

At the Ira Sohn Conference earlier this month, Jonathon Jacobson of Highfields Capital Management outlined a short case against Digital Realty Trust (DLR) that was one of the best we had ever heard. Since then (and at the time of this writing), the stock has declined about 9%. DLR is heavily shorted with 17.7MM of the 128MM shares outstanding short as of the end of April. Based on the presentation we heard, this made perfect sense, and we would not have been surprised if the stock had been down more. When we investigated Highfields' claims, we found that everything they said was factually correct. We also believe that they have misinterpreted these facts and that the stock represents a buying opportunity ahead of the company's presentation at the NAREIT Conference which begins on June 5.

In examining Highfields' case, we want to emphasize that we do not believe they mislead anyone or that they did bad research. We do think they missed a few critical points that invalidate the thesis. We will do our best to properly state their thesis and we invite Highfields to contact us if they believe we missed or misstated anything.

Is DLR Misstating Their Maintenance Cap-X?

Highfields made three significant claims about Digital Realty. The first is that the company is misstating recurring capital expenditures. The reason this matters is because recurring cap-x is one of the items subtracted in the company's calculation of Adjusted Funds from Operations (AFFO). AFFO is a non-GAAP measure that Real Estate Investment Trusts (REITs) use to calculate their ability to fund dividends from their ongoing operations. Digital Realty tends to pay out about 80% to 85% of their AFFO in dividends so an increase in recurring cap-x would reduce AFFO which would in turn reduce the company's dividend payments. Since REITs often trade off of dividend yield, a dividend reduction would drive the stock price down.

In 2012, DLR claimed that their recurring or maintenance cap-x was \$21MM and their AFFO was \$433MM. DLR paid out about 85% of their AFFO in dividends that year. DLR spent \$2.5 billion on capital expenditures in 2012 and \$1.6 billion of that was for acquisitions of real estate. This means that the company put about \$900 million into improvements in real estate. Improvements in datacenters are typically for things like hookups to multiple supplies of electricity, uninterruptible power supplies, air conditioning units, fire suppression, and pipes and cabling for everything. It is important to note that DLR houses servers with relatively short lives, but they don't own them.

With \$900MM of investments in 2012 in the kind of cap-x that needs maintenance and replacement and \$8.2 billion in non-land investments in properties, Highfields believes that \$21MM of recurring cap-x is too low. They suggest that \$413MM would be a more appropriate number. We believe they are getting that number by adding up the non-

land and non-lease investments in properties from the most recent balance sheet and dividing by an assumed 20 year life. There are a few problems with this approach:

Do These Assets Really Have no Value 20 Years From Now?

First, this approach assumes that with the exception of land, everything that Digital Realty owns will have no value in 20 years. We've spoken with experienced REIT investors, and datacenter experts who have designed and built high end facilities for large investment banks. Datacenter facilities are highly engineered buildings with assets that have much longer lives.

- Let's start with the buildings themselves. Datacenters are basically large windowless warehouses designed to be fire, bomb, earthquake, and flood resistant. We live in New York, and most buildings here are substantially older than 20 years and are not engineered to datacenter specifications. These buildings will last decades past the 20 year life assumed by Highfields.
- Much of the capital invested in these sites goes to laying pipes and electrical cabling. The useful life for these assets is also many decades.
- These buildings have diesel generators to provide emergency power in case access to the grid is impaired. These generators are well-maintained, tested regularly, and have a useful life that extends decades past the 20 year mark.
- Raised floors and steel cages: Datacenters build raised floors to provide room for cabling and have steel cages to secure servers in a shared facility. The useful life of these items is essentially indefinite.
- Battery backup, HVAC and air conditioning systems, and fire suppression systems: This is the stuff that has to be replaced on an 18 to 30 year cycle. HVAC units tend to last around 20 – 25 years. New technology may make it worthwhile to upgrade fire suppression units on a 20 – 30 year cycle. And battery systems need to be replaced more often.
- Servers: These have a useful life of around 5 years. Digital Realty doesn't own the servers in their facilities. They are either provided by tenants, or Digital will buy servers for a tenant and charge them for it.

When Highfields wants to use \$413 in annual maintenance cap-x, they are essentially making the case that everything DLR owns will be worthless and will need to be replaced in 20 years. Looking at the list above, we can see that the buildings, and many of the expensive assets in them have much longer lives. We have heard

estimates from people who build datacenters that about 30% to 45% of the cost of building a site is for capital items that will need to be replaced every couple of decades. The rest will last much longer.

Shouldn't We Credit DLR for Maintenance Expense?

Second, Digital Realty spends a lot of money maintaining their equipment. Things like the uninterruptible power supply, the diesel generators, and the fire suppression system are regularly maintained and tested. In 2012, DLR spent \$380MM on property operating and maintenance expense. One reason that maintenance capital expenditures are low is because the company expenses most of the maintenance on these items. DLR is spending the money to maintain their systems. They just aren't capitalizing it.

Maintenance Cap-X is a Cash Expense – Depreciation is an Accrual

Most importantly, we believe Highfields is missing the distinction between cash and accrual accounting. In our first point above, we note that much of DLR's capital expenditures have a life that extends decades beyond the 20 year Highfields' assumption. Let's examine the accounting for the items with 20 – 30 year lives. Let's assume Digital Realty buys an item like an HVAC unit or power supply which will need to be replaced in 20 years and that they pay \$10MM for the item. DLR will then recognize \$500,000 a year in depreciation and will expense approximately \$1MM a year in maintenance (See point 2 above). But until they need to replace the unit, they don't have maintenance cap-x. It is crucial to understand the difference between the annual \$500,000 non-cash depreciation accrual, the \$1MM maintenance expense which is recognized in the income statement, and the cash maintenance capital expenditures which will be \$0 for the first 19 years then be \$10MM in year 20.

DLR isn't hiding their maintenance cap-x. They are telling you that last year, they spent \$900MM in improvements in real estate (growth cap-x), \$21MM in recurring cap-x (capitalized maintenance or replacement of worn out items), and \$380MM in property operating and maintenance expense (non-capitalized maintenance recognized on the income statement). The \$21MM is what they spent in cash which is not the same as an accounting accrual for depreciation expense.

Highfields might look at \$382MM of depreciation and amortization and think that maintenance cap-x should be higher, but most of DLR's facilities are relatively new. A 5 year old datacenter should not have any expensive items that need to be replaced. In

fact many of the assets have very long lives (building, cabling, pipes, diesel generators, and steel cages). Items like the HVAC unit and fire suppression units will need to be replaced in another 15 to 20 years. There is no part of this that is misleading or which should lead the company to cut their dividend now.

We realize that arguments like this can have a slippery slope. If a company has high cash flow this year and has to spend a fortune in cap-x next year, we wouldn't look at this year's cash flow as recurring. DLR owns 122 mostly new properties with assets that have long lives. Not paying a dividend this year because they might have to replace an HVAC unit in 20 years seems a bit extreme. (In fact, we'll show in the next section that DLR pays out a small enough dividend to have money left over to replace that HVAC unit.) Assuming the entire company's asset base will be worthless in 20 years and placing no value on huge annual maintenance expenses that are recognized in the income statement is inaccurate and highly misleading.

Is DLR a Ponzi Scheme?

Highfields' second claim is that Digital Realty is paying their dividends from issuances of debt, preferred, and common equity instead of from free cash flow. While Mr. Jacobson avoided saying "Ponzi scheme", he did point out that there was a term used to describe a business enterprise that pays existing investors out of money raised from new investors.

Just like their first claim discussed above, Highfields is technically correct in this matter. If you subtract capital expenditures from cash from operations, you get a negative number. Digital Realty is also paying a dividend and regularly accesses the capital markets. These items are all factually correct, but can lead you to a poor conclusion.

In order to understand the Highfields' dividend claim, it helps to have a bit of an understanding of how a Real Estate Investment Trust (REIT) works. A typical REIT will own a collection of properties. It will operate and maintain those properties, and lease them to tenants in exchange for rental revenue. In order to maintain REIT status, the REIT needs to pay out at least 90% of its income to investors. Many REITs will pay out a high percentage of AFFO which can often be greater than net income.

Because REITS pay out most of their internally generated capital to investors, they typically access the capital markets to fund growth. As value investors, we are usually suspicious of companies that constantly raise capital; however, REITs are not typical companies. Successful REIT management will look at the cost of capital for raising debt or equity, choose whichever one is cheaper (or safer), and invest in new properties they expect will have a higher rate of return than the new capital raised. Existing equity

holders experience dilution, but because in our example, the new assets had a higher return than the cost of the new capital, net value is created for shareholders.

Taking this hypothetical example further, imagine you own a REIT that owns one property worth \$100MM. Let's imagine that this property produces about \$6MM of recurring cash flow per year and pays out \$5MM of that in dividends to investors. Now, let's imagine that the management of this REIT found a second building priced at \$100MM and that that price represented extraordinary value. If this REIT issued equity or debt to purchase this second building, and still paid \$5MM in dividends from property number one, would you consider this to be a Ponzi scheme?

Of course not...our hypothetical REIT is paying out a dividend based on a measure of recurring cash flow and it raised capital to purchase a second asset. This is not nefarious. It is how REITs operate.

That's Hypothetical. How Does This Apply to DLR?

In 2012, DLR had \$543MM in cash from operations and paid out \$373MM in dividends to preferred and common stock holders. Subtracting maintenance cap-x of \$21MM leaves a cushion of \$149MM. Highfields can point out that actual cap-x at DLR in 2012 was the \$2.5B noted above, but that was for acquisitions, new construction, or buildout of new property they'll lease in the future. Digital Realty didn't need to tap the capital markets to pay the dividend. The company has a portfolio of assets that produce enough cash to do that. DLR did need to access the capital markets to add new facilities; just like almost every other REIT.

We've already made the case that DLR is accounting for their maintenance cap-x appropriately and that we believe Highfields is ignoring the considerable amount of maintenance that the company is expensing. We noted earlier that much of the cost of a new facility is for assets that have a very long life (buildings, cabling, pipes, diesel generators) and that about 30% to 45% of the cost is for assets that need to be replaced on an 18 to 30 year cycle. We will note that the \$149MM cushion calculated above leaves room for DLR to replace 45% of their non-land assets on a 25 year schedule. That seems like ample cushion considering these are items they might need to replace in a couple of decades.

In any case, in suggesting that DLR is a Ponzi scheme, we believe Highfields is mixing up cash flow from existing operations with the typical REIT practice of raising capital for new construction or acquisitions.

You Claim These Practices Are Industry Standard. Are They?

We are not parents, but we can't imagine that the words, "Well, so-and-so is doing it so why can't I" will ever be convincing. Bad accounting is bad accounting and the fraud inherent in a Ponzi scheme is never ok no matter what anyone else is doing. Still, Highfields is making some pretty dramatic claims here and we thought it might be useful to take a look at what the numbers look like at the other public datacenter REITS. Please note that Equinix is not a REIT yet, Dupont Fabros doesn't report maintenance cap-x and that CyrusOne did their IPO on Jan 24, 2013. Still, we were able to get some valuable industry data.

Company	Recurring Cap-x/D&A			Recurring Cap-x/Depreciable Assets			Dividend Covered by CFFO Less All Cap-x	
	2011	2012	1Q '13	2011	2012	Annualized 1Q '13	2011	2012
Digital Realty Trust	4.2%	5.6%	4.1%	0.2%	0.3%	0.2%	No	No
Coresite Realty	2.1%	6.3%	10.7%	0.2%	0.6%	1.0%	No	No
CyrusOne		5.3%	1.4%		0.5%	0.1%	No	No
Dupont Fabros							No	No

What we can see here is that recurring cap-x is a fraction of depreciation and amortization which is consistent with our discussion above of long-lived assets and well-maintained systems. Recurring cap-x is tiny relative to depreciable assets. If Highfields was correct and the company should be recognizing \$413MM of maintenance cap-x a year, the number in that second group of columns should be around 5%. The last set of columns just illustrates the point made about how REITS finance themselves. They pay dividends based on the recurring adjusted funds from operations of their existing business and raise capital to build or acquire new assets.

Our view is that the entire REIT industry isn't a giant Ponzi scheme. While Highfields didn't make that claim either, their claim against Digital Realty applies widely. We would be interested in hearing if they think all REITs that raise capital to pay for new assets and that pay a dividend are also Ponzi schemes.

Is DLR Going to be Buried by GOOG, AMZN, and MSFT?

Mr. Jacobson expressed concern that with Google, Amazon, and Microsoft focused on cloud-based computing, there could be some well-capitalized competition in the datacenter space. We have to admit that we don't have any special insight into the strategic plans at those companies and more competition is never good for rental rates. We also would acknowledge that while building a high end datacenter with all the appropriate security, fire suppression, power redundancy, power backup, and industrial air conditioning among other safekeeping concerns is difficult, the knowledge for how to do so is available and can be easily purchased. In other words, if someone decides to enter the high end datacenter business, they can acquire the expertise to do so.

Before we declare that the datacenter hosting companies are all going out of business, it's worthwhile to take a more complete look at the sector. Google does offer its users cloud space as does Amazon. For the less technically inclined reader, all that means is that Google and Amazon will store documents for you which you can retrieve from your home computer, your work computer, your smart phone, or anywhere with a web connection. It's just like when you email yourself something at work so you can easily find the file when you log in at home. The documents are stored on Google's and Amazon's servers, and you can access them at your convenience. This is perfectly fine if you are a college student trying to access your history paper and don't care if it takes 10 milliseconds to load, or if it takes 3 or 4 seconds. If you are a high frequency trading operation, or if you are running a business that needs to comply with stringent record keeping and regulatory compliance issues, it's not even close to fine.

High frequency trading operations need to be located on an internet node in close physical proximity to the end server. In this world, the amount of time it takes the electrons to travel through the internet fiber is a significant consideration and thousandths of a second matter. If you are running an investment bank, a major telecom company, or a pharmaceutical company, data security and record keeping is crucial. These operations need to be in buildings that are earthquake, fire, bomb, and flood resistant. They need redundant power sources, backup power sources, state of the art fire suppression, and multiple water sources for the HVAC units. Even then, these customers will often store the same data in multiple datacenters in multiple locations. If the FDA, the SEC, or another relevant regulatory body wants data, these companies need to know they have secure immediate access to it. This is not the same as having your school papers or photos stored on Google or Amazon's cloud storage.

In fact, among Digital Realty's largest customers are TelX Group, Facebook, Morgan Stanley, AT&T, Deutsche Bank, Verizon, NTT, Level 3 Communications, Pfizer, Yahoo!, and Amazon. Even Equinix, a retail-oriented data service provider rents space from Digital Realty. Demand for greater and indefinite record keeping, and for secure access to more data from anywhere is growing and will continue to grow. It's possible that Google, Amazon, and Microsoft will start building high-end datacenters. It's also

possible that they'll realize that these are capital intensive enterprises that don't aren't part of their core competency, and will decide to rent space from companies like Digital Realty. We'll be watching future events closely, but will point out that Digital's operational datacenters have been averaging just under 95% occupancy for years, and their tenants have long leases and high switching costs.

So What Happens Now?

We noted earlier that Mr. Jacobson's presentation at the Sohn Conference was exciting, and there were many newspaper and blog posts outlining his scathing thesis. Presenters at the Ira Sohn Conference tend to be among the best known and most successful fund managers in the world, and presentations there have a tendency to move stocks as the presenter is speaking, or in the case of late presentations, the next day. There were articles in the papers noting that Digital Realty was one of the largest post-presentation movers. The stock is down as a result of Highfields' short thesis and short interest in DLR is high.

What makes this situation particularly interesting is that everything Mr. Jacobson said is factually true. We just think that his conclusions that AFFO is overstated and the company is a Ponzi scheme are incorrect. In addition to us providing a more clear understanding of the company's financials, we have spoken to DLR. We wouldn't be surprised if Digital Realty responds to Highfields' allegations during or before the NAREIT Conference which takes place in Chicago during the first week of June. We found the company's response on these issues to be factually based, unemotional, and compelling.

We think that a heavily shorted stock which is down on a broken short thesis and which will be facing a well-thought out response from the company at an industry conference represents an attractive buying opportunity.

What if We're Wrong?

We have shorted stocks for the better part of the last two decades, and understand the importance of having a catalyst to make your short thesis apparent to the rest of the world. The hedge fund business is full of people who got a short thesis right, but who lost a fortune before they were eventually proven correct. Even if we're wrong about everything, in order for Highfields to see the \$20 stock price they predict, we think one or more of three things will have to happen:

- 1) The Funding Window Would Have to Close: The definition of a Ponzi scheme involves paying existing investors with funds from new investors. If Highfields is correct that DLR is a Ponzi scheme, the catalyst that would illustrate this would be an inability to access new funds. The last time DLR issued debt, they did so at a yield well below 4%. The 10 year treasury is below 2%, and events around the world have investors looking for places to invest in the US. Easy access to funds is never a perpetual state of the markets, but it could be years before datacenter REITs have to make due with their existing capitalization structures. (We would note that difficulty getting funding would be a problem for any REIT that is trying to grow. It does not; however, make their accounting fraudulent or their business a Ponzi scheme).
- 2) Maintenance Cap-x Would Have to Catch Up With Accrued Depreciation: Highfilelds thinks that Digital Realty is understating their maintenance cap-x by a huge margin. We pointed out earlier in this report that many of Digital Realty's assets have very long lives, and the company spends a lot on maintenance expense. However, if Highfields is correct, the catalyst that would make this apparent would be the company starting to recognize the cash impact of these maintenance capital expenditures. Most of DLR's datacenters are relatively new. Unless the company is hit with a statistically unlikely early failure of much of their equipment, it will start to replace expensive equipment like HVAC units around 15 to 20 years from now. That's a long time to be short a stock while waiting for confirmation.
- 3) Third Parties Like GOOG, AMZN, and MSFT Would Have to Invest Billions in the Datacenter Hosting Business: The first two items on this list are highly unlikely to happen in the near future. This one, we could debate endlessly and not know. Any investment in technology faces an uncertain future, and we don't know if the above companies will decide to get into the real estate business or to rent high-end datacenter space for their operations and customers. We do think there is a difference between archiving emails or documents in the cloud and in hosting latency intensive high-security backup for mission critical applications and required data for regulators. Again, we point out Digital Realty's high occupancy and long contracts as well as the need to monitor the space.

Conclusion:

Digital Realty is heavily shorted and the stock is down due to a broken short thesis based on misunderstood facts. The company is likely to respond to this short thesis in a public forum in the next couple of weeks, and to do so in a convincing fashion. Even

if the short case turns out to be correct, it could be many years before they get confirmation or a catalyst. Being short a growing and dividend-paying REIT indefinitely seems like a risky proposition.

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Gary Brode is a SumZero contributor.