Drivers of Successful Pension Investing: Lessons from the Canadian Model

Author: Sebastien Betermier
Associate Professor of Finance

GLOBAL RISK INSTITUTE

EXECUTIVE SUMMARY

The proposal "Drivers of Successful Pension Investing: Lessons from the Canadian Model" was approved in September 2018 by the NPH initiative to study the Canadian pension model. The funding has given me the opportunity to launch two projects starting January 2019.

1. Active Management 2.0: Insights from the Direct Real Estate Investments of Canadian Pension Funds

Summary: This project is joint with Yuedan Liu, Advisor, CIO Group at PSP. We analyze how Canadian pension funds actively invest in private markets in comparison to their international counterparts. We focus our attention on the real estate and infrastructure sector in which Canadian funds have been particularly active, and analyze hundreds of real estate transactions made by Canadian and non-Canadian funds over the past 20 years. Our analysis sheds new light into the way Canadian funds have redefined the concept of active management.

Milestone: I recruited two undergraduate research assistants at McGill who have been collecting and analyzing the data since January 2019. We now have an almost complete set of preliminary findings and expect to submit a draft for publication by Spring 2020. I provide a short preview of the findings in the next Section.

2. Let the Numbers Speak: A Quantitative Characterization of the Canadian Model

Summary: This project is joint with the research staff at CEM Benchmarking. We compare Canadian and non-Canadian funds along a wide range of dimensions and provide a quantitative characterization of the Canadian model. The variables we study include the funds' liability profiles, risk-sharing mechanisms, corporate governance, organizational and compensation structures.

Milestone: In April 2019, I signed a partnership with CEM researchers. The partnership involves using the detailed CEM data for the purpose of this project. I also recruited two undergraduate research assistants who will work on the project starting Winter 2020: one assistant based in Montreal who has begun to build a database of variables that are currently outside of the CEM database, and another assistant who will be based in Toronto and work directly on the CEM data and run the quantitative analysis.

ACTIVE MANAGEMENT 2.0:

INSIGHTS FROM THE DIRECT REAL ESTATE INVESTMENTS OF CANADIAN PENSION FUNDS

SUMMARY

Over the past decade, the literature on retirement investing has shifted its attention away from the DB model and toward the DC model in response to the decline of the DB industry in the US and throughout the World. The Canadian pension model, however, provides a remarkable counter-example to this trend (see The Economist 2012 'Maple Revolutionaries,' Ambachtsheer 2016, and the World Bank Report 2017). The Canadian model has demonstrated that the combination of good corporate governance, competitive employee compensation schemes, hybrid plans that share risks with pensioners, and controlled investment risk-taking makes it possible to sustain pension programs over the long-term even in the challenging environment of low interest rates and high life expectancy.

In this study, we aim to understand how Canadian pension funds directly invest in private markets in comparison to their international counterparts. We focus our attention on the real estate sector in which Canadian funds have been particularly active, and analyze hundreds of real estate transactions made by Canadian and non-Canadian funds over the past 20 years.

We show that Canadian funds pursue a distinct investment strategy in the private real estate market. They tend to make larger and more diversified real estate acquisitions and are more likely to pursue value-added investments than their international peers. Through their real estate subsidiaries, Canadian funds directly manage the assets themselves and also undertake large greenfield investments. Moreover, Canadian funds tend to partner up abroad to reach economies of scale and expand their business model beyond Canada. These findings altogether reveal an activist and integrated model of active management that departs from the standard framework of corporate governance which advocates for a separation of ownership and management (Tirole, 2006).[1]

We argue that the benefits of this distinct model of active management play a key role in generating high enough returns to keep Canadian pension plans financially afloat. The benefits of this model include greater control of the assets, direct communication between owners and managers, lower fees due to the elimination of financial intermediaries, and the ability to extract the full economic profit from the real ventures. Through this model of active management, Canadian funds get the alpha directly from the source.

Of course, there are legal and operational risks associated with the development and management of real assets. There are also liquidity risks related to the long-term nature of development projects. We show, however, that Canadian funds have put in place several strategies to mitigate these risks.

First, the evidence suggests that Canadian funds restrict this model of active management to the real estate sector. This is a sector where projects are well defined (i.e. build a downtown tower) and have a risk profile that naturally matches the long-term bond profile of the funds' liabilities. Indeed, real estate projects tend to provide a steady stream of cash flows and some form of inflation hedge.

Second, the greenfield projects chosen by Canadian funds are mostly limited to standard multi-use buildings located in prime downtown locations of major cities with diversified industries. As such, these projects can be adapted to various economic scenarios and do not heavily depend on factors outside the funds' control, such as oil price fluctuations.

Third, Canadian funds benefit from the expertise of their real estate subsidiaries, which have acquired decades of experience in building and managing these projects. Moreover, the fact that projects are managed inside these subsidiaries shields the funds from legal risks and provides additional flexibility regarding employee compensation.

[1] Tirole, J, 2016, "The Theory of Corporate Finance", Princeton University Press.

In the final part of this study, we discuss possible issues to watch out for concerning the lack of separation between ownership and management of assets. We also discuss the feasibility of implementing the Canadian model in other sectors, such as infrastructure, and other countries.

PREVIEW OF THE FINDINGS

We provide a preview of some of our findings. Please note that they are still preliminary and we appreciate any form of feedback you can provide.

DATA

We use data from Preqin, a global database that provides detailed information on real estate transactions from funds around the World. We limit the analysis to the 75 largest pension funds as ranked by WillisTower Watson.[2] The Preqin data includes 133 transactions from 7 Canadian funds, 105 transactions from 6 US funds, and 137 transactions from 8 rest-of-the-world (RoW) funds from 1988 to 2019. All transactions represent acquisitions of real assets by these funds. 82% of these acquisitions took place after 2010. The AUM of the 75th largest fund is about USD 50 billion in 2018.

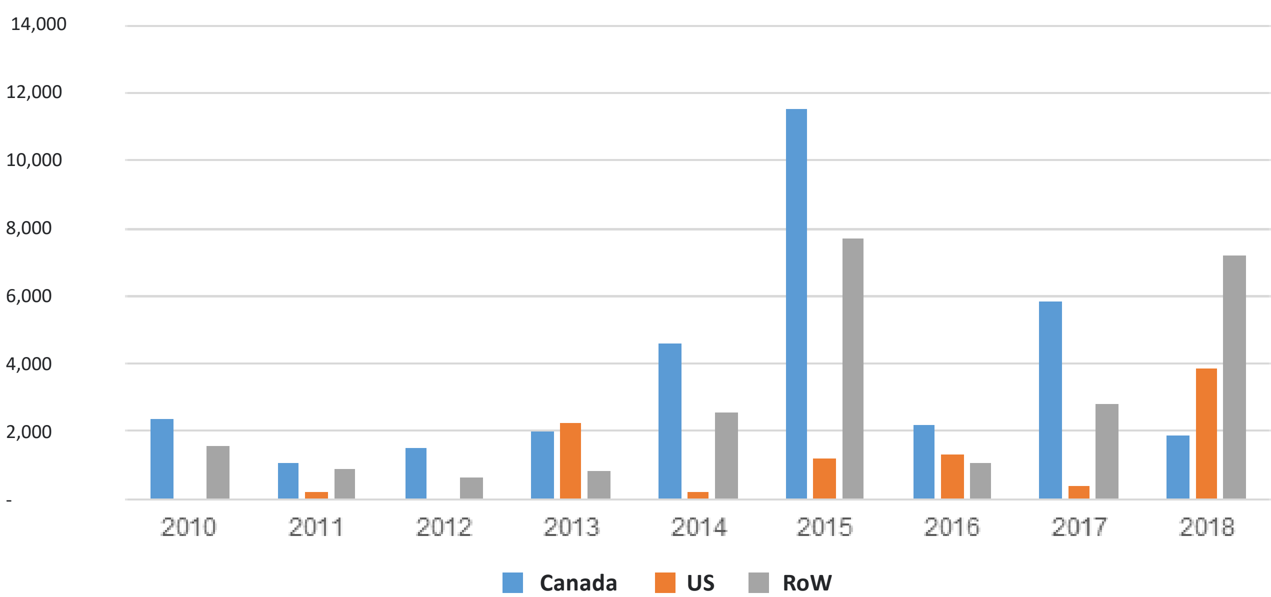
In this preview, we only report statistics from Preqin. However, one limitation of the dataset is that the majority of transactions reported are U.S. assets. To get deeper insights into the depth and nature of direct investments of Canadian funds, we also collect 200 real estate transactions reported in the annual reports of 10 large Canadian pension funds[3] from 2004 to 2018. These transactions mostly include Canadian assets.

DIRECT REAL ESTATE INVESTMENTS

One key finding is that Canadian funds directly invest much more in real estate than their international counterparts. In total, Canadian funds invested USD 35 billion in real estate transactions, whereas U.S. funds invested USD 15 billion and all other funds invested a combined amount of USD 29 billion. The Figure below illustrates the breakdown of aggregate direct investments made by Canadian, US, and RoW funds each year since 2010.

Interestingly, Canadian pension funds invest more in U.S. real assets than U.S. funds, which do the bulk of their real investments in the U.S. We also note that the 35 billion total estimate for Canadian funds only represents the 'tip of the iceberg' as it does not include many of the real estate deals we collected from their annual reports.

All Real Estate Transaction (USD MM)



[2] WillisTower Watson Thinking Ahead Institute, Pensions & Investments, World 300. There are very few real estate transactions reported in Preqin for Funds outside the largest 75.

[3] The funds are: AIMCo, bcIMC, Canada Post, CDPQ, CPPIB, HOOP, OMERS, OPB, OTPP, and PSP.

VALUE-ADDED INVESTMENTS

To compare the degree to which Canadian pension funds pursue value added strategies, we use data from the Leadership in Energy and Environmental Design (LEED) certification. The LEED framework is pertinent because it focuses on environmental initiatives that add value to an asset. According to the US Green Building Council (USGBC) website, LEED certification provides: i) *instant recognition for the building*; ii) *faster lease up rates*; iii) *higher resale value*; iv) *healthier indoor space*; v) *lower use of energy, water, and other resources*; and vi) *brand enhancement*.[4]

A key advantage of the LEED framework for the purpose of our study is that it provides detailed information on every certified building, including the level of certification achieved (platinum/gold/silver/certified) and the dates at which the certification was requested and approved. We combine this data with the transaction-level data from Preqin.

We introduce the following terminology. A "LEED value-added" investment is defined as one where the fund actively either seeks some form of LEED certification after having acquired the asset. A "premium" investment is one where the fund purchases an asset already LEED-certified and does not upgrade it. A "basic" investment is one that does not have any LEED certification.

The Table below shows the portfolio allocation in basic, premium, and LEED value-added assets for Canadian, U.S., and RoW pension funds. The leftmost panel reports the global allocation, whereas the two right panels report the allocation for US and Canadian assets only.

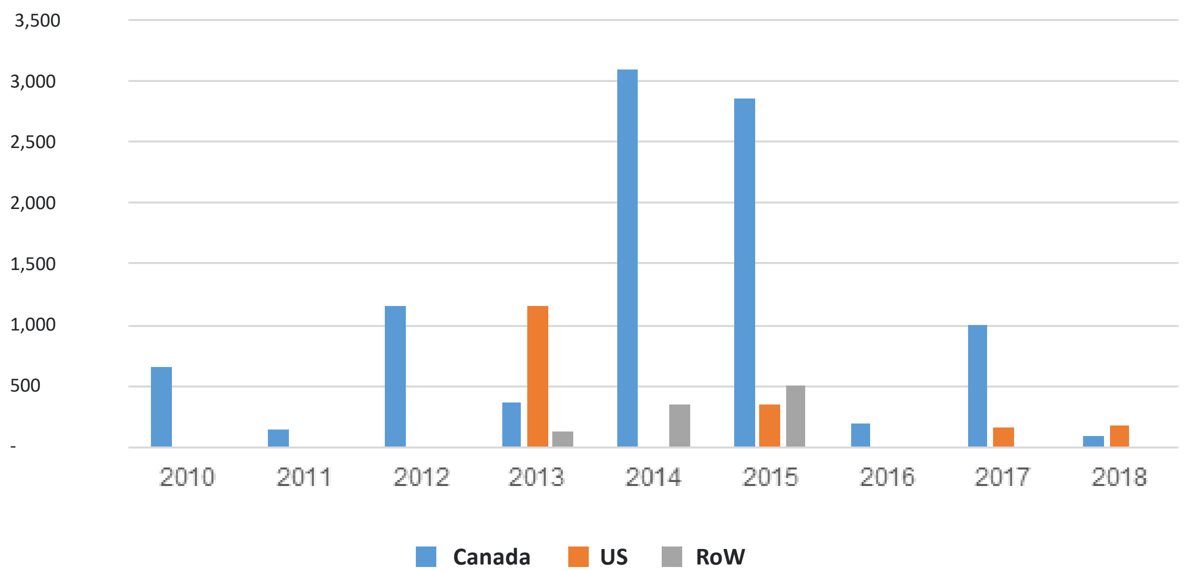
The table reveals that, for each portfolio, Canadian funds are more likely to invest in value-added assets than their peers. Moreover, for Canadian funds, the proportion of value-added investments decreases with the distance of the investments from Canada. This means that Canadian funds are more likely to pursue value-added strategies on their home turf. This result is consistent with the evidence from our manually collected data that reveals a large amount of value-added real estate investments in major Canadian cities.

The combination of i) large direct real estate investments and ii) a tilt more toward value-added strategies (as proxied by LEED certification) implies that Canadian pension funds are much more likely to pursue value-added strategies than their international peers. The Figure below illustrates the breakdown of aggregate value-added investments made by Canadian, US, and RoW funds each year since 2010.

	All Assets				US Assets Only				CA Assets Only		
	CA	US	RoW		CA	US	RoW		CA	US	RoW
Basic	40%	59%	87%		21%	57%	72%		22%	0%	0%
Premium	32%	18%	8%		43%	18%	17%		26%	0%	0%
LEED V-A	27%	24%	5%		35%	24%	11%		52%	0%	0%
Total	100%	100%	100%		100%	100%	100%		100%	0%	0%

[4] https://new.usgbc.org/leed

Value Added Real Estate Transaction (USD MM)



Another type of value-added strategy is to achieve a higher degree of LEED certification. Depending on the number of LEED points it obtains, an asset can qualify as Certified, Silver, Gold, or Platinum. In the Table below, we calculate an asset's LEED score as the number of points awarded as a fraction of total possible points. We see that Canadian funds score the highest for value-added.

Average LEED Score			
	Canada	**US**	**RoW**
Premium	60%	55%	64%
LEED V-A	61%	57%	58%

GREENFIELD INVESTMENTS

Our manual collection of real estate transactions of Canadian funds reveals that a large number (15-20) are considered "development." Leading examples of development projects include the Telus House in Toronto (HOOP), the RBC Waterpark place in Toronto (OMERS), the Deloitte Tower in Montreal (OTPP), and CIBC Square in Toronto (CDPQ). The majority of greenfield investments takes place in Canada, but some are international.

Greenfield projects are a distinct feature of Canadian funds. We verify this fact by doing an extensive search of greenfield projects using the Factiva global news database.[5] The search returned 12 cases of greenfield projects. Of the 12 projects, 11 belonged to Canadian funds.

Value-added and greenfield projects are mostly conducted through the Canadian funds' real estate subsidiaries. Here again, Canadian funds are unique. Except for a couple of large sovereign funds, we did not find any evidence of non-Canadian pension funds operating through a real estate subsidiary.

ADDITIONAL FINDINGS

We show evidence that Canadian funds are more likely to collaborate when they invest in foreign projects. This is consistent with the hypothesis that Canadian funds seek to reach economies of scale and expand their business model beyond Canada.

[5] We use the following keywords: pension funds, construction, development, real estate.

We also show evidence that funds that are more mature and have negative net cash flow are the most likely to pursue local value-added strategies. In contrast, younger funds with positive net cash flow tend to invest more in "basic" portfolios of real assets around the World. These results are consistent with the hypothesis that younger funds face immediate pressure to deploy large amounts of cash, whereas more mature funds that have acquired expertise with value-added strategies prefer to invest in more local real estate projects whose cash flow profile is directly aligned with that of their liabilities.

We use ArcGIS software to analyze geographic data on the location of premium and value added investments of Canadian and U.S. funds. Our preliminary results suggest that value-added investments of Canadian funds are highly clustered, which is consistent with the hypothesis that Canadian pension funds are restricting their higher-risk value-added strategies to a particular type of investment.

We review the academic literature on the corporate governance issues that can arise when ownership and management are not separated. We also provide a comprehensive discussion of the risk-mitigation techniques that Canadian funds have put in place to mitigate these issues.

Finally, we compare the performance of the real estate portfolios of Canadian and U.S. funds. Our preliminary results suggest that Canadian funds outperform their U.S. counterparts both in terms of return generation and risk mitigation. These results highlight the value of the Canadian active management model.