



Boston Properties

Boston Properties, Inc. (BXP) Investment Report

Jakub Duda
Dr. Steven Todd
FINC 356
26 March 2021

Investment Summary and Thesis

Boston Properties (BXP) is a fully integrated real estate investment trust (REIT) that develops, redevelops, acquires, manages, operates and owns a diverse portfolio of primarily Class A office space, totaling approximately 48.4million square feet and consisting of about 164 office properties.

I am initiating a buy rating with a 12-month target price of \$140 for Boston Properties. With this target price there is an approximate 33.75% upside from their March 26th closing price of \$104.67.

Key Drivers:

Return of Pre-COVID conditions will create returning demand

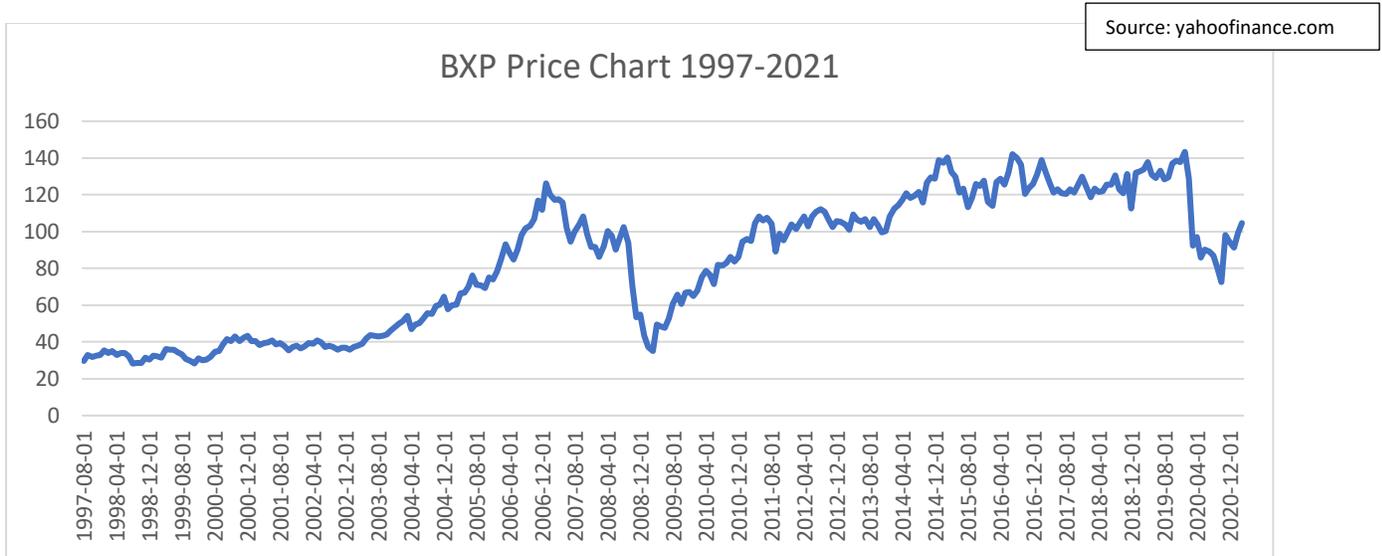
BXP traded at a high of \$145 pre-COVID and is trading at about 39% below that now. The office REIT industry suffered during COVID due to workers being asked to work from home (the WFH – work from home model), which created a drop of demand for office space. As we are approaching a solution to COVID, and vaccinations are being offered, there will be a new drive for getting workers back into their workplace, as working from home was inefficient for many workers. Even now, if managers are seeking to get their workers back into an office, they will likely need to create more space between workers, for COVID safety reasons, which can offset any demand lost for office space from managers finding working from home acceptable or even efficient.

A Significant Focus on ESG and Sustainability

A heavy focus of Boston Properties now is working on their social image. They issued \$850million of green bonds, increasing their total green bond offering to \$1.85billion since 2018. These are bonds designed specifically to support specific climate or environmental projects. They have also built additional onsite solar power, increasing their onsite solar capacity by 400%.

Cutting Costs and Continued Leasing's through 2020

In 2019 they reduced like-for-like energy and water usage by 27% and 30% respectively compared to the usage in 2008, cutting \$34million in annual recurring operating costs. In 2020 Boston Properties still managed to lease out 3.7million square feet of office space, including a 586k square foot leasing to Microsoft in Virginia. Following COVID and this decrease of demand, Boston Properties has many opportunities in the near future.



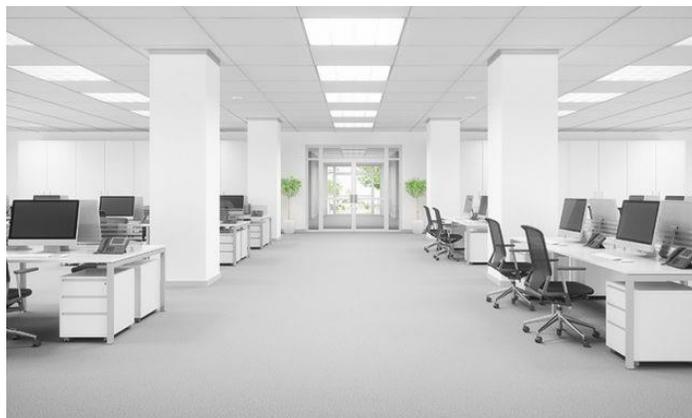
Stock Chart Analysis:

BXP went public June 1997, where it experienced a very healthy growth up until the 2008 Financial Crisis. They began recovery after the crisis, December 1st 2008, they were trading at about \$55.00 and December 1st of 2014 they were trading at about \$128.69. The CAGR in this time frame is 15.22% which is pretty significant. Following this point in 2014, Boston Properties hovers near the \$120-\$140 range up until the most recent COVID-19 pandemic. The pandemic brought them to their lowest point of 10 years in October of 2020. I am confident that a return of Pre-COVID conditions will create returning/new demand for the space Boston Properties provides, which can lead them back to their prospering \$140 price ranges. Their additional

<u>BXP'S Market Profile</u>	
Ticker	BXP
Share Price	\$104.67
Market Cap	16.682B
Dividend Yield	3.75
Beta	1.26
Debt/Equity	2.29
P/E	19.33
P/B	2.88
ROE	14.60%
ROA	3.80%
Instit. Own.	98.50%
EPS	5.54

Source: finviz

attempts to make cost cutting measures, and a greener social image to be a more favorable choice over other REIT-Office companies, should be taken into consideration as well for the return and potential growth over their record high price.

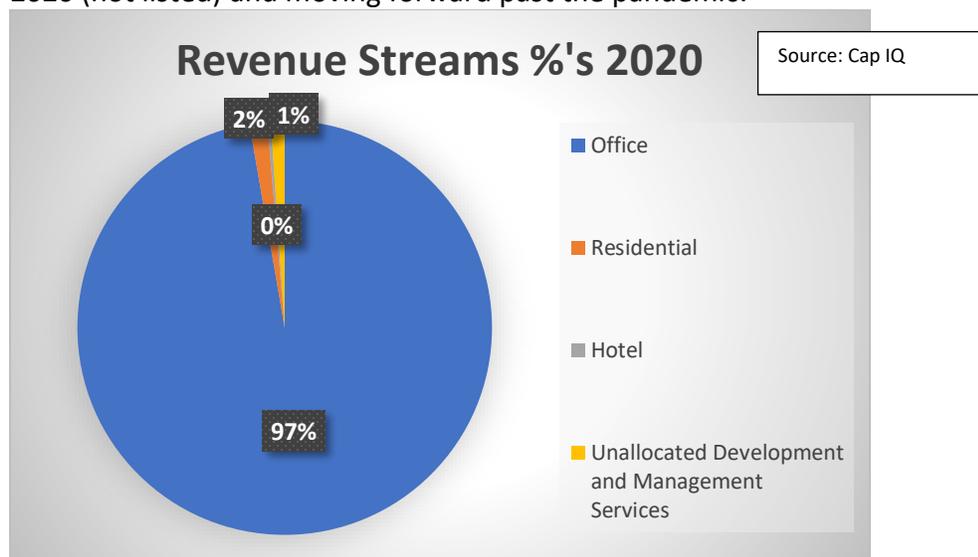


Company Description

Boston Properties Inc. was founded in 1970 in Boston Massachusetts by Mortimer Benjamin Zuckerman and Edward H. Linde. BXP operates primarily in the REIT office space industry. They also offer financial Services, Construction and Investment Services. They own 48.4 million square feet total, and about 164 office properties.

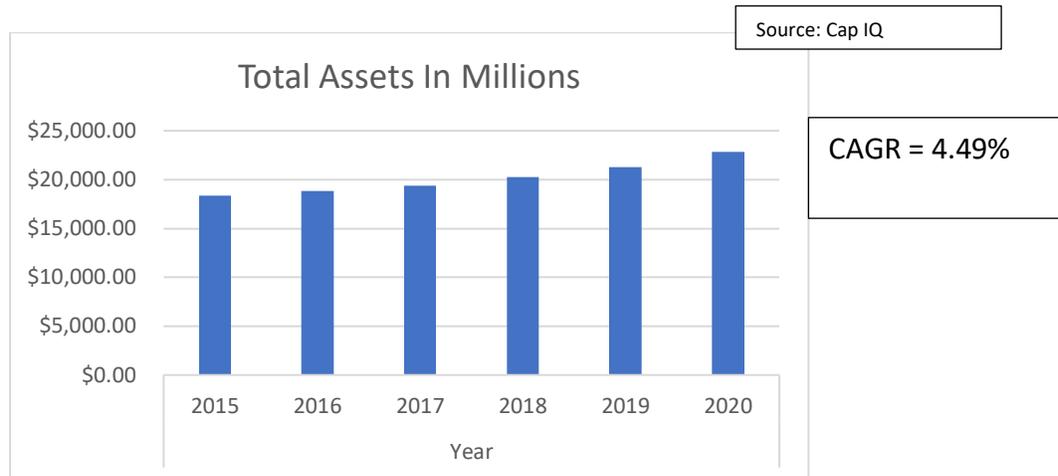
Revenue By Segment:

As seen in the Revenue streams chart below, an absolute majority of their revenue comes from Office Leasing (both office and technical). In 2020, they had revenues of \$2.678.8 million in office/technical leasing, \$38.1 million in residential leasing, \$7.5 million in hotels, and \$29.6 million in “unallocated Development and Management Services” which mostly accounts for investment services, and management services they provide for clients. As seen in the chart and in previous years, Boston Properties primarily focuses on their office spaces for revenue. BXP has a section of their revenues made for adjustments for losses from their services which was at a record low of \$2.2million in 2018, compared to a \$22.8million loss in 2015, and a significant loss in 2019 due to the pandemic of \$46.6million. This is expected to decrease in 2020 (not listed) and moving forward past the pandemic.



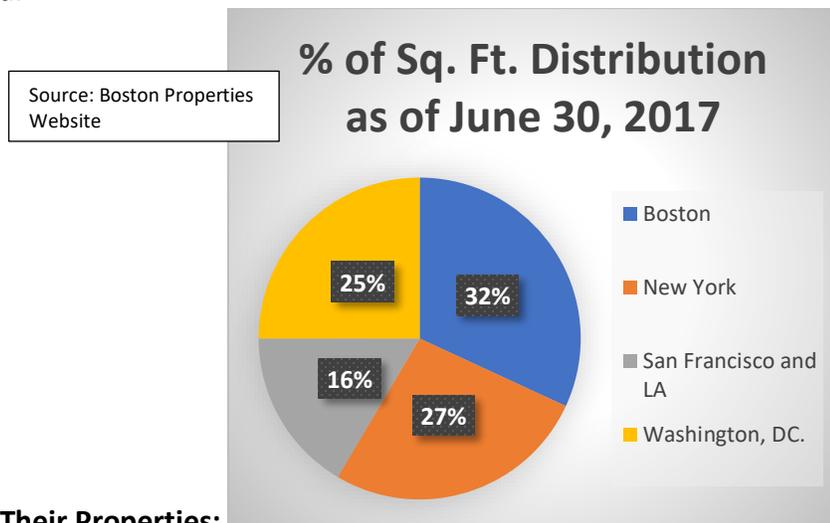
Of their office rental revenue, they acquire said revenue through renting or leasing their properties, minimum and additional rent for the properties, renting of their land for various reasons and various other sources. For example, they provide some short-term equipment rentals (unspecified but seems to vary from construction equipment to more office-oriented equipment). But once again, the majority of their revenue comes from the leasing of their office properties.

A large focus for BXP is the drive to have an excellent social image. They strive to be a “green” company. In an industry where the majority of assets are very similar to competitor assets, having their social image be more impressive than consumers can potentially affect the consumer decisions for business managers to pick Boston Properties office spaces over competitors’ spaces.



Assets Analysis:

Boston Properties assets have continued to grow in this 5-year span by a CAGR of about 4.49%. They have added on additional debt in borrowing to achieve this growth of assets, in hopes of increased demand post-COVID. To be clear, they seem to be following a type of going concern ideology, where they aren't selling off many of their properties to avoid risk of lack of renters/leasers, they are continuing to expand with expectations that the supply of space will be met with similar demand.



Geographical Footprint of Their Properties:

Boston Properties real estate is found solely in: Boston, New York, San Francisco, Los Angeles, and Washington, DC. Most of their properties distribution is in Boston where the company was founded, with expansion to some pretty big cities as listed.



In 2017, BXP had pretty solid percentages of their properties in all of their locations being rented or leased. All were over 90% leased, with their Boston properties at 92.6% leased out. This shows that BXP makes pretty legitimate property pick-ups and do extensive research to know which company might need what space, where.



Picture of Boston

Industry Analysis

REITs:

REITs in general must meet certain conditions to be considered a real estate investment trust. They must pay out 90% of their taxable income as dividends. At least 75% of a REITs' assets must be real estate or real estate related assets, and a REIT must acquire at least 75% of its income from real estate or related activities. A REIT must have a minimum of 100 shareholders. Additionally, restrictions are put in place for REITs to avoid having 5 investors owning 50% of the REITs shares. For meeting all these requirements and restrictions, REITs get to enjoy a very large tax advantage, meaning they don't pay corporate taxes on their profits no matter what.

Source:
fool.com

Office REITs and their Risks:

Office REITs are generally less risky than most other REITs. Some risks they do have to deal with are:

Interest Rate Risk:

When interest rates go up, Office REITs stock prices tend to fall. REIT stock prices and Treasury Yields have an inverse relationship.

Oversupply Risk:

This concept is fairly simple, matching the demand for office space with the accurate amount of supply of spaces is not a perfect science. As shown in the business description, BXP has a range of about 7.4%-10% of excess (not in use) office space throughout the regions it resides in 2017. If the excess supply is too significant, there can be additional difficulties for the office REIT.

Economic Risk:

Demand for office space does partially depend on how healthy the overall economy is. If a company was planning to sign a long-term lease and the economic conditions were pretty tight, they might push the plan to do so until a safer time. A lot of the time however, even in rough times, additional office space may be required to generate more revenues for this example company, and they will sign a lease anyway. In this way, office REITs can be less risky than other REITs.

How BXP Compares to its Office REIT Industry Competitors:

Source: finviz and marketwatch

REITs in the Office Sector	Ticker	Market Cap (billions)	P/E	Price	Revenue 2019	Revenue 2020
Cousins Properties Incorporated	CUZ	5.36	22.7	36.3	657.52M	740.34M
Vornado Realty Trust	VNO	8.87	(n/a)	47.3	3.69B	1.89B
SL Green Realty Corp.	SLG	4.91	19.41	72.31	1.24B	1.03B
Highwoods Properties, Inc.	HIW	4.48	13.56	43.84	745.1M	739.88M
Alexandria Real Estate Equities, Inc.	ARE	23.11	28.84	168.98	1.53B	1.88B
Boston Properties, Inc.	BXP	16.31	19.32	107.07	2.9B	2.77B
Kilroy Realty Corporation	KRC	7.7	41.95	68	837.65M	916.69M
Douglas Emmett, Inc.	DEI	5.65	116.54	32.98	946.41M	867.1M

All of these chosen competitors have a prioritized interest in the office space sector of REITs. The largest piece of their segmented revenue is based off leasing office spaces. ARE is a slightly different competitor, as they seek space that could have been office space but are seeking to own it to lease it out for “life science and technology” purposes. Alexandria Real Estate Equities handles property in locations very similar to BXP, including: Boston, San Francisco, and New York City. Companies like KRC have a single revenue stream of leasing offices. I believe all of these competitors of BXP have approximately 90%+ of their revenue coming from leasing office spaces, except for ARE due to its slightly different nature. The REIT office industry doesn't seem to diversify revenue streams very much.

Of the companies in the industry I am analyzing, Boston Properties is 2nd in market cap size at 16.31 billion. P/E ratios aren't an especially great tool for analyzing equity REITs and really REITs in general, due to a recognition of “the cost of depreciation” which is written off as a cost where it really isn't a cost (learned from fool.com). So earnings are always less than they could be as their real estate depreciates. But in a general sense, BXP is sitting at a 19.32 P/E, where REITs as a whole have a median of 19.73. It is worth noting that many of its competitors have similar P/E ratios, but are trading at a much lower price due to their lower earnings.

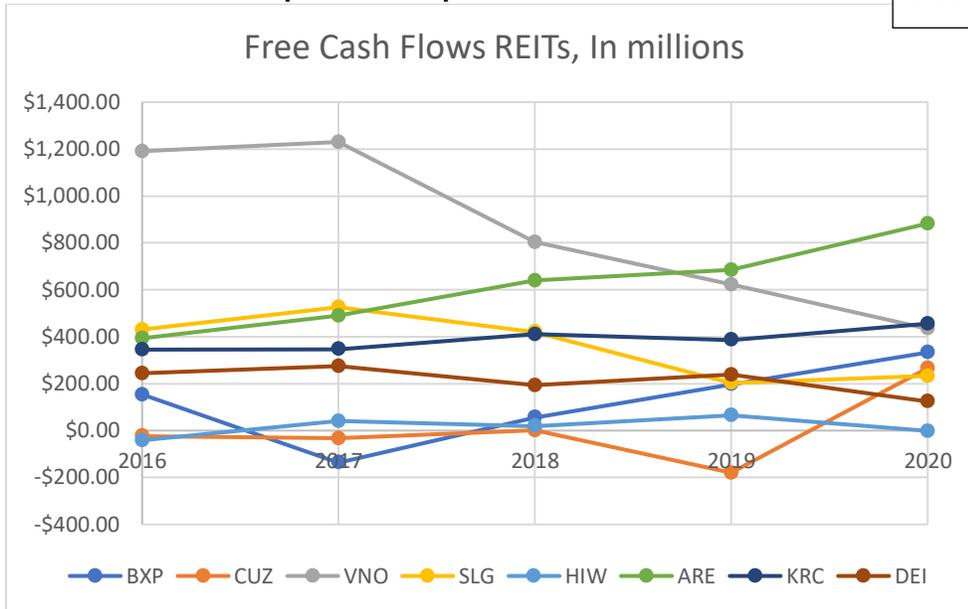
Additionally, I listed the change in revenues for BXP's competitors from 2019 to 2020. This is to show the differences between how they did during the pandemic compared to BXP. Some actually continued to grow their generated revenue like CUZ, KRC and ARE. What could be happening is they had more active leases ongoing potentially before the pandemic with reputable clients that continued to pay rent expenses. While BXP was not especially prepared for the pandemic, they pulled it together to scrape through a difficult time of low demand. Vornado was completely unprepared and generated nearly 50% less revenues from 2019 to 2020. It was difficult to be prepared for a recession coming from a healthy market (some say overvalued market but it is a vivid argument) due almost purely to pandemic circumstances, and it seems it partially came down to luck for whether financial statements were affected severely or not.

Additional Information:

The Barrier to enter the REIT market is rather high, as the capital needed to make all the purchases of buildings to rent is high. Competition can also outbid your likely low bids on property as a new player in the industry.

Free Cash Flows Competitor Comparison:

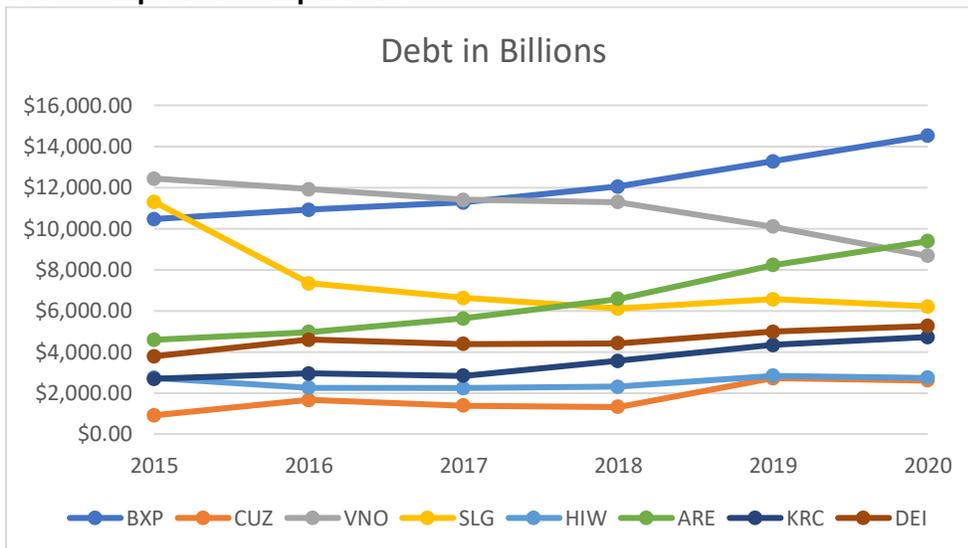
Source: Marketwatch



BXPs free cash flows have grown pretty constantly in the past 3 years, even throughout the pandemic. REITs cash flows can fluctuate quite a bit depending on how much capital they spend on properties and with each additional property come additional costs. VNO is an intense example, as their available free cash flows have decreased by more than 50%. They have been restructuring in the recent years with hopes for growth. Unlike BXP, they have about 16% of their revenues coming from retail, which was doing poorly and the pandemic just caused more non paid rent situations.

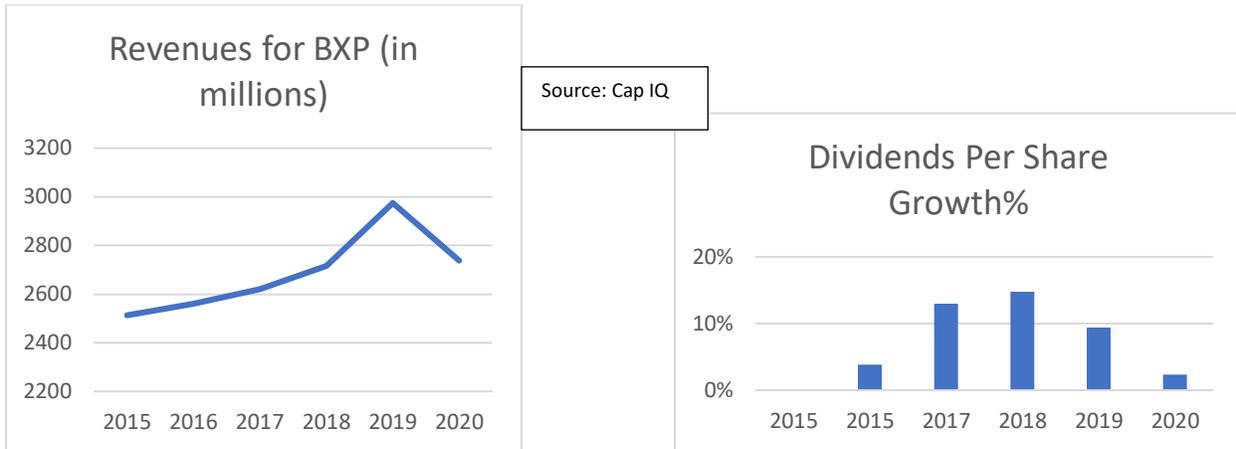
Debt Competitor Comparison:

Source: Cap IQ

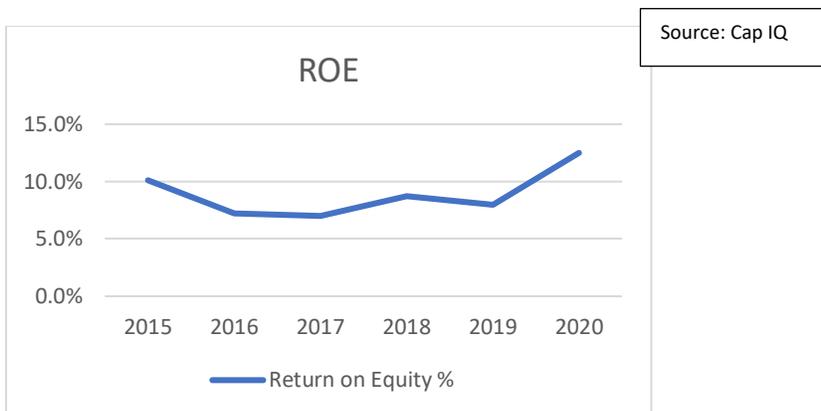


As you can see, BXP had rather high debt the last 5 years compared to its competitors, and constant increasing debt. It is a bigger company compared to some of these competitors listed, so debt should be higher. When compared to ARE, the only company listed with a higher market cap, a similar trend is seen with constant increasing debt, as both seem to borrow for their property purchases.

Financial Analysis



In the above graphics, we see revenues as well as dividends per share. When a REIT is paying out dividends, the dividend is 90% of the REITs earnings. As you can see, as revenues rise dividends per share growth rises, and in 2020 we see very low earnings (low revenues high costs) and the dividend per share is also much lower, as it should be.



A good ROE is about 15-20%, and BXP is potentially heading in that direction. Their ability to generate income in the form of leasing revenue on their office spaces primarily is a pretty solid percentage.

Ticker	Company	P/LTM EPS Multiple		
		28-Jun-19	30-Jun-20	29-Mar-21
BXP	Boston Properties, Inc.	40.44	15.39	18.61
CUZ	Cousins Properties Incorporated	38.61	14.34	22.4
VNO	Vornado Realty Trust	21.05	2.5	NM
SLG	SL Green Realty Corp.	39.28	12.23	14.24
HIW	Highwoods Properties, Inc.	29.66	12.39	13.14
ARE	Alexandria Real Estate Equities, Inc.	42.17	76.34	28.14
KRC	Kilroy Realty Corporation	29.01	31.49	41.68
DEI	Douglas Emmett, Inc.	58.59	14.86	116.43

Source: Cap IQ

According to Investopedia, an established real estate company trades at about 35x to 45x forward earnings. This is because of the skewed earnings figures for a REIT, due to depreciation which isn't an actual cost, but more something that needs to be accounted for, thus reducing earnings. In 2019, the multiples are in the 29x-59x range with Douglas Emmett being a curious case through this examination, with the only PE multiple in this range that is not in the 35x-45x range. In 2020, revenues and in turn revenues were lower for most of these companies, even more than the stock price dips in most of these companies. The most severe example is once again Vornado, for reasons discussed. ARE had a relatively high multiple in this 2020 time period, but the multiple available closest to today is lower. This could be a delay as all the other companies including BXP reported higher multiples in 2021 so far. If I was going to predict the next upcoming P/LTM EPS multiple for each, it would likely continue to increase as revenues should be rising in the REIT industry as things return to pre-COVID conditions, however, share prices will rise as well.

Ticker	Company	P/BV Multiple		
		28-Jun-19	30-Jun-20	29-Mar-21
BXP	Boston Properties, Inc.	3.54	2.4	2.77
CUZ	Cousins Properties Incorporated	1.38	0.98	1.19
VNO	Vornado Realty Trust	3.44	1.23	1.64
SLG	SL Green Realty Corp.	1.2	0.75	1.04
HIW	Highwoods Properties, Inc.	1.99	1.68	1.96
ARE	Alexandria Real Estate Equities, Inc.	2.09	2.16	1.97
KRC	Kilroy Realty Corporation	1.9	1.35	1.57
DEI	Douglas Emmett, Inc.	2.87	2.12	2.35

Source: Cap IQ

According to Investopedia, value investors often consider price to book values of under 3. good. BXP does have a relatively high P/B ratio compared to its competitors, but it has decreased from over 3.0 to under 3.0 from 2019-2020. I don't think these values for BXP are especially alarming, but it definitely something to consider if you're thinking about investing.

Valuation

Source: Capital IQ, Market Watch and Yahoo Finance

Free Cash Flow to Equity Model			
Two Stage Growth Model			
Stage 1 Growth Rate	3.00%		
Number of Years in Stage 1	6		
Stage 2 Growth Rate	1.00%		
Number of Years in Stage 2			
Stage 3 Growth Rate			
Growth Path	Linear		
Cost of Equity Capital	7.13%		
Free Cash Flow to Equity, LTM	\$1,305.39		
		For FCF and FCFE models only:	
		Net new debt (\$ millions)	\$1,030.00
		Interest on debt (\$ millions)	\$419.38
		Shares Outstanding (millions)	155.56
		Corporate tax rate (%)	21.00%

	k / terminal g	-0.50%	0.00%	0.50%	1.00%	1.50%	2.00%	2.50%
	5.63%	\$156.95	\$167.48	\$180.07	\$195.38	\$214.40	\$238.67	\$270.71
	6.13%	\$144.92	\$153.65	\$163.94	\$176.24	\$191.19	\$209.77	\$233.47
	6.63%	\$134.58	\$141.92	\$150.45	\$160.50	\$172.51	\$187.11	\$205.26
	7.13%	\$125.60	\$131.83	\$138.99	\$147.33	\$157.14	\$168.88	\$183.14
	7.63%	\$117.73	\$123.07	\$129.15	\$136.15	\$144.29	\$153.88	\$165.34
	8.13%	\$110.78	\$115.39	\$120.60	\$126.54	\$133.38	\$141.34	\$150.71
	8.63%	\$104.59	\$108.60	\$113.10	\$118.19	\$124.00	\$130.68	\$138.46
Average	\$155.27							

(where cost of equity capital is 7.125% for both models)

In the Free Cash Flow to Equity Model, I chose a two-stage linear growth path. The first stage growth rate is 3% with a bit of a drop off after about 6 years to a 1% growth rate. The reason for very conservative growth rates assigned to this model is that BXP's cash flows fluctuate quite a bit, to account for this the growth rates are smaller to account for potential upcoming dips and rises to average out at about a 3% CAGR, followed by a 1% CAGR.

The new increase in debt of \$1.03B, with a \$419.38 interest on this debt, with a free cash flow to equity of ~\$1.305B and shares outstanding of 155.56M led to an average share price of \$155.37. This valuation is a bit higher than what I am expecting but is entirely possible.

Dividend Discount Model	
Two Stage Growth Model	
Stage 1 Growth Rate	10.00%
Number of Years in Stage 1	6
Stage 2 Growth Rate	3.00%
Number of Years in Stage 2	
Stage 3 Growth Rate	
Growth Path	Linear
Cost of Equity Capital	7.13%
Dividends per share, LTM	\$3.92

Source: Cap IQ,
Marketwatch,
Yahoofinance

	k / terminal g	1.50%	2.00%	2.50%	3.00%	3.50%	4.00%	4.50%
	5.63%	\$130.08	\$145.10	\$164.92	\$192.29	\$232.55	\$297.57	\$420.40
	6.13%	\$115.74	\$127.24	\$141.91	\$161.27	\$188.00	\$227.31	\$290.82
	6.63%	\$104.21	\$113.25	\$124.48	\$138.80	\$157.71	\$183.82	\$222.23
	7.13%	\$94.73	\$101.99	\$110.82	\$121.79	\$135.78	\$154.25	\$179.76
	7.63%	\$86.80	\$92.74	\$99.83	\$108.45	\$119.17	\$132.84	\$150.89
	8.13%	\$80.08	\$85.00	\$90.80	\$97.73	\$106.15	\$116.62	\$129.98
	8.63%	\$74.30	\$78.43	\$83.24	\$88.91	\$95.68	\$103.91	\$114.15
Average	\$141.11							

In the Dividend Discount Model, I also chose a two-stage linear growth path. Here I use some less conservative rates, matching to the dividends per share of \$3.92 in the most recent year. I found a CAGR of 6.96% using the model and chose to try to split that up in the model. It is likely that if COVID passed within this first stage, the revenues will increase greatly, and if costs are reasonable earnings should also increase greatly. REITs are obligated to distribute 90% of their earnings as dividends to avoid income taxes on the profits paid to the shareholders. So, growth should be higher in this time frame, and it will most likely reach a lower growth rate after that. Through this model I derived an average share price of \$141.11.

To reach my target price I leaned more on my DDM model and even went a little bit below that, mostly because as I mentioned the Free Cash Flows fluctuate a little too much for a completely accurate future prediction in my opinion, while the DDM focuses on a direct correlation with the companies' growth that is expected (for most REITs- especially in the office sector of REITs) and the dividends which are directly relying upon BXP's earnings. So, with confidence, I value Boston Properties Inc. at least at a stock price of \$140 in the short term of a 1-year span.

Investment Risks



Increases in unemployment/Technology over Office Spaces:

In recessions, there is an increase in the national unemployment rate, which can mean many things for a REIT in the office sector. It can mean companies are cutting jobs and will be needing less office space. It can mean full companies going under and not needing any office space for that company. In this COVID pandemic recession, a technology type change affected heavily. The idea of having workers work from home and not needing office space, created a lack of demand for BXP's assets. The going plan is to have this pandemic behind us and to get workers back in the workplace. But in general, a lack of demand can arise from new technology and increases in unemployment.



Competition from other office, hotel, retail and residential companies:

A pretty basic risk for all companies is their competition. In the REIT sector, most of the goods (space provided) can be pretty similar, and it can end up being a price/costs game, unless the specific space works best for the company that would like to lease.

Oversupply or reduction of demand for offices and other retail:

As seen during the pandemic, a reduction in demand can be very possible if many if not most companies were following the WFH (working from home) model. On the other end, BXP can end up purchasing areas where there is no demand for the office space if they are not careful. BXP must adjust what they own by trying to assume what is needed by who, where.

**Changes in market rental rates and a potential for increased operating costs:**

Varying costs for things like taxes, insurance and utilities as well as market rental rates can affect BXP's income statement. This is something to consider if investing in most REITs.

Decline in financial condition of tenants:

If BXP rents out its office spaces to companies with a bad track record, or a destiny of failure, there can be room for conditions where the tenants just don't pay rent. This can be monitored with reviews of who they are actually leasing to. They can also have strict eviction regulations set in place, but in the professional workplace I believe having a place to make money is a priority and this doesn't happen too often.

Decreases in underlying value of their real estate:

Well, if the real estate Boston Properties owns falls in value from depreciation, or if a neighborhood where one of their properties resides changes in stature, the value of their assets may decrease. It can be hard to fight this risk, as buildings generally age poorly, but can be fought with regular inspections and maintenance. They can also keep an eye on social conditions of neighborhoods and buy or sell accordingly.

Works Cited

“Boston Properties Announces Fourth Quarter 2020 Results; Reports EPS of \$0.05 and FFO Per Share of \$1.37.” *Boston Properties, Inc.*, 26 Jan. 2021, ir.bostonproperties.com/news-releases/news-release-details/boston-properties-announces-fourth-quarter-2020-results-reports.

Boston Properties Bxp, www.bostonproperties.com/pages/sustainability.

“Boston Properties, Inc. (BXP) Stock Historical Prices & Data.” *Yahoo! Finance*, Yahoo!, 29 Mar. 2021, finance.yahoo.com/quote/BXP/history?period1=1228089600&period2=1616716800&interval=1mo&filter=history&frequency=1mo&includeAdjustedClose=true.

BXP Boston Properties, Inc. Stock Quote, finviz.com/quote.ashx?t=BXP.

Contributor Trefis Team Trefis. “Boston Properties Stock Has A 40% Upside.” *Nasdaq*, www.nasdaq.com/articles/boston-properties-stock-has-a-40-upside-2020-12-02.

Fernando, Jason. “Understanding the Compound Annual Growth Rate – CAGR.” *Investopedia*, Investopedia, 24 Mar. 2021, www.investopedia.com/terms/c/cagr.asp.

“2021 Outlook for REITs and Commercial Real Estate: Risk and Resilience.” *2021 REIT Outlook / Commercial Real Estate & the Economy | Nareit*, www.reit.com/data-research/research/nareit-research/2021-reit-outlook-economy-commercial-real-estate.

Boston Properties Bxp, www.bostonproperties.com/pages/properties.

Matt Frankel, CFP. “Investing in Office REITs: A Beginner's Guide.” *Millionacres*, Millionacres, 4 Feb. 2021, www.fool.com/millionacres/real-estate-investing/reits/reit-investing-101/investing-in-office-reits-a-beginners-guide/.

Matthew Frankel, CFP. “Why P/E Ratios Are Useless When Evaluating a REIT.” *The Motley Fool*, The Motley Fool, 18 June 2015, www.fool.com/investing/general/2015/06/18/why-pe-ratios-are-useless-when-evaluating-a-reit.aspx.

DiLallo, Matthew. “Where Will Vornado Realty Trust Be in 3 Years?” *Millionacres*, Millionacres, 22 Feb. 2021, www.fool.com/millionacres/real-estate-investing/articles/where-will-vornado-realty-trust-be-in-3-years/.

Are.com, www.are.com/global-properties.html.

Investopedia. “What Price-To-Earnings Ratio Is Average in the Real Estate Sector?” *Investopedia*, Investopedia, 29 Aug. 2020, www.investopedia.com/ask/answers/052815/what-pricetoearnings-ratio-average-real-estate-sector.asp.

Maverick, J.B. “What Is Considered a Good Price-To-Book Ratio?” *Investopedia*, Investopedia, 13 Dec. 2020, www.investopedia.com/ask/answers/010915/what-considered-good-price-book-ratio.asp.