March 2013

UNDERSTANDING CANADIAN AND U.S. REITS

The S&P Dow Jones Indices Practice Essentials series is a curriculum-based, educational program covering selected financial markets, asset classes and indexing concepts.

Want more? Sign up to receive complimentary updates on a broad range of index-related topics and events brought to you by S&P Dow Jones Indices.

www.spdji.com/spindices

Traditionally, real estate has been an illiquid asset class. However, publicly traded property stocks, including real estate investment trusts (REITs) and real estate operating companies (REOCs), allow investors to gain exposure to real estate without sacrificing the liquidity benefits of listed equities or exposing them to the burdens of owning physical property. REITs provide exposure to companies that own, and in most cases, operate income-producing real estate. REOCs provide access to companies that are engaged in real estate ownership, development and/or management. While similar, the primary difference is that REOCs reinvest their earnings into the business whereas REITs distribute their earnings to unitholders. REITs also have more restrictions than REOCs in terms of what types of real estate investments they can make. Index-based products, such as ETFs that track property and REIT benchmarks, can provide a cost-effective means of accessing a diversified portfolio of REITs and REOCs.

Canadian and U.S. REITs are structured similarly, with the major differences being that Canadian REITs are classified as unit trusts and mutual funds trusts whereas U.S. REITs are classified as corporations. In a unit trust, unitholders are responsible for the debts and other liabilities of the REIT, though most REITs take steps to shield unitholders from these liabilities. Canadian REITs can be open- or closed-ended. The primary differences between these REITs are related to the types of property held.

With the exception of the financial crisis, during which some exceptions were made, U.S. REITs must distribute at least 90% of their annual taxable income whereas Canadian REITs may distribute up to 100% of their annual taxable income but may also change or cease distributions at any time. A comparison of the most common types of U.S. and Canadian REIT structures is available at the end of this paper (see Appendix II). However, investors should be aware that updates to the Canadian REIT qualifications are pending (KPMG's TaxNewsFlashCanada). As such, investors should continue to stay abreast of these changes as they evolve.

But structure is not the only difference between Canadian and U.S. REITs. The markets they operate in and the indices that track those markets can differ as well.

Overview

Over the past three major business cycles(from 2000 to 2012) including the technology bubble and the financial crisis, the Canadian REIT sector as measured by the S&P/TSX Capped REIT Index provided a 14.2% compound average growth rate, compared to 2.8% for the S&P/TSX Composite. The U.S. REIT sector also performed well as measured by the S&P U.S. REIT Index, which delivered a compound average growth rate of 11.2%, compared to 2.6% for the S&P 500 over the same twelve-year period.

However, while their performance may be similar, the Canadian and the U.S. REIT markets differ significantly not only in size but also in composition. According to Raymond James' REIT October 2012 Industry Report, since 2002, the market value of Canadian REIT and REOC equities has increased from USD 12 billion to nearly USD 60 billion today, a 17% compounded annual growth rate. Over the same period, the market value of U.S. REIT equities has grown at a compounded annual rate of 15%, from USD 133 billion to nearly USD 555 billion. In contrast to the U.S., in which 86% of REIT/REOC assets are held institutionally, Canadian retail investors are the primary holders of REIT/REOC assets, accounting for 70%. Because of this, Canadian REITs have traditionally provided high initial yields and payout ratios to attract retail investors whereas U.S. REITs have utilized preferred equity, largely unavailable in Canada, to provide mainly institutional investors with attractive yields and cash flows. Credit quality has also differed between the two countries. The primary form of debt financing across Canadian REIT/REOCs is secured mortgage debt and as a result, Canadian REITs generally tend to use higher levels of leverage than U.S. REITS. About 50% of U.S. REIT debt, on the other hand, is financed on a loan-to-value basis. For these reasons, it is not surprising that Canadian and U.S. REIT indices have very different exposures.

Sector Exposures and Security Diversification

Due to the nature of the market, Canadian REITs are more concentrated than their U.S. counterparts both in terms of the quantity available and the sectors represented.

The S&P/TSX Capped REIT and Dow Jones Canada Select Equal Weight REIT indices each take different approaches to capturing the unique qualities of the Canadian real estate market, while the S&P U.S. REIT and Dow Jones U.S. Select REIT indices follow their own distinct methodologies to measure the U.S. market. The variations in these two markets and in index construction can result in significant performance, risk/return and sector characteristic differences over time.

Sector Representation

Due to the nature of the market, Canadian REITs are more concentrated than their U.S. counterparts both in terms of the quantity available and the sectors represented. Canadian REIT indices track five to seven sectors at any one time while U.S. indices cover nine. As a result, U.S. REIT indices may provide more consistent exposure to sectors that are underrepresented in the Canadian market such as storage, hotel/resort and entertainment, and industrials.

Two examples may help illustrate this point. First, as shown in Exhibit I, industrial REITs are represented in both the S&P U.S. REIT and Dow Jones U.S. Select REIT indices, but are not separately tracked in the S&P/TSX Capped REIT. Although some constituents in the Canadian indices such as Artis Real Estate Investment Trust invest in industrials, many do so as part of a diversified portfolio and not as a focused investment strategy. In a Wall Street Transcript Interview Paul E. Adornato, Senior Analyst for BMO Capital Markets Group remarked,

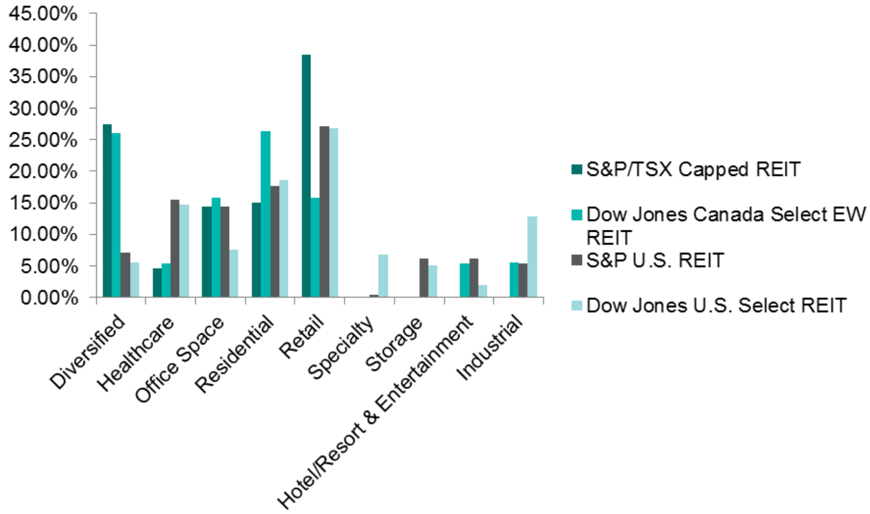
> "I think that the industrial REITs, companies that own and operate warehouses used for international trade and domestic distribution of goods, are still a relative bright spot. We still see very, very low levels of new construction in industrial, and at the same time, we see modest increases in demand. This has produced a steady increase in occupancy."

According to Adornato, this coupled with a return to positive same-property net operating income for just about all of the industrial operators may make exposure to industrial REITs attractive for some portfolios. S&P Dow Jones Indices provides a number of REIT options, including industrial REITs.

Significant differences also exist among these indices even within sectors that are tracked by all of them. Office REITs, for example, are evenly represented across the Canadian indices and the S&P U.S. REIT index but underweighted in the Dow Jones U.S. Select REIT index.

Additionally, the make-up of the U.S. and Canadian office space market can vary greatly. For example, significant differences exist in vacancy rates, with space in the U.S. dropping below 15% for the first time in five years in Q1 2012. Canadian office space vacancy rates, however, posted a national average of 6% during the same time. Since 2005, office occupancy rates in Canada have been between 90% and 95%—a full 6% to 12% higher than in the U.S. —which may have contributed to more stable returns in recent years.

Exhibit 1: Canadian and U.S. REIT Sector Representation



Source: S&P Dow Jones Indices and TMX Group. Data as of Dec. 31, 2012.

In comparison to its U.S. counterparts, the S&P/TSX Capped REIT is more likely to be highly concentrated in two to three sizable companies.

Constituent Diversification and Weighting Variations

There are just under 160 REITs listed in the U.S. compared to roughly 40 in Canada.[1] Because the Canadian REIT market is smaller than the U.S. market, Canadian indices tend to have fewer securities (see Exhibit 2). For example, the S&P/TSX Capped REIT and Dow Jones Canada Select Equal Weight REIT indices have just 14 and 19 constituents respectively. In comparison, their U.S. counterparts contain 126 and 83 as of December 31, 2012. Greater diversification may be achieved by considering both Canadian and U.S. REIT index exposures.

Additionally, due to the uniqueness of the Canadian market, the REIT industry tends to be not only concentrated but also dominated by a few large names. In comparison to its U.S. counterparts, the S&P/TSX Capped REIT is more likely to be highly concentrated in two to three sizable companies. While still representative of the Canadian ETF market, the Dow Jones Canada Select Equal Weight Index, launched in April 2010, provides exposure that is similar to that of the S&P/TSX Capped REIT index (see Exhibit 3) while reducing the effect any one security could have on the index as a whole[2].

Exhibit 2: Top Three Companies by Weight

	S&P/TSX Capped REIT	Dow Jones Canada Select Equal Weight	S&P U.S. REIT	Dow Jones U.S. Select REIT
Top 3 Companies by Weight	41.3%	25.6%	20.1%	21.9%
# of Constituents	14	19	126	83

Source: S&P Dow Jones Indices and TMX Group. Data as of Dec. 31, 2012.

[1] Avalos, Ken and Johann Rodrigues, “Real Estate Industry Report,” Raymond James, Oct. 4, 2012.

[2] It is not possible to invest directly in an index. Exposure to the asset class represented by the index is only possible through products linked to such index.

The S&P/TSX Capped REIT is heavily weighted towards large- and mid-cap companies.

Exhibit 3: Top 10 Constituents by Weight and Sector Classification

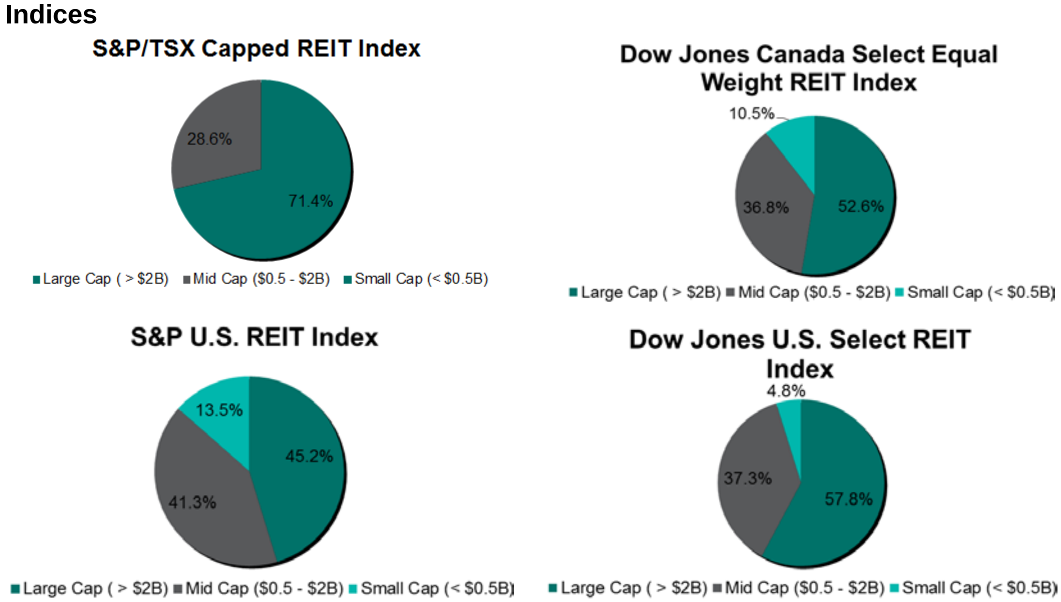
Constituent	Weight	Weight	DJ sector	S&P Property Classification
RioCan Real Estate Investment Trust	20.5%	5.2%	Retail	Retail
H&R REIT	11.7%	5.2%	Industrial & Office	Diversified
Dundee Real Estate Investment	9.1%	5.2%	Industrial & Office	Office Space
Canadian Real Estate Investment Trust	7.4%	5.2%	Diversified	Diversified
Calloway REIT	7.1%	5.2%	Retail	Retail
Primaris Retail REIT	6.6%	5.3%	Retail	Retail
Cominar REIT	6.3%	5.2%	Diversified	Diversified
Boardwalk Real Estate Investment Trust	6.3%	5.2%	Residential	Residential
Canadian Apartment Prop REIT	6.3%	5.3%	Residential	Residential
Allied Properties REIT	5.3%	5.3%	Industrial & Office	Office Space

Source: S&P Dow Jones Indices and TMX Group. Data as of Dec. 31, 2012.

Capitalization Variations

Each index has a distinct approach to tracking small-, mid- and large-cap companies. The S&P/TSX Capped REIT is heavily weighted towards large- and mid-cap companies, with less small-cap representation than the U.S indices. Even between the U.S. REIT indices, however, there are significant variations, particularly in small-cap exposure. The S&P U.S. REIT Index tracks 8.7% more companies with a market capitalization below USD 2.0 billion than the Dow Jones U.S. Select REIT Index, which allocates more weight to large-cap constituents.

Exhibit 4: Total Market Capitalization Comparison of Canadian and U.S. REIT Indices



Source: S&P Dow Jones Indices and TMX Group as of Dec. 31, 2012

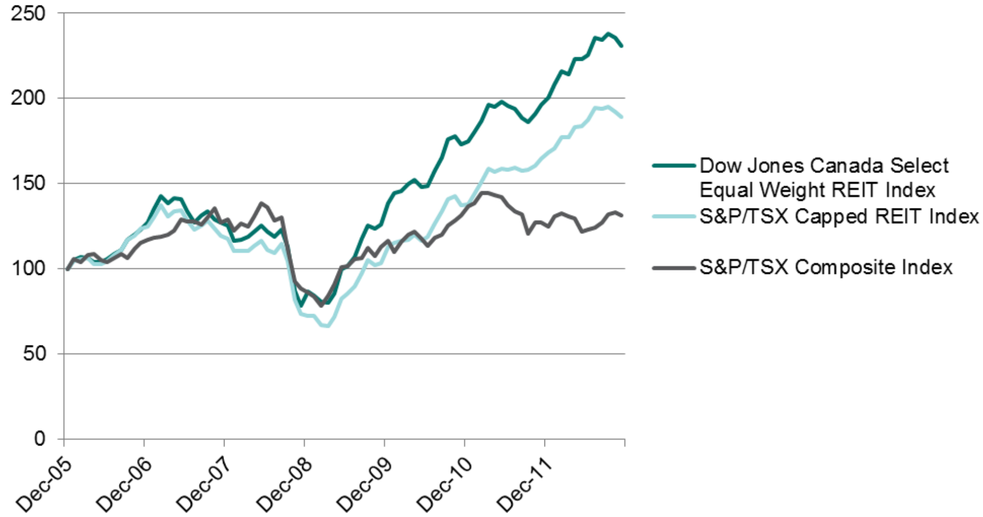
Benefits of REITs

Risk and Return Characteristics

The long-term performance of Canadian REITs and property stocks has been relatively strong compared to broad-based equity indices, with Canadian REITs continuing to rise while the S&P/TSX Composite has remained relatively flat (see Exhibit 5). On the other hand, while U.S. REITs have outperformed, they've followed the general market (as represented by the S&P 500) more closely (see Exhibit 6.)

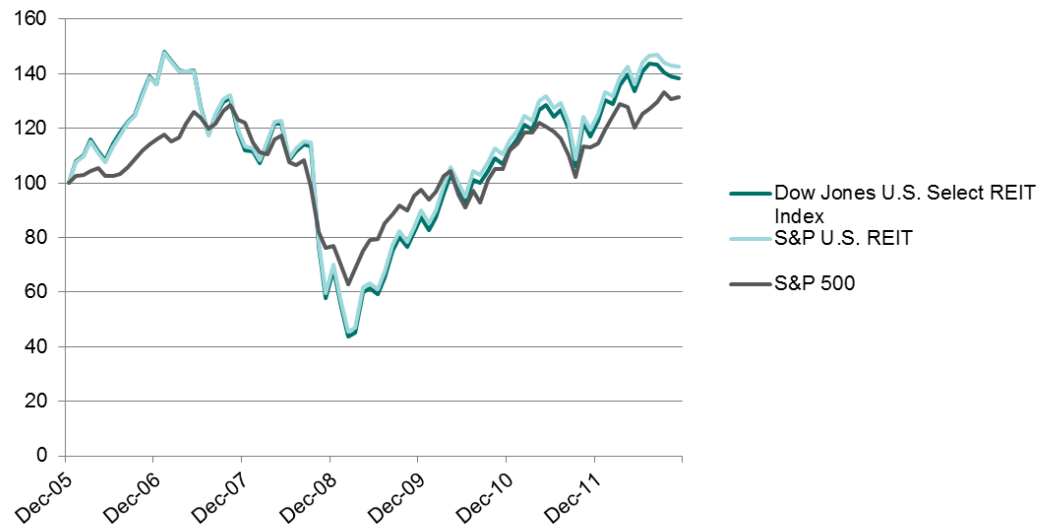
During the financial crisis Canadian REITs had more access to credit than U.S. REITs.

Exhibit 5: Performance of the Canadian REIT and Broad Canadian Equity Markets



Source: S&P Dow Jones Indices and TMX Group. Total return data from Dec. 30, 2005 to Dec. 31, 2012. Charts are provided for illustrative purposes. Past performance is no guarantee of future results. This chart may reflect hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Exhibit 6: Performance of the U.S. REIT and Broad U.S. Equity Markets

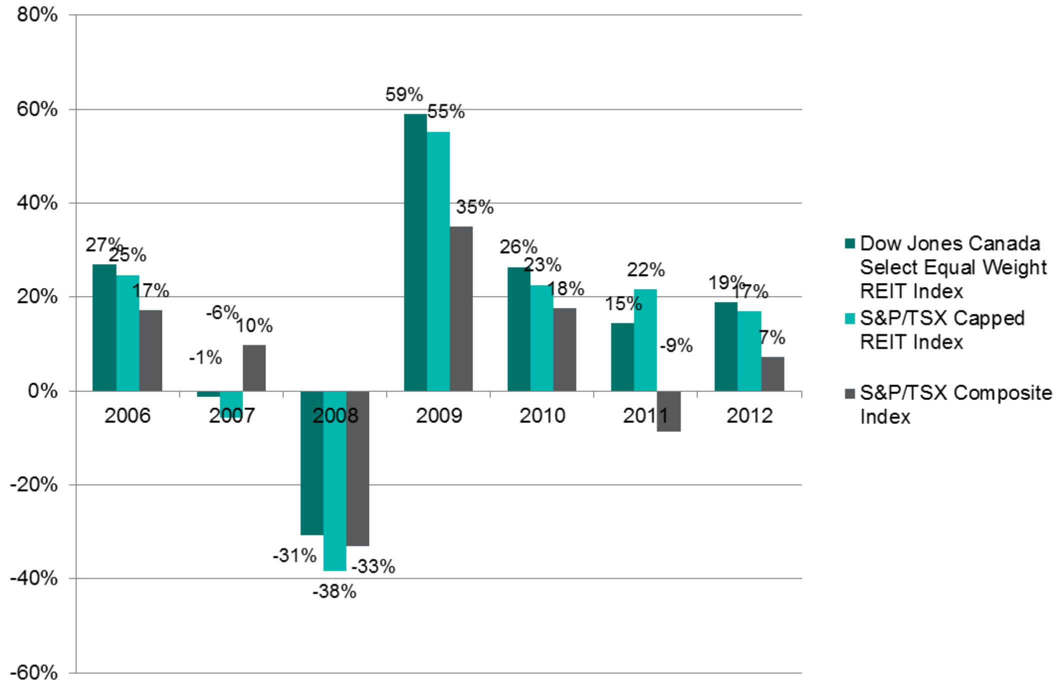


Source: S&P Dow Jones Indices. Total return data from Dec. 30, 2005 to Dec. 31, 2012

The long-term outperformance of Canadian REITs is due in part to their outperformance during the financial crisis, when they fell less in value than their U.S. counterparts and recovered more quickly. As discussed earlier, unlike U.S. REITs, the primary form of debt financing among Canadian REIT/REOCs is secured mortgage debt.[3] As a result, during the financial crisis Canadian REITs had more access to credit than U.S. REITs, which saw much of the liquidity for unsecured debt halt during this time. The relatively stable economic environment that Canada experienced during the financial crisis also kept occupancy rates steady unlike in the U.S., where bankruptcies and downsizing were prevalent. However, U.S. REITs are recovering and have posted positive calendar-year returns every year since 2009; returns are once again comparable to their Canadian REIT counterparts (see Exhibits 7 and 8).

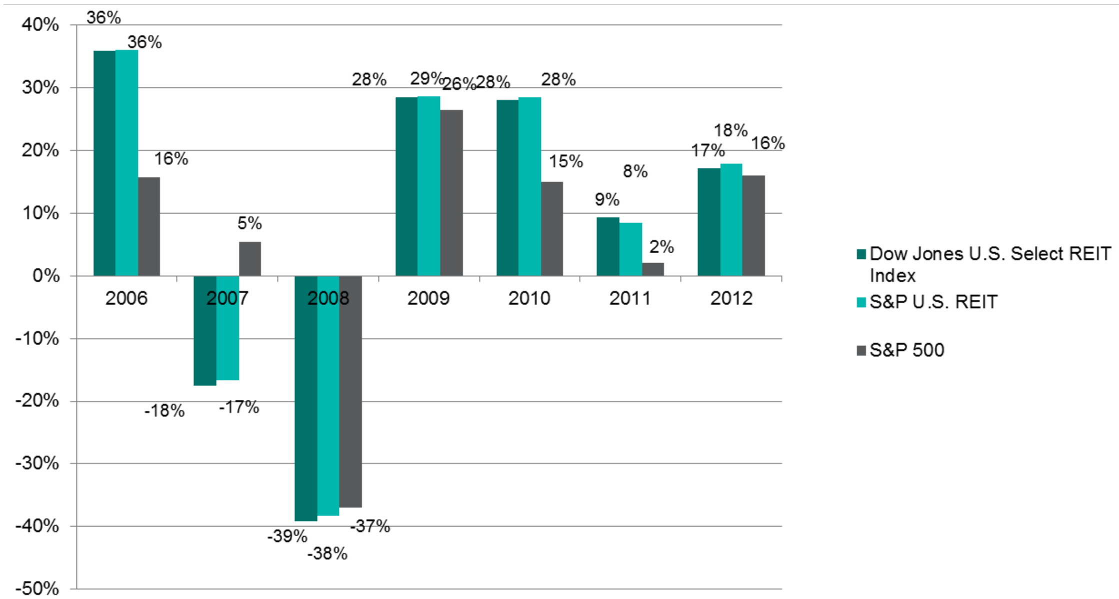
[3] Avalos, Ken and Johann Rodrigues, "Real Estate Industry Report," Raymond James, Oct. 4, 2012.

Exhibit 7: Calendar-Year Returns: S&P/TSX Capped REIT, Dow Jones Canada Select Equal Weight REIT and S&P/TSX Composite Index



Source: S&P Dow Jones Indices and TMX Group. Total return data from Dec. 30, 2005 to Dec. 31, 2012. Charts are provided for illustrative purposes. Past performance is no guarantee of future results. This chart may reflect hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

Exhibit 8: Calendar-Year Returns: S&P U.S. REIT, Dow Jones U.S. REIT and S&P 500



Source: S&P Dow Jones Indices. Total return data from Dec. 30, 2005 to Dec. 31, 2012.

Even with the more pronounced drawdown in real estate during the financial crisis, U.S. REITs have historically had a standard deviation relatively similar to that of common stocks, generally with higher risk-adjusted returns. Due to more favorable economic conditions and a rapid recovery, Canadian REITs experienced lower annualized volatility versus equities in the short term and significantly higher risk-adjusted returns over the most recent one-, three- and five-year periods.

Exhibit 9: Risk and Performance Characteristics

	Dow Jones U.S. Select REIT Index	S&P U.S. REIT	S&P 500	Dow Jones Canada Select EW REIT Index	S&P/TSX Capped REIT Index	S&P/TSX Composite Index
Year	**Annualized Volatility**					
1	11.9%	11.7%	10.1%	7.8%	6.9%	9.5%
5	31.9%	31.1%%	17.7%	18.0%	17.1%	16.0%
Year	**Sharpe Ratio**					
1	1.44	1.54	1.59	2.42	2.47	0.76
3	0.96	0.98	0.72	1.99	2.20	0.41
5	0.16	0.18	0.09	0.76	0.63	0.05

Source: S&P Dow Jones Indices and TMX Group from Dec. 31, 2007 through Dec. 31, 2012. Charts are provided for illustrative purposes. Past performance is no guarantee of future results. This chart may reflect hypothetical historical performance. Please see the Performance Disclosure at the end of this document for more information regarding the inherent limitations associated with back-tested performance.

U.S. REITs must distribute at least 90% of their annual taxable income, excluding capital gains, as dividends to shareholders.

High Current Income

Real estate companies benefit from the elimination of corporate taxes as long as they comply with several distribution and income stream requirements, as well as ownership restrictions. As a result, U.S. REITs must distribute at least 90% of their annual taxable income, excluding capital gains, as dividends to shareholders. Canadian REITs have the option to distribute up to 100% of their annual taxable income. For this reason, many investors have looked to REITs to meet current and future income needs as part of their overall income portfolios.

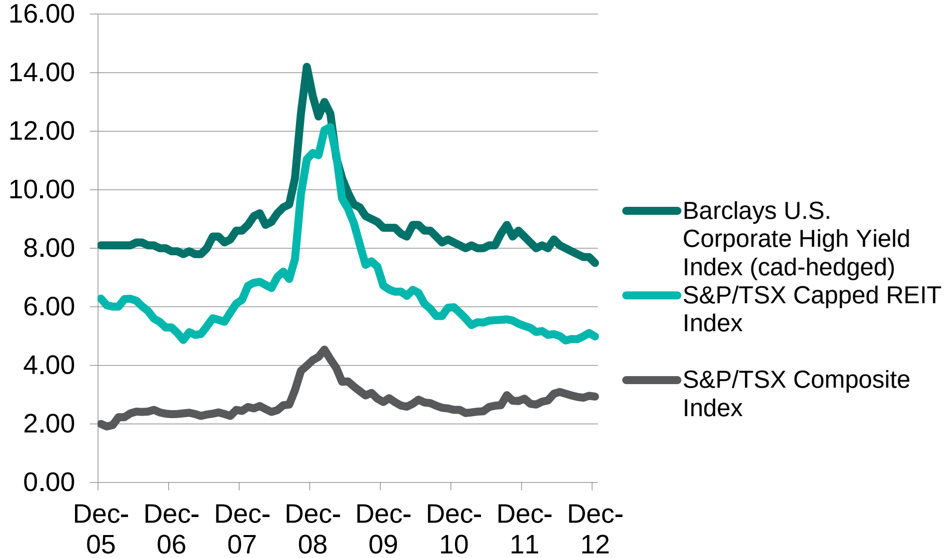
A comparison of yields below illustrates that Canadian REITs have provided greater dividend yields than Canadian equities over time but, as expected, have underperformed U.S. high-yield corporate bonds. However, REITs have several noteworthy characteristics that distinguish them from high-yield corporate bonds.

Since 2005, nearly 40% of the total returns of the S&P/TSX Capped REIT Index have come from dividends. Over the past two years, dividends have accounted for almost half of the index's total returns. The S&P U.S. REIT has also consistently generated half its total returns from dividends over the same time period. Both indices have historically provided both capital gains and income.

A REIT must derive at least 75% of its gross income from rents, mortgage interest or gains from the sale of real property. Rents and mortgage income tend to be consistent, stable forms of income that adjust for inflation over time. This is also a contributing factor to the long-term historical outperformance of REIT indices over their traditional equity counterparts. In Canada, this has resulted in the S&P/TSX Capped REIT index's gain of 3.8% in additional yield over the S&P/TSX Composite since 2005. While this gain narrowed to 2.1% in the most recent year, for income portfolios, this additional yield could still be considered substantial in a low-interest rate environment.

Stable cash flows, historically consistent dividend yields and higher risk-adjusted returns compared to traditional equity benchmarks are benefits to consider when evaluating REITs.

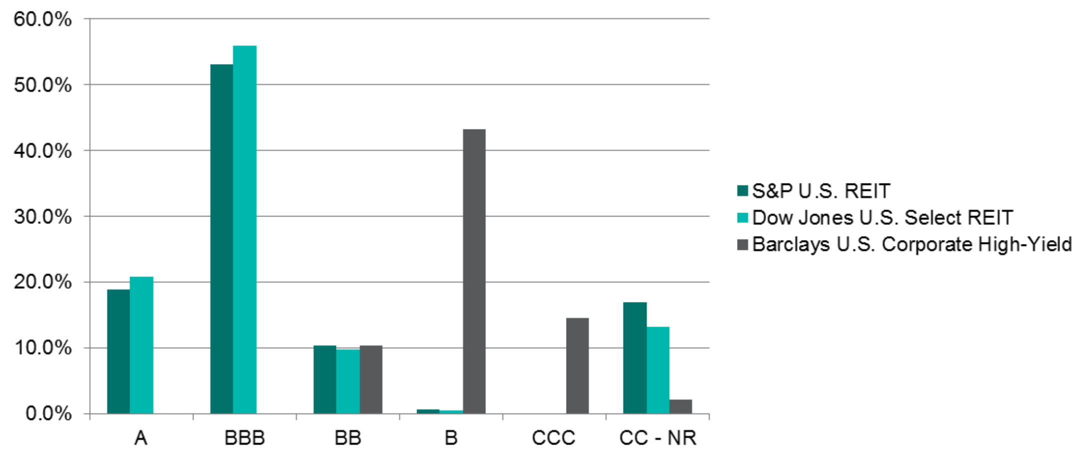
Exhibit 10: Canadian REIT Yields Compared to Those of Equity and High-Yield Corporate Bonds



Source: Barclays, S&P Dow Jones Indices from Dec. 30, 2005 through Dec. 31, 2012.

Finally, although U.S. high-yield corporate bonds do provide an absolute yield advantage over REITs, it is worth noting the differences in overall credit quality exposure required to achieve that yield. As expected, the average credit rating of the Barclays U.S. Corporate High Yield Bond Index is significantly below that of the S&P U.S. REIT and Dow Jones U.S. Select REIT indices.

Exhibit 11: Index Credit Quality Comparison: U.S. REITs Versus U.S. High-Yield Corporate Bonds



Source: Barclays, S&P Dow Jones Indices, S&P Capital IQ, S&P Ratings Services. Data as of Dec. 31, 2012 for S&P Dow Jones Indices and as of Dec. 31, 2011 for Barclays U.S. Corporate High-Yield Index, the most recent data publicly available. S&P Ratings Services is analytically separate and independent from S&P Capital IQ and S&P Dow Jones Indices.

Conclusion

REITs are designed to provide investors with liquid investment opportunities in commercial real estate. Stable cash flows, historically consistent dividend yields and higher risk-adjusted returns compared to traditional equity benchmarks are benefits to consider when evaluating REITs.

Since the first Canadian REIT was listed on the Toronto Stock Exchange in 1993, the total number of REITs available in Canada has grown to over 40, many of which are available to investors via index-linked products. Understanding the differences between the Canadian and U.S. REIT markets and the unique ways that indices measure them is important when considering REIT exposures.

Appendix I: S&P Dow Jones Canadian and U.S. REIT Indices (data as of December 31, 2012)

Parameters	S&P/TSX Capped REIT	Dow Jones Canada Select Equal Weight REIT Index	S&P U.S. REIT	Dow Jones U.S. Select REIT Index
Mean Constituent Market Capitalization (millions)	CAD 2,932.3	CAD 1,200.0	USD 3,420.0	USD 4,741.1
Number of Constituents	14	19	126	83
Constituent Cap	25%	Equal-Weighted	None	None
Geographical Coverage	Canada	Canada	U.S.	U.S.
Universe	GICS® classification	S&P Dow Jones Indices' proprietary classification system	GICS classification	S&P Dow Jones Indices' proprietary classification system
Top 3 Industries	Retail, Diversified, Residential	Residential, Diversified, Office Space	Retail, Residential, Healthcare	Retail, Residential, Healthcare
Index Weight of the 3 Largest Companies	41.3%	25.6%	20.1%	21.9%
Summary of Index Methodology	Includes constituents of the S&P/TSX Income Trust Index that are classified as real estate income trusts as defined by the GICS financials sector. Constituents must derive more than 60% of their revenue from property or real estate–related activities. Constituents must have at least USD 100 million in float-adjusted market capitalization. Rebalanced quarterly.	Includes constituents in the Dow Jones Canada Total Stock Market Index that are classified as real estate investment trusts by a proprietary classification system used by S&P Dow Jones Indices. Rebalanced semiannually in June and December.	Includes property trusts that invest in physical assets and other pass-through vehicles. Must derive more than 60% of their revenue from property or real estate–related activities Constituents must have at least USD 100 million in float-adjusted market capitalization Rebalanced quarterly.	Includes companies that are both equity owners and operators of commercial and/or residential real estate. Must derive at least 75% of their revenue from the ownership and operation of real estate assets. Constituents must have at least USD 200 million in float-adjusted market capitalization. Rebalanced quarterly.

Source: S&P Dow Jones Indices. Data as of December 31, 2012.

Appendix II: Comparison of Canadian and U.S. REIT Structures

Rule	U.S. REIT	Canadian REITs			
		Unit Trust Requirement		Mutual Fund Trust Requirement	REIT Exception
		Open-end	Closed-end (no limited partnerships)		
Ownership	Must have at least 100 shareholders and less than 50% of the outstanding shares concentrated in the hands of five or fewer shareholders.	-	-	Must be a unit trust resident in Canada and maintain less than 50% ownership by nonresidents. The REIT must have at least 150 beneficiaries holding at least one block of units with certain minimum requirements.	
Assets	Must have at least 75% of its assets invested in real estate, mortgage loans, shares in other REITs, cash or government securities.	95% or more of the fair market value (FMV) of all units of the trust must have a right of redemption by the holder.	No more than 10% of the property of the trust may consist of bonds, securities or shares in the capital stock of any single corporation or debtor (exceptions for government securities). At least 80% of property must consist of “good basket” assets (i.e. shares, cash, bonds, debentures, mortgages, notes, marketable securities, real property situated in Canada and certain Canadian natural resource properties).	-	Must not hold any non-portfolio property (NPP) other than “qualified REIT properties” at any time in the taxation year.
Distribution	Must distribute at least 90% of its annual taxable income, excluding capital gains, as dividends to its shareholders.	May distribute up to 100% of annual taxable income. Distributions can change or stop at any time.			

Source: Investor Education Fund, “Income Trusts,” getsmarteraboutmoney.ca; KPMG, “Canadian Real Estate Tax Handbook,” 2012 Edition.

Appendix II: Comparison of Canadian and U.S. REIT Structures (continued)

Rule	U.S. REIT	Canadian REITs			
		Unit Trust Requirement		Mutual Fund Trust Requirement	REIT Exception
Income	The REIT must derive at least 75% of its gross income from rents, mortgage interest or gains from the sale of real property. At least 95% of its gross income must come from these sources together with dividends, interest and gains from securities sales.	-	-	=	The REIT must derive at least 75% of its gross income from rents, mortgage interest or gains from the sale of real property. At least 95% of its gross income must come from these sources together with dividends, interest and gains from securities sales.
Exchange Listed	Mandatory	-	If a trust's real property holdings enable the trust to be a closed-end unit trust under paragraph 108(2)(b), the units must also be listed on a designated Canadian exchange in the year or the following year.	-	None

Source: Investor Education Fund, "Income Trusts," getsmarteraboutmoney.ca; KPMG, "Canadian Real Estate Tax Handbook," 2012 Edition.

Appendix III: Definitions

Below is a brief description of each property peer group classification.

Diversified property companies focus on more than one of the major activities listed below. Typically, if the revenue from one kind of activity is less than 60% of the total, the company is considered diversified.

Hotel/resort and leisure property companies own, acquire, develop, lease, manage and operate hotels, resorts and other entertainment facilities such as amusement parks.

Industrial property companies own, acquire, develop, lease, manage and operate a diverse set of industrial facilities such as warehouses and distribution and manufacturing bases.

Office space property companies own, acquire, develop, lease, manage and operate office buildings. These can be based in business districts or suburbs, and can be multitenant or single-tenant facilities.

Healthcare property companies own, acquire, develop, lease, manage and operate healthcare facilities such as nursing homes, assisted living facilities, hospitals, psychiatric facilities and medical office buildings.

Retail property companies own, acquire, develop, lease, manage and operate shopping malls, outlet malls, and neighborhood and community shopping centers.

Storage property companies own, acquire, develop, lease, manage and operate self-storage facilities. These can be equipped with advanced security systems and climate-controlled units.

Specialty property companies own, acquire, develop, lease, manage and operate a range of specialized activities not classified elsewhere. Companies that operate and invest in correctional and restaurant facilities are included. Since each of these activities is highly specialized, they have been dubbed specialty property companies.

Residential property companies own, acquire, develop, lease, manage and operate residential properties, including multifamily homes, apartments, manufactured homes and housing properties for the purpose of rentals.

Performance Disclosures

The inception date of the Dow Jones U.S. Select REIT Index (the "Index") was January 30, 1987, at the market close. All information presented prior to the index inception date is back-tested. Back-tested performance is not actual performance, but is hypothetical. The back-test calculations are based on the same methodology that was in effect when the index was officially launched. Complete index methodology details are available at www.spindices.com.

The inception date of the S&P/TSX Capped REIT Index (the "Index") was October 15, 2002, at the market close. All information presented prior to the index inception date is back-tested. Back-tested performance is not actual performance, but is hypothetical. The back-test calculations are based on the same methodology that was in effect when the index was officially launched. Complete index methodology details are available at www.spindices.com.

The Dow Jones Canada Select Equal Weight REIT Index (the "Index") was first calculated on April 16, 2010, at the market close. All information presented prior to this date is back-tested. Back-tested performance is not actual performance, but is hypothetical. The back-test calculations are based on the same methodology that was in effect when the index was officially launched. Complete index methodology details are available at www.spindices.com.

Past performance of the Index is not an indication of future results. Prospective application of the methodology used to construct the Index may not result in performance commensurate with the back-test returns shown. The back-test period does not necessarily correspond to the entire available history of the Index. Please refer to the methodology paper for the Index, available at www.spdji.com or www.spindices.com for more details about the index, including the manner in which it is rebalanced, the timing of such rebalancing, criteria for additions and deletions, as well as all index calculations. It is not possible to invest directly in an Index.

Another limitation of back-tested hypothetical information is that generally the back-tested calculation is prepared with the benefit of hindsight. Back-tested data reflect the application of the index methodology and selection of index constituents in hindsight. No hypothetical record can completely account for the impact of financial risk in actual trading. For example, there are numerous factors related to the equities (or fixed income, or commodities) markets in general which cannot be, and have not been accounted for in the preparation of the index information set forth, all of which can affect actual performance.

The Index returns shown do not represent the results of actual trading of investable assets/securities. S&P Dow Jones Indices LLC maintains the Index and calculates the Index levels and performance shown or discussed, but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the Index or investment funds that are intended to track the performance of the Index. The imposition of these fees and charges would cause actual and back-tested performance of the securities/fund to be lower than the Index performance shown. As a simple example, if an index returned 10% on a US $100,000 investment for a 12-month period (or US$ 10,000) and an actual asset-based fee of 1.5% was imposed at the end of the period on the investment plus accrued interest (or US$ 1,650), the net return would be 8.35% (or US$ 8,350) for the year. Over 3 years, an annual 1.5% fee taken at year end with an assumed 10% return per year would result in a cumulative gross return of 33.10%, a total fee of US$ 5,375, and a cumulative net return of 27.2% (or US$ 27,200).

Disclaimers

It is not possible to invest directly in an index. Exposure to an asset class represented by an index is available through investable instruments based on that index. S&P Dow Jones Indices does not sponsor, endorse, sell, promote or manage any investment fund or other investment vehicle that is offered by third parties and that seeks to provide an investment return based on the performance of any index. S&P Dow Jones Indices makes no assurance that investment products based on the index will accurately track index performance or provide positive investment returns. S&P Dow Jones Indices LLC is not an investment advisor, and S&P Dow Jones Indices makes no representation regarding the advisability of investing in any such investment fund or other investment vehicle. A decision to invest in any such investment fund or other investment vehicle should not be made in reliance on any of the statements set forth in this document. Prospective investors are advised to make an investment in any such fund or other vehicle only after carefully considering the risks associated with investing in such funds, as detailed in an offering memorandum or similar document that is prepared by or on behalf of the issuer of the investment fund or other investment vehicle. S&P Dow Jones Indices LLC is not a tax advisor. A tax advisor should be consulted to evaluate the impact of any tax-exempt securities on portfolios and the tax consequences of making any particular investment decision. Inclusion of a security within an index is not a recommendation by S&P Dow Jones Indices to buy, sell, or hold such security, nor is it considered to be investment advice.

These materials have been prepared solely for informational purposes based upon information generally available to the public from sources believed to be reliable. No content contained in these materials (including index data, ratings, credit-related analyses and data, model, software or other application or output therefrom) or any part thereof (Content) may be modified, reverse-engineered, reproduced or distributed in any form by any means, or stored in a database or retrieval system, without the prior written permission of S&P Dow Jones Indices. The Content shall not be used for any unlawful or unauthorized purposes. S&P Dow Jones Indices and its third-party data providers and licensors (collectively "S&P Dow Jones Indices Parties") do not guarantee the accuracy, completeness, timeliness or availability of the Content. S&P Dow Jones Indices Parties are not responsible for any errors or omissions, regardless of the cause, for the results obtained from the use of the Content. THE CONTENT IS PROVIDED ON AN "AS IS" BASIS. S&P DOW JONES INDICES PARTIES DISCLAIM ANY AND ALL EXPRESS OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE, FREEDOM FROM BUGS, SOFTWARE ERRORS OR DEFECTS, THAT THE CONTENT'S FUNCTIONING WILL BE UNINTERRUPTED OR THAT THE CONTENT WILL OPERATE WITH ANY SOFTWARE OR HARDWARE CONFIGURATION. In no event shall S&P Dow Jones Indices Parties be liable to any party for any direct, indirect, incidental, exemplary, compensatory, punitive, special or consequential damages, costs, expenses, legal fees, or losses (including, without limitation, lost income or lost profits and opportunity costs) in connection with any use of the Content even if advised of the possibility of such damages.

To the extent that regulatory authorities allow a rating agency to acknowledge in one jurisdiction a rating issued in another jurisdiction for certain regulatory purposes, S&P Ratings Services reserves the right to assign, withdraw or suspend such acknowledgement at any time and in its sole discretion. S&P Dow Jones Indices, including S&P Ratings Services disclaim any duty whatsoever arising out of the assignment, withdrawal or suspension of an acknowledgement as well as any liability for any damage alleged to have been suffered on account thereof.

Affiliates of S&P Dow Jones Indices LLC may receive compensation for its ratings and certain credit-related analyses, normally from issuers or underwriters of securities or from obligors. Such affiliates of S&P Dow Jones Indices LLC reserve the right to disseminate its opinions and analyses. Public ratings and analyses from S&P Ratings Services are made available on its Web sites, www.standardandpoors.com (free of charge), and www.ratingsdirect.com and www.globalcreditportal.com (subscription), and may be distributed through other means, including via S&P Rating Services publications and third-party redistributors. Additional information about our ratings fees is available at www.standardandpoors.com/usratingsfees.
S&P Dow Jones Indices keeps certain activities of its business units separate from each other in order to preserve the independence and objectivity of their respective activities. As a result, certain business units of S&P Dow Jones Indices may have information that is not available to other business units. S&P Dow Jones Indices has established policies and procedures to maintain the confidentiality of certain non-public information received in connection with each analytical process.

In addition, S&P Dow Jones Indices provides a wide range of services to, or relating to, many organizations, including issuers of securities, investment advisers, broker-dealers, investment banks, other financial institutions and financial intermediaries, and accordingly may receive fees or other economic benefits from those organizations, including organizations whose securities or services they may recommend, rate, include in model portfolios, evaluate or otherwise address.