

W U T I S



Equity Research Division

Prologis

Logistical Real Estate

Target Price: \$ 176.8

Current Price: \$ 153.3

Upside Potential: 15.3%

Recommendation: BUY

Investment Horizon: 1 Year

Vienna, 28th of January 2022

Team - Overview

Equity Research – Team Prologis



**Lukas
Likar**

Director

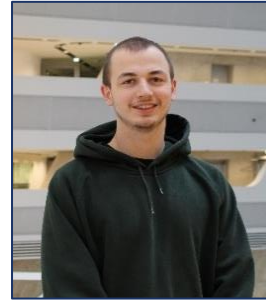
- Task distribution
- Story guideline



**Gabriela
Ciolacu**

Associate

- Industry Analysis
- Peer Benchmarking
- Competitors



**Gabriel
Köck**

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- Valuation



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**Arthur
Kaspar**

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- Business Model



**Artemii
Korzhevskiy**

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- Valuation



**Nevena
Vujovic**

Analyst

- Business Model

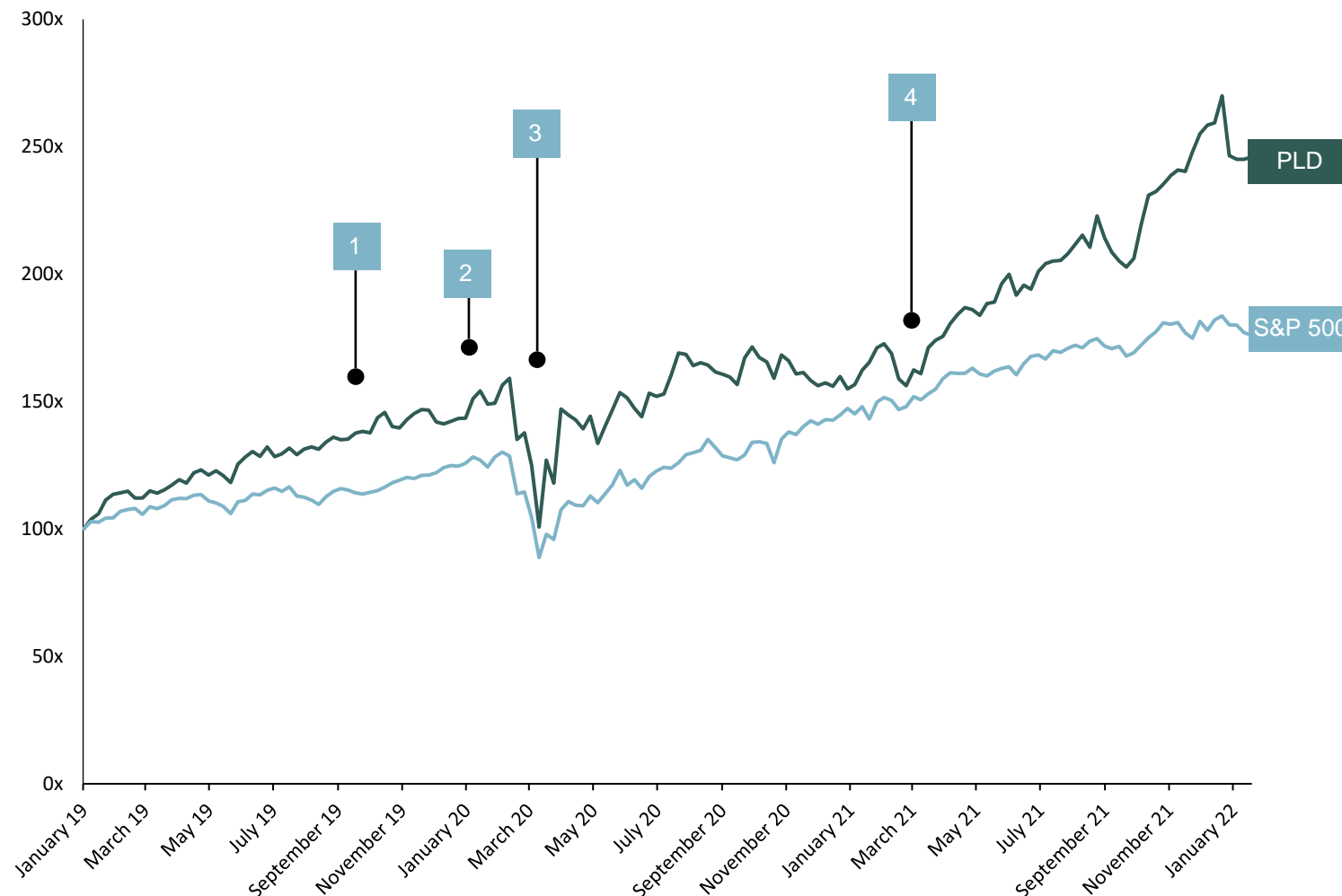


- MSc. (WU) – 3rd Sem.
- MSc. (WU)-1st Sem.
- BSc. (WU) – 3rd Sem.
- MSc. (UniVie)- 3rd Sem.
- BSc. (WU) – 3rd Sem.
- MSc. (WU) – 1st Sem.
- BSc. (WU) – 5th Sem.

1	Investment Thesis
2	Business description
3	Industry overview
4	Competitors
5	Financials
6	Valuation
7	Risks
8	Appendix

Share Price Performance

Prologis outperformed the broad market especially post COVID-19 outbreak



Share Price – Major Events

- [1] October 2019 (+6.6%) – Prologis revised earnings guidance for the third quarter of fiscal year 2019. For this period, the company adjusted earnings per diluted share of \$2.65 to \$2.69 compared to \$2.38 to \$2.46
- [2] December 2019 (+5.9%) – Prologis expands China development venture to USD 3.5 Billion and announces the formation of USD 1.7 billion China open end fund. The Fund has raised RMB 3.1 billion (approx. USD 445 million) and will acquire the existing portfolio of assets from Prologis China Logistics Venture 1 of approximately approx. 22.0 million square feet with a fair value of approximately RMB 12.3 billion (approx. USD 1.7 billion)
- [3] March 2020 (-22.8%) – Impact of the COVID-19 pandemic – Prologis authorized a buyback plan and announces a shelf registration
- [4] February 2021 (-7.6%) – Prologis announced the closing of approximately \$2.0 billion of senior unsecured notes. The financing included the issuance of \$1.0 billion USD of senior unsecured notes

Key investment highlights



1

Prologis' **irreplaceable portfolio** of over one billion square feet of property in **high-density urban locations** capitalizes on the population growth and increased flow of goods

2

Favorable market conditions driven by **strong demand** for warehouses due to rising e-commerce presence create market opportunities with **high growth potential**

3

Add-on services such as last-mile and PV plants **provide additional edge** against competitors and innovative value for their customer and the environment

4

Broad range of **blue-chip customers** present the biggest client share of the company, thus, making it **less vulnerable against weak market conditions**

5

Industry features, mainly, **capital intensity, low liquidity, regulations and vulnerability to business cycles** ceil further business expansion

6

Land shortage, inflationary fears and labor market fluctuations put pressure on industry growth opportunities



BUSINESS DESCRIPTION

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PROLOGIS

Company Overview I

Prologis being a critical Waypoint for the Global Economy

Company Description

- Prologis, Inc. is a **real estate investment trust (REIT)** that acquires, develops and maintains **the largest collection of logistics real estate** in the world.
- The company was formed through the **merger of AMB Property Corporation and ProLogis** in June 2011



Founded in **1983**



Head-quartered in **San Francisco**



5,800 customers



850k employees under Prologis' roofs



2.5% of the World's GDP flows through its distribution centers

Financials

US mn	2021	2020	2019	2018
Revenue	4,759	4,438	3,330	2,804
Revenue Growth (%)	7%	33%	19%	7%
EBIT	3,207	2,119	1,850	1,688
EBIT Margin (%)	67.4%	47.7%	55.5%	60.2%
Net Income	2,934	1,473	1,566	1,643
Debt/Assets	0.30x	0.30x	0.30x	0.29x

Management team



H R. MOGHADAM

Co-Founder, Chairman & Chief Executive Officer (Since 2011)

- Co-founded the company's predecessor, AMB Property Corporation



THOMAS S. OLINGER

Chief Financial Officer (Since 2012)

- From 2007 to 2011, served as AMB's chief financial officer



EUGENE F. REILLY

Chief Investment Officer (Since 2019)

- Has three decades of experience in real estate investment

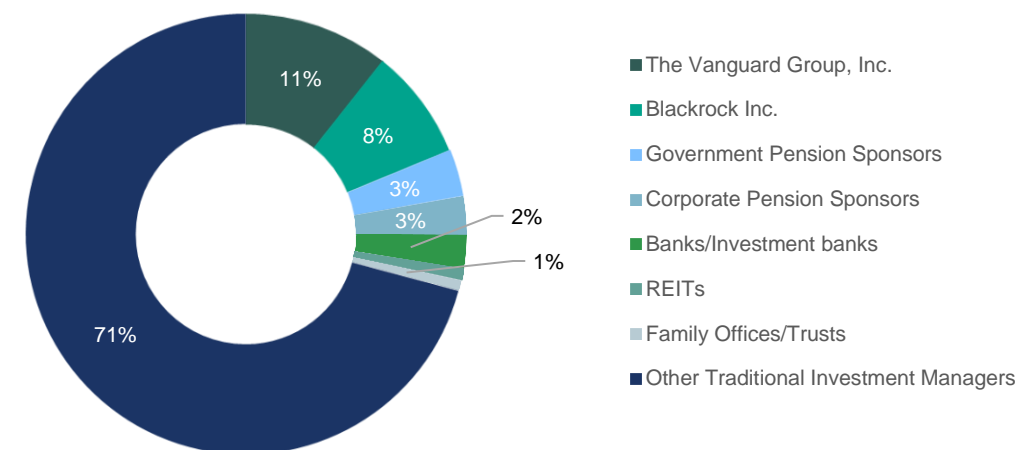


GARY E. ANDERSON

Chief Operating Officer (Since 2019)

- Prologis' head of global operations until the merger with AMB

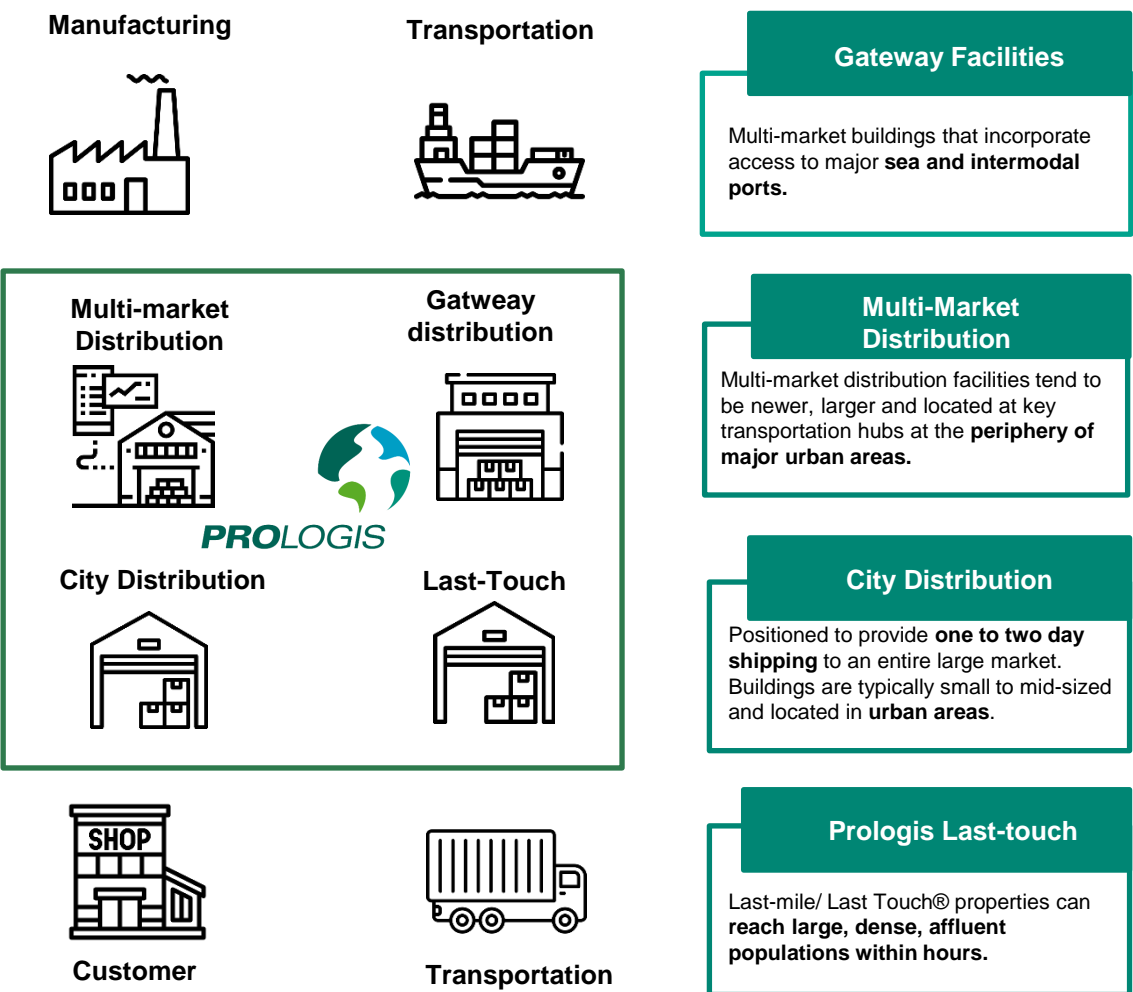
Shareholder Structure



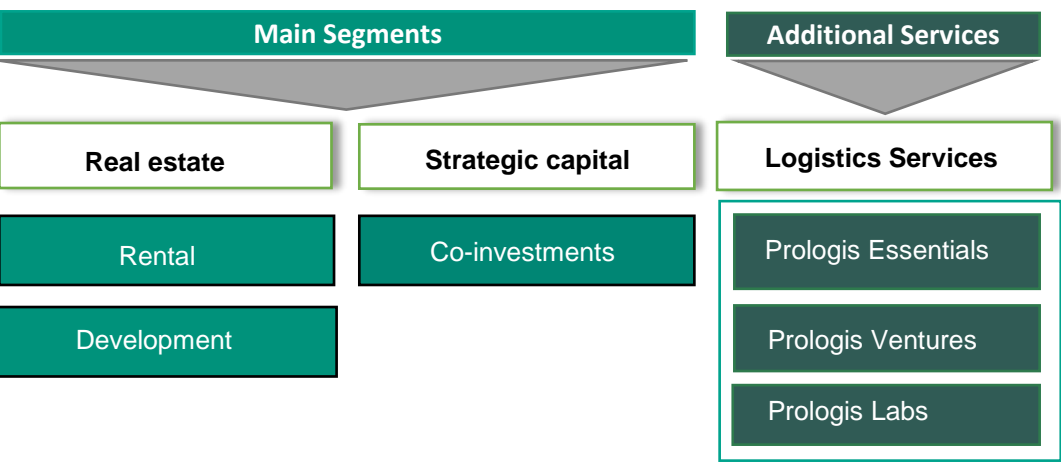
Business model

Prologis as an utterly important step in the supply chain

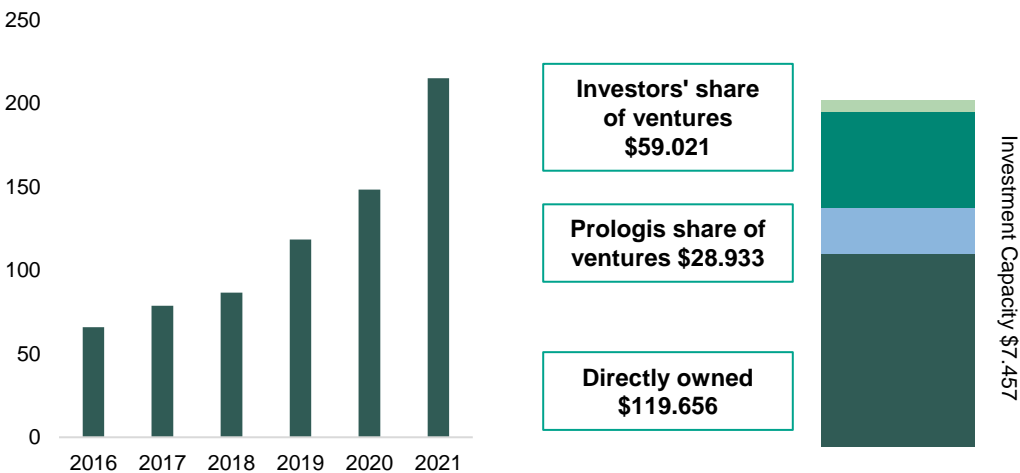
Real estate offering



Segments

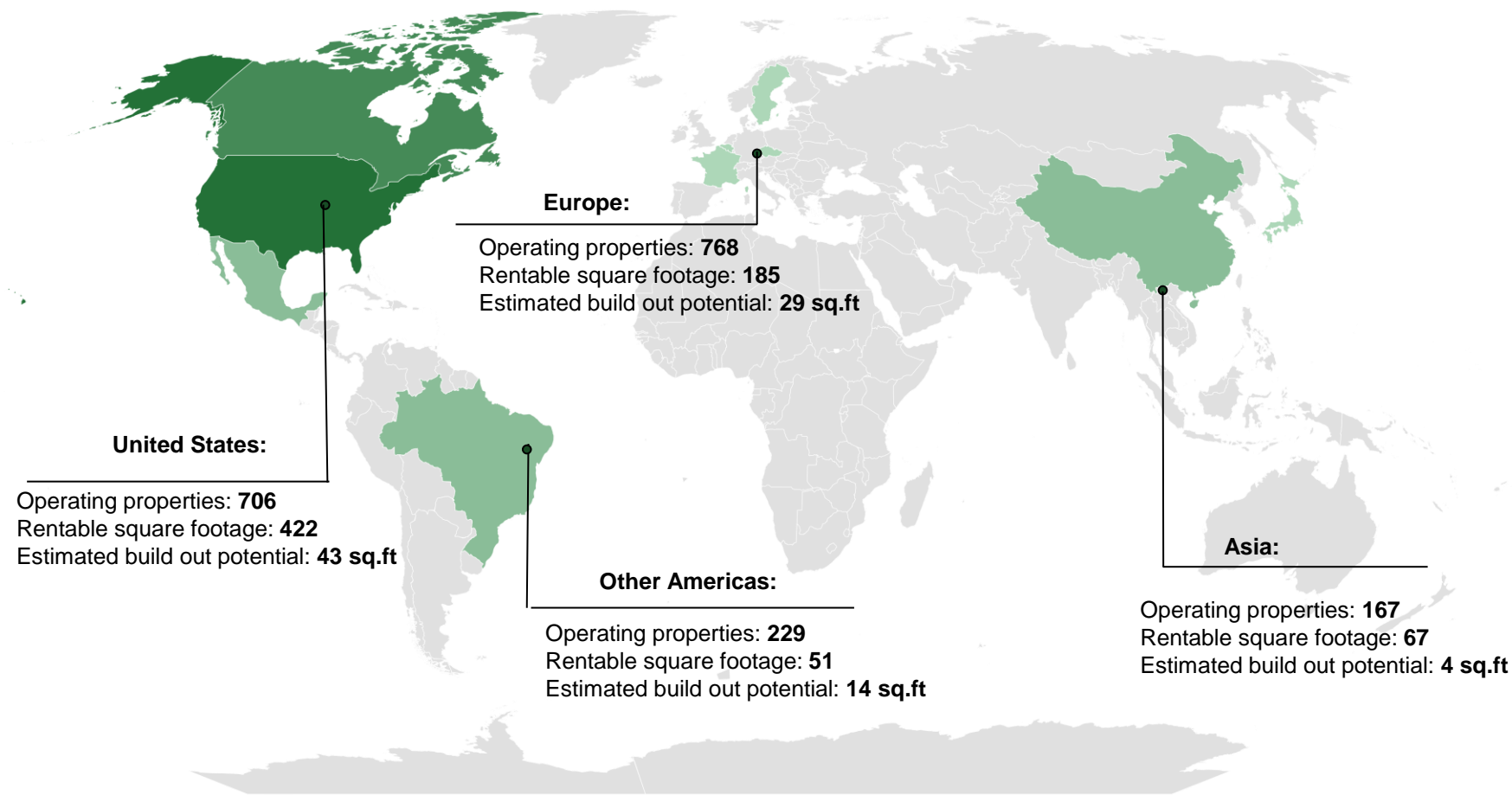


Strategic Capital - Prologis' Operated Assets (in billion USD)

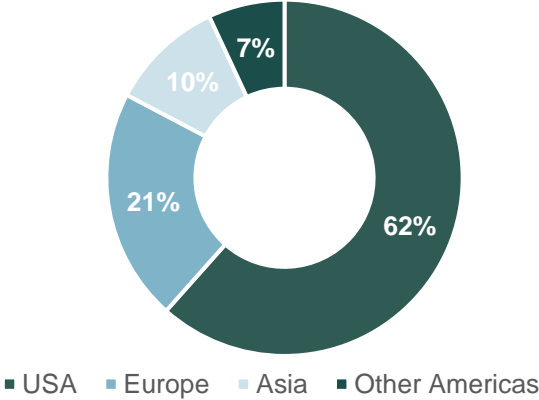


Further expansion into the Chinese market as a current strategic goal

Global presence



Prologis RE portfolio in MSF after region



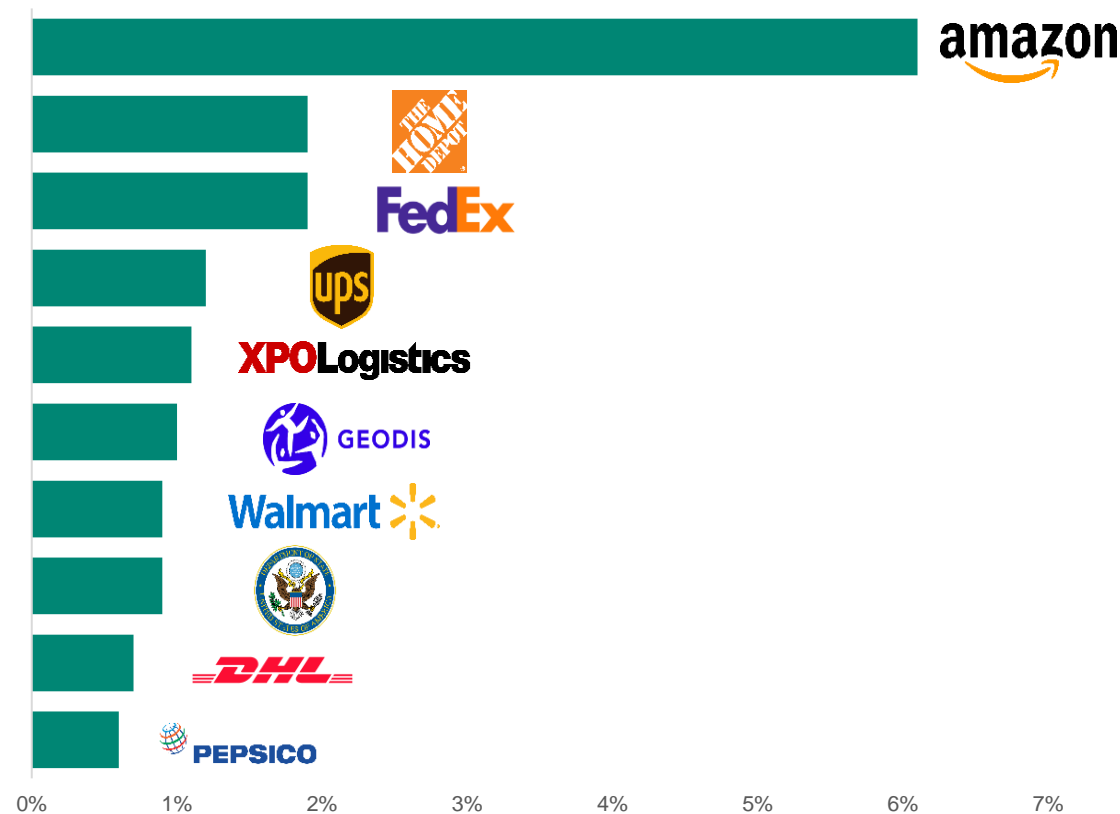
China expansion strategy

- 2003 - Entry into the China market
- 2007 – Selling all China operations
- 2019 - expansion in China and investing more than US\$3.5 billion.
- 2020 - China total holdings include 5.1 million square meters with 41 logistics centers in 22 cities around the country.

Customers

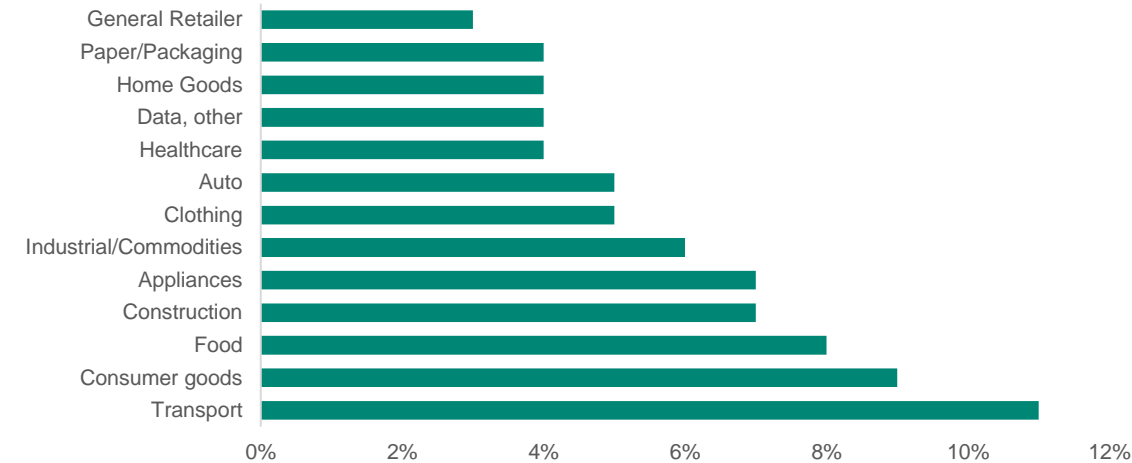
Most leases stated to expire in the upcoming year

NER (%) of Prologis' Customers



Net Effective Rent (NER), is a measure of the expected income from a tenant, seen mostly in commercial real estate. It is the net present value of all the rental payments over the period of the lease.

Types of Goods in Prologis' Warehouse



Lease Contracts



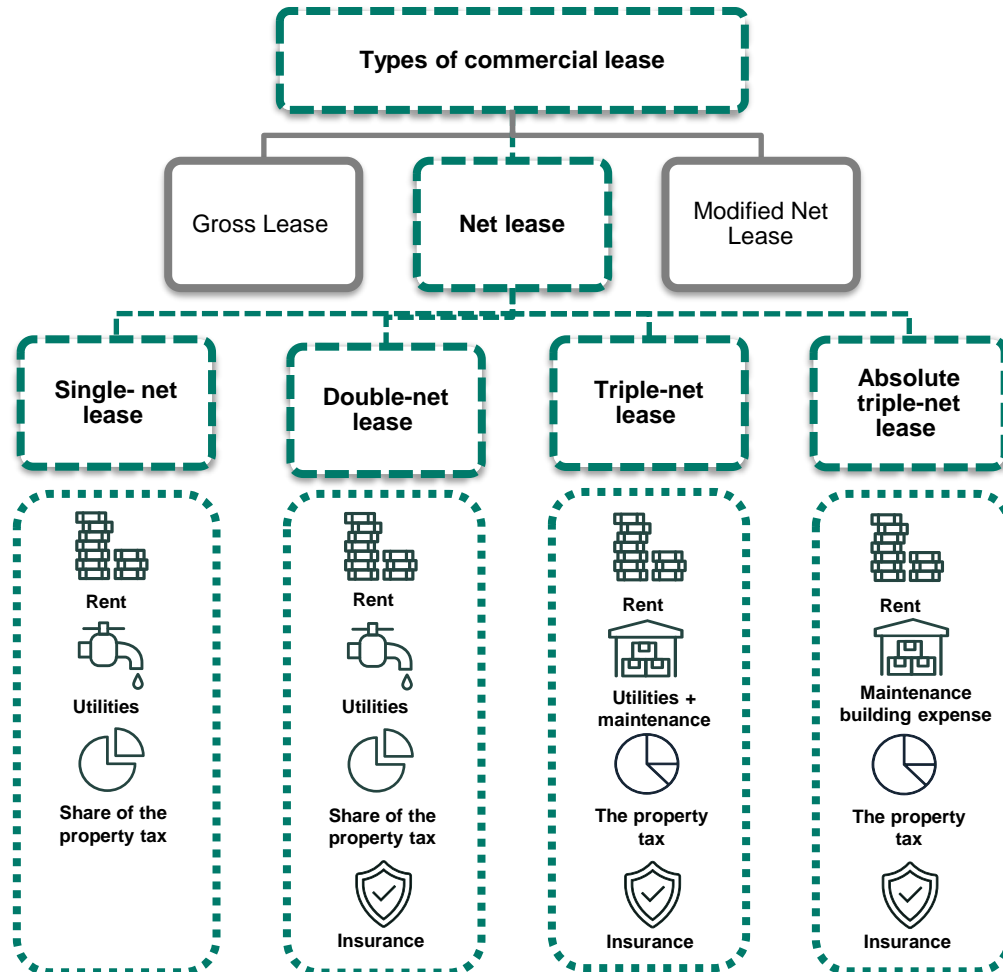
INDUSTRY OVERVIEW

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PROLOGIS

Types of Commercial/ Logistics Leases



Anatomy of REIT

Legal Restrictions for US REITs
REITs are prohibited from certain lines of business e.g., hotel operations, parking operations.

Types of REITs
REITs can be structured either as a corporation or a unit trust. We can distinguish among equity, mortgage or hybrid.

Asset Test for REIT
At least 75% of a REIT's asset value must come from real estate, cash, and government securities at the close of each quarter of taxable year.

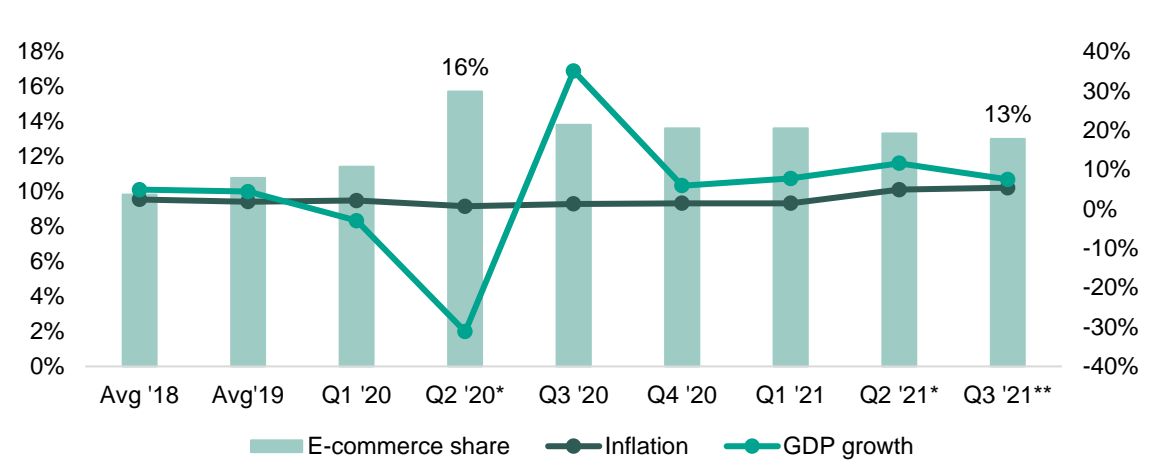
Income Test for REIT
At least 95% of gross income must come from dividends, interests, rents, or gains from sale of certain assets.

Stock and Ownership Test for REIT
REIT shares must be transferable and must be held by a minimum of 100 persons and no more than 50% of REIT shares maybe be held by 5 or fewer.

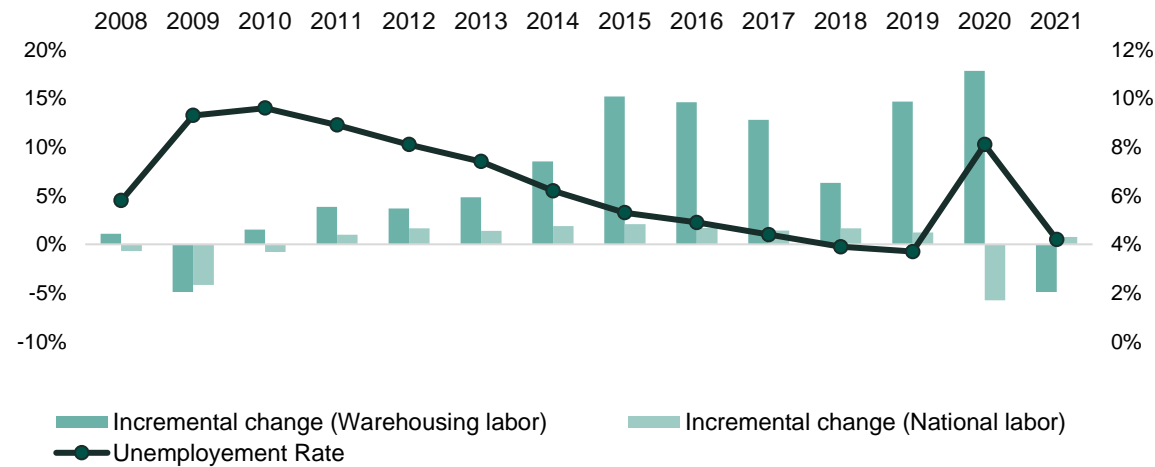
Distribution Test for REIT
REITs must pay 90% of their earnings to shareholders to avoid double taxation, leaving us with high dividends/ low retained earnings.

Market Macroeconomic Overview for the RE Market


US Quarterly Inflation, GDP Growth (YoY) and e-commerce share of total retail sales




Labor Market Trends and Unemployment




Key Industry Features



Frequently, industrial and logistics assets are mixed together. Notably, it is important to mention that industrial and logistics are mixed despite the former including light manufacturing or food manufacturing as well.

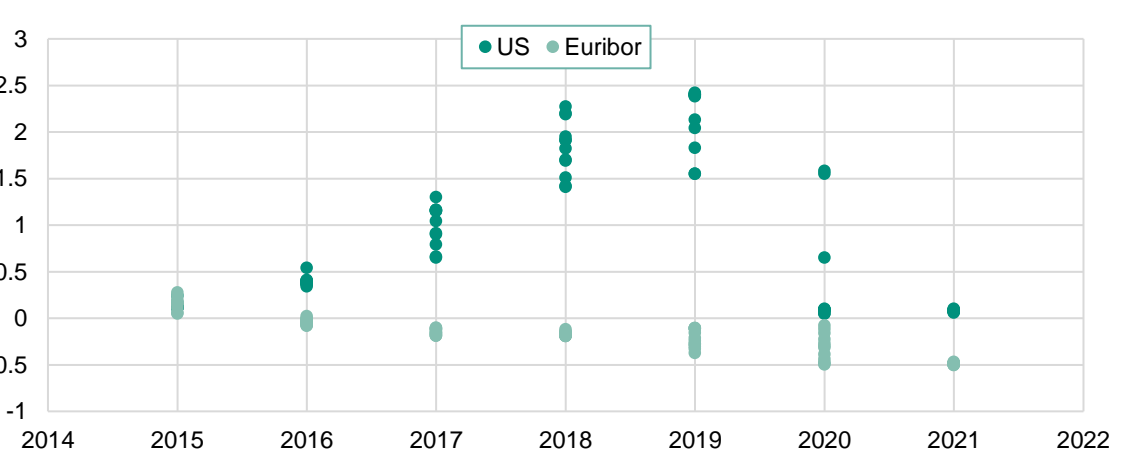


Though conventional wisdom has it that REIT performance suffers during rising interest rate environments, there is little evidence for short-term leases. On the other hand, net lease REITs typically have long-term leases, making them vulnerable to interest rate changes.

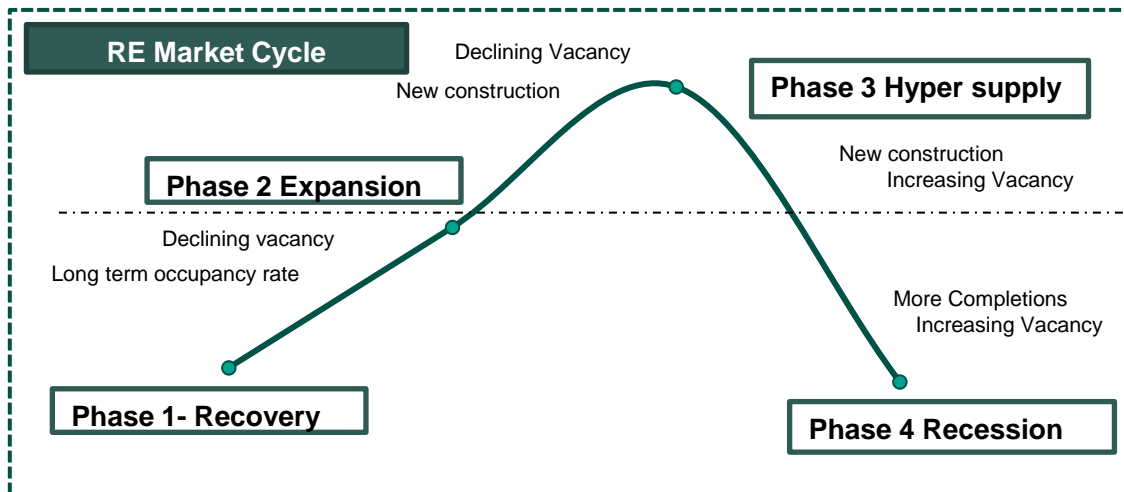
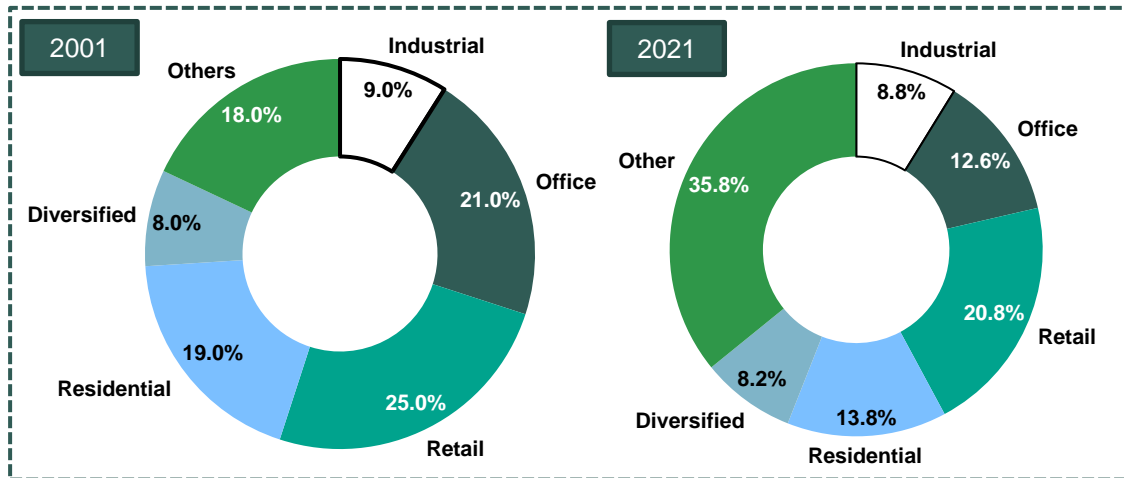


Economically sensitive sectors such as retail and industrial experienced significantly greater volatility during times of economic stress compared with less cyclical sectors such as apartments and self-storage.

Interest change and its Impact on Long-term Leasing Agreements



Current REIT landscape and Market Cycle



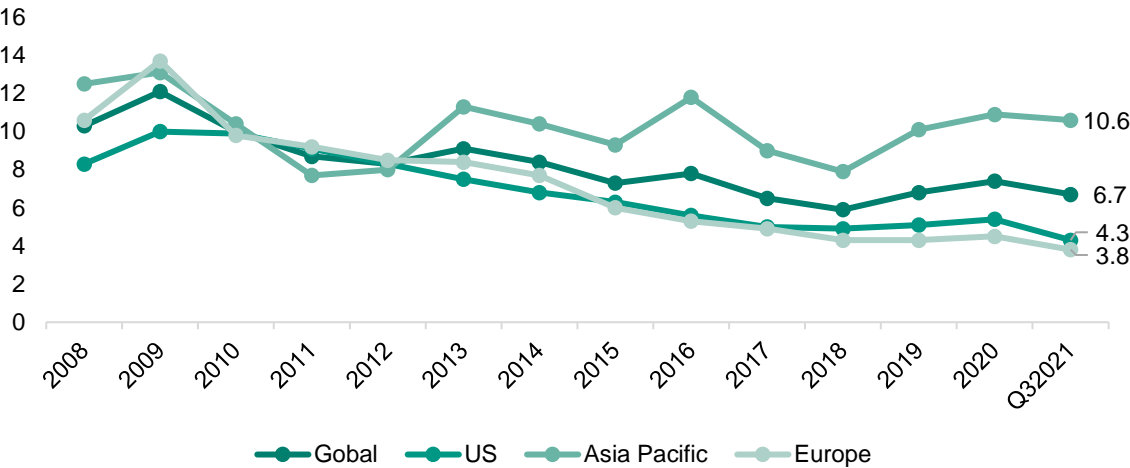
Current & future industry trends

- Raising Inflation Concerns**
 Considering that RE is seen as a powerful hedging strategy against inflation, logistics assets have seen a boost in demand, eclipsing supply.
- Limited Supply of Land**
 Despite being an obvious statement, the increasingly limited supply of land imposes a risk to the REITs market.
- Cyclicality of the Industry**
 The CRE industry follows national and international economic trends. Several sources claim that we are in between expansion and hyper supply phase.
- Low Vacancy Rates**
 As the pipeline is struggling to keep up with demand, the aggregate vacancy rates are below 5% in both the US and Europe. Global Avg. is 6.7%.
- Solid Rental Growth**
 The solid rental growth is fueled by multiple macroeconomic factors (increasing ratio of e-commerce, inflation, demand boost), reaching 4,4% globally.
- Integration of Smart Technology and Automation**
 As a result of the labor shortage and rise in automation, technology like robotics is expected to disrupt the market.

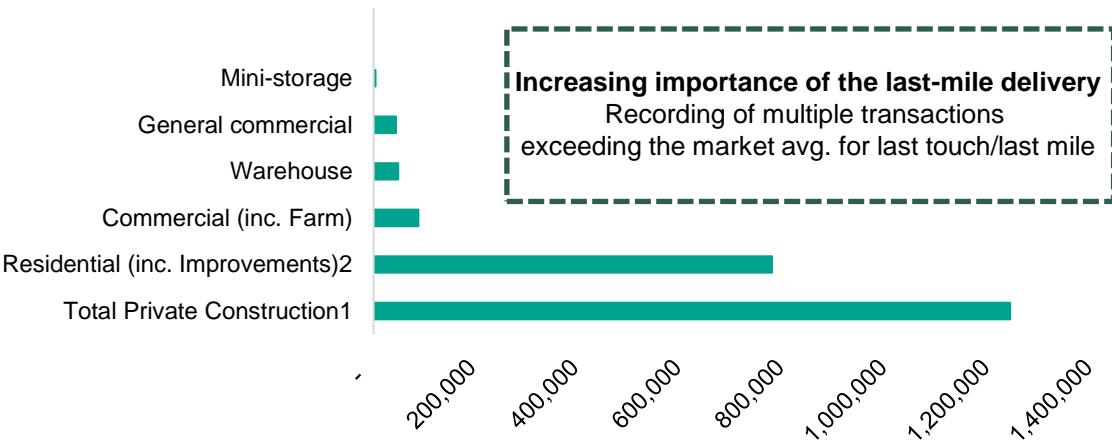
(1) Vacancy rate- the ratio of all available units in a rental property, in a particular time.

Crucial drivers influencing the Logistics RE market

Logistics Vacancy Rate (%) 2008- 2021 Q3



Demand in the small/mid-size segment due to the increase in Last Mile delivery supply



Key Important Points



Occupancy rates in the industrial REIT sector moved slightly higher to 96.4%. No other traditional REIT has registered a similar vacancy rate as office declined to 10.2% and retail continues to suffer from COVID-19 repercussions.

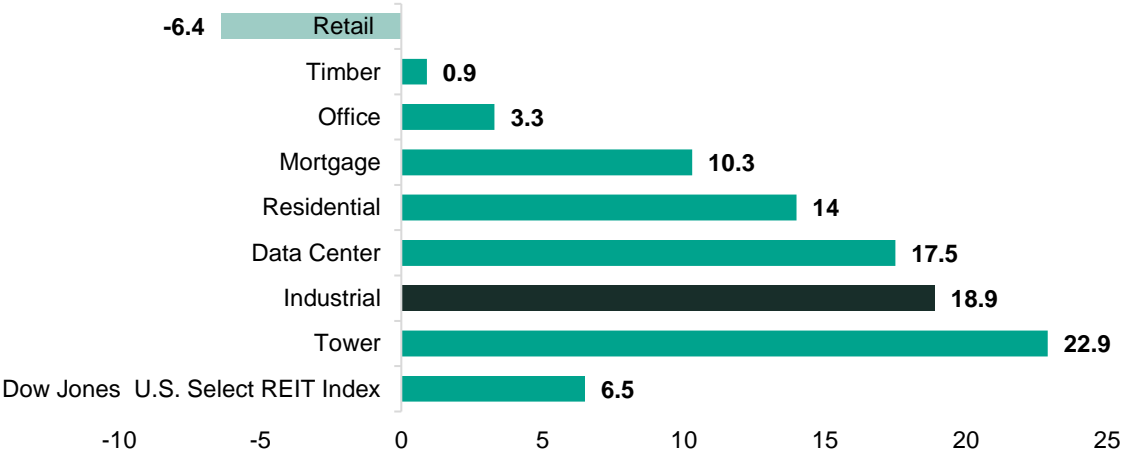


A relatively low correlation between traditional core property types and specialty REITs indicates that the different fundamental drivers of these sectors strongly influenced the differing returns. Logistics REIT mainly focuses retail sales, population growth and SC.



Equity REITs—known for their stable payouts fueled by long-term lease arrangements are preferred by the investors, delivering an averaged 5 years dividend yield of 3.2% for the industrial REITs, while office offers a 2.9%.

REIT Sector Return - Trailing 3-year period



COMPETITORS

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PROLOGIS

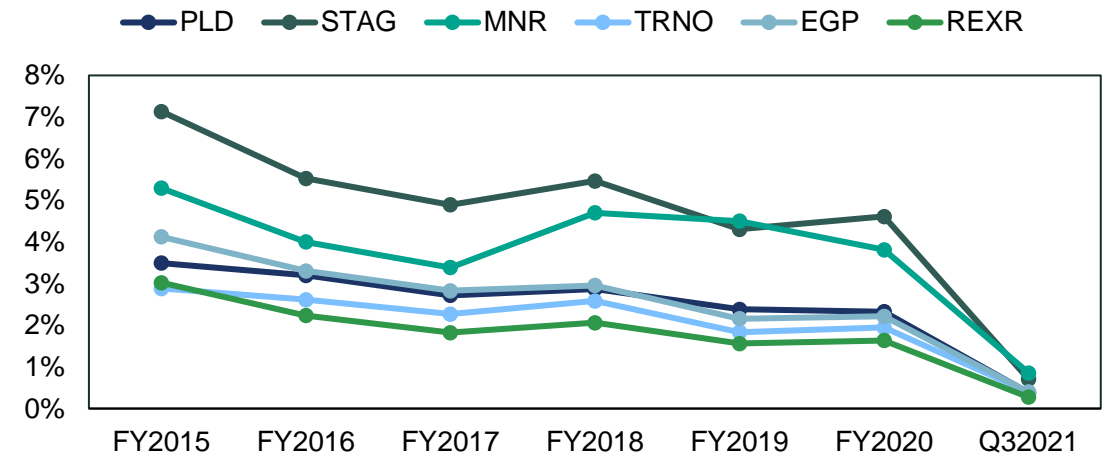
Valuation Universe

Prologis represents the market leader on the equity REIT sector

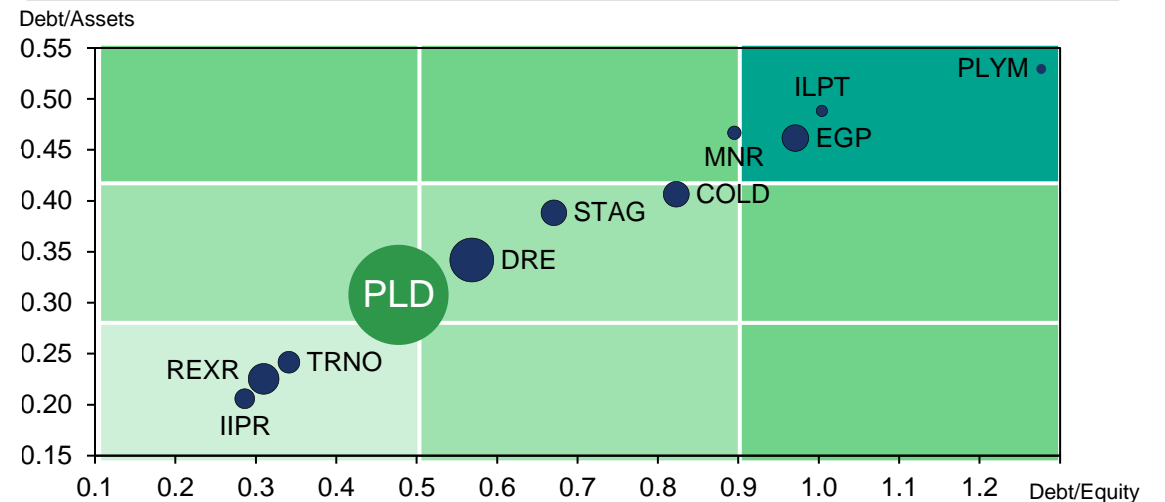
Peers – overview



Dividend Yield Comparison



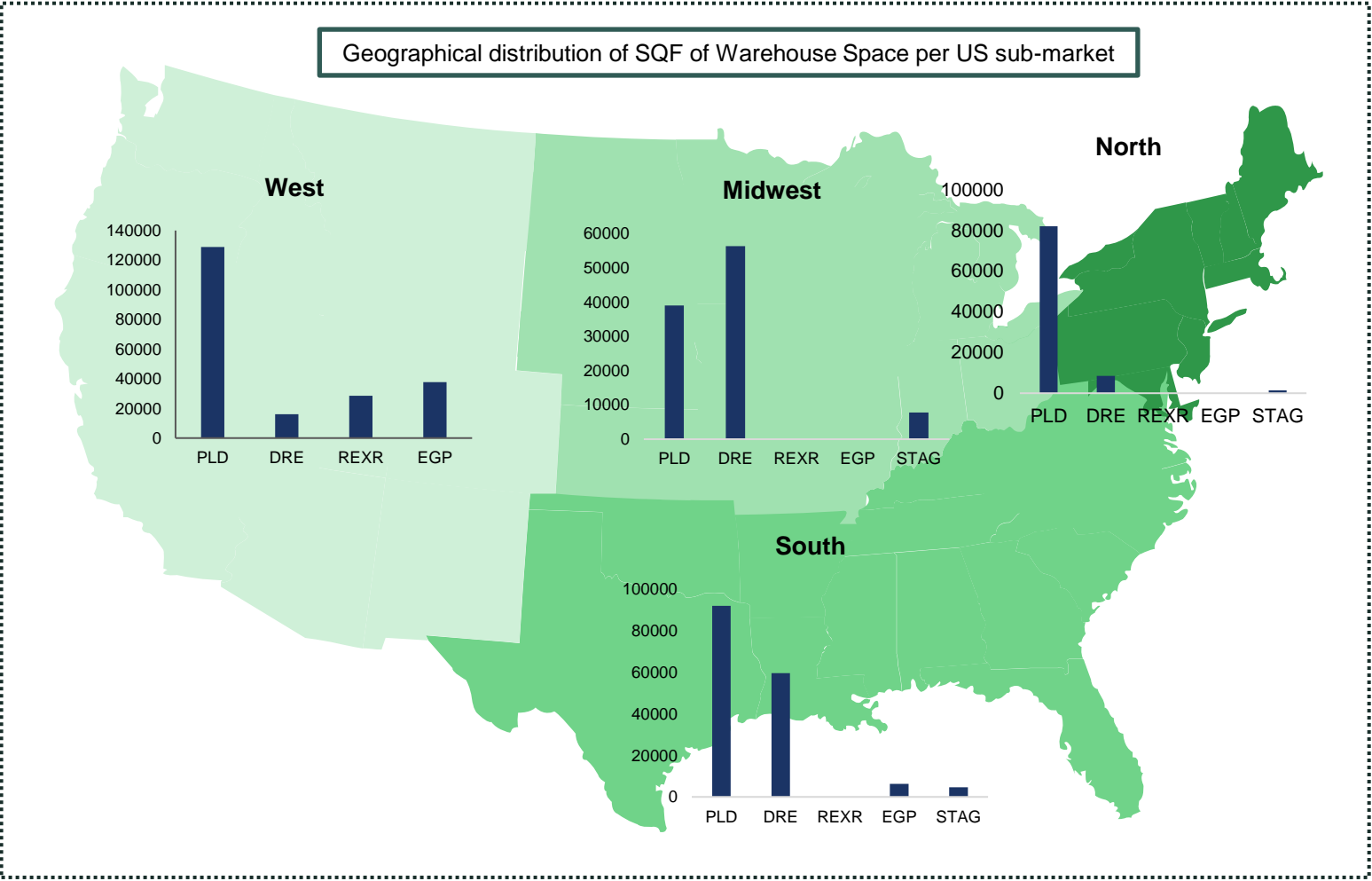
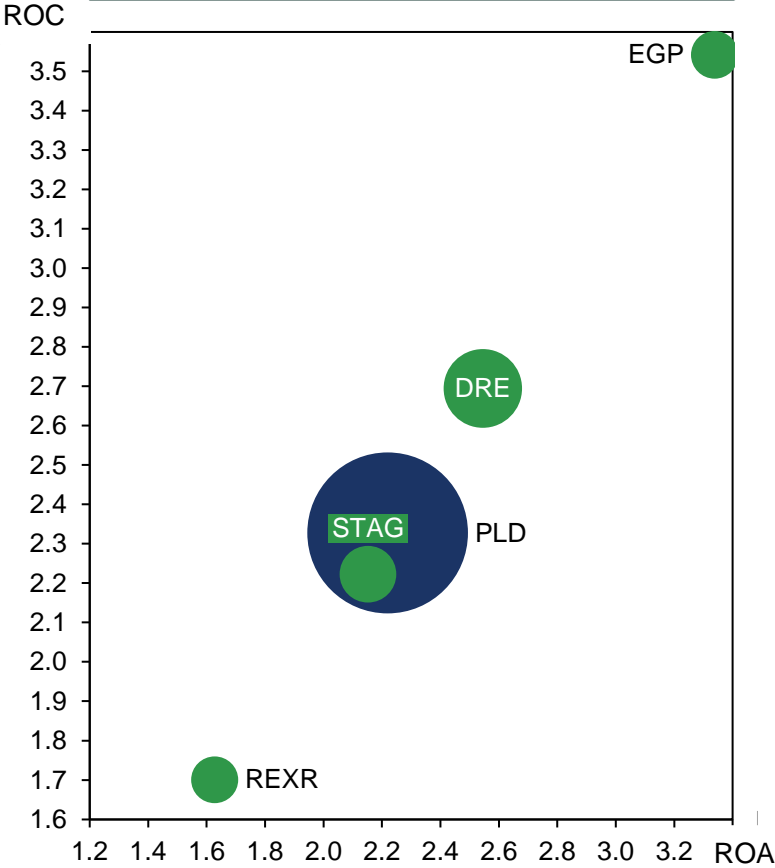
Indebtedness of the peers



Valuation Universe

Prologis represents the market leader in the equity REIT sector

Prologis is present in the most dense urban markets within the US, capitalizing on the growing urban logistics that exceeds Office CBD yield.



FINANCIALS & VALUATION

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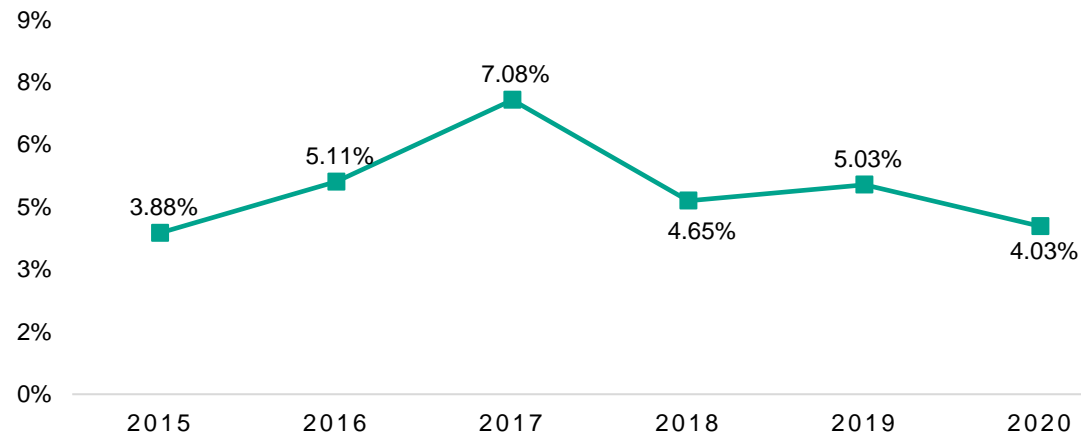


PROLOGIS

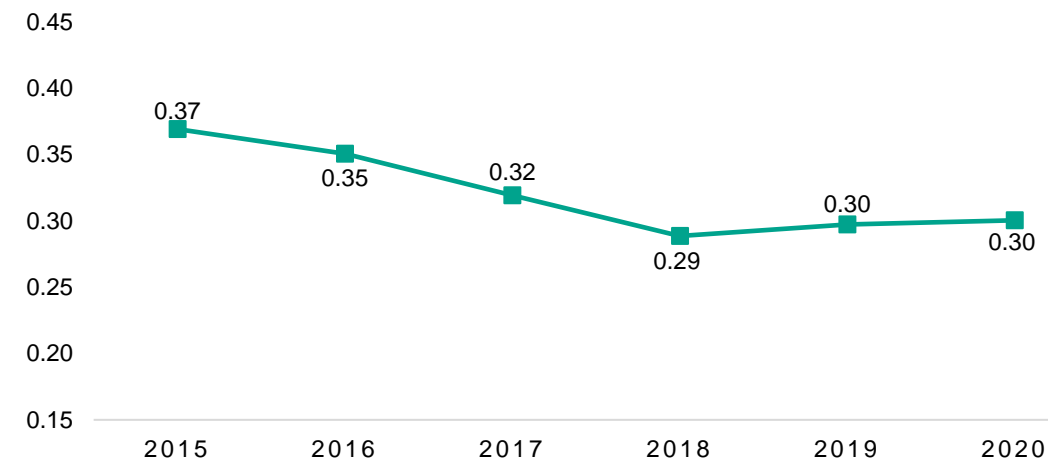
Financials

Steady ratios show financial resilience

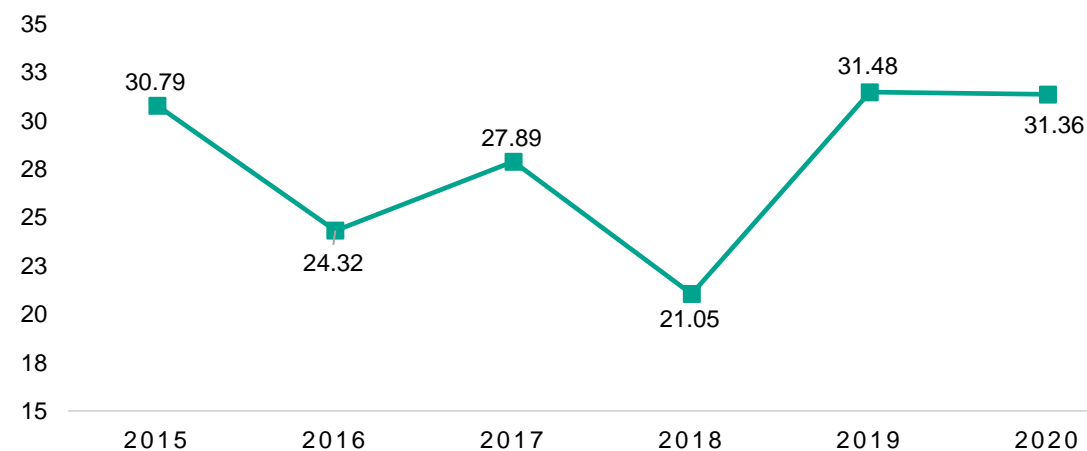
Capitalization Rate got lower in the recent years



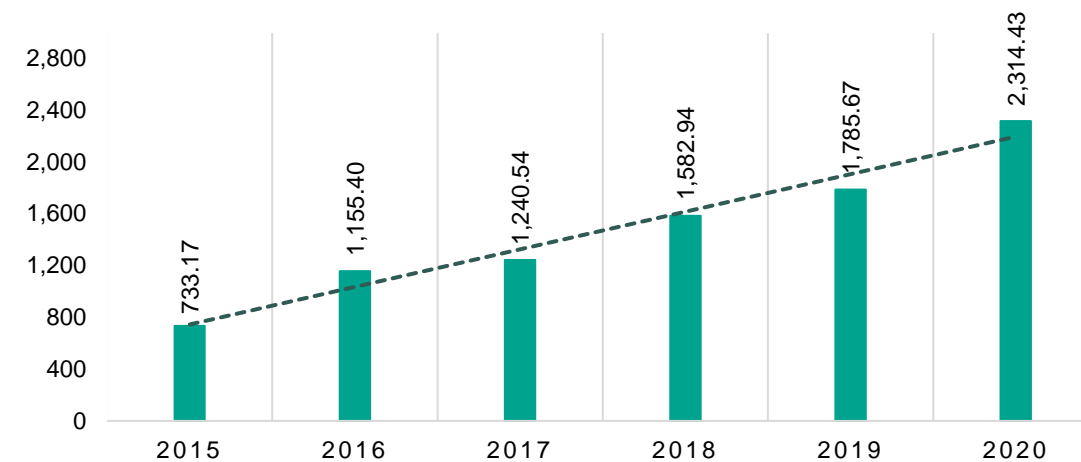
Total debt / Total assets leveled out at a constant level



P / FFO increased from the 2018 low



FFO increased steadily in the last six years



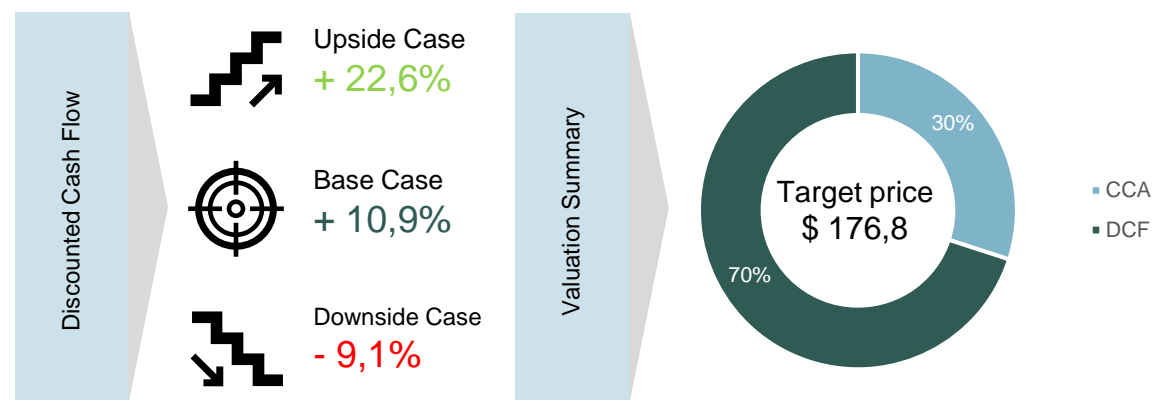
Valuation Summary

Prologis is undervalued in the current market environment

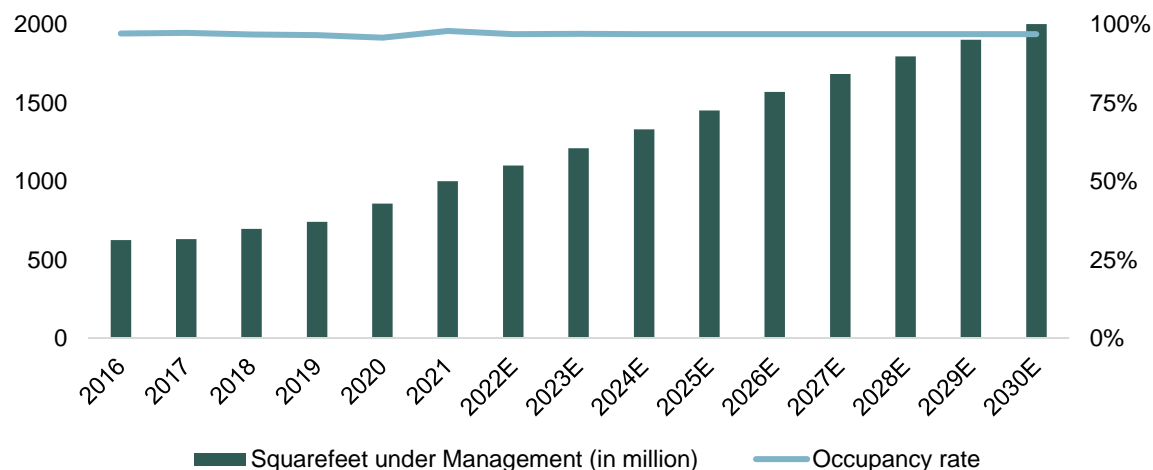
Valuation Assumptions

- Future operating revenue is projected based on forecasted **total squarefeet under management** influenced by positive market environment
- Second driver of the operating model are the **rental prices per squarefoot** projected according to market data provided by research institutes
- Operating margin is projected to increase slightly due to **wider gap** between rental prices and operating expenses
- CCA is **weighted less** than DCF as comparable companies with the same business operations are significantly smaller and thus often trade at a premium

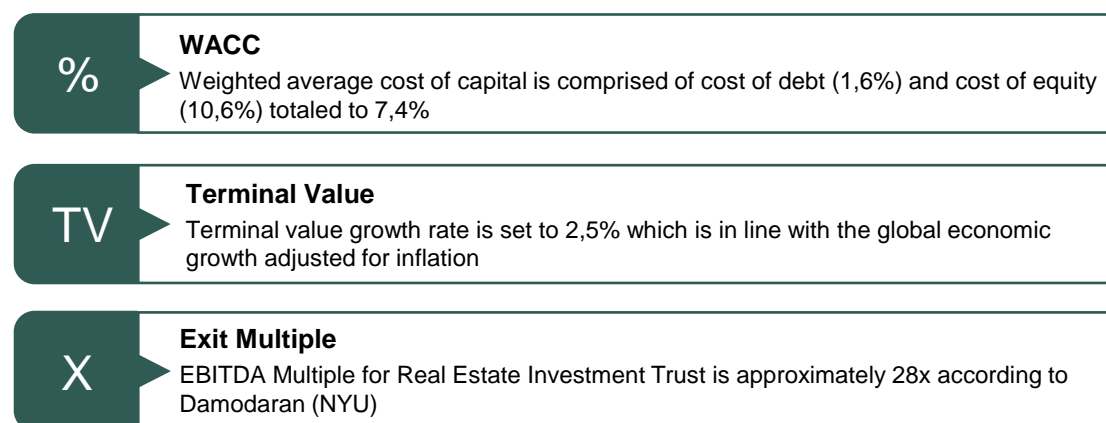
Valuation Method



Operating Forecast – Sqft under Management



Other Assumptions



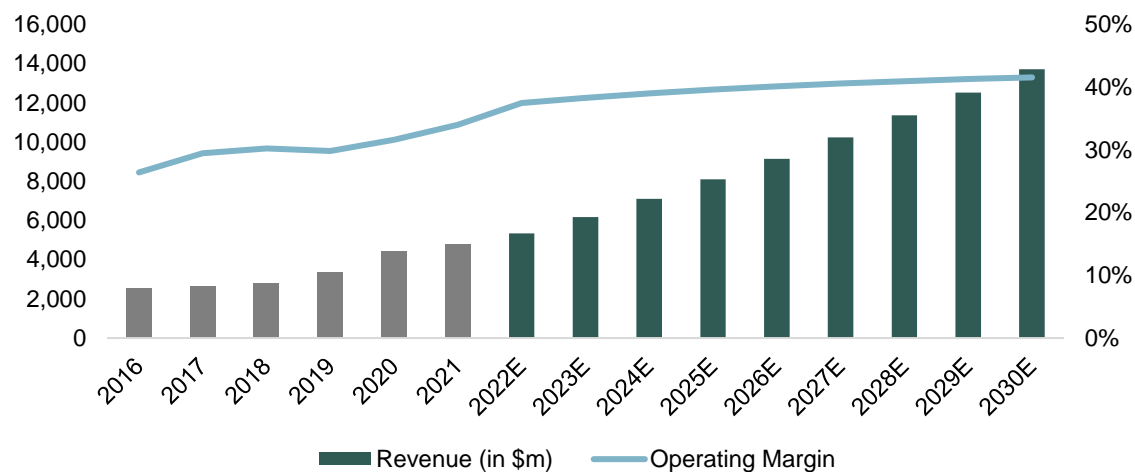
Valuation

CCA shows stronger undervaluation than DCF model

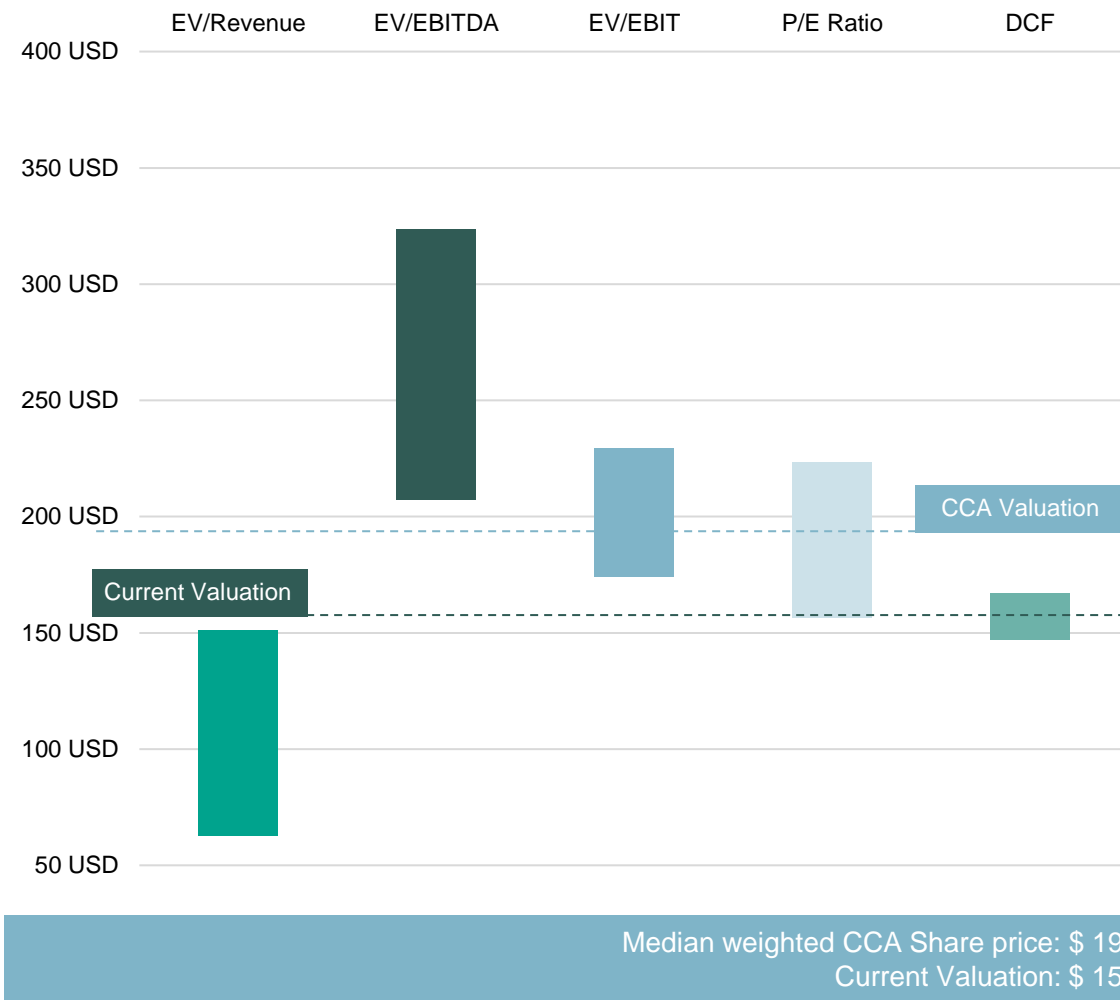
Sensitivity Analysis – TV Growth x WACC

		TV Growth Rate						
		1%	1,5%	2%	2,5%	3%	3,5%	4%
WACC	6,0%	166,1	182,0	201,8	227,4	261,5	309,2	380,7
	6,5%	153,7	166,7	182,7	202,7	228,3	262,6	310,5
	7,0%	143,3	154,3	167,4	183,4	203,5	229,3	263,7
	7,4%	135,8	145,3	156,5	170,1	186,7	207,5	234,5
	8,0%	127,1	135,1	144,4	155,5	168,7	184,9	205,2
	8,5%	120,6	127,6	135,6	145,0	156,1	169,4	185,7
	9,0%	114,9	121,0	128,0	136,1	145,6	156,7	170,1

Revenue and Operating margin



Valuation Breakdown – CCA & DCF



A photograph of a large industrial warehouse interior. The space is filled with tall metal shelving units (pallet racks) that are densely packed with cardboard boxes. The boxes are stacked high, reaching towards the ceiling. The lighting is somewhat dim, and the overall color palette is dominated by the metallic grays of the shelving and the brown/tan of the cardboard boxes. The perspective is from within the aisles, looking down the length of the warehouse.

RISKS

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PROLOGIS

Company Specific Risks

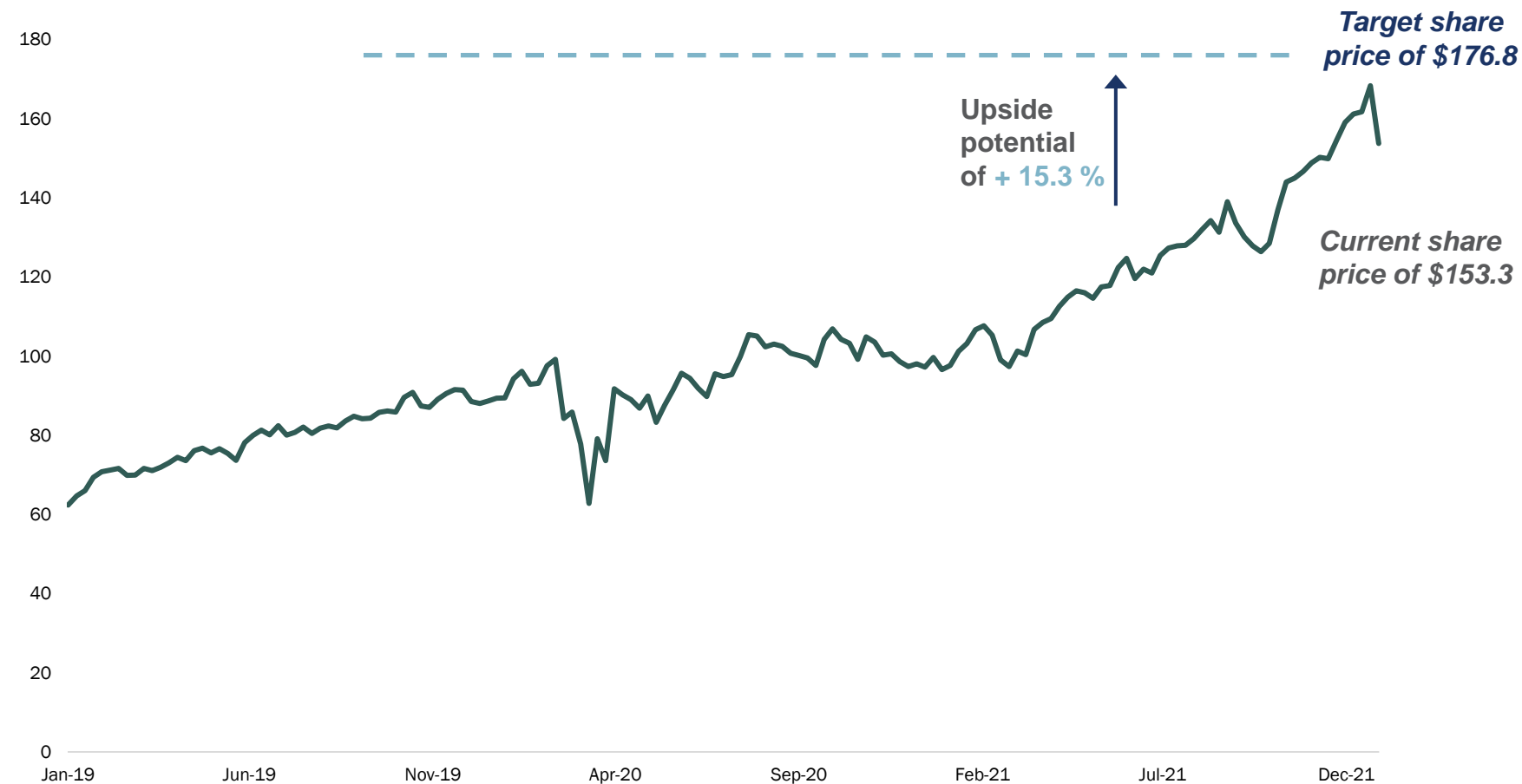
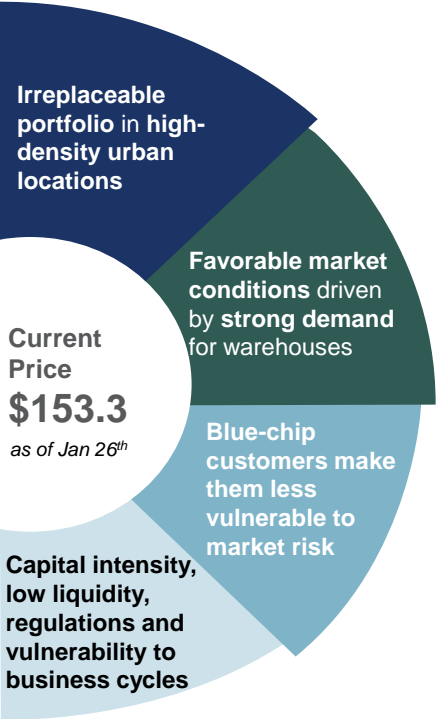
Operational risks could hinder Prologis' success

- O1** Land shortage may result in high acquisition costs putting pressure on further business expansion.
 - O2** Default/loss originating from joint forming co-investment ventures, investing in new and co-investment ventures.
 - O3** Disruptions in capital markets may put pressure on liquidity access resulting in reduced economic returns to investors.
 - O4** Unfavorable supply chain conditions could impact its role of a real estate developer
 - M1** Decrease in economic activity, labor shortage and supply chain disruptions due to pandemic escalation.
 - L1** The failure of Prologis, Inc.as well as its subsidiaries to qualify as a REIT leading to U.S. federal income tax charges.
 - L2** No insurance coverage for losses from floods, earthquakes, riots and acts of war
- Operations (O) – Market (M) – Legislation (L)*



Summary

Logistical REIT with strong future potential

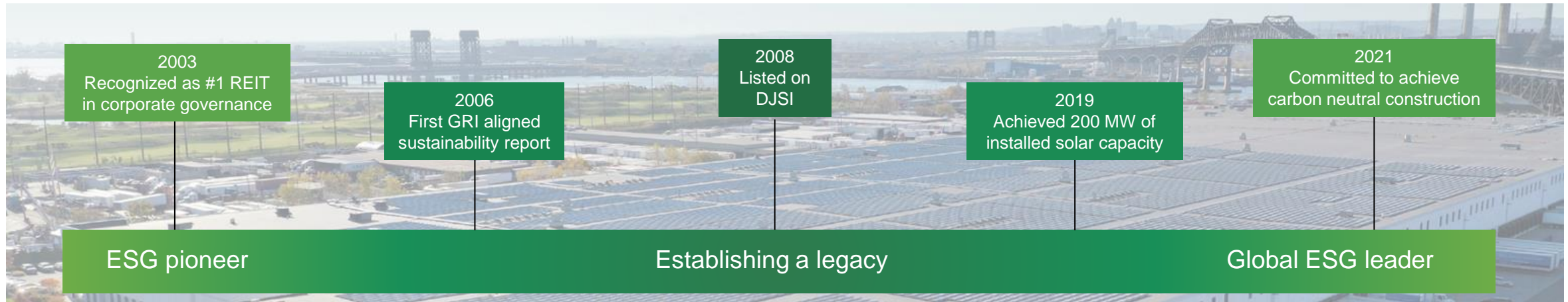


Appendix




ESG Evaluation

Long history in ESG development with focus on sustainable operations




Prologis ESG Journey



Awards & Recognitions

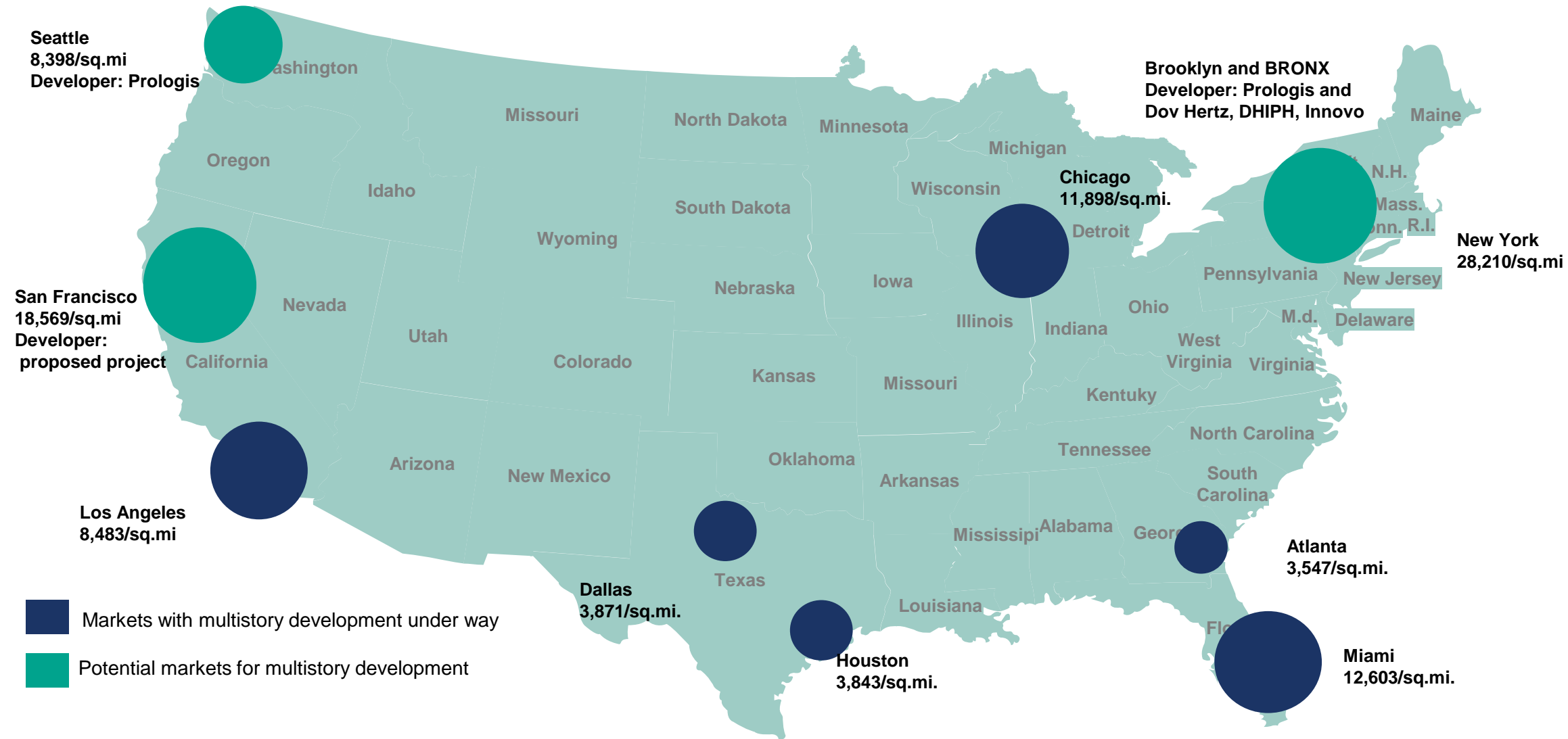
Organization	Description
	The 2,500 Dow Jones Global Total Stock Market companies are categorized into sectors, from which the 10% most sustainable companies are then included in the Dow Jones Sustainable Index.
	#1 Public Industrial Fund in the Americas #1 Private Industrial fund in the United Kingdom #1 Private Industrial Fund in Brazil #1 Private Industrial Fund in China
	Third most onsite installed solar capacity among U.S. corporations

Goals & Progress

SDG Goal	Goal / Target year	Progress
	Install 400 MW of solar capacity on our buildings by 2025	252 MW
	Install 100% LED lighting across our entire portfolio (by area)	42%
	Achieve 100% carbon-neutral construction globally	On track

Market Trends: Multistory Development

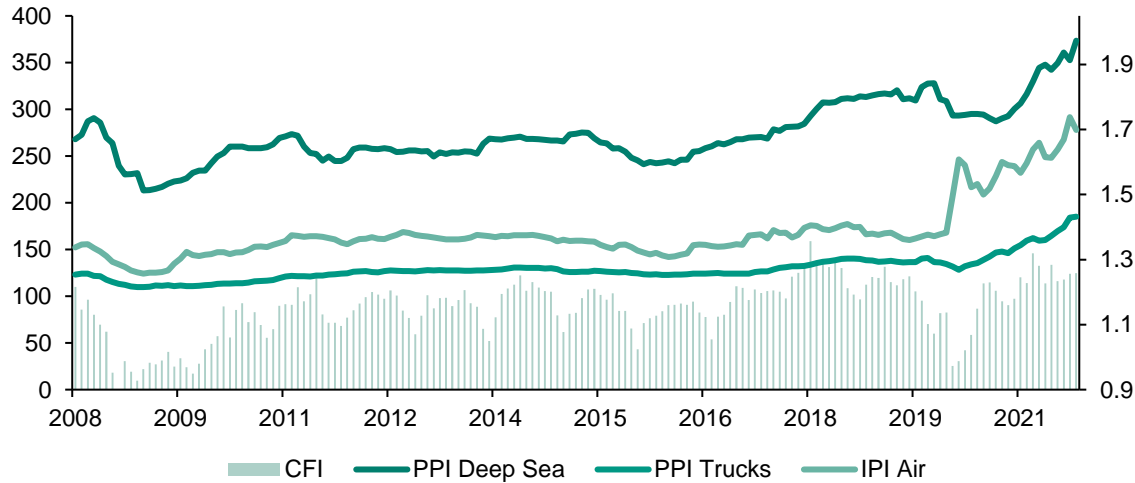
Multistory Development and Population Density By Metro



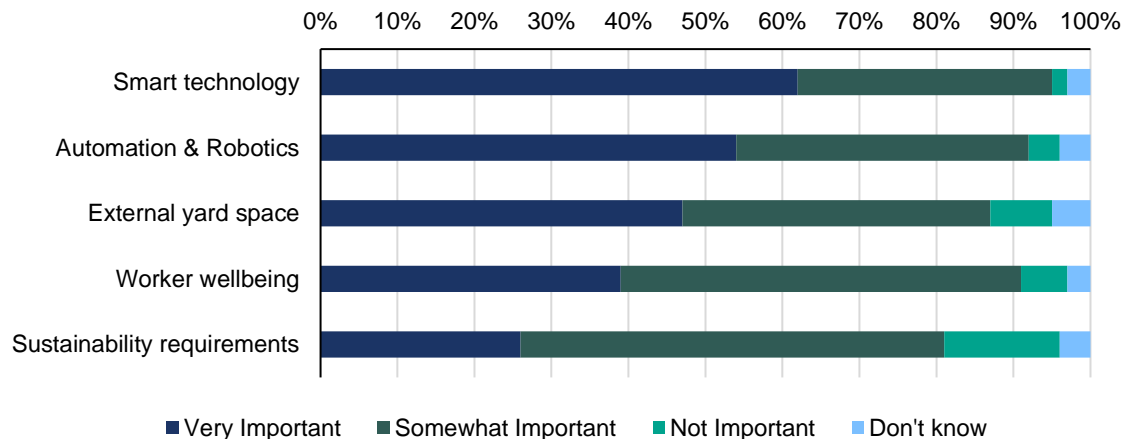
Market Drivers & Trends

Industrial overview of the Logistics REITS

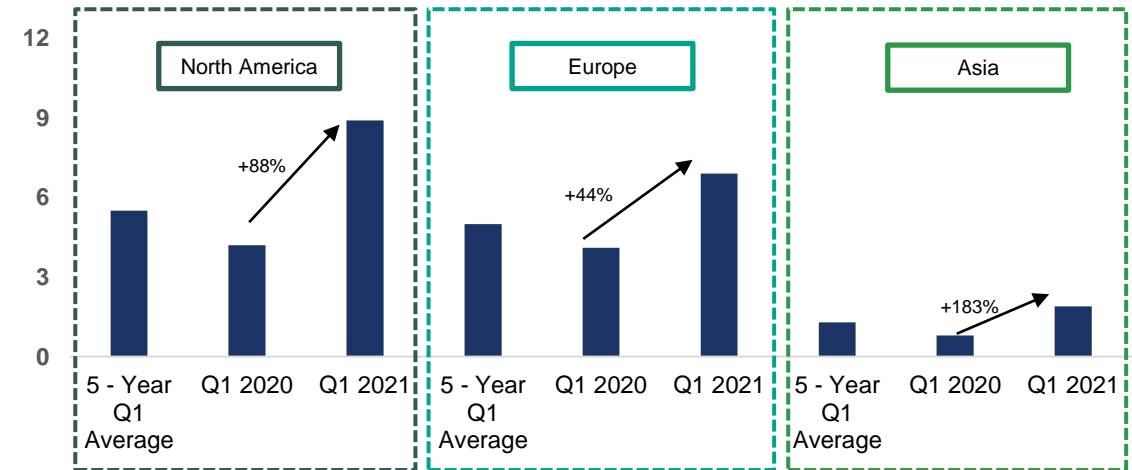
Transportation cost by shipment type and total value of goods transported



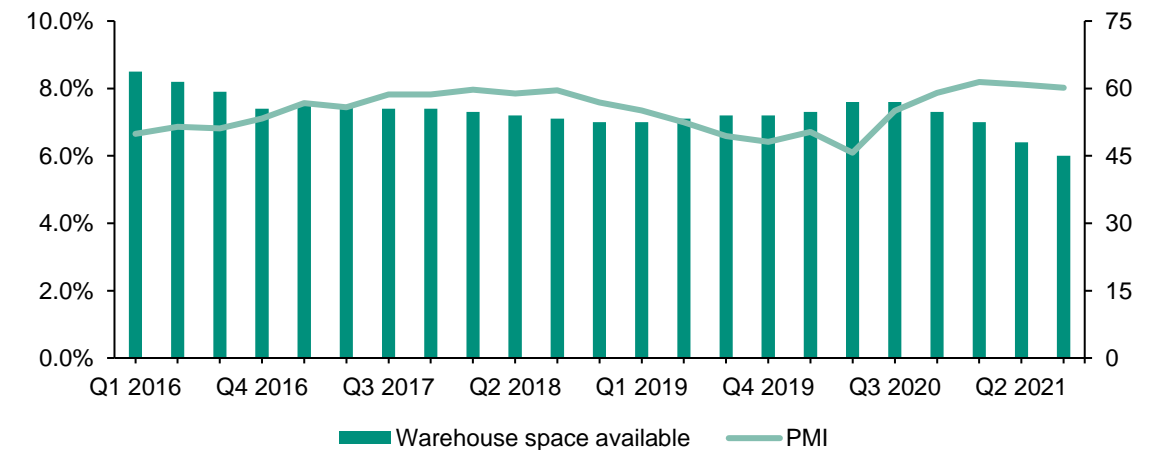
Logistics Real Estate Outlook Survey



Structural uplift in global demand for logistics RE (absorption rate in million sqm)

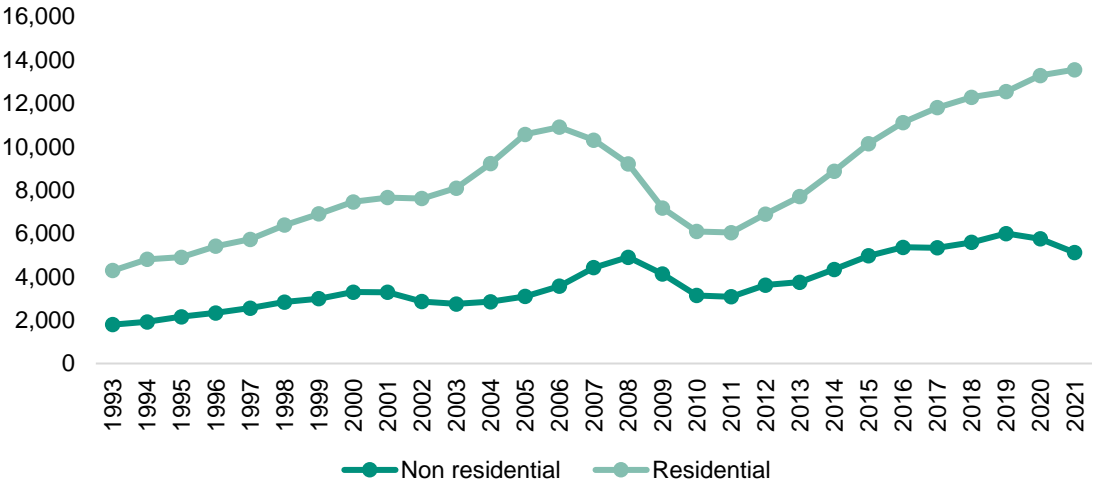


Warehouse Vacancy rate and PMI

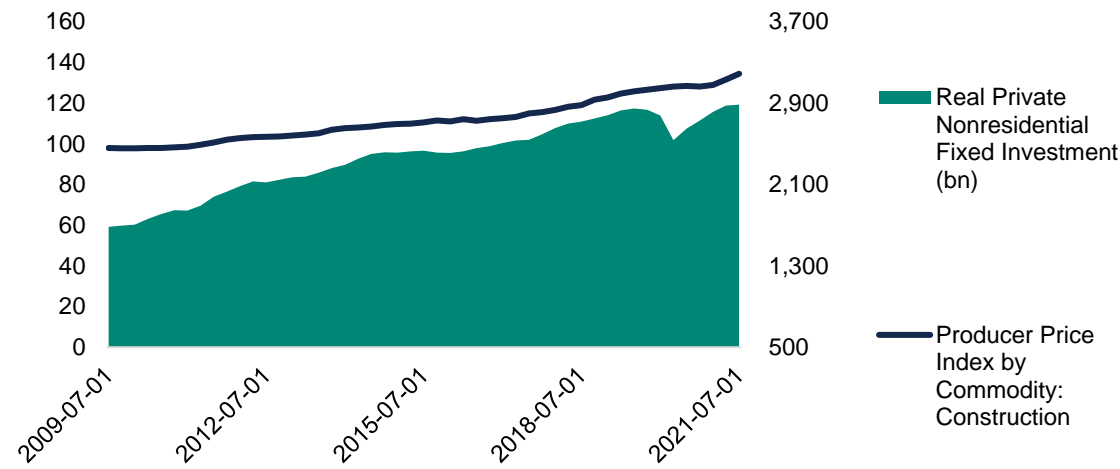


Macroeconomic factors influencing the Logistics RE market

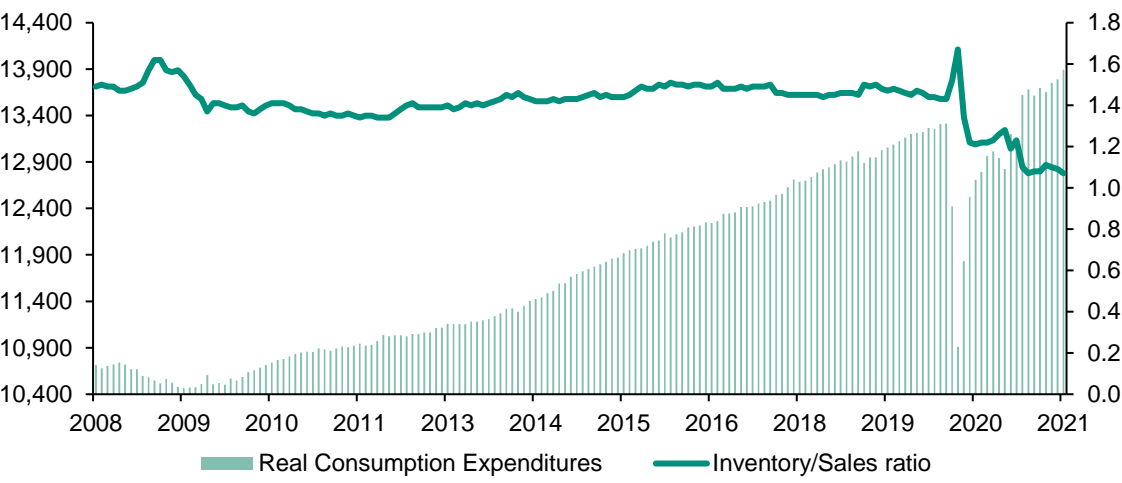
Construction Spending in US bn (Non-Residential vs Residential Private Construction)



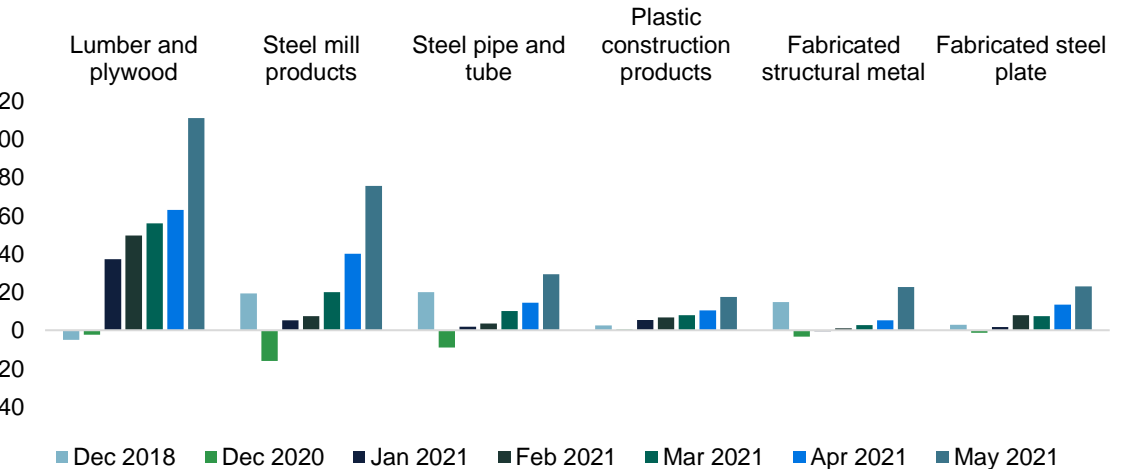
Real Estate Non-Residential Investments in US and PPI: Construction



Supply Chain Bottlenecks (Real Consumption Expenditure with Inventory/Sales Ratio)



Percentage Change (YoY) of the PPI for selected Commodities in US



Appendix

Valuation

Equity Bridge (in \$m)



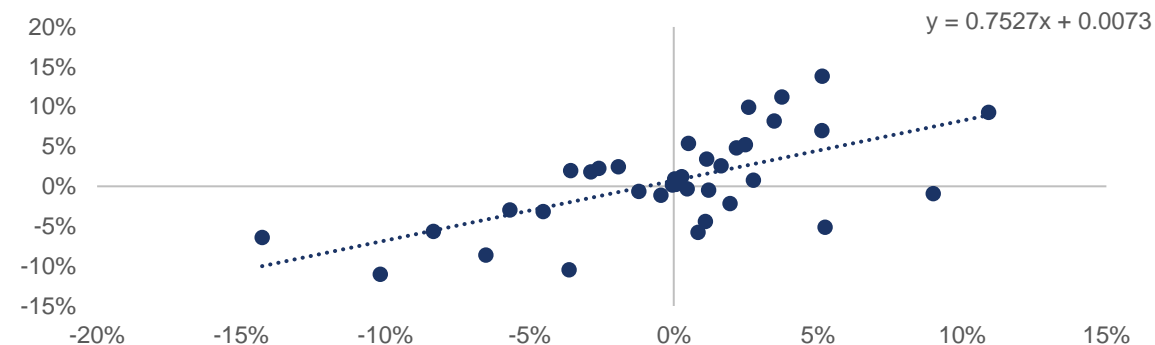
Base Case Share price – Upside Potential (in \$)



Sensitivity Analysis – Exit Multiple x WACC

		EBITDA Exit Multiple						
		22x	24x	26x	28x	30x	32x	34x
WACC	6,0%	155,0	171,2	187,3	203,4	219,6	235,7	251,8
	6,5%	147,7	163,1	178,6	194,1	209,5	225,0	240,4
	7,0%	140,7	155,5	170,3	185,1	199,9	214,8	229,6
	7,4%	134,9	149,2	163,5	177,8	192,1	206,4	220,7
	8,0%	127,6	141,2	154,8	168,5	182,1	195,7	209,4
	8,5%	121,5	134,5	147,6	160,7	173,8	186,8	199,9
	9,0%	115,6	128,2	140,7	153,3	165,8	178,4	190,9

CAPM – Cost of Equity



Appendix: Porter's Five Forces

Very few competitors in the logistics real-estate market have a big market share

- Few substitutes available in industry due to individual demand of customers and diverse strategies by competitors
- Buyers are less likely to switch to substitutes due to well-established partnership with suppliers of logistics real-estate

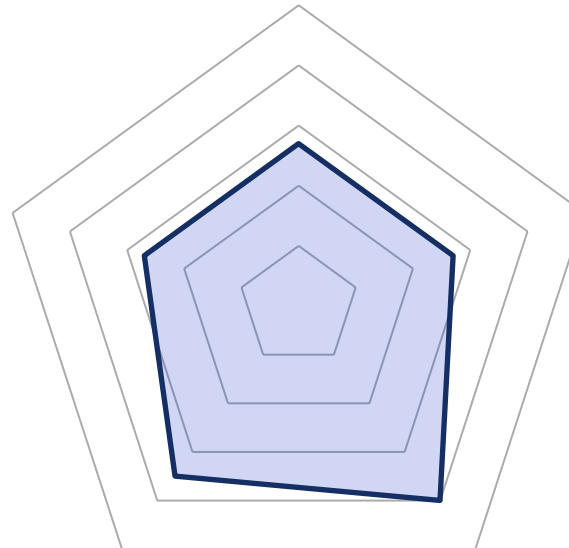
Moderate threat of substitutes

- More suppliers than buyers within the industry meaning suppliers have low impact on prices and switching costs.
- Revenues of suppliers strongly depend on industry where Prologis operates. Suppliers are interested in charging reasonable price.
- Lack of supplier's product substitutes
- Shortage of land supply may put pressure on prices.

Moderate bargaining power of suppliers

- Buyers look for innovative and high-quality products.
- Buyers choose warehouses which are best fit for their geographical operations

Buyers



- High capital requirements within the industry are high, which makes it difficult for new entrants to set up a new business.
- High governmental regulations with required licensing and multiple legal requirements
- The economies of scale is hard to achieve in the industry meaning small players cannot benefit from cost advantage

Low threat of new entrants

- Very few competitors have a big market share
- Favourable economic conditions lead to steady industry growth discourages participants from competing for market share
- Products are highly differentiated with every competitor having personal customer base
- High exit barriers arising from capital intensity and regulatory barriers discourage participants to leave the industry
- Diverse strategies and geographical presence of competitors

Competitors

Appendix: SWOT

Strengths and opportunities outweigh weaknesses and threats

STRENGTHS

- Strong global **market position resulting from solid geographical presence and reliable distribution network**
- **Services such as “Build-to-suit” and Prologis Essentials**
- **Active M&A strategy** with successful track record of integrating complimentary firms
- Robust product **innovation lifecycle**
- **Well-structured supply chain** diminishes supply chain risks

OPPORTUNITIES

- **Increasing demand for industrial real estate** driven by growth in e-commerce sales and global economic recovery
- Further **expansion into the Chinese market**
- **Changes in REIT taxation policy**
- **Technology advancement** may lead to significant competitive advantage
- **Favourable market conditions** (leasing costs, availability of land, transportation costs, etc.)
- **New environmental regulations** will strengthen market positioning due to low CO2 footprint compared to peers



- **Real estate investments are not as liquid**
- They must annually **distribute at least 90% of its taxable income** in the form of dividends
- **Financial ratios (ROC & ROA)** among industry average
- **Loss of market share** to smaller competitors results in missed market opportunities

WEAKNESSES

- **Customers** such as Amazon **starting to buy their own warehouses** instead of renting them
- **Changes in consumer preferences**
- **Shortage of available land**
- Intense **competition**
- Escalation of pandemic leading to **supply chain disruption**
- Labor market did not bounce back to pre-pandemic level resulting in **high R&D costs for integration of robotics solutions**
- Companies providing inventory management solutions may drive down inventory levels leading to decreased demand for warehouses

THREATS

Appendix

Industry Indexes and Prologis Stock

