ANGELO GORDON

Angelo Gordon's Capital Markets Perspectives

SECOND QUARTER 2022

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Angelo Gordon's Capital Markets Perspectives (CMP) is a quarterly publication that provides information and our portfolio managers' views on the credit, real estate, and private equity markets. We hope you find this to be a valuable resource and enjoy our latest look at the markets.

Angelo Gordon is a privately-held registered investment advisor dedicated to alternative investing. The firm was founded in 1988 and currently manages approximately $51 billion. We seek to generate absolute returns with low volatility by exploiting inefficiencies in selected markets and capitalizing on situations that are not in the mainstream of investment opportunities. We creatively seek out new opportunities that allow us to remain a leader in alternative investments.

We have expertise in a broad range of absolute return strategies for both institutional and high net worth investors. Our dedicated team of employees seeks to deliver consistent, positive returns in all market environments. We have built our name on our breadth of talent, intensive research, and risk averse approach to investing. Our long-term experience gives us the insight and patience to turn our vision into profitable, stable businesses.

Co-CIO Overview

In the first quarter of 2022, concerns surrounding interest rate hikes, persistent inflation, and geopolitical risk increased volatility across asset classes. The Fed's upcoming rate hikes, surging energy prices, and supply chain disruption led to the repricing of risk across the equity, commodities, credit, and interest rate markets.

Against this backdrop, U.S. and European high yield bonds posted quarterly returns of -4.2% and -3.7%, respectively. Higher quality bonds underperformed, as BB-rated bonds returned -4.9% in the U.S. and -4.0% in Europe. In the U.S., new issuance fell to its lowest level in over three years, and high yield mutual funds experienced their largest quarterly outflow on record.

During the quarter, leveraged loans benefited from demand for floating rate assets. The J.P. Morgan U.S. Leveraged Loan Index was flat for the quarter, while the J.P. Morgan European Leveraged Loan Index posted a -0.4% return. Similar to the trend seen in the high yield market, primary market activity was lower in both U.S. and European leveraged loans.

In residential and consumer debt, the volume of new issuance ticked up on a year-over-year basis. This increase took place amid wider spreads and against the backdrop of continued resilience in U.S. housing and consumer fundamentals. Mortgage fundamentals continued to be favorable, with improvements seen in prepayment and forbearance rates, as well as home price appreciation, as the supply of homes remained limited relative to demand. According to the latest reading from the CoreLogic Home Price Index, in February, home prices increased 20% year-over-year.

Convertible bonds finished the first quarter with a return of -5.8%, with similar underperformance from convertible arbitrage strategies, as the HFRX Relative Value Fixed Income Convertible Arbitrage Index declined nearly 4.2%. The primary markets for both convertible bonds and SPACs posted lower deal volume, with $7.9 billion of new convertible bonds issued globally during the quarter.

The U.S. merger arbitrage market remained robust in the first quarter, as financial sponsors and strategic buyers continued to pursue transactions and announced deal value rose 25% year-over-year. The $2 trillion of dry powder amassed by global private equity firms continued to be deployed, with three sponsor-backed deals valued at over $10 billion witnessed during the quarter. Private equity sponsors have also benefited from access to financing for their deals, via both the thriving direct lending market and traditional banks. Looking ahead, given the healthy M&A pipeline, wider spreads, and unchanged U.S. antitrust laws, we believe there will continue to be ample opportunities in the space.

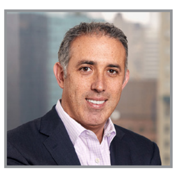
Turning to real estate, the global market continued to demonstrate strong fundamental improvement during the first quarter, with increased investment volumes and relative strength across many property types. However, the combination of inflationary pressures on borrowing costs and the geopolitical impact of Russia's invasion of Ukraine has slowed the tremendous growth we've seen over the last eighteen months. Late in the first quarter, borrowing rates began to increase, which in turn put pressure on the steady compression of cap rates witnessed since the onset of the pandemic. Going forward, we believe continued strength in property fundamentals – particularly in sectors such as multifamily, industrial, and some of the niche asset classes – will provide continued ballast for what might otherwise be downward pricing pressure. However, certain segments of the market may see pockets of distress should an ongoing trend of increased lending rates and expanding investor return expectations emerge.

In the U.S., transaction volume was up 56% year-over-year in the first quarter. Multifamily and industrial assets have continued to be favored by investors. Although the economy continues to be on solid footing, growth has slowed as consumers are faced with inflationary pressures. With regard to valuations, Green Street's Commercial Property Price Index was effectively flat year-to-date, suggesting investors are becoming more cautious of an overheated market. We expect to see a further downward trajectory of transaction volumes in the coming months as a result of increasing uncertainty, and pricing will likely moderate as well.

In Europe, real estate investment volumes rose 20% year-over-over in 2021 and continued to increase into the first quarter of 2022. However, similar to the U.S., we expect certain economic and political forces to slow down investment activity through 2022. The European real estate markets have seen inflationary pressure on construction and energy costs, which has been exacerbated by the conflict in Ukraine. We expect these trends to negatively impact both investment volumes and real estate fundamentals through 2022.

Real estate fundamentals have remained strong in Asia, particularly in logistics, where rent and occupancy growth have continued. Across the region, office has also continued to demonstrate resilience – particularly in Japan, Korea, and certain markets in China. In Hong Kong, investment volumes in 2021 increased 50.5% year-over-year, as the market has continued to demonstrate some improvement from pandemic lows.

Josh Baumgarten
Co-Chief Executive Officer
Co-Chief Investment Officer
Head of Credit

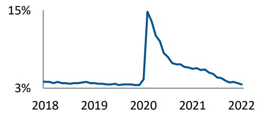


Adam Schwartz
Co-Chief Executive Officer
Co-Chief Investment Officer
Head of Real Estate

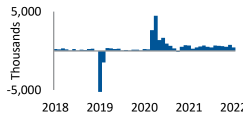
Economic Dashboard & Market Indices

Job Market

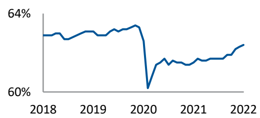
U.S.—Unemployment Rate	As of 3/31/2022
Latest Level	3.6
Change from Prior Period	▼ (0.2)
Frequency	Monthly



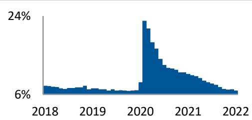
U.S.—Non-Farm Payroll	As of 3/31/2022
Latest Level	431.0
Change from Prior Period	▼ (319.0)
Frequency	Monthly



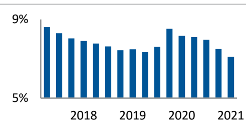
U.S.—Labor Participation Rate	As of 3/31/2022
Latest Level	62.4
Change from Prior Period	▲ 0.1
Frequency	Monthly



U.S.—U-6 Unemployed & Margin & Part-Time as Percent of Labor Force & Margin	As of 3/31/2022
Latest Level	6.9
Change from Prior Period	▼ (0.3)
Frequency	Monthly

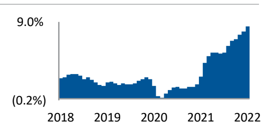


Eurozone Unemployment Rate	As of 12/31/2021
Latest Level	7.1
Change from Prior Period	▼ (1.0)
Frequency	Quarterly

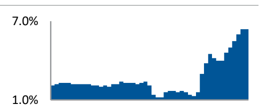


Inflation

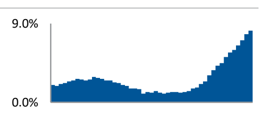
U.S. Consumer Price Index (CPI) Y-o-Y (%)	As of 3/31/2022
Latest Level	8.5
Change from Prior Period	▲ 0.6
Frequency	Monthly



U.S. CPI Goods Less Food & Energy Y-o-Y (%)	As of 3/31/2022
Latest Level	6.4
Change from Prior Period	0.0
Frequency	Monthly

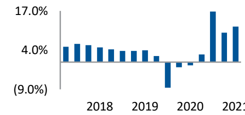


U.S. Producer Price Index (PPI) Y-o-Y (%)	As of 3/31/2022
Latest Level	8.2
Change from Prior Period	▲ 0.4
Frequency	Monthly

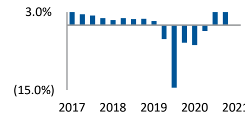


GDP Growth

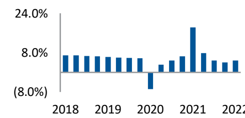
U.S.—GDP Y-o-Y (%)	As of 12/31/2021
Latest Level	11.8
Change from Prior Period	▲ 2.0
Frequency	Quarterly



Eurozone—GDP Y-o-Y (%)	As of 12/31/2021
Latest Level	4.6
Change from Prior Period	▲ 0.6
Frequency	Quarterly

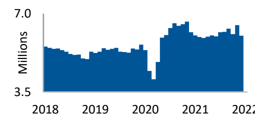


China—GDP Y-o-Y (%)	As of 3/31/2022
Latest Level	4.8
Change from Prior Period	▼ (0.1)
Frequency	Quarterly

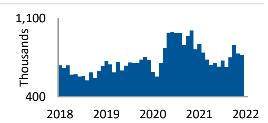


Housing

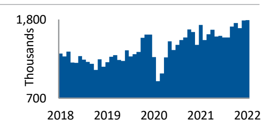
Existing Home Sales	As of 2/28/2022
Latest Level	6.0
Change from Prior Period	0.0
Frequency	Monthly



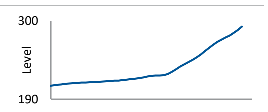
New Home Sales	As of 2/28/2022
Latest Level	772.0
Change from Prior Period	0.0
Frequency	Monthly



Housing Starts	As of 3/31/2022
Latest Level	1,793.0
Change from Prior Period	▲ 5.0
Frequency	Monthly



Case-Shiller Index of Home Value in 20 Cities	As of 1/31/2022
Latest Level	292.2
Change from Prior Period	0.0
Frequency	Monthly



Note: All charts are based on a five-year trend.
Source: Bloomberg (All).

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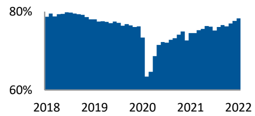
Economic Dashboard & Market Indices *(continued)*

Economic & Market Confidence

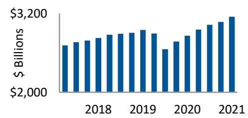
Capacity Utilization as a Percent of Capacity — As of 3/31/2022

Latest Level	78.3
Change from Prior Period	▲ 0.6
Frequency	Monthly



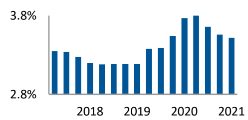
Private Fixed Investment Nonresidential SAAR — As of 12/31/2021

Latest Level	3,154.9
Change from Prior Period	▲ 81.0
Frequency	Quarterly



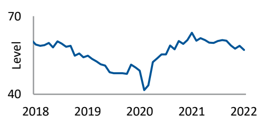
Residential Fixed Investment as a Percent of GDP — As of 12/31/2021

Latest Level	3.5
Change from Prior Period	▼ (0.1)
Frequency	Quarterly



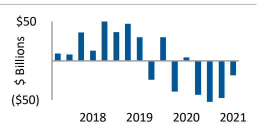
ISM Manufacturing Index — As of 3/31/2022

Latest Level	57.1
Change from Prior Period	▼ (1.5)
Frequency	Monthly



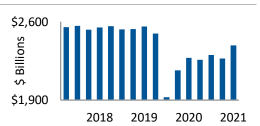
Manufacturing Inventory Change Q-o-Q ($) — As of 12/31/2021

Latest Level	(18.4)
Change from Prior Period	▲ 29.2
Frequency	Quarterly



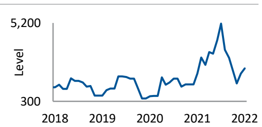
Exports of Goods/Services — As of 12/31/2021

Latest Level	2,391
Change from Prior Period	▲ 118
Frequency	Quarterly



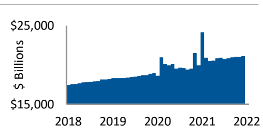
Shipping Rates — As of 3/31/2022

Latest Level	2,358
Change from Prior Period	▲ 318
Frequency	Quarterly



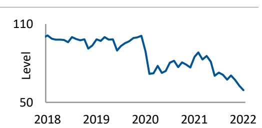
Personal Income Level — As of 2/28/2022

Latest Level	21,153
Change from Prior Period	▲ 101
Frequency	Monthly



Michigan Consumer Confidence Sentiment — As of 3/31/2022

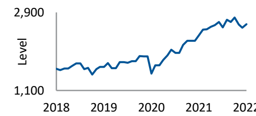
Latest Level	59.4
Change from Prior Period	▼ (3.4)
Frequency	Monthly



Equity

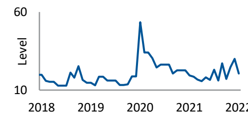
U.S. Equity Markets—Russell 3000 — As of 3/31/2022

Latest Level	2,631.7
Change from Prior Period	▲ 79.3
Frequency	Monthly



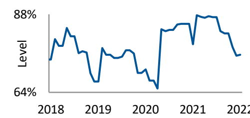
U.S. Equity—VIX — As of 3/31/2022

Latest Level	20.6
Change from Prior Period	▼ (9.6)
Frequency	Monthly

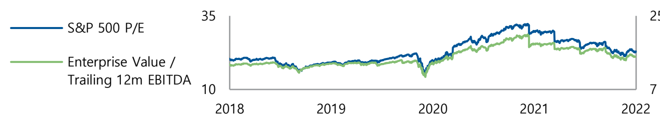


S&P 500 Percentage Exceeding Earning Estimates — As of 3/31/2022

Latest Level	75.6
Change from Prior Period	▲ 0.3
Frequency	Monthly

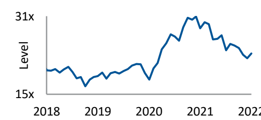


S&P 500 Historical Valuation Levels — As of 3/31/2022



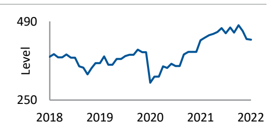
Trailing P/E on S&P 500 — As of 3/31/2022

Latest Level	23.4
Change from Prior Period	▲ 1.0
Frequency	Monthly



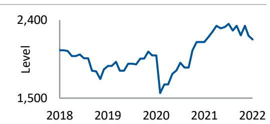
Equity Markets—Euro Stoxx — As of 3/31/2022

Latest Level	434.9
Change from Prior Period	▼ (1.6)
Frequency	Monthly



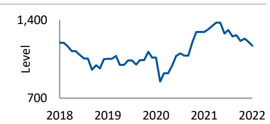
Equity Markets—MSCI EAFE — As of 3/31/2022

Latest Level	2,181.6
Change from Prior Period	▲ 2.5
Frequency	Monthly

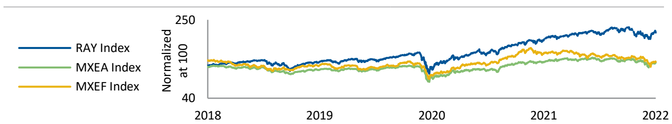


Equity Markets—MSCI EM — As of 3/31/2022

Latest Level	1,141.8
Change from Prior Period	▼ (29.5)
Frequency	Monthly



Russell 3000 & MSCI EAFE & MSCI EM — As of 3/31/2022



Note: All charts are based on a five-year trend.
Source: Bloomberg (All).

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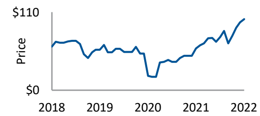
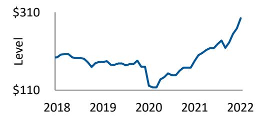
Commodities

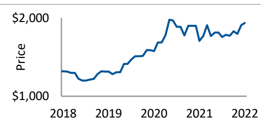
WTI Crude Oil Price	As of 3/31/2022
Latest Level	100.3
Change from Prior Period	▲ 4.6
Frequency	Monthly



Reuters/Jefferies Commodity Index	As of 3/31/2022
Latest Level	295.2
Change from Prior Period	▲ 26.1
Frequency	Monthly

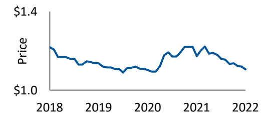


Gold	As of 3/31/2022
Latest Level	1,937.4
Change from Prior Period	▲ 28.5
Frequency	Monthly

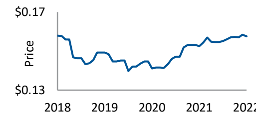


Foreign Exchange Rates

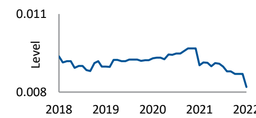
Euro Spot Rate vs. 1 USD	As of 3/31/2022
Latest Level	1.11
Change from Prior Period	▼ (0.02)
Frequency	Monthly



Yuan Spot Rate vs. 1 USD	As of 3/31/2022
Latest Level	0.1577
Change from Prior Period	▼ (0.0008)
Frequency	Monthly

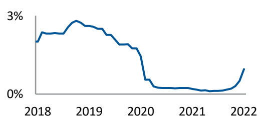


Yen Spot Rate vs. 1 USD	As of 3/31/2022
Latest Level	0.0082
Change from Prior Period	▼ (0.0005)
Frequency	Monthly

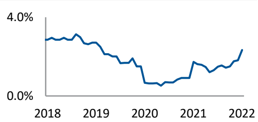


Rates

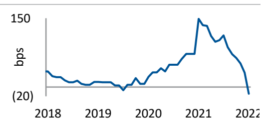
Libor 3M	As of 3/31/2022
Latest Level	0.96
Change from Prior Period	▲ 0.46
Frequency	Monthly



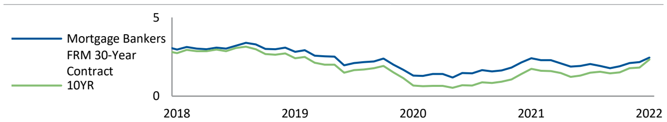
Treasury 10-Yr Yield	As of 3/31/2022
Latest Level	2.34
Change from Prior Period	▲ 0.51
Frequency	Monthly



Swaps 2-Yr vs. 10-Yr	As of 3/31/2022
Latest Level	(14.57)
Change from Prior Period	▼ (45.88)
Frequency	Monthly



30-Yr Mortgage & 10-Yr Treasury As of 3/31/2022



Note: All charts are based on a five-year trend.
Source: Bloomberg (All).

Performing Credit

In the first quarter, leveraged loans benefited from demand for floating rate assets and showed relative outperformance and stability compared to fixed income assets, as a hawkish U.S. Fed and rising geopolitical tensions resulted in a steep recalibration of interest rate expectations.

The J.P. Morgan U.S. Leveraged Loan Index was flat for the quarter, whereas the corporate credit and equity markets faced losses. The loan market benefited from lighter issuance, a reacceleration of retail inflows from investors seeking diversification from rising rates, and an improvement in CLO activity. Concerns about rising interest rates drove volatility in the bond market; after selling off early in the quarter through the first half of March, high yield bonds saw a significant recovery in the last two weeks of the quarter. U.S. high yield bonds posted a nearly 6% year-to-date loss through March 15th, only to see a 1.8% recovery in the two weeks that followed—ending the quarter with a return of -4.2%.

U.S. institutional loan issuance activity was lighter during the quarter, with quarterly volume totaling $120.5 billion—down 60% year-over-year. The default rate continues to be muted, at 0.5% for U.S. high yield and 0.9% for leveraged loans. Defaults are projected to remain below the long-term averages for U.S. high yield bonds and leveraged loans, which are 3.4% and 3.0%, respectively.

Europe saw a similar pattern of relative loan outperformance in the first quarter. The J.P. Morgan European Leveraged Loan and High Yield Indexes posted quarterly returns of -0.4% and -4.3%, respectively. Also similar to the U.S., the European high yield default rate remains muted at 0.68%. European capital markets got off to a relatively slow start in January, and then volatility completely halted primary markets for a month in mid-February. Despite recent crossover deals, first quarter issuance in Europe totaled just under €14 billion, the lowest quarterly volume since the first quarter of 2019 and a 60% year-over-year decline.

Looking ahead, we believe the long-term, non-mark-to-market financing of a CLO allows investors to benefit from micro-dislocations in the market. CLOs not only allow patient investors to benefit from credit selection and active trading, but they also provide quarterly distributions as a risk mitigant against an uncertain market environment.

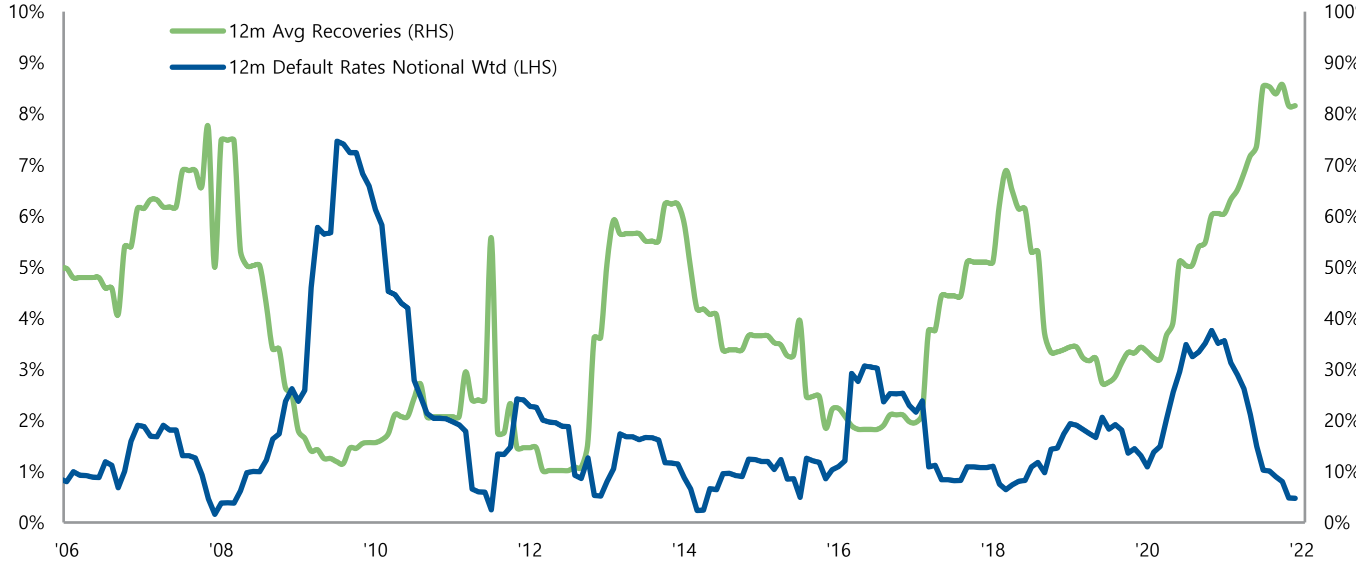
U.S. Leveraged Loan Default Rate

Par-Weighted Default Rate

Note: Represents the last 12-month default rate.
Source: J.P. Morgan.

In the U.S., the default rate for loans and high yield is at or near all-time lows. Although this "default deflation" may be transitionary, analysts expect the default rate will remain well below the historical average in the near term.

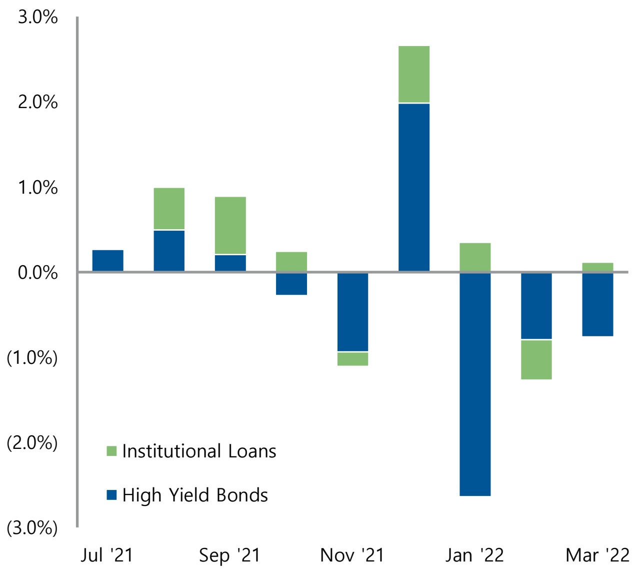
European Default Rate



Source: J.P. Morgan.

The default environment remained similarly benign in Europe, with the dramatic increase in the recovery rate for defaulted securities being particularly noteworthy, as it rose to 84% for full year 2021—well above the historical average.

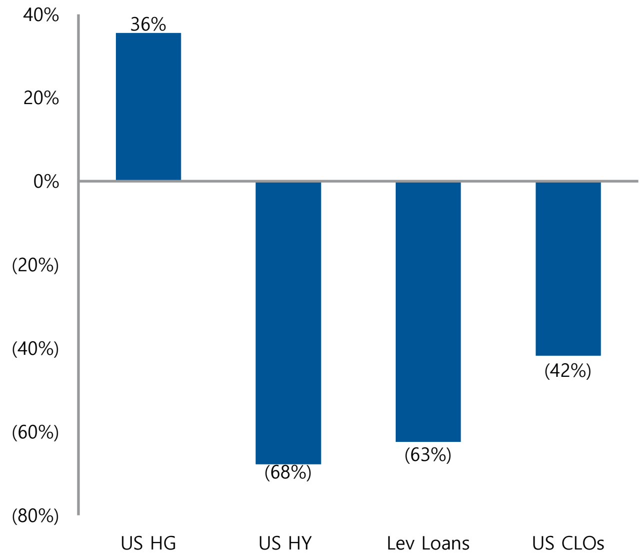
Loans vs. Bonds



Source: J.P. Morgan High Yield Bond and Leveraged Loan Market Monitor.

Loans outperformed bonds for the third consecutive month, as interest rates rose in March.

March Gross Issuance Change



Note: Percent change is from prior 4-year average.
Source: JPM U.S. Corporate Credit.

March 2022 saw the lightest volume of new high yield issuance since March 2020.

Maureen D'Alleva
Portfolio Manager

For more information on Performing Credit, click here.

Distressed Debt

Geopolitical tensions surrounding the Russian war against Ukraine, sharp increases in commodity prices, expectations of multiple interest rate hikes, and growing inflationary concerns all contributed to negative high yield performance in the first quarter of 2022. U.S. high yield bonds declined 4.15% and European high yield markets returned -3.72% for the three-month period ended March 31, 2022.

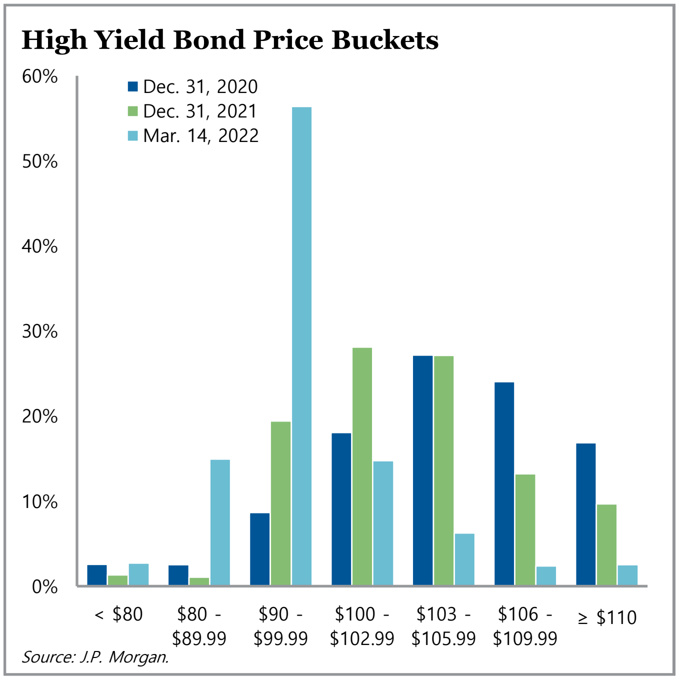
U.S. high yield bond spreads widened 24 basis points during the first quarter, ending March at 399 basis points, and European spreads rose 74 basis points to close at 458 basis points. While spread movements were relatively modest during the quarter, yields of U.S. high yield bonds increased 160 basis points, rising from 4.71% at year-end 2021 to 6.31% as of the end of March. This move was lifted by the 2-year U.S. Treasury yield expanding 160 basis points, from 0.73% to 2.33%, and the 10-year U.S. Treasury yield rising 82 basis points to 2.33% over the three-month period.

Both higher- and lower-rated bonds suffered in the first quarter: BBs returned -4.9% in the U.S. and -4.0% in Europe, and CCCs returned -4.3% in the U.S. and -4.2% in Europe. Notably, this was the second-worst performance for BB-rated bonds since the fourth quarter of 2008. All 21 of the U.S. sectors tracked by J.P. Morgan ended the quarter with negative performance, ranging from -1.89% for energy to -6.28% for housing.

Default levels remained near record lows. With only $1.6 billion of default transactions in the first quarter, the trailing 12-month U.S. high yield default rate decreased to 0.23%, the lowest level on record. Including distressed exchanges, the U.S. high yield default rate ended March at 0.50%, well below the historical average of 3.80%. In Europe, there was €1.4 billion of high yield debt from four issuers that defaulted, which resulted in a decline in the one-year trailing default rate to 0.68%.

New issuance in U.S. high yield fell to its lowest level in over three years, with first quarter 2022 volume dipping to $46.5 billion—down more than 70% from the first quarter of 2021's $159 billion. Refinancing again accounted for the largest use of proceeds at nearly one-half of primary activity, while acquisition financing and general corporate purposes each represented approximately 25% of the quarterly total. In Europe, high yield new issuance totaled €14 billion, which was the lowest quarterly volume since the first quarter of 2019.

U.S. high yield mutual funds experienced outflows in each of the first three months of 2022, totaling $25 billion for the quarter—the largest quarterly outflow on record. Conversely, U.S. leveraged loan funds enjoyed their second-largest quarterly inflow on record, as investors shifted toward floating-rate instruments in anticipation of rising interest rates. In Europe, high yield funds experienced outflows of €4 billion—the worst quarter since the first quarter of 2020.



Over 75% of U.S. high yield bonds traded above par at the start of 2022; that figure had declined to 26% as of mid-March.

Q1 2022 was only the fourth quarter in the past six years with a negative return.

Ryan Mollett
Global Head of Distressed & Corporate Special Situations

For more information on Distressed Debt, click here.

Structured Credit: RMBS

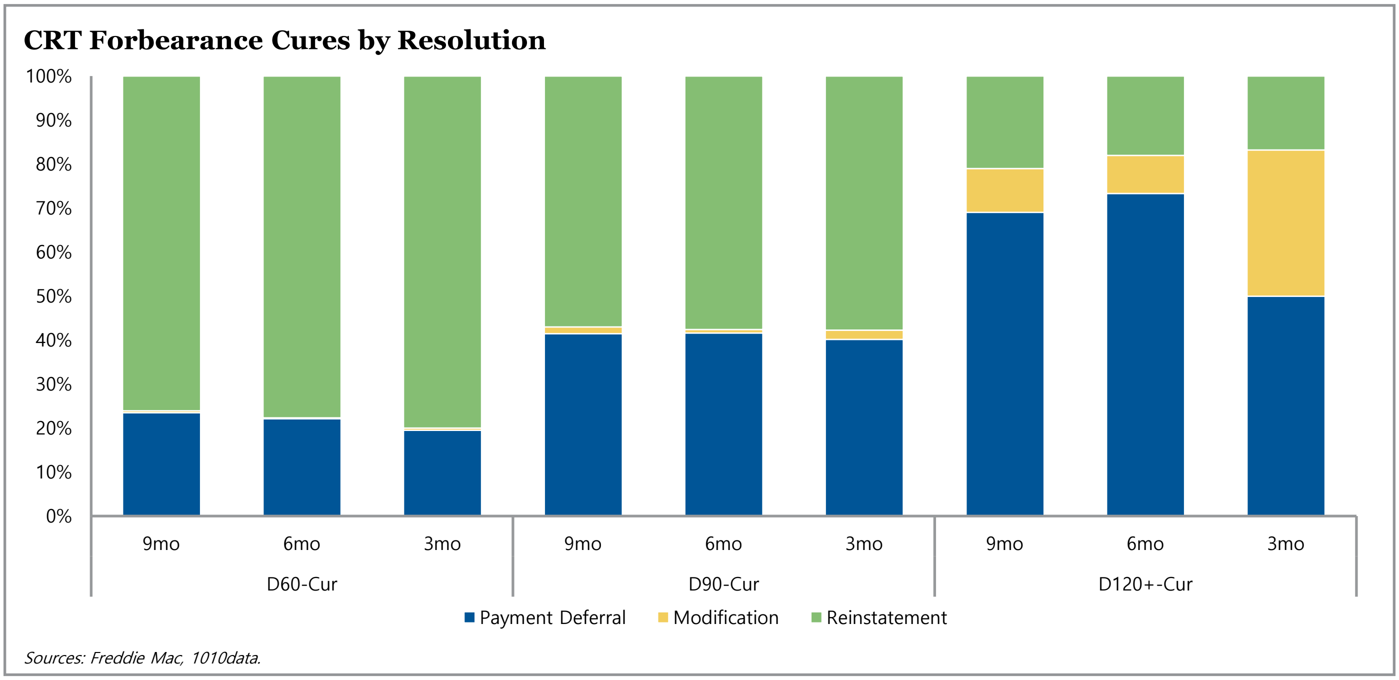
Spreads for securitized residential debt sectors were wider, in some cases sharply, during the first quarter amid a broad-based deterioration in risk sentiment and an upward shift in interest rate expectations that dominated the start of the year. New issuance for RMBS sectors grew on an annual basis, adding to the spread widening; however, mortgage credit and housing fundamentals continued to be resilient.

Credit risk transfer (CRT) tranches were as much as 200-300 basis points wider to end the quarter, with most of the widening occurring in January and February. Subordinate tranches bore the brunt of the risk-off mood, leading to a steeper credit curve. As the first quarter turned into April, CRT spreads started to reverse course, as risk appetite appeared to increase; new issuances were several times oversubscribed as market participants weighed the relative value against corporate credit spreads, with additional demand generated by new investors coming to the CRT market. Other mortgage credit sectors also widened during the quarter. Legacy RMBS widened by 80 basis points to around 220 basis points. AAA-rated tranches of non-qualified mortgage (NQM) transactions also widened by 80 basis points to roughly 170 basis points.

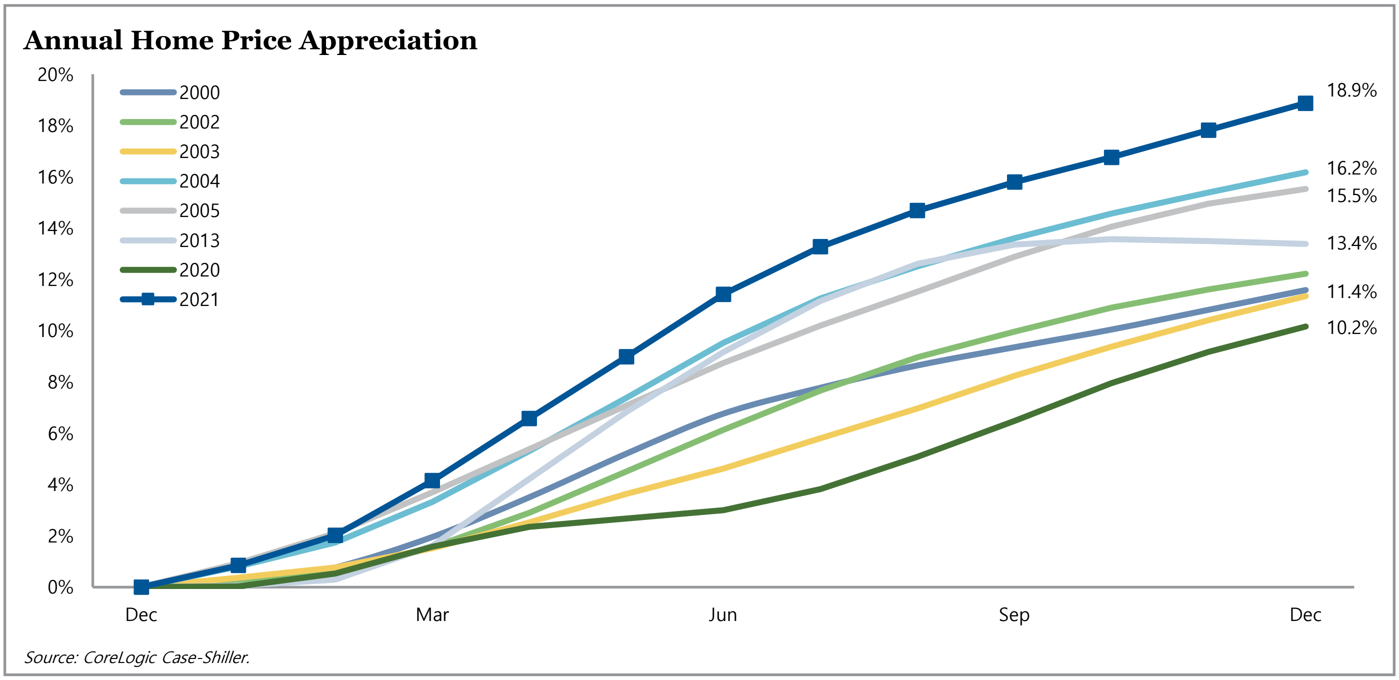
Quarterly new issuance of RMBS rose to $51 billion in the first quarter—up 24 % year-over-year—on higher NQM, CRT, and agency-eligible issuance; compared to the fourth quarter, RMBS new issuance was a little lower, falling from $64 billion at the end of 2021. NQM and jumbo 2.0 were the most active sectors during the first quarter—at $12.6 billion and $11.3 billion, respectively—followed by CRT at $9.1 billion. New issuance of single-family rental transactions more than doubled versus year-ago levels to nearly $4 billion, and other RMBS grew 32% to $3.7 billion.

Mortgage fundamentals continued to be favorable, and some signs of normalization to pre-pandemic levels continued to emerge. Headline prepays declined and were 10-20% higher than pre-pandemic levels, after having been as much as 150% higher in early 2021. The forbearance rate continued to fall, and servicers began offering modifications in greater share to cure delinquent statuses.

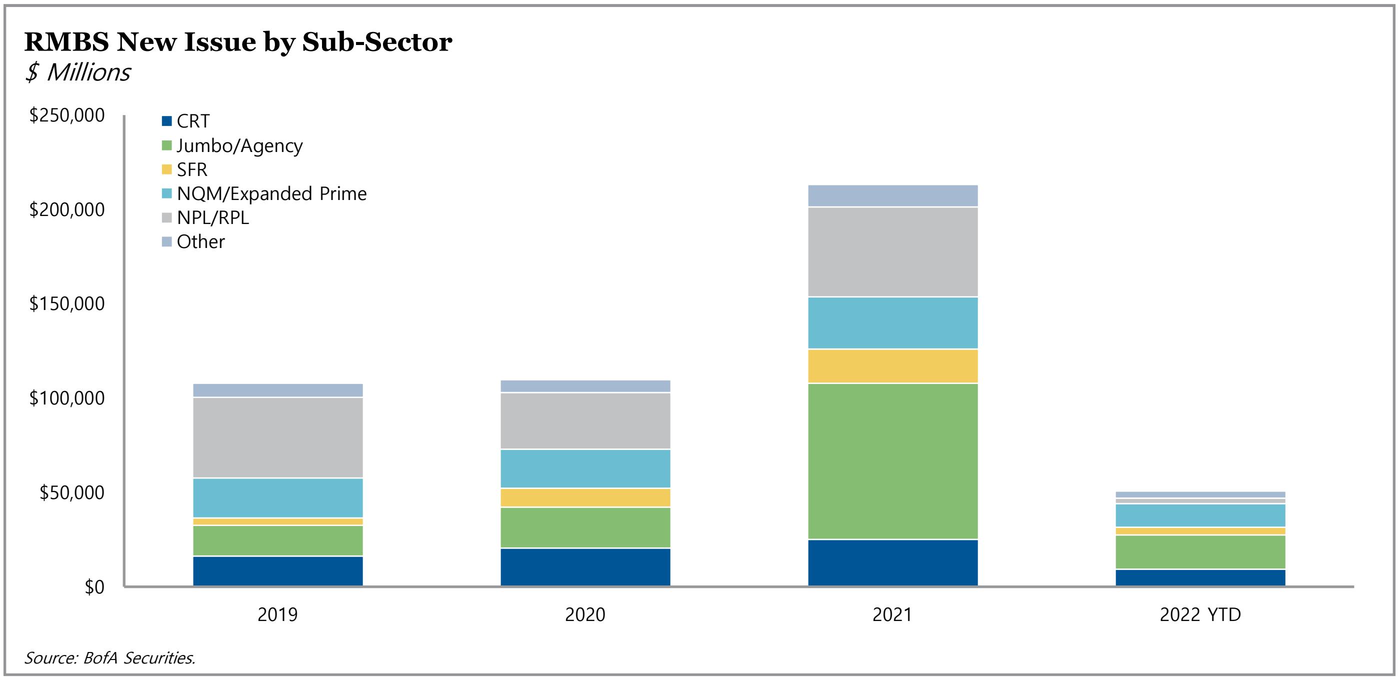
Home price growth continues to print at or near 20%. The latest reading from the S&P/CoreLogic Case-Shiller Index showed home prices increased 19.2% in January, and the CoreLogic Home Price Index rose 20% in February. Limited availability of homes against fundamentally strong housing demand has been a driving factor for persistent home price appreciation.



Payment deferrals remain the predominant source of forbearance workouts as GSE forbearances reach their 18-month expiration.



Home price appreciation through 2021 was greater than any year since 2000.



Quarterly RMBS new issuance rose 24% compared to year-ago levels.

Structured Credit: ABS

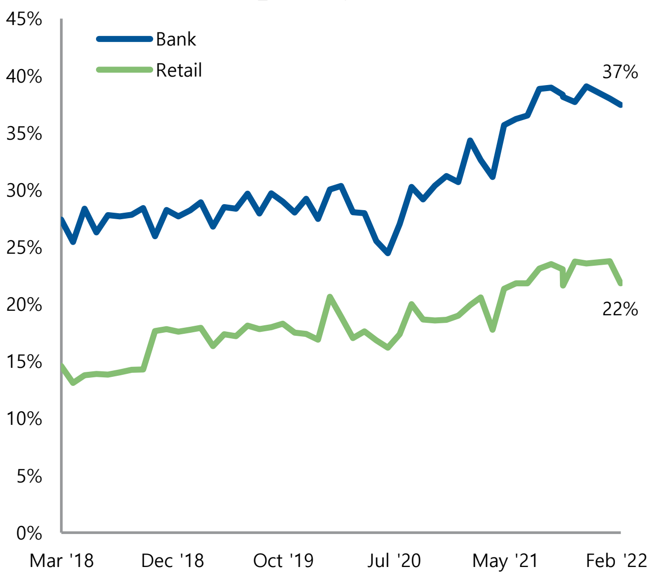
Spreads for securitized consumer debt sectors also widened during the first quarter and for similar reasons as the mortgage credit sectors. New issuance for ABS sectors was higher on an annual and quarterly basis, and while collateral fundamentals have been mostly stable, there have been some distinct areas of weakening.

Benchmark ABS sectors were roughly 30-50 basis points wider, while down-in-credit and esoteric sectors generally widened 50-65 basis points, mostly owing to broader market weakness. Consider that 3-year AAA-rated prime auto ABS widened by 37 basis points, while AAA-rated subprime auto ABS spreads were 60 basis points wider. Lower down the capital stack, subprime BBB auto ABS widened by as much as 100 basis points. Several new issue ABS transactions were pulled during the turbulence, and tiering among sponsors for personal loan ABS became more apparent, particularly due to weaker collateral performance. However, by quarter-end, the tone started to be more orderly, and some interesting opportunities emerged both in the primary and secondary markets.

In the first quarter, new issuance of ABS rose 10% year-over-year to $70 billion on higher volumes of credit card and other ABS, which were up $5.7 billion and $3.9 billion, respectively. Credit card issuance was comprised of a mix of general purpose and non-U.S. issuers, while other ABS was a blend of timeshare, franchise, and personal loan issuers, among other types. Auto ABS issuers generated roughly half of the quarter's issuance.

Collateral performance data has mostly been stable except for specific personal loan lenders, where later-stage delinquencies for 2021 originations have eclipsed pre-pandemic levels. Other vintages and lenders have had better performance. Legacy student loan ABS continued to generate strong recovery cash flows, which have been stable and large enough to offset new charge-offs. The latest auto ABS data showed some sequential improvement as the impact from early tax refunds generates prepayments and delinquency curing, including for down-in-credit categories. That said, the seasonal delinquency decline was more muted in comparison to the tax return seasons of prior years. Based on IRS statistics through February 18th, Cox Automotive estimates that 17% of this year's anticipated number of tax refunds have been issued; whereas for the same week in 2019, 38% had been distributed. However, the average refund so far this year is up 13% year-over-year, which should support debt repayment across the consumer ABS complex.

Credit Card Principal Payment Rate

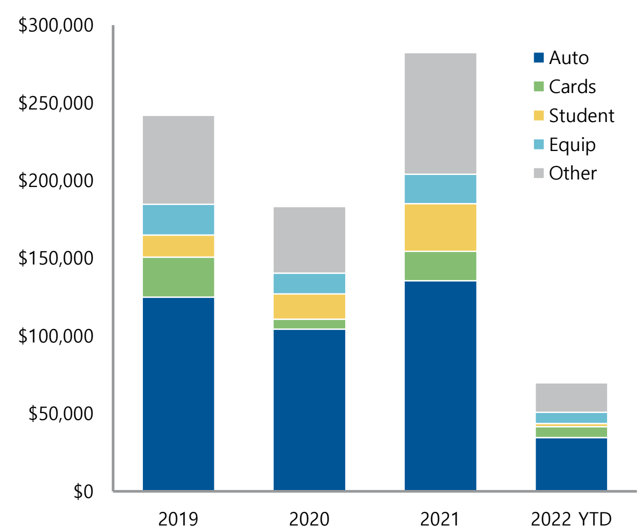


Source: Intex.

Monthly credit card payment rates rose during the pandemic and remain at elevated levels.

ABS New Issue by Sub-Sector

$ Millions



Source: BofA Securities.

ABS new issuance is 10% higher than the first quarter of 2021, led by auto.

Structured Credit: CMBS

While memorable, the first quarter of 2022 is one most market participants would likely prefer to forget.

Reflective of continued pandemic-related disruption, the year started with a series of event cancellations at the CRE Finance Council's (CREFC) annual January Conference in Miami due to the Omicron variant. While the conference itself—which is hosted by the trade association for the commercial real estate finance industry—did take place, attendance was a fraction of what it has been in prior years. The typical bullish sentiment to start the year was in shorter supply than over-the-counter rapid tests.

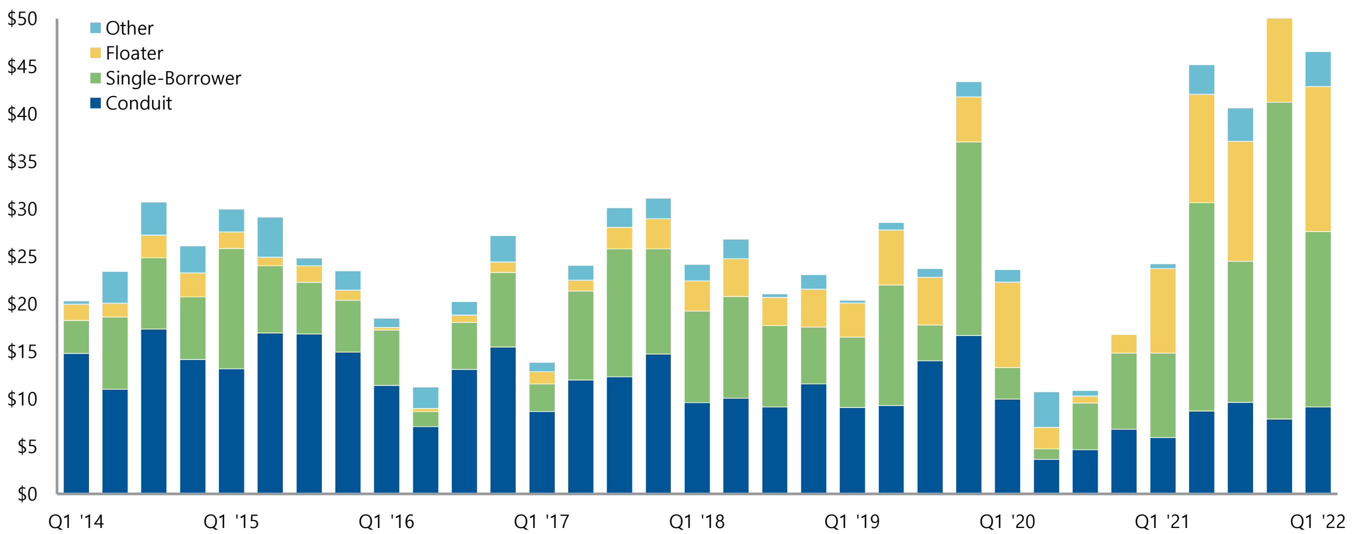
Inflation measures continued to run hot, and the Federal Reserve pivoted to an aggressively hawkish stance. It took financial markets several weeks to believe the Fed's rhetoric, but by the end of March, those promised future rate increases were being reflected in Treasury prices. The yield curve flattened significantly and closed the quarter with the 2-year Treasury bond at a slightly higher yield than the 10-year bond. Economists see this inversion as a strong signal that the economy will go into a recession in the next two years. Additionally, Russia invaded Ukraine on February 24th, triggering the largest conflict on European soil since the end of World War II. While the war has not yet appeared to have a direct impact on U.S. commercial real estate fundamentals, inflationary pressures have increased, and markets have become more volatile.

These pressures confronted the CMBS market as it tried to absorb record amounts of new issue supply in the first quarter. Unsurprisingly, spreads on new transactions widened significantly, and several expected deals were put on hold. Secondary spreads widened in sympathy with primary markets. Barclays estimates that, during the first quarter, both AAA- and BBB-rated CMBS generated losses of 5.5%.

In an effort to conclude on a more positive note, there are a few additional points about the first quarter that are worth calling out. Although case numbers spiked, hospitalization and death rates from the latest COVID-19 surge in the U.S. were a fraction of those endured during prior waves. On the economic front, interest rate hikes have begun, and their trajectory has been clearly articulated to the market. In the commercial real estate sector, capital for investment—or dry powder—remains abundant. Last but not least, property-level cash flow numbers continue to improve from the shock of early 2020, and according to Trepp, CMBS delinquency levels dropped to 3.73% in March—less than half of their peak seven quarters ago and just 170 basis points higher than their pre-pandemic levels.

Quarterly Private Label Issuance

$ Billions

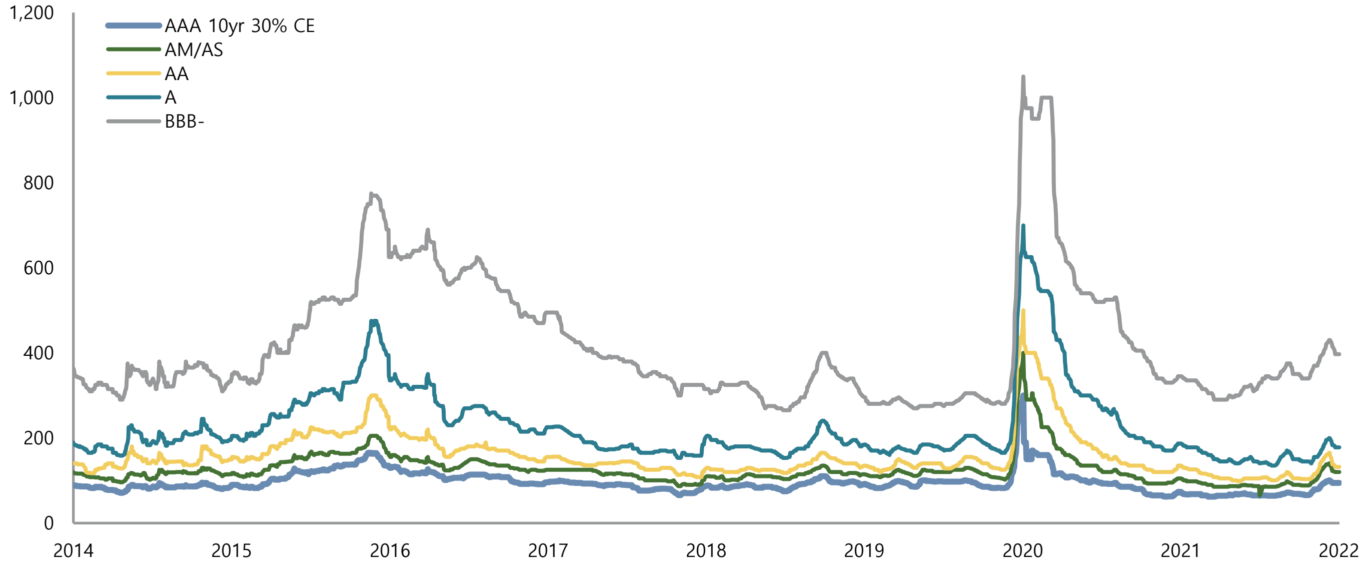


Sources: Credit Suisse, Commercial Mortgage Alert.

Issuance volumes continued to be robust in Q1 2022, after Q4 2021 set a post-GFC record led by a large increase in single-borrower transactions.

Structured Credit: CMBS *(continued)*

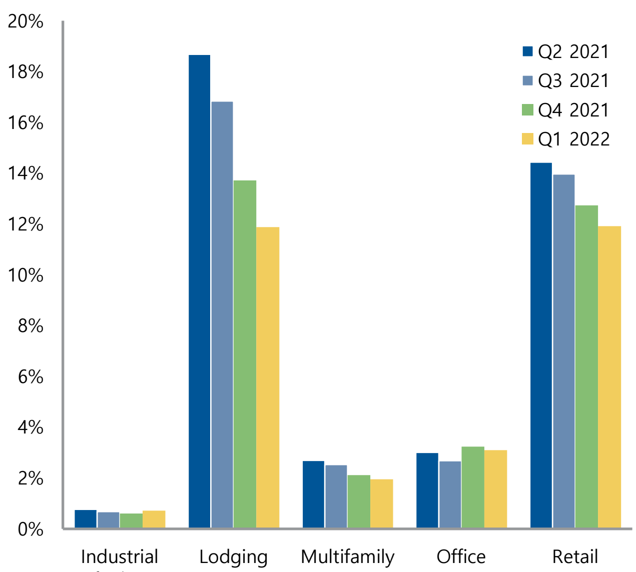
CMBS New Issue Spread



Source: Credit Suisse.

New issue spreads continued to widen from their 2021 lows, as supply volumes and broader macroeconomic concerns weighed on sentiment.

CMBS Special Servicing Rate

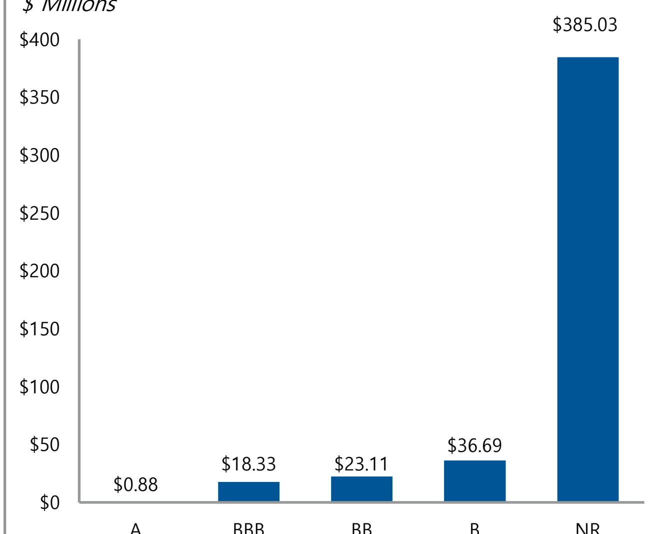


Note: As of February 28, 2022.
Source: Trepp.

Delinquency rates continue to decline, led by curing in the hotel and retail sectors, but offset to a small degree by an increase in office delinquencies.

Interest Shortfall by Rating

$ Millions



Note: CGCMT 2016-P5 revised its June 2021 remit to remove the interest shortfall to classes A and B. Ratings have been clubbed to letter.
Source: Intex Data.

Interest shortfalls in conduit CMBS are concentrated in the non-rated, first-loss portion of the capital structure.

TJ Durkin
Co-Portfolio Manager

Yong Joe
Co-Portfolio Manager

Andrew Solomon
Portfolio Manager

For more information on Structured Credit, click here.

Energy

The Russia-Ukraine crisis has crystallized the fact that the global community is drastically short reliable energy. A full-blown energy crisis may be brewing because the world has under-invested in reliable energy since 2016. Unfortunately, we've seen that bear markets, unrest, and global conflict can follow an energy crisis. Similarly sobering, we believe there is significantly increased risk of a recession, as high-cost energy spending commands a higher percentage of consumers' income.

Investment risks and opportunities have become clearer. Additionally, it is obvious that surplus is the condition that best facilitates rapid net zero energy transition.

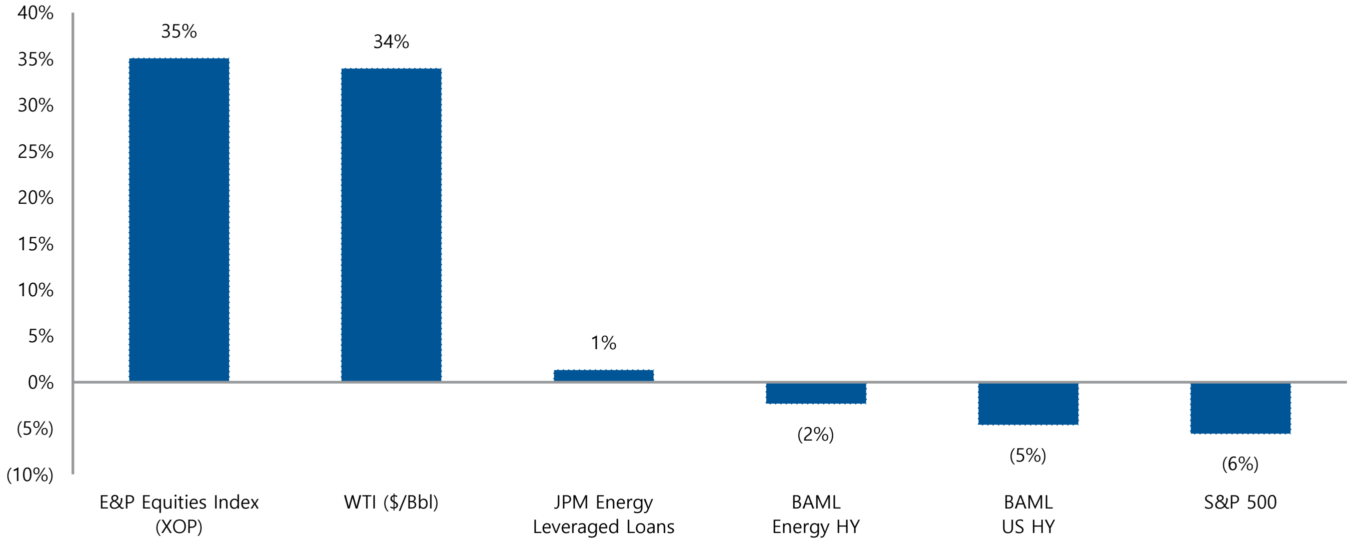
Energy intensity is a risk and metric that is now most relevant in the underwriting of new equity and credit investments. Despite that risk, investment opportunities exist both on the supply and demand ends of the energy chain, and distress and rescue finance opportunities are emerging.

Ramping up shale gas and LNG production is clearly necessary, as exporting U.S. gas contributes to meeting the goals of both energy security and decarbonization. Short-cycle resources like shale oil and oil storage are also part of the path to energy surplus. In the event of an energy transition slowed by an energy crisis, growth in energy savings as well as weatherization products and services will require growth capital and asset-based debt.

Higher yielding opportunities are developing in renewables, and projects facing challenges due to supply chain issues, rising interest rates, and energy intensity will increasingly require senior secured rescue financing as a lifeline for already invested capital. Those opportunities are likely to emerge in several areas: on the solar developer side, where valuations are dependent on continued access to capital, whether in the securitization market or elsewhere; in the volatile renewable diesel business, where projects are exceeding budgets; in undercapitalized SPACs; and with LNG developers in search of working capital to collateralize pricier contracts.

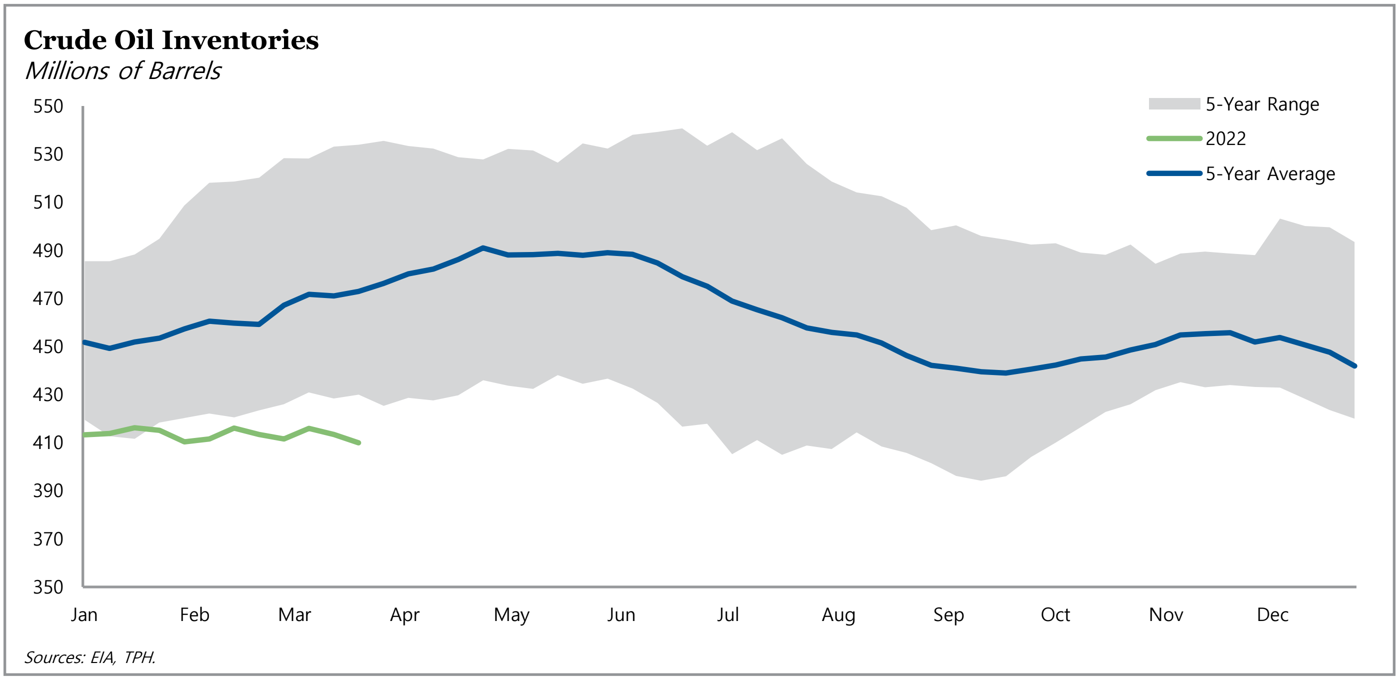
Finally, we expect the recently announced release of barrels from the Strategic Petroleum Reserve (SPR) to be positive for energy valuations because it will likely mute demand destruction from exceedingly high prices at the front-end of the curve and should boost demand and prices in the middle and on the back end, as the SPR will need to be refilled. Such a curve flattening will likely lead to more price deck agreement between buyers and sellers in the property market, resolving some of the existing disagreement over the steep front-end. Finally, the SPR release doesn't address the longer-term structural supply deficit, leaving intact the super cycle thesis.

YTD Returns Across Asset Classes

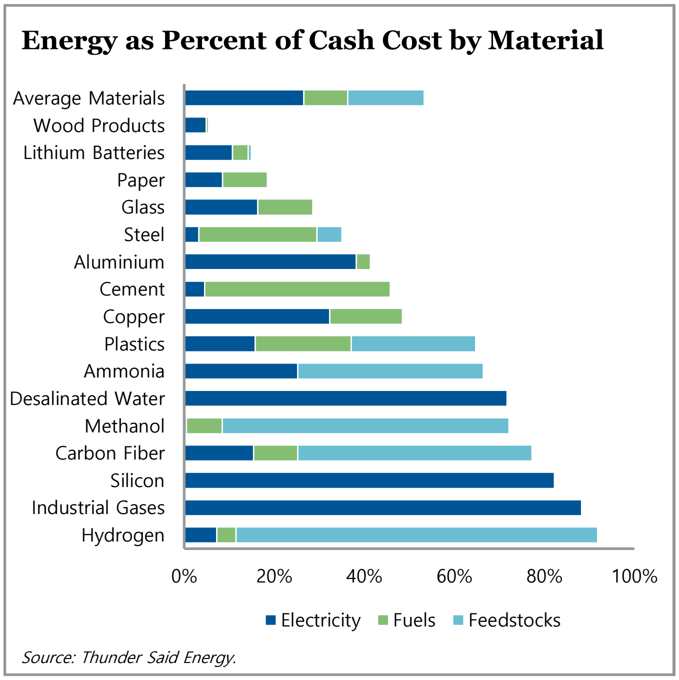


Note: Reflects data from 1/3/2022 through 4/5/2022.
Source: Bloomberg.

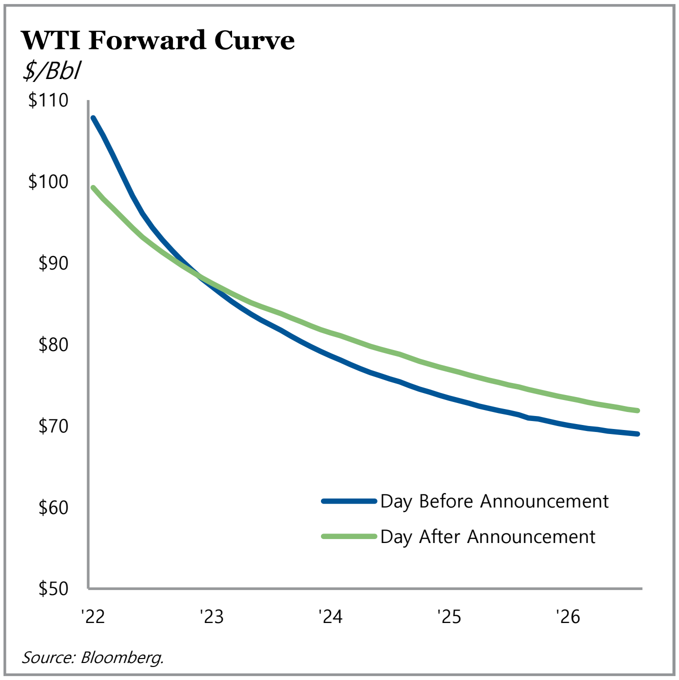
E&P equities and crude oil significantly outperformed the broader equities market and energy high yield indices.



As of the end of Q1 2022, crude oil inventories stood below 5-year lows.



Energy is 53% of the cash cost of materials.



The forward curve flattened following the announcement of plans to release 1 million barrels of oil per day from the Strategic Petroleum Reserve.

Todd Dittmann
Portfolio Manager

For more information on Energy, click here.

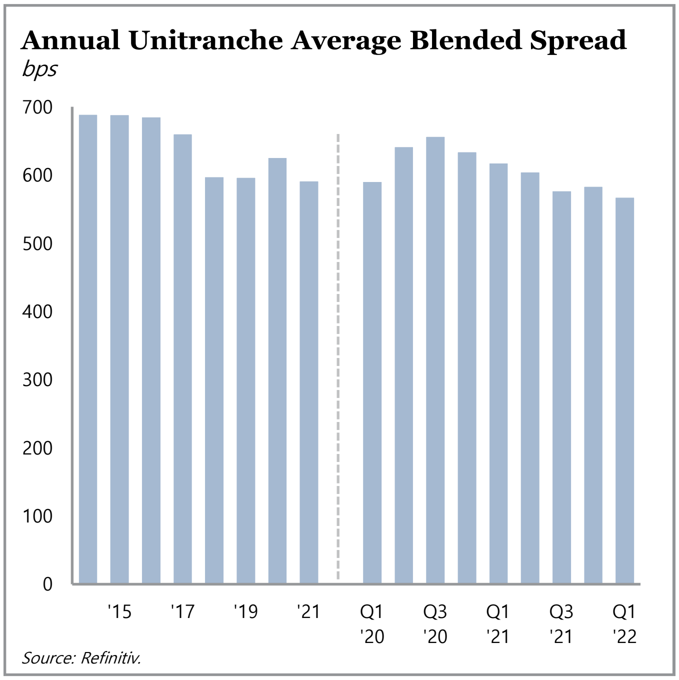
Middle Market Direct Lending

In the first quarter of 2022, syndicated middle market issuance totaled $30 billion—falling from the recent highs of 2021 but marginally above the $29 billion of issuance posted in the first quarter of last year. Middle market sponsored syndicated lending dropped to $7.8 billion in the first quarter, a 53% decline quarter-over-quarter and down 29% year-over-year. The general slowdown in the market can be attributed to the decline in LBO activity following a highly active second half of 2021, with many sponsors and issuers deciding to take a breath after the frenetic pace of last year. However, lenders have kept busy with continued add-on activity within their portfolios. Despite macroeconomic and geopolitical uncertainty, most managers do not view the first quarter issuance to be representative of the rest of 2022, as the first quarter is historically less active, and the majority of managers remain confident they will hit their lending goals for 2022 due to growing pipelines and expected add-on activity.

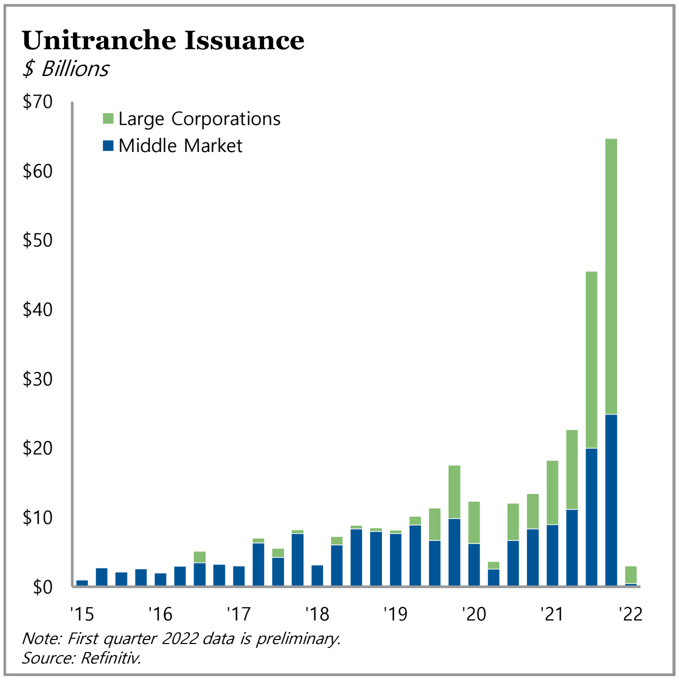
Direct lending continued to be a sector that benefited from the volatility present in the broadly syndicated loan (BSL) market; jumbo direct lending unitranches took market share from BSL executions as global uncertainty persisted in the first quarter. Lenders that have amassed a sizeable portfolio of borrowers were somewhat shielded from a slow M&A environment in the first quarter, as add-on activity outpaced LBOs.

Volatility in the market has caused lenders to tighten their underwriting standards. Refinitiv's most recent middle market lender outlook survey indicated that 37% of lenders are willing to lend at first-lien leverage multiples greater than 5x EBITDA, and 25% of lenders are willing to lend at total leverage multiples above 7x EBITDA – down from 53% and 32%, respectively, at the end of the fourth quarter 2021.

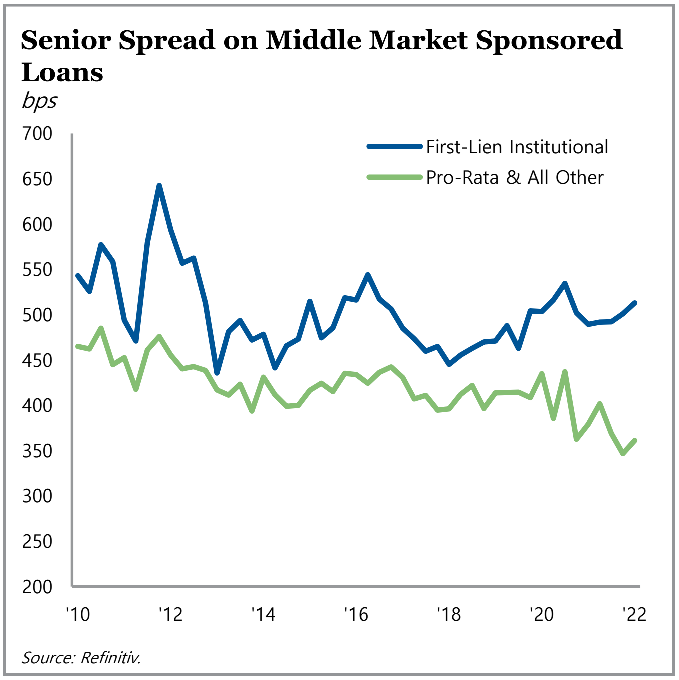
Increases in risk appetite, however, can still be seen in lenders' willingness to participate in covenant-lite transactions; 38% of lenders are unwilling to do covenant-lite transactions, down considerably from 50% at the end of the fourth quarter. Covenant-lite now represents more than 23% of the institutional middle market lending market; its market share is higher than it was in 2019 and 2020, but it is still a far cry from the 44% seen in 2017.



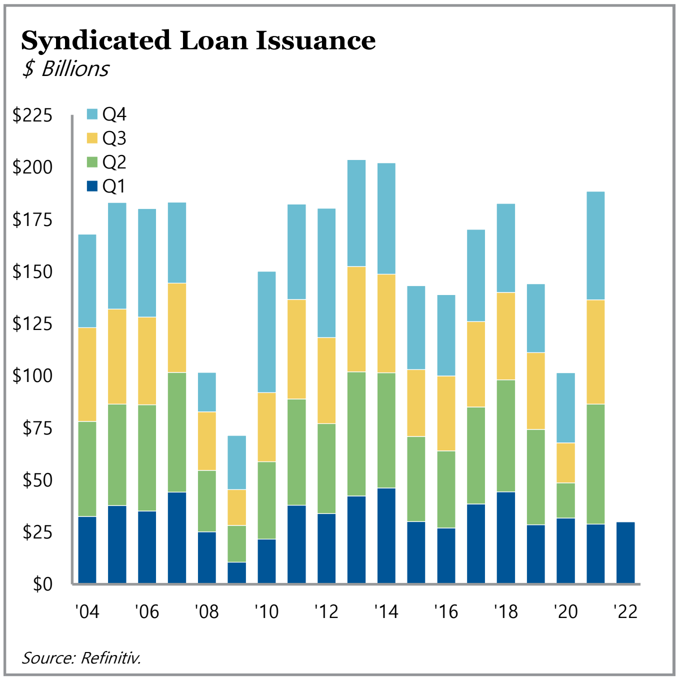
Average unitranche spreads continued to tighten from the highs of 2020, compressing to 568 basis points in the first quarter of 2022.



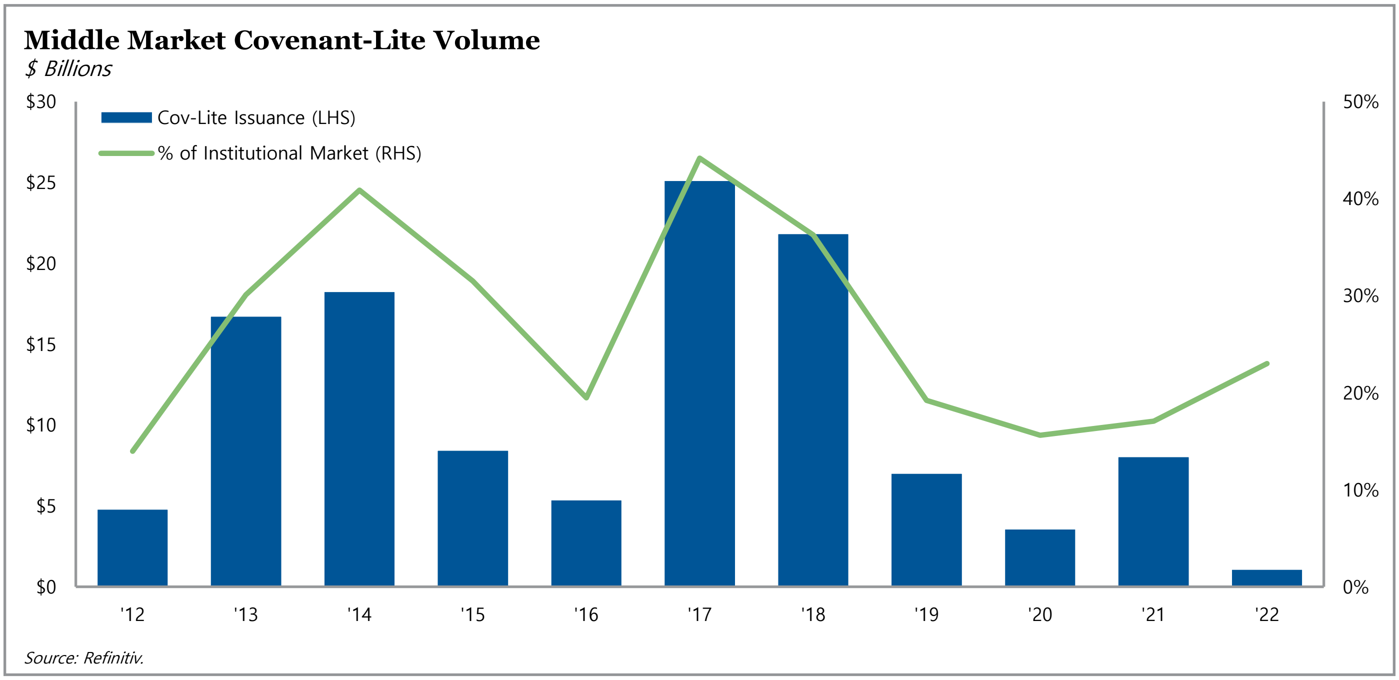
Middle market unitranche issuance slowed down in the first quarter of 2022, as sponsors and issuers took a breath after a historic second half in 2021.



Middle market sponsored loans continue to offer incremental returns, as spreads for these loans have held steady at about 5.0%.



Q1 2022 syndicated middle market loan originations decreased greatly from the previous quarter, highlighting the slowdown of overall issuance.



Covenant-lite as a percentage of the market continues to increase, reflecting the increased risk appetite across the market.

Trevor Clark
Portfolio Manager

For more information on Middle Market Direct Lending, click here.

Merger Arbitrage

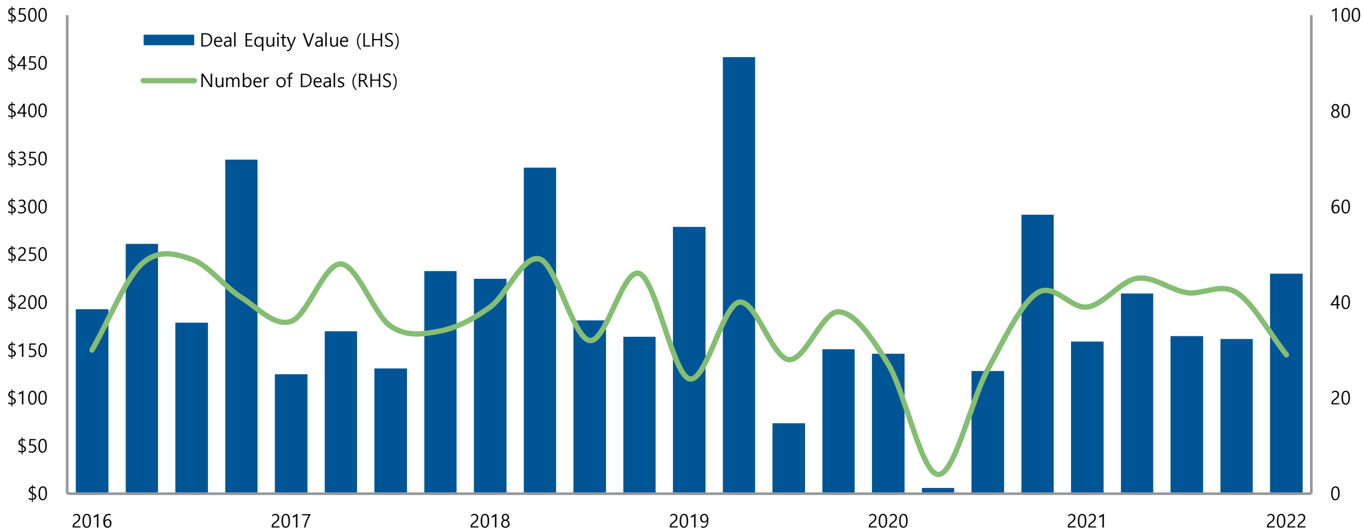
The U.S. M&A market remained robust through the first quarter, as companies and private equity firms continued deploying capital and pursuing larger deals despite facing multiple geopolitical issues, broader economic concerns, and increasing market volatility. Announced deal value increased 11% quarter-over-quarter and 25% year-over-year. At quarter-end, the deal universe had an average adjusted annualized spread of 12%, aggregate deal value remained flat at $361 billion, and the total arbitrage profit pool increased to $21.2 billion.

The $2 trillion war chest accumulated by global PE firms continued to be deployed, pushing the sponsor-backed portion of total deal value to a post-GFC high of 25%. Three such deals were valued at greater than $10 billion, led by Elliott Investment Management affiliate Evergreen Coast Capital and Vista Equity Partners' $16.5 billion acquisition of Citrix. While banks provided ample funding for deals despite the weakening credit markets, PE firms have grown more comfortable turning to the flourishing direct lending market—particularly for tech LBOs, like Thoma Bravo's $10.7 billion acquisition of Anaplan, for example. Not to be outshined, corporations were active participants in the mega-cap deal space. After Take-Two Interactive kicked off the year with its purchase of Zynga for $12.7 billion, Microsoft answered the call of duty when it announced the largest acquisition in its history, agreeing to acquire Activision Blizzard for nearly $70 billion.

Last quarter, we warned that the Federal Trade Commission (FTC) and U.S. Department of Justice (DOJ) were expected to become more active as the groups' teams settled into their seats over the coming months. In the first quarter, both FTC Chair Lina Khan and DOJ Assistant Attorney General Jonathan Kanter started to exercise their powers, filing suits to block Lockheed Martin's purchase of Aerojet Rocketdyne and UnitedHealth Group's acquisition of Change Healthcare, respectively. While we observed that these particular examples were viewed as unwelcomed actions by the U.S. antitrust agencies in the eyes of some, more broadly, both agencies generally continued to positively surprise investors. We expect both agencies will continue to increase their regulatory actions throughout the year; however, we've observed that companies are adapting to the times and entering agreements for acquisitions that would traditionally be considered low risk.

Looking to the future, while we expect higher interest rates will make acquisition financing more costly, we've seen equity valuations decline to offset those increased borrowing costs. In this environment, we expect PE firms will continue to be important players as they seek to invest dry powder and raise increasingly large flagship funds; as such, we expect investing in the space to remain very attractive and that active management will be important. This comes as we've seen many companies start to refrain from giving timing guidance on transactions, which has led to wider spreads and increased debate among investors about whether the regulatory environment has changed even though U.S. antitrust laws have remained the same.

Quarterly U.S. Deal Activity
$ Billions



Source: Bloomberg.

U.S. M&A continued its strong run, as sponsor-backed deals proliferated.

Mark Wojtusiak
Head of Merger Arbitrage

For more information on Merger Arbitrage, click here.

Convertible Arbitrage

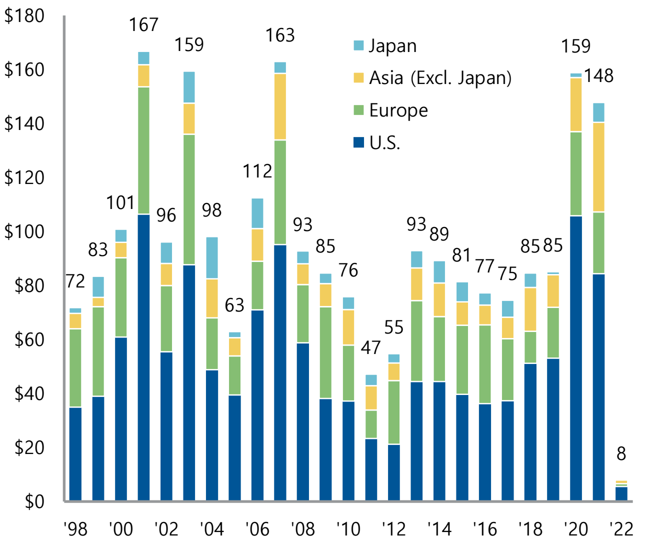
Global equities, credit, and sovereign bonds experienced a difficult start to the year. January was dominated by the ongoing hawkish shift of major central banks in the face of persistent inflationary pressures. The severe weakness in most risk assets fed through into the convertible bond market, and we saw long-only and hedged strategies suffer their worst start to the year in decades. Subsequently, Russia's invasion of Ukraine and the ensuing geopolitical crisis and severe economic sanctions triggered a further substantial risk-off move. The strength in commodities—particularly in energy, metals, and agricultural goods—added to inflation concerns, raising expectations of more aggressive monetary tightening. We saw global bond yields surge by magnitudes surpassing those witnessed in 2008. Despite a partial recovery in March, the MSCI World Index lost 4.95% in local currency terms during the first quarter. Convertible bonds underperformed, ending the quarter down 5.8% on an outright basis. Convertible arbitrage strategies also struggled significantly, as the HFRX Relative Value Fixed Income Convertible Arbitrage Index dropped 4.18% in the first quarter.

Unsurprisingly, given the difficult macro backdrop, the global convertible primary market only recorded $7.9 billion of new deals during the first quarter. The U.S. accounted for $5.5 billion of new issuance, followed by Europe and Asia, with $1.2 billion issued in each of these regions. However, a reasonable backlog appears to have been building, and continued market stabilization may lead to a swift recovery in primary activity.

The primary market for SPACs also slowed down, with $11.8 billion of IPOs pricing globally in the first quarter. Despite the increasing regulatory scrutiny and more challenging environment, especially for growth equities, there are still almost 200 SPACs that have filed IPOs in the U.S. The first quarter saw 33 new business combination announcements and 27 completed business combinations, while 15 previously announced deals were terminated. This leaves a total of 108 SPACs that have agreed to a business combination deal and are working toward completing the transaction. A significant part of the secondary market continues to trade at a discount to trust value, offering attractive low-risk yields with upside optionality.

Annual Convertible Issuance by Region

$ Billions

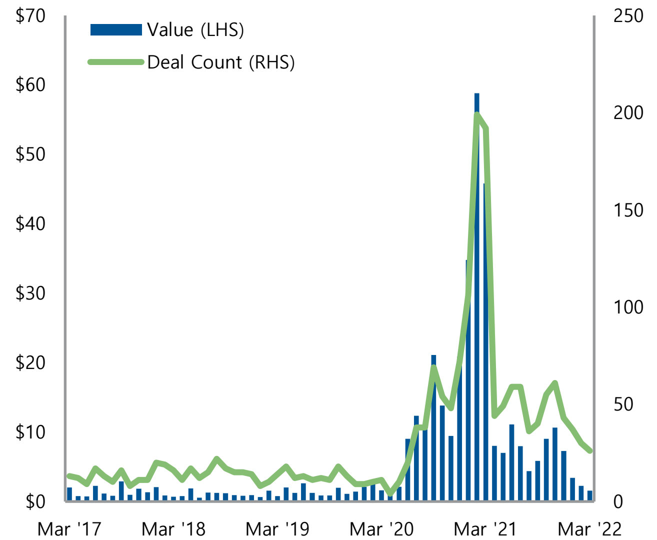


Source: Bank of America Merrill Lynch.

Convertible new issuance is off to a slow start given the difficult market backdrop.

Global SPAC Deal Activity

$ Billions



Source: Bloomberg.

SPAC issuance looks set to stabilize at more sustainable levels.

Gary Wolf
Head of Convertible Arbitrage

For more information on Convertible Arbitrage, click here.

U.S. Real Estate

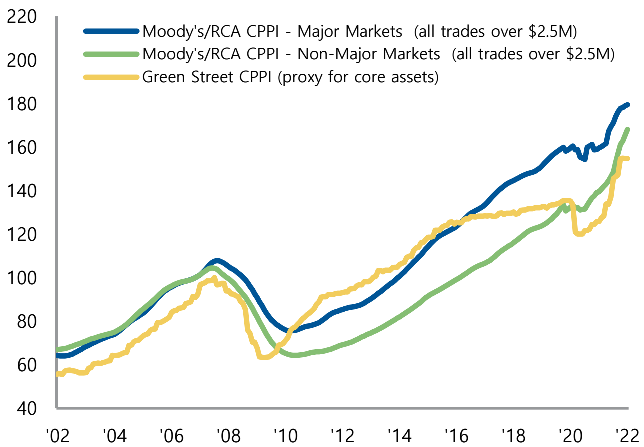
The first quarter of 2022 continued the trends seen last year; commercial property markets remained fairly robust and transaction volume increased 56% year-over-year, though activity through the end of March is predominantly reflective of deals put under contract at the start of the year. Broader markets—including securities and Treasury markets—retrenched, and the quarter ended with cracks forming in the commercial real estate complex. As tragic events unfolded in Ukraine and inflation concerns further intensified, an element of caution grew in credit markets. Several CMBS deals were shelved and others priced wide of initial guidance, even in highly sought-after property types. Anecdotally, Angelo Gordon has seen several widely marketed sale processes pause while buyers digest movements in borrowing costs. For the quarter, apartment and industrial deals remained the driving force by property type—up 56% and 50%, respectively, and making up 37% and 20% of total transaction volume. Additionally, investor capital continued to skew toward the Sun Belt as opposed to gateway markets.

Emerging trends are disrupting the elevated liquidity that has underpinned aggressive real estate pricing, but supportive fundamental metrics—driven by secular and behavioral trends—continue to guide investors to strongly favor residential, industrial, and several niche sectors. We believe near-term fundamentals continue to provide some runway, but the tension of higher borrowing rates is palpable and likely to impact cap rates. Additionally, economic growth is moderating; savings rates have normalized, consumer balance sheets—while still flush—are starting to stagnate, higher energy costs are expected to reduce discretionary spending, and maximum employment is colliding with spiking interest rates and inflation, posing a challenge to real wage growth. As a result, the Fed has shifted from supporting growth to counterbalancing inflation, increasing the risk of a recession, as evidenced by a flattening in the 2-year versus 10-year Treasury curve.

On the valuation front, the Green Street Commercial Property Price Index remained flat in the first quarter, after increasing 24% in 2021. U.S. REIT shares have similarly pulled back, ending March down 5.26% year-to-date. Public company valuations varied by property type; they suggest many traditional property types—including apartments, office, self-storage, and shopping centers are modestly overvalued but, on average, imply a roughly neutral signal for the overall direction of private market property valuations. Green Street Advisors' model, which tracks the relative value relationship between private real estate and fixed income (investment grade and high yield), pegged real estate as fairly valued.

Commercial Real Estate Price Indices

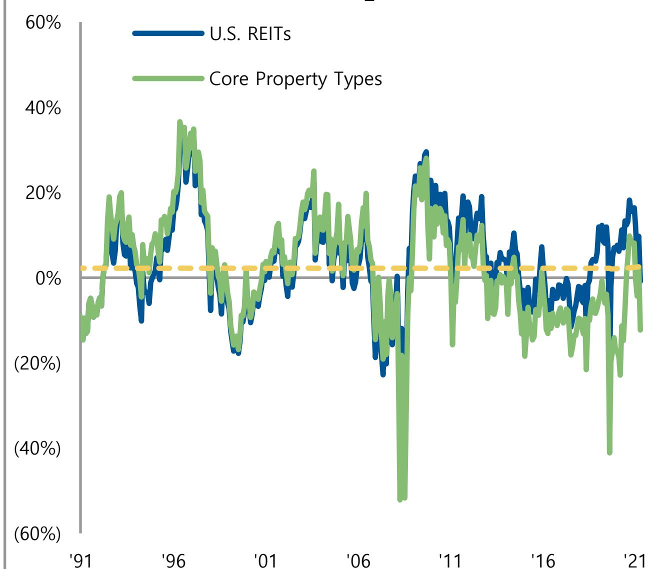
Index



Note: For this chart, Green Street CPPI was indexed to 100 at its 2007 peak (Aug 2007) and Moody's CPPI was indexed at 100 in Dec 2006. Major markets include Boston, Chicago, Washington D.C. Metro, Los Angeles Metro, New York City Metro, and San Francisco Metro.
Sources: Moody's CPPI = Moody's/RCA All Property Types; Green Street CPPI = Major Sectors; Moody's – Commercial Property Price Index (Moody's CPPI).

Private real estate pricing has begun to flatten out.

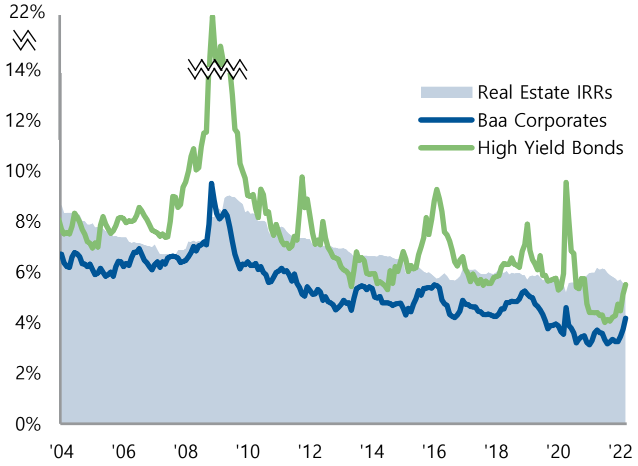
Public-Private Price Comparison



Note: Core Property Types include Office, Retail, Apartment, and Industrial.
Source: Green Street Advisors.

Public company valuations vary by property type but, on average, imply a roughly neutral signal for the overall direction of private market property valuations.

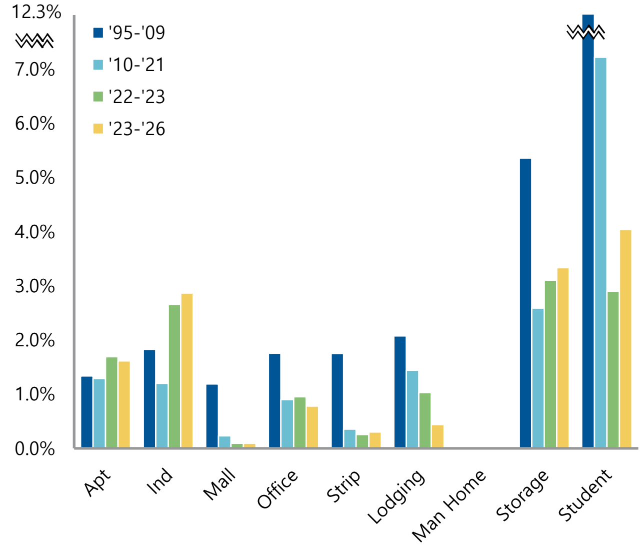
Unlevered Total Return Expectations on Real Estate vs. Corporate Bond Yields



Note: Real Estate IRRs is an equal-weighted average of the asset-weighted averages for the five major property sectors (apartment, industrial, mall, office, and strip center). Sources: Green Street Advisors (October '20), Moody's (Baa Corporates), BAML (High Yield Bonds).

Unlevered real estate has historically offered a return between investment grade and high yield bonds. Real estate is currently fairly valued compared to debt.

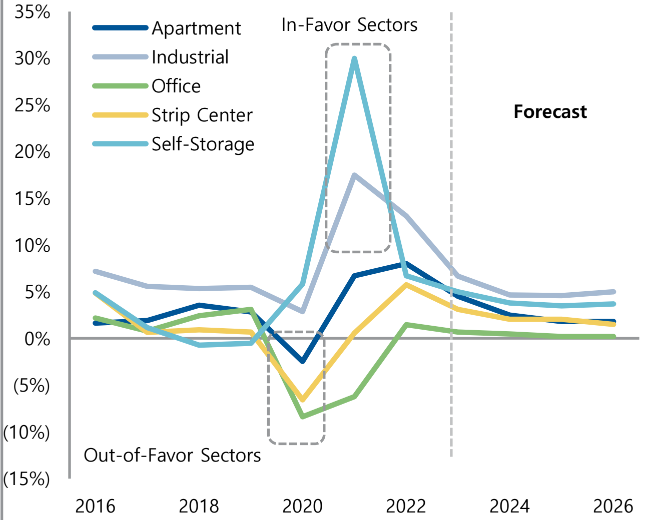
Supply by Sector



Note: Estimates are not shown because impact has not been quantified. Source: Green Street Advisors.

New deliveries are waning for property types facing challenges, while apartments, industrial, and alternative sectors are experiencing rising supply alongside elevated levels of demand.

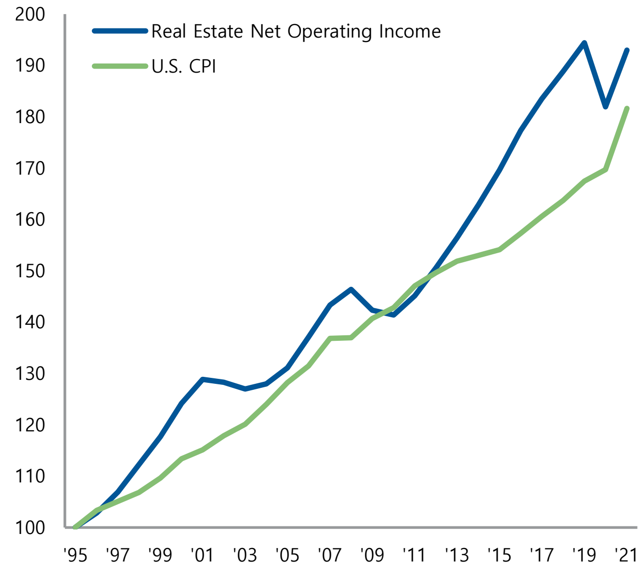
Market RevPAF Growth: Occupancy & Rent Growth



Source: Green Street Advisors.

Multifamily, industrial, and alternative sectors have bright prospects for growth; office and retail remain on a slower recovery trajectory.

Net Operating Income vs. CPI



Source: Green Street Advisors.

In general, the mechanics of real estate leases are embedded with structural features commonly accepted to correlate with cyclicality in market pricing or inflation.

Reid Liffmann
Co-Portfolio Manager
Head of U.S. Real Estate

Matt Jackson
Co-Portfolio Manager
U.S. Real Estate

For more information on U.S. Real Estate, click here.

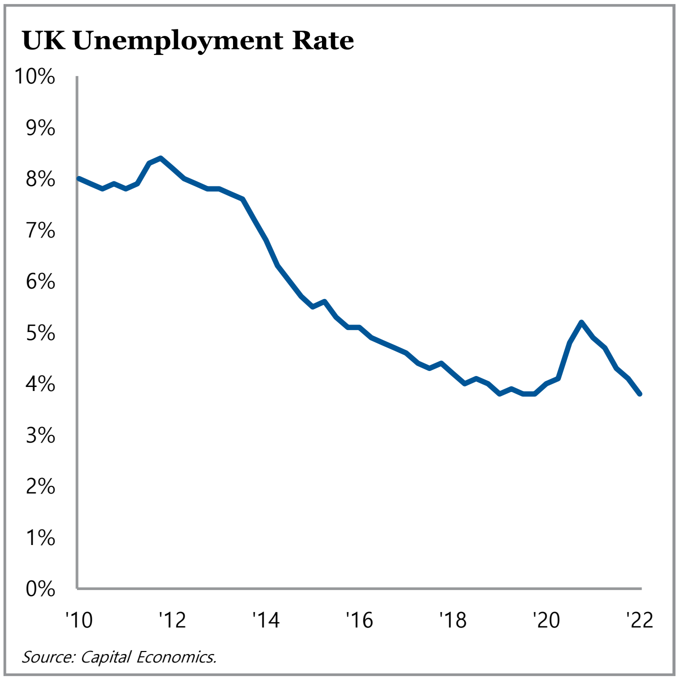
Europe Real Estate

In the first quarter of 2022, European real estate markets faced headwinds from significant construction cost and energy inflation, the prospect of an expanding interest rate environment, and the geopolitical threat of the Russian war against Ukraine. Headline inflation in the eurozone reached 7.5% in March, with core inflation increasing to 3%. Businesses are struggling with the increase in prices, as both input and output price PMIs reached record highs in March. With inflation rising and unemployment reaching a low of 6.8%, the ECB has unsurprisingly started to raise rates and will likely continue to do so throughout the year. Additionally, the Russia-Ukraine war has pushed food prices higher, disrupted supply chains, and increased energy prices by 45%, and consumer confidence has fallen, which may inhibit GDP growth potential.

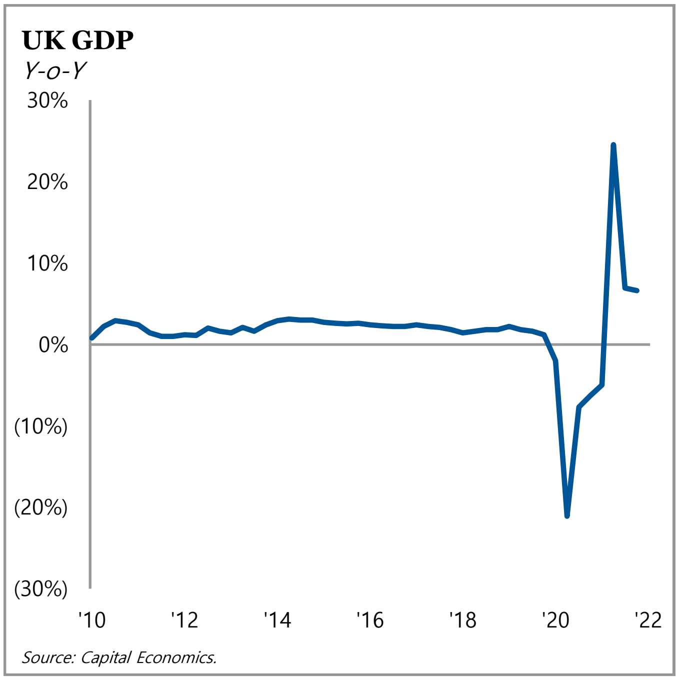
These headwinds have persisted into the second quarter; however, real estate reporting usually lags that of economic indicators, so available data on eurozone markets does not yet reflect the impact of these issues. For example, the latest data shows a strong recovery in late 2021, with real estate investment levels totaling €220 billion last year—20% higher than 2020 and up 5% from 2019. This full-year growth was a function of a very strong fourth quarter and that momentum has continued into early 2022, but uncertainty due to the economic and geopolitical climate may dampen investment activity later in the year. Eurozone prime office rents increased 2.8% year-over-year in 2021, and well-located, high-quality office space is expected to continue to benefit from increased tenant demand for amenitized workplaces in central locations. However, the office market has changed, and it will not perform well just because employment rates are strong. Even with high employment, companies continue to reassess their needs for physical office space and, on average, are considering downsizing 20% to 30%.

Moving to the UK, mobility indicators suggest the country's economy is returning to more normalized levels following the COVID-19 surge caused by the Omicron variant in late 2021. Like the continent, the UK is facing significant price increases, with CPI inflation reaching 5.5% in January and likely growing to over 8% by the end of April. Gas prices are expected to jump another 20%. Real household disposable incomes are dropping sharply with these soaring prices, and the unemployment rate has held steady around 4%, putting pressure on wage growth.

UK real estate continues to recover from the pandemic, with rental growth increasing early in 2022, driven mostly by industrial growth as well as some retail value increases. Investment volume reached £4.3 billion in January, and the 12-month rolling figure hit its highest level since May 2019. Central London offices have performed well, with take-up increasing to 700,000 square meters and vacancy falling to 9.1% as of the end of February. Office rental growth held steady around 1%, with all-property growth reaching 3.1% in February. Hotel occupancy reached 71% in late 2021, a 30% increase year-over-year, indicating positive momentum for travel in the country. For the first time in nearly four years, monthly rents in retail did not decrease, and annual retail rental growth continued to improve.



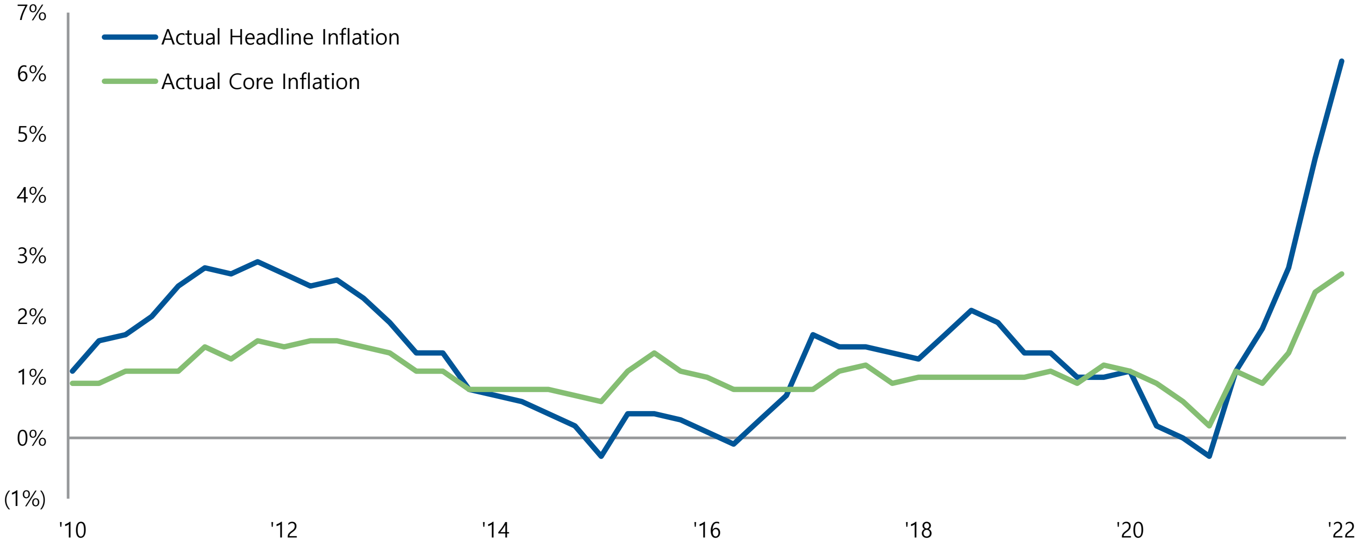
The UK labor market remains tight, with the unemployment rate dropping below 4% in Q1 2022.



In 2021, pent-up consumer demand caused GDP to recover from its pandemic low.

Eurozone Inflation

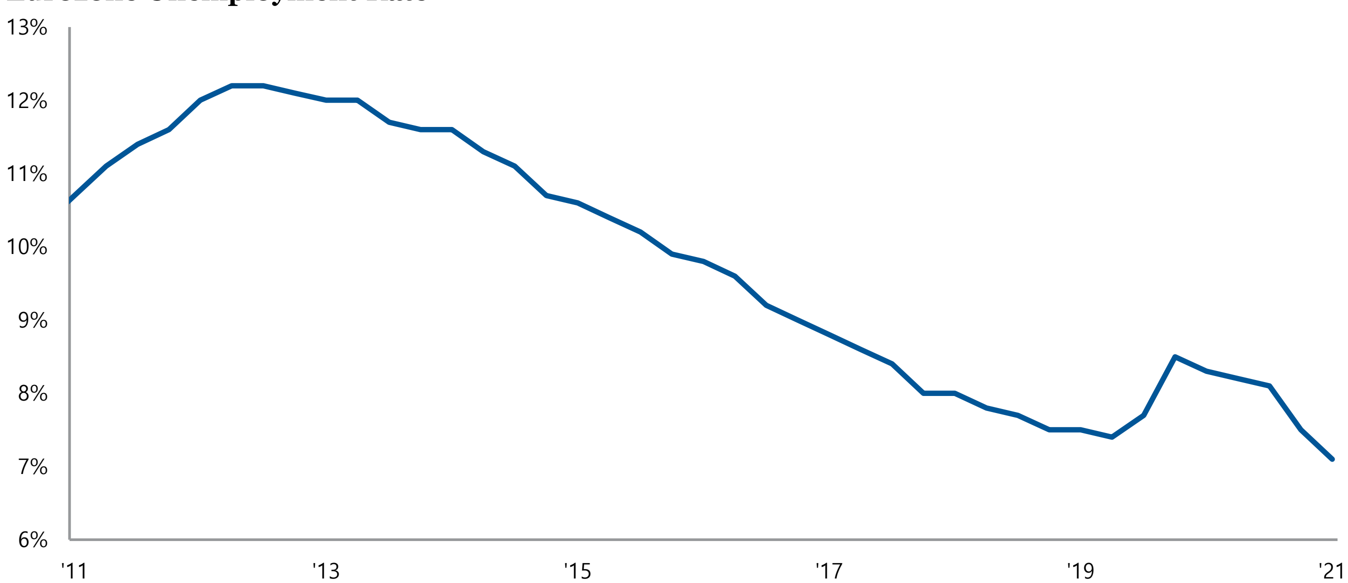
Y-o-Y



Source: Capital Economics.

Headline and core inflation rates have reached their highest levels in over a decade.

Eurozone Unemployment Rate



Source: Capital Economics.

The eurozone unemployment rate fell below its pre-pandemic level in late 2021.

Anuj Mittal
Co-Portfolio Manager
Head of Europe Real Estate

Tom Rowley
Co-Portfolio Manager
Europe Real Estate

For more information on Europe Real Estate, click here.

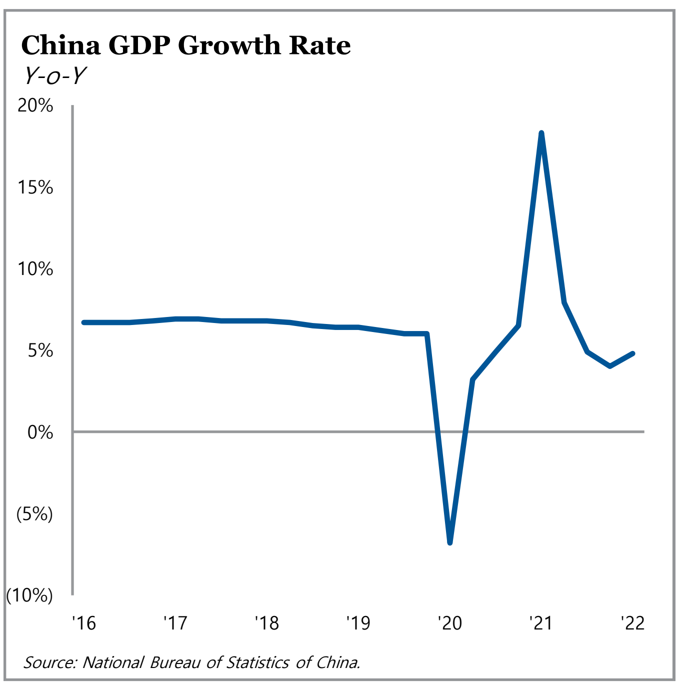
Asia Real Estate: China

China's economy grew 4.0% year-over-year in the fourth quarter of 2021, expanding 8.1% in full year 2021 and bringing the two-year average for 2020 and 2021 to 5.1%, beating market expectations. The slower pace of expansion in the fourth quarter, as compared to 4.9% in the third quarter, can be attributed to the pandemic prevention and control measures as well as the impact of the government's deleveraging policy. Exports grew by 21.2% year-over-year, while value-added industrial output rose by 9.6% year-over-year – bringing the two-year average to 6.1%. Domestic retail sales increased 12.5% year-over-year in 2021, underscoring the resilience of consumer spending despite ongoing pandemic-related challenges. China remains highly focused on further developing its advanced manufacturing sector, particularly industries like life sciences, integrated circuitry, and new energy. While total fixed-asset investment activity only grew 4.9% year-over-year, fixed-asset investment in high-tech manufacturing grew 17.1% year-over-year in 2021.

In Beijing, we observed a notable pickup in office leasing demand, mainly driven by the continuing relocation trend. Two new buildings were delivered in the fourth quarter, adding 263,000 square meters of office space to the leasing market. Strong demand pushed net absorption to its highest quarterly level since 2011, at 337,000 square meters, with domestic companies accounting for more than 90% of the leasing demand in the fourth quarter. Leasing activity from the finance and IT industries remained robust, respectively accounting for 36% and 14% of transacted space in the fourth quarter. The Grade A office market recorded rent declines of 3.3% year-over-year and 0.1% quarter-over-quarter, but the trend is slowing, as vacancy dropped considerably—down 1.0 percentage point quarter-over-quarter to 11.7%. In the Zhongguancun submarket of Beijing, known as China's Silicon Valley, rents increased slightly—up 0.7% quarter-over-quarter—and vacancy decreased to 2.2%, the lowest level in the city.

Industrial and logistics real estate remained resilient in the major submarkets due to limited supply and strong leasing demand from third-party logistics companies and online retailers. In Shanghai, industrial rents rose 1.1% quarter-over-quarter and recorded 3.7% growth year-over-year; meanwhile, vacancy rose significantly—up 5.3 percentage points to 9.7%—due to the quarter's large newly completed supply of 486,000 square meters. Excluding the effect of the fourth quarter's new supply, vacancy rates in other projects fell to 3.6%, below the third quarter level of 4.4%.

In terms of overall market activity, total commercial real estate transaction volume amounted to RMB 273 billion in full year 2021, a 32% increase year-over-year and the second-highest annual total in history. Domestic investors dominated the market and accounted for 78% of the total transactions in 2021, an increase of 31% year-over-year. Activity among foreign investors also picked up, accounting for 22% of the overall investment volume in 2021 and registering an increase of 40% year-over-year. We saw business parks and logistics warehouses remain the most popular asset classes, as they are positioned to benefit from the structural upgrading of China's economy toward innovation-driven growth, as well as the continued expansion of e-commerce and third-party logistics companies.



China's GDP growth returned to normal levels after a strong recovery in early 2021.

CNY remained strong during the quarter.

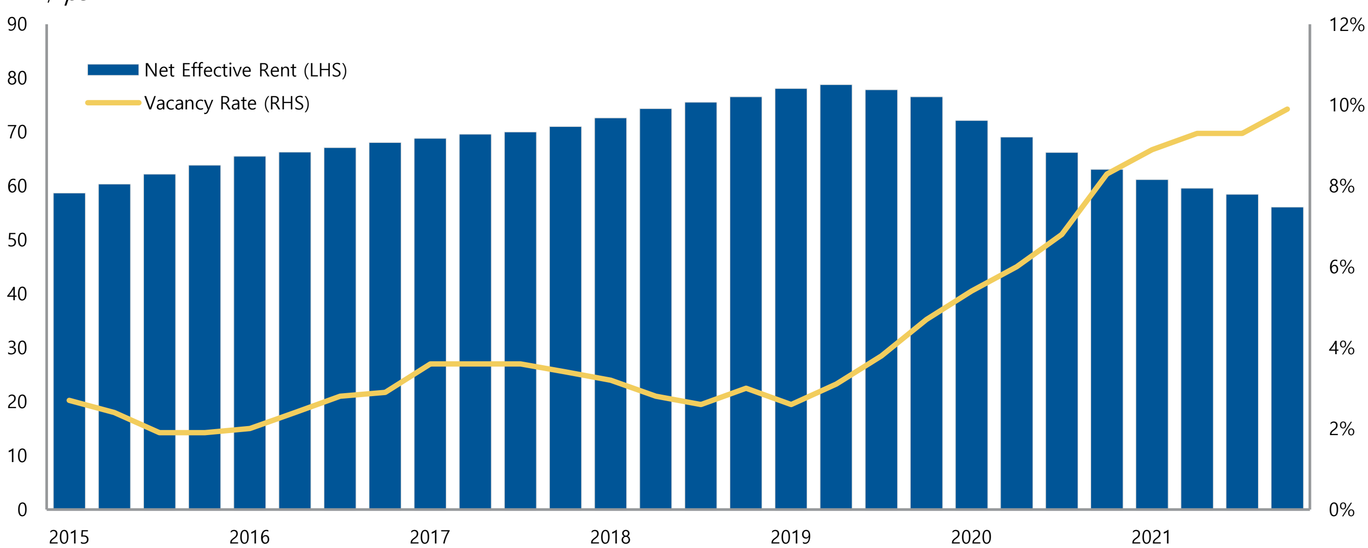
Asia Real Estate: Hong Kong

Following an extremely difficult 2020, Hong Kong's economy staged a visible recovery last year, growing 6.4% in full year 2021 and 4.8% year-over-year in the fourth quarter. We attribute the improvement to sustained growth in local consumption alongside a rebound in global demand. However, the economic recovery remained uneven, with exports performing well and consumption levels recovering, while inbound tourism remained frozen due to border controls. Total exports of goods saw strong growth in 2021, increasing 19.0% year-over-year, underpinned by the revival of major economies and regional trade flows. Private consumption expenditure grew 5.7% year-over-year due to the receding local epidemic situation, improving labor market conditions, and the rollout of the Consumption Voucher Scheme. The unemployment rate declined meaningfully, falling from 4.5% in the third quarter to 3.9% in the fourth quarter—visibly lower than its peak of 7.2% in December 2020.

After reaching a high in September, residential prices retreated 2.7% quarter-over-quarter in the fourth quarter but rose 4.7% year-over-year. Industrial buildings remained keenly sought-after, with HK$9.2 billion worth of industrial assets changing hands in the fourth quarter, representing the second-highest quarterly total since 2005 and bringing the full-year total to HK$29.7 billion—the highest on record. Commercial real estate investment transaction volume rose 14.5% quarter-over-quarter to HK$22.5 billion in the fourth quarter, bringing the full-year total to HK$80.1 billion—up 50.5% year-over-year. Investment demand in the fourth quarter was largely supported by property funds and REITs, which accounted for 43% of the quarter's total—the highest proportion since 2019. As of December 2021, Hong Kong's office vacancy edged up slightly to 9.9%, while the decline in rents slowed to 1.3% in the fourth quarter, bringing the full-year decline to 5.4%.

Hong Kong Overall Grade A Office Vacancy Rate & Net Effective Rent

HK$ psf



Note: Vacancy rate includes confirmed leasing stock that is currently vacant or becoming vacant over the next 12 months.
Source: Savills.

Hong Kong's office vacancy remained high as rents weakened.

Asia Real Estate: Japan

In the fourth quarter of 2021, Japan's real GDP increased 1.1% quarter-on-quarter. With the lifting of the pandemic-related state of emergency in October 2021, consumer spending and capital expenditure have recovered. The government relaxed the border restrictions in March 2022, and we expect further economic expansion through the balance of the year. Unemployment remained low, at 2.7%, due to the government's continued support. We expect the Bank of Japan to continue its active quantitative easing policy and keep government bond yields low.

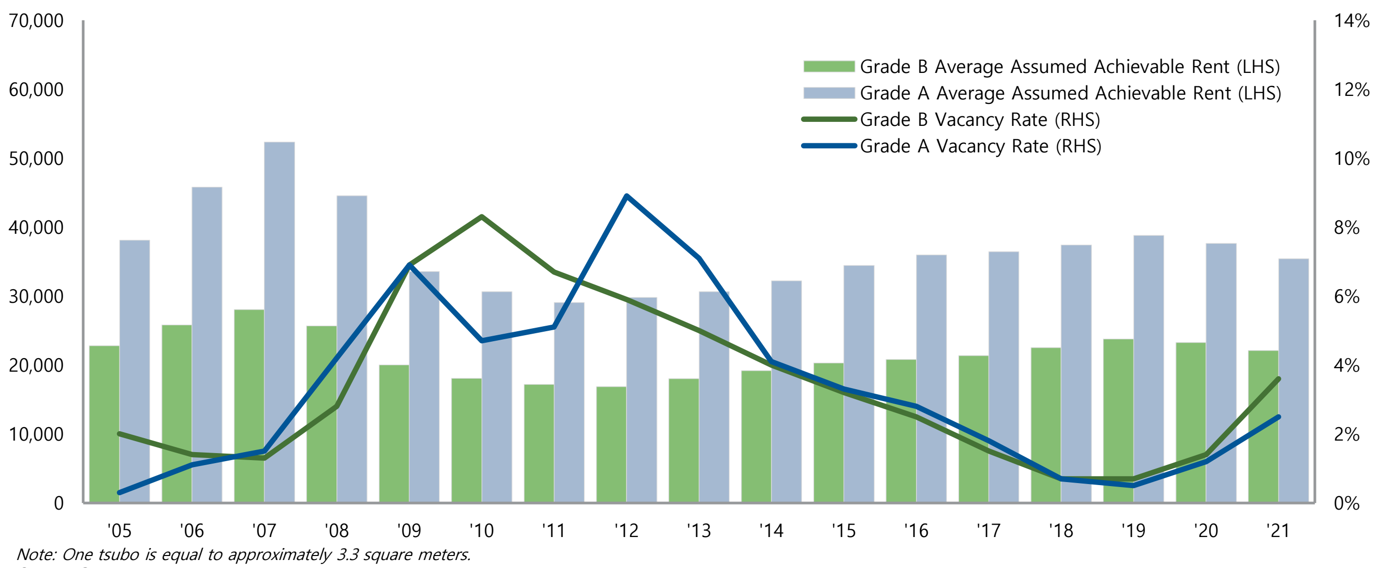
Real estate fundamentals in the office sector remain strong. Vacancy rates in Tokyo rose slightly in the fourth quarter, increasing from 2.4% to 2.5% for Grade A and from 3.0% to 3.6% for Grade B; meanwhile, Osaka office vacancy rates increased marginally, rising from 1.9% to 2.0% for Grade A and from 2.7% to 2.8% for Grade B. Additionally, we expect Tokyo's limited office supply in 2022 to have a positive impact on overall office market fundamentals.

The Japanese logistics market remained strong during the fourth quarter, with vacancy rates for multi-tenant facilities in Greater Tokyo decreasing from 2.6% to 2.3%. We believe this improvement is primarily due to steady demand both from e-commerce and third-party logistics tenants. The fact that over 30% of the upcoming supply in 2022 has already been pre-leased demonstrates the strong demand for modern logistics facilities.

Annual real estate transaction volume in 2021 totaled ¥3.8 trillion, exceeding the pre-pandemic levels witnessed in 2018 and 2019. In 2021, Japanese companies continued to sell their non-core assets, which we believe could persist into 2022. Japanese REIT (J-REIT) investment volumes also increased approximately 15% year-over-year, contributing to market liquidity.

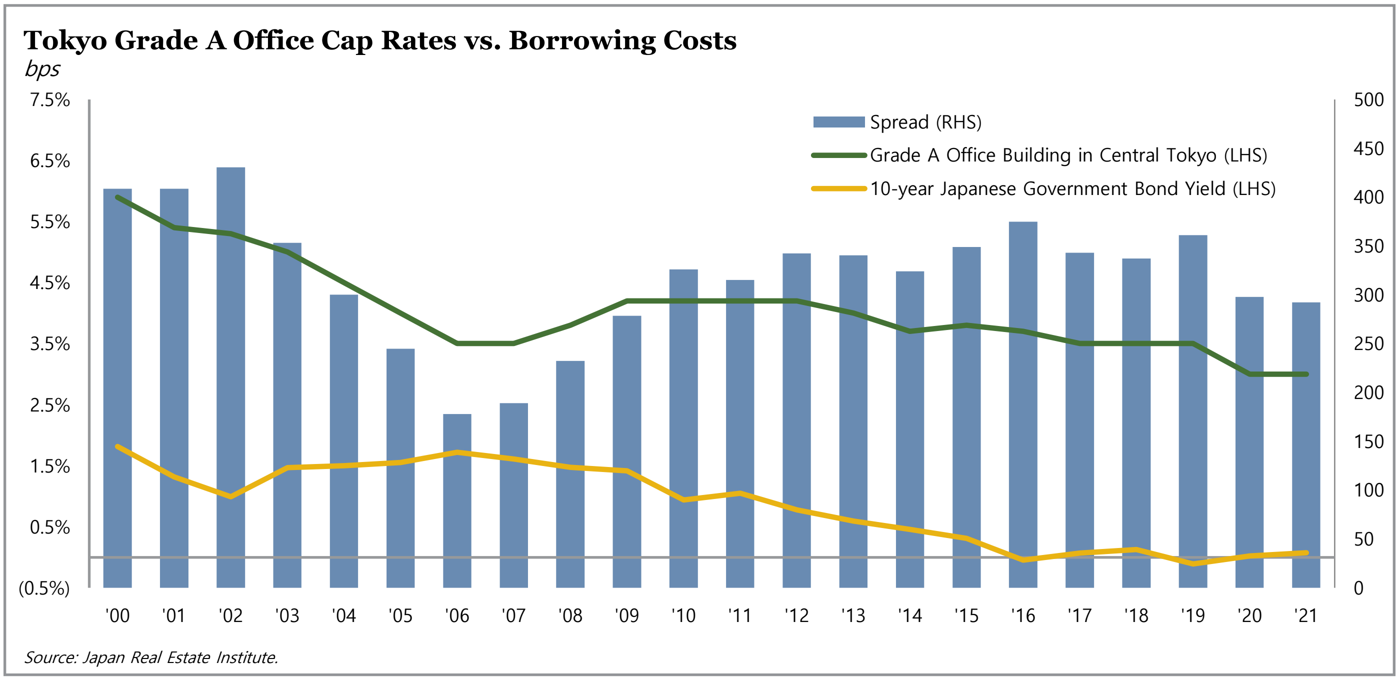
Tokyo's 23 Wards Grade A & B Office Rent And Vacancy

JPY/tsubo/mon

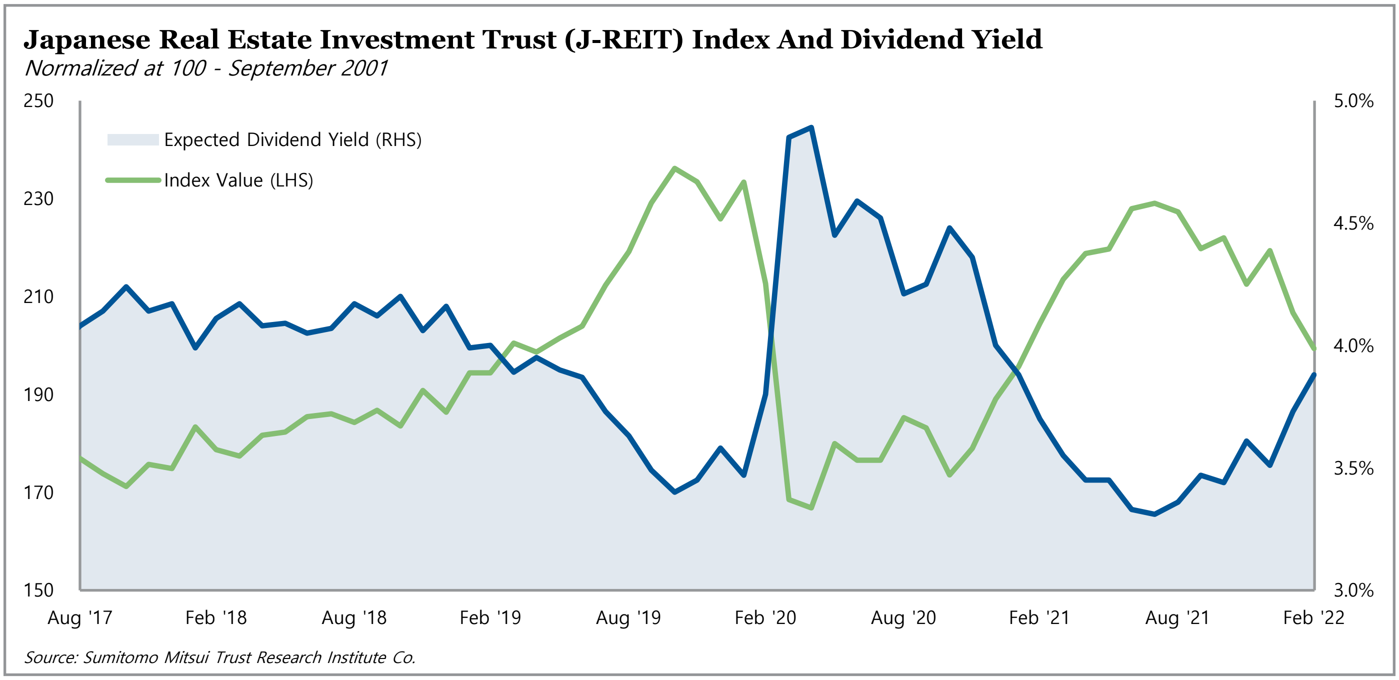


Note: One tsubo is equal to approximately 3.3 square meters.
Source: CBRE.

Tokyo office fundamentals continue to be stable.



Tokyo Grade A office cap rate spreads remain wide as compared to historical lows.



J-REIT yields expanded as the J-REIT market values declined.

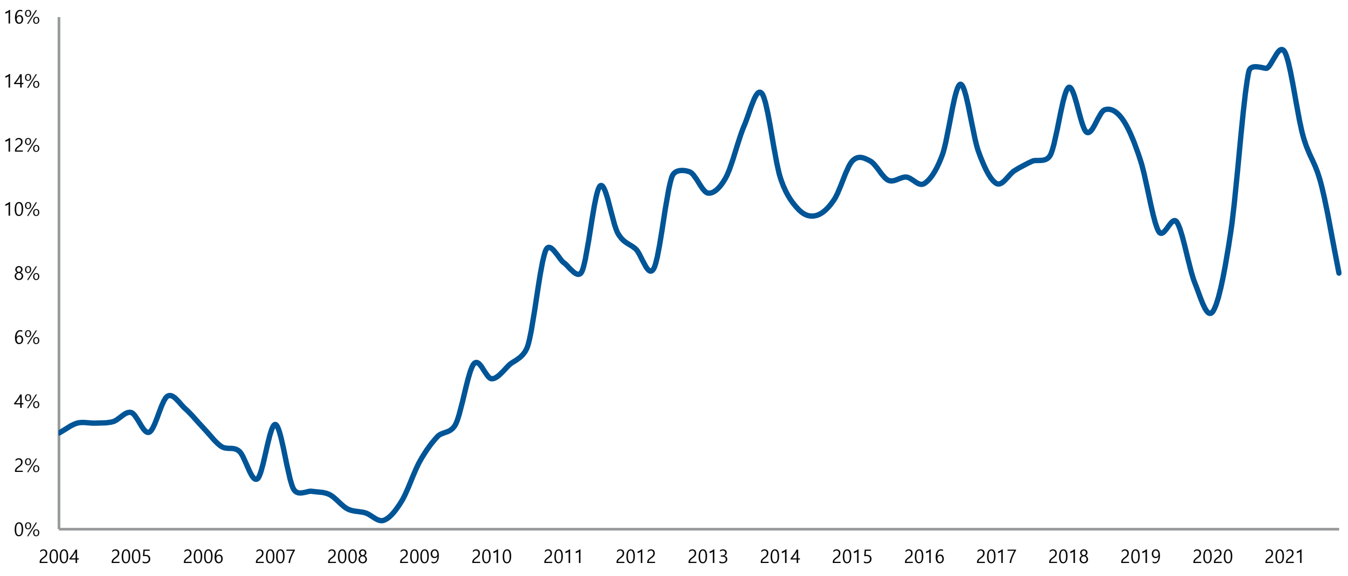
Asia Real Estate: South Korea

In the fourth quarter of 2021, South Korea's GDP increased 1.2% quarter-over-quarter, mainly driven by increased domestic consumption, eased quarantine measures, and the recovery of export activities in semiconductors and chemical products. The Bank of Korea (BoK) announced that the Korean economy grew 4.0% in 2021 – recovering from a 0.9% contraction in 2020—and is expected to grow 3.0% in 2022. COVID-19 cases increased in late 2021 and into early 2022 with the spread of Omicron variant; however, with over 86% of the population being fully vaccinated and 64% having had booster shots, the impact is expected to be limited.

On the real estate front, the spread between prime office cap rates and Korean government bond yields (i.e., 5-year treasury bonds) tightened and stood at 190 basis points. The tightening of the spread can be attributed to higher interest rates; meanwhile, office cap rates remained unchanged at approximately 4.0%. Despite the increase in market yields, cap rates have remained at the 4.0% level for three consecutive quarters due to the moderate spread between cap rates and interest rates. Office fundamentals were robust, with strong tenant demand and limited new supply. Prime office vacancy in Seoul stood at 8% as of the end of the fourth quarter, down 280 basis points quarter-over-quarter, with all major business districts recording a decrease in vacancy. The Gangnam Business District experienced the strongest demand from traditional IT and startup tenants, but the overflow of demand forced some to find alternative locations in the Central Business District and Yeouido Business District. Future supply is limited, with no significant prime office supply planned in 2022, and office rents have increased as a result of the supply-demand dynamics. Average prime office rents in Seoul increased 2.8% quarter-over-quarter and 7.2% year-over-year. In response to the strong market fundamentals, investment activity has also remained robust, with office transaction volume totaling ₩13.6 trillion in 2021—up 3.8% from 2020's record-high total of ₩13.1 trillion.

Leasing and investment momentum in the logistics space was strong in 2021, marking a continuation of the trend witnessed since the outbreak of the pandemic. Logistics vacancy in Greater Seoul decreased further to 1.8%, with new supply quickly being filled by e-commerce companies. Cap rates for logistics centers have continued to compress to the low-to-mid 4.0% level, narrowing the gap between logistics cap rates and prime office cap rates to only 50-plus basis points.

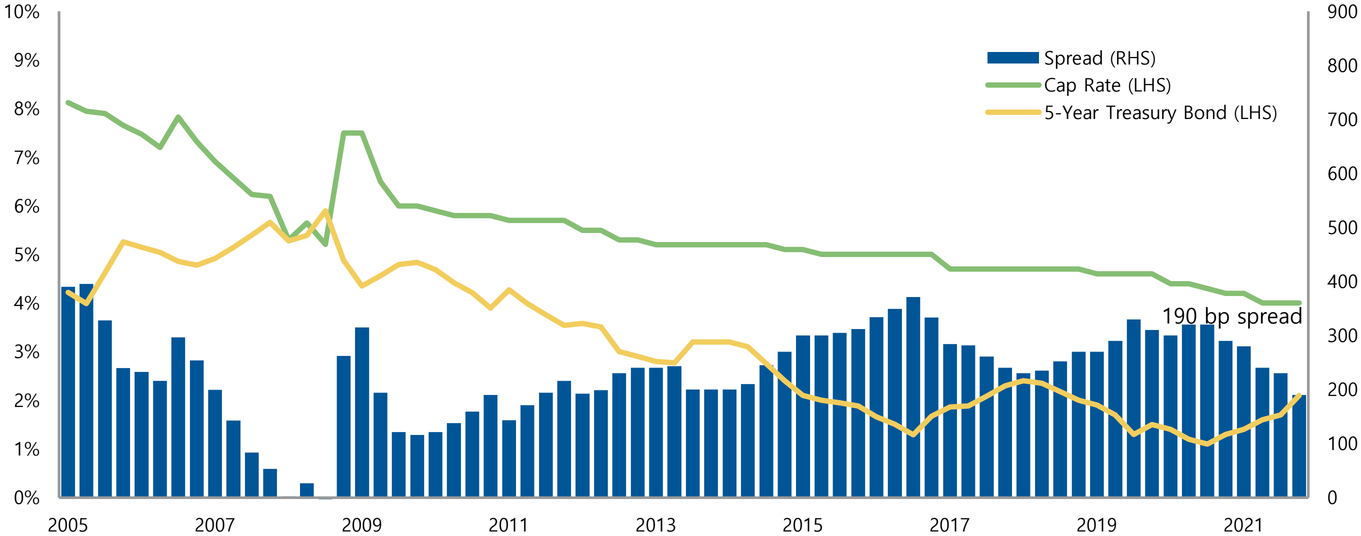
Seoul Office Vacancy Rate



Source: Jones Lang Lasalle Research.

Strong tenant demand driven by IT companies continues to drive down office vacancy rates across the city.

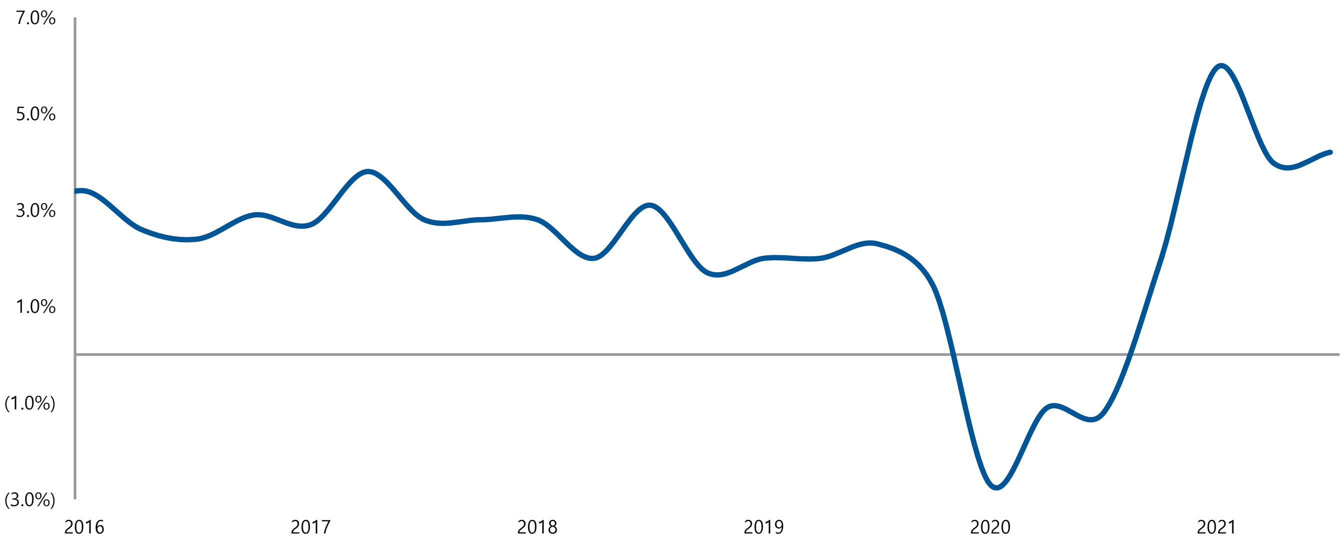
Seoul Prime Office Cap Rate and Spread Over 5-Year Treasury Yield
bps



Note: 5-year Treasury is average for quarter.
Source: Savills Research.

Cap rate spreads are tightening as Treasury yields rise.

Korea GDP Growth
Y-o-Y



Source: Bank of Korea.

Following sluggish growth in 2020, the Korean economy recovered in 2021.

Wilson Leung
Co-Portfolio Manager
Head of Asia Real Estate

Steven Cha
Co-Portfolio Manager
Asia Real Estate

For more information on Asia Real Estate, click here.

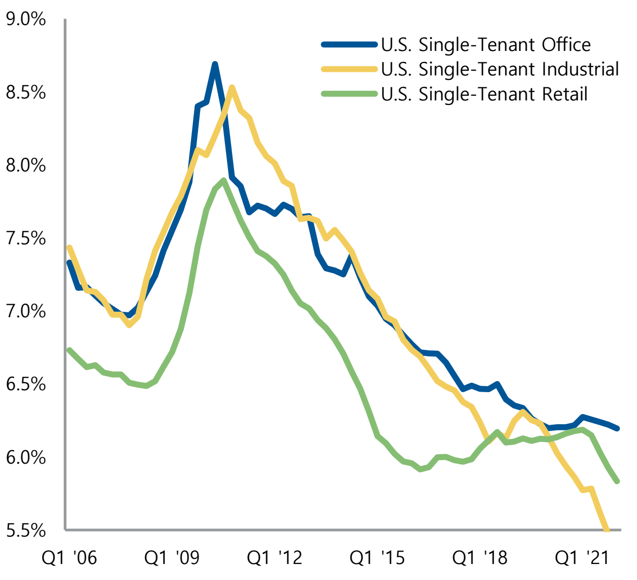
Net Lease Real Estate

As of the first quarter of 2022, the trailing 12-month U.S. single-tenant transaction volume totaled $103 billion, according to Real Capital Analytics (RCA). Single-tenant volume eclipsing $100 billion represents a surge in transaction volume in the first quarter as well as a longer-term trend upward, as the current levels are more than double those from a decade ago. The rise in volume can be attributed to a number of factors, including tighter cap rates, higher rents, and the evolution of net lease into more of an institutional asset class. The increase in volume is most pronounced in the industrial sector, which currently represents over 50% of the single-tenant market, as compared to 30-40% five years ago. At the end of 2019, single-tenant volume totaled around $80 billion, and the approximately $20 billion increase to the level as of the end of March 2022 was generated almost entirely in the industrial segment.

In the first quarter of 2022, single-tenant cap rates averaged 5.8%, according to RCA, which is an all-time low. The trends witnessed in volume can also be seen in cap rates, with industrial leading the way downward, while office has remained more stable. From 2012-2018, retail cap rates traded 60 basis points inside of industrial and office, on average; however, this trend reversed in 2019 due to widening retail cap rates and tightening industrial cap rates. After a recent peak in the first quarter of 2021, retail cap rates have begun to trend downward again.

Looking across real estate broadly, inflation, interest rates, the evolving office landscape, and the resilience of retail were key themes through the first quarter, and we expect these topics will remain points of focus as we move through the balance of the year.

Average Single-Tenant Cap Rates

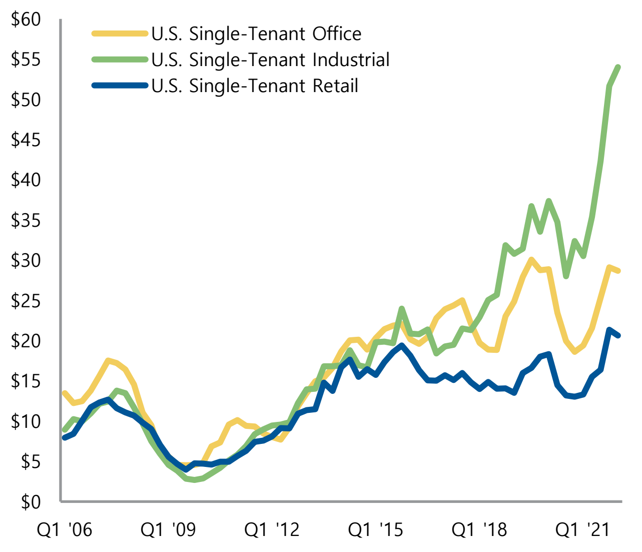


Source: Real Capital Analytics.

Single-tenant industrial cap rates continue to trend lower and retail has begun to follow, while office has remained more stable.

12-Month Rolling Single-Tenant Deal Volume

$ Billions



Source: Real Capital Analytics.

Single-tenant volume reached an all-time high, led by industrial.

Gordon Whiting
Portfolio Manager

For more information on Net Lease Real Estate, click here.

Private Equity

In the first quarter of 2022, the private equity industry maintained the very strong momentum seen in calendar 2021, during which all-time highs for deal volume and exits were recorded. Despite continued pandemic-related and geopolitical challenges, private equity once again proved its resilience.

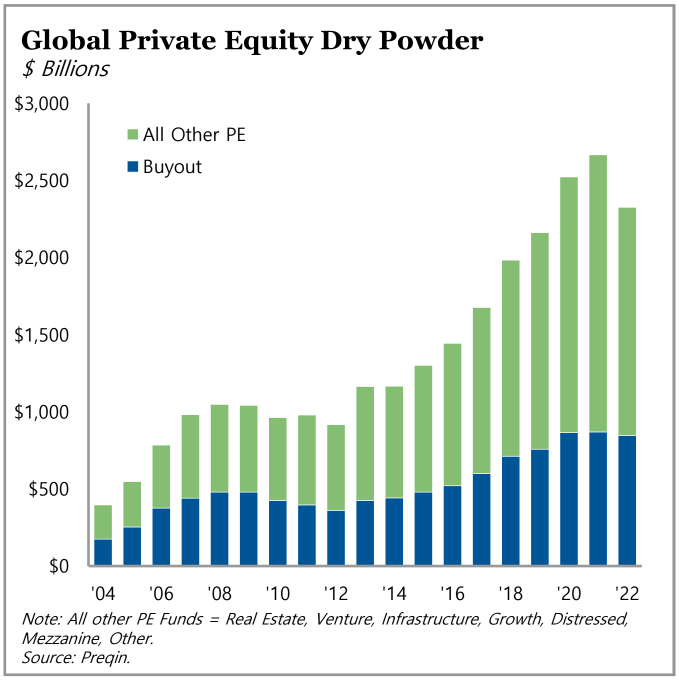
Global deal volume in the first quarter of 2022 totaled $186 billion, down 7% year-over-year; however, this level still represents one of the best quarters in history. First quarter deal volume in North America totaled $122 billion, as compared to $115 billion in the first quarter of 2021—a year-over-year increase of 6%. As previously stated, both global and North American deal volumes set records in 2021, and the strong performance seen thus far in 2022 bodes well for another good year.

Dry powder at March 31st stood at $846 billion, a decrease of 3% from year-end levels and a 6% decline from September 30, 2021 levels. This represents the second consecutive quarter where dry powder has experienced a decline, but prior to the final three months of 2021, all-time records were being set consistently each quarter. It is too early to determine whether there has been a fundamental shift in fundraising activity relative to deal activity, or if this is simply a temporary phenomenon given the tremendous volume of deal activity seen over the last several quarters. Regardless, dry powder remains very high from a historical perspective and is barely off its record level. Also demonstrating continued strength were the transaction multiples paid. Average multiples paid in the first quarter of 2022 stood at 12.2x, which is higher than calendar 2021's 11.2x and above the record of 11.6x set in 2020. However, as we mentioned previously, one should not place too much emphasis on a single quarter's performance; more will be learned about multiples paid as the next few quarters unfold. Average leverage for buyouts in the first quarter was 6.1x multiple of EBITDA, which is slightly higher than prior years. On a year-over-year basis, the number of exits and dollar volume in the first quarter of 2022 decreased approximately 35% and 50%, respectively, reflecting both the robust market conditions in early 2021 and the volatile market environment in the first three months of this year.

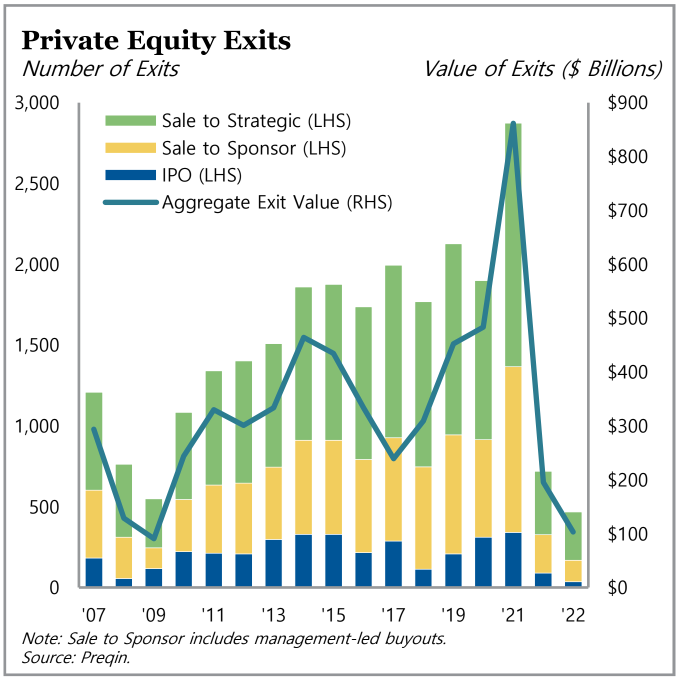
Coming off what was arguably the strongest year in private equity history, the first quarter of 2022 – with the exception of exits – continued the trend of elevated activity. Deal volume, transaction multiples, and dry powder were all at or near record levels. As we turn our focus to the remainder of 2022, the Russia-Ukraine war, additional geopolitical concerns, COVID-19, tight labor supply, and rising interest rates all could have an adverse effect on private equity.

First quarter 2022 deal volume decreased approximately 7% globally but increased 6% in North America on a year-over-year basis. The first quarter of 2022 was one of the strongest quarters in history.

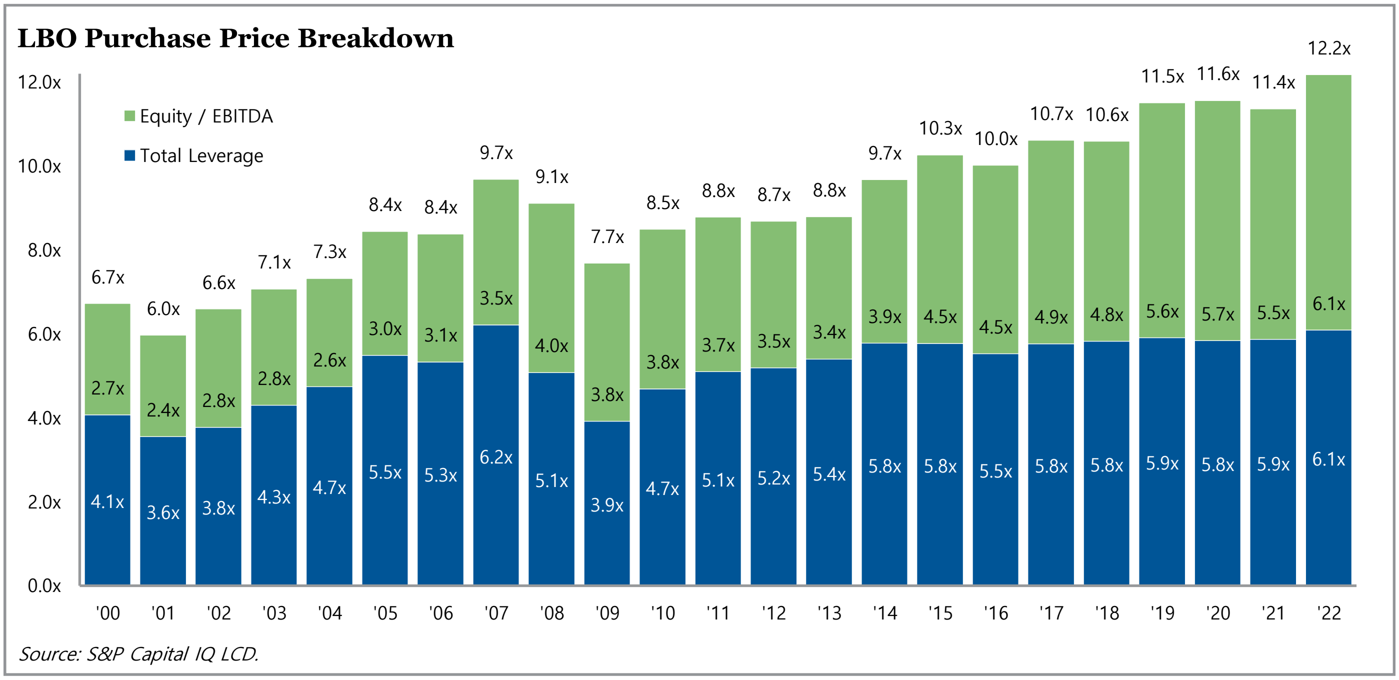
Private Equity *(continued)*



Buyout dry powder at March 31, 2022 stood at $846 billion, down slightly from year-end 2021.



The number of exits and dollar volume in the first quarter of 2022 decreased approximately 35% and 50%, respectively, on a year-over-year basis—reflective of the strength of the market in 2021 and the volatility being witnessed in 2022.



LBO multiples for the first quarter of 2022 averaged 12.2x, which demonstrates a very strong start to the year.

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