



Green Street Advisors

HEARD ON THE BEACH: THE SUM OF ALL FEARS

AUTHORS:

MIKE KIRBY

CHAIRMAN & DIRECTOR OF RESEARCH

PETER POTHEMUND

MANAGING DIRECTOR



Heard on the Beach

The Sum of All Fears

March 22, 2020



Green Street Advisors

Executive Summary

The COVID-19 recession has had an incredibly short incubation period. Fears about the virus' direct impact on health started to impact share prices less than five weeks ago. Those were soon compounded once the enormous costs of mitigation started to come into view. Now, policy makers are frantically fixing leaks as they appear in the plumbing of the global financial system. Each of these variables is impacting the valuation of REITs and real estate.

The fallout from what promises to be a record-breaking plunge in GDP should have somewhat predictable impacts across property sectors. The outlook is complicated, however, by outsized effects on properties that serve as gathering spots and/or cater either to tourists or an older crowd. The market has had time to pass a preliminary judgment on how these risks add up.

Less clear is whether the market has discounted the impact that cash flow disruptions/excessive leverage might have on REITs with less-than-pristine balance sheets. And there are plenty of them: 25% of US REITs now have leverage ratios (debt/enterprise value) in excess of 60%. Balance sheets have been easy to ignore in recent years, but they will serve as sizable return differentiators going forward.

To help clients better track fast-changing valuations, while also keeping an eye on balance sheet strength, we're simultaneously unveiling a new publication, *REITs Amid a Pandemic*.

RMZ: **790** | DJIA: **19,173** | 10-Year T-Note: **0.84%** | Baa Yield: **5.13%**

Heard on the Beach

March 22, 2020

The Sum of All Fears: As recently as five weeks ago, investors were paying little heed to news about the COVID-19 threat beyond the disruption it was causing to supply-chains for goods sourced in China. It has now become the only thing they care about.

As those weeks have unfolded, fears that were once focused primarily on the direct impact of the disease itself, transitioned to the enormous economic costs involved in containing it, and more recently to concerns about the ability of the global financial system to withstand the many stresses that are starting to mount. The sum of these fears has had a dramatic impact on the price of every asset, the most startling of which is the 32% decline in the value of the US equity market.

The first two fears were discussed three weeks ago, in *A Most Unwelcome Visitor*. The extent to which COVID-19 will directly impact a given property type is a function of several factors, including the extent to which: 1) it serves as a place for communal interaction; 2) its fortunes are tied to travel; and 3) it caters to an older crowd. Sectors where an outsized impact will occur include hotels, net-lease casinos, skilled nursing facilities, senior housing, non-grocery retail, and student housing. These impacts have generally been elaborated on in follow-up reports by our respective sector teams. In most other property sectors, the disease itself is unlikely to create a demand shock beyond what might occur in a sharp economic downturn.

The impact of an economic downturn on any given property sector is also a function of three variables: 1) the extent to which demand for space is affected by economic vigor; 2) operating profit margins; and 3) the protection afforded by long-term leases. Hotels are in a class of their own when it comes to economic risk, followed by retail, office, and industrial. Sectors that have historically held up well during downturns include health care, net lease, self-storage, and manufactured housing.

At the time *A Most Unwelcome Visitor* (3/4/20) was published, the idea that REIT balance sheets might be tested seemed a bit far-fetched. To be sure, there have long been a couple of handfuls of US REITs that warrant modest pricing discounts due to excessive leverage, but, as evidenced by the industry's average leverage ratio of 35% (liabilities/private-market asset value) as of the start of this year, most REITs had been doing a reasonable job of minimizing balance sheet risk. That piece was, however, written 8000 points ago in the ongoing plunge of the DJIA.

Now, news stories are starting to pop up that seem uncomfortably familiar to anyone who lived through the Global Financial Crisis. The Fed is buying MBS and flooding repo markets with liquidity; it is backstopping money market funds and, perhaps soon, business loans; and Congress is rushing to throw at least a trillion dollars at citizens/businesses. This may be well and good, but medicine this strong is normally reserved for only the most desperate situations.

There are, to be sure, large differences between then and now. Today's banks are far better capitalized, which alleviates fears of a true credit crunch, and the "whatever it takes" mentality is so pervasive in the minds of policy makers that responses will be swift and aggressive. A financial crisis loosely akin to the GFC is more plausible than it seemed a few weeks back, but it is still unlikely.

The experiences from that era are nevertheless illustrative. Whereas COVID is the "only thing that matters" today, balance sheets held that title during '08/'09. As equity values plunged and balance sheet metrics worsened, half of all US equity REITs felt compelled to issue equity at distressed share prices. The infamously dilutive impact this had on long-term total returns serves as the sector's biggest black eye over the past four decades. REITs that avoided balance sheet stress dramatically outperformed those that didn't. Even if the coming recession only remotely resembles the last downturn, REIT balance sheets will be a large differentiator of returns.

And there is reason to think that is in the cards. The collapse in REIT share prices has been akin to an ebb tide that has exposed plenty of naked swimmers: 10 REITs in our US coverage universe now have Debt/Enterprise Value ratios north of 70% and another 13 are above 60%. Put differently, more than a quarter of our coverage universe has leverage that is excessive by any normal standard. The north-of-70% group is comprised exclusively of REITs in risky sectors, such as hotels, retail, and office. Even if cash flow disruptions are not in the cards – and they are – REITs with such high leverage are clearly operating with sub-optimal capital structures. Equity raises, painful as they may be, will be a necessary dose of medicine for companies striving to maximize shareholder wealth.

To view the full report, please contact
our sales team at 949.640.8780 or
inquiry@greenstreetadvisors.com

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

This report is issued in the USA by GSA (US). GSA (UK) accepts no responsibility for this report to the extent that it is relied upon by persons based in the USA. GSA (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 GSA (UK). GSA (US) accepts no responsibility for this report to the extent that it is relied upon by persons based in the EEA. GSA (UK) is registered in England, (Company number. 6471304), and its registered office is 20 Balderton Street, 5th Floor, London, W1K 6TL. GSA (UK) 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:

- GSA (US) to the extent that this report has been disseminated in the USA; or
- GSA (UK) to the extent that this report has been disseminated in the EEA.

Green Street Advisors 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 Advisors 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 for 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 are potential conflicts regarding our affiliates 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.
- An affiliate of Green Street is an investment manager implementing a real estate securities strategy focused on REITs. The affiliate employs an investment strategy based on Green Street's published research and the portfolios managed by this affiliate contain securities of issuers covered by Green Street's research department. The principals of Green Street Advisors, Green Street Investors and its affiliates have invested in GSREF, L.P. Green Street Investors is located in a separate locked office within Green Street's headquarters.

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 Disclosures 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 GSA (US) and GSA (UK) research reports received from subject companies represent approximately 3% of each of GSA (US)'s and GSA (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 GSA 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. Services are only offered to clients or prospective clients where Green Street Advisors, 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.

GSA (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.

This report is a property-sector review and does not contain the amount of in-depth company-specific analysis sufficient to make informed investment decisions about one specific issuer disclosed in this report. For a more thorough analysis, please review this report in conjunction with GSA's company-specific research which is available at www.greenstreetadvisors.com.

Terms of Use

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

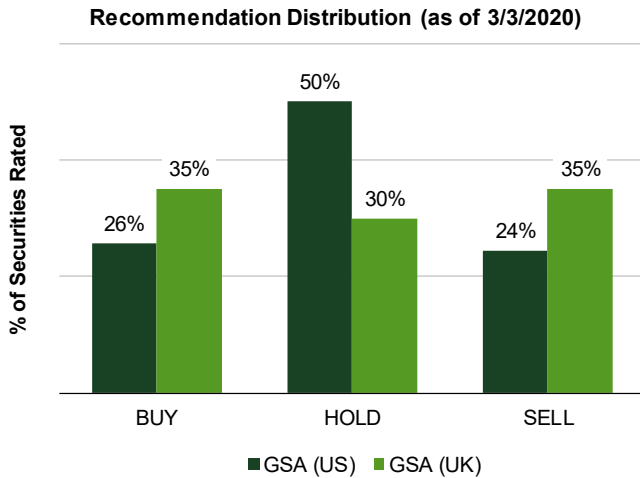
EEA Recipients: For use only by Professional Clients and Eligible Counterparties: GSA (UK) is authorized by the Financial Conduct Authority of the United Kingdom to issue this report to "Professional Clients" and "Eligible Counterparties" only and is not authorized to issue this report to "Retail Clients", 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 GSA (UK) that he/she/it has been classified, for the purpose of receiving services from GSA (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
2020 YTD	-7.0%	-9.5%	-12.4%	-9.5%
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	45.6%	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	21133.4%	1383.7%	42.0%	1617.6%
Annualized	21.9%	10.4%	1.3%	11.1%

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.

- 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%.
- 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".
- 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

Research

Strategic Research	Mike Kirby, Director of Research Dave Bragg, Managing Director Peter Rothmund, CFA, Managing Director Stephen Pazzano, Senior Associate Jared Giles, Associate	mkirby@greenst.com dbragg@greenst.com prothemund@greenst.com spazzano@greenst.com jgiles@greenst.com
Company and Sector Research	Cedrik Lachance, Director of REIT Research Michael Knott, Head of U.S. REIT Research Jim Sullivan, Senior Advisor	clachance@greenst.com mknott@greenst.com jsullivan@greenst.com
Data Centers/Towers	David Guarino, Analyst	dguarino@greenst.com
Gaming/Net Lease/Self-Storage	Spenser Allaway, Analyst	sallaway@greenst.com
Industrial	Eric Frankel, CFA, Senior Analyst	efrankel@greenst.com
Lodging/Health Care	Lukas Hartwich, CFA, Senior Analyst	lhartwich@greenst.com
Office	Daniel Ismail, CFA, Senior Analyst Chris Darling, CFA, Analyst Dylan Burzinski, Senior Associate	dismail@greenst.com cdarling@greenst.com dburzinski@greenst.com
Residential	John Pawlowski, CFA, Senior Analyst Alan Peterson, Senior Associate Galen Faurot-Pigeon, Associate	jpawlowski@greenst.com apeterson@greenst.com gfaurotpigeon@greenst.com
Retail	Vince Tibone, CFA, Senior Analyst Paulina Rojas-Schmidt, Senior Associate Nick Fromm, Senior Associate Emily Arft, Associate	vtibone@greenst.com projasschmidt@greenst.com nfromm@greenst.com earft@greenst.com
Research Generalists	Ryan Lumb, CFA, Analyst John Magee, Senior Associate Harsh Hemnani, Associate	rlumb@greenst.com jmagee@greenst.com hhemnani@greenst.com
Real Estate Analytics	Andrew McCulloch, CFA, Managing Director Joi Mar, CFA, Managing Director Rob Filley, CFA, Analyst Ryan Miller, CFA, Analyst Weston Mui, Senior Associate Alaine Coffey, Associate Alexander McIntyre, Associate Alexandra Boyle, Associate Claire Arora, Associate Emily Meckler, Associate Hannah Berg, Associate Kevin Neys, Associate Michael Stroyeck, Associate	amcculloch@greenst.com jmar@greenst.com rfilley@greenst.com rmiller@greenst.com wmui@greenst.com acoffey@greenst.com amcintyre@greenst.com aboyle@greenst.com carora@greenst.com emeckler@greenst.com hberg@greenst.com kneys@greenst.com mstroyeck@greenst.com

Executive

Jeff Stuek, Chief Executive Officer	jstuek@greenst.com
-------------------------------------	--------------------

Account Management

Damon Scott, Managing Director	dscott@greenst.com
Seth Laughlin, Managing Director	slaughlin@greenst.com

Sales

Kris Hoffman, Managing Director	khoffman@greenst.com
---------------------------------	----------------------

Advisory

Dirk Aulabaugh, Managing Director	daulabaugh@greenst.com
Phillip Owens, CFA, Managing Director	powens@greenst.com
Justin Brown, Managing Director	jbrown@greenst.com

Marketing & Media Relations

Katie Clemons, Vice President	kclemons@greenst.com
-------------------------------	----------------------

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

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

Green Street Advisors, LLC
2828 N. Harwood Street, Suite 1200
Dallas, TX 75201
T 214.749.4730

** These employees operate in a support capacity and are not yet licensed. All acts performed in the United States are supervised by Green Street Advisors US.