Warehouse giant Prologis increases further its U.S. presence in a $23B deal

Nico Enzmann

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"We're gaining high-quality properties and more than 500 new customers in key markets. These new customers will be able to tap into our Essentials platform, which delivers end-to-end solutions to address critical supply chain challenges and contributes to their broader sustainability efforts." – Hamid R. Moghadam, Prologis Co-founder, CEO, and Chairman

Deal Overview

- **Acquirer**: Prologis Inc. (NYSE: PLD)
- **Target**: Duke Realty Corp. (NYSE: DRE)
- **Industry**: Industrial real estate
- **Transaction amount**: $23B
- **Announcement date:** June 13, 2022
- **Closing date:** October 3, 2022
- **Acquirer Advisors**: Citigroup Inc. / Goldman Sachs & Co. LLC
- **Target Advisor**: Morgan Stanley & Co. LLC / JPMorgan Chase & Co

Prologis, S&P 500 member No.75, is an industrial real estate investment trust (REIT) strongly focusing on markets with high barriers to entry and high growth. A REIT is a type of company that owns and operates income-generating real estate and has the particular requirement to distribute at least 90% of its taxable income to shareholders in the form of dividends. Previously, this type of company was only allowed to own real estate, which delayed its growth. Nowadays, REITs are permitted to provide customary services for property, such as operating and managing the owned properties in addition to just owning real estate. Prologis owns approximately 1 billion square feet of properties and development projects in 19 countries. Prologis' M&A history clearly demonstrates its ability to integrate new assets into the business. The acquisition of Duke Realty is Prologis' largest transaction during the last seven years, following the $13 billion acquisition of Liberty in 2020, a REIT active in industrial properties, and the $8.5 billion purchase of DCT Industrial Trust back in 2018, a logistics real estate company focusing on bulk distribution.

The acquisition of Duke Realty will add nearly 550 properties and 150 million square feet of space in 19 major U.S. markets to Prologis' 1-billion-square-foot portfolio. Over 500 new customers are expected to be acquired through the transaction. After Prologis' initial exchange ratio offers of 0.465 and 0.466, which Duke Realty said weren't attractive enough, they finally agreed that Prologis would exchange 0.475 of its shares for each Duke share. While there are no changes to Prologis' executive management team, Duke is set to receive one seat on the Prologis board of directors. Furthermore, when a REIT is as big as Prologis has become in the last years, only a limited number of strategic transactions can enable them to grow and scale as they have done in the previous few years. The underlying rationale seems to be the expansion of Prologis' portfolio and especially the increase of its presence in key industrial markets in the U.S. As land is becoming increasingly limited in some key industrial regions, acquiring a company already owning land might be one of the few potential solutions to enable further growth. The combined portfolio brings Prologis to the position of a truly dominant force in the U.S. market.

Company overview – Prologis Inc.

Co-founded in 1983 by Hamid R. Moghadam, current CEO, and Chairman, Prologis started making investments in offices, industrial buildings, and community shopping centers. Over the years, it shifted its strategy exclusively towards industrial properties in targeted geographies. This strategic change is the outcome of developing industrial real estate's key drivers, such as consumption, trade, supply chain reconfiguration, and especially recently, e-commerce, all of which are on a rising trend. Although its international presence has increased significantly over the years, for example, through the launch of its international expansion program in 2002, focusing on trade-centric locations in Mexico, Europe, and Asia, there has always been a strong focus on the U.S.

Today, over $2.2 trillion of goods flow through Prologis' logistics facilities every year around the world. This includes critical goods people rely on daily, such as food or medicine. Online retailers, delivery companies, and even the U.S. Government are among the company's largest clients.

Prologis' largest customers, based on net effective rent (NER)

Top Customers	% of NER	Occupied Sq. Ft.*
1. Amazon	7.0	24
2. FedEx	2.1	7
3. Home Depot	1.9	9
4. Geodis	1.1	5
5. Walmart	1.0	4
6. U.S. Government	0.8	2
7. UPS	0.8	4
8. GXO	0.7	4
9. DSV Panalpina	0.7	2
10. DHL	0.6	3

Figure 1: As of December 31, 2021. *in square feet million. Source: Prologis (2022).

The NER is computed by dividing the lease's total gross rent by the number of months, thus including any discounts or promotions.

Company overview – Duke Realty Corp.

Duke Realty (REIT) was founded in 1972 by John Rosebrough, Phil Duke, and John Wynne with a modest capital of $40'000. The company became public through an IPO on the New York Stock Exchange in 1993 by raising $310 million. Headquartered in Indianapolis, Duke previously owned and operated both office and industrial properties but made the strategic decision to narrow its focus on the industrial real estate in U.S. cities that are key marketplaces for logistics, mainly because of the stronger growth opportunity it saw in this market. Prior to acquisition, Duke was a leading domestic-only (U.S.), pure-play industrial REIT. Next to ownership and development, it also provides various real estate services such as property management, maintenance, or leasing.

In addition to the owned properties on over 150 million square feet, Duke also owns 11 million square feet of in-progress development and 1'228 acres of land that is both owned and under option with a build-out of about 21 million square feet. Contrary to Prologis, which is active on an international level, Duke focuses only on 19 key markets in the U.S.

Duke Realty's operating portfolio, based on annualized Q1 2022 net operating income (NOI)

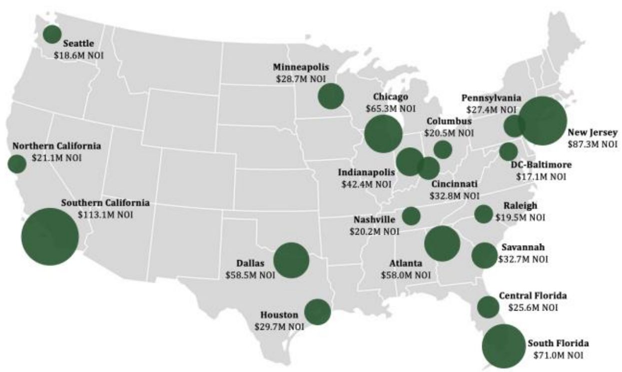

Figure 2: As of March 31, 2022, in million USD. Source: Prologis (2022).

State of the Industry – Industrial Real Estate

Before the pandemic, the industrial market in the U.S. had experienced positive absorption for 40 consecutive quarters, meaning more space was being leased than what was vacated in the market over this time frame, and the prospect for further stable growth was favourable. The last two years, however, have been rather unpredictable and unprecedented for the industrial market. The pandemic led to consumer behavior shifts across various retail channels, which led to significant inflation and increased the pressure on the U.S. industry since there was just insufficient space to meet the occupiers' needs.

In the last century, the need for industrial properties, such as warehouses, distribution centers, or manufacturing facilities has become less linked to traditional drivers such as GDP or manufacturing output and instead aligned more and more with consumer spending. A significant driver of this change is e-commerce.

E-commerce spending and its share of total retail sales in the U.S.

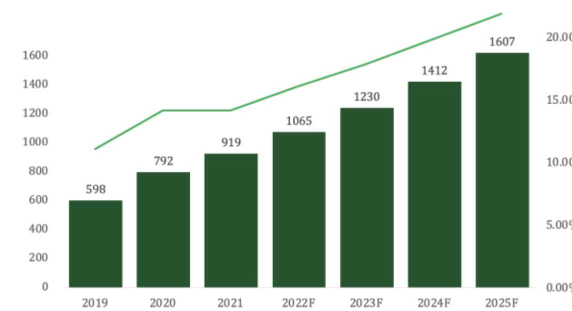

Figure 3: As of October 2021, in billion USD. Source: eMarketer (2021).

The fulfillment of e-commerce transactions requires up to three times the amount of industrial space needed for physical retail, partially driven by the increased reverse logistics. While it is certain that the pandemic was a massive driver for e-commerce, double-digit annual growth in sales is expected to continue to drive the industry. Furthermore, as larger REITs have a cost-of-capital advantage over the smaller ones, a continuing trend towards consolidation of the industrial real estate sector can be expected. Prologis' acquisition history or the recent $7.6 billion acquisition of PS Business Parks by the Blackstone Group are examples of this trend.

Deal Structure

The transaction was an all-stock acquisition by Prologis of Duke Realty at a fixed exchange ratio of 0.475 shares of Prologis common stock for one Duke share. Including the assumption of debt, the transaction value amounted to approximately $23 billion.

As a result of REITs' operations being distinctive from those of typical companies, conventional valuation techniques are not applicable. REITs buy properties based on projected cash flows over the assets' expected lifetimes, and not on earnings or past book values. Thus, we decided to value the target company by running a comparable company analysis based on funds from operations (FFO) and adjusted funds from operations (AFFO). The calculation of FFO involves adding depreciation and amortization back to the net income of a company and subtracting its capital gains on the sale of properties. AFFO is based on FFO but is preferred because it considers expenses, thus providing a more realistic assessment of the REIT's current values and dividend-paying capacity. Although there is no single measure for its calculation, the formula would be something along the lines of the following:

$$AFFO = FFO + RI - capex - RMA$$

Where:

$RI = rent\ increases$

$RMA = routine\ maintenance\ amounts$

The entire set of peer companies is composed of publicly listed U.S. REITs focusing on different sectors such as industrial, retail, office, residential, healthcare, or specialty. Since P/FFO and P/AFFO multiples sometimes vary significantly between operating sectors, we decided also to analyze a specific subset solely composed of U.S. REITs operating in the industrial sector. While PS Business Parks would have been a suitable comparable company, we decided not to include it since it has recently been acquired by Blackstone. Due to a lack of forward estimates for certain comparable companies, we decided to use trailing twelve months (TTM) financial data.

Comparable company analysis, Duke Realty

				Financial Data TTM				Valuation	
Company Name	Price ($/share)	Market Cap ($bn)	EV ($bn)	FFO ($m)	AFFO ($m)	NOI ($m)	EBITDA ($m)	P/FFO (x)	P/AFFO (x)
LXP Industrial	10.84*	3.07	4.55	200.87	202.20	265.58	260.79	15.28x	15.18x
First Industrial Realty Trust	49.59*	6.55	8.33	255.96	199.70	345.00	310.40	25.59x	32.80x
Rexford Industrial Realty	61.12*	10.39	12.02	253.59	194.60	344.01	295.50	40.97x	53.39x
Terreno Realty	57.70*	4.36	4.97	120.81	85.33	165.69	138.55	36.09x	51.10x
STAG Industrial	32.09*	5.80	8.10	336.94	293.80	454.20	402.70	17.21x	19.74x
25th percentile								17.21x	19.74x
Median subset								25.59x	32.80x
75th percentile								36.09x	51.10x
National Retail Properties (Retail)	42.32*	7.40	11.14	467.80	534.80	653.20	694.85	15.82x	13.84x
Kilroy Realty (Office)	54.38*	6.35	10.30	462.30	357.20	688.70	595.20	13.74x	17.78x
Equity Residential (Residential)	72.25*	27.15	36.04	1150.60	1161.40	1613.40	1458.70	23.60x	23.38x
Physicians Realty Trust (Healthcare)	17.94*	4.05	6.09	228.40	219.00	333.08	282.50	17.73x	18.49x
SBA Communications (Specialty)	325.53*	35.11	47.51	966.70	1193.10	1763.40	1544.80	36.32x	29.43x
Average entire set								24.24x	27.51x
Median entire set								20.66x	21.56x
Duke Realty (announcement)		**25.60**		**632.62**	**589.00**	**737.00**	**706.00**	**40.47x**	**43.46x**
Duke Realty (market)	49.78*	19.33	22.90	632.62	589.00	737.00	706.00	30.56x	32.82x
Duke Realty (closing)		**23.00**		**632.62**	**589.00**	**737.00**	**706.00**	**36.36x**	**39.05x**
Duke Realty (market)	48.20**	18.74	22.51	632.62	589.00	737.00	706.00	29.62x	31.82x

*share prices correspond to June 10, 2022

**share price corresponds to October 3, 2022

Figure 4: Source: FactSet (2023).

The 0.475x ratio final offer represents an 18.99% premium over Duke Realty's pre-announcement share price, which is within a reasonable range. Comparing the final offer P/FFO and P/AFFO multiples to the median of the industrial sector subset, we notice that it is significantly overvalued. According to our analysis, the target price for Duke Realty based on the subset's P/AFFO median is around $19 billion. One of the key arguments for the higher price could be the strengthened market share. Due to its size, only a limited number of industrial REITs enable Prologis' further development. The price could therefore be justified for the company, especially considering that they have been trying to acquire Duke for almost a year and have increased their initial offer twice. In fact, the acquisition makes Prologis the world's largest REIT according to market capitalization. Moreover, the further expected growth of e-commerce, which is a crucial driver of Prologis' product demand, could also be a possible argument.

Potential Risks & Upsides

The deal comes at an interesting time, given that REITs stock prices have sharply decreased the months before the deal's announcement, predominantly driven by Amazon's announcement that they had more warehouse space than they actually needed. Especially when considering that Amazon is Prologis' biggest customer and generates 7.0% of the company's NER. Thus, questioning if the acquisition occurs at the right time is legitimate.

iShares U.S. REIT ETF performance, April 2022 – July 2022

Figure 5: As of February 2023, in USD. Source: FactSet (2023).

However, the market may not be affected as much as investors anticipate, though, as vacancies are at record low levels in the industrial real estate sector and demand from other clients is still high. Furthermore, the company has not deviated from its determination to purchase its rival and, by doing so, expresses its confidence in both the long-term benefits of this transaction and the underlying principles of the industrial real estate market. Otherwise, it undoubtedly would have waited until the bottom of the cycle to purchase Duke.

Duke's portfolio can be seen as highly complementary to some of Prologis' key markets in the U.S. In fact, Prologis states that it aims to hold 94% of Duke's pre-transaction portfolio. On top of the 557 newly acquired customers, the buyer is also able to reinforce over 230 customer relationships through the transaction. Prologis' strengthened market share in those regions is a key opportunity. The newly onboarded customers will receive access to Prologis' Essentials service, which provides both sustainability-related and supply-chain logistics solutions to tenants. This innovative solution brings Prologis ahead of its competitors. It is especially interesting for customers who leased properties from both Prologis and Duke, as the service will now be integrated into all properties. Prior to the acquisition, Duke's renewable energy equipment assets were limited. Prologis, however, pursues intensive environmental sustainability goals and reduces its environmental footprint by, for example, installing solar panels on a majority of its properties' roofs. Given the current ESG developments, this could have a significant positive impact on their stock performance. Thus, Duke's assets are not only to be perceived as complements to the acquirer's portfolio, but they can also highly benefit from Prologis' knowledge regarding renewable energy enhancement.