



DUFF & PHELPS
INVESTMENT MANAGEMENT CO.

2022 OUTLOOK

LISTED REAL ASSETS



David Grumhaus
President and Chief Investment Officer

The emergence of the Omicron variant could not stop a Santa Claus rally from putting an exclamation point on a very strong 2021 for global stocks. The MSCI World Index and S&P 500 returned 4.30% and 4.48%, respectively, in December, capping off returns of 22.35% and 28.71%, respectively, for the year. Both indexes marked their third double-digit yearly gain in a row. While we remain optimistic going into 2022, we worry that a tightening Federal Reserve (Fed) may put a damper on the market later in the year, making another year of double-digit gains a challenge.

2021 was all about rising earnings and the reopening. Market multiples actually contracted slightly while S&P earnings jumped 34%, driven by the post-COVID-19 economic recovery and very accommodative central-bank policy. We expect strong earnings again in 2022 with a further rebound from the pandemic and higher top-line revenue caused by increasing prices and higher inflation. However, our concern is that this inflation will remain persistent and could eventually lead to other challenges. We expect inflation to pull back as supply chain issues dissipate and consumers start to focus on services rather than goods, but we still expect it to be well above the Fed's 2% target. Two areas of particular concern for us are rents and wages. Owners' equivalent rent (OER) is an oversized inflation component, and we expect it to continue to rise given what we are seeing in the apartment REIT subsector. In terms of wages, job openings (JOLTS) and quit rates are at record levels, and companies across every sector are being forced



to pay up for employees. With labor participation still almost 5 million employees below pre-pandemic levels and with the majority of non-participants over 65, we think the wage spiral likely continues.

Between securing his second term and the higher inflation prints, Fed Chair Jerome Powell finally turned more hawkish. However, while accelerated tapering is a good first step, the Fed is still way behind the curve. Even at only 3% inflation, three rate hikes in 2022 will not be nearly enough to put things back in balance. Though rate hikes are coming, we expect the market to start the year strong. Like the previous variants, we think Omicron cases and worries will fade, and the market will once again focus on the economic recovery and rising profits. However, as the Fed starts implementing rate hikes, multiples may start to pull back, which will likely put a damper on the market in the back half of year. We will also be keeping a close eye on Washington for policy missteps or geopolitical issues. We expect gridlock in Congress. A more muted Build Back Better (BBB) bill may get done, but the greater risk is that nothing happens and the frustration of progressive Democrats boils over, perhaps leading to changes

in the Senate filibuster rules or extreme executive orders. Russia and China are potential wild cards as well, as any military action in the Ukraine or Taiwan would likely lead to significant market volatility and economic disruption.

We think global markets will generally follow the U.S.'s lead. However, we believe Europe is due for a catch-up later in the year. Due to more lockdowns and much lower direct governments payouts during the pandemic, European stocks have not enjoyed the same recovery trade that U.S. stocks have experienced. Additionally, the European Central Bank has more flexibility than the Fed in terms of keeping rates low. Thus, we think a rotation toward Europe later in the year makes sense. Emerging-market (EM) stocks have also dramatically underperformed U.S. stocks. Assuming COVID-19 dissipates, we would expect less weakness overall, though China's significant weight in EM combined with fears around continued Chinese government intervention may lead to more muted returns.

The following sections provide in-depth views by Duff & Phelps Investment Management Co.'s portfolio managers on their respective areas of expertise.

OUTLOOK: GLOBAL REAL ESTATE SECURITIES

By Geoffrey Dybas, CFA and Frank Haggerty, CFA

2021 REFLECTIONS

“THE TEAM EXPECTS CASH FLOW AND DIVIDEND GROWTH IN THE GLOBAL LISTED REAL ESTATE SPACE TO ACCELERATE FURTHER IN 2022...”

Global listed real estate outperformed broader global equity, fixed income, and private real estate markets in 2021.¹ Outperformance was driven by a triple discount to global equities, fixed income, and private real estate; ongoing global economic recovery; merger and acquisition activity (M&A); and the pursuit of inflation hedges.

With the help of significant fiscal and monetary stimulus and a lack of shutdowns versus other countries, U.S. nominal economic growth rebounded strongly from COVID-19 induced challenges. While rapid demand created supply chain issues and higher inflation, U.S. REITs materially outperformed the FTSE EPRA Nareit Developed Index as all property sectors delivered positive results. Of note, Israel, Sweden, and Canada also outperformed the global index.

Ex-U.S. real estate equities generally lagged the global index in the year. Multiple headwinds emerged, including a stronger U.S. dollar, a slower and more uneven recovery across many ex.-U.S. countries, and less exposure to non-core property sectors with healthier market fundamentals.

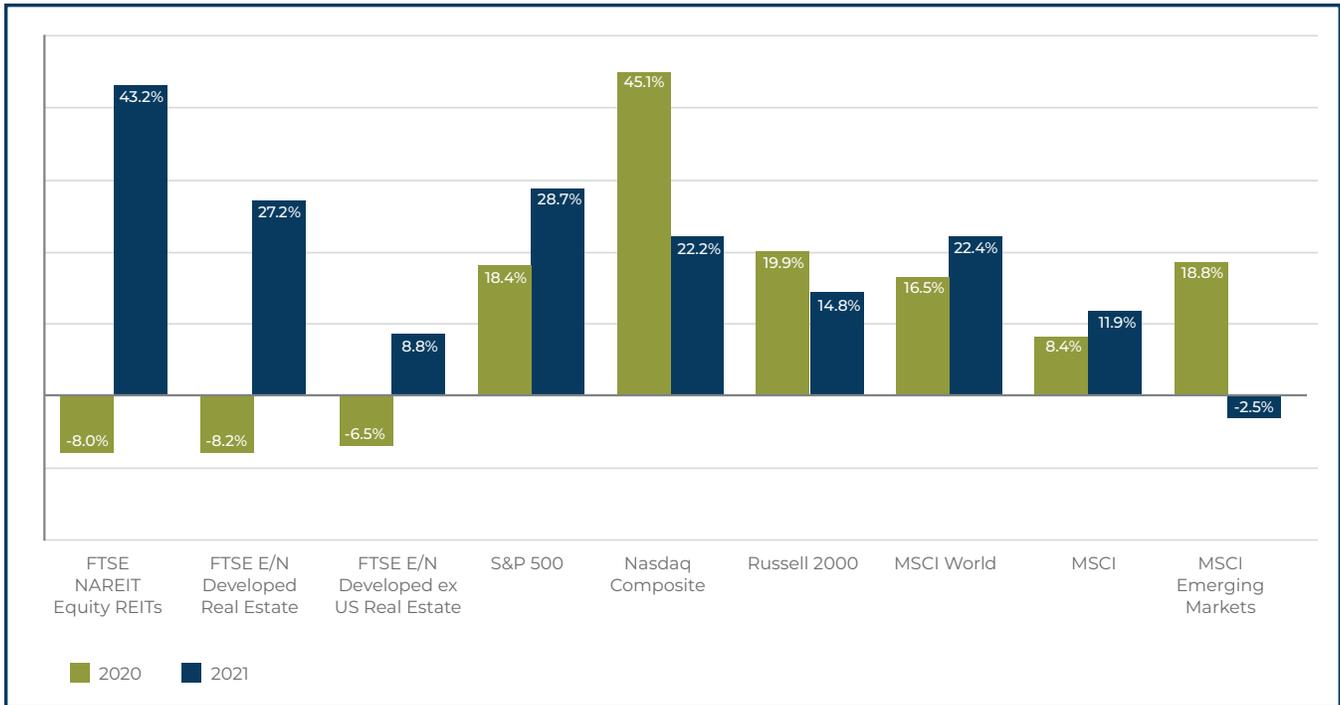
Looking Forward

The Duff & Phelps Global Real Estate Securities Team expects cash flow and dividend growth in the global listed real estate space to accelerate further in 2022, following the COVID-19 pandemic. While global economic growth and regional property sector fundamental

¹ Listed results through December 31, 2021; private real estate results through September 30, 2021.



Comparative Asset Class Total Return Performance (US \$)



Source: Bloomberg Finance L.P.

Past performance is not indicative of future results. Indices are gross of fees and are not available for direct investment.

performance will remain varied and influenced by the impacts of the pandemic, new variants, and local policy responses, the team expects healthy underlying property fundamentals to result in an acceleration in global cash flow and dividend growth. Growth will differ on a regional basis as better positioned balance sheets of U.S. real estate companies will continue to support growth through acquisitions, development, and redevelopment while ex-U.S. companies benefit from a cyclical recovery.

From a sector perspective, secular growth drivers should continue to benefit logistics, self-storage and residential globally. However, retail, office, healthcare and lodging recoveries will continue to vary by geographic location, asset quality and customer orientation. Against a backdrop of solid

demand, new supply continues to fall across global property sectors and should not be an issue in the near-term.

From a macro perspective, governments and central banks will begin to remove some of the fiscal and monetary support that was provided in response to the negative economic shock from COVID-19. The pace and magnitude of future interest rate increases in response to on-going and persistent inflationary pressures will have a significant influence on the pace of economic growth and markets. However, the team believes global real estate can benefit from a certain amount of higher inflation. Historically, during periods of rising interest rates and medium to high inflation, U.S. REITs have generated positive total returns and outperformed equities. In addition, the ability to



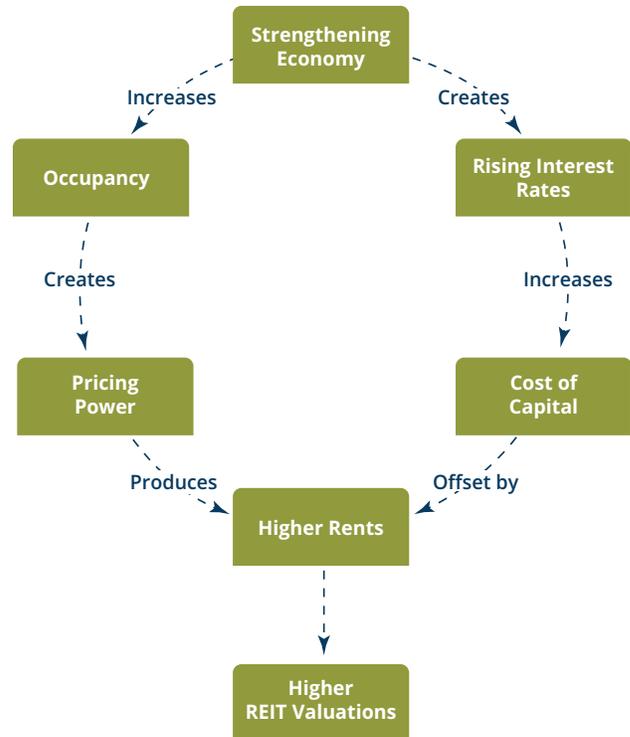
raise rents, and thus cash flows, and the increase in replacement costs of the real estate itself make a strong case for REITs to perform well in a rising interest rate and inflationary environment.

Rising interest rates and inflation occur during a rebounding or strengthening economy, which in turn leads to an increasing demand for commercial real estate space. This dynamic can result in faster revenue growth through increases in occupancy and rents, which may more than offset an increase in expenses due to higher inflation. Additionally, the replacement value of their underlying real estate should increase as land values go higher and input costs increase (materials such as steel, concrete, lumber, and architectural and contractor services).

Merger and acquisition activity was robust in 2021 and should continue in 2022, though the team expects the pace to slow. Most M&A transactions announced among public companies in 2021 involved larger peers looking to increase scale and lower their cost of capital. In private transactions, on the other hand, the buyers have sought to arbitrage the difference in valuations in the private vs. the public real estate market. Given the capital that continues to be raised by private equity sponsors on a global basis, the Global Real Estate Securities Team expects acquisition activity to remain elevated and for pricing to remain competitive.

In 2022, the team expects global REITs to benefit from increased economic and employment growth, as they are well-positioned to grow their businesses in a post COVID recovery period. Variances in global growth trajectories offer value creation opportunities for long-term, active managers. The Global Real Estate Securities Team is particularly well suited to capitalize on these opportunities, due to their focus on high quality owner-operators of enduring commercial real estate, with solid balance sheets and proven management teams, which will benefit from the on-going improving global economic backdrop.

Demand Leads to Pricing Power, Which Can Outweigh Higher Capital Costs



OUTLOOK: GLOBAL LISTED INFRASTRUCTURE

By Steven Wittwer, CFA and Connie Luecke, CFA

2021 REFLECTIONS

“WE ARE OPTIMISTIC THE ECONOMY WILL CONTINUE A PATH TO RECOVERY...”

Global equity markets posted strong gains in 2021, sparked by progress in vaccine deployment, supportive monetary policy, and encouraging signs of economic recovery. However, there were some bumps in the road in the latter half of the year with the appearance of the Delta and Omicron variants along with persistent supply-chain bottlenecks and inflation. Inflation continued to rise at a higher and more sustained level than anticipated by the Federal Reserve, causing an increase in both 2022 rate-hike expectations and market volatility.

The energy infrastructure sector staged a strong rebound due to positive vaccine news and an improved outlook for demand as the economy recovers. The communications sector posted healthy returns, as tower customers increased deployment of 5G equipment. North American railroad stocks were the primary driver of performance in the transportation sector as the movement of freight recovered to pre-pandemic levels. Airport and toll-road stocks were mixed by region as travel lagged other areas of the economy due to varying restrictions. After a very strong performance in 2020, European renewables-focused electric utility stocks retraced their gains, resulting in lackluster performance for the utility sector.

Looking Forward

Investors will likely remain focused on the COVID-19 variants and the potential for rising inflation. We are optimistic the economy will continue a path to recovery in 2022. With respect to inflation, we would highlight that infrastructure companies possess measures of protection via inflation-linked contracts and regulatory resets.



Global Listed Infrastructure Inflation Protection Characteristics

By Subsector

Subsector	Hedge Rating	Comments
US Railroads	+++	<ul style="list-style-type: none"> – Inflation + pricing escalators – Fuel costs passed through to customers – Higher fuel costs make more competitive vs. trucks
Cellular Towers	+++	<ul style="list-style-type: none"> – US towers have 3% annual escalators; European towers have escalators tied to inflation
US Utilities	++	<ul style="list-style-type: none"> – Mostly regulated, with pre-determined ROEs and expected costs – Some lag, but some big costs (fuel) often passed through
Toll Roads	++	<ul style="list-style-type: none"> – Most toll roads have inflation-linked escalators that reset annually
Energy Infrastructure	++	<ul style="list-style-type: none"> – Regulated pipelines have built in PPI escalators – Higher commodity prices drive volumes and directly benefit those with commodity exposure
European Utilities	+	<ul style="list-style-type: none"> – Some regulation and cost pass-through – Higher commodity prices can drive higher generation profits
Airports	+	<ul style="list-style-type: none"> – Aeronautical fees (40% of revenue) have inflation escalators – Other fees based on retail sales which rise with inflation

Source: Duff & Phelps Investment Management Co.

We see opportunities for the Strategy as market volatility has created attractive valuations across much of the infrastructure universe. Strong secular trends support a steady growth cadence for communications and utility companies, while transportation and midstream energy companies are poised to benefit from improving economies. In addition, infrastructure companies could benefit in multiple ways from the U.S. Infrastructure and Jobs Act, which is supportive to most sectors in the Strategy, particularly utilities.

As we look forward to 2022, we see the following trends in each of the infrastructure sectors:

Communications

Wireless tower activity levels have increased to an all-time high in the U.S. as the big three wireless operators have begun to upgrade their networks in earnest while a new entrant is feverishly building out a fourth nationwide network. We expect further growth in 2022 as operators deploy new spectrum to accommodate surging wireless data traffic.

In Europe, the independent tower model is accelerating, as more telecommunications carriers are considering selling off their tower portfolios. We expect further M&A in 2022 as the European market follows a roadmap used in the U.S. more than a decade ago. This provides significant opportunity for tower companies to grow through



acquisition while they continue to construct new towers to meet organic demand.

The 5G buildout is just beginning and will be a multi-year process, so tower companies' runway for related growth remains quite long and is supportive of current valuations. Investment by telecommunications carriers will necessitate more wireless towers, including small cells and fiber networks, to meet increasing levels of data and video usage.

Utilities

The decarbonization of the economy creates a win-win for utilities as they improve their environmental profile while also increasing their earnings. The transition to renewable energy provides a visible ramp of growth that extends for more than a decade.

Political initiatives reinforce our positive thesis. Investments from the Next Generation EU recovery funds will hit their stride in 2022 and are focused on the energy transition. In the U.S., the clean-energy portion of the Build Back Better legislation is likely to be addressed by Congress in some fashion regardless of whether this particular legislation is passed, adding to the already attractive economics of wind and solar power generation.

Utilities have much to offer that we believe is currently being overlooked by investors: strong earnings visibility, momentum from the global clean-energy theme, and attractive valuations relative to the broader market.

Transportation

North American railroads have seen freight volumes nearly recover to pre-pandemic levels and the rails have a bright outlook for 2022. Over the course of the year, we expect global supply chain congestion to moderate, supporting more fluid movement of freight volumes as economies recover. In addition, strong pricing gains coupled with efficiency measures will lead to further margin expansion for the group.

Toll road volumes have shown resiliency with many roads already exceeding pre-pandemic traffic levels. Investor concerns over the Delta and Omicron variants have created attractive valuation opportunities, while we foresee another steady year of operations ahead.

Airports have suffered the most within the transportation sector. We expect passenger traffic to recover as the pandemic dissipates. Leisure travel should continue to improve due to pent-up demand, while business travel is likely to face continued challenges from video conferencing and corporate ESG objectives. Airport stocks will likely remain volatile until there is more certainty around travel trends. There is potential upside to long-term valuations if passenger traffic does return to pre-pandemic levels.

Energy Infrastructure

The midstream energy sector should continue to perform well in 2022. Although crude oil, natural gas, and NGL prices are off the highs set several weeks ago, they remain at levels that are broadly supportive of producer economics and should encourage continued modest increases in activity levels. We see demand growth outpacing supply additions in each of these markets as the global economy continues to recover from the effects of the pandemic.

We are encouraged by the newfound capital discipline of midstream energy companies, as the focus has turned to generating free cash flow and returning cash to shareholders. This shift in capital allocation philosophy is likely to appeal to a broader set of investors and support higher company valuations.

With signs of improvement in the operating environment, we view large, integrated midstream energy companies as undervalued, given their attractive asset bases and the essential role they play in the transportation of oil, natural gas, and LNG (liquefied natural gas).



OUTLOOK: GLOBAL CLEAN ENERGY

By Benjamin Bielawski, CFA and Eric Fogarty, CFA

2021 REFLECTIONS

“...WE REMAIN
VERY
CONSTRUCTIVE
ON THE GLOBAL
OUTLOOK FOR
CLEAN ENERGY...”

Following Joe Biden’s presidential win and the Democrats taking the Senate, 2021 began with expectations that the U.S. would follow Europe’s lead in adopting a broader clean-energy agenda. However, U.S. policy implementation never materialized during the year.

December 2021 was punctuated by California regulators’ proposed changes to net-energy metering and very slim prospects (as of this writing) for the current form of the Biden administration’s Build Back Better (BBB) legislation. In addition to these U.S. policy challenges, the clean-energy sector was also impacted by higher interest rates, inflation, supply chain worries, and higher energy prices.

Looking Forward

Despite a rather difficult 2021, we remain very constructive on the global outlook for clean energy into 2022 and long term. In Europe, many of the bigger initiatives were taken in 2021, such as the ‘Fit-for-55’ framework, the U.N.’s Intergovernmental Panel on Climate Change (IPCC) Assessment Report and COP26 directives. The EU and/or local governments are now expected to establish laws around these directives coinciding with the EU Taxonomy rollout. Also, 2022 should see a ramp-up in EU recovery fund disbursement. Next Generation EU entails €750 billion (€390 billion in grants + €360 billion in loans), which must be disbursed between 2021 and 2026. These funds are focused on the clean-energy transition and should act as the initial stimulus for significantly more private investment.

In the U.S., while uncertainty around BBB is a setback, we see solid prospects for the clean-energy portion of the legislation. Congress could vote on standalone environmental legislation in 2022 if



BBB is broken into its constituent pieces. The key Investment Tax Credit (ITC) and Production Tax Credit (PTC) portions have wide bipartisan support. Both the ITCs and PTCs were extended during the Trump administration when Republicans controlled the Senate. Recent commentary from Sen. Joe Manchin and others suggests that these clean-energy components are feasible. In addition, we expect the proposed changes to net-energy metering in California to end up being relatively benign given commissioner turnover, solar-industry backing, growing battery storage adoption, and calculation assumptions. This should set a reasonable template in the U.S.'s most important jurisdiction for distributed solar.

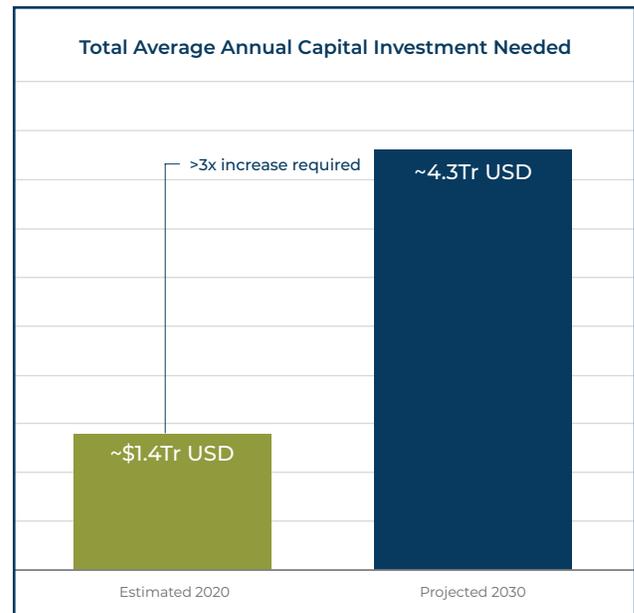
We also expect a continued ramp-up of renewable and clean-energy technologies in 2022, including newer areas such as hydrogen, carbon capture, and storage. Also, energy market structures should continue to advance, including corporate purchased power agreement (PPA) activity for renewables. Overall electrification efforts are expected to move forward as well, including broader adoption of electric vehicles and heat pumps.

Despite this positive outlook we remain cognizant of the headwinds facing clean-energy investments. First, the bounce in global interest rates could weigh on equity markets. Second, the global economy continues to experience cost inflation and supply-chain pressures. Third, the rise in energy prices puts pressure on the U.S. and Europe given the potential ramifications for household affordability. We continue to monitor risks in the form of political intervention, bill 'headroom,' and roll-out delays.

The long-term attraction of clean energy remains intact. We expect a global, long-term capital replacement cycle with decades of growth ahead. Over the next 10 years, the annual investment level could grow more than threefold. This will entail a combination of increased governmental

support, technology innovation and disruption, growing adoption, and global proliferation of clean-energy advancements.

Investment Needs in the IEA's "Net Zero by 2050" Scenario Versus Current Levels



Sources: D&P estimates derived in part from International Energy Agency's (IEA's) "Net Zero by 2050 - A Roadmap For the Global Energy Sector," October 2021



For more information about Duff & Phelps Investment Management Co. strategies please visit www.dpimc.com or contact Susan Ford.



Susan Ford

Susan.Ford@dpimc.com

312-917-6538

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