

Third Quarter 2022 Investor Survey

ROI
+ 5,963
64%

Resilient Despite Rising Rates, Lower Confidence

BY CHRIS SONNE



Self-storage cap rates increased 6 bps in 2Q 2022 to an average of 4.99 percent, the first increase since 3Q 2018. Market participants, based on the Newmark Self-storage Investor Survey for 2Q 2022, expect cap rates to increase 25 bps or more by 1Q 2023. Continued inflation leading to increased interest rates has led to the rise. Uncertainty in macro-economic conditions has caused lower confidence in commercial real estate overall, but self-storage remains resilient and is considered a safe haven against both inflation and recession.

Cap rates for self-storage are near interest rates or approaching negative leverage. As a result, increases in cash flows and valuations are moderating. Yet, confidence in the sector remains strong with an abundance of capital looking to invest in the sector. As one long-time national owner said, "Where the hell else would you put your money?" Key performance indicators are shown in the table below.

Self-storage rental rates and occupancy levels are "normalizing," meaning growth has moderated to a more typical pace. Valuations are generally stable with moderate increases for single assets, but portfolio

demand remains robust. Due to ongoing supply chain challenges, new supply remains relatively low, so supply/demand factors remain near equilibrium.

The self-storage team at Newmark Valuation & Advisory surveyed market participants about a wide variety of data points, including the usual cap rate, yield rate, and growth rates. Survey participants include buyers, brokers, owners (small and large operators including REITs, national and regional owners), investors, lenders, and REIT analysts. Most interviews were conducted in person, over the telephone, or by electronic conferencing. Survey research interviews referenced in this report occurred primarily in the 2Q 2022. Additional information includes trade area size, absorption time, marketing time, profit on costs, optimism index, and other metrics. Over 50 market participants were interviewed, bolstered by anecdotal insights gained from a record number of calls with key market participants. Survey results are summarized and compared to 10 years of data in the Self-Storage Time Series – Survey Research table on the opposite page.

Segmentation by Investment Quality - 2Q 2022			
	Class A	Class B	Class C
Discount Rate (IRR)			
Range:	6.00% - 7.75%	6.50% - 8.25%	7.00% - 9.50%
Average:	6.70%	7.45%	8.00%
Capitalization Rate			
Range:	4.00% - 4.75%	4.50% - 5.25%	5.00% - 6.50%
Average:	4.61%	5.20%	5.50%
Terminal Capitalization Rate			
Range:	4.25% - 5.25%	4.75% - 5.75%	5.25% - 7.00%
Average:	4.99%	5.70%	6.10%

Source: Newmark Self Storage Investor Survey, 2Q 2022

Cap Rate Analytics

The current spread between 10-year Treasuries and self-storage cap rates can be a good benchmark and foreshadow of equity dividend or cash on cash returns (similar to a stock quarterly dividend). The following



Self Storage Time Series - Survey Research													
	2Q 2022	3Q 2021	1Q 2021	3Q 2020	3Q 2019	3Q 2018	3Q 2017	3Q 2016	2015	2014	2013	2012	2011
Trade Area (Miles)													
Range:	1.00 - 5.00	1.00 - 5.00	1.00 - 5.00	1.00 - 5.00	1.00 - 5.00	1.00 - 5.00	1.00 - 5.00	1.00 - 5.00	1.00 - 5.00	1.00 - 5.00	1.00 - 5.00	1.00 - 5.00	1.00 - 5.00
Average:	3.35	3.30	3.26	3.25	3.20	3.18	3.14	3.25	3.20	3.30	3.25	3.22	3.20
Change:	1.52%	1.23%	0.31%	1.56%	0.63%	1.27%	-3.38%	1.56%	-3.03%	1.54%	0.93%	0.63%	-
Demand (\$F per Person)													
Range:	3 - 9	3 - 9	2 - 8.5	2 - 8.5	2 - 8.5	2 - 8	2 - 8	2 - 8	1 - 8	1 - 8	1 - 8	1 - 8	1 - 8
Average:	7.9	7.7	7.4	7.3	7.5	7.1	6.9	7	7.1	7.1	7.35	7.31	7.15
Change:	2.60%	4.05%	1.37%	-2.67%	5.63%	2.90%	-1.43%	-1.41%	No Change	-3.40%	0.55%	2.24%	-
Capitalization Rate													
Range:	4.00% - 6.50%	4.00% - 6.50%	4.25% - 6.00%	4.50% - 6.50%	4.50% - 6.50%	4.50% - 6.50%	4.75% - 6.50%	4.90% - 6.00%	5.00% - 6.25%	5.25% - 6.50%	5.50% - 6.50%	6.25% - 6.50%	6.50% - 8.75%
Average:	4.99%	4.93%	5.37%	5.50%	5.60%	5.68%	5.60%	5.64%	5.74%	5.90%	6.25%	6.75%	7.30%
Change:	6	-44	-13	-10	-8	8	-4	-10	-16	-35	-50	-55	-
Absorption Time (Months)													
Range:	18 - 48 Months	18 - 48 Months	18 - 48 Months	18 - 36 Months	18 - 36 Months	18 - 36 Months	18 - 36 Months	18 - 36 Months	18 - 36 Months	18 - 36 Months	18 - 36 Months	20 - 40 Months	24 - 40 Months
Average:	30	32	34	36	32	30	29	27	28	28	30	33	36
Change:	-2.0	-2.0	-2.0	4.0	2.0	1.0	2.0	-1.0	No Change	-2.0	-3.0	-3.0	-
Marketing Time (Months)													
Range:	2 - 6 Months	2 - 6 Months	2 - 6 Months	2 - 6 Months	2 - 6 Months	2 - 6 Months	2 - 6 Months	2 - 6 Months	2 - 6 Months	2 - 6 Months	2 - 7 Months	3 - 6 Months	3 - 9 Months
Average:	4.5	4.3	4.0	6.0	4.4	4.2	3.7	4.0	3.5	3.0	3.0	3.0	4.0
Change:	0.2	0.3	-2.0	1.6	0.2	0.5	-0.3	0.5	0.5	No Change	No Change	-1.0	-
Profit (on Cost Only)													
Range:	20% - 35%	20% - 35%	15% - 35%	15% - 35%	15% - 50%	15% - 50%	15% - 50%	15% - 50%	10% - 25%	10% - 25%	10% - 25%	10% - 25%	10% - 20%
Average:	32.00%	30.00%	25.00%	26.00%	25.00%	24.00%	23.00%	25.00%	21.00%	21.00%	20.00%	17.50%	15.00%
Change:	6.67%	20.00%	-3.85%	4.00%	4.17%	4.35%	-8.00%	19.05%	No Change	5.00%	14.29%	16.67%	-
Optimism Index (1-10)													
Range:	7.00 - 10.00	7.00 - 10.00	6.50 - 10.00	5.00 - 9.00	5.00 - 9.00	5.00 - 9.00	5.00 - 9.00	5.00 - 9.00	3.00 - 9.00	3.00 - 9.00	3.00 - 9.00	3.00 - 10.00	3.00 - 9.00
Average:	8.8	8.74	8.2	7.7	7.5	7.1	6.9	8	8.1	8.1	7.5	7.25	7
Change:	0.69%	6.59%	6.49%	2.67%	5.63%	2.80%	-13.75%	-1.23%	No Change	8.00%	3.45%	3.57%	-
Market Conditions													
Under-supplied:	41%	37%	27%	25%	27%	28%	27%	39%	42%	42%	25%	20%	15%
Over-supplied:	21%	23%	28%	31%	33%	32%	28%	21%	20%	20%	30%	40%	50%
Equilibrium:	38%	40%	45%	44%	40%	40%	45%	40%	38%	38%	45%	40%	35%
Buy:	45%	55%	51%	44%	41%	37%	36%	43%	55%	55%	52%	47%	42%
Sell:	35%	35%	35%	40%	38%	42%	38%	24%	20%	20%	24%	35%	41%
Build:	20%	10%	14%	16%	20%	21%	26%	33%	25%	25%	24%	18%	17%
Discounted Cash Flow													
Usage:	93%	92%	90%	88%	86%	82%	81	75	70	70	61	52	41
Holding Period:	10 Years	10 Years	10 Years	10 Years	10 Years	10 Years	10 Years	10 Years	10 Years	10 Years	10 Years	10 Years	10 Years
Cost of Sales:	2.0%	1.9%	2.0%	2.0%	2.0%	2.0%	2.0%	1.8%	2.0%	2.0%	2.0%	2.8%	3.5%
Discount Rate (IRR)													
Range:	6.00% - 9.50%	6.00% - 9.50%	6.75% - 10.75%	6.50% - 11.00%	7.50% - 11.00%	7.50% - 11.00%	7.75% - 10.75%	7.75% - 10.75%	8.00% - 10.75%	8.00% - 11.00%	8.25% - 11.00%	9.00% - 11.50%	9.50% - 11.50%
Average:	7.22%	7.54%	8.39%	8.45%	8.55%	8.73%	8.75%	8.63%	8.75%	9.00%	9.25%	10.25%	10.50%
Change (Basis Points):	-32	-85	-6	-10	-18	-2	12	-12	-25	-25	-100	-25	-
Rental Growth Rate													
Range:	3.00% - 6.00%	3.00% - 6.00%	3.00% - 6.00%	3.00% - 6.00%	3.00% - 6.00%	3.00% - 6.00%	3.00% - 6.00%	3.00% - 6.00%	3.00% - 6.00%	3.00% - 6.00%	3.00% - 6.00%	3.00% - 6.00%	1.00% - 5.00%
Average:	3.50%	3.71%	3.50%	3.25%	3.40%	3.50%	3.50%	3.55%	3.60%	3.50%	3.25%	3.50%	3.25%
Change (Basis Points):	-21	21	25	-15	-10	No Change	-5	-5	10	25	-25	25	-
Expense Growth Rate													
Range:	2.00% - 5.00%	2.00% - 5.00%	2.00% - 5.00%	2.00% - 5.00%	2.00% - 5.00%	2.00% - 5.00%	2.00% - 5.00%	2.00% - 5.00%	2.00% - 5.00%	2.00% - 5.00%	2.00% - 5.00%	2.00% - 5.00%	2.00% - 5.00%
Average:	3.25%	3.15%	3.00%	3.05%	3.10%	3.00%	3.02%	3.01%	2.94%	3.00%	3.00%	3.25%	3.00%
Change (Basis Points):	10	15	-5	5	10	-2	1	7	-6	No Change	-25	25	-
Terminal Cap Rate													
Range:	4.25% - 7.00%	4.25% - 7.00%	4.75% - 8.75%	4.75% - 8.75%	4.75% - 8.75%	4.75% - 8.75%	5.00% - 8.30%	5.20% - 8.20%	5.25% - 8.25%	5.50% - 8.50%	6.00% - 8.50%	6.50% - 8.75%	7.00% - 9.00%
Average:	5.47%	5.33%	5.63%	5.85%	5.85%	5.92%	5.86%	5.88%	6.01%	6.15%	6.50%	7.00%	7.50%
Change (Basis Points):	14	-30	-22	0	-7	6	-2	-13	-14	-35	-50	-50	750
Spread to Cap Rate (Basis Points)	48	40	26	35	25	24	26	24	27	25	25	25	20

Compiled by Newmark

scenario is using current interest and LTV ratios to conclude at the average Investor Survey cap rate of 4.99 percent. It indicates an equity dividend of 1.95 percent. Historically, self-storage has been 2.75 percent to five percent or better (based on REIT stock dividends), suggesting equity requirements have declined as interest rates have increased. This scenario is typical in an inflationary environment. The Band of Investment is used as a tool of analysis, shown below.

Band of Investment	
Mortgage and Equity Assumptions	
Loan to Value Ratio	65%
Interest Rate	5.25%
Amortization (Years)	30
Mortgage Constant	6.63%
Equity Ratio	35%
Equity Dividend Rate	1.95%
Weighted Average of Mortgage Equity Requirements	
Mortgage Requirement	65% x 6.63% = 4.31%
Equity Requirement	35% x 1.95% = 0.68%
Indicated Capitalization Rate (Rounded)	4.99%
<i>Compiled by Newmark</i>	

The Federal Reserve has shown great determination to battle inflation with significant increases to the Federal Funds Rate. After the real-time scenario above, let's assume going forward the Fed will increase rates an additional 50 bps, or an interest rate of 5.75 percent. Using the same equity dividend rate of 1.95 percent, an implied increase to cap rate is 5.23 percent, or an increase of 24 bps due to the increase in interest rates. This corroborates concerns outlined by market participants that interest rates may increase 25 bps by 1Q 2023. Cap rates may not increase that much because the requirements of equity dividends may fall further.

Self-storage is a good hedge against inflation, and the R word for the sector is not recession but resistance (to recession). As a result, more equity is still seeking to store capital in self-storage than product available. The Band of Investment reflecting a 50-bps increase in interest rates is presented below.

Band of Investment	
Mortgage and Equity Assumptions	
Loan to Value Ratio	65%
Interest Rate	5.75%
Amortization (Years)	30
Mortgage Constant	7.00%
Equity Ratio	35%
Equity Dividend Rate	1.95%
Weighted Average of Mortgage Equity Requirements	
Mortgage Requirement	65% x 7.00% = 4.55%
Equity Requirement	35% x 1.95% = 0.68%
Indicated Capitalization Rate (Rounded)	5.23%
<i>Compiled by Newmark</i>	

The spread between 10-year Treasuries and the 2Q Investor Survey is 202 bps or well below the 23-year average of 389 bps and the prior low of 254 bps in 2006. Over 23 years, the spread has ranged from 254 to 531 bps. The data is presented graphically in the Treasury Interest Rates & Self Storage Cap Rates Chart on the opposite page.

Sophistication Of The Asset Class

Comparatively high returns have led to an increase capital flow to the sector. The appeal of self-storage over other types of real estate investments is that costs tend to be lower and operating results demand a lower yield. For example, the breakeven occupancy rate for a self-storage facility is approximately 40 percent to 45 percent, as compared to 60 percent or more for apartments. Consequently, self-storage facilities tend to hold value better and recover faster than other assets when real estate markets sour. In addition, self-storage had the highest total annual returns over 25-year averages in an analysis of five different property sectors, according to NAREIT data of self-storage REIT stocks. Self-storage continues to offer steady returns, even in uncertain macro-economic conditions, see Analysis table on opposite page.

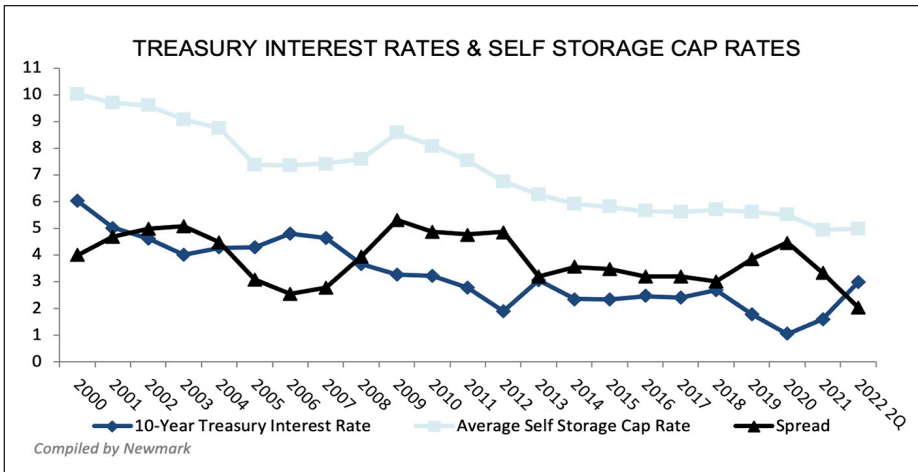
These characteristics were recognized by Wall Street REITs beginning in 1995. In the year 2000, REITs became eligible for Standard and Poor's indexes, increasing investors' exposure and lending credibility to the industry. Self-storage returns consistently lead the market yet have the lowest default rate of all asset classes. These trends demonstrate that institutional investors are seeking self-storage properties as a viable core investment vehicle.

The Economy

The concerns of macro-economic conditions by market participants are many and unprecedented. As an example, current econometric models have never had to account for so many variables at the same time:

- Inflation
- Recession
- Pandemic
- Deficit
- Debt
- Social and political unrest domestically
- War in Europe (geo-political)

The Federal Reserve is fighting inflation by raising interest rates; that often leads to a recession. While GDP data indicates a recession now, high job growth has caused some economists to believe the economy is not in a recession. Other economists argue that high job growth is a function of pent-up demand as a result of the pandemic, and not a real-time capture of economic activity now. Even bank CEOs conflict, with one major



the prior 10 years. Many market players note the resiliency of the sector has improved market perceptions of self-storage. Similarly, the buy strategy is also high, reflecting a desire to expand or enter the sector.

Marketing Time – Sometimes called exposure time, it is the time a property is listed on the market to the date of close. The total time varies widely, but it is interesting to note a slight increase to the estimate. Brokers report longer closing periods, primarily due to rising interest rates. Re-trades are beginning to occur, but generally these are less than five percent of the purchase price.

Growth Rates – Rental rates are forecast by survey respondents to grow at 3.5 percent, compared to 3.25 percent for expenses. The variance is a function of confidence in ECRIs (existing customer rate increases) and the ability to manage operating expenses, even in an inflationary environment. Management expenses are being operated with reductions to on-site and off-site management. On-site management is completed with a reduced hours strategy, having the office closed during slow customer periods. Off-site management expenses have been declining due to rising competition of third-party management companies. Calculated as a ratio of collected income

Analysis - Calculated Based on NAREIT Data					
5 yr Avg. Return 2016 - 2021	5.15	28.20	5.53	16.40	22.54
5 yr Standard Deviation	19.58	23.76	25.83	27.04	28.79
10 yr Avg. Return 2011 - 2021	8.48	23.40	8.94	14.17	20.61
10 yr Standard Deviation	15.50	19.36	20.48	22.20	23.73
15 yr Avg. Return 2006 - 2021	5.20	12.86	6.54	12.26	17.04
15 yr Standard Deviation	20.60	28.08	24.42	24.94	23.23
20 yr Avg. Return 2001 - 2021	9.34	16.09	12.35	14.63	19.58
20 yr Standard Deviation	21.20	25.27	24.25	23.46	21.80
25 yr Avg. Return 1996 - 2021	9.79	14.76	11.82	14.19	17.50
25 yr Standard Deviation	20.78	23.57	22.82	21.95	21.65

Source data NAREIT / Compiled by Newmark

bank declaring a hurricane is coming, while another major bank declares we are not in a recession. These perplexing and conflicting data points lead to uncertainty, and that leads to lower confidence in equities and commercial real estate. Nevertheless, self-storage perseveres and continues to outperform as shown by the data.

Other Metrics – Investor Survey

Demand – Since 1Q 2021, demand has increased approximately five percent to 7.9 square feet per capita according to the Investor Survey. A surge in demand was experienced during the pandemic, but there has been debate about the longevity of this “new” demand. While national occupancy rates have declined slightly by 1 to 2 bps in 2022, this has been physical occupancy only while economic occupancy has continued to rise.

Market Conditions – An increase in estimates that the market is under-supplied by market participants is largely

a function of limited new supply. Inflation to costs, uncertainty regarding the timing of labor and materials, and rising interest rates have decreased the number of projects that actually get developed from the planning stages.

Since 1Q 2021, demand has increased approximately five percent to 7.9 square feet per capita according to the Investor Survey.

As a result, the survey indicates the average absorption time from certificate of occupancy or completion to economic stabilization has decreased to 30 months. Most new projects are now experiencing fast physical occupancy (12 to 18 months), but economic occupancy lags by six months to 18 months due to lower rental rates offered during absorption and concessions.

Optimism Index – The Index is an all-time high of 8.8 compared to estimates

or effective gross income, the ratios have been declining as collected income has been rising.

Even property tax rate increases are beginning to slow, perhaps a very thin silver lining of slower economic conditions. Estimates are for significant increases in tax appeals in 2023. And advertising expense increases have moderated, a function of high occupancy in the sector. Altogether, the result is forecast expense increases significantly

below inflation and below forecasts of rental growth rate increases. However, portfolio underwriting is modeling less tax risk than single assets to make deals pencil.

Discounted Cash Flow Modeling

Institutional investment in the sector is creating a change in discounted cash flow modeling. Self-storage is primarily associated with cash flow, but the way that cash flow is analyzed is becoming like other core sectors of commercial real estate. As an example, the variance between a self-storage cap rate and a discount rate was often a function of the delta or rate of change to net operating income over the holding period. This can be expressed mathematically as follows:

$$\text{Cap Rate} + \text{NOI delta} = \text{Discount Rate (IRR)}$$

Exit cap rates were generally only 25 bps higher than the overall cap rate due to low capital improvement requirements and steady cash flow during the projected holding period (typically 10 years). This resulted in a very balanced cash flow, with approximately 55 percent of value associated with the cash flow and 45 percent

associated with appreciation. In appreciating markets, more emphasis is placed to the future or the reversion re-sale at the end of the holding period.

Now, particularly for portfolios, we are seeing compressed yield rates at a delta from the cap rate of about half the growth rate of the net operating income. However, this modeling also includes significant increases to the terminal or exit cap rate of up to 5 bps per year of the holding period. Such revised modeling is more similar to other real estate sectors, and investors like the ability to compare similar modeling among several asset classes of commercial real estate.

Self-storage appreciation and cash flow increases have moderated, but investors remain confident in the sector ...

Interestingly, valuation in both models does not change. In other words, the result of the present value is the same, derived with different metrics. The compressed discount rate is offset by the increase to the terminal cap rate. The going in or direct cap rate doesn't change in either model, for example. Both models for the same property with the same valuation conclusion are presented in the following two tables at the left.

Conclusion

Self-storage appreciation and cash flow increases have moderated, but investors remain confident in the sector because of resiliency to dynamic economic conditions. As an example, self-storage REITs (Real Estate Investment Trusts) or publicly traded companies, have shown a year-to-date increase of 12.8 percent as of Aug. 15, 2022, compared to the DJIA declining 4.9 percent. Equities investors are taking a more defensive stance, looking for stable assets with relatively high quarterly dividends as exemplified by self-storage. Owners report a "return to normal" in terms of operations, but self-storage continues to outperform other core sectors of commercial real estate over the long run.

Cap rates are forecast to increase, along with discount rates and exit cap rates. This is primarily a reaction to rising interest rates and macro-economic concerns that are exogenous to self-storage. Overall, the Investor Survey indicated market sentiment for self-storage is that confidence remains strong during uncertain economic conditions although performance parameters are moderating.

Chris Sonne is the executive vice president of the Newmark Valuation & Advisory Group.

Valuation Matrix			
Exit Cap.	Internal Rate of Return		
	7.75%	8.00%	8.25%
5.00%	\$10,179,688	\$9,988,560	\$9,801,904
5.25%	\$9,875,817	\$9,691,650	\$9,511,780
5.50%	\$9,599,570	\$9,421,732	\$9,248,031

General Cash Flow Assumptions	
Valuation Scenario:	As Is
Cash Flow Start Date:	2/4/2021
Investment Holding Period:	10 Years
Analysis Projection Period:	Years 1 - 11
Indicated Market Value (Rounded):	\$9,700,000
Cost of Sale	2.00%
Percentage Residual	61.27%
Indicated Market Value (\$/SF)	\$202.59

Compiled by Newmark

Valuation Matrix			
Exit Cap.	Internal Rate of Return		
	7.30%	7.55%	7.80%
5.45%	\$10,182,068	\$9,990,982	\$9,804,374
5.70%	\$9,907,539	\$9,722,768	\$9,542,315
5.95%	\$9,656,079	\$9,477,093	\$9,302,278

General Cash Flow Assumptions	
Valuation Scenario:	As Is
Cash Flow Start Date:	2/4/2021
Investment Holding Period:	10 Years
Analysis Projection Period:	Years 1 - 11
Indicated Market Value (Rounded):	\$9,700,000
Cost of Sale	2.00%
Percentage Residual	60.14%
Indicated Market Value (\$/SF)	\$202.59

Compiled by Newmark