

Why are Canadian Pension Funds abandoning Canada?

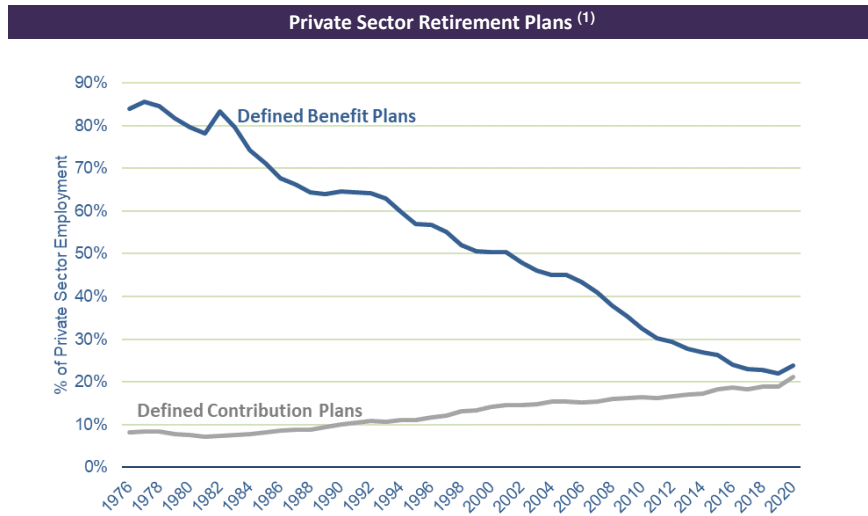
This is the story of undesired and undesirable consequences and the importance of paying attention to them.

The presentation is in the form of a meal. So, take out your knives and forks and let's get into it.

<p>Les Hors-d'œuvre</p> <p>These are meant to be eaten quickly</p>	
LetkoBrosseau	1

First, the hors-d'oeuvres, literally things that are not part of this talk, as if that made any sense.

We will not be talking about this



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1. Statistics Canada

2

I will not be talking about the four-fold decrease in the number of private sector employees covered by defined benefit plans, a 75% decline from 40 years ago.

We will not be talking about this

**Define Contribution Plans Compared to Defined Benefit Plans<sup>(1)</sup>**

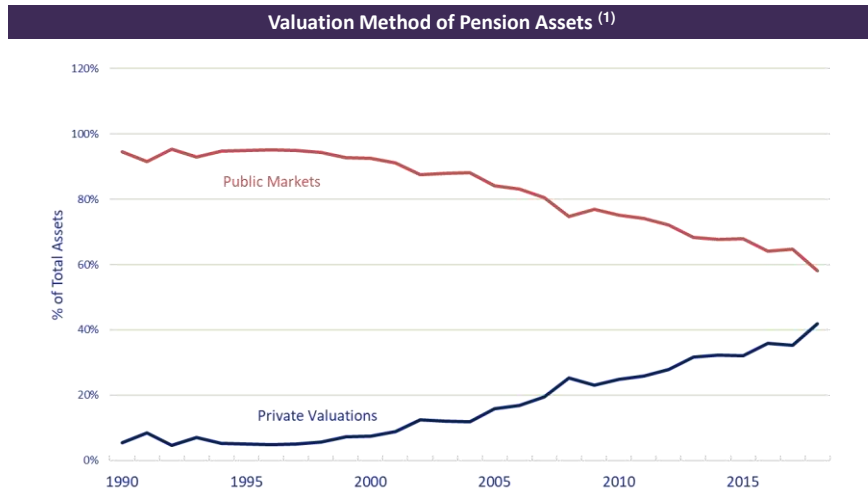
For the same life-time savings of  
\$500,000

Defined benefit pension:	\$50,000
Defined contribution pension:	\$25,000

-50% !

I will not be talking about the fact that for the same life-time accumulation of capital, a defined contribution plan can only offer half the pension of a defined benefit plan.

We will not be talking about this



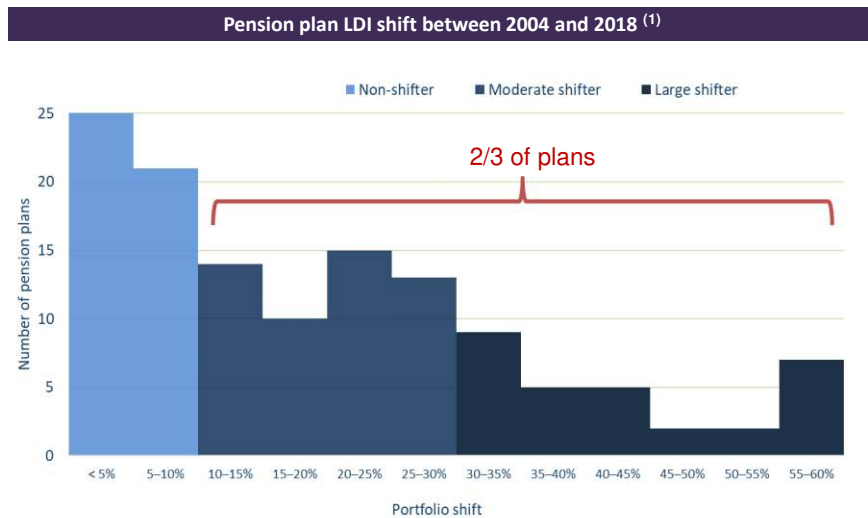
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1. PIAC, as of 2018 encompasses C\$2.1T in Canadian pension assets.

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I will not be talking about the close to half of pension assets that are now hidden behind a valuation veil and the loss of transparency, liquidity, and increased system risk that results.

We will not be talking about this



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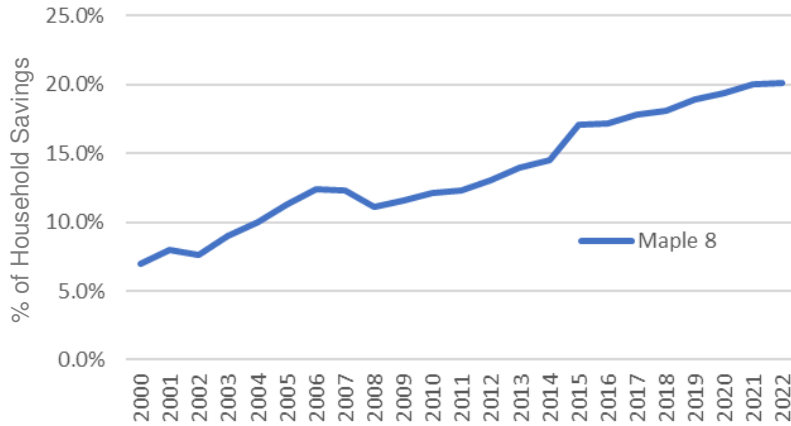
1: Letko Brousseau, Office of the Superintendent of Financial Institutions pension fund data Reaching for yield or resiliency? Explaining the shift in Canadian pension plan portfolios.

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I will not be talking about the counterintuitive fact that most pension funds added substantially to their long bonds just as interest rates were hitting century low interest rates.

We will not be talking about this

Increasing Concentration of Control of Canadian Savings <sup>(1)</sup>



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1: StatsCan, Maple 8 annual reports.

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I will not be talking about the increasing concentration of savings in Canada. We have a few banks, a few insurance companies and large pension funds. The Maple 8 now account for 20% of household savings, a 3-fold increase since 2000.

L'Entrée The First Course	
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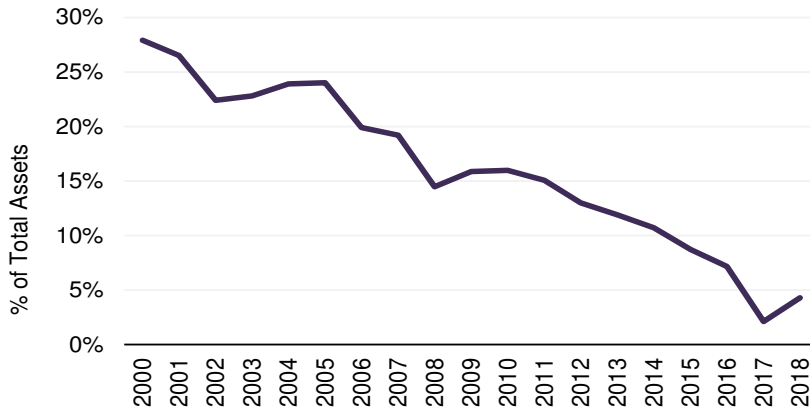
What will I be talking about then?

On with the first course.

We first became interested in the subject of tonight's talk when pension funds started calling us to inform us that their consultants were telling them to substantially reduce their Canadian equity exposure. After all, Canada represented only 3% of the MSCI and a well-diversified portfolio should hold about the same amount.

This is what first drew our attention

**Canadian Public Equities as a % of Total Assets<sup>(1)</sup>**



*Canada has seen a 7-fold decrease in exposure to Canadian public equities.*

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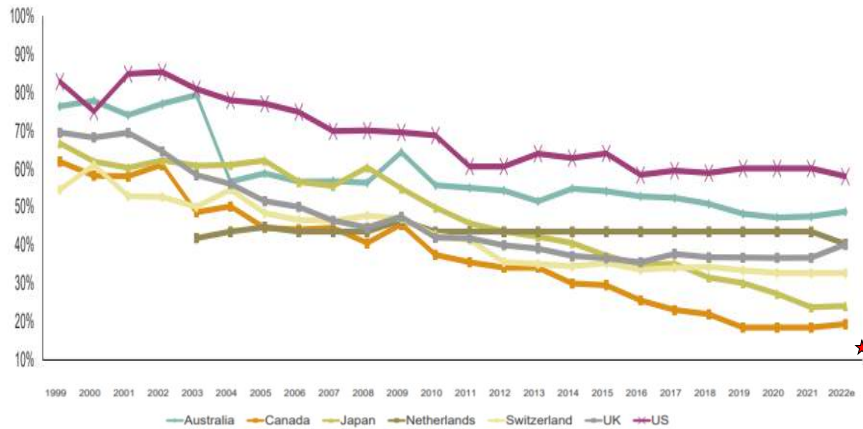
1. PIAC, as of 2018 encompasses C\$2.1T in Canadian pension assets.

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Upon examination, we discovered that there had been a seven-fold decrease in their Canadian public equities over the previous 20 years. Down from 28% to 4% of total assets.

Then we saw what was happening elsewhere

**Domestic Equity Over Total Equity Exposure Has Declined The Most Out of Its Peers<sup>(1)</sup>**



**Canada has significantly cut back investing domestically compared to all its peers!**

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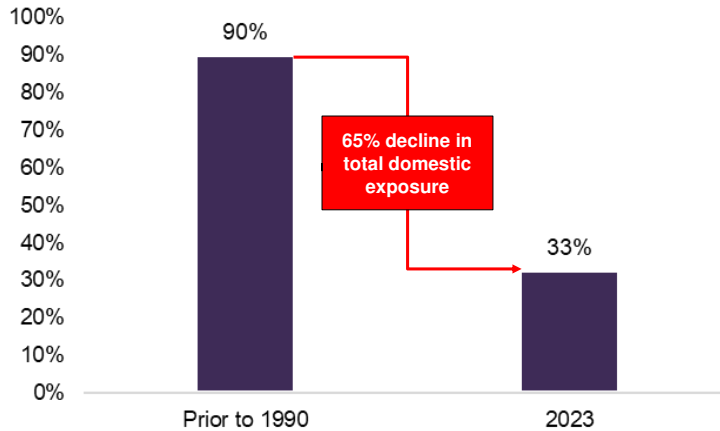
1. [Thinking Ahead Institute](#), P7 countries, encompasses pension assets of US\$44T, domestic public equities only.

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When comparing Canada to other countries, we saw that some were also reducing their domestic exposure, probably the same consultants, but nothing like what was happening in Canada. We were special.

Then we looked at total exposure to investments of all forms

### Canadian Exposure Has Plummeted in All Forms of Investment<sup>(1)</sup>



We wondered if this was limited to just public equities. We found that all forms of Canadian investment had declined from 90% of assets 30 years ago to only 33% now. A 65% decline in total domestic exposure.

## Then We Looked at The Exposure by Asset Class

**Collective Maple 8 Investment By Asset Class<sup>(1)</sup>**

Asset Class	Total	CAD	Non CAD	Total	CAD	Non CAD
Public Equities	\$449	\$52	\$396	22%	3%	19%
Private Equities	\$424	\$29	\$394	21%	1%	19%
Fixed Income	\$442	\$266	\$176	21%	13%	9%
Credit	\$210	\$34	\$176	10%	2%	9%
Real Estate	\$271	\$88	\$183	13%	4%	9%
Infrastructure	\$269	\$41	\$228	13%	2%	11%
<b>Total:</b>	<b>\$2,064</b>	<b>\$511</b>	<b>\$1,553</b>	<b>100%</b>	<b>25%</b>	<b>75%</b>

***For every \$1 managed by the eight largest pension funds in Canada, over 75 cents is invested outside of Canada.***

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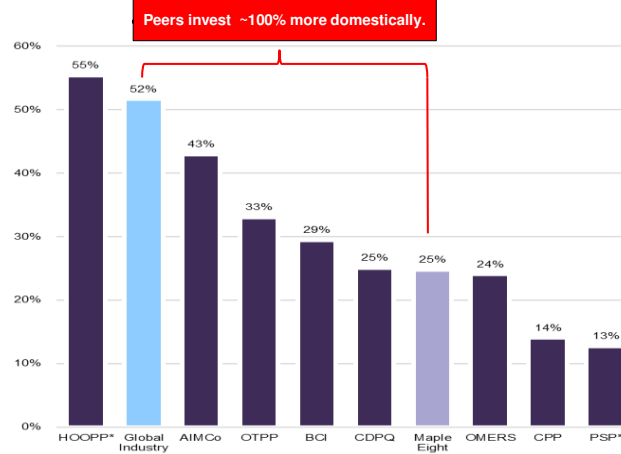
1. Letko Brousseau estimates, 2022/2023 public filings, PSP+HOOP\* total Canadian exposure estimated, asset classes normalized, and geographic exposure approximated to best of public disclosure, sum of columns/rows may not add up precisely due to rounding. Sources: HOCOP, AIA, OTEP, BCI, C2000, CMBS, CIP, BSE.

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We then looked at the different asset classes. For this we used the eight largest funds in Canada. We found that they invested even less in Canada than the Canadian average, only 25% of their assets. Meaning that for every dollar that Canadians had saved in these funds, 75 cents was going elsewhere. No asset class was spared. Very little of private equity is done in Canada and even much touted real-estate is overwhelmingly foreign, as is infrastructure and private credit. Even a considerable part of fixed income is foreign. Clearly the phenomenon is not limited to Canadian public equities.

## And Compared it to The Global Industry

Total Domestic Exposure As a % of Net Assets<sup>(1,2)</sup>



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1. Letko Brousseau estimates, 2022/2023 public filings. PSP+HOOP\* total Canadian exposure estimated, asset classes normalized, and geographic exposure approximated to best of public disclosure, sum of columns/rows may not add up precisely due to rounding. Sources: HOOPP, AIMCo, OTPP, BCI, CDPQ, OMERS, CPP, PSP.  
2. Global 500E 2021 Annual Report, Top 100 State Owned Investors (SOIs), Global industry domestic exposure estimated through a sample of pension and development funds consisting of total AUM of US\$8.317 with \$4.394 invested domestically.

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Looking at other countries, we found that they typically invested a least twice as much in their domestic economies.

Canadian pension funds are generally well managed, the regime is sound, and the funds are solvent. But the Maple 8 have more invested in China, roughly \$88 billion, than in Canadian public and private equities, roughly \$81 billion.

<p>Le Plat Principal</p> <p>The Main Course</p>	
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What does this all mean?

On to the main course.

## Pension Funds are Important and Very Special?

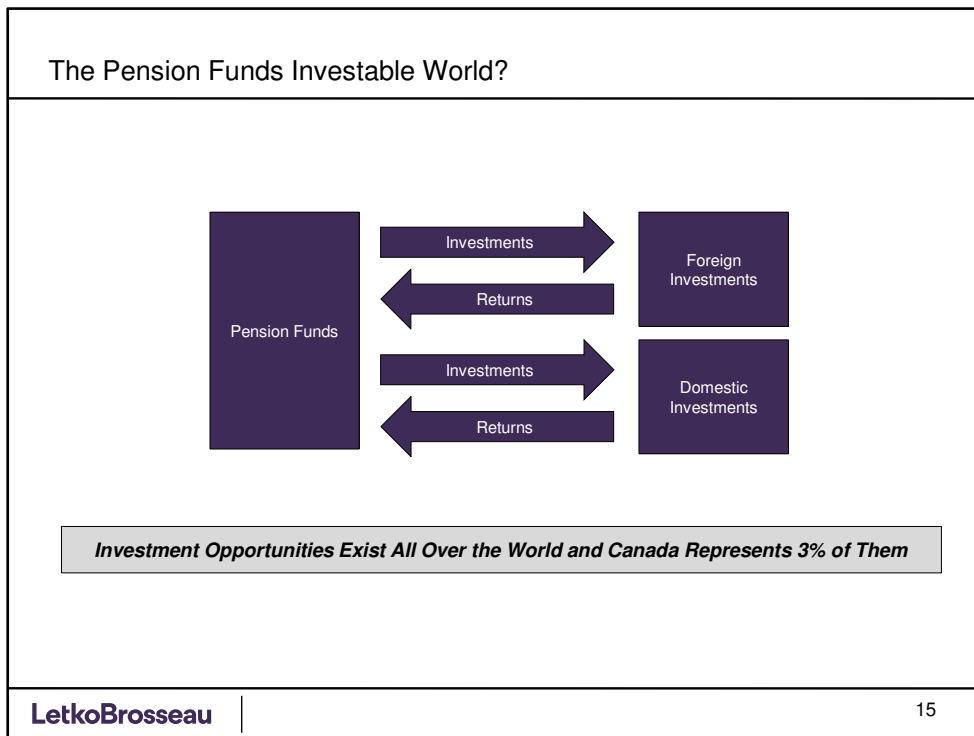
Canadian Savings	CAD (\$ Bil)	%	Preferred Asset Type
Bank Deposits	\$2,716	37%	Shorter Term Debt
<b>Pension Savings</b>	<b>\$2,709</b>	<b>37%</b>	<b>Debt and Equities</b>
Insurance Assets	\$1,642	23%	Short and Long Term Debt
Other Lenders	\$195	3%	Shorter Term Debt
Total	\$7,263	100%	

*Investment is how countries grow, build their future, create high quality jobs.  
Canada is no exception.*

Pension funds are not only important, they are very important and very special. They represent over 37% of institutional financial savings, similar in size to the banks and more than 50% larger than the insurance companies. The banks lend short term, insurance companies lend long term.

But the pension funds are special because they are the only ones that can take on long-term equity risk, the type of investments that patiently build the future.

They are also special because they are a creation of government. They benefit from considerable government largesse, tax deductibility of contributions and tax-free income and gains.



How are pension funds managed? Very well it turns out. They are managed in accordance with sound financial principles weighting risk and returns of investment opportunities all over the World. They see little difference between a foreign and domestic investment. This is how Peter, and I were taught to manage pension fund portfolios when we were at the CN forty years ago.

Foreign and Domestic Investments Are Different	
Foreign Investment	CASE 1. A Canadian invests \$100 abroad. After one year, they repatriate the \$100 and \$10 of profit. Their return is 10%.
Domestic Investments	CASE 2. A Canadian invests \$100 in a machine that produces \$205 of product in the year. The costs are \$100 of salaries and \$100 of wear on the machine, leaving \$5 of profit. Their return is 5%.
<p>In CASE 1 Canada's GDP rises by \$10, the profit. In CASE 2, GDP in Canada increases by \$205, the salaries, the machine, and the profit.</p> <p>From the Canadian investor's point of view, the foreign investment gives a higher return but from a GDP perspective, from a GDP per capita perspective, from the perspective of Canada's ability to save, the domestic investment is by far the better one.</p>	
<div>LetkoBrousseau</div> <div>16</div>	

But there is a difference between a foreign and domestic investment when it comes to the economy.

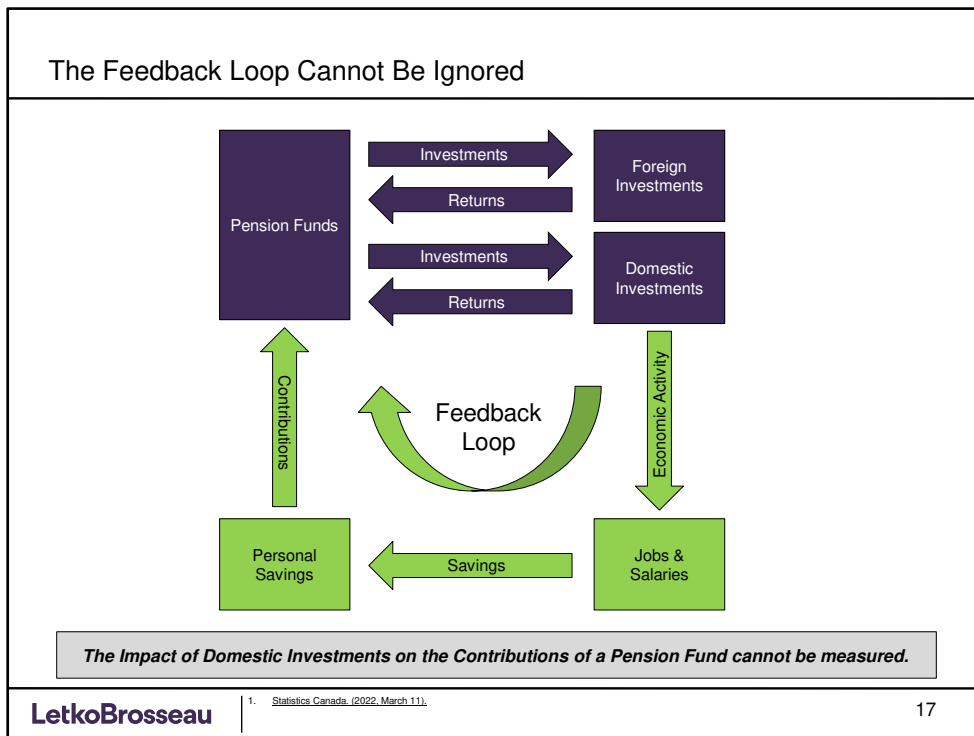
Here we present two simple cases.

In case 1 a Canadian invests \$100 abroad. After one year they repatriate the \$100 and \$10 in profit. Their return is 10%.

In case 2 a Canadian invests \$100 in a machine that produces \$205 of product in the year. The costs are \$100 of salaries and \$100 of wear on the machine, leaving \$5 of profit. Their return is 5%.

In case 1, Canada's GDP rises by \$10, the profit. In case 2, GDP in Canada increases by \$205, the salaries, the machine, and the profit.

From the Canadian investor's point of view, the foreign investment produced a higher return but from a GDP perspective, from a GDP per capita perspective, from the perspective of Canada's ability to save, the domestic investment is by far the better one.



The feedback loop cannot be ignored. If 10% of the salaries in our example are contributed to the pension fund, the pension fund would grow by the \$10 of contributions and \$5 from investment returns to total \$15 compared to the \$10 from the foreign investment. But the pension fund manager cannot factor in the \$10 rise in contributions, the effect of their investments on the incomes of Canadians. At the CN, there was no way we could measure the impact an investment in Alcan would have on the wages of the train engineer. The impact in aggregate is substantial as the example illustrates, but it is diffuse, it is macroeconomic. The impact is outside the ability of standard portfolio analysis to factor in.

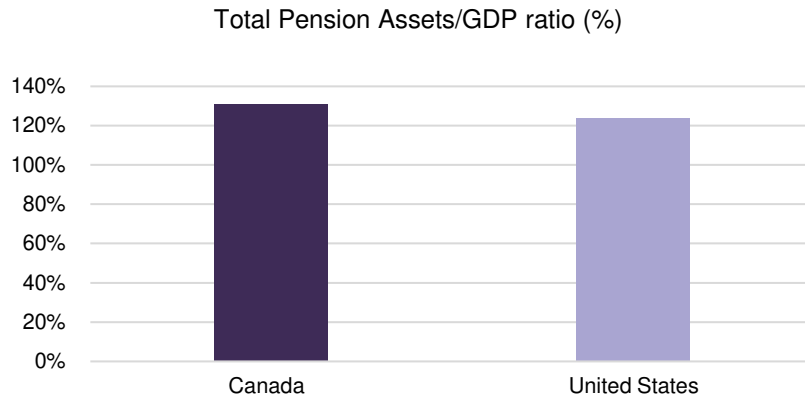
This is the most difficult part of the presentation to understand. Canada's pensions are well managed but there is an essential missing piece and only government can contribute it.

<p>Les Fromages</p> <p>An Interlude Before the Dessert</p>	
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Now for the cheese.

## Canada Is Not Too Small To Invest In

### Canada's Pensions Assets Are In Line with the United States<sup>(1)</sup>

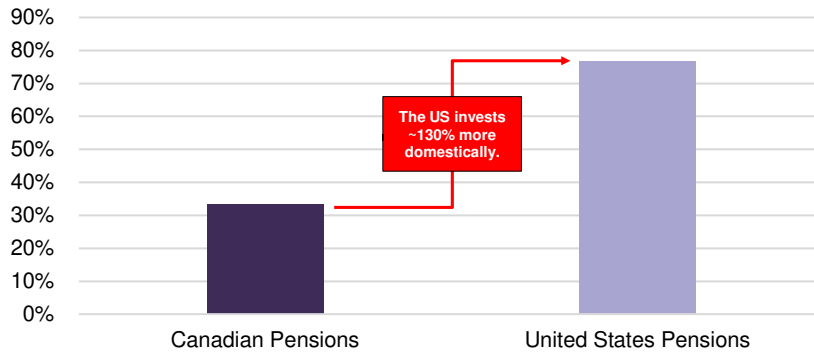


Canada's pension assets are in line with the US, about 120% of GDP.

## Canada Is Not Too Small To Invest In

**Yet Americans Invest 130% More Domestically<sup>(1)</sup>**

Total Domestic Exposure (2021)



***American pensions invest 130% more domestically – Canada is rich with opportunity.***

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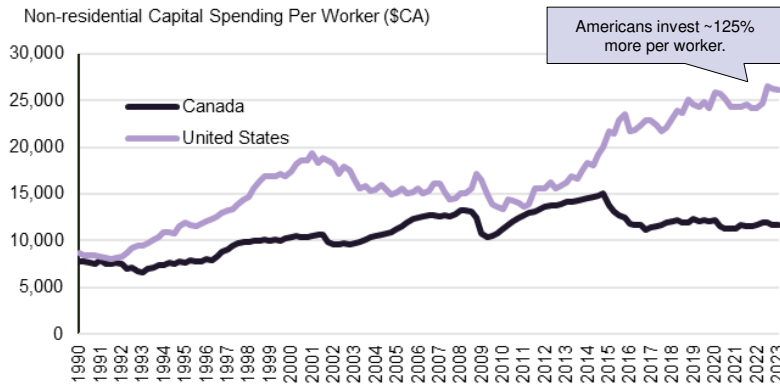
1. Global S&P 2021 Annual Report, Top 100 State Owned Investors (SOIs), data set used to estimate country domestic exposure by aggregating funds by country. United States consist of US\$1285 bn of AUM with 77% invested domestically, while Canada consist of US\$1294 bn AUM with 33% invested domestically.

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But in the US, more than 75% are invested domestically compared to our 33%, 130% more. But it is not as if Canada's economy does not need the investments.

## Canada Is Underinvesting in Its Workers

### Canada Is Underinvesting In Its Workers<sup>(1)</sup>



*This must impact productivity*

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1. Statistics Canada, BEA, TD Economics, Factsheet, Real Private Nonresidential Fixed Investment in US dollars.

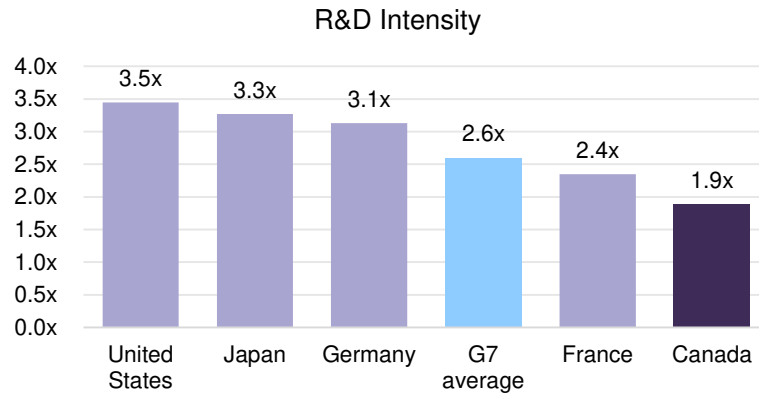
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We underinvest in our workers. Americans invest about 125% more per worker than Canadians do.

Want to guess how that impacts productivity?

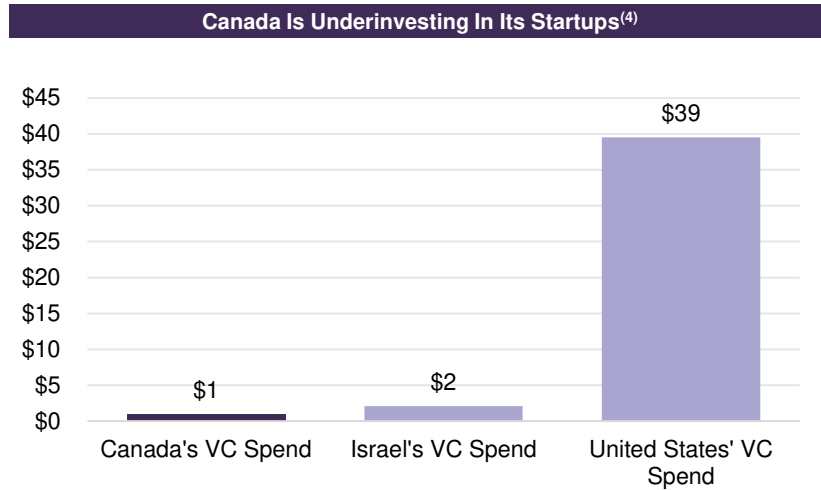
## Canada Is Underinvesting in Innovation

### Canada Is Underinvesting In Innovation<sup>(3)</sup>



We also underinvest in R&D compared to most developed economies. 25% less than the G7 average.

## Canada Is Underinvesting in Startups

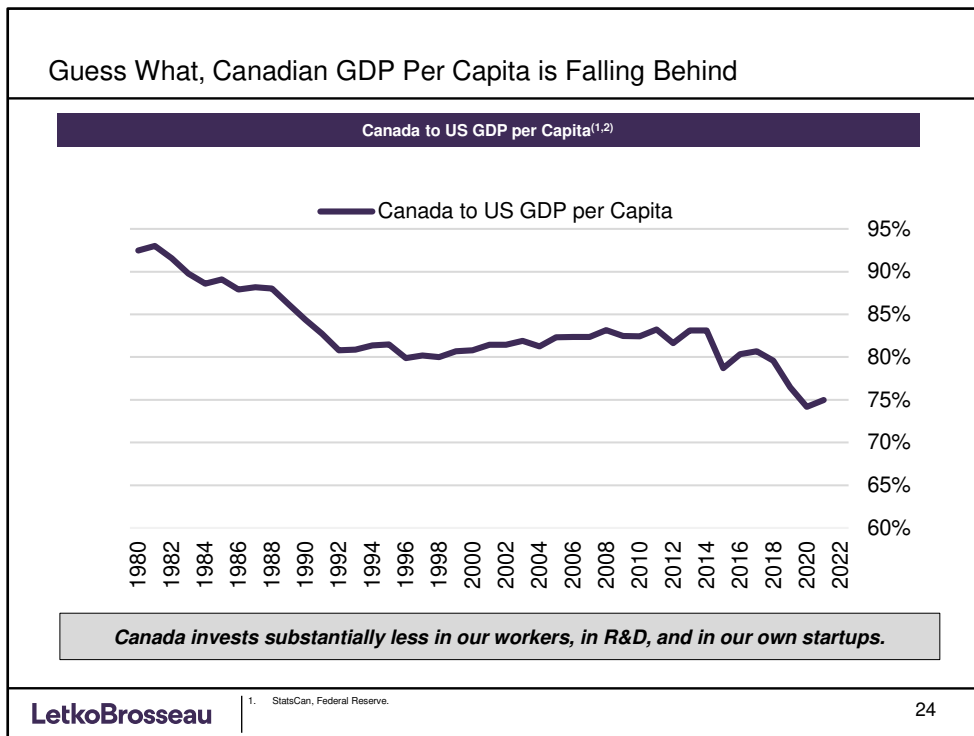


**LetkoBrosseau**

1. Letko Brosseau, OECD (2019) domestic venture capital spending normalized in US dollars, CPE Media, World Bank.

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We underinvest in startups. For every \$1 we invest in startups, Israel invests \$2 despite being an economy a quarter of Canada's size, and the US invests \$39. Moreover, Canadians provide a mere 34% of the funding for their own startups.



Is it any surprise that Canada's GDP per capita has fallen from 95% of the US to 75% now?

How are we going to keep up?

Canadian success stories have received limited support from pension funds. Ask Calin Rovinescu how hard he tried to receive the backing from pension fund investors in 2008 and 2009 from which Air Canada rose approximately 4,000% delivering amongst the very best return on the TSX. Ask Serge Godin whose CGI became one of our leading IT companies with operations around the world or Alain Bouchard, founder of Canada's wonderful global success Couche Tard, or Tobias Lutke of Shopify who took on Amazon and can still talk about it today. Each has told us Canadian Pension Funds were all missing in action.

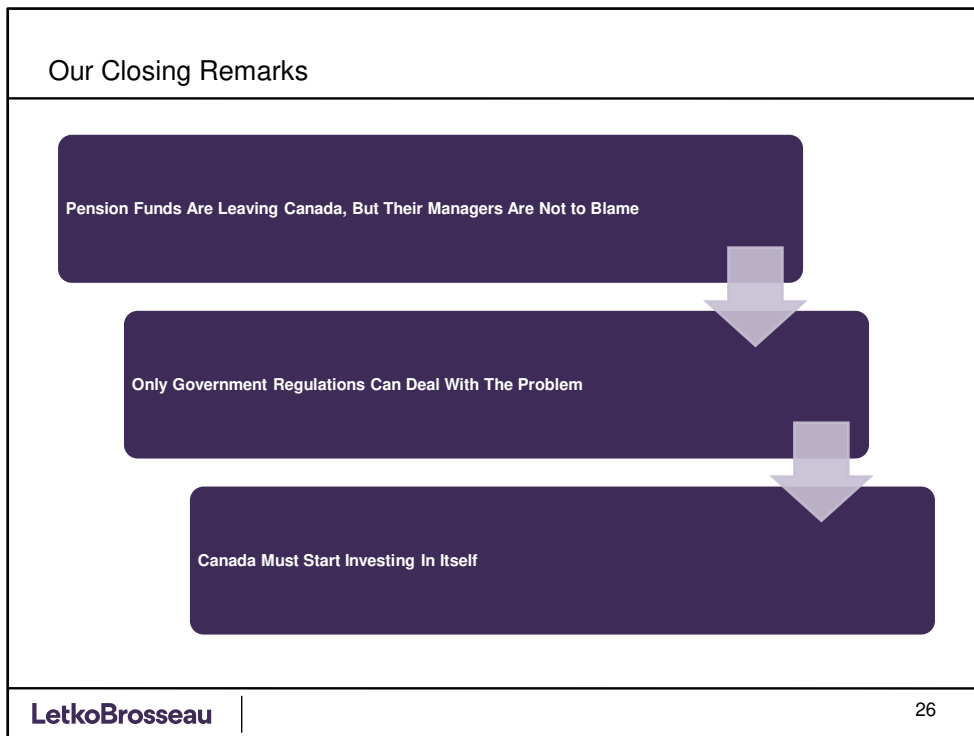
More recently our most successful mining company Teck Resources has been pursued by Glencore and the only pension fund investor appears to be the Government of Japan Pension Fund.

Not only do these represent colossal misses, but we are also gutting Canadian control of great businesses. When Alcan becomes a foreign subsidiary of Rio Tinto it is no longer driven to grow and develop its business but rather becomes a branch plant with a goal of operating at the lowest cost possible. The benefits of a head office in Canada which often radiates out through the legal and other professional communities disappears. Board Meetings, Research and Development audit moves to Melbourne or London.

This is very different from how Couch Tard or CGI have continued to grow and benefit the Canadian economy.

Le Dessert	
LetkoBrosseau	25

And now for the dessert.



Investment opportunities exist all around the World, those outside Canada can have a role to play. However, investments made in Canada do not impact just pension portfolios, they can have a considerable impact on Canada's economy, generating jobs, improving incomes, and increasing contributions to retirement plans. Less investment in Canadian businesses increases their cost of capital, discounts their value, reduces their ability to grow, and makes Canada less attractive.

This cannot be addressed through portfolio analysis. Only government regulations can deal with the problem.

Some say that Canada is only 3% of the World economy so that is an appropriate target for a diversified portfolio. Following that argument to its logical end would mean that small countries should avoid investing in themselves, a patently ridiculous conclusion.

Some say we should simply go back to limiting how much pension funds can invest outside Canada to a hard maximum of 10% or 30%. We think this is the wrong way to go.

Pension Funds should be able to invest wherever their managers feel appropriate. However, we believe a concept of reserves against certain types of investments would encourage managers to think twice and would discourage some investment strategies and encourage more of a domestic orientation.

<p>Les Mignardises</p> <p>After Dinner Mints</p>	
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Now if we have time, I have a few after dinner mints to offer.

Quick Pub Quiz – Which is Canada, Which is the United States?

Which Market is Most Concentrated? <sup>(1)</sup>

Is Canada country A or B?

	Country A <i>% of GDP</i>	Country B <i>% of GDP</i>
<b>Largest Market Cap</b>	6%	12%
<b>Largest 5 Market Cap</b>	23%	38%
<b>Largest 10 Market Cap</b>	37%	51%
<b>Largest 50 Market Cap</b>	88%	91%
<b>Largest 100 Market Cap</b>	104%	113%
<b>GDP</b>	100%	100%

These are the weights of the largest companies in the Canadian and US stock markets. Is Canada country A or B?

Quick Pub Quiz – Which is Canada, Which is the United States?

Which Market is Most Concentrated? <sup>(1)</sup>

	Canada <i>% of GDP</i>	US <i>% of GDP</i>
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<b>Largest 50 Market Cap</b>	88%	91%
<b>Largest 100 Market Cap</b>	104%	113%
<b>GDP</b>	100%	100%

*The US market is more concentrated by company than Canada's market*

When it comes to the size of companies, Canada is less concentrated than the US.

Quick Pub Quiz – Canada, United States, or Europe?

Concentration of Savings in Canada, United States and Europe <sup>(1)</sup>

Which is Canada? A, B, or C?

	Region A <i>% of GDP</i>	Region B <i>% of GDP</i>	Region C <i>% of GDP</i>
<b>Largest Fund</b>	2.2%	2.8%	19.7%
<b>Largest 5 Funds</b>	6.3%	7.7%	58.6%
<b>Largest 10 Funds</b>	9.8%	11.5%	79.4%
<b>GDP</b>	100.0%	100.0%	100.0%

These are the size of the largest funds in Canada, the US and Europe. Is Canada Region A, Region B, or Region C?

## Quick Pub Quiz – Canada, United States, or Europe?

### Concentration of Savings in Canada, United States and Europe <sup>(1)</sup>

	<b>EU</b> <i>% of GDP</i>	<b>USA</b> <i>% of GDP</i>	<b>Canada</b> <i>% of GDP</i>
<b>Largest Fund</b>	2.2%	2.8%	19.7%
<b>Largest 5 Funds</b>	6.3%	7.7%	58.6%
<b>Largest 10 Funds</b>	9.8%	11.5%	79.4%
<b>GDP</b>	100.0%	100.0%	100.0%

*Canada is 7 times more concentrated than the US and 8 time more then Europe*

Canada is seven times more concentrated than the US and eight times more than Europe. If a large US fund wants to take a position in a company, their size does not hold them back. But in Canada, it is not the same story, size can be a constraint. But if we have to choose between investing Canadian savings in Canada or having large institutions, the choice should not be difficult.

## Quick Pub Quiz – Which is Canada, Which is the United States

### Concentration of Industries in Canadian and US Markets <sup>(1)</sup>

Is Canada country A or B?

Country A		Country B	
Industry	Weight	Industry	Weight
Industry A	29.4	Industry A	30.0
Industry B	14.1	Industry B	16.8
Industry C	10.6	Industry C	13.8
Industry D	10.0	Industry D	12.5
Industry E	8.5	Industry E	6.7
Industry F	8.2	Industry F	4.8
Industry G	6.5	Industry G	4.5
Industry H	4.6	Industry H	4.3
Industry I	2.8	Industry I	3.7
Industry J	2.7	Industry J	2.5
Industry K	2.6	Industry K	0.3

These are the industry weights in the Canadian and US stock markets. Is Canada country A or B?

## Quick Pub Quiz – Which is Canada, Which is the United States

### Concentration of Industries in Canadian and US Markets <sup>(1)</sup>

United States		Canada	
Industry	Weight	Industry	Weight
INFORMATION TECHNOLOGY	29.4	FINANCIALS	30.0
HEALTH CARE	14.1	ENERGY	16.8
CONSUMER DISCRETIONARY	10.6	INDUSTRIALS	13.8
FINANCIALS	10.0	MATERIALS	12.5
INDUSTRIALS	8.5	INFORMATION TECHNOLOGY	6.7
COMMUNICATIONS SERVICES	8.2	COMMUNICATION SERVICES	4.8
CONSUMER STAPLES	6.5	UTILITIES	4.5
ENERGY	4.6	CONSUMER STAPLES	4.3
UTILITIES	2.8	CONSUMER DISCRETIONARY	3.7
MATERIALS	2.7	REAL ESTATE	2.5
REAL ESTATE	2.6	HEALTH CARE	0.3

*Canada is slightly more concentrated than the United States, but not by much.*

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1: FactSet, MSCI

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Both markets are about equally concentrated by industry, just different industries.

If you want to build a perfectly diversified portfolio with 9.1% in each industry, you can do it with a 66% Canada, 34% US mix. You do not need to bring Canada down to 3%.

## Quick Pub Quiz – Rank the Maple 8

Which has the highest Canada weight? Which has the lowest?

% of Assets	Highest																		Lowest		
	%	CAD	Non CAD	%	CAD	Non CAD	%	CAD	Non CAD	%	CAD	Non CAD	%	CAD	Non CAD	%	CAD	Non CAD	%	CAD	Non CAD
Public Equities	14%	2%	13%	31%	6%	25%	7%	0%	7%	26%	0%	26%	30%	6%	24%	13%	2%	11%	24%	2%	22%
Private Equities	12%	2%	10%	9%	2%	7%	25%	4%	22%	12%	0%	12%	14%	2%	11%	24%	2%	22%	33%	0%	33%
Fixed Income	60%	46%	13%	23%	23%	0%	33%	15%	18%	27%	12%	15%	19%	10%	9%	10%	10%	0%	12%	9%	3%
Credit	0%	0%	0%	5%	0%	5%	5%	4%	1%	9%	7%	2%	13%	2%	11%	10%	0%	10%	13%	0%	13%
Real Estate	11%	6%	5%	17%	10%	7%	11%	7%	4%	16%	7%	8%	13%	3%	10%	23%	6%	18%	9%	2%	7%
Infrastructure	3%	0%	3%	15%	2%	14%	19%	3%	16%	10%	2%	8%	11%	2%	9%	19%	5%	15%	9%	2%	7%
Total:	100%	55%	45%	100%	43%	57%	100%	33%	67%	100%	29%	71%	100%	25%	75%	100%	24%	76%	100%	14%	86%

AIMCo	
BCI	
CDPQ	
CPP	
HOOPP	
OMERS	
OTPP	
PSP	

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1. Letko Brousseau estimates, 2022/2023 public filings, PSP/HOOP total Canadian exposure estimated, asset classes normalized, and geographic exposure approximated to best of public disclosure, sum of columns/rows may not add up precisely due to rounding. Sources: HOOPP, AIMCo, OTPP, BCI, CDPQ, OMERS, CPP, PSP.

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These are the Maple 8 ranked by their exposure to Canada. Which has the largest Canadian weight? Which has the lowest?

## Quick Pub Quiz – Rank the Maple 8

Which has the highest Canada weight? Which has the lowest?

% of Assets	HOOPP (\$103)			AIMCo (\$158)			OTPP (\$244)			BCI (\$215)			CDPQ (\$402)			OMERS (\$128)			CPP (\$570)			PSP (\$244)		
Asset Class	%	CAD	Non CAD	%	CAD	Non CAD	%	CAD	Non CAD	%	CAD	Non CAD	%	CAD	Non CAD	%	CAD	Non CAD	%	CAD	Non CAD	%	CAD	Non CAD
Public Equities	14%	2%	13%	31%	6%	25%	7%	0%	7%	26%	0%	26%	30%	6%	24%	13%	2%	11%	24%	2%	22%	16%	2%	14%
Private Equities	12%	2%	10%	9%	2%	7%	25%	4%	22%	12%	0%	12%	14%	2%	11%	24%	2%	22%	33%	0%	33%	14%	0%	14%
Fixed Income	60%	46%	13%	23%	23%	0%	33%	15%	18%	27%	12%	15%	19%	10%	9%	10%	10%	0%	12%	9%	3%	20%	6%	14%
Credit	0%	0%	0%	5%	0%	5%	5%	4%	1%	9%	7%	2%	13%	2%	11%	10%	0%	10%	13%	0%	13%	12%	0%	12%
Real Estate	11%	6%	5%	17%	10%	7%	11%	7%	4%	16%	7%	8%	13%	3%	10%	23%	6%	18%	9%	2%	7%	16%	3%	14%
Infrastructure	3%	0%	3%	15%	2%	14%	19%	3%	16%	10%	2%	8%	11%	2%	9%	19%	5%	15%	9%	2%	7%	22%	2%	20%
Total:	100%	55%	45%	100%	43%	57%	100%	33%	67%	100%	29%	71%	100%	25%	75%	100%	24%	76%	100%	14%	86%	100%	13%	87%

	AIMCo	43 %
	BCI	29 %
	CDPQ	25 %
	CPP	14 %
Highest →	HOOPP	55 %
	OMERS	24 %
	OTPP	33 %
← Lowest	PSP	13 %

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1. Letko Brousseau estimates, 2022/2023 public filings, PSP/HOOP total Canadian exposure estimated, asset classes normalized, and geographic exposure approximated to best of public disclosure, sum of columns/rows may not add up precisely due to rounding. Sources: HOOPP, AIMCo, OTPP, BCI, CDPQ, OMERS, CPP, PSP.

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PSP and CPP, two funds that fall under the federal government's aegis, have the lowest Canadian exposure.

HOOPP has the highest, principally because of its high fixed income weight.

CDPQ, which is the only one with a dual mandate is right in the middle. The dual mandate has affected their Quebec exposure but has had no overall effect on their Canadian exposure.

Dual mandates and moral suasion are evidently not what it takes. The government needs to set a weight and then every one will coalesce around it.

## Further Reading

We invite you to read:



- A short "Pension System Frequently Asked Questions" which further examines the impact of the pension system on the domestic economy, why government regulation is required, the comparative capacity of the Canadian economy to absorb investments, and the recommended tools to bring about change.



- A longer paper on several unintended and undesirable problems with the pension system and how regulations can deal with them.

Both documents available upon request.

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