Heard on the Beach

Escape Velocity
August 18, 2021

Green Street

Executive Summary

The sharp upward trajectory observed in commercial property pricing is expected to continue. Though any snapshot of current pricing is blurred by the speed at which prices are moving, a comparison of real estate pricing with corporate bond yields suggests a fair value for property that is substantially above prevailing levels.

Capital continues to flow into real estate, particularly private equity funds. ROE-focused buyers also have access to ample amounts of debt, and at interest rates that have never been lower.

REIT share prices foretell a rise in pricing, though a more modest one. With pricing that is, in aggregate, 10% higher than the private market, REITs should be aggressive bidders for now. They may eventually get priced out of auction tents and become prime acquisition targets themselves.

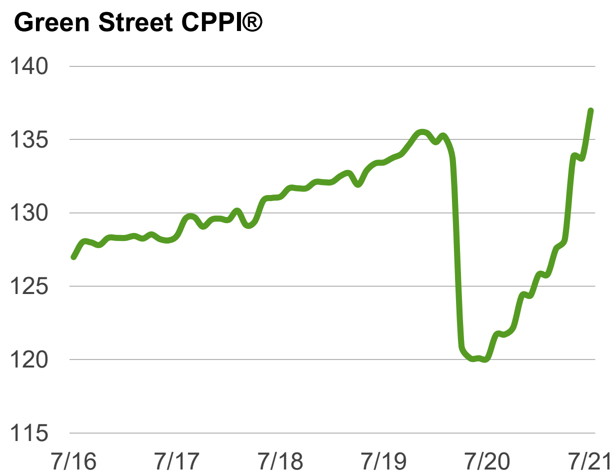
With further rises in property pricing on the way, buyers are advised to make haste and transact before cap rates chase bond yields to unprecedented low levels.

RMZ: **1423** | DJIA: **35,343** | 10-Year T-Note: **1.26%** | Baa Yield: **3.24%**

Important disclosure on pages 6-7

Heard on the Beach
August 18, 2021

Escape Velocity: Whether in the physical sense, or merely metaphorically, gravity-defying stunts are becoming commonplace. Sir Richard Branson and Jeff Bezos recently enjoyed a few minutes of weightlessness. Bitcoin and the shares of AMC are evidence that the force of gravity can be overcome, at least temporarily, in financial markets. And commercial real estate's 14% gain over the past year represents the largest year-over-year increase in a decade. A short on space, crypto, and meme stocks is understandable, but commercial property warrants the opposite. Real estate valuations are compelling relative to bond yields, investors are as flush with capital as they've ever been, and debt markets are wide open for business. Commercial property prices are poised to continue their rapid ascent.



Pricing benchmarks in fixed-income markets—particularly corporate bond yields—provide the best tools for assessing property valuations. DCF-type underwriting (4% NOI yield after an appropriate reserve for cap ex combined with solid growth the next several years before trending to a little below inflation into perpetuity) suggests property will deliver a long-term return of 6.2%. Compared to pricing in the investment grade bond market—long duration Baa-rated corporate bonds at 3.2% (65 bp lower than yields were at the end of '19)—that expected return is fantastic. Real estate values would need to increase by 25% to bring the current spread between real estate and Baa back to its average level of the past thirty-five years. The spread between real estate and high-yield bonds is even more out of line with long-term norms, but the duration mismatch (real estate long vs. high-yield short) makes it less reliable when the yield curve is unusually steep, like it is now.

The catalysts for the recovery in property pricing were renewed confidence in the financial system, and then a Covid vaccine. Low borrowing costs and record-breaking fund flows into real estate private equity—already sitting on war chests pre-Covid—will drive pricing going forward. Blackstone and Brookfield remain the dominant players, but there is a breadth to capital raising that hasn't been seen in some time. Lone Star, Carlyle, and Oaktree have all recently closed funds in the $5-10 billion range. As for Blackstone, its non-traded REIT (BREIT) alone takes in $2 billion per month. Competition among PE shops will lead to higher prices.

Low bond yields are an important reason why capital is flowing into private equity, but they also play a direct role in property pricing. Though Green Street follows the unlevered approach espoused by Miller & Modigliani, private equity firms target return on equity (ROE), and today's interest rates—debt has never been cheaper—make achieving return hurdles possible at low cap rates. While 10-year money may be the conservative play (and 65% LTV at around 3.0% is not exactly expensive), most funds opt for a shorter term and lower rate. That choice may have more to do with the expected holding period than the slope of the yield curve, but either way, when one-month LIBOR is only 0.09% it juices the return (on equity). REIT CFOs have noticed, and shorter maturity unsecured issuances are becoming more common.

The pricing of REIT equities suggests that commercial property is attractively priced, but not altogether cheap. Pricing varies by the type of property a REIT owns, but in aggregate, REITs trade 10% above the private market.[1] That is modest next to the corporate bond signal (+25%), but nonetheless material. And it allows REITs in most sectors to be aggressive in bidding tents, providing another source of pressure on cap rates.

Property appreciation is likely to be strongest for industrial properties, portfolios of single-family homes, and cell towers. Those sectors sit squarely in the PE bullseye, for good reason. DCF-type long-term expected returns are compelling (industrial less so) and public-market pricing is particularly bullish.

Higher property prices, when the cause is lower cap rates (i.e., not higher NOI), is great for sellers of real estate, not for buyers. With many REITs positioned as the latter, it is not obvious that the upcoming surge in private pricing will do much for share prices. Perhaps the stock market will finally come to appreciate that REITs are a hybrid bond/equity security, and price REITs accordingly. If not, REITs may go from trading at sizable premiums to private pricing to sizable discounts (office REITs are already there). That would take the shine off growth via acquisition, though many external growth stories predicated on development would remain highly profitable.

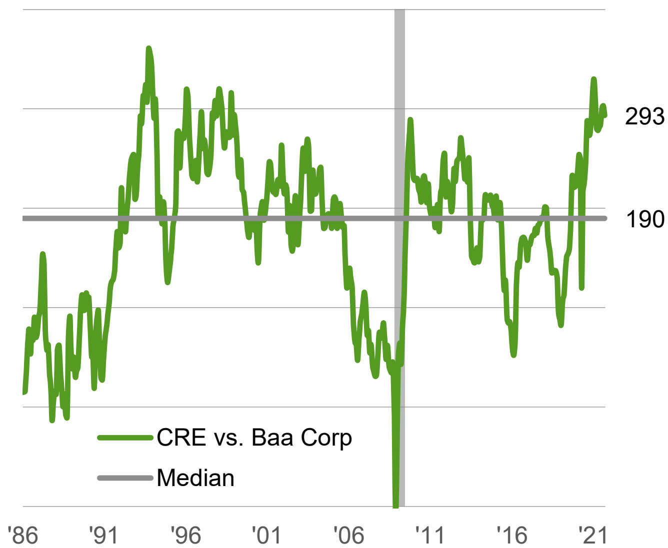
The silver lining for REIT investors is NAV discounts cause funds to flow into REITs. Smart investors will shift allocations away from private vehicles and towards public ones. And even those that refuse to acknowledge that "REITs are real estate" will inadvertently take part. Private equity funds are likely to make the trade for them. Privatizations by PE firms have totaled $17 billion of U.S. REIT equity cap so far this year vs. $7 billion/year from '15-'19. In each deal, a premium of circa 20% was paid.

---

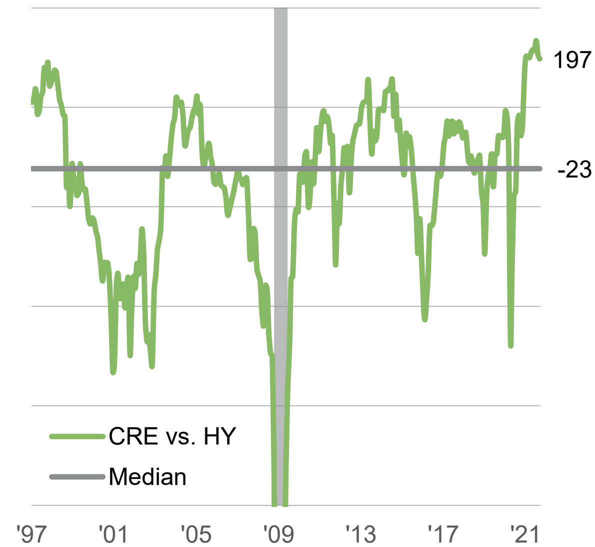
[1] The 10% premium is on the high side of real-time pricing. Recent transactions will cause Green Street's CPPI to increase even in the absence of further appreciation.

Never Cheaper: Real estate is priced to deliver long-term returns averaging 6.2% across property sectors, roughly in line with how it has been priced over the last decade. Meanwhile, bond yields—corporates are highlighted below—are near all-time lows. As a result, real estate looks cheaper than it ever has versus bonds, and, holding rates constant, a reversion to the historic norm would translate into a 25%+ increase in prices.

CRE vs. Baa-Rated Corporates (20Y+)



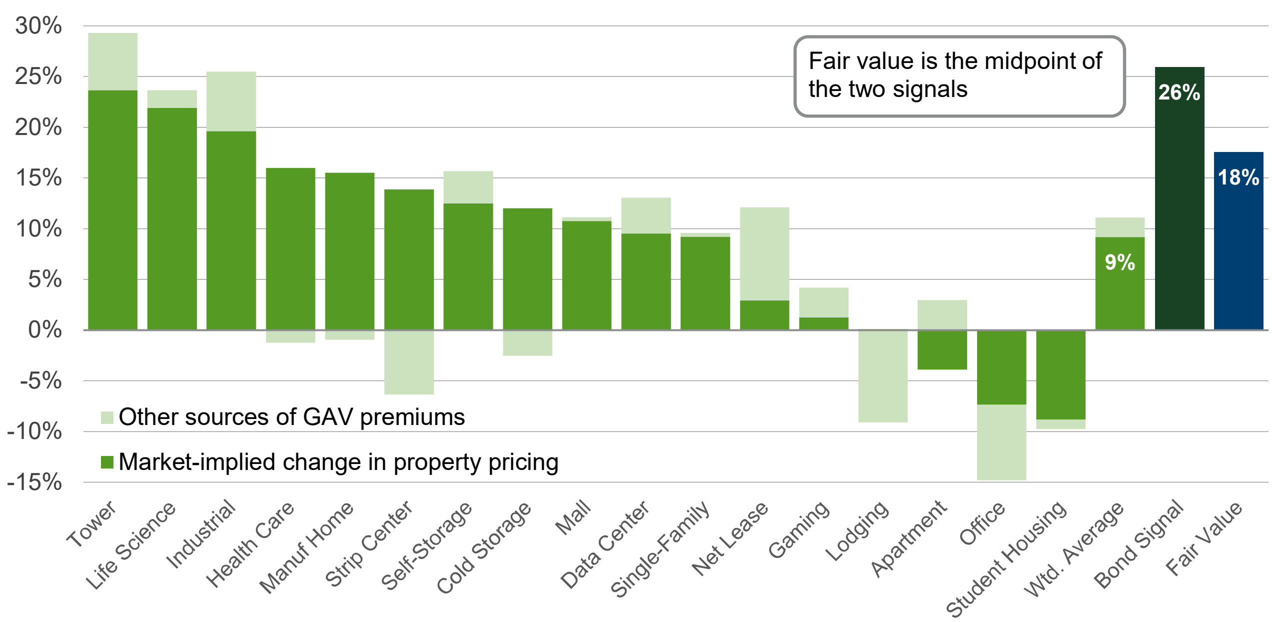
CRE vs. High-Yield Bonds (circa 5Y)



CRE expected return prior to Sep '19 based on core sectors & adjusted up 25 bp to make comparable with all property series in use now. Bond yields: Moody's Seasoned Baa Corporate Bond; ICE BofA US High Yield Index. Shading is GFC.

Implied by REIT Prices: Most REITs currently trade at sizable premiums to asset value, also an unusually bullish signal for property prices. The strength of this signal—an upward move in prices of 9%—is not as strong as that from the corporate bond market, but a blending of the two suggests that the robust property price increases that characterized the first half of '21 will continue unabated in the second half of the year.

REIT GAV Premuiums



Other sources of GAV premiums include low (high) G&A, external growth, and strong (weak) balance sheets

With most REITs trading at NAV premiums, investors should consider the private market for real estate exposure. That is especially true if funds can be allocated to investment pools where the mark-to-market does not appropriately reflect today's fast-changing pricing (open-end funds and non-traded REITs are good places to start). Diligence is required. Most funds probably carry industrial properties at a discount, but retail properties may be valued well above market.

It doesn't take a rocket scientist to calculate that the combination of ultra-low bond yields, fund flows to private equity, and open debt markets is causing property prices to rise. What may catch observers off guard, is the speed and magnitude of the adjustment. Where possible, buyers should transact while cap rates are still relatively high. And if those acquisitions happen to be financed at higher LTV and with shorter-term debt than usual, it is doubtful that shareholders or fund investors will mind.

Peter Rothemund, CFA
Dave Bragg

Green Street's Disclosure Information

Issuers of this Report: US and EEA: This report has been prepared by analysts working for Green Street (Green Street (US)) and/or Green Street (U.K.) Limited (Green Street (UK)). Green Street (US) is the parent company of Green Street (UK).

This report is issued in the USA by Green Street (US). Green Street (UK) accepts no responsibility for this report to the extent that it is relied upon by persons based in the USA. Green Street (US) is regulated by the United States Securities and Exchange Commission, and its headquarters is located at 100 Bayview Circle, Suite 400, Newport Beach, CA 92660.

This report is issued in the European Economic Area (EEA) by Green Street (UK). Green Street (US) accepts no responsibility for this report to the extent that it is relied upon by persons based in the EEA. Green Street Advisors (UK) Ltd is registered in England, (Company number. 6471304), and its registered office is 6th Floor, 30 Panton Street, London SW1Y 4AJ. Green Street Advisors (UK) Ltd is authorized and regulated by the Financial Conduct Authority in the United Kingdom and is entered on the FCA's register (no. 482269]).

References to "Green Street" in Disclosures in this section and in the Other Important Information section apply to:
- **Green Street (US) to the extent that this presentation has been disseminated in the USA; or**
- **Green Street (UK) to the extent that this presentation has been disseminated in the EEA.**

Green Street US is exempt from the requirement to hold an Australian financial services license under the Act in respect of the financial services; and is regulated by the SEC under US laws, which differ from Australian laws.

Green Street UK Ltd. is exempt from the requirement to hold an Australian financial services license under the Act in respect of the financial services; and is regulated by the FCA under UK laws, which differ from Australian laws.

Swiss recipients: the funds, the REITs, the investment companies and any collective investment schemes referred to in these reports may not have been registered with the Swiss Financial Market Supervisory Authority (FINMA) and no Swiss representative or paying agent has been appointed in Switzerland. This report is provided in Switzerland
or the use of the addressees only and may not be distributed, copied, reproduced or passed on to any third parties.

Green Street reserves the right to update the disclosures and policies set out in this document at any time. We encourage a careful comparison of these disclosures and policies with those of other research providers, and welcome the opportunity to discuss them.

Affiliate Disclosures: Green Street does not directly engage in investment banking, underwriting or advisory work with any of the companies in our coverage universe. However, the following is a potential conflict regarding our affiliate that should be considered:
- Green Street has an advisory & consulting practice servicing investors seeking to acquire interests in publicly-traded companies. Green Street may provide such valuation services to prospective acquirers of companies which are the subject(s) of Green Street's research reports.

Other Important Information

Management of Conflicts of Interest: Conflicts of interest can seriously impinge the ability of analysts to do their job, and investors should demand unbiased research. In that spirit, Green Street adheres to the following policies regarding conflicts of interest:

- Green Street employees are prohibited from owning the shares of any company in our coverage universe.
- Green Street employees do not serve as officers or directors of any of our subject companies.
- Neither Green Street nor its employees/analysts receives any compensation from subject companies for inclusion in our research.
- On occasion, Green Street analysts may be contacted by companies within the firm's coverage universe regarding potential employment opportunities. Additional disclosure will be made when appropriate.
- The research analysts who authored this report may hold shares of the non REIT companies mentioned in this research report. These are not companies in our coverage universe.

Please also have regard to the Affiliate Disclosure listed above when considering the extent to which you place reliance on this research report and any research recommendations made herein.

Green Street, at times, assists Eastdil Secured, a real estate brokerage and investment bank, when Eastdil Secured provides investment banking services to companies in Green Street's coverage universe. Green Street is never part of the underwriting syndicate or the selling group, but Green Street may receive compensation from Eastdil Secured for consulting services that Green Street provides to Eastdil Secured related to Eastdil Secured's investment banking services. Green Street does not control, have ownership in, or make any business or investment decisions for Eastdil Secured.

A number of companies covered by Green Street research reports pay an annual fee to receive Green Street's research reports. Green Street may periodically solicit this business from the subject companies. In the aggregate, annual fees for Green Street (US) and Green Street (UK) research reports received from subject companies represent approximately 3% of each of Green Street (US)'s and Green Street (UK)'s respective total revenues.

Green Street publishes research reports covering issuers that may offer and sell securities in an initial or secondary offering. Broker-dealers involved with selling the issuer's securities or their affiliates may pay compensation to Green Street upon their own initiative, or at the request of Green Street's clients in the form of "soft dollars," for receiving research reports published by Green Street.

The information contained in this report is based on data obtained from sources we deem to be reliable; it is not guaranteed as to accuracy and does not purport to be complete. This report is produced solely for informational purposes and is not intended to be used as the primary basis of investment decisions. Because of individual client requirements, it is not, and it should not be construed as, advice designed to meet the particular investment needs of any investor. This report is not an offer or the solicitation of an offer to sell or buy any security.

Green Street Advisors, LLC is a Registered Investment Advisor doing business as Green Street. Services are only offered to clients or prospective clients where Green Street, LLC and its representatives are properly licensed or exempt from licensure.

For Green Street's advisory customers, this research report is for informational purposes only and the firm is not responsible for implementation. Nor can the firm be liable for suitability obligations.

Green Street (US) generally prohibits research analysts from sending draft research reports to subject companies. However, it should be presumed that the analyst(s) who authored this report has(/have) had discussions with the subject company to ensure factual accuracy prior to publication, and has(/have) had assistance from the company in conducting due diligence, including visits to company sites and meetings with company management and other representatives.

Terms of Use

Protection of Proprietary Rights: To the extent that this report is issued by Green Street (US), this material is the proprietary and confidential information of Green Street, LLC, and is protected by copyright. To the extent that this report is issued by Green Street (UK), this material is the proprietary and confidential information of Green Street (U.K.) Limited, and is protected by copyright.

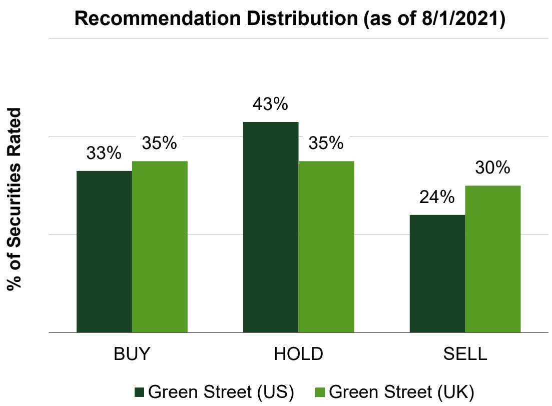
This report may be used solely for reference for internal business purposes. This report may not be reproduced, re-distributed, sold, lent, licensed or otherwise transferred without the prior consent of Green Street. All other rights with respect to this report are reserved by Green Street.

EEA Recipients: For use only by Professional Clients and Eligible Counterparties: Green Street Advisors (UK) Ltd is authorized by the Financial Conduct Authority of the United Kingdom to issue this report to "Professional Clients" and "Eligible Counterparties" only and is not authorized to issue this report to "Retail Clients", as defined by the rules of the Financial Conduct Authority. This report is provided in the United Kingdom for the use of the addressees only and is intended for use only by a person or entity that qualifies as a "Professional Client" or an "Eligible Counterparty". **Consequently, this report is intended for use only by persons having professional experience in matters relating to investments. This report is not intended for use by any other person. In particular, this report intended only for use by persons who have received written notice from Green Street (UK) that he/she/it has been classified, for the purpose of receiving services from Green Street (UK), as either a "Professional Client" or an "Eligible Counterparty". Any other person who receives this report should not act on the contents of this report.**

Review of Recommendations:
- Unless otherwise indicated, Green Street reviews all investment recommendations on at least a monthly basis.
- The research recommendation contained in this report was first released for distribution on the date identified on the cover of this report.
- Green Street will furnish upon request available investment information supporting the recommendation(s) contained in this report.

Green Street's Disclosure Information

At any given time, Green Street publishes roughly the same number of "BUY" recommendations that it does "SELL" recommendations.



Green Street's "BUYs" have historically achieved far higher total returns than its "HOLDs", which, in turn, have outperformed its "SELLs".

Total Return of Green Street's Recommendations[1,2]

Year[3]	Buy	Hold	Sell	Universe
2021 YTD	28.6%	29.8%	24.0%	28.1%
2020	3.3%	-13.0%	-22.5%	-10.7%
2019	31.6%	22.4%	17.8%	24.0%
2018	-5.1%	-6.6%	-9.2%	-7.0%
2017	6.4%	0.2%	2.1%	2.6%
2016	14.9%	14.7%	13.1%	14.4%
2015	8.3%	0.9%	-1.7%	2.4%
2014	41.6%	31.5%	27.3%	33.3%
2013	4.1%	0.6%	1.7%	2.2%
2012	24.5%	24.7%	18.9%	23.0%
2011	18.9%	7.6%	-4.7%	7.6%
2010	43.3%	32.8%	26.6%	33.8%
2009	59.0%	47.7%	6.0%	37.9%
2008	-28.1%	-30.9%	-52.6%	-37.3%
2007	-6.9%	-22.4%	-27.8%	-19.7%
2006	45.8%	29.6%	19.5%	31.6%
2005	26.3%	18.5%	-1.8%	15.9%
2004	42.8%	28.7%	16.4%	29.4%
2003	43.3%	37.4%	21.8%	34.8%
2002	17.3%	2.8%	2.6%	5.4%
2001	34.9%	19.1%	13.0%	21.1%
2000	53.4%	28.9%	5.9%	29.6%
1999	12.3%	-9.0%	-20.5%	-6.9%
1998	-1.6%	-15.1%	-15.5%	-12.1%
1997	36.7%	14.8%	7.2%	18.3%
1996	47.6%	30.7%	18.9%	32.1%
1995	22.9%	13.9%	0.5%	13.5%
1994	20.8%	-0.8%	-8.7%	3.1%
1993	27.3%	4.7%	8.1%	12.1%
Cumulative Total Return	**28103.1%**	**1541.4%**	**36.4%**	**1863.1%**
Annualized	**21.9%**	**10.3%**	**1.1%**	**11.0%**

The results shown above are hypothetical; they do not represent the actual trading of securities. Actual performance will vary from the hypothetical performance shown above due to, but not limited to 1) advisory fees and other expenses that one would pay; 2) transaction costs; 3) the inability to execute trades at the last published price (the hypothetical returns assume execution at the last closing price); 4) the inability to maintain an equally-weighted portfolio in size (the returns above assume an equal weighting); and 5) market and economic factors will almost certainly cause one to invest differently than projected by the model that simulated the above returns. All returns include the reinvestment of dividends. Past performance, particularly hypothetical performance, cannot be used to predict future performance. Investing involves risk and possible loss of principal capital.

(1) Results are for recommendations made by Green Street's North American Research Team only (includes securities in the US, Canada, and Australia). Since July 5, 2017, performance is calculated whenever a recommendation is changed using the share price at the most recent market close. Previously, performance was based on recommendations provided in Green Street's "Real Estate Securities Monthly" (RESM) and assumed no change in recommendation between RESM publications. Results from January 28, 1993 through January 4, 2016 were independently verified by an international "Big 4" accounting firm. The accounting firm did not verify the stated results subsequent to January 4, 2016. As of January 4, 2016, the annualized total return of Green Street's recommendations since January 28, 1993 was: Buy +24.0%, Hold +11.1%, Sell +0.6%, Universe +11.7%.

(2) Beginning July 5, 2017, all companies in Green Street's North American coverage universe are included in the performance calculation. Previously, inclusion in the calculation of total return had been based on whether the companies were listed in the primary exhibit of Green Street's "Real Estate Securities Monthly" and had a rating other than "Not Rated".

(3) From 1993 until July 3, 2017, the returns for each year cover the period following the first RESM issued in the respective year through the first RESM issued in the following year and are not based on a calendar year. Subsequent to July 5, 2017, returns are based on calendar months.

"Buy" = Most attractively valued stocks. We recommend overweight position; "Hold" = Fairly valued stocks. We recommend market-weighting; "Sell" = Least attractively valued stocks. We recommend underweight position. "Not Rated" companies are covered by the firm's research department, but are not rated due to fundamental attributes related to business prospects and balance sheets that are deemed to make the securities more option-like than equity-like.

Green Street will furnish upon request available investment information regarding the recommendation

North American Team

Green Street

Research

Leadership	Mike Kirby, Co-Founder Cedrik Lachance, EVP, Director of Research	mkirby@greenstreet.com clachance@greenstreet.com
Strategic Research	Dave Bragg, Co-Head of Strategic Research Peter Rothemund, CFA, Co-Head of Strategic Research Jared Giles, CFA, Senior Associate	dbragg@greenstreet.com prothemund@greenstreet.com jgiles@greenstreet.com
Company and Sector Research	Michael Knott, Managing Director, Head of U.S. REIT Research	mknott@greenstreet.com
Data Centers/Towers	David Guarino, Analyst Michael Stroyeck, Senior Associate	dguarino@greenstreet.com mstroyeck@greenstreet.com
Gaming/Net Lease/Self-Storage	Spenser Allaway, Senior Analyst David Balaguer, Senior Associate Harsh Hemnani, Senior Associate	sallaway@greenstreet.com dbalaguer@greenstreet.com hhemmani@greenstreet.com
Industrial/Retail	Vince Tibone, CFA, Senior Analyst Paulina Rojas-Schmidt, Analyst Emily Arft, Senior Associate Tomi Cubrilo, Senior Associate Jessica Zheng, Senior Associate	vtibone@greenstreet.com projasschmidt@greenstreet.com earft@greenstreet.com tcubrilo@greenstreet.com jzheng@greenstreet.com
Lodging/Health Care	Lukas Hartwich, CFA, Managing Director Chris Darling, CFA, Analyst John Magee, CFA, Senior Associate Alaine Coffey, Associate	lhartwich@greenstreet.com cdarling@greenstreet.com jmagee@greenstreet.com acoffey@greenstreet.com
Office	Daniel Ismail, CFA, Senior Analyst Dylan Burzinski, Senior Associate Michael Manos, CFA, CPA, Senior Associate	dismail@greenstreet.com dburzinski@greenstreet.com mmanos@greenstreet.com
Residential	John Pawlowski, CFA, Senior Analyst Alan Peterson, Senior Associate Robyn Luu, CFA, Senior Associate	jpawlowski@greenstreet.com apeterson@greenstreet.com rluu@greenstreet.com
Data & Analytics	Andrew McCulloch, CFA, EVP, Global Head of Data & Analytics	amcculloch@greenstreet.com
Market Analytics	Joi Mar, CFA, Managing Director Rob Filley, CFA, Analyst Ryan Miller, CFA, Analyst Weston Mui, CFA, Analyst Alexandra Boyle, Senior Associate Alexander McIntyre, Associate Chinar Rastogi, Associate Emily Meckler, Associate Kevin Neys, Associate Mitchell Briggs, Associate Tina Tsyshevska, Associate Sara Knippa, Associate * Sophie Piller, Associate * Cole Smith, Associate * Arthur Berlinger, Associate Naishal Shah, Associate	jmar@greenstreet.com rfilley@greenstreet.com rmiller@greenstreet.com wmui@greenstreet.com aboyle@greenstreet.com amcintyre@greenstreet.com crastogi@greenstreet.com emeckler@greenstreet.com kneys@greenstreet.com mbriggs@greenstreet.com ttsyshevska@greenstreet.com sknippa@greenstreet.com spiller@greenstreet.com csmith@greenstreet.com aberlinger@greenstreet.com nshah@greenstreet.com
Forecasting & Data Science	Daniel Wijaya, Lead Analyst Dmitry Nikalaichyk, Senior Quant Analyst Otto Aletter, Analyst	dwijaya@greenstreet.com dnikalaichyk@greenstreet.com oaletter@greenstreet.com

Executive

Jeff Stuek, Chief Executive Officer	jstuek@greenstreet.com

Account Management

Seth Laughlin, Managing Director	slaughlin@greenstreet.com
Caroline McCrory, Senior Vice President	cmccrory@greenstreet.com

Sales

Kris Hoffman, EVP, Head of Revenue	khoffman@greenstreet.com

Advisory

Dirk Aulabaugh, EVP, Global Head of Advisory Services	daulabaugh@greenstreet.com
Phillip Owens, CFA, Managing Director	powens@greenstreet.com
Justin Brown, Managing Director	jbrown@greenstreet.com

Marketing & Media Relations

Katie Clemons, Vice President	kclemons@greenstreet.com

Green Street
100 Bayview Circle, Suite 400
Newport Beach, CA 92660
T 949.640.8780

Green Street (UK) Limited
6th Floor, 30 Panton Street
London SW1Y 4AJT
T +44 (0)20.3793.7000

** These employees operate in a support capacity and are not yet licensed.*