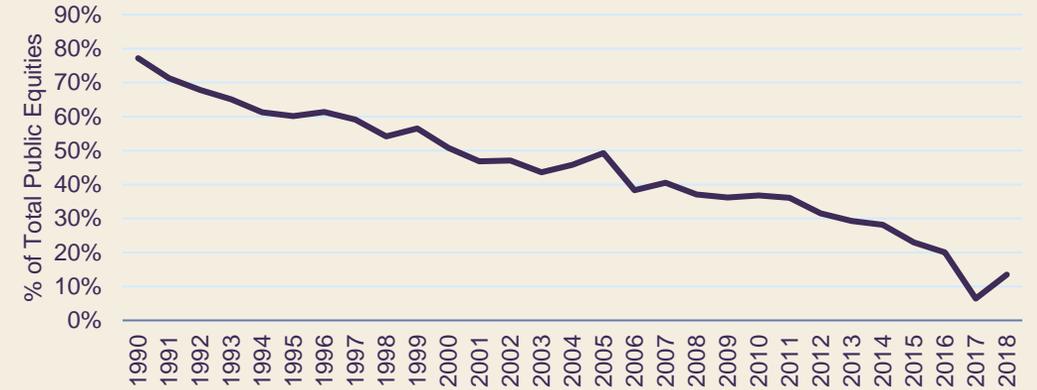


Canadian Pension System's Divestment of Canadian Equities: The Canary in the Coal Mine

LetkoBrosseau
Global Investment Management

In 1990, Canadian public equities represented close to 80% of all equities held by pension funds in Canada. By 2018, they had declined to barely 10%, less than 4% of overall assets. Some of Canada's largest funds currently hold only 1%¹ of their assets in Canadian public equities.

Canadian Equities Share of Public Equities



Sources: Pension Investment Association of Canada (PIAC) <https://piacweb.org/>, Letko Brosseau

Canadian Equities Share of Total Assets

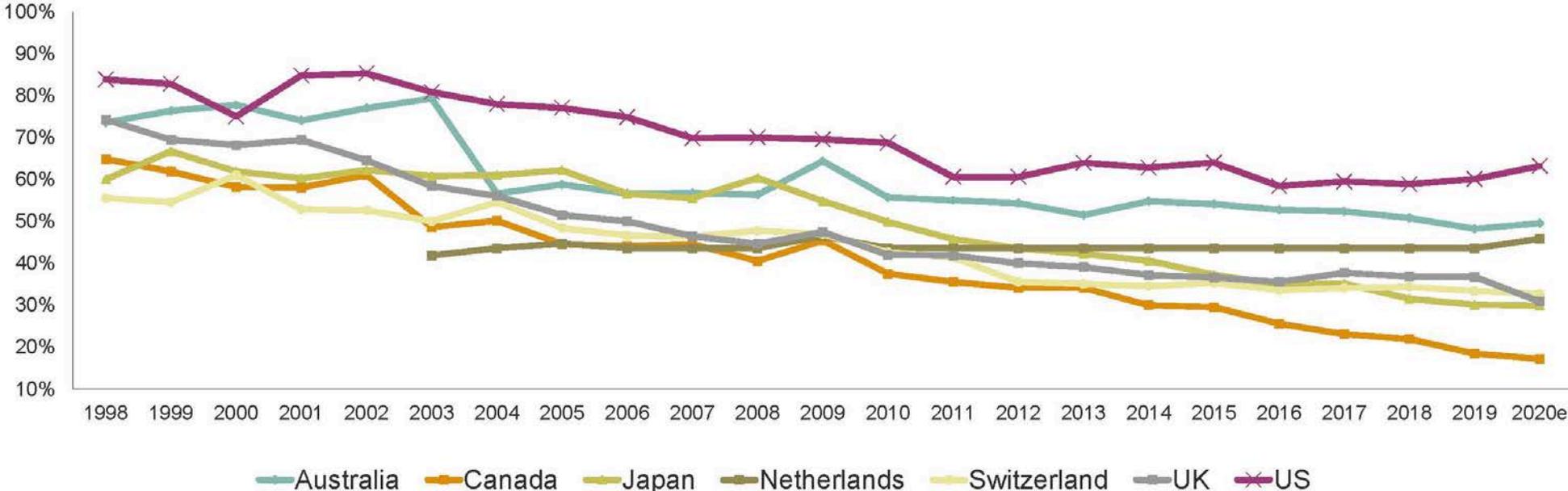


Sources: Pension Investment Association of Canada (PIAC) <https://piacweb.org/>, Letko Brosseau

(1) Pension Investment Association of Canada (PIAC) <https://piacweb.org/>

Canadian pension funds have cut back their weight in domestic equities much more than other countries.

Domestic equity over total equity exposure



Sources: Willis Towers Watson, Thinking Ahead Institute and secondary sources



Why?



Not because of returns

- Returns in Canada have lagged the US market over the last 10 years.
- But in the previous 10 years, the Canadian market beat the US market by an equal amount.
- Such that, over 20 years, Canadian and US returns were the same.
- Over the last 30 years, Canadian markets beat Emerging markets by 2.1%¹ annually.
- Over the same period, Canadian markets beat developed markets, ex US, by 2.9%² per year.
- Financial theory says that the financial markets should arbitrage away prospective differences in returns, adjusted for risk, so expected returns in Canada should neither be significantly higher nor lower than returns elsewhere in the World.



Not for diversification

- When you are down to holding only 10% of an asset in your portfolio, unless it is a very unusual asset (not a bank, retailer, manufacturer, ...), it will do very little to reduce the risk of the other 90%.
- Similarly, it does not take 90% of other holdings to diversify the risk away from a 10% holding.



Most common reason given: Indexing

- Canada represents 3%³ of global equity markets so Canadian pension funds should have 3% in Canada.

(1) S&P/TSX Composite Total Return Capped Index, Letko Brosseau, MSCI Emerging Markets Total Return Net Index

(2) S&P/TSX Composite Total Return Capped Index, Letko Brosseau, MSCI EAFE Total Return Net Index

(3) MSCI available at: <https://www.visualcapitalist.com/a-geographic-breakdown-of-the-msci-acwi-imi/>



Is the right weight 3%, 50% or 70%?

Having a 3% weight in Canada may be problematic and fundamentally wrong. The logic is:

- The US economy is large and US savings are also large.
- US equities account for 56%¹ of World equity markets.
- Consequently, the US should invest a large percentage of their large savings in their domestic markets.
- This means that the larger you are, the greater the share of your economy should be domestically owned.
- Conversely, the smaller your economy, the less you should invest in it and own of it.
- Is it right to say that all the economies in the World should invest primarily in the largest economies? Do they really need all that help from the smaller economies?
- In Australia, an economy of comparable size to Canada's, pension funds have a 50% weight in their domestic equities, close to 5 times that of Canadian pension funds.

In fact, Americans own more than 70%² of their equities, more than their weight in world equity markets.

The US is one of the World's most evolved economies, often cited as a model.

Should other smaller economies also own 70% of their domestic equities?

Investments drive jobs.

(1) Willis Towers Watson, Thinking Ahead Institute and secondary sources

(2) Federal Reserve Board

Pension funds are unique

- Pension funds account for approximately 30%¹ of financial savings.
- As opposed to bank deposits, this 30% is long term.
- As opposed to life insurance assets, this 30% can invest in equities.
- This 30% is very special and is uniquely positioned to play a policy role in the economy.
- Governments have given pension funds substantial advantages:
 - Tax deductibility of contributions.
 - Tax free status of income and gains.
- Pension fund savings are long term and able to absorb short term volatility, ... if regulations allow.

Investments are how economies grow and build their future; Canada's included.

Investments are how countries create high quality jobs.

As Government creations, pension funds must meet Canadian policy objectives.

(1) Statistics Canada



Reduced ownership of Canadian companies and the Canadian economy by Canadian pension funds is just one trend. Others are:

- Reduced participation of Canadians in retirement plans generally.
- Increased participation in defined contribution plans at the expense of much more efficient defined benefit plans.
- Reduced importance of public equity markets, reduced liquidity, reduced visibility.
- Increased importance of subjective, negotiated, and generally less transparent private markets.
- Reduced inflation protection and increased investment in low return fixed income assets.
- Increased indexing.
- Decreased future looking fundamental analysis and increased reliance on historical statistical analysis.
- Increased reliance on expert advice that is unmeasured and not subject to strict standards.

Is this what we want?

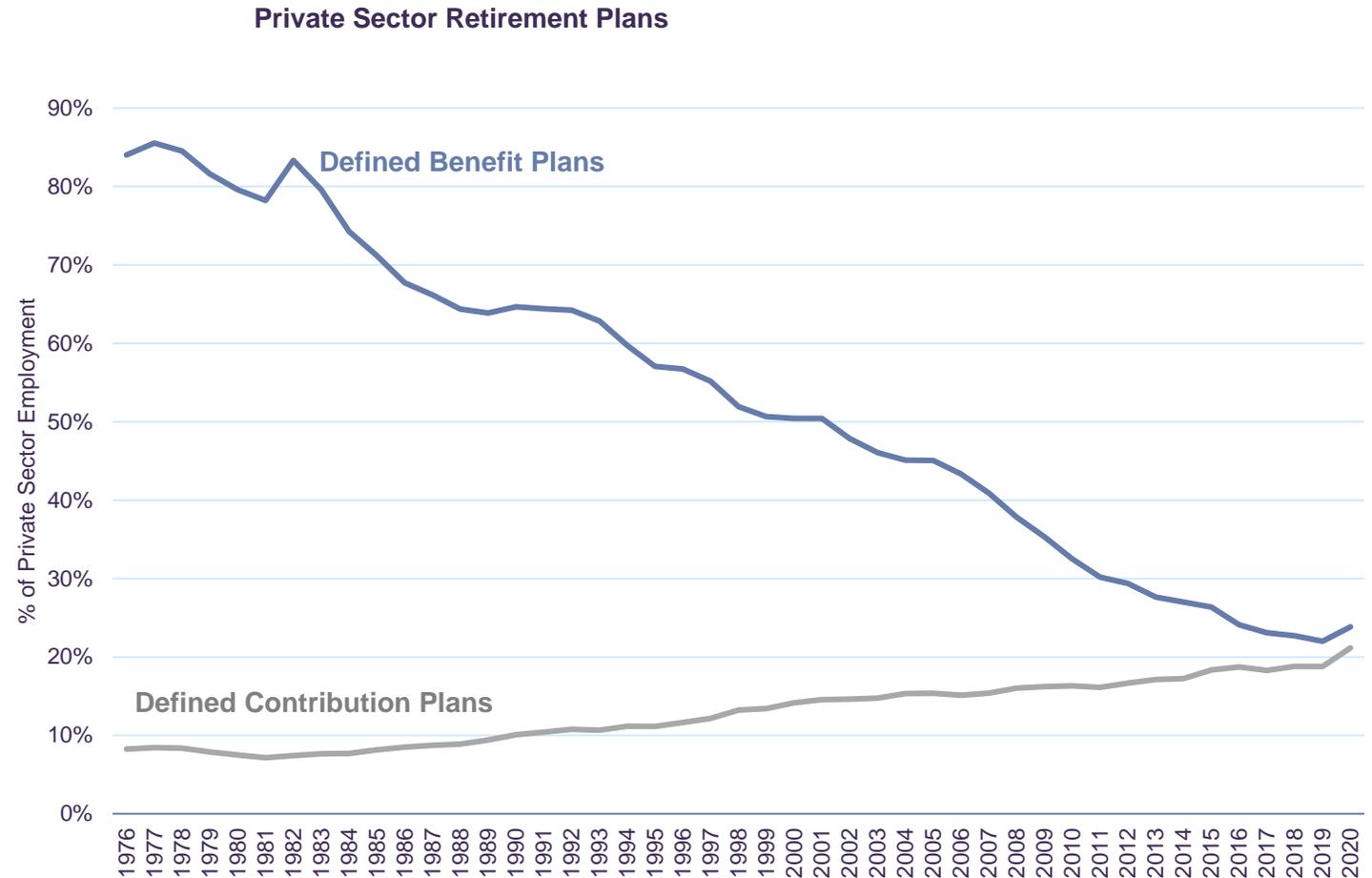
If you are not convinced of the importance of these trends, read on ...



What is Canadian Government policy?

Is it policy to reduce participation of Canadians in retirement plans generally?

Is it policy to reduce the participation in defined benefit plans and push them towards much less efficient defined contribution plans?*



* Appendix A, at end of presentation, examines the difference between defined benefit and defined contribution plans

Sources: Statistics Canada, Letko Brosseau

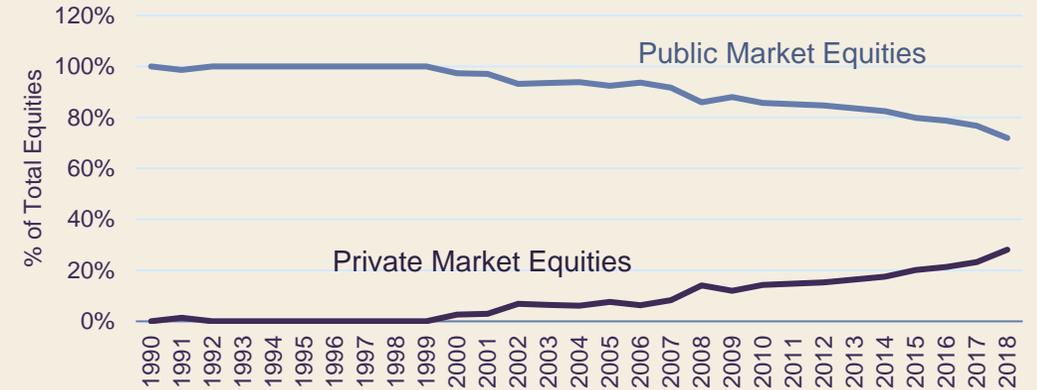


What is Canadian Government policy?

Is it policy to reduce importance of public equity markets, reduce liquidity, reduce visibility?

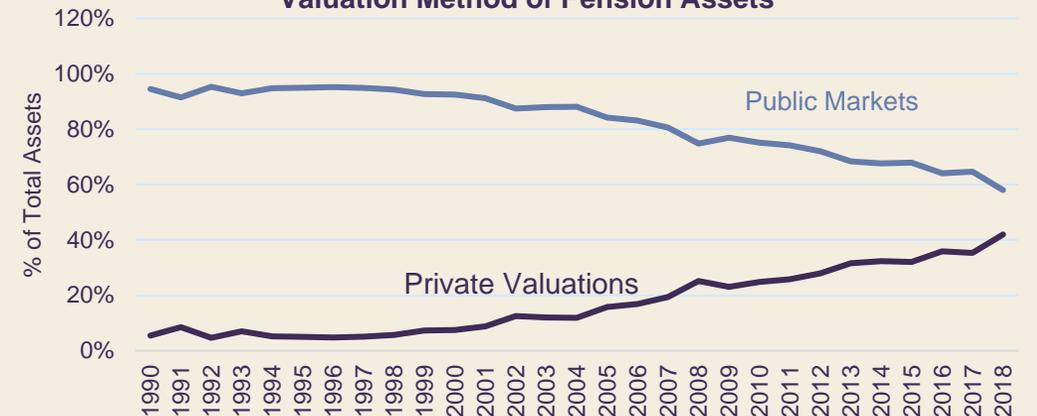
Is it policy to increase the importance of subjective, negotiated, and generally less transparent private markets?

Pension Fund Equities by Market



Sources: Pension Investment Association of Canada (PIAC) <https://piacweb.org/>, Letko Brousseau

Valuation Method of Pension Assets



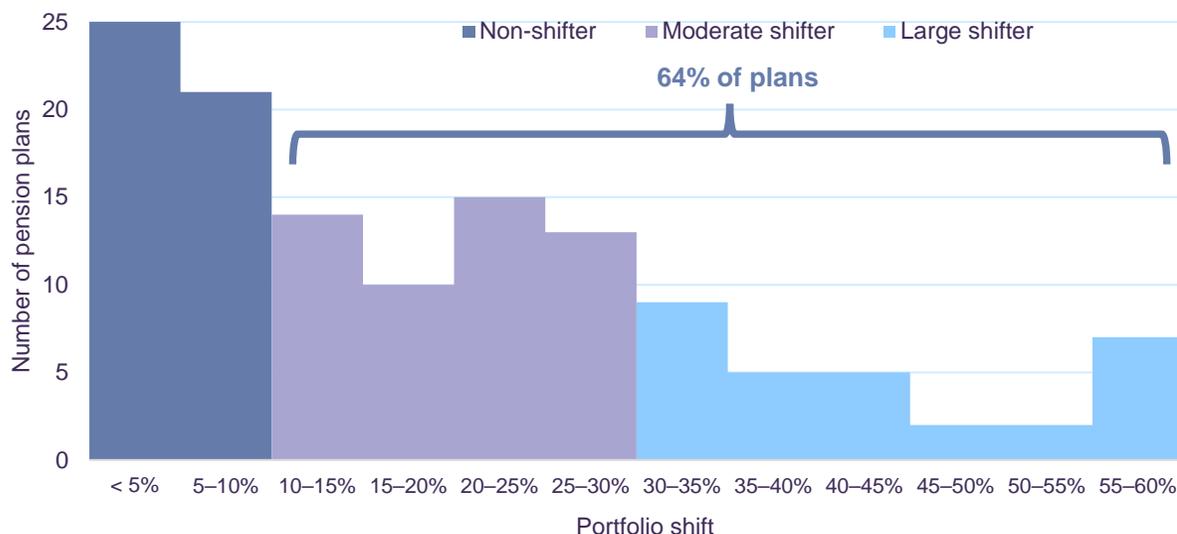
Sources: Pension Investment Association of Canada (PIAC) <https://piacweb.org/>, Letko Brousseau

What is Canadian Government policy?

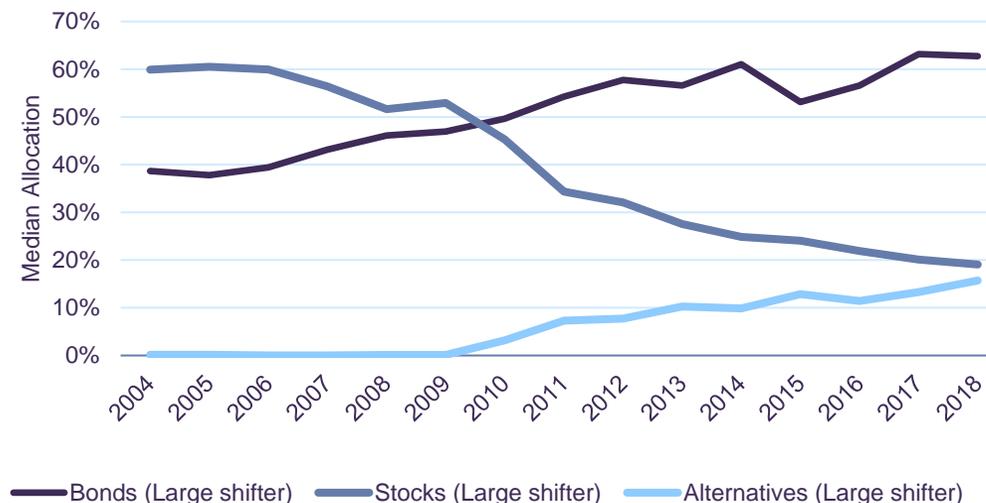
Is it policy to reduce inflation protection and increase investment in low return fixed income assets?

- Liability driven investing (LDI) relies on buying long bonds with a duration equal to the pension liabilities. In this way, if interest rates fall or rise, the value of a fund's bond portfolio will rise or fall in sympathy with the rise or fall of the fund's liabilities.
- LDI has increased in order to reduce the impact of volatile interest rates on frequent actuarial valuations.

Pension plan LDI shift between 2004 and 2018



Plans that shifted since 2004 now hold a majority of bonds



Sources: Letko Brosseau, Office of the Superintendent of Financial Institutions pension fund data Reaching for yield or resiliency? Explaining the shift in Canadian pension plan portfolios. Chart 2: Pension plans shifted their portfolio allocations between 2004 and 2018. Sébastien Betermier, Nicholas Byrne, Jean-Sébastien Fontaine, Hayden Ford, Jason Ho, Chelsea Mitchell. The reproduction is a copy of the version available at: <https://www.bankofcanada.ca/2021/08/staff-analytical-note-2021-20/>

Sources: Letko Brosseau, Office of the Superintendent of Financial Institutions pension fund data Reaching for yield or resiliency? Explaining the shift in Canadian pension plan portfolios. Chart 3: Plans that shifted since 2004 now hold a majority of bonds. Sébastien Betermier, Nicholas Byrne, Jean-Sébastien Fontaine, Hayden Ford, Jason Ho, Chelsea Mitchell. The reproduction is a copy of the version available at: <https://www.bankofcanada.ca/2021/08/staff-analytical-note-2021-20/>

Pension funds have never been more interested in buying long bonds despite historic low yields.
Is this good for the Canadian economy, for funding Canada's future?

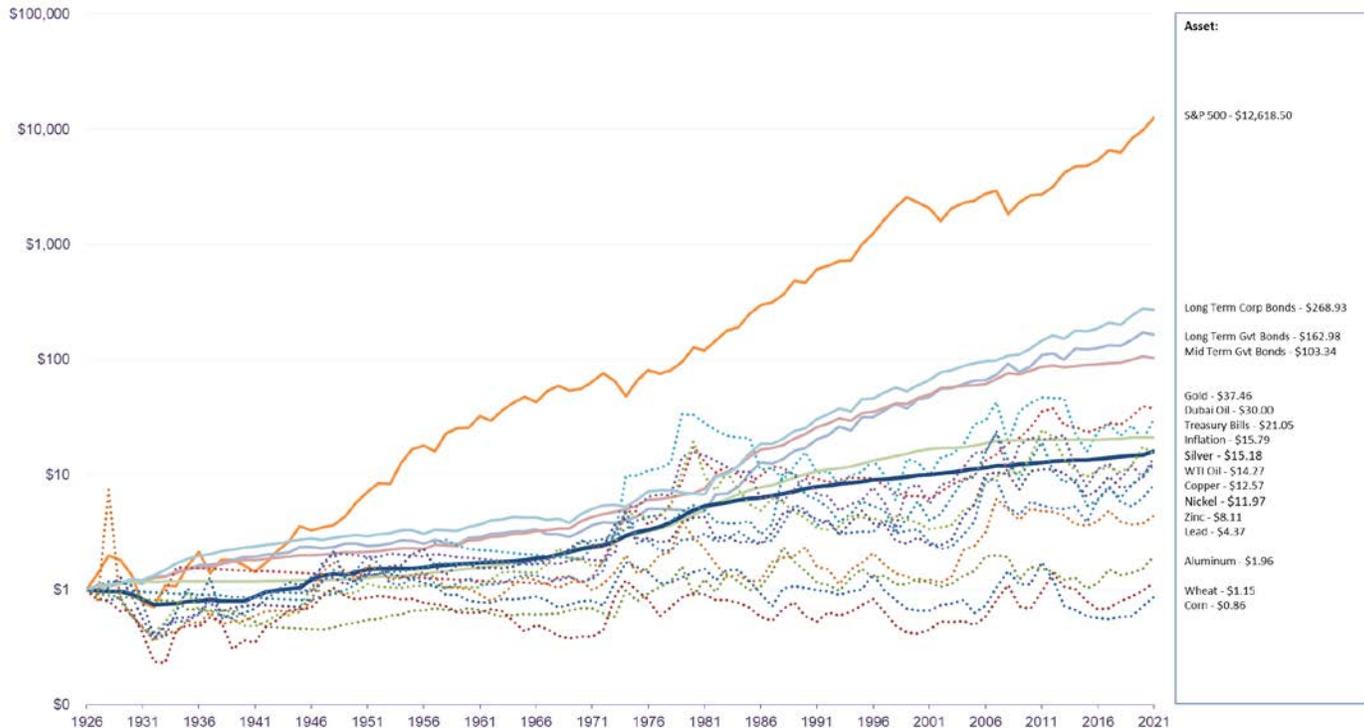


What is Canadian Government policy?

Is it policy to increase investment in low return assets?

- Equities have outpaced all other asset classes over the years.
- Equities have the lowest return volatility of all asset classes over long holding periods.

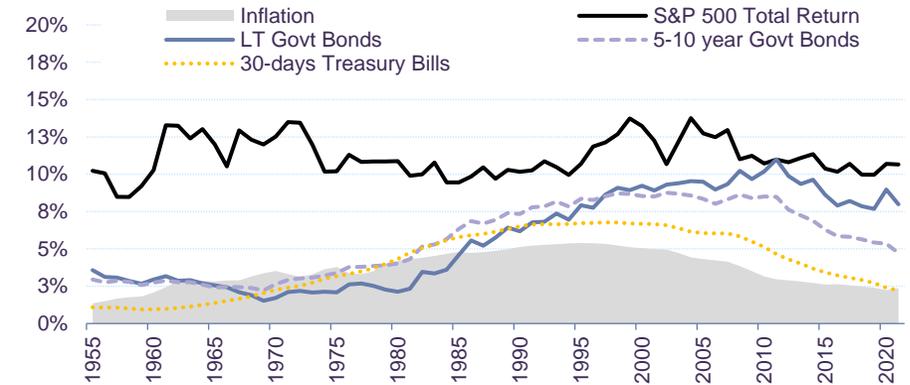
Long Term Returns in U.S. Financial Markets and Commodities
What one dollar invested in 1926 was worth in 2021



Sources: Morningstar Direct, CFA Institute, Letko Brousseau

USA - Stocks vs. Bonds

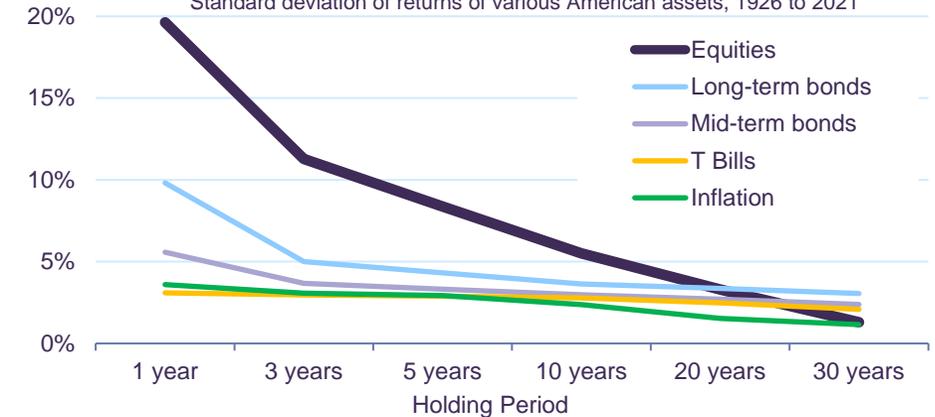
For 30-year rolling holding period, total compound annual return



Sources: Morningstar Direct, CFA Institute, Letko Brousseau. Data starts in 1926. First 30-year period ends in 1955 (return from 1926 through 1955). Last actual period from 1992 through 2021.

Volatility depends on investment horizon

Standard deviation of returns of various American assets, 1926 to 2021



Sources: Morningstar Direct, CFA Institute, Letko Brousseau

Pension funds are investing their assets in instruments that will fail to keep up with inflation and will lag equities significantly.



What is Canadian Government policy?

Is it policy to incentivise indexing, to move away from actively analysing, forecasting and selecting individual investments?

- Just like the zebra that does not want to be separated from its herd for fear of becoming the target when a lion attacks, plan sponsors have paid much more attention to investing in the same asset classes and in the same proportions as others.
- It is not rare to hear a sponsor change their asset mix because their current one is an outlier; not based on any view they may have on expected returns or risk.
- The financial argument behind indexing is that asset prices are constantly being reviewed by knowledgeable investors and that their judgment is difficult to improve upon.
- Indexing may make some sense for the individual investor, but the premise is that someone is doing the detailed analysis.
- Is it sound policy to not have the largest investors in the economy contribute?
- Indexing abdicates the responsibility of fixing security prices to others.
- Can this neglect lead to increased risk of distortions and suboptimal economic growth?

Is it not the fiduciary responsibility of institutional investors to exercise their own independent judgement based on fundamental future looking analysis and participate in the price discovery process?

What is Canadian Government policy?

Is it policy to decrease transparency and standards and increase the reliance on less accountable experts?

- Investment policies used to be broad, and allocations limited to a few comprehensive categories.
- Investment managers were tasked with making the proper choices depending on current market conditions.
- It is now common to rely on static and fine-grained asset class recommendations made by asset allocators.
- Allocations are mostly based on statistical analysis of historical returns and cross correlations.
- There is little, if any, forward-looking fundamental analysis and risk is often an afterthought.
- Results of these recommendations are not sampled and measured; there is limited agency, they are only recommendations.
- Investment managers are subject to strict norms for the calculation and presentation of historical returns which form an integral part of their code of ethics. They are also subject to the strict standards of National Instrument 31-103.
- No similar transparency and norms exist for the recommendations made by the asset allocators.

If you are a municipal counsellor sitting on your town's pension committee and a recommendation is made to seriously consider investing 10% of your assets in international real-estate, what do you do?

Do you go out and get the lease roll of some offices in London, Frankfurt, or Tokyo? Do you look at the capitalization rates currently being used?

Do you ask about the fees that are being charged? Or do you read the table of four digit returns and correlations that is presented to you and ask who else is doing this?



Can Government Policy help with other issues?

Despite Canada ranking higher than the United States on population growth, natural resources, territory, education, immigration, equality, and many other basic factors that determine economic advantage ...

- Canada's GDP per capita was over 90% that of the United States in 1980 and is now less than 75%.
- Research and development by Canadian companies is less than 50%¹ the level of US companies, as a share of GDP.
- Initial Public Offerings, which are a way to keep Canadian companies in Canada and finance their growth, are also less than 40%² the level of the US relative to the respective size of these two economies.

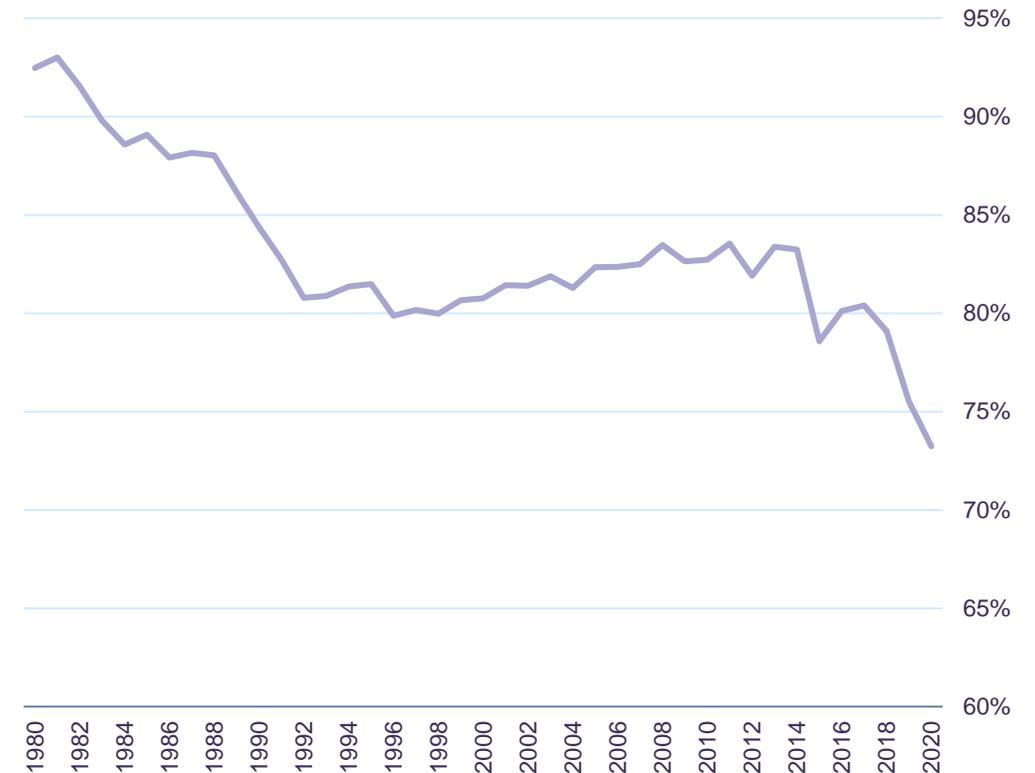
As one of the most important pools of long-term savings in Canada, should pension savings contribute to closing the gap?

Investments are essential to create high quality jobs.

(1) Organisation for Economic Co-operation and Development (OECD)

(2) OECD

Canada to US GDP per Capita
(based on OECD PPP)



Sources: OECD, Letko Brousseau



Evolution of pension regulations

Pension regulations have changed substantially over the last 40 years

- They have increased the frequency of actuarial valuations.
- They have shortened the time allowed to make up deficits or extinguish surpluses.

With the consequence of

Accentuating the effects of short-term market volatility

- Public markets reevaluate every day and, as a result, show considerable short-term volatility but readjust and recover. Their long-term returns have generally been much higher and less volatile than those of any other asset class. The regulations have increased the importance given to short-term volatility to the detriment of long-term considerations.

Amplifying stress of the business cycle on plan sponsors

- Poor economic conditions lead to declining equity markets and asset values.
- Concurrently, central banks lower interest rates to get the economy moving again.
- Regulations stipulate that pension liabilities be valued in reference to interest rates.
- Lower rates lead to higher liabilities.
- Declining assets and rising liabilities lead to higher deficits.
- Deficits need to be repaired by plan sponsors and guarantors just when their businesses are suffering.
- In such difficult times, money would be much better invested elsewhere to help the business.

Resulting in a lot of stress and the trends we have reviewed.



This is what has happened.

- Reduced ownership of Canadian companies and the Canadian economy by Canadian pension funds.
- Reduced participation of Canadians in retirement plans generally.
- Increased participation in defined contribution plans at the expense of much more efficient defined benefit plans.
- Reduced importance of public equity markets, reduced liquidity, reduced visibility.
- Increased importance of subjective, negotiated, and generally less transparent private markets.
- Reduced inflation protection and increased investment in low return fixed income assets.
- Increased indexing.
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- Increased reliance on expert advice that is unmeasured and not subject to strict standards.



Possible solutions



Account for risks



Lengthen investment horizon



Increase transparency and accountability



Possible solutions



Account for risks

- Most would instantly recognize different levels of counterparty, governance, and currency risk between an Indonesian and a Canadian bank. Simply recording investments at market value when preparing the actuarial report assessing the solvency of a pension fund does not fully account for risk.
- An investment in an index fund where no analysis of the individual holdings is carried out by the investor, or the fund manager, probably does not represent the same level of risk as a portfolio of companies that are subject to detailed financial and business analysis.
- Regulations require banks to recognize differing levels of risk by applying a reserve for riskier assets. A similar model could be considered for pension funds.



Possible solutions



Lengthen investment horizon

- At the depths of the recession in 2009, when equity markets had declined by 50%¹ from their peaks, it would have been extremely difficult to sell even the best office properties in any major Canadian city, regardless of price. But no pension funds needed to, so building appraisals were not significantly revised.
- Similarly, only those that needed to sell their public equities actually suffered from the low prices at that time. Permanent loss was avoided if no securities were sold. Yet, in contrast to the treatment of real estate assets, pension funds were forced to recognize the unrealized loss on their equities. Rigor requires that private and public investments be appraised on the same unbiased basis to properly value pension fund assets.
- Judgement is required to assess equity values, just as it is to value other assets. Judgement needs to acknowledge that short term turbulence is just that, temporary.

(1) MSCI available at: <https://www.msci.com/real-time-index-data-search>



Possible solutions



Increase transparency and accountability

- Global Investment Performance Standards (GIPS) were created to provide an ethical framework for the calculation and presentation of the investment performance history of an investment management firm.
- The investment community currently has great difficulty obtaining meaningful comparisons of the recommendations put forth by asset allocation advisors.
- Given that these advisors now play a major, and fine-grained, role in how pension funds are invested, it is important that unbiased standards also be established to ensure the accuracy, completeness, transparency, visibility, and comparability of the history of their advice. It should be possible to develop these standards, as it was, for the investment management industry. Accountability requires no less.



Government Policies

These trends are in great part the result of pension regulations that have shortened the investment horizon of what is otherwise a long-term project: saving for retirement.

- Government pension policies have created an environment that has led to important changes in the basic structure of the Canadian retirement system, in the overall economy and in the social contract between Canadians.
- Whether these changes are viewed as beneficial or disadvantageous, they must be discussed by regulators, by professionals in the field, by sponsors, by plan members, and by all Canadians.
- They are just too important to be ignored.
- It might be tempting to think that plan managers should counteract these trends but that would be wrong and ineffective. Plan managers are reacting in very predictable ways to their regulatory environment and the only way to change behaviour, if that is what is required or desired, is to change the environment.
- Although Governments need to exercise a light touch, pension regulations must reflect Government policy ...

It's past time for all Canadians to talk about this if this is not what we want. Jobs are at stake.



Defined benefit plans are being abandoned

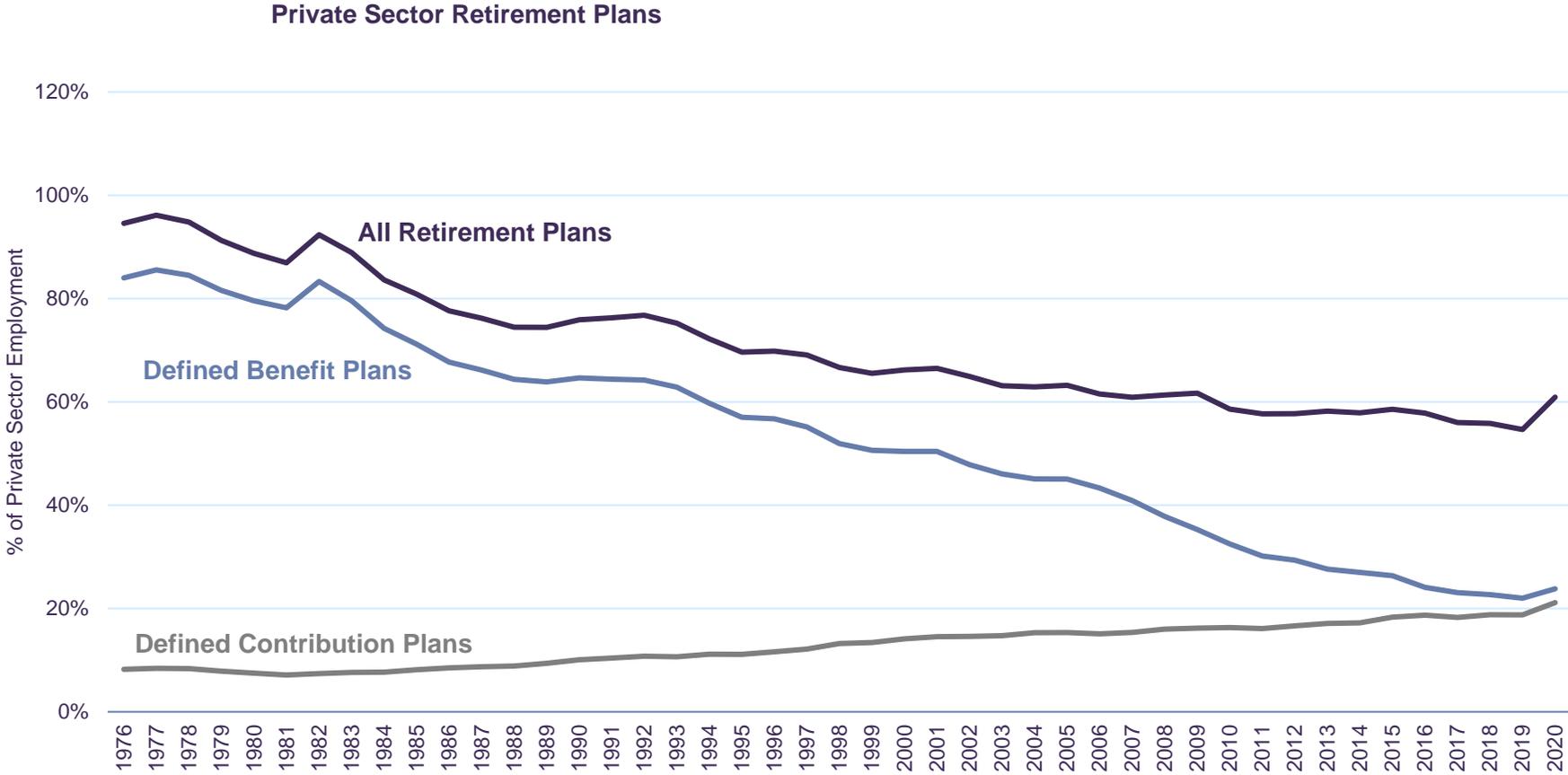


Appendix A – Defined Benefit versus Defined Contribution Plans

- There are very important differences between defined benefit and defined contribution plans.
- In a defined benefit plan, the plan sponsor and member both contribute to the plan over the lifetime of employment and on retirement the member receives a pension which is determined on their final years' salary.
- In defined contribution plans, the plan sponsor and member also contribute to the plan over the lifetime of employment, but on retirement, the member must withdraw their assets and invest them themselves.
- There are slight variations on these two themes, but the basis structure is as presented, and this has important consequences.



Defined benefit plans are being abandoned



Sources: Statistics Canada, Letko Brosseau



Defined contribution versus defined benefit

Typically, in a defined contribution plan, the employee chooses his own investments during his contribution years, and on retirement, leaves with his capital. Thus, on retirement, his situation changes:

- **Higher fixed income weight required**
 - Since the retiree cannot take the risk of a market downturn during his retirement, he is forced into a fixed income portfolio.
- **Capital drawn down over longer period**
 - Even if life expectancy at 65 is 17 years, the retiree must foresee the case where he lives to 90 or 95. He thus needs to conserve his capital longer just in case.
- **Higher management fees**
 - Being alone, his capital is less and management fees higher, probably much higher.
- **Lack of expertise**
 - Without access to the same financial expertise, his chances of making a costly mistake are higher.



Defined contribution versus defined benefit

- Base case – defined benefit plan
 - Assume: Retirement at 65, life expectancy of 83, \$50,000 annual pension, return on fixed income of 3%, on equities of 8% and 6% for a balanced portfolio composed of 40% bonds, 60 % equities, 0.5% management fees.
 - Required capital at retirement \$550,000.

Factor	Defined benefit	Defined contribution	Δ Required capital	Required capital
Defined benefit plan	Base case			\$550,000
Asset allocation	Balanced fund (40% bonds, 60% equities)	Bond fund (100% bonds)	+26%	\$690,000
Draw down period	17 years	27 years	+42%	\$975,000
Management fees	0.5%	1.5%	+14%	\$1,100,000
Defined contribution plan		Equivalent base case		\$1,100,000

Source: Letko Brosseau calculations



Defined contribution versus defined benefit

\$50,000 annual pension, required capital:

Defined benefit: \$550,000
Defined contribution: \$1,100,000

+100% !

\$1,400,000 or +160% if we factor in the lack of financial expertise

\$19,000 annual pension with a retirement capital of \$550,000

Despite the need for more capital, plan members generally save less in defined contribution plans than in defined benefit plans.

\$15,000 annual pension if contributions are 20% less



Why should we be concerned?

- Smaller pensions
- Less consumer demand
- Fewer jobs
- Less savings in the economy
- Greater emphasis on fixed income, less risk capital
- Equities held in fewer hands, more concentration of wealth
- More anemic economy, loss of competitiveness
- Greater dependence on the State, pensions will be too small to suffice



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