen hurt investors who were not hedged to the dollar. However, yen depreciation has raised the prospects for Japanese corporate earnings. Japan is also a market that tends to be resilient to rising interest rates and many of the same forces at work around supply chains and infrastructure should benefit sectors like energy, chemicals, and transportation. Japan's underperformance versus other developed markets last year combined with comparatively attractive valuations and underweighting by foreign investors puts the market in a reasonably good place, so long as we don't see a sharp decline in economic growth.



Source: Bloomberg

The slowdown in economic growth likely in the wake of monetary tightening, however, does pose a material risk to the downside for equities globally. In some ways, given the macro headwinds, it's somewhat surprising equities have held up as well as they have so far. Some of the strength is certainly due to continued negative real interest rates in Q1 driving capital out of bonds.

Dividend Yield / EPS Ratio



Source: Datastream, Goldman Sachs Global Investment Research

Emerging Markets

Emerging markets equities finished the quarter down 7.0% as measured by the MSCI Index, but country dispersion was the name of the game. Setting aside MSCI's decision to remove Russia from the EM Index altogether, it was China, roughly one third of the MSCI EM Index, that led negative performance at minus 14%. Korea and Taiwan fared little better, down 9.6% and 6.6% respectively. Outside of North Asia it was a different story, with Latin America and South Africa up by mid to low double digits and ASEAN markets also outperforming. Q1-2022 rewarded the equity markets from countries that have what the world wants and needs – energy and food – and mostly punished those that do not.

For commodity exporters, the big question is – what happens when the boom softens? We're already seeing signs that demand for energy commodities is slowing, driven in part by the effects of China's Covid lockdowns. Moreover, European governments have pledged to speed up plans to transition to greener energy sources and adopt more sustainable food practices. In Latin America, domestic dynamics in commodity heavyweights Brazil, Chile, and Colombia speak to structural headwinds, including rapidly rising inflation; debt/GDP levels that are, on average, the highest in the world, and a series of consequential presidential and legislative elections.

Inflation (%) [1]

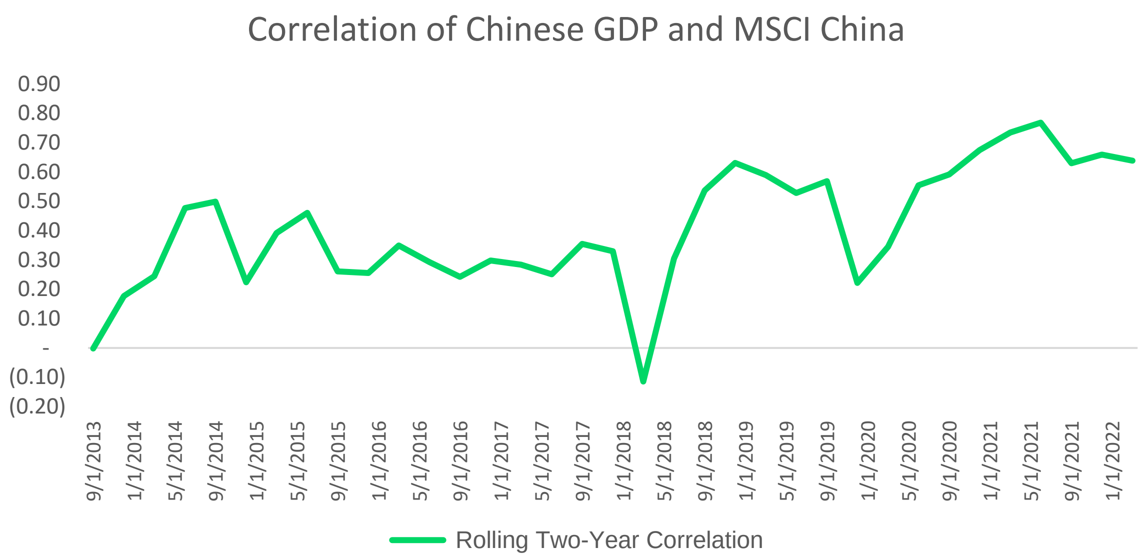
Country	Last	Previous
Peru	6.83	6.15
Mexico	7.45	7.28
Colombia	8.53	8.01
Chile	9.4	7.8
Brazil	11.3	10.54
Argentina	52.3	50.7
Venezuela	284	340

Similarly, South Africa faces slower growth, tighter financial conditions, and unresolved domestic power supply disruptions continue. Higher transportation and food prices will also weigh on already subdued domestic demand.

For China, the world's major commodity importer, pressures could hardly come at a worse time. The world's second largest economy was already weighed down by slow growth, a real estate credit crunch, and a badly managed series of Covid shutdowns (see spotlight below). Chinese equities are trading at or below the levels of March 2020, the height of the pandemic, and do not show signs of improving. Historically, Chinese GDP growth and equity market performance have been uncorrelated, but in recent

[1] Trading Economics as of 3/22/22

years this dynamic has changed. At best, this is a sign of a maturing capital market and economy. More likely, it coincides with Beijing's crackdown on its most successful private enterprises, which is damaging growth as well as worrying investors.



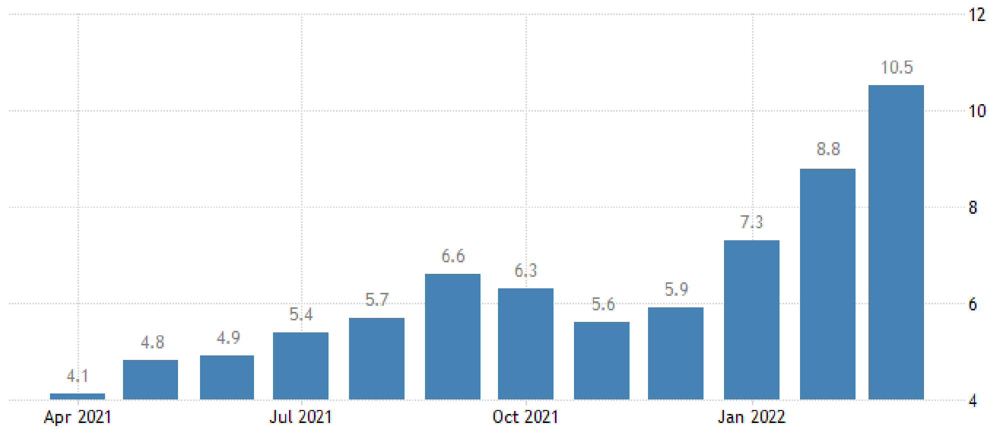
Source: RockCreek

As a net importer of commodities, Asia's other behemoth, India, did not perform as badly as feared in the first quarter. We attribute this to earlier business-friendly reforms, the lowering of budget busting subsidies, and deft diplomatic tactics. Staid sectors like utilities, energy, and financials have supported the market. Barring a global recession and oil spiking – for example to $200 per barrel – we believe value can also be found elsewhere, particularly in the country's tech enabled growth sectors.

As we covered in January, ASEAN markets were the shining stars in Asia during Q1. The recovery and re-rating stories continue, led by Indonesia and Malaysia. Tourism in the region is expected to pick up significantly, which would benefit Thailand even if the heretofore omnipresent Chinese tourist is still subject to tough restrictions.

Uncertainty will remain elevated for emerging markets, as more generally, with downside risks as the IMF has just warned. Emerging and frontier markets are especially vulnerable to the global external shocks from energy and food prices, tightening US monetary policy, and China's weakness. Food security will be a particularly thorny issue, where countries need to act fast to avoid civil unrest.

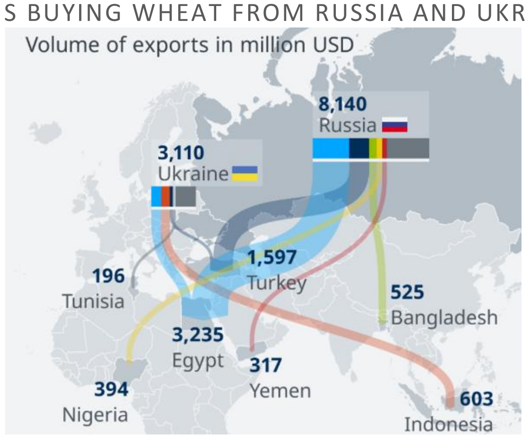
EGYPT FOOD INFLATION[2]



Source: Trading Economics

From an investment perspective, we believe EM companies with strong corporate governance, a solid understanding of current macro shocks, and – importantly – a plan to invest in areas that address the global economy's shortcomings should do well. The current macroeconomic backdrop in our view underscores the importance of focusing on investments with strong sustainable underpinnings. Over 3-, 5-, and 10-year periods of time, the performance of sustainability related investments have largely outperformed traditional indices irrespective of the region, and importantly, have done so with lower volatility and smaller drawdowns.

WHO IS BUYING WHEAT FROM RUSSIA AND UKRAINE?



Source: OEC.World

[2] As of March 31st, 2022

ESG in EM Matters

MSCI Index	YTD	1 Yr	3 Yr	5 Yr	10 Yr
EM (EMERGING MARKETS)	-9.4%	-14.6%	3.1%	5.5%	3.3%
EM (EMERGING MARKETS) ESG LEADERS	*-10.5%*	*-16.8%*	*3.6%*	*6.4%*	*5.6%*
EM ASEAN	3.5%	4.9%	-1.2%	1.6%	1.1%
EM ASEAN ESG LEADERS	*2.6%*	*1.2%*	*-1.9%*	*1.1%*	*1.7%*
EM ASIA	-11.7%	-19.0%	4.1%	6.5%	5.6%
EM ASIA ESG LEADERS	*-12.2%*	*-20.0%*	*5.9%*	*8.2%*	*7.8%*
EM EASTERN EUROPE	-79.3%	-75.6%	-36.5%	-20.0%	-12.2%
EM EASTERN EUROPE ESG LEADERS	*-73.9%*	*-66.9%*	*-32.7%*	*-15.5%*	*-7.9%*
EM EMEA	-12.3%	-4.3%	0.0%	2.7%	-0.2%
EM EMEA ESG LEADERS	*-11.3%*	*-4.5%*	*-2.5%*	*3.0%*	*2.5%*
EM EUROPE	-71.3%	-66.8%	-30.2%	-16.7%	-11.1%
EM EUROPE ESG LEADERS	*-67.4%*	*-59.2%*	*-28.3%*	*-12.9%*	*-6.8%*
EM EUROPE & MIDDLE EAST	-21.2%	-8.0%	-0.6%	2.6%	-1.4%
EM EUROPE & MIDDLE EAST ESG LEADERS	*-25.5%*	*-9.6%*	*-4.4%*	*3.1%*	*1.3%*
EM FAR EAST	-13.9%	-24.3%	2.3%	5.6%	5.0%
EM FAR EAST ESG LEADERS	*-14.2%*	*-25.0%*	*4.4%*	*7.3%*	*7.2%*
EM LATIN AMERICA	24.3%	18.8%	1.6%	3.5%	-1.0%
EM LATIN AMERICA ESG LEADERS	*19.5%*	*4.6%*	*-4.0%*	*-1.2%*	*-1.6%*

Source: MSCI, as of April 11th, 2022

LOOKING AHEAD

As institutional investors continued to de-risk in recent months, retail flows have been comparatively strong. For example, in early April, markets saw selling from hedge funds for five of the previous six weeks, while over that same period equity mutual funds and ETFs saw $46 billion of inflows. The strategy of "buying the dip" has been promptly well-rewarded going all the way back to the Great Financial Crisis. It will be important to watch whether retail buying will sustain itself. In particular, companies that over-earned because of Covid or are exposed to consumers being squeezed by inflation are areas that stand out to the downside. In addition, predicting sales and margins is more challenging amid high inflation. Elevated and stable margins will be more scarce and thus more valuable to investors, so quality and high dividend yields will be important factors to have in a portfolio.

Geographically, investors will continue to be rewarded by being overweight to US public equities, though there are select opportunities outside the US that are very promising. Within emerging markets, ASEAN countries are attractive, as are EM countries that benefit from commodity and agriculture trends. In Europe, countries with less reliance on hydrocarbons for energy and sectors tied to renewable energy will be areas of interest, though the risk-reward for European equities, more generally, is increasingly being challenged by today's geopolitical tensions and the rift with Russia. The likelihood that the war in Ukraine will drag on puts a focus on near-term recession risks, as well as the longer-term risks from Europe's energy dependence and required transition to regional power generation.

A similar geographic positioning makes sense in private sector portfolios, where US- focused funds that have smaller mandates to invest outside the US look most attractive. Finally, equity investors need to monitor developments in China with particular care. Policymakers are navigating a difficult predicament – containing Covid outbreaks while not further dampening an already weakening economy.

Spotlight: China

Less than a month after President Xi Jinping proudly announced that "friendship between China and Russia has no limits", some limits, in fact, have been reached. The Asia Infrastructure Investment Bank (AIIB) suspended all business with Russia and Belarus on March 3rd. China state refiners such as Sinopec, CNOOC, PetroChina, and Sinochem are avoiding new Russian oil contracts, despite the steep discounts. Chinese companies such as DiDi, Lenovo, and Semiconductor Manufacturing International Corporation have all announced they will cease doing business in Russia for fear of sanctions.

China's economic growth, even before the war in Ukraine, was faltering – in large part reflecting policy decisions in two key areas. First, the regulatory crackdown in 2021 damaged many traditionally high growth Chinese industries such as consumer internet, education, and – in particular – real estate. It marked the end of an era of a focus on high export-led growth. President Xi moved instead to prioritize issues such as income inequality and to urge a renewed role for state enterprises. This shift weakened China's economic growth and dampened consumer confidence going into 2022.

Second, China's "zero-Covid" policy has curtailed production and likely also impacted consumer demand – with spillover effects on the rest of the world. Immediate steps to stamp out infection have been the hallmark of China's approach to Covid. The policy of swift and drastic lockdowns in response to reported cases has succeeded in holding deaths to extremely low levels, in contrast to the nearly one million lives lost in America. However, as the highly contagious Omicron variant began to sweep across China in Q1, the limits – and costs – of the zero covid policy became more evident. A low vaccination rate – especially among the elderly – risks an uncontrollable wave of illness and death if infection outbreaks occur. However, adhering to the zero-Covid policy comes at a high cost to the economy.

Hong Kong was the first place in China hit by Omicron. After eventually abandoning the zero-Covid policy, the city now has the world's highest Covid fatality rate. But life for most inhabitants is getting back to normal. Elsewhere, President Xi has made clear that the policy must continue, despite its economic and social costs. Omicron outbreaks late in Q1 triggered lengthy lockdowns in Shanghai and Shenzhen, the first and third largest cities by GDP. The impact on consumer confidence and industrial production will spill into slower growth in Q2 and likely lead to GDP below this year's official target of 5.5%. The IMF is now projecting growth of just 4.4% for the year.

China's top electric-car maker, Nio, has been forced into temporary shutdown; and the Chairman of Xpeng Motors has warned that if companies in the auto supply chain in Shanghai and neighboring cities cannot find a way to resume production, then by May all of the China's automakers will have to shut down production.

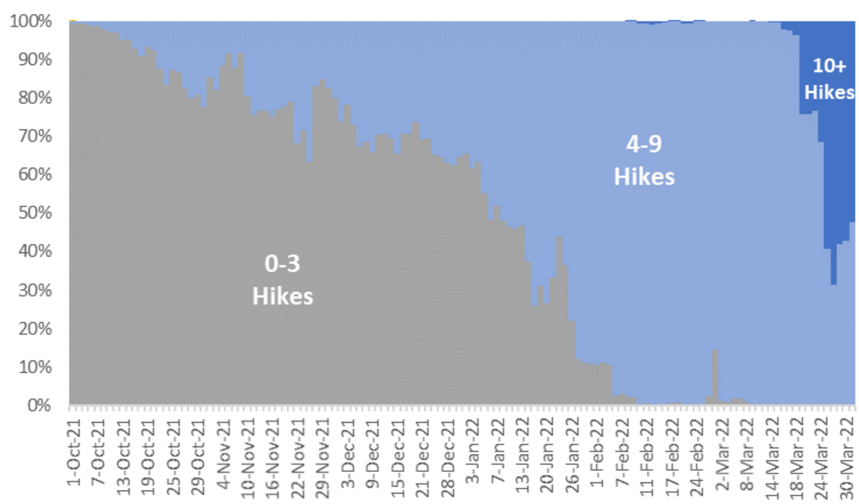
President Xi's approach has global implications. At the ports of Shanghai and Shenzhen – two of the world's busiest – images show large container ships idling offshore, unable to load or unload the goods that comprise an essential part of the global supply chain.

FIXED INCOME

We concluded our Q4 2021 Fixed Income commentary with "bond buyers be warned." And hopefully those with the flexible mandate to take cover did so, because bonds just had their worst three-month period in more than 40 years. The Bloomberg US Aggregate Bond Index declined -5.9% during the quarter. The last time bond holders saw that kind of mark-to-market loss was in September 1980, but that was in the context of the 10-year Treasury yielding 12% – a very different risk-return proposition.

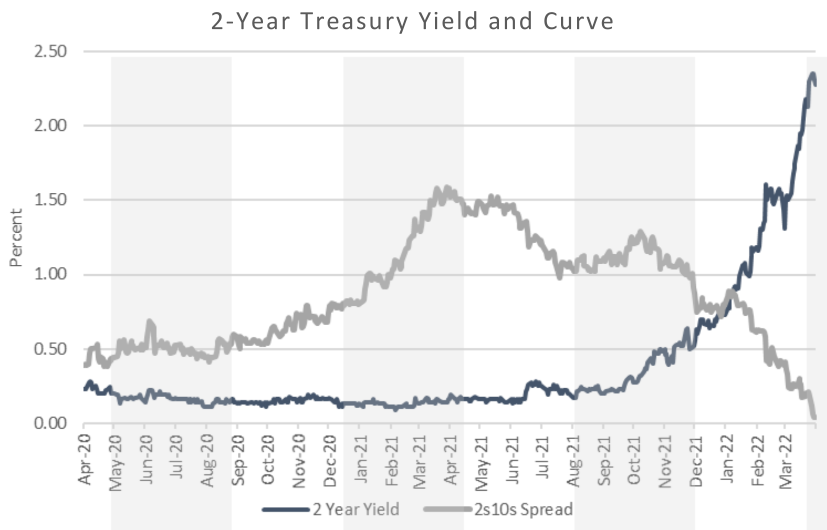
We were not alone in voicing concern. Consensus at the beginning of 2022 was calling for higher yields. But the magnitude of the move caught many by surprise. It was clear bonds would take pain as central bankers choreographed their growing hawkishness in response to multi-decade highs in inflation. But few expected that markets would move from pricing three quarter-point hikes in the Fed Funds policy rate during 2022 to a staggering ten. An important silver lining: this has occurred without visible cracks, so far, in financial markets.

Market Implied Probability of Rate Hikes by December 2022



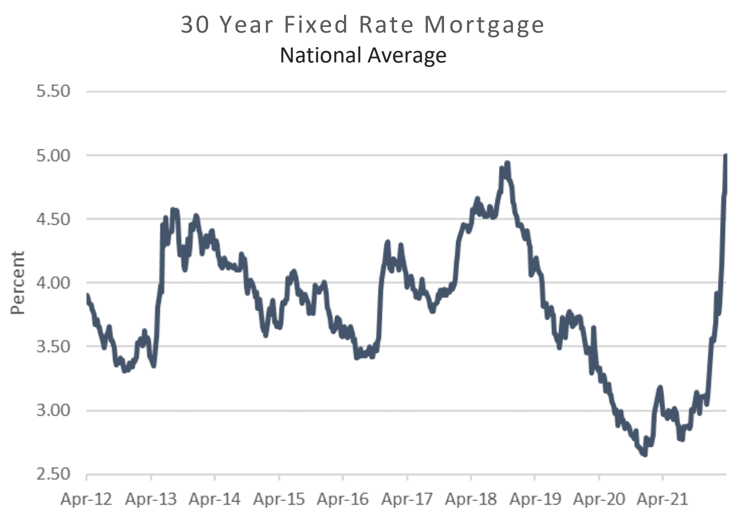
Source: CME FedWatch

While the Fed is only one hike into this cycle, the market is already doing a lot of the work in tightening financial conditions. Two-year yields jumped 155 basis points during Q1 to 2.28%, and 2s10s tightened by 75 basis points, briefly dipping into negative territory.



Source: US Department of the Treasury

The borrowing rate for high quality corporate bonds of a similar maturity widened by an additional 21 basis points. Mortgage rates have topped 5% for the first time in more than decade as also discussed in our real estate commentary. When combined with elevated home prices and tight inventory, this has made "the pursuit of homeownership the most expensive in a generation" according to an assessment by Freddie Mac.



Source: Freddie Mac Primary Mortgage Market Survey

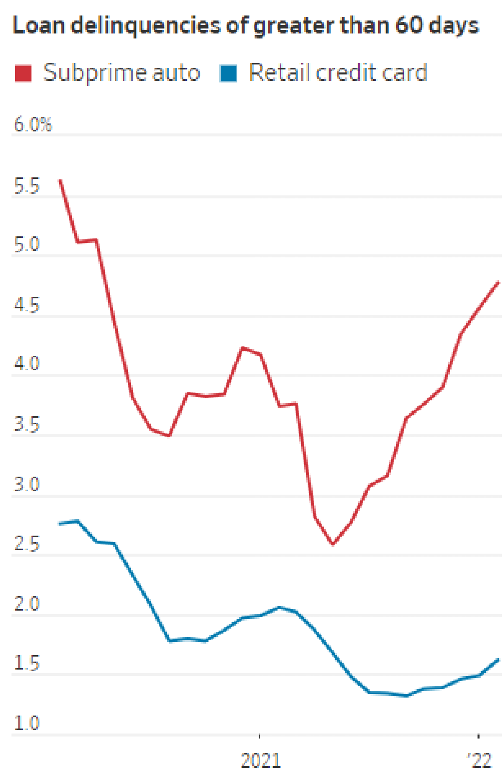
In this context – and the dimming outlook for global growth, the market may have moved beyond where the Fed will go. The last dot plot suggested central bankers envisaged the equivalent of six more 25 basis point hikes, rather than the ten now priced in. Although real returns on bonds remain negative, and therefore unattractive, we think there is reason to be less bearish about the asset class.

PUBLIC CREDIT

Credit markets saw a mostly weaker quarter as high yield bonds returned -4.15% and leveraged loans were flat. High yield bond yields finished March at 6.3%, up 160 basis points from December, while spreads finished at 400 basis points, up 70 basis points from December.

In a sign that interest rate hikes have largely driven performance, higher rated bonds with higher duration have underperformed (10-year treasuries -6.6%, IG -7.7%, HY Muni's -6.5%, BB's -4.9%, and CCC's -4.3%). However, the collapse in issuance for riskier bonds also points to some investor concern around credit quality. In Q1, high yield issuance fell 70% to $47 billion (from $160 billion in Q1 2021), while investment grade issuance rose. From a sector perspective, commodities-related companies performed the best, while consumer-oriented companies lagged. Energy returned -1.9%, Metals/Mining -2.4%, Media -2.6%, and Gaming -3.4%, while Housing -6.3%, Retail -6.1%, Food/Bev -6%, Consumer Prod -5.8%, and Autos -5.7%. Structured credit posted losses as well, but with a broad range. RMBS performed the best (-1%) given the continued strength in residential housing, followed by ABS (-2.9%), MBS (-5%), and CMBS (-5.6%).

The quarter also saw a welcomed pickup in dispersion following a post-Covid environment of tightening spreads and higher correlations both within and across asset classes. The most glaring example has been commodity-related businesses. Those that sell commodities have benefited significantly – at least those that haven't been fully hedged – while companies with high commodity-sensitive input costs, such as tire producers, have seen margins decline.



Source: WSJ

We will be watching for signs of income statement deterioration as a leading indicator of balance sheet impairment. As earnings season continues, we're likely to see a widening gap in earnings strength between companies with relatively elastic and inelastic demand. As consumers feel the pinch of higher prices and a lack of further fiscal stimulus, demand will likely fall for non-essential purchases. Historically, auto loans have been a good indicator of consumer health, given these are seen as a 'last-to-default' loan due to the necessity of mobility for work, groceries, healthcare, etc. Perhaps that has changed over time given car-sharing services, grocery delivery, telemedicine, etc., but we think it still warrants a close watch. While auto delinquencies remain below pre-pandemic levels, they are on a worrying (and sharp) upward trend, as shown in the chart here.

Given how much debt has been refinanced within the high yield and loan markets over the past two years, we're nowhere near a maturity-wall induced distressed cycle, and balance sheets remain healthy. Trailing 12-month default rates are approximately 50 basis points, and bank credit desks see a jump to only 1.25% in 2023. But with the severity of inflation, rising rates, supply chain disruptions, and a lack of fiscal stimulus impacting consumer behavior as well as a collapse in investor demand for risky new issuance (high yield issuance was down 70% year-over-year in Q1) the stage could be set for a meaningful distressed cycle late next year.

Outside the US, there has been significant volatility in emerging market debt stemming from the war in Ukraine. One of the next big questions looming over the economic war against Russia is what will happen to its bonds. The Russian government has borrowed about $49 billion in the form of dollar- and euro-denominated bonds, over half of which is owned by foreign investors. The majority of defaults occur when the bond issuer has run out of cash. In this case, Russia has the willingness and ability to pay its debt. It collects the equivalent of over $1 billion a day from its oil and gas deliveries alone, and while most of those funds are being spent on the war, it could still earmark capital towards servicing its debt payments.

A Russian default would stem from the inability to process the payments due to limited access to dollars after the US blocked the country from using its reserves held at American banks. Russia has until May 5th to make about $650 million in dollar-denominated debt payments, but with no clear ability to do so, Russia may be on the cusp of its first default on its foreign debt since the Bolsheviks ousted Czar Nicholas II over a century ago (the 1998 Russian debt crisis was only a domestic debt default). According to Oxford Economics, the impending Russian debt default is likely to be one of the most difficult in history to resolve and could even lead the US to permanently seize assets from the country's central bank.

The significant uncertainty on the fate of Russia's debt hasn't deterred investors from trading in its bonds. In fact, the volume of trading in Russian debt has risen to a two-year high, with MarketAxess data showing that Russian sovereign debt traded at a volume of $7 billion between February 24th and April 7th, up from $5 billion in the same period in 2021 – a 35% uptick. The rise in trading volume is primarily driven from selling of traditional EM bond funds to non-traditional holders, including some of the largest distressed credit investors who have begun aggressively scooping up debt as prices have fallen. In fact, some of these investors have been able to set-up a negative-basis trade in which they have purchased Russian government or corporate bonds along with Russian credit-default swaps (CDS), which act as insurance on the potential default of a borrower. As traditional investors look to quickly rid their portfolios of anything Russia-related, bond prices have fallen faster than the price to hedge them have risen.

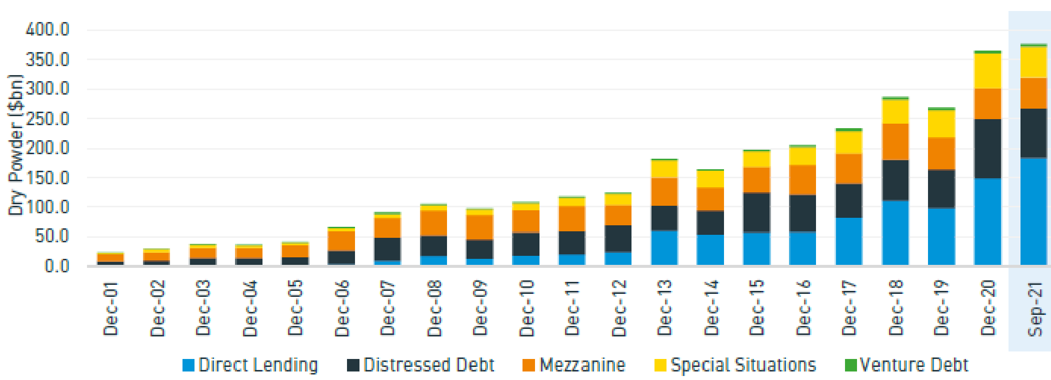
In general, distressed credit investors have been more focused more on corporate bonds than sovereign bonds, eying companies that can generate dollar- or euro-based cash flows outside of Russia as it may be easier to remit those hard currency funds back to foreign investors, partially because the money may never need to be routed through Russia and possibly trapped by sanctions.

PRIVATE CREDIT

After seeing its resilience tested as never before during two years of pandemic-related disruptions, the private credit market is poised for growth as yield-hungry institutional investors extend their hunt for high-performing assets. Covid-related lockdowns in 2020 dealt a series of blows to borrowers, pushing default rates higher and creating new debt repayment challenges to both private and public companies. However, global central bank stimulus programs limited the damage and helped private debt withstand the effects of the downturn. US private loan default rates peaked at 8.1% in the second quarter of 2020 before falling back to 1% in the fourth quarter of last year, according to the Proskauer Private Credit Default Index.

A large number of US public pension funds have increased their allocation to private debt as they look for ways to increase investment returns. Two of the largest US public pension plans – CalPERS and CalSTRS – both stepped up their private credit allocation last year with a 5% target allocation. Most of these flows are expected to be directed towards sponsored direct lending, given the ability to commit a significant amount of capital especially to the mega-sized firms. GPs have responded to the increased demand by raising $193.4 billion in aggregate in 2021, with over 60% directed towards direct lending strategies. According to Preqin, this has resulted in private credit assets swelling to over $1.2 trillion, a 17% increase over 2020. As a result, as depicted below, dry powder in the asset class has grown with direct lending strategies representing over $200 billion.

Dry Powder by Private Credit Sub-Strategy



Source: 2022 Preqin Global Private Debt Report

The 10 largest private credit GPs have increased their market share of private credit assets; in 2021, their share accounted for 42% of all capital. This development contrasts with the picture in private equity and real estate, where the top 10 funds have attracted an average of 27% and 30% of LP capital, respectively, over the past 10 years. The only caveat, however, is that these asset classes also tend to have many more funds in the market than private credit.

The first quarter was a mixed one for private credit as credit markets remained resilient and defaults were benign. Investors that were overweight to income-oriented strategies generated strong returns, as performance continued to be driven by coupon payments. Distressed related strategies were flat to slightly lower, driven by mark to market valuation declines in specific distressed and post-reorg equity positions.

As we look forward, given the significant amount of capital flowing into sponsored based lending strategies, we remain steadfast on avoiding the space and have focused more on non-sponsored opportunities with a focus on the lower US middle market, given it remains highly fragmented, and GPs with strong sourcing network can still find opportunities to underwrite loans to high quality borrowers with strong economics and tight covenants. Outside of corporate lending, we have also focused on other income-oriented strategies, including specific areas of specialty finance and asset-based lending where yields remain relatively healthy and there is strong collateral value supporting the underlying loans. For example, areas of focus are loans backed by commercial real estate assets or working capital assets such as accounts receivables or inventory.

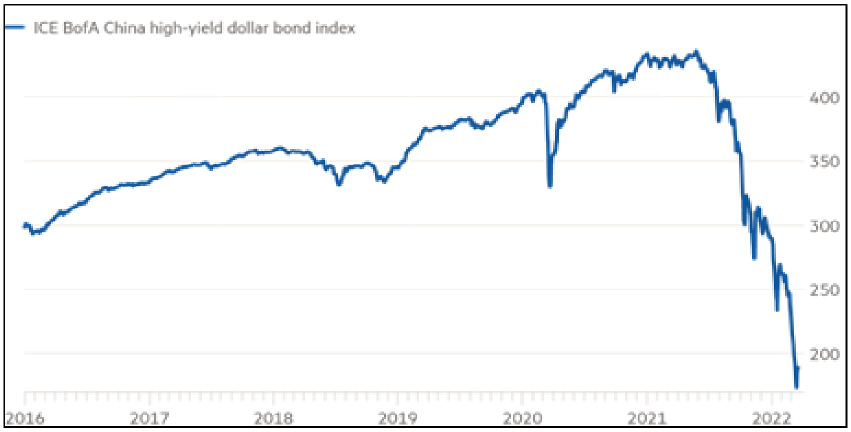
One area that we have become cautious is taking on consumer credit risk especially in the subprime space, given the possibility of higher delinquencies if rising inflation and slowing growth persists. In fact, buyers of bonds backed by subprime car loans or credit cards are demanding the highest premiums over interest-rate benchmarks since mid-2020.

Turning to distressed related investments, we believe the opportunity set is more attractive in Europe and Asia. In Europe, governments have generally pulled back on Covid-related support. Although some may increase spending to cushion the impact of the Ukraine-Russia conflict and resulting sanctions, fiscal relief is unlikely to fully offset the fall-out of the war, potentially creating special situation opportunities focused on the smaller and mid-sized companies that will continue to face challenges accessing traditional financing channels.

CONTINUED VOLATILITY IN THE CHINESE PROPERTY MARKET

As we have discussed in prior letters, the primary opportunity in Asia is in China's property sector debt market. Much of developed credit markets have, so far, remained relatively immune to the heightened geopolitical and inflation risks; however, the quarter did bring continued volatility to the Chinese high yield market and more specifically to the property developers that continued to face challenges in making debt payments. Investor risk aversion was heightened due to recent defaults in the sector. In 2021, China high yield property bonds suffered their worst calendar year loss on record with the default rate reaching around 30%. As shown below, the stress continued in the first quarter with Chinese single-B spreads now trading as wide as 6,500 basis points over Treasuries, reflecting the stress in the property sector.

Chinese High Yield Index Performance



Source: Bloomberg

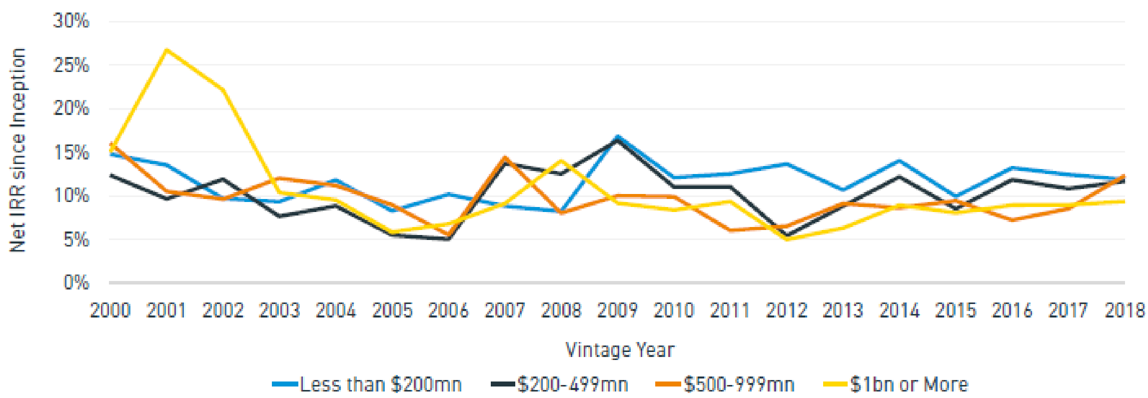
Further adding fuel to the fire, international audit firms have begun resigning from China's property developers as a wave of delayed financial results has increased uncertainty over the total amount of leverage in the system and potential existence of hidden debt. PwC, which audits more than a dozen listed Chinese developers, is under investigation in Hong Kong over its Evergrande audit, and it and Deloitte have resigned as auditors of at least five Chinese developers in the past three months.

Regulators have begun to realize the challenges and impact on overall growth and have started to initiate policies for stabilizing both physical demand and financial markets. In December 2021, the Central Economic Work Conference confirmed a policy shift for the New Year recognizing the near-term downward pressure on the economy resulting from weak investment in property and infrastructure and emphasizing stability as the top policy priority for 2022. In the first quarter, there have been some green shoots that the physical market is improving. For example, in January, there was a decent rebound in property sales in Tier 1 cities and this trend spread into Tier 2 cities in March. Moreover, cities have begun to initiate their own policy relaxation – for example, Zhengzhou became the first city to relax curbs on second homes and have cut the down-payment ratio for buyers that already own one home and have no outstanding mortgage to 30% from 60%. Moreover, policymakers are now drafting nationwide rules to make it easier for developers to access funds from sales still held in escrow accounts to help further alleviate the liquidity crunch. For now, RockCreek remains on the sidelines.

Despite some of these positive developments on easing on liquidity, GPs have been cautious about entering the sector more aggressively as they believe credit conditions continue to remain tight as easing measures from policymakers have, so far, been piecemeal and haven't had a significant impact on the physical market, as well as the delay in the release of financial statements. At this point, GPs are nibbling only at very specific opportunities that have limited further downside as pricing reflects worst case recovery value and there is significant positive convexity in the event of a recovery. The distressed opportunity is attractive, but timing remains uncertain.

Investors need to stay vigilant and both capital deployment and GP-selection will be critical to future outperformance. Avoiding commitments to the large mega size funds, focusing on sourcing and partnering with GPs that are raising smaller funds, and looking for alignment of interest through strong GP commitments is necessary. Nimble funds that can take advantage of less competitive transactions should generate outsized returns. The graph below shows that the smaller sized funds have consistently outperformed their large sized peers since 2008.

Performance by Vintage and Fund Size



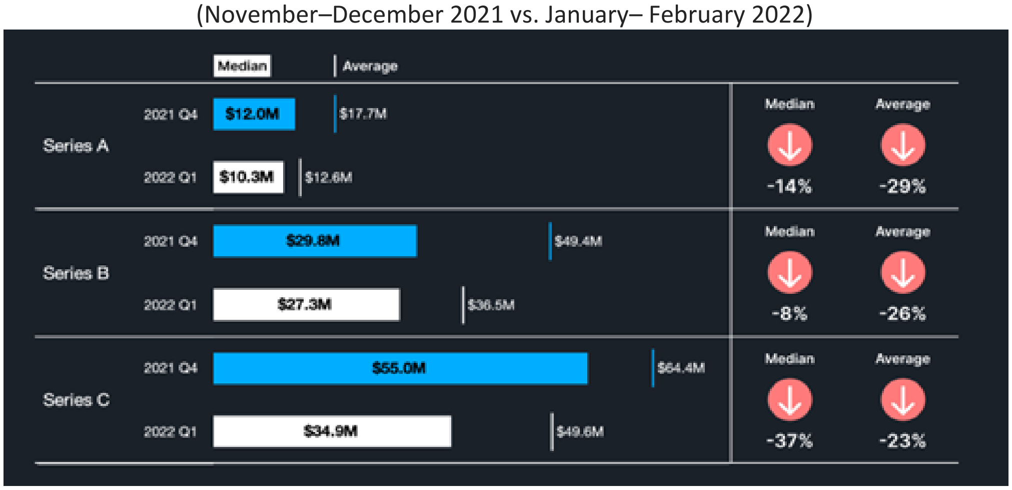
Source: 2022 Preqin Global Private Debt Report

PRIVATE EQUITY

Q1 2022 brought on a new set of risks with Russia's invasion of Ukraine, rising interest rates, inflation, and continued supply chain challenges, all of which have begun to put pressure on funding and valuations. In fact, late-stage growth deal activity — which set records for both deal count and investment volume in 2021, slowed considerably over the quarter. Nontraditional investors, especially many tech-focused hedge funds that helped drive the breakneck pace in 2021, pared back their activity significantly as their public market holdings fell in value. Recent data from Crunchbase shows that global venture funding is down – startups raised $10 billion less in February compared with January, the first such dip in years. Late-stage funding was down 19%, from $41 billion to $33.2 billion, and more insulated early-stage funding also slipped 17%, from $18.4 billion to $15.3 billion on a year-over-year basis. As seen in the chart below, the average size of funding round has declined in Q1-2022 compared to Q4-2021.

Change in Amount Raised per Round

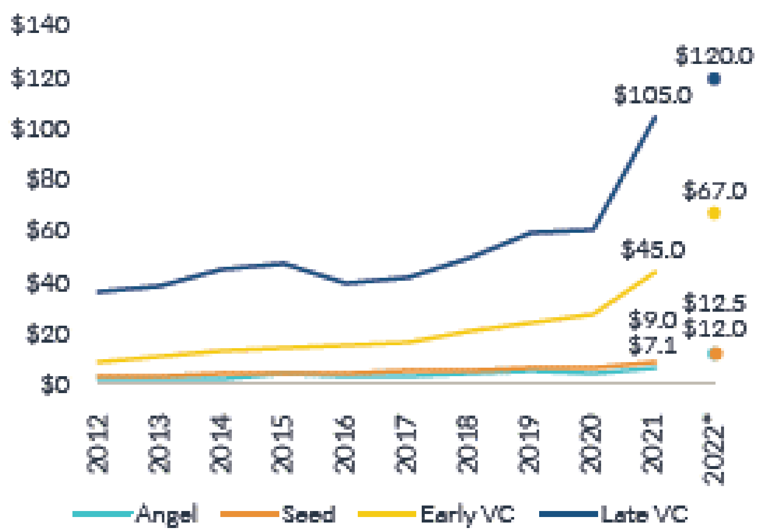
(November–December 2021 vs. January– February 2022)



Source: Carta

While the pace of investment activity slowed since 2021, we believe that innovation is as vibrant as ever and the venture ecosystem remains robust. The first quarter reflected a healthy recalibration of the market after a period in which investors were 'throwing money' at everything on the expectation that valuations could only move higher. This frenzy is over; now investors are more selective on capital deployment and have stronger valuation discipline to generate attractive returns. Moreover, more restrained valuations should be an overall positive for the ecosystem as there should be less pressure on the entrepreneurs to hit the 'lofty' growth targets justifying the valuation which, in turn, should lead to less failures. With general partners and our own direct investments, we continue to invest in innovations across sectors such as healthy living, software and hardtech, climate innovations, global access to education, and financial inclusion – many examples of interesting companies that continue to grow. One such example is Esusu, a fintech solution built to create equitable financial access that provides rent reporting and data solutions for credit building. In January, Esusu announced their Series B and became the sixth black-led unicorn.

Median US VC pre-money valuations ($M) by stage



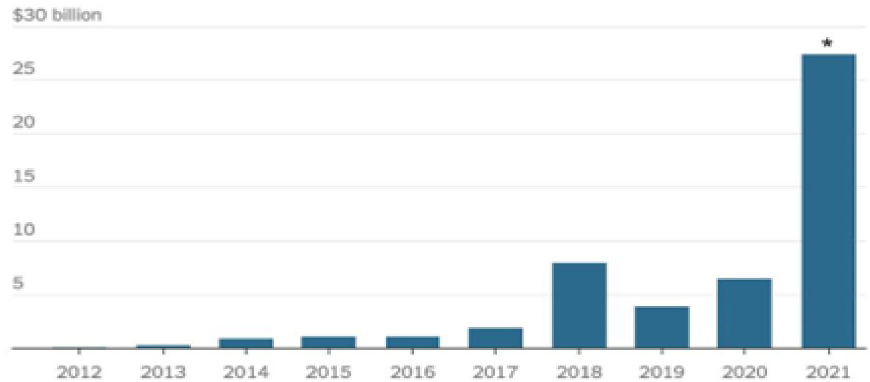
Source: Pitchbook Venture Capital Report (Q1 2022)

The public market performance and economic uncertainty did cause a pause in exits as IPOs of venture backed startups came to a complete halt during the quarter and SPAC combination deals have fared only marginally better. However, the change in the liquidity environment has yet to have an impact on valuations with median pre-money valuations rising across all stages, even late-stage. This has started to change, however, as we move into the second quarter. The sizes and valuations of late-stage growth investments have recalibrated to reflect public market valuations as they seek new funding.

VENTURE CAPITAL AND RISE OF WEB 3.0

One key theme of interest is the evolution of blockchain technology, decentralized finance, and other segments of the Web 3.0 ecosystem. RockCreek added exposure to the sector primarily through our venture capital allocation. Last year was a pivotal one, as the broader ecosystem realized that Web 3.0 is not only likely here to stay but could potentially be a major technological innovation since the advent of the Internet. Over the past year, we have seen talent and capital flow into the Web 3.0 ecosystem, with massive innovation emerging in the underlying decentralized technology stack, as well as consumer-facing applications that are disrupting finance, and even the internet itself. However, despite the increased focus, the sector is still in its early infancy stage as less than 10% of the global population own tokens and decentralized financial applications currently hold around $100 billion in assets, a small drop relative to the traditional financial system. Moreover, Web 3.0 apps have reached tens of millions of users, yet still pale in comparison to the billions that are using Web 2.0 apps.

Global Venture Capital Investment in Cryptocurrency and Blockchain Companies



Source: Pitchbook Venture Capital Report (2021)

As depicted in the chart above, VCs bet big on crypto start-ups in 2021, investing ~$30 billion globally as of late November across 1,278 deals. The average day in 2021 saw blockchain-related startups raise $20 million, and the average seed raise has risen from $1.5 million in 2020 to $3.3 million. Moreover, large crypto-focused funds have become commonplace with two of the giants in the sector – Andreessen Horowitz and Paradigm – raising multi-billion funds. Katie Hahn, a former Co-Managing Partner of Andreessen Horowitz's crypto strategy, recently completed fundraising for her own fund at $1.5 billion, well above the $900 million target and the largest ever fund raised by a single female GP. And larger and well-established funds including Tiger Global and Sequoia, which have historically stayed away from crypto, are now aggressively entering the market through late-stage growth equity investments.

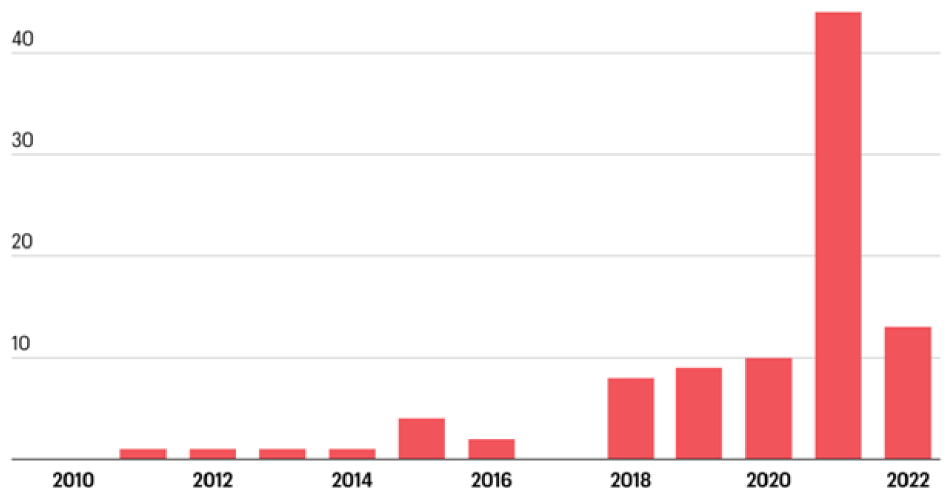
As more institutional capital flows into the Web 3.0 ecosystem, valuations could get bid-up amid competition among funds to intensify. In fact, the increasing frequency of later stage rounds has resulted in at least 65 startups in the crypto/ blockchain sector reaching $1 billion-plus valuations, with over 40 of those companies reaching unicorn status in 2021.

OUTSIDE US, INVESTORS TURN CAUTIOUS; OPPORTUNITIES REMAIN DESPITE GEOPOLITICAL TENSIONS

Beijing's crackdown on Chinese tech companies spooked global investors and prompted many to take a pause from making future commitments in the region. Some indicators have already painted a precarious outlook for Chinese startups seeking venture investments, as venture fundraising activity in China during the first quarter declined 46% on a year over year basis to $13.6 billion. While public market valuations have re-rated significantly, private valuations have not, and expectations hold that it will take another six months to see any material changes. GPs have been urging their existing portfolio companies to seek liquidity through IPO exits and have been very deliberate about deploying capital, especially in late-stage growth and rather choosing to take a wait-and-see approach on how the regulatory winds are likely to blow.

In India, the growth in the number of unicorns is booming as investors continue to flock to the country's sizzling tech scene. The chart below depicts the number of new Indian unicorns over time. 2021 was a record year for the Indian startup ecosystem as VC investments reached $38.5 billion — which was 3.8x growth over 2020 with increases in average deal size and volume. India recently minted its 13th startup worth more than $1 billion this year, one of the country's fastest rates of unicorn creation to date.

New Indian Unicorns by Year



At this point last year, India had minted five unicorns; between October and December last year, it minted 15. For all of 2021, India added 44 firms to its unicorn ranks, easily dwarfing the 37 firms that had hit the $1 billion valuation milestone in the previous decade combined. The number also surpassed China's 42 unicorns in 2021 and leapfrogged India to third place in terms of total active unicorns globally after the US and China. The pace of unicorn creation this year – roughly one per week – signals that the investment surge in 2021 wasn't a blip – and that global investors who turned their attention to India last year remain focused on opportunities even amidst a volatile global market. A study from PwC suggests the pace of unicorn creation will continue in 2022 with the report estimating that India could add more than 100 unicorns providing ample investment opportunities for investors.

REAL ESTATE

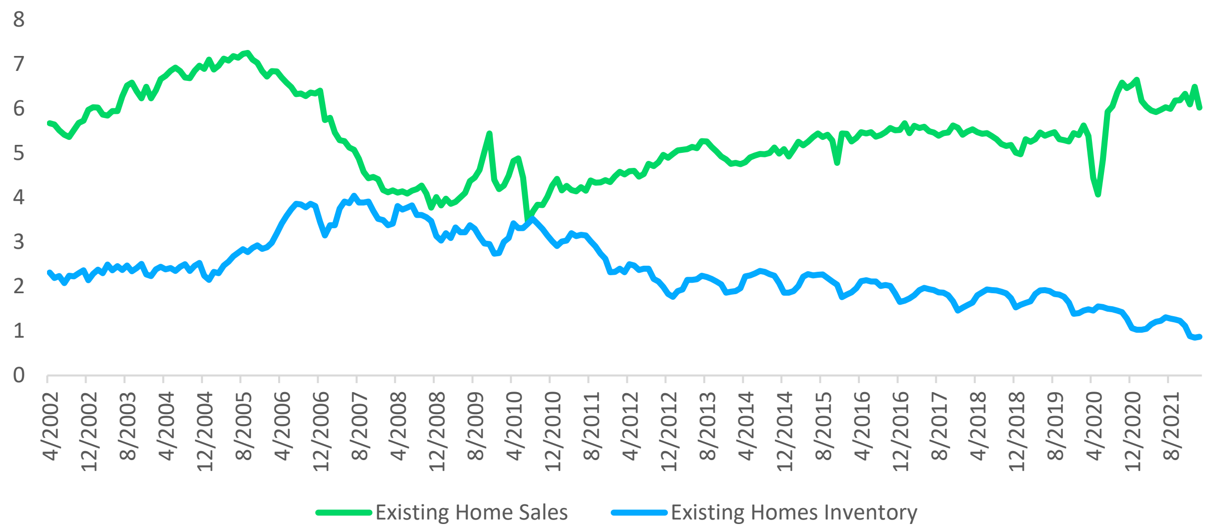
Real estate markets have continued to recover across all major property types through the first quarter of 2022. This trajectory is expected to continue as investors seek durable income yield in an inflationary environment. Within the main real estate property types, industrial and multifamily continue to set the pace with the best three-year forward outlook as structural and demographic trends provide tailwinds for both. Retail has experienced a strong recovery as shoppers return in mass as restrictions have been lifted, and the retailers that survived the pandemic have emerged with stronger balance sheets and improved market share relative to 2019.

Office, however, still is experiencing mixed performance. Sunbelt markets, particularly those with in-migration have benefitted from demand from tenants seeking to bring employees back to the office. The newer, class-A office buildings that provide flexible floor plans, superior locations, energy efficiency, and amenities have attracted the high rent paying tenants, bringing lower vacancies, higher rent growth, and lower turnover as tenants focus on creating an attractive environment for their employees to convene. We have focused on this segment, while avoiding older, commoditized products that continue to face leasing headwinds. Additionally, certain submarkets in Manhattan, Chicago, San Francisco, and DC where workers have not returned to office due to reliance on public transit and continued Covid restrictions, have not experienced the same recovery as their counterparts in the sunbelt.

The housing sector has been extremely hot, as home prices rose 18.8% in 2021, according to the S&P CoreLogic Case-Shiller US National Home Price Index, the biggest increase in 34 years of data and substantially ahead of 2020's 10.4% gain. With the price increases, the headline 7.2% decrease in existing-home sales month-over-month in February has caused concerns in the market, especially when paired with rising mortgage costs pushing above 5% for the first time since 2011 as the Fed has begun to increase interest rates. This leaves investors questioning if this drop off in home sales is due to decreasing demand due to perceived higher financing costs or if it’s a supply issue with a lack of available homes for homebuyers.

Our data suggests that homebuilders have such incredible demand for houses that they are electing to wait until completion to sell and capture value increases rather than pre-selling homes, indicating it’s a lack of supply induced drop in sales. The chart below details the decreasing inventory or homes for sale, with supply struggling to keep up with the elevated demand.

US Existing Home Sales and Inventory (monthly, millions of homes)



Source: National Association of Realtors

This lack of available homes for sale has resulted in pricing power with landlords leading to rent growth and lower turnover, resulting in a favorable investment environment for multifamily. As a result, investors have been positioning themselves overweight to the rental sector. As such, we have seen non-rationale pricing from sellers due to the increased liquidity in the space. In one submarket, we have seen single family rental homes trade at an implied valuation premium of 30-50% relative to the exact same house from the same homebuilder across the street that is going for sale-homes. With this arbitrage, we're cautious about the future implications of the affordability of rental housing over the medium to long term as supply catches up to demand. For our portfolios, this has been a key area of focus where we have diversified our multifamily investments not only by type, but also across affordability levels to capture renter demand while also avoiding concentration. Interestingly, our investments in the creation and preservation of affordable housing have performed exceptionally well in the past few quarters as the resiliency of the property type was proven during Covid and investors have increased their focus on buying portfolios that generate an impact and stabilized income yield.

ROCKCREEK UPDATE

RockCreek celebrated Earth Day by participating in discussions focused on key areas of policy, accounting, and investment that will drive the fight against climate change in the years ahead.

CEO Afsaneh Beschloss moderated a White House discussion, hosted by the President's Office of Science and Technology Policy, on new efforts to fully account for natural capital in the United States. Immediately preceding the panel, Commerce Secretary Gina Raimondo announced details of how the Commerce Department would integrate climate considerations into its policies, strategic planning, and programs. The department's Bureau of Economic Analysis will develop a program to advance natural capital accounting and improve understanding of how America's natural resources affect the economy.

"There is no better future without tackling climate change," Afsaneh said, "and a key part of that effort is understanding the depth of our natural resources, what is missing, and where we need to invest for future generations."

Afsaneh also moderated a discussion hosted by the Bretton Woods Committee on Financing the Climate Transition Toward Net-Zero, which also featured RockCreek Advisory Board member Laura Tyson. Afsaneh pointed out that, despite a world awash in savings, the funding needs are in the trillions, but we are working in billions.

Significantly more public, private, and multilateral capital is needed to accelerate the energy transition. At RockCreek, we will continue to pursue impactful solutions and invest in pioneering entrepreneurs, companies, and teams who are building a stronger planet and shaping a brighter, more sustainable future for many generations to come.

Videos of both events will be posted on RockCreek's website social media pages when available.

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