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The next 'big short'

Evan Lorenz writes:

Online data continue to multiply, the crash in cryptocurrencies and the wobble in the Nasdaq Composite notwithstanding. However, the profitability of the landlords that house those digital ones and zeroes continues to erode. In preview, *Grant's* is bearish—still—on data-center REITs, in particular our former pick-not-to-click Cyxtera Technologies, Inc. (CYXT on the Nasdaq) and Digital Realty Trust, Inc. (DLR on the New York Stock Exchange).

Data centers—big, warehouse-like buildings that will never make the cover of *Architectural Digest*—hold the computer servers that make the digital world possible. While the industry can trace its origins to the 1945 construction of the Electronic Numerical Integrator and Computer at the University of Pennsylvania, data-center growth took off with the rise of the internet. Now it's meeting its match with (among other things) the long-delayed consequences of ultralow interest rates.

Data centers come in two flavors nowadays: colocation and hyperscale. In the former, multiple tenants occupy the same building. In the latter, larger tech companies, in particular megacloud providers such as Amazon.com, Inc., Microsoft Corp. and Alphabet, Inc., lease whole buildings. Smaller clients pay higher rents than the hyperscalers, who have the cash and clout to push down pricing.

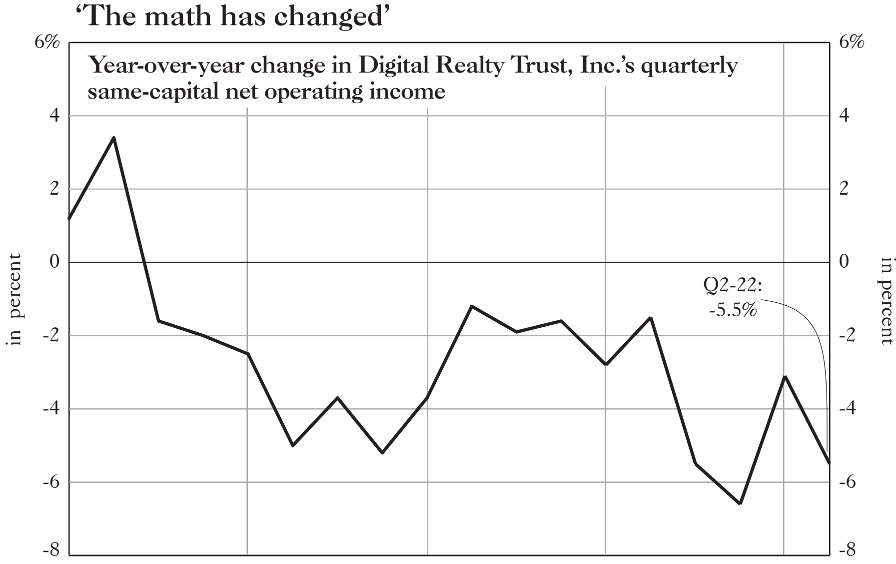
This is the crux of the bear case we laid out in the issue of *Grant's* dated May 28, 2021. As more enterprises shift their workloads to the cloud, operators like Cyxtera and Digital Realty face declining rents and returns on capital. And, unlike many other property types, data centers face technological risk, as buildings that are only 10 years old lack the current cooling and power requirements to house today's dense blade servers. While these structures are not obsolete per se, they either need major retrofits or must lower their rents. Neither alternative is calculated to enhance their returns on capital.

Much has changed since we last had our say. CoreSite Realty Corp., the other focus of our bearish analysis, was acquired by American Tower Corp. on Nov. 15, 2021 at a price of $170 per share versus $121.25 when we published. This was part of a string of data-center buyouts that included Blackstone, Inc.'s purchase of QTS Realty Trust, Inc. last September and KKR & Co., L.P., Inc's acquisition of CyrusOne, Inc. in March. And, of course, business activity is softening.

On June 29, the *Financial Times* broke news that our friend James S. Chanos, famed short seller and eponym of Chanos & Co., views data centers as "our big short right now." The next day, on CNBC, A. William Stein, CEO of Digital Realty, begged to disagree: "Well, I think Jim maybe isn't aware that demand has never been stronger in our space. We've had record bookings."

Digital, the second-largest data-center REIT after Equinix, Inc., boasts 297 centers worldwide with a grand total of 36.8 million net rental square feet. In the second quarter, the 50

'The math has changed'



source: company reports

Digital Realty Trust, Inc. at a glance
all figures in $ millions except per share data

	TTM*	2021	2020	2019	2018
revenue	$4,510.9	$4,427.9	$3,903.6	$3,209.2	$3,046.5
operating income	627.5	694.0	557.5	594.2	549.8
net income	1,298.1	1,681.5	263.3	493.0	249.9
shares outstanding	285.1	282.5	260.1	208.3	206.7
earnings per share	4.58	5.94	1.00	2.35	1.21
cash	99.2	142.7	108.5	89.8	126.7
debt	14,294.3	13,448.2	13,304.7	10,122.4	11,101.5
operating leases	1,418.5	1,512.2	1,468.7	693.5	–
total assets	35,956.1	36,369.6	36,076.3	23,068.1	23,766.7

* Trailing 12 months ended June 30, 2022.

source: company reports

states produced 59.7% of Digital's top line. Northern Virginia (18.7% of rents), Chicago (9.1%), New York (6.2%), London (5.8%) and Frankfurt (5.8%) constitute the largest metropolitan markets.

Leasing activity has—indeed—surprised to the upside. "Over the past three quarters the industry has gone through an unprecedented level of demand and has completely changed our view of how the space will operate going forward," David Guarino, who rates DLR a buy for Green Street, tells me. "New leasing has been off the charts.... It is better than anything we've ever seen in the history of the sector."

When, in July, electric utility Dominion Energy, Inc. warned that it may run out of transmission capacity in northern Virginia, the world's largest market for data centers, the eyes of the data-center bulls momentarily brightened. Surely, this points to heightened pricing power for the structures already in place? The hope seems misplaced. "From our read of it," Adam Simmons, founder and CEO of research boutique Dgtl Infra, tells me, "Dominion is putting a stake in the ground to push the appropriate government authorities to get moving and realize there is a problem in the future. It is not imminent."

As Digital Realty readily admits, profitability for data centers is weakening. In the second quarter, net operating income from the company's existing properties (as distinct from new developments) slipped by 5.5%, and that metric has fallen every period since the third quarter of 2018. Between 2012 and 2021, Digital Realty's returns on invested capital have declined to 2.1% from 5.6%.

A tsunami of capital beginning in 2012 bears the blame, DLR IR chief Jordan Sadler tells me. Cheap financing plus long-term contracts with gold-plated credits like Microsoft gave hyperscale data centers the beckoning appearance of bond proxies. Resulting new construction led to a 17% reduction in wholesale rents in the decade ended 2021.

While DLR has struggled with this onrush, it, too, has benefited from lower interest rates. Thus, the coupon attached to the Digital 10-year "green" bonds issued on Jan. 5, 2021 was 0.625%. Priced at €99.52, the securities change hands at €74.30 for a yield to maturity of 4.1%.

But the sum total of rising interest rates, ballooning development costs, some restrictions on supply and strong demand suggests that the tide may be turning. "The math has changed.... [T]hey've got to adjust the model," says Sadler about his competition, "and that typically means pushing rate." While same-store NOI has declined, the IR man added, that is backwards-looking. He predicts better returns mañana.

Digital Realty is priced to a 3.9% dividend yield and valued at 24.7 times enterprise value to trailing Ebitda. For an investment-grade credit, albeit one rated only Baa2/triple-B, Digital Realty's balance sheet is heavily encumbered, with net debt equal to 6.7 times trailing Ebitda as of June 30. In the second quarter, operating income covered interest expense by 2.5 times, thanks in part to DLR's low cost of borrowing; the average interest rate was 2.12% at quarter's end.

However, elevated leverage and a full valuation have not deterred 14 of the 23 analysts covering Digital to rate the shares a buy against only one calling them a sell. DLR's short interest amounts to just 2.6% of the equity float. For its part, management seems to line up with Chanos: Over the past 12 months, insiders have sold a net 211,643 shares for proceeds of $33.1 million.

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It bears mention that the source of the strength in leasing is fairly narrowly focused. *Grant's* pick-to-click Meta Platforms, Inc. is one such pillar of demand. Buffeted by competitive pressures from rival social network TikTok and by changes that Apple, Inc. made to the digital-advertising ecosystem last year (*Grant's*, July 8), the former Facebook has responded by rolling out algorithmically recommended videos (Reels) and by mining online data to determine which ads on its network lead to purchases. Both endeavors are computationally intensive.

Mark Zuckerberg's creation accounted for 51% of all large leases (greater than four megawatts) throughout North America last year, Barclays plc notes, and has continued to play an outsize role this year. However, Meta is trimming its outlays, so the land grab may end soon.

Bigger picture, the problems we identified last year remain: Data centers are replacing higher-paying colocation customers with lower-paying hyperscalers, who frequently construct their own buildings. "Microsoft has been one of the most lease-heavy in terms of propensity to build versus propensity to lease," says Simmons. Yet, he continues, the software giant is at work on up to 1 million square feet of its own data centers in northern Virginia and a comparable amount in the southern part of the state.

Rising interest rates and development costs may eventually deter outside competition, though that hasn't happened yet. "Private capital for data centers is significantly higher and more well-funded today than when we spoke 12 month ago," Simmons relays. "First and foremost, you have players like Blackstone and KKR, who have completed their take privates and are establishing how can we get these 20–30 times Ebitda multiples down to a blended something reasonable, and we are going to do that by developing new capacity."

Following a period of post-Covid hypergrowth, cloud companies may be set for a slowdown. "We are concerned that 2023 could bring a moderation in growth rates," Morgan Stanley cautioned last week, "as hyperscalers in particular look to consolidate their recent footprint expansions. As Microsoft noted: 'we do feel we've gotten in a good place on capacity on a global basis.'" Morgan Stanley predicts that capital outlays by the 10 largest cloud companies, excluding Amazon, will rise just 5% next year after an estimated 25% increase in 2022.

Indeed, the slowdown may already be upon us. In the second quarter, Intel Corp. and Advanced Micro Devices, Inc. reported a combined 3.5% year-over-year decline in business units that make chips for servers and data centers.

Demand for space could lurch lower if Corporate America tightens its belt heading into a weaker economy. According to the second-quarter results of Duke University's CFO Survey, the median corporate bean counter expects revenue growth to lag behind inflation this year. According to customers surveyed in Flexera's 2022 State of the Cloud Report, 32% of cloud spending is wasted.

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With the IPO market essentially stuck and venture capital firms in stand-pat mode, profitless tech ventures are struggling to raise money to keep the server lights on. Wes Chan, co-founder of FPV Ventures, an early-stage v.c. fund, unburdened himself the other day on the *20 Minute VC* podcast. In past fund launches, said Chan, he is typically approached by several hundred cash-seeking startups. In his latest launch, he's been deluged by 5,000–6,000 "people saying, 'I need money,'" with most supplicants reporting a cash runway of less than four months.

So far, evidence of pricing power is scant. In the second quarter, Digital Realty disclosed that rates on lease renewals rose 3.4% from in-place rents, far below the 9.1% year-over-year increase in the June CPI. "There is probably a level of wimpiness in terms of how much they are willing to push tenants," says Guarino. "'Do I want to blow up a relationship that is going to help me grow around the globe?' At the end of the day you have to think that the growth story in the sector is not on the internal growth side, it is really the external growth."

As Guarino suggests, and Cyxtera amply demonstrates, the economics of older data centers are not what excites investors. Cyxtera was created in 2017 when a trio of p.e. shops purchased 57 older data centers from CenturyLink, Inc. On July 29, 2021, those dispersed 57 properties acquired a single public listing—voilà, CYXT—by merging with a blank-check company.

Cyxtera began the second quarter with the happy news of a 5.8 percentage-point rise in occupancy, measured year over year, to 74.2%, and a 4.9% jump in revenue. But that didn't translate into higher earnings as Ebitda (by management's definition) declined by 3.7%, to $60 million.

The lack of earnings growth notwithstanding, Cyxtera said that $52.2 million of the $64.4 million in first-half capital expenditures stemmed from growth initiatives rather than from maintenance spending. This is an important distinction for the company's valuation, as analysts deduct only maintenance capex, not growth expenditures, from adjusted funds from operations. "Put another way," Chanos tweeted on Aug. 11, "$CYXT is saying that 'Maintenance' capex is only 20% of total capex, yet 'Total Sellable Sq Ft' is up less than 1% Y/Y! See the problem?"

Whether classified as growth or maintenance, that capex needs to be paid for. Unfortunately, cash flows from operations in the first six months of the year amounted to just $11.7 million while cash balances, as of June 30, footed to $39.7 million. With limited runway left at current cash burn rates, Cyxtera filed a shelf registration on Aug. 12 to sell up to $300 million in new securities.

CYXT pays no dividend and trades at 12 times enterprise value to bespoke Ebitda. On June 30, net debt, including operating leases, amounted to $2.3 billion, or eight times trailing Ebitdar (that is, Ebitda plus rent). In the three months ended June, the company generated an operating loss of $11.1 million versus an interest expense of $38.9 million.

While the Street is bullish on CYXT with seven of the eight analysts on the case rating shares a buy, short interest sums to 14.5% of the limited equity float. Since our analysis last summer, the share price has slipped by 35.9% versus a 3.5% decline in the S&P 500. The Cyxtera C-suite perhaps doesn't regret selling a net 151,700 shares for proceeds of $2.1 million over the past 12 months. In the August shelf registration, insiders lined up to sell an additional 130.3 million shares out of a total share count of 178.6 million.

Cyxtera is not just a freestanding problem, but also presents a risk to Digital Realty. As of Dec. 31, 2021, Cyxtera was DLR's 11th-largest tenant, providing 1.8% of rents. Cyxtera likewise delivered 24.1% of rents for Digital Core REIT Management Pte. Ltd. The last-named entity is a spinout of 10 DLR data centers that Digital Realty listed on the Singapore Exchange last year. DLR owns 35% of Core's shares and retains a 10% stake in its properties.

In Core REIT, Digital had hoped to build a vehicle that could tap the public markets to buy additional vintage DLR buildings. The April bankruptcy of Sungard Availability Services, however, has stymied those plans. Sungard had accounted for 7.3% of Core's rents; tossing a lifeline to Core, DLR volunteered to make whole any missed Sungard payments. Laudable as that gesture may be, Core REIT now trades below its IPO price, postponing indefinitely Core's ability to buy Digital's unwanted properties. Continued deterioration in Cyxtera's financial situation would create bigger headaches for both Core and its parent.

Give Digital Realty this much: It is spending heavily on its properties, although, like Cyxtera, it tells analysts that the vast majority of outlays are for growth, not maintenance. In the first half of 2022, DLR's capex amounted to $1.1 billion versus cash flows from operations of $783.6 million. However, by the company's lights, just $90.3 million of those outlays were for recurring investments; the balance went into growth opportunities.

Despite hefty investing, the top line showed year-over-year growth of only 4.2% in the second quarter while funds from operations per share slumped by 12.9%. This is the basic problem for the sector: It needs to spend ever greater sums just to stay put. While capital employed per square foot of data center rose to just under $800 in the second quarter, from slightly under $400 in full year 2012, occupancy fell to 83.9% from 94.4%.

"In reality, these are capital-intensive operating businesses," Chanos tells me, "where capex has exceeded depreciation for years, where free cash flow has been negative for years and where returns on invested capital are in the low- to mid-single digits, well below the industry's cost of capital. On top of that, they are competing with three of the most vicious competitors in the world who also happen to be some of their largest tenants: Amazon, Microsoft and Google.

"We are not saying that the legacy data-center business is going away tomorrow," Chanos continues. "We do think it may go away over time as it is losing market share to the hyperscalers."

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