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Get real with income-producing real assets

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We have seen demand for real assets grow dramatically in recent years, and we expect it will advance further as investors better understand the positive attributes of the asset class. Real assets offer the opportunity for diversification, inflation hedging and competitive total return potential. Real assets may also serve as a nontraditional source of income, a feature that investors frequently overlook.

WHAT ARE REAL ASSETS?

Broadly, real assets provide the framework and resources to facilitate everyday activity in the world economy. While numerous types of investments could be considered real assets, our definition includes:

- **Real estate,** including real estate investment trusts (REITs). Land and commercial properties including apartments, offices, warehouses, malls, etc.
- **Infrastructure.** Assets and networks used to transport, store and distribute goods, energy, people and information, such as toll roads, pipelines, airports and cellphone towers.
- **Commodities.** Basic goods such as oil, natural gas, precious metals, gold, corn and soybeans.

Unlike conventional stocks and bonds, the value of listed real asset investments comes from the physical nature of their underlying assets. This direct link to hard assets means real assets often store long-term value better than more traditional investments. Their intrinsic value may also increase due to higher utilization, greater demand or scarcity of supply.

The inherent characteristics of each real asset can vary, but they have several features in common.

DIVERSIFICATION BENEFITS

Real assets have historically exhibited a lower correlation to a wide variety of investment alternatives, as well as other real assets. The performance drivers for real assets are fundamentally diverse from other types of securities. By expanding into asset classes with lower correlations, investors may potentially benefit from greater diversification.

Figure 1: Real assets have a low correlation with other assets

	Infrastructure	EM equities	Global RE	EM bonds	HY bonds	U.S. equities	Non-U.S. equities	Global bonds	Municipals	U.S. bonds	Commodities
Infrastructure	**1.00**										
EM equities	**0.80**	**1.00**									
Global RE	**0.85**	0.76	**1.00**								
EM bonds	**0.70**	0.68	**0.67**	**1.00**							
HY bonds	**0.74**	0.72	**0.75**	0.78	**1.00**						
U.S. equities	**0.79**	0.76	**0.77**	0.56	0.70	**1.00**					
Non-U.S. equities	**0.89**	0.93	**0.83**	0.67	0.75	0.87	**1.00**				
Global bonds	**0.51**	0.38	**0.46**	0.54	0.32	0.18	0.39	**1.00**			
Municipals	**0.24**	0.09	**0.26**	0.44	0.31	0	0.09	0.47	**1.00**		
U.S. bonds	**0.22**	0.08	**0.24**	0.51	0.20	-0.06	0.04	0.73	0.67	**1.00**	
Commodities	**0.51**	0.50	**0.39**	0.35	0.43	0.39	0.52	0.22	0.01	-0.08	**1.00**

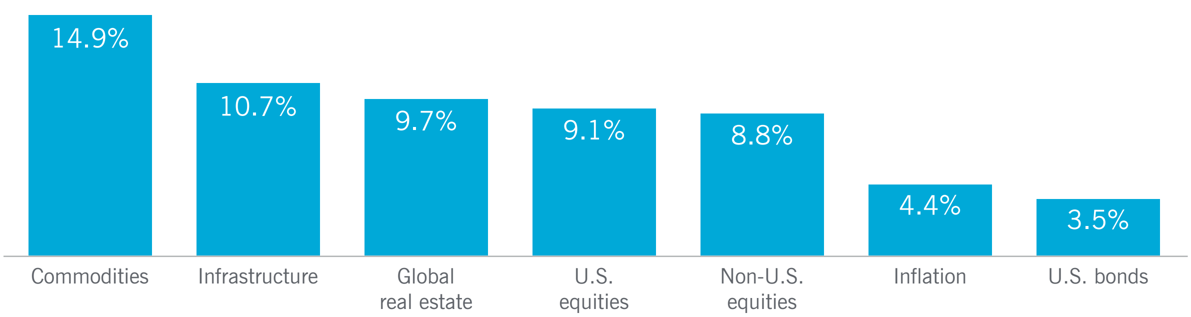
Data source: Morningstar Direct, 01 Jan 2002 to 30 Jun 2021. Period shown is the earliest common date among indexes; full year S&P Global Infrastructure Index returns start 1 Jan 2002. **Past performance is no guarantee of future results. Representative indexes: infrastructure:** S&P Global Infrastructure Index; **emerging market equities:** MSCI Emerging Markets Index; **global real estate:** FTSE EPRA/NAREIT Developed Index; **emerging markets bonds:** Bloomberg Barclays Emerging Markets Aggregate Index; **high yield corporate bonds:** Bloomberg Barclays U.S. Corporate High Yield Index; **U.S. equities:** S&P 500 Index; **non-U.S. equities:** MSCI ACWI Ex US Index; **global bonds:** Bloomberg Barclays Global Aggregate Unhedged Bond Index; **municipal bonds:** Bloomberg Barclays Municipal Bond Index; **U.S. bonds:** Bloomberg Barclays U.S. Aggregate Bond Index; **commodities:** S&P GSCI Index.

INFLATION HEDGING ABILITY

Real assets have historically exhibited greater ability to hedge inflation than the broader equity and fixed income markets. Real assets have generally offered stronger returns during periods when inflation is rising.

Figure 2: Real assets offered stronger returns when inflation was rising

Annualized total return



Data source: Morningstar Direct, 01 Jan 2002 to 30 Jun 2020. **Past performance is no guarantee of future results. Representative indexes: commodities:** S&P GSCI Index; **infrastructure:** S&P Global Infrastructure Index; **global real estate:** FTSE EPRA/NAREIT Developed Index; **non-U.S. equities:** MSCI ACWI Ex US Index; **U.S. equities:** S&P 500 Index; **inflation:** US BLS CPI All Urban NSA 1982-1984; **U.S. bonds:** Bloomberg Barclays U.S. Aggregate Bond Index.

In general, inflation increases as economic activity accelerates. In such an environment, commodity prices tend to rise in conjunction with inflation, as demand for goods increases with gains in consumption and building activity. Infrastructure and real estate also tend to have a positive correlation with inflation. When the prices for goods and labor costs increase, the replacement costs for these types of assets also increase. Additionally, many infrastructure assets have a direct tie to inflation measures such as the Consumer Price Index (CPI) in their contracts or concessions.

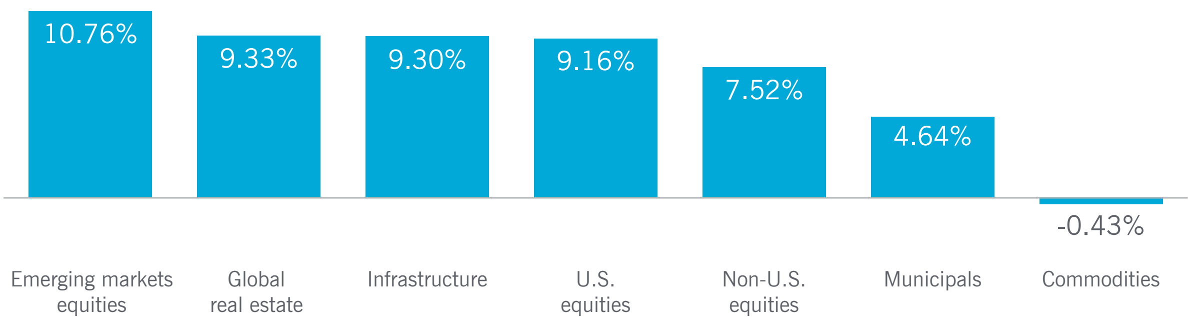
Real estate companies often structure leases with rent escalators that increase the rent over the life of the lease. In both cases, these structures are used to grow cash flows in an attempt to account for the potential effects of inflation.

COMPETITIVE TOTAL RETURN POTENTIAL

Global real estate and infrastructure investments have outpaced most other equity groups, including U.S. stocks and non-U.S. stocks, since 2002.

Figure 3: Infrastructure and real estate returns have outpaced most other equity groups

Annualized total return



Data source: Morningstar Direct, 01 Jan 2002 to 30 Jun 2021. **Past performance is no guarantee of future results. Representative indexes: emerging markets equities:** MSCI Emerging Markets Index; **infrastructure:** S&P Global Infrastructure Index; **global real estate:** FTSE EPRA/NAREIT Developed Index; **U.S. equities:** S&P 500 Index; **non-U.S. equities:** MSCI ACWI Ex US Index; **commodities:** S&P GSCI Index.

In addition, infrastructure has also offered a higher return with similar or less risk. And while global real estate has demonstrated more risk than broader non-U.S. equities, it has provided more return per unit of risk than the broader set.

Figure 4: Infrastructure offers an attractive risk and return balance

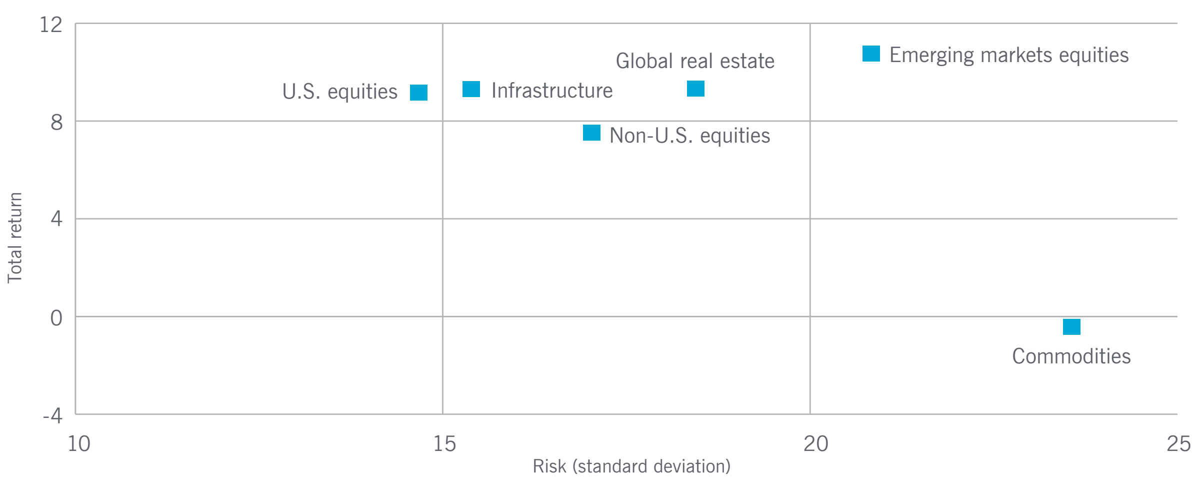


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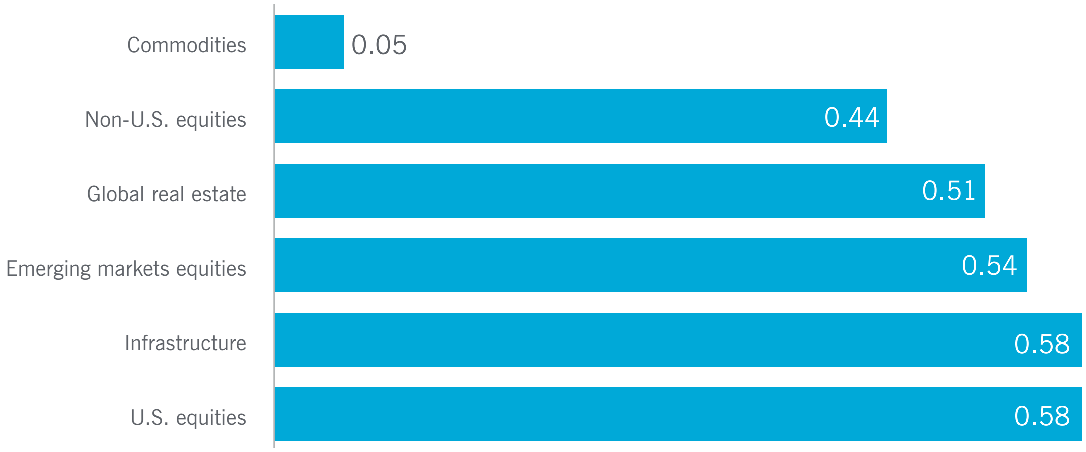
Figure 5: Infrastructure and global real estate have provided strong risk-adjusted returns

Sharpe ratio



Data source: Morningstar Direct, 01 Jan 2002 to 30 Jun 2021. **Past performance is no guarantee of future results. Representative indexes: commodities:** S&P GSCI Index; **non-U.S. equities:** MSCI ACWI Ex US Index; **U.S. equities:** S&P 500 Index; **emerging markets equities:** MSCI Emerging Markets Index; **global real estate:** FTSE EPRA/NAREIT Developed Index; **infrastructure:** S&P Global Infrastructure Index.

Overall, infrastructure and global real estate equities have provided competitive risk-adjusted returns compared to U.S. equities and stronger risk-adjusted returns than non-U.S. equities.

Commodity returns since 2002 are low, as the asset class has been in a bear market that has persisted since the financial crisis in part due to supply and demand imbalances.

NONTRADITIONAL SOURCE OF INCOME

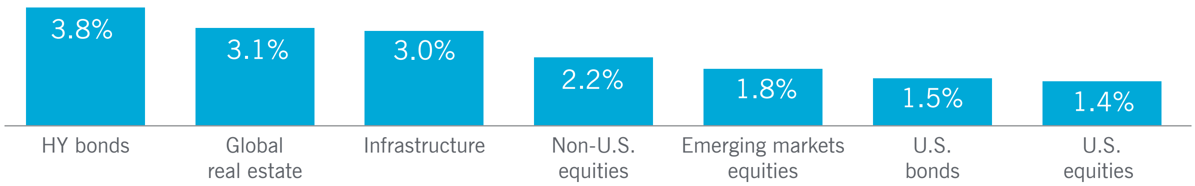
We believe real asset investments that offer a stable yield supported by contractual cash flows are especially attractive. These investments have assets that tend to be monopolistic, providing a strong and consistent income stream usually derived from their fee-for-use nature.

Infrastructure and real estate exemplify these types of income-producing real assets. These companies commonly own or operate location-specific hard assets that garner a fee for use through long-term contracts, concessions or leases. Commodities rely solely on capital appreciation and offer no income component. Infrastructure and real estate have the potential to produce attractive yields compared to other commonly held investments.

These alternative income sources may also prove particularly advantageous for investors in low interest rate environments where more traditional yield options are anchored by lower rates, much like we've seen globally for the past several years.

Figure 6: Real estate and infrastructure offer attractive yields

Yield



Data source: Bloomberg, L.P., 30 Jun 2021. **Past performance is no guarantee of future results. Representative indexes: high yield corporate bonds:** Bloomberg Barclays U.S. Corporate High Yield Index; **global real estate:** FTSE EPRA/NAREIT Developed Index; **infrastructure:** S&P Global Infrastructure Index; **non-U.S. equities:** MSCI ACWI Ex US Index; **U.S. bonds:** Bloomberg Barclays U.S. Aggregate Bond Index; **emerging markets equities:** MSCI Emerging Markets Index; **U.S. equities:** S&P 500 Index.

Moreover, these steady income streams may help cushion total returns in times of volatility, potentially providing for added downside risk management.

Emphasizing the most mature companies within infrastructure and real estate with fewer growth expectations allows for stable cash flow, and may result in a less volatile return stream.

Figure 7: Steady income streams may help cushion total returns

Downside capture ratio

	Downside capture vs U.S. equities		Downside capture vs Non-U.S. equities
Emerging markets equities	-110.25	Emerging markets equities	-107.04
Non-U.S. equities	-106.20	Non-U.S. equities	-100.00
U.S. equities	-100.00	Global real estate	-74.11
Global real estate	-92.80	Infrastructure	-71.83
Infrastructure	-77.39	U.S. equities	-65.66

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CONSIDER INCOME PRODUCING REAL ASSETS

Historically, income producing real assets such as infrastructure and real estate have supplied competitive total return and positive inflation hedging effects, with lower correlations to more traditional stocks and bonds. These asset classes have also provided convincing yields, helping investors diversify their income sources. Additional benefits to investors include enhanced total returns and cushioned performance during volatile periods. For these reasons, we feel income-producing assets should be an important part of a balanced portfolio.

For more information, please visit nuveen.com.

Endnotes

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A word on risk

All investments carry a certain degree of risk, including possible loss principal and there is no assurance that an investment will provide positive performance over any period of time. It is important to review your investment objectives, risk tolerance and liquidity needs before choosing an investment style or manager. Concentration in infrastructure-related securities involves sector risk and concentration risk, particularly greater exposure to adverse economic, regulatory, political, legal, liquidity, and tax risks associated with MLPs and REITS. Foreign investments involve additional risks including currency fluctuations and economic and political instability. These risks are magnified in emerging markets. Common stocks are subject to market risk or the risk of decline. Small- and mid-cap stocks are subject to greater price volatility. The use of derivatives involves substantial financial risks and transaction costs. A potential investment in other investment companies means shareholders bear their proportionate share of expenses and indirectly, the expenses of other investment companies. Additionally, infrastructure-related entities may be subject to regulation by various governmental authorities and may also be affected by governmental regulation of rates charged to customers, service interruption and/or legal challenges due to environmental, operational or other mishaps and the imposition of special tariffs and changes in tax laws, regulatory policies and accounting standards.

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