S&P Dow Jones Indices

A Division of S&P Global

Real Estate from an Index Perspective Discovering Your Real Estate Benchmark

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INTRODUCTION

Indices have long played an important part in measuring the real estate market and the array of offerings illustrates the varied needs of market participants. This paper highlights the role of various real estate indices offered by S&P DJI, how they differ from each other, and how they cater to the diverse needs of real estate investors.

S&P DJI REAL ESTATE INDICES

Our diverse offerings allow investors to measure the performance of listed real estate companies in a variety of ways.

Dow Jones Select Real Estate Securities

The Dow Jones Select Real Estate Securities Indices (RESI) are cut from the <u>S&P Global BMI</u> and are designed to serve as a proxy for direct real estate investment. These indices measure approximately USD 24.3 billion¹ in passive AUM and exclude companies whose performance may be driven by factors other than the value of real estate.

- Key Attributes: 75% of revenue must be derived from the ownership and operation of real estate; there is a minimum float-adjusted market cap of USD 200 million; mortgage companies and a majority of specialized real estate companies are excluded.
- Key Indices:
 - o Dow Jones Global Select RESI
 - Dow Jones Global ex-U.S. Select RESI
 - o Dow Jones U.S. Select RESI
 - Dow Jones U.S. Select REIT Index

Source: S&P Dow Jones Indices LLC; Evestment; Morningstar. Figure includes ETF data as of Feb. 28, 2019; index fund and other investment vehicle data as of Dec. 31, 2017.

Dow Jones Real Estate

The Dow Jones Real Estate Index seeks to track the performance of real estate investment trusts (REITs) and other companies that invest directly or indirectly in real estate through development, management, or ownership, including property agencies, capturing approximately USD 5.0 billion² in passive AUM.

- Key Attributes: Comprehensive benchmark that includes mortgage and specialized REITs.
- Key Index: Dow Jones U.S. Real Estate Index

Dow Jones Green Real Estate

The Dow Jones Green Real Estate Indices include the same constituents as the corresponding Dow Jones Select RESI, however, company weights are modified to tilt each index toward stronger performers according to GRESB's real estate ESG assessment.

- Key Attributes: The same constituents as the Dow Jones RESI, but weights are tilted to reward higher-performing ESG constituents.
- Key Indices:
 - Dow Jones Global Green RESI
 - o Dow Jones Global Ex-U.S. Green RESI
 - o Dow Jones U.S. Green REIT Index
 - o <u>Dow Jones Japan Green RESI</u>

S&P Global Property

Drawn from the S&P Global BMI, the S&P Global Property Indices offer the most comprehensive global coverage and most extensive historical data, acting as benchmarks for approximately USD 9.5 billion³ in passive AUM.

- Key Attributes: Comprehensive coverage including smaller, less liquid companies; 60% of revenue must be derived from real estate activities, which is comparatively lower than other series; constituents must have a minimum float-adjusted market cap of USD 100 million.
- Key Indices:
 - S&P Global Property
 - S&P Global REIT
 - S&P United States REIT

² Source: Morningstar. ETF data as of Feb. 28, 2019.

³ Source: S&P Dow Jones Indices LLC; Evestment; Morningstar. Figure includes ETF data as of Feb. 28, 2019; index fund and other investment vehicle data as of Dec. 31, 2017.

Real Estate Select Sector

The Real Estate Select Sector is designed to measure all components of the <u>S&P 500</u>[®] that have been assigned to the Real Estate sector according to the Global Industry Classification Standard (GICS[®]), serving as an underlying index for approximately USD 3.0 billion in passive AUM.⁴

- Key Attributes: The index uses the S&P 500 as its starting universe, follows the GICS definition, and has a large-cap focus.
- Key Index: Real Estate Select Sector

A summary of each real estate index series is outlined in Exhibit 1 and includes the selection universe and category eligibility for each type of real estate company.

INDEX SERIES	DOW JONES SELECT RESI S&P GLOBAL BMI		DOW JONES REAL ESTATE	S&P GLOBAL PROPERTY S&P GLOBAL BMI		SELECT SECTORS	
SELECTION UNIVERSE			DOW JONES GLOBAL INDEX				
	DOW JONES SELECT RESI	DOW JONES SELECT REIT	DOW JONES REAL ESTATE	S&P PROPERTY	S&P REIT	REAL ESTATE SELECT SECTOR	
	GLOBAL-GLOBAL EX-U.S.	u.s.	u.s.	GLOBAL EX-U.S DEVELOPED EX-U.S.	u.s.	U.S.	
COMPANY ELIGIBLIT	Y: REAL ESTATE	CATEGORY					
Diversified	х	Х	х	Х	Х	х	
Health Care	х	Х	х	х	Х	х	
Hotel & Resort	х	Х	х	х	Х	х	
Industrial	х	х	х	х	х	х	
Office	х	Х	х	х	Х	х	
Residential	х	Х	х	х	Х	х	
Retail	х	Х	х	х	Х	х	
Mortgage	-	-	х	-	-	-	
COMPANY ELIGIBILIT	TY: SPECIALIZED I	REAL ESTATE					
Self-Storage	х	х	х	х	х	х	
Timber	-	-	х	-	-	х	
Cell Tower	-	-	х	-	-	х	
Data Center	х	Х	х	х	х	х	
Net-lease	-	-	х	х	Х	х	
Billboard	-	-	х	х	Х	х	
Prison	-	-	х	х	х	х	
OTHER							
Diversified Real Estate Activities	X	-	Х	Х	-	Х	
Real Estate Development	-	-	Х	х	-	х	
Real Estate Operating Companies	х	-	Х	х	-	х	
Real Estate Services	-	-	Х	=	-	Х	

Source: S&P Dow Jones Indices LLC. Data as of March 29, 2019. Table is provided for illustrative purposes. Further information can be found within the relevant methodology documents found at www.spindices.com. The Dow Jones Green Real Estate Indices include the same universe and eligibility criteria as the corresponding Dow Jones Select RESI.

⁴ Source: Morningstar. ETF data as of Feb. 28, 2019.

REITS AND REOCS

REITs have been an important component of property investing since their adoption in the U.S. in 1960. While regulations vary somewhat in each country, generally, a REIT must pass 90% of taxable income to shareholders in the form of dividends. Our REIT-specific indices are available across our global real estate suite, while indices inclusive of real estate operating companies (REOCs) are recognized within the headline Dow Jones Real Estate and S&P Global Property offerings. In the U.S., listed real estate companies are almost always REITs, while in other countries they may be somewhat less common.

Similar to REITs, REOCs have more flexibility to reinvest earnings back into the business. While not included in the Dow Jones REIT or S&P REIT indices, such companies are included within the broader Dow Jones Select RESI and S&P Global Property indices. REOCs tend to be more popular in domiciles outside the U.S.

Country Weight Differences

While the various real estate index series target companies based on the definitions previously discussed, it is important to note how these definitions may affect country exposure. For example, the relatively stringent inclusion criteria of the Dow Jones Select RESI results in a greater weight toward the U.S. and other developed markets. Conversely, the more comprehensive nature of the S&P Global Property Indices leads to greater exposure to Hong Kong, China, and other emerging markets. Exhibit 2 shows the various country exposures of three popular global real estate indices.

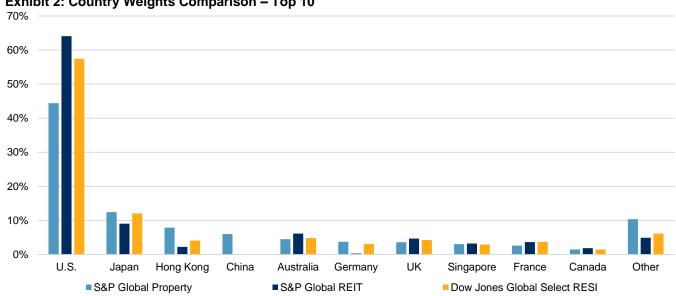


Exhibit 2: Country Weights Comparison - Top 10

Source: S&P Dow Jones Indices LLC. Data as of March 29, 2019. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

CONCLUSION

The real estate indices offered by S&P DJI are among the most widely followed in the market. The various index series allow participants to select the best offering according to specific exposure needs.

APPENDIX

UNDERLYING INDEX	INDEX LAUNCH	FIRST VALUE DATE	PRODUCT NAME	TICKER
U.S. MARKET INDICES	•	•	•	•
Real Estate Select Sector	Aug. 17, 2015	Dec. 30, 2011	Real Estate Select Sector SPDR®	XLRE
Dow Jones U.S. Select REIT	Feb. 28, 1991	Feb. 28,1991	Schwab US REIT ETF™	SCHH
Dow Jones U.S. Select REIT	Feb. 28, 1991	Feb. 28, 1991	SPDR® DJ REIT ETF	RWR
Dow Jones U.S. Real Estate	Feb. 14, 2000	Jan. 2, 1992	iShares US Real Estate ETF	IYR
Dow Jones Global ex-U.S. Select RESI	Dec. 31, 2004	Dec. 31, 1992	SPDR [®] DJ International Real Estate ETF	RWX
Dow Jones Global Select RESI	Dec. 31, 2004	Dec. 31, 1992	SPDR® DJ Global Real Estate ETF	RWO
Dow Jones U.S. Select Short- Term REIT	Aug. 22, 2016	Sept. 15, 2000	NuShares Short-Term REIT ETF	NURE
Dow Jones U.S. Real Estate	Feb. 14, 2000	Jan. 2, 1992	iShares US Real Estate ETF	IYR
Dow Jones U.S. Real Estate	Feb. 14, 2000	Jan. 2, 1992	ProShares Ultra Real Estate ETF	URE
Dow Jones U.S. Real Estate	Feb. 14, 2000	Jan. 2, 1992	KIM KINDEX Synth-DJ US RE ETF	181480
Dow Jones U.S. Real Estate	Feb, 14, 2000	Jan. 2, 1992	Capital DJ U.S. Real Estate ETF	714
S&P United States REIT	Dec. 31, 1992	June 30, 1989	First Trust S&P REIT ETF	FRI
INTERNATIONAL MARKET INDIC	ES			
S&P Global Ex-U.S. Property	Dec. 31, 1992	June 30, 1989	Vanguard Global ex-U.S. Real Estate ETF	VNQI
S&P Developed Ex-U.S. Property	Dec. 31, 1992	June 30, 1989	iShares International Developed Property ETF	WPS
S&P Developed Ex-Japan REIT	Dec. 31, 1992-	June 30, 1989	NEXT FUNDS International REIT S&P Developed ex Japan ETF	2515
S&P South Africa Property	Dec. 31, 1997	Nov. 30, 2001	Satrix Property ETF	STXPR
S&P/TSX Capped REIT	May 1, 2002	Sept. 24, 2002	iShares S&P/TSX Capped REIT ETF	XRE
S&P/TSX Capped REIT Income Index	April 3, 2017	July 31, 2006	Invesco S&P/TSX REIT Income ETF	REIT
S&P/ASX 300 A-REIT	July 2, 2002	March 31, 2000	Vanguard Australian Property Securities ETF	VAP
S&P/ASX 200 A-REIT	July 2, 2002-	March 31, 2000	SPDR [®] S&P/ASX 200 Listed Property ETF	SLF
S&P/ASX 200 A-REIT	July 2, 2002-	March 31, 2000	Listed Index Fund Australian REIT	1555
S&P/NZX Real Estate Select	Oct. 12, 2015	March 18, 2005	Smartshares NZ Property Trust	NPF
S&P 500 Equal Weight RE	Sept. 16, 2016	Sept. 16, 2016	Invesco S&P 500 Equal Weight Real Estate ETF	EWRE
S&P Global Property 40	Jan. 24, 2007	Nov. 20, 2006	Sygnia Itrix Global Property ETF	SYGP
S&P Select Sector Cap 20% RE	Sept. 19, 2016	Sept. 19, 2003	Invesco Real Estate S&P US Select Sector ETF	XRES
Dow Jones Global Select RESI	March 21, 2006	Dec. 31, 1992	SPDR® Dow Jones Global Real Estate ETF	GLRE
Dow Jones Global Select RESI	March 21, 2006	Dec. 31, 1992	SPDR [®] Dow Jones Global Real Estate ETF	DJRE

Source: S&P Dow Jones Indices LLC. Table is provided for illustrative purposes. S&P Dow Jones Indices does not sponsor, promote, or endorse any investment product linked to any of our indices. The above is a complete list of all products that were linked to the indices discussed in this report as of Feb. 28, 2019.

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