



The Active Investing Decision

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Schulich School of Business Financial Forum

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It is a privilege to be invited to address this distinguished Financial Forum and I am pleased to see one or two Schulich students in attendance. At the CPP Investment Board we're certainly familiar with the high calibre of financial expertise that Schulich programs produce. At last count we had nine Schulich graduates hard at work helping to invest our \$120 billion investment portfolio.

At the time when Schulich School of Business first invited me to speak last spring, we were leading a consortium bidding for BCE in what was then the largest private equity buyout in history – not just in Canada but globally. Many things have changed since then. With respect to BCE, we, like any disciplined bidder in an auction process, established our valuation range and then declined to bid further when the price moved beyond that value. Shortly after that process concluded at the end of June, we began to see a global reversal from excess liquidity and easy credit, which accelerated dramatically in the latter part of August. One consequence of this is that we don't think it's likely that any buyout will challenge the record transaction size established by BCE anytime soon.

Our bid for BCE was perhaps the first opportunity for many Canadians to see that the CPP Investment Board had built an organization capable of underwriting significant private equity transactions on a global scale and partnering with such top-tier investment organizations as Kohlberg Kravis Roberts & Co.. What I would like to focus on today is how the CPP Investment Board came to be, why we have chosen to be an active investor and how we have built our organization to tackle transactions of the scale and complexity of BCE.

CPP Investment Board

An interesting case study with:

- ▶ Public policy dimensions
- ▶ An investment challenge unprecedented in Canada



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For the Schulich faculty here today embarking with your students on a semester of management case studies, perhaps I could suggest that the CPP Investment Board might make an interesting case study some day.

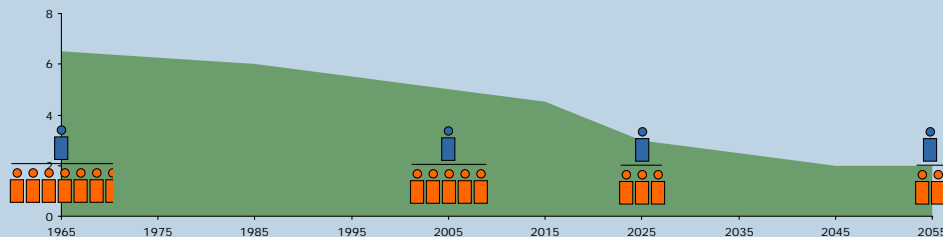
In my view, it has two compelling dimensions :

- First, from a public policy point of view, Canada, unlike virtually every other industrial country in the world including our neighbours to the south, has solved its national pension solvency issues. It has done so in an innovative way that is admired globally and the CPP Investment Board is an integral part of that solution.
- Second, our investment challenge is on a scale unprecedented in Canada and with few parallels elsewhere. At its inception in 1999, this organization had the challenge of transforming a starting portfolio of 100 per cent non-marketable non-transferable provincial bonds into a diversified portfolio that would generate sufficient investment income to help sustain the Canada Pension Plan, all the while operating with a higher degree of transparency and accountability than any other comparable fund within Canada or elsewhere for that matter.

Why We Exist: Historical Context

- ▶ A dwindling labour force struggling to support an aging demographic
 - In 1966 there were 6.5 workers for every retiree
 - By 2025 only 3 workers for each retiree

Dependency Ratio (Ratio of 20-64 to 65+)



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In order to understand how we came about, it's necessary to review the history of the Canada Pension Plan itself. The CPP was created in 1966 as one of the cornerstones of Canada's "social safety net". It adopted a key design element that had been first implemented in Germany in the 19th century in the time of Otto von Bismarck and had subsequently been adopted by many other countries – which was a pay-as-you-go funding formula. That formula had worked well historically and seemed like a good idea for Canada back when there were 6.5 workers for every retiree.

However, as we all know, demographics in Canada and elsewhere have changed dramatically since that time. And by the mid 1990s, projections showed that the ratio would move steadily to 3 to 1 and eventually 2 to 1, as shown on the timeline. This situation was characterized by the C.D. Howe Institute at the time as an intergenerational Ponzi scheme, where future generations would be asked to pay dramatically higher rates to sustain the plan than previous generations.

Our History – CPP Reforms

**Federal
and
Provincial
Ministers
took bold
action**

Solution

1997

- ▶ Modest reduction of benefits
- ▶ Contribution rates increased resulting in net cash inflows
- ▶ Funds segregated from government revenues
- ▶ CPP Investment Board formed to invest assets at arm's length from governments

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Now, unlike virtually every other country facing similar projections and issues for their national pension systems who are still debating the solutions, Canada actually took bold action back in the mid 1990s to fix this problem. That in itself is a remarkable story of leadership and federal/provincial cooperation, but not the primary focus of my comments tonight.

In simplified form, the CPP reforms in 1997 entailed:

- a relatively modest reduction of certain benefit features
- a dramatic increase in contribution rates from 5.6 % to 9.9 % over a six-year period, coupled with a freezing of the level of income exempt from contributions. This almost doubling of contribution rates was intended to generate a large pool of surplus assets.
- these assets were segregated from general government revenues in a CPP Fund so that they could not be used for any other purpose.
- the CPP Investment Board was created as a single-purpose entity to manage CPP Fund assets.

Arm's length governance structure

- ▶ Amending formula hurdle
- ▶ Investment-only mandate
- ▶ Highly-qualified professional board

The governance structure for the CPP Investment Board was designed to ensure that it would operate at arm's length from governments. Some of its key elements are:

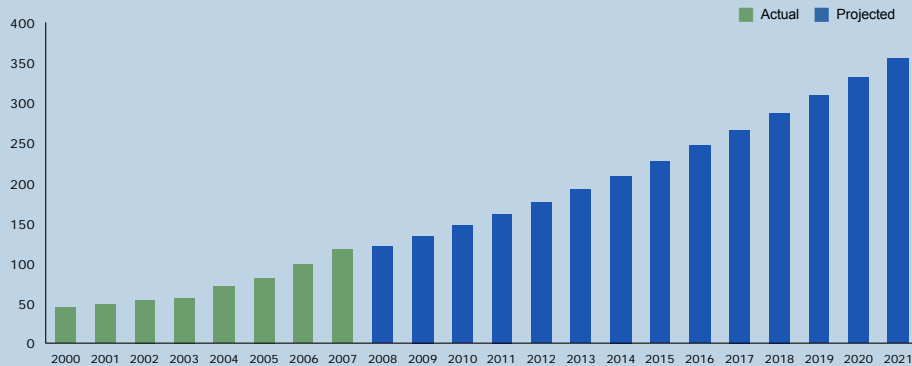
- a careful balance of independence and accountability. It is the only Crown corporation in Canada that has joint federal and provincial jurisdiction and requires that changes to its legislation and regulations must meet the constitutional amending formula test – that is, the agreement of the federal government and two-thirds of the provinces representing two-thirds of the population.
- it was given a very clear and intentional **investment-only** mandate that is enshrined in legislation
- it is governed by a highly-qualified professional board and is designed to operate with private sector practices and principles.

This governance model was very thoughtfully designed and I'm pleased to say has operated as planned since our inception. It is also greatly admired by other countries, even to the extent that both Ireland and New Zealand have copied many aspects of it verbatim. As well, the model has been cited by the World Bank as a best-practice pension plan solution for other countries to consider.

Projected growth of the portfolio

An investment challenge

Projected assets of the CPP Fund (\$billions)



The Chief Actuary of Canada, in the 21st Actuarial Report on the Canada Pension Plan, has projected that the CPP contributions will exceed annual benefits paid through 2021 providing 15 years in which excess CPP contributions will be available for investment.

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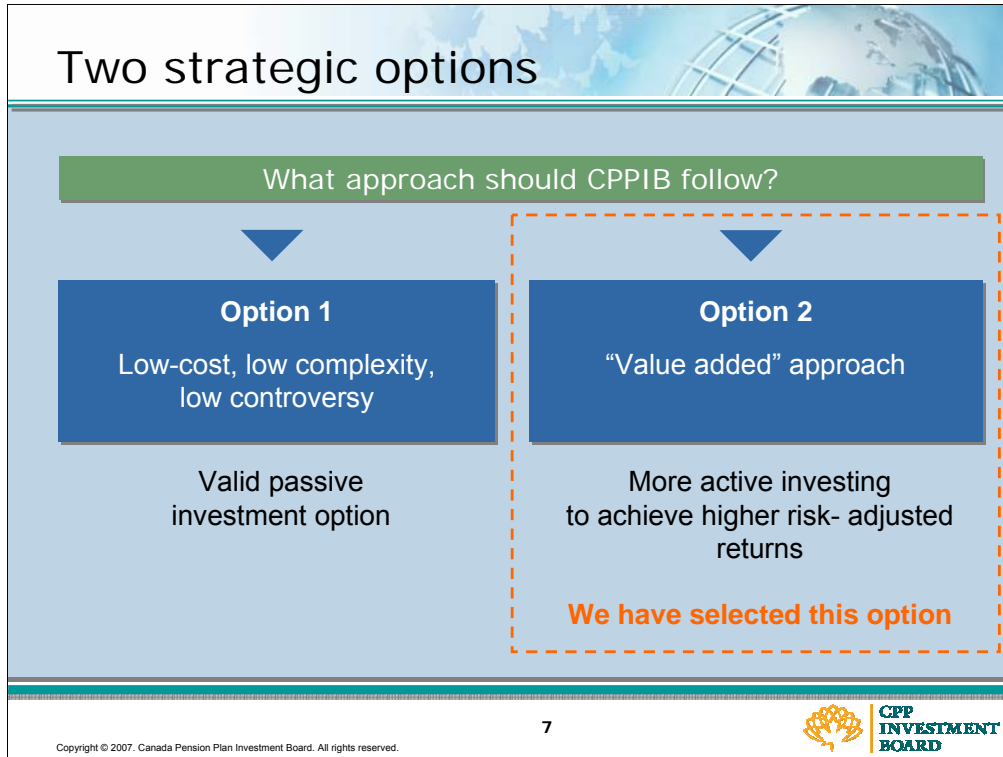
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Let's now turn to the second dimension of the potential case study, and that is how to address the investment challenge facing the CPP Investment Board.

The chart on the screen shows the dimensions of that challenge. Over the period shown here, contributions are expected to exceed benefits paid and hence the fund is expected to grow rapidly from its current size of \$120 billion to \$250 billion within the next seven to eight years and on to approximately \$350 billion by 2021. At that point, the first dollars of investment income will be required to supplement contributions in order to fund benefits. But even then, that supplement will constitute only a small portion of the fund's annual investment income for many years, so the CPP Fund will continue to grow substantially beyond 2021.

Now, sadly, the asset growth won't look exactly like this nice smooth PowerPoint chart – markets of course aren't that well-behaved – but the overall direction is valid.

So the organization, and by this I mean management and the board, had to decide upon a strategy to fulfill its mandate and meet this challenge.



Of course there are many strategic options and variations to consider, but tonight I will highlight two broad directional alternatives that we considered.

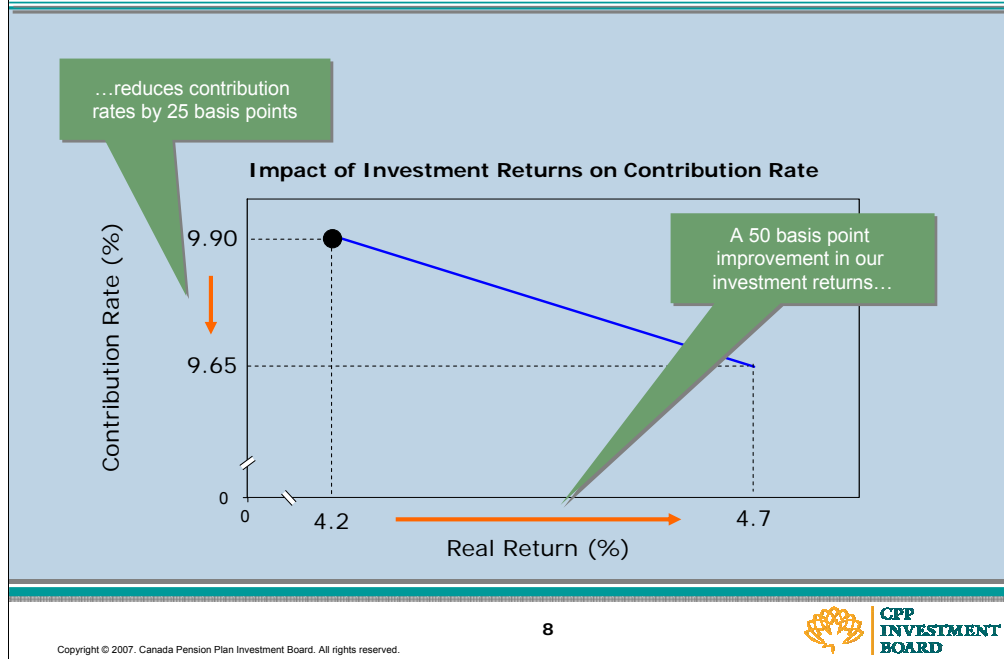
One option was to pursue predominantly a low-cost, low-complexity approach emphasizing passive investment management, essentially harvesting the returns that are available through public markets. With the proper portfolio design, this approach could meet the investment income requirements needed to sustain the CPP. It had the added benefits of being simple to explain, easy to execute and, importantly, would not attract potential controversy. There are certainly a number of people who have, and still do, advocate this approach, and indeed in the organization’s early years, this was the course followed.

Another option was to adopt a value-added approach. This would mean assuming the additional risk inherent in active investing in order to pursue returns beyond what passive market exposures would yield.

Given my introductory comments about our involvement with the BCE transaction, it is clear that we have in fact chosen to pursue Option 2.

As you would expect, given the quality of our board of directors, this was not a decision taken lightly in view of the role and visibility of the CPP Investment Board. We are all mindful that we serve the interests of 16 million participants.

How active investing helps sustain the CPP



Before embarking on an active investing strategy, we needed to satisfy ourselves that we could successfully execute the strategy and so we asked ourselves three key questions:

- would our governance structure be strong enough to support it?
- would active investing make a measurable difference to the CPP?
- and did we have the right stuff to become active investors?

To the first question we concluded that by design and intent our governance model was “maximum strength” and would ensure that we could operate independent of any external interference in fulfilling our investment mandate.

To the question of “does it matter”, this slide indicates it does. Basically it shows that for every 50 basis points beyond the 4.2 % real rate of return assumed by Canada’s Chief Actuary that we are able to generate through our investment programs, the CPP contribution rate could be reduced by 25 basis points or benefit levels increased by a corresponding amount. In our view, that opportunity spread over 16 million participants in the CPP as well as every employer in Canada across multiple decades is material and certainly worth pursuing.

As for the last question, we are mindful that while many market participants pursue above-market returns, relatively few do in fact achieve those results on a consistent and sustainable basis. So for us to be in the successful camp, we needed to be convinced that we would have some comparative advantages.

Our advantages

Structural

- ▶ Very long-term investment horizon
- ▶ Certainty of assets
- ▶ Size of our portfolio

Developed

- ▶ Total Portfolio Approach
- ▶ Ability to partner with world-class firms
- ▶ Culture

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In our case, we believed we had both structural advantages and others that we could develop to succeed as active investors.

On the **structural** side we noted that:

- We are the quintessential long-term investor. Indeed, because of the structure of CPP funding, we have an implied 75-year amortization period which provides us an extraordinary amount of investment flexibility
- We have the advantage of relative certainty of the amount and timing of future cash flows to invest and, unlike many market participants, we don't have to worry about how to accommodate redemption requests at the end of each quarter or lock-up period nor about structuring investments within the finite life of a fund structure.
- The size of our portfolio provides sufficient scale so that we can build sophisticated internal investment and technology capabilities and also permits us to make comparatively large investments that would be beyond the reach of many other organizations.

In terms of **developed** advantages we include:

- We have adopted a Total Portfolio Approach, which means that we do not construct our portfolio in the traditional way through allocations to various asset classes. Instead this approach requires us to analyze investments according to their underlying risk/return attributes and ignore how they are labeled. While presenting some operational challenges, this will also allow us to make better investment decisions and to design a more efficient overall portfolio.
- A strong commitment to developing partnering relationships with other investment organizations. In that regard, our clear investment-only mandate and transparent investment processes position us strongly versus a number of other public sector organizations and the rising number of sovereign wealth funds where decision-making and investment objectives are sometimes opaque to say the least.
- And finally culture. In order to succeed at active investing we need highly talented people within our organization. Because we were intentionally set up to operate with private sector principles, we were confident that we could create a high-performance culture with corresponding HR and compensation policies that would allow us to attract and retain high-calibre people.

Two types of investment returns

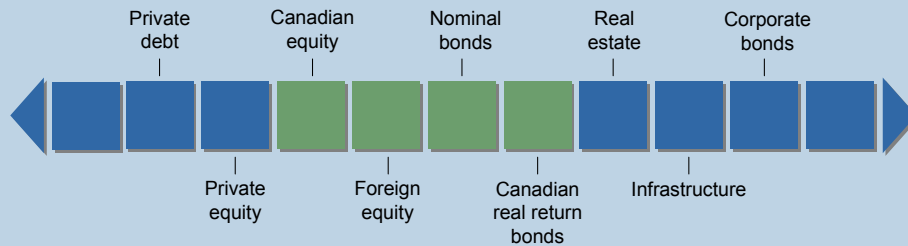
- Beta returns – systematic, passive
- Alpha returns – based on skill

Having settled on the approach, let me now give a high-level overview of how we have built the CPP Investment Board organization.

Like any other investment management organization, we achieve investment returns from two sources:

- “beta” returns, which are systematic returns underlying any given asset class.
- and “alpha” returns, which are returns in excess of systematic, passive returns.

Building a “better beta” portfolio



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It is relatively easy to harvest beta returns from liquid, efficient public market sources such as developed market equities and government bonds, and so in our portfolio design, we started with the four cornerstone public market asset classes shown here – all basic beta sources. These reflect the components of our CPP Reference Portfolio, which serves as a benchmark for our active investing activities.

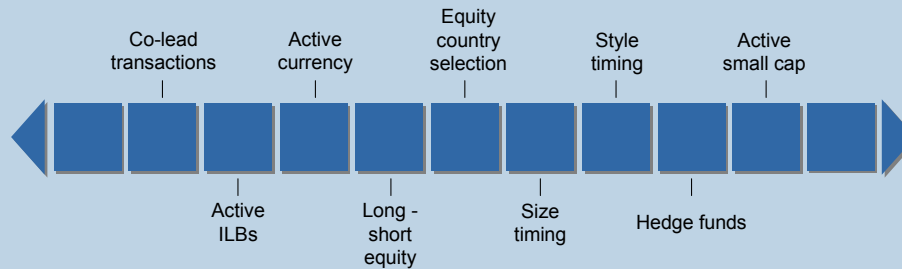
We then look to add other exposures that we call “Better Beta” sources.

Many of these require us to operate in the private markets, which in the case of both real estate and infrastructure for example, are vastly larger than their public market counterparts.

Investing in the private markets requires different processes and skill sets than in the public markets and it’s also not as easy to separate beta and alpha here.

This is where the scale of our portfolio allows us, indeed compels us, to pursue some of these more challenging sources of beta returns.

Capturing sources of alpha



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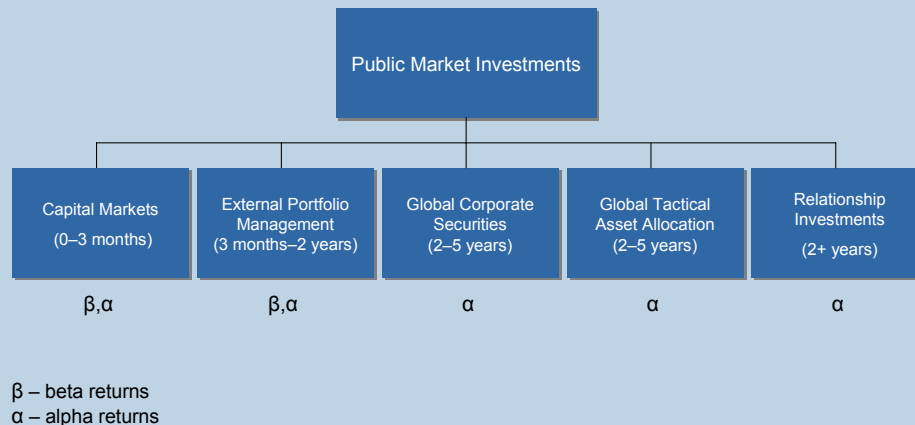
Alpha returns are by nature skill-based so we refer to them as returns that need to be captured rather than harvested.

We have lots of programs focused on capturing alpha and these are particularly valuable to any portfolio since diversified sources of alpha don't add materially to the overall systematic risk of the portfolio.

As shown here, our current alpha-generating programs include Co-Lead Transactions such as our BCE bid, Active Inflation-linked bonds, Active Currency and Long-Short Equity, and a myriad of others.

Public Market Investments Department

Department Structure



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In keeping with our Total Portfolio Approach, we have organized our investment activities into three broad departments.

Our Public Markets Investment department basically focuses on any security where we can find active bid-ask quotes or any derivatives based upon those securities.

We've organized our programs primarily according to investment horizon rather than underlying instrument.

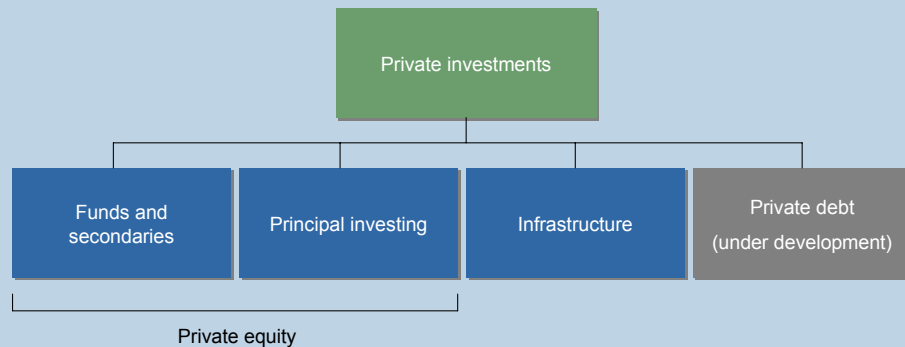
Because of the large positive cash flows that we have to invest as well the significant amounts of investment income we have to re-deploy, we need to be extremely strong in our capital markets or trading capabilities, which by nature have a short time horizon. Over the past few years, we've developed one of the most sophisticated buy-side trading operations in Canada. One indication of this is the fact that the CPP Investment Board is the only investment organization with an ownership stake in Project Alpha, a new alternative trading system primarily sponsored by major Canadian brokerage firms.

We access the skills of a variety of external managers in the 3 to 24-month investment horizon, which given their business models, is their natural region of focus and expertise.

We have then built our internal investment programs for a longer horizon – 2 to 5 years and beyond. Searching for alpha here is less competitive, allows us to exploit our long-horizon advantage, and has the added benefit of minimizing portfolio turnover, which is important for a large fund like ours.

Private investments

Department structure



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Our Private Investments department manages our direct and indirect investments in non-listed companies. As I mentioned earlier, this allows us to access very large markets while also capturing a premium for illiquidity which, given the certainty of our asset base, is not a concern for us.

The cornerstone of our private equity program is our Funds & Secondaries program. In fact, we are one of the largest investors in private equity funds in the world, which allows us to scale these investments in order to make an appreciable impact on the CPP Fund. Through these partnerships with private equity managers, we also take advantage of their strong transaction origination networks, which we have concluded would be impossible for us to replicate. For our part, we add both our investment capital and our internal analysis and execution capabilities that we have systematically developed so that we can co-sponsor or co-invest in transactions alongside these partners.

Sample of principal investments

Technology and telecom

- freescal** - Leading developer and manufacturer of semiconductors
- SUNGARD** - Integrated software & processing solutions and provider of information availability services
- versatel** - Low cost provider of telephony & broadband services in Germany
- NEP** - Leading developer and manufacturer of semiconductors
- COGECO** - Leading cable provider in Spain

Consumer products and services

- GENERAC POWER SYSTEMS, INC.** - Leading manufacturer of commercial and consumer power generators
- Serta** - Largest manufacturer and distributor of Serta branded mattress in the US
- Berliner Zeitung** - Leading German newspaper publisher
- Kalsatus** - Leading northern European vehicle inspection company

Commercial products and services

- SPRINT** - Manufacturer of commercial aircraft structures
- AWAS** - Aircraft trading and leasing company
- nielsen** - Global information and media company (formerly called VNU)
- COMETAL** - Global manufacturer and distributor of bar and tubular products to the oilfield service industry
- Avio** - Jet engine component and subsystem manufacturer based in Italy

Financial services

- FINNEN** - Leading odd-lot fixed income trading platform

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CPP INVESTMENT BOARD

BCE was a prime example of a co-sponsorship relationship alongside KKR.

Now, as you might expect, that wasn't the first time we had worked together on a transaction. We previously completed a number of other less high-profile investments as partners and gained comfort with each other's valuation methodologies and decision-making before we decided to go shoulder to shoulder on something as complex as BCE.

And as you can see from this slide, we have also gained experience completing a number of other principal investments.

Sample of infrastructure investments



AWG Plc
(\$1.1 billion)



Transelec
(\$364 million)

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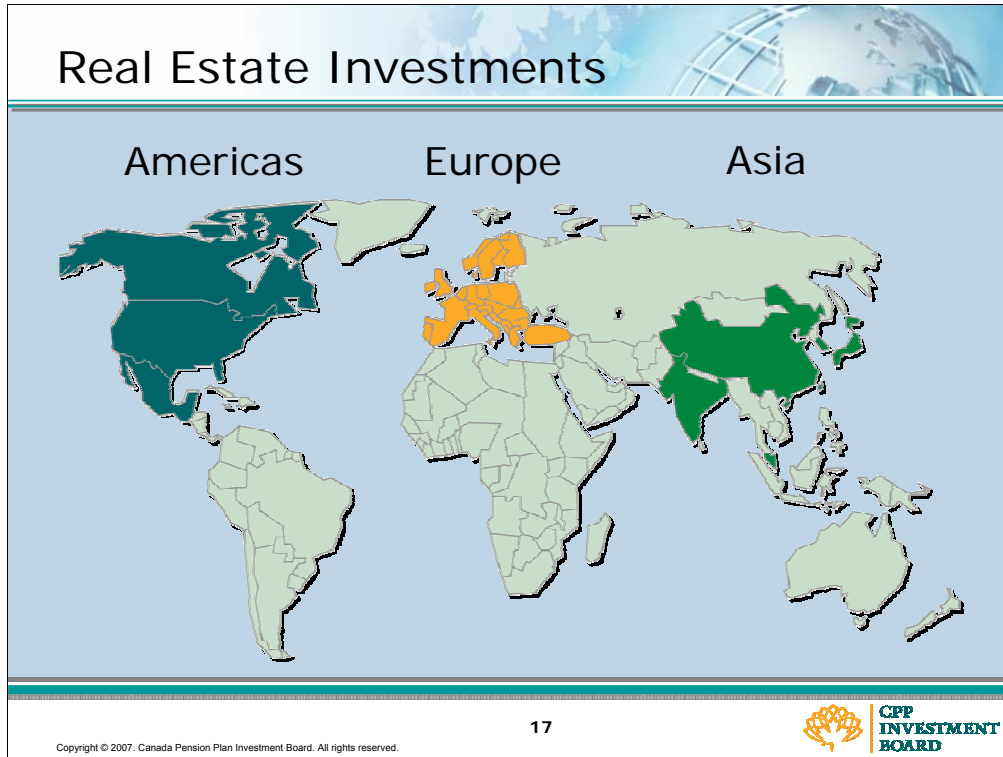
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In Infrastructure, we tend to operate as a direct investor since, by nature, the investment opportunities are far fewer and much easier to identify than in private equity.

Here we rely on our comparative advantages of size and investment horizon, since many of these require very large amounts of equity capital and only make sense as long-term buy-and-hold assets. For example our investment in AWG, the parent of a UK water utility, was \$1.1 billion and our investment stake in Transelec, which is Chile's largest electrical transmission company, is certainly a buy-and-hold asset.

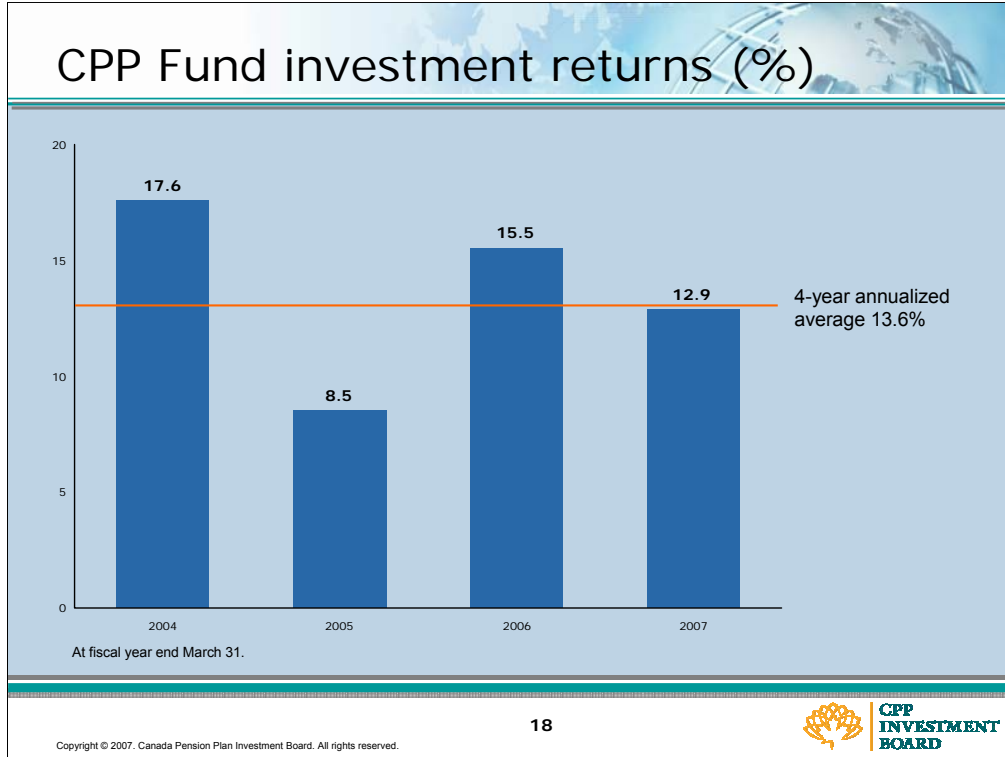
Our current pursuit of the Auckland International Airport in New Zealand, where we are the sole bidder rather than within a consortium, is another good example of our approach in this area.



In Private Real Estate, we believe the old adage that “location matters”, and consequently we have organized ourselves on a geographic basis.

We have really been focused on real estate only since 2005 so this is still a relatively new program for us. As a result, we have largely been concentrating on acquiring core office, retail and industrial assets in developed markets initially, with one team focused on North America and another on the UK and Europe. We have recently begun to invest in Asia and will be expanding our activities there over time.

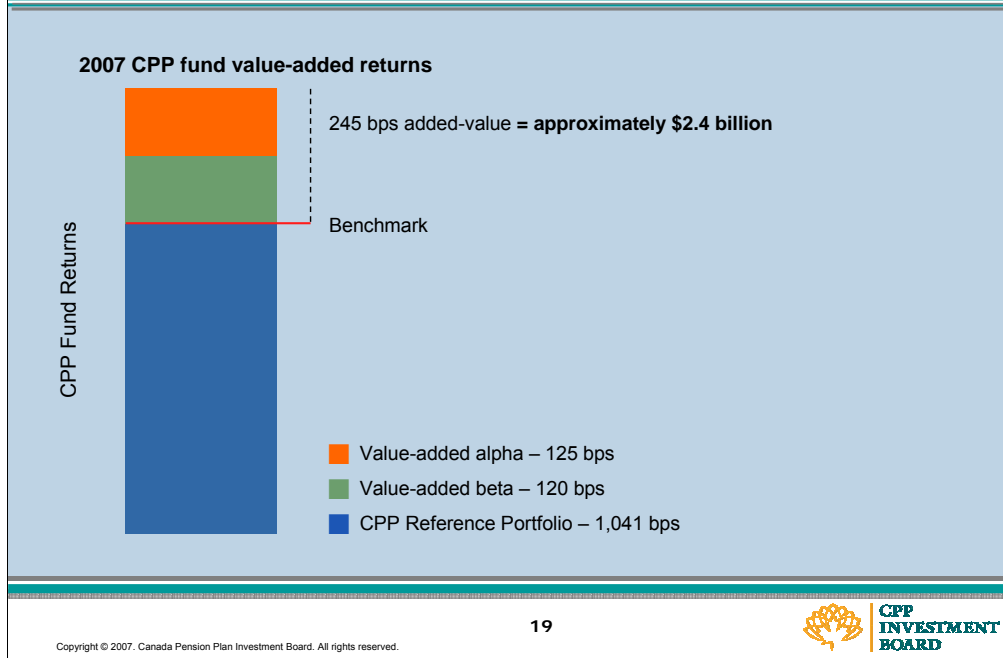
Again, consistent with our Total Portfolio Approach, we don’t have a specific target allocation to Real Estate and so don’t feel compelled to invest in all markets at all times. We have been selective in identifying core assets that we intend to hold for a very long time and that will maintain their relative value through various market cycles.



A look at our financial track record gives you an idea of how our strategy has played out by the numbers.

Over the past four fiscal years the CPP Fund has generated a 13.6 per cent annualized rate of return and added \$43 billion of investment income to its pool of assets.

The argument for active investing



Looking at the past fiscal year, as an example, of the \$13.1 billion earned, approximately \$2.4 billion was value-added above our benchmark which amounts to 245 basis points of additional return. Of that amount 120 basis points was derived from the accumulation of our better beta decisions and the remaining 125 basis points was from the combination of all our alpha activities.

Organization growth

Full-time employees



*At fiscal year end March 31.

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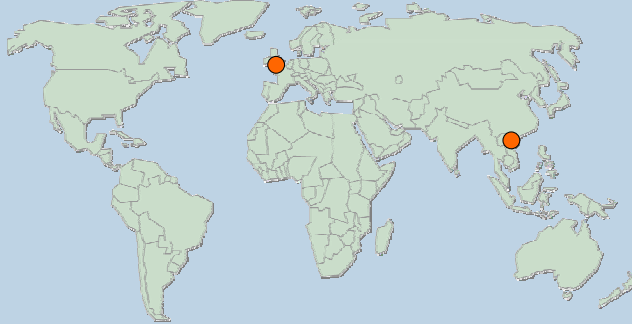
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As I indicated earlier, in order to succeed at active investing, we need highly skilled and talented people within our organization. Over the past few years we have attracted many recruits who match that description, including some of those highly sought-after Schulich graduates I mentioned earlier.

We're confident that we have a strong employment brand that's a combination of our high-performance entrepreneurial culture, the investment challenge we face, the relative certainty of our asset base and the importance of our contribution to the CPP.

What's next

- ▶ Two international offices:
London and Hong Kong



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We're now in the process of opening offices in both London and Hong Kong in order to be able to operate more effectively in those important geographic regions and have already made local hires in each of those locations.

Active investing too risky?

- ▶ William Robson, President and CEO, C.D. Howe Institute, has argued: ".....a more passive, lower-profile approach – might be a smarter strategy."

THE CPP INVESTMENT BOARD | DID IT HAVE ANY BUSINESS BIDDING FOR BCE?

Spared for now, our pension plan needs to invest wisely

WILLIAM ROBSON
President and CEO,
C.D. Howe Institute

The battle for Bill Canada's pension plan is heating up. The CPP Investment Board is being asked to invest in BCE Inc. as part of a plan to raise the pension plan's assets to pay for the plan's obligations. The board is being asked to invest in BCE Inc. as part of a plan to raise the pension plan's assets to pay for the plan's obligations. The board is being asked to invest in BCE Inc. as part of a plan to raise the pension plan's assets to pay for the plan's obligations.



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In my remarks tonight I have explained why the CPP Investment Board decided to pursue an active investing approach, how we have chosen to do so and our early performance results.

Now, not everyone agrees with our decisions in this regard. As an example, the head of the C.D. Howe Institute, Bill Robson, wrote an op-ed in the Globe and Mail in July expressing concern that our active investing might lead to government interference and urged us to adopt a more passive investment management approach.

Active investing: a sound course

- ▶ CPP Investment Board is protected by a: “Maximum strength” governance model
- ▶ Structural and developed advantages position CPP Investment Board to capture benefits of active management
- ▶ Active investing returns are a materially positive benefit to 16 million participants in the CPP

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While we have a tremendous amount of respect for Bill Robson and the C.D. Howe Institute, we disagree with his conclusion.

As I have outlined this evening, we believe that:

- we have a “maximum strength” governance model that has shielded the CPP Investment Board from any kind of political interference to date and will continue to do so in the future.
- that we have structural and developed advantages that position us to capture the benefits of active management in a sustainable way.
- that active investing can have a materially positive benefit to the 16 million beneficiaries of the CPP.

Conclusion

▶ Questions?

So I thank you all for your attention tonight and look forward to answering any questions that you might have.