Evolving Trends of Canadian Pension Plans Survey

Major Canadian pension plans search for higher performance in a changing environment
Foreword

The ability to achieve adequate long-term returns while managing risk in a low return, low rate environment has been cited by large plan sponsors in Canada as the biggest challenge facing them today. The range of investment instruments and strategies for addressing this challenge continues to evolve, while new perspectives on portfolio construction and implementation are coming to the forefront. Additionally, the repeal of the Foreign Property Rule offers Canadian pension plans possibilities for further portfolio diversification and a broader range of alpha sources. The question is, to what extent are plan sponsors using or considering this broader range of assets or implementing innovative strategies and ideas to meet their risk and return objectives?

The 2005 JPMorgan Asset Management Evolving Trends of Canadian Pension Plans Survey was conducted to answer this question as well as to gain deeper insight into the usage and understanding of investment ideas such as portable alpha, currency management and derivative-based strategies, particularly within the context of the Foreign Property Rule repeal.

Those surveyed include 104 of Canada’s 200 largest defined benefit pension plans, accounting for almost $240 billion in assets. Our research captures industry-wide trends as well as some important distinctions between plans over and under $1 billion in assets. The results provide compelling insight into the way Canada’s pension plan investors are thinking and responding to new opportunities to meet return requirements, diversify risk and maintain or improve their funded status.

At JPMorgan, we are committed to listening to plan sponsors in a way that will enable us to continue to help our clients navigate an evolving investment landscape. I would like to extend my warmest thanks on behalf of JPMorgan to all the institutions that took part in this research. Without their participation, this report would not have been possible.

I hope our report will provide you with a valuable perspective on the state of Canadian pension plans in their quest for enhanced returns and will serve as part of our continuing dialogue.

John F. Baumann
Managing Director
President, JPMorgan Asset Management (Canada) Inc.
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KEY FINDINGS

The return challenge
• Cited by plan sponsors as the biggest challenge in considering the future performance of their plans was — achieving target returns while managing risk in a low return, low interest rate environment.

Funded status
• Approximately 40% of survey participants have classified their plans as less than 95% funded — with non-corporate plans faring somewhat better than corporate plans.
• Three in four under-funded plans are focused on increasing contributions.

Repeal of Foreign Property Rule (FPR)
• Current asset allocation for the average portfolio is very close to the previous limit on foreign investment, with nearly 29%* in primarily U.S. and international equities.
• Nearly all plan sponsors believe the average non-domestic allocation of assets will be over 30% within 3 years and a significant number believe it will be over 40% in 5 years.
• The majority (60%) of plan sponsors believe that Canadian investment managers will need to offer a greater range of non-domestic strategies to succeed in the future.
• However, plan sponsors appear to be taking a gradual approach to change, focusing first on revisiting strategic asset allocations before implementing significant shifts.
• When those anticipating significant changes to their portfolios in the near term (18%) were asked what specific changes they plan to make to their asset allocation, 84% plan to decrease Canadian equities and 42% plan to decrease Canadian fixed income, while increasing allocations to a range of asset classes — led by international and global equities.

Portfolio management strategies
• A clear majority of all plan sponsors (eight in ten) are focused on revisiting their strategic asset allocation and generating alpha.
• Passive range-based rebalancing is the most common strategy (59%) for management of portfolio allocation among Canadian plan sponsors.

For those looking to make a change in their approach to allocation management, some form of active allocation is the most likely choice (66%). Only one in three plan sponsors are accounting for beta and alpha separately, with corporate plans somewhat more likely to do so than non-corporate plans (public funds, unions, educational and other institutions).

Differences in asset holdings
- Larger plans ($1 billion and over in assets) are more likely than smaller plans (under $1 billion) to include a number of non-traditional and alternative assets such as private equity, hedge funds, commodities, and real estate as well as emerging markets.
- Larger plans are also more likely to use currency management and international equities than smaller plans.
- Smaller plans are more likely to include income trusts in their asset allocation.

Alternative assets
- Six in ten plan sponsors foresee changes in their alternative assets category — primarily the addition of new non-domestic alternatives.
- Larger plan sponsors are more likely to anticipate new allocations to alternatives than smaller plans (68% vs. 52%).
- Plan sponsors believe the greatest alpha opportunities lie in non-domestic (vs. domestic) strategies.

Portable alpha strategy
Most (87%) of those surveyed reported being familiar with the concept of portable alpha. Of these:

- Fifty-four percent are either already using (14%) or considering using (40%) a portable alpha strategy.
- Larger plans are significantly more likely to be familiar with and using portable alpha strategies than smaller plans.
- Those with alternative assets are significantly more likely to be familiar with portable alpha, and be using or considering portable alpha strategies.
Those using a portable alpha strategy generally do so in relation to the S&P. However, those considering using a portable alpha strategy are most interested in strategies involving the Scotia Capital Universe Bond Index (SCU Index).

**Derivative strategies**

- A slight majority (56%) of plan sponsors currently use synthetic strategies, primarily as a result of their past needs to address the now repealed FPR and to gain access to markets.
- Of those not currently using derivatives, 41% say they would consider using them.
- Plan sponsors for larger plans ($1 billion plus) are significantly more likely to use synthetic strategies.
- Committee or Trustee guidelines and lack of expertise are the primary barriers to using synthetic strategies for those neither using nor considering the use of synthetics.
- Moving to cash markets and full active management (referenced to a benchmark) are the changes most often cited by plan sponsors already using synthetic strategies in U.S. or international equities.

**Currency management**

- Of those plans which employ currency management (41%), the majority (56%) have implemented passive hedging strategies. This indicates that these plan sponsors are concerned about risks involved with foreign currency exposure.
- A slight majority of plan sponsors anticipate an increase in the value of the Canadian dollar in the next 5 years (51% expect an increase, 13% no change, 19% a decrease).
The 2005 JPMorgan Asset Management Evolving Trends of Canadian Pension Plans Survey canvases the investment views and practices of 104 of the largest 200 Canadian pension plans — ranked by defined benefit (DB) plan assets, with the majority of respondents coming from the top 100 plans¹. In total, these DB plans accounted for almost $240 billion in assets.

Those surveyed include a cross-section of plan types. Approximately half were corporate plans and the other half a combination of public funds, unions, and other plans. The majority of respondents were senior investment decision-makers including chief executive officers, chief investment officers, treasurers and directors of pensions and investments. This sample included both clients and non-clients of JPMorgan Asset Management. Exhibit 1 provides a profile of participating plans. Data is representative of the 200 largest Canadian pension plans.

Telephone surveys were conducted from July 21 to September 7, 2005 for JPMorgan Asset Management by a third-party research firm². JPMorgan’s sponsorship of the research was made known to survey participants. Individual responses are not attributable to specific institutions.

2. Harris Interactive®.
Survey results are presented for total respondents and in some cases, by size of plan or for those considering significant changes to their plans based on the repeal of the Foreign Property Rule. We believe results for these subcategories of plans will be of interest and value to our readers but refrain from drawing definitive conclusions to questions for which the respondent sample is small.
CURRENT STATUS AND PLAN
ASSUMPTIONS

Asset allocation mix
Exhibit 2a shows the percentage of plan sponsors interviewed that had holdings in particular asset classes. Exhibit 2b depicts the average asset allocation for all plans based on respondents' estimates of their portfolio mix as of December 31, 2004. Equities make up approximately 56% of the Canadian pension plan portfolio. Fixed income accounts for approximately 37%. Less than 10%, on average, is allocated to alternatives and other assets. Nearly 29% of the average portfolio is in various non-domestic asset classes — primarily U.S. and international equities. (This is obviously very close to the previous limit on foreign investments.)

Exhibit 2a: Percentage of plans with allocations to...

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canadian fixed income</td>
<td>100%</td>
</tr>
<tr>
<td>Foreign fixed income</td>
<td>12%</td>
</tr>
<tr>
<td>Canadian equities</td>
<td>100%</td>
</tr>
<tr>
<td>U.S. equities</td>
<td>89%</td>
</tr>
<tr>
<td>International equities</td>
<td>86%</td>
</tr>
<tr>
<td>Emerging market equities</td>
<td>19%</td>
</tr>
<tr>
<td>Global equities</td>
<td>30%</td>
</tr>
<tr>
<td>Cash</td>
<td>70%</td>
</tr>
<tr>
<td>Private real estate/property</td>
<td>40%</td>
</tr>
<tr>
<td>Public real estate/property incl. REITs</td>
<td>25%</td>
</tr>
<tr>
<td>Hedge funds</td>
<td>15%</td>
</tr>
<tr>
<td>Income trusts</td>
<td>7%</td>
</tr>
<tr>
<td>Private equity</td>
<td>20%</td>
</tr>
<tr>
<td>Commodities</td>
<td>6%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
</tr>
</tbody>
</table>

Exhibit 2b: Average asset allocation

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canadian fixed income</td>
<td>37%</td>
</tr>
<tr>
<td>Alternatives</td>
<td>3.5%</td>
</tr>
<tr>
<td>Emerging markets equity</td>
<td>2%</td>
</tr>
<tr>
<td>Global equity</td>
<td>0.5%</td>
</tr>
<tr>
<td>International (ex-U.S.)</td>
<td>11%</td>
</tr>
<tr>
<td>U.S. equity</td>
<td>13%</td>
</tr>
<tr>
<td>Canadian equity</td>
<td>28%</td>
</tr>
<tr>
<td>Non-domestic fixed income</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

On the surface, there are only minor allocation differences between those plans with over and under $1 billion in assets — with larger plans more likely to allocate to alternative assets and smaller plans more likely to include income trusts in their allocations.

Exhibit 3 provides additional perspective on the alternatives and other non-traditional assets in which plans are investing. While both plans above and below $1 billion allocate to these categories, with the exception of investment trusts, larger plans are more likely to invest in these asset classes (especially real estate) than smaller plans.

Current funded status

Approximately 40% of our survey participants, as shown in Exhibit 4, have classified their plans as less than 95% funded — with non-corporate plans faring somewhat better than corporate plans.

Exhibit 4: Status of plan

<table>
<thead>
<tr>
<th>% of respondents</th>
<th>Corporate</th>
<th>Non-corp.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under-funded (less than 80% funded ratio)</td>
<td>11%</td>
<td>6%</td>
<td>9%</td>
</tr>
<tr>
<td>Moderately under-funded (80-95% funded ratio)</td>
<td>39%</td>
<td>22%</td>
<td>31%</td>
</tr>
<tr>
<td>Fully funded (95-100% funded ratio)</td>
<td>20%</td>
<td>38%</td>
<td>29%</td>
</tr>
<tr>
<td>Over-funded (greater than 100% funded ratio)</td>
<td>22%</td>
<td>30%</td>
<td>26%</td>
</tr>
<tr>
<td>Other (unknown, refused)</td>
<td>8%</td>
<td>4%</td>
<td>5%</td>
</tr>
</tbody>
</table>

"How would you define the status of your plan? Would you categorize it as under-funded (< 80% funded ratio), moderately under-funded (80-95%), fully funded (95-100%) or over-funded (over 100%)?"

Base: Total (104), Including 54 Corporate, 50 Non-corporate
Plan assumptions

What level of returns do plan sponsors anticipate going forward? As seen in Exhibit 5, we found the average reported expected return on plan assets to be 7.7%, with a somewhat higher anticipated return for smaller vs. larger plans, and for corporate vs. non-corporate plans. We found the average discount rate to be 5.9% with little difference based on plan size or type of institution.

Exhibit 5: Return assumptions

<table>
<thead>
<tr>
<th>Rates of return</th>
<th>Corporate</th>
<th>Non-corporate</th>
<th>Asset size</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean annual rate of return expected</td>
<td>7.8%</td>
<td>7.5%</td>
<td>7.9%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Average discount rate for financial</td>
<td>6.0</td>
<td>5.8</td>
<td>6.0</td>
<td>5.9</td>
</tr>
<tr>
<td>reporting purposes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

“What annual % rate of return do you expect your overall portfolio to deliver over the next 3-5 years based on your current strategic asset allocation?”

“What discount rate* did you use for financial reporting purposes as of December 31, 2004?”

(Discount rate defined as pension liability discount rate.)

Base: Total 104, Corporate=54, Non-corporate= 50, <$1B=54, $1B+=50.
PLAN SPONSORS’ GREATEST CHALLENGES

The return challenge
Against this backdrop of year-end portfolio positioning, funded status and plan assumptions, we asked plan sponsors to tell us, in their own words, what their biggest concern or challenge is as they consider the future performance of their plan. Exhibit 6 is a revealing breakdown of the major concerns on the minds of plan sponsors.

Exhibit 6: Challenges facing plan sponsors

<table>
<thead>
<tr>
<th>% of respondents</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>41% Expected rate of return</td>
<td>“Just the low expected equity returns.” “It is to attain the 7.5 percent return with a low or stable volatility.”</td>
</tr>
<tr>
<td>16% Interest rates</td>
<td>“The low interest rate environment that we currently find ourselves in.” “Declining interest rates.”</td>
</tr>
<tr>
<td>15% Market conditions/volatility</td>
<td>“The cyclical nature of the Canadian equity market and possible currency fluctuation in the Canadian dollar.” “I guess it would be the overall economy worldwide. It seems like there are not many good purchase opportunities; it’s like they are almost saturated when we speak with our investment managers.”</td>
</tr>
<tr>
<td>12% Funded status</td>
<td>“The level of funding. We’ve basically had twenty years of being overfunded and that looks like it has run its course. Now it is about maintaining the level of funding.” “Efforts to improve our funded ratio.”</td>
</tr>
<tr>
<td>9% Better matching of assets/liabilities</td>
<td>“Matching liabilities with assets.” “The method of calculating liabilities. In our case it is based on real return bonds for which the rates are artificially low in both Canada and the United States.”</td>
</tr>
<tr>
<td>8% Risk management</td>
<td>“To implement risk budgeting.” “The absolute return for paying benefits while maintaining the risk at an acceptable level.”</td>
</tr>
<tr>
<td>7% Investing in alternatives</td>
<td>“Implementing alternative investment strategies.” “We have had significant exposure to alternative investments in the past and as other institutions move assets in that direction, our fear is the decline in available alpha.”</td>
</tr>
<tr>
<td>20% Other</td>
<td></td>
</tr>
</tbody>
</table>

“What is your biggest concern or challenge as you consider the future performance of your plan?”
Base: All respondents — 104.

1. JPMorgan Asset Management categorized verbatim responses. Some respondents provided answers falling into multiple categories. Therefore, the sum of percentages exceeded 100%.

Clearly, finding return and meeting return targets are primary issues for plan sponsors. While a few were relatively unconcerned, even over-funded plans saw a challenge in maintaining that status. Our survey explores what plan sponsors are doing or contemplating to confront these issues.
Future focus

We asked plan sponsors about their focus in the foreseeable future within the context of their current funded status. As reflected in Exhibit 7, revisiting their asset allocation strategy and generating alpha are major objectives for all plans. At the same time, matching assets to liabilities and reducing return volatility are also important goals, with fully/overfunded plans giving directionally more attention to both of these areas. Well-funded plans are also directionally more likely to separate alpha from beta. Not surprisingly, plan sponsors with under-funded plans intend to focus more on increasing contributions than do their fully/overfunded peers.

Exhibit 7: Future focus – by funded status

<table>
<thead>
<tr>
<th>% of respondents</th>
<th>Underfunded (n=41)</th>
<th>Fully/Overfunded (n=37)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revisiting strategic asset allocation</td>
<td>78%</td>
<td>88%</td>
</tr>
<tr>
<td>Generating alpha</td>
<td>76%</td>
<td>81%</td>
</tr>
<tr>
<td>Increasing focus on matching assets to liabilities</td>
<td>51%</td>
<td>67%</td>
</tr>
<tr>
<td>Reduce volatility of returns</td>
<td>56%</td>
<td>65%</td>
</tr>
<tr>
<td>Separation of alpha from beta</td>
<td>41%</td>
<td>53%</td>
</tr>
<tr>
<td>Hedge inflation</td>
<td>37%</td>
<td>37%</td>
</tr>
<tr>
<td>Increasing contributions</td>
<td>30%</td>
<td>73%</td>
</tr>
<tr>
<td>Reducing benefits</td>
<td>7%</td>
<td>11%</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Significantly higher at the 95% confidence level

“To help close any funded status gap, on which of the following areas do you plan to focus over the next four years?”
Base: Underfunded, n=41

“In light of your plan’s fully/overfunded position, do you plan to focus on any of the following areas over the next four years?”
Base: Fully/Overfunded, n=37
REACHING RETURN DESTINATIONS

How are plan sponsors, concerned with reaching target returns and maintaining or improving funded status, addressing these challenges? What are some of the changes they are making or considering in terms of strategic allocation and alpha generation? As the following survey results indicate, while there is a high degree of consensus on the challenges they face, there is less unanimity among plan sponsors on the paths they are taking to reach their return destinations. In the survey results that follow we consider:

- The asset allocation shifts being considered, particularly in view of the Foreign Property Rule (FPR) repeal.
- The use of alternatives (both domestic and foreign).
- The extent to which plan sponsors are using active vs. passive strategies in managing their portfolio allocations.

Asset allocation in the absence of foreign property constraints

In 2005, the Canadian government amended its income tax code to repeal the Foreign Property Rule. This removed the 30% restriction on foreign investments for pension plans. Respondents provided insight on the impact that the repeal of the FPR may have on the direction, timing and magnitude of change that the plans anticipate making:

- Current asset allocation for the average portfolio is very close to the previous limit on foreign investment, with nearly 29%1 of assets in primarily U.S. and international equities.
- As reflected in Exhibit 8, over 80% of plan sponsors believe the average non-domestic allocation of assets will be over 30% within 3 years and 28% believe the allocation will be over 40% in 5 years.

When asked about their own plans, 18% of plan sponsors said they were planning to change their strategic asset allocation significantly after the elimination of the FPR. As reflected in Exhibit 9, the majority of those who said they would make significant changes plan to make them within a year, with most of the remainder making changes in the next 2 to 3 years. We interpret this result as reflecting a thoughtful, cautious approach on the part

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of many Canadian plan sponsors to the repeal of the FPR. These plan sponsors are revisiting strategic asset allocations in light of the extended opportunity set of asset strategies now available to them, before committing to any specific changes.

Exhibit 8: Anticipated changes in foreign property allocations

% of respondents

<table>
<thead>
<tr>
<th></th>
<th>Three years</th>
<th>Five years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Little change (&lt; 30%)</td>
<td>18%</td>
<td>13%</td>
</tr>
<tr>
<td>30% to less than 40%</td>
<td>64%</td>
<td>58%</td>
</tr>
<tr>
<td>40% to less than 50%</td>
<td>16%</td>
<td>21%</td>
</tr>
<tr>
<td>50% or more</td>
<td>0%</td>
<td>6%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

*With the elimination of the Foreign Property Rule, where do you anticipate that the average Canadian pension plan’s foreign property allocation will be in three years? In five years?*

Base: All respondents, n=104

Exhibit 9: Impact of the FPR elimination on strategic asset allocation

% of respondents

Plan to make significant changes

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>18%</td>
</tr>
<tr>
<td>No</td>
</tr>
<tr>
<td>75%</td>
</tr>
<tr>
<td>Don’t know</td>
</tr>
<tr>
<td>4%</td>
</tr>
</tbody>
</table>

Time frame

<table>
<thead>
<tr>
<th></th>
<th>0%</th>
<th>58%</th>
<th>37%</th>
<th>5%</th>
<th>0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immediately</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within a year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 to 3 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 or more years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*With the FPR eliminated, do you plan to make any significant changes to the strategic asset allocation of your plan?*

Base: All respondents, n=104

*Over what time frame do you see making any significant changes to the strategic asset allocation of your plan?*

Base: Making changes to plan, n=19; due to the small base size, responses to this question should be viewed as directional rather than precise.
As reflected in Exhibit 10, among the 18% of plan sponsors who expect to make significant changes to their asset allocation with the elimination of the FPR, most plan to shift from Canadian equities and/or Canadian fixed income to a range of asset classes — led by international and global equities, along with currency management. Additionally, almost half of this group anticipates increases to U.S. equity, private equity and foreign fixed income.

As seen in Exhibit 11, the majority (60%) of respondents believe that Canadian investment managers will need to offer a more diverse set of non-domestic offerings in the future to succeed. Those who believe more non-domestic strategies are essential have a slightly higher allocation to U.S. and international equities and are more likely to be using synthetic strategies than their counterparts. This may provide an indication that those who currently use synthetics (originally to address the FPR) and who are looking to investment managers for non-domestic strategies, will perhaps unwind their synthetic positions and move to more actively managed equity portfolios.
Alternative assets

Six in ten plan sponsors foresee changes to their alternative asset allocation in the near future. The majority anticipates new allocations to non-domestic alternatives (82%) vs. domestic alternatives (48%).

- Larger plan sponsors are more likely to anticipate new allocations to alternative assets than smaller plans (68% vs. 52%).
- The greatest alpha opportunities are believed to lie in non-domestic (71%) vs. domestic alternatives (12%).

```
Exhibit 12: Alternative assets: expected allocation changes
% of respondents

Do you foresee changes in your alternative assets category over the next few years? Base: All respondents, n=104
What changes do you think will occur? Base: Foresee changes in alternative assets category, n=62
```
Asset allocation management

The objective of asset allocation management is to maintain portfolio efficiency and/or enhance return potential. Passive strategies adjust for the inevitable drift of a portfolio away from its strategic allocation by rebalancing back to the strategic normal, either at a specified frequency, e.g., monthly (calendar-based rebalancing) or when at least one asset drifts outside a specified allocation range (range-based rebalancing). Active allocation strategies actively shift portfolio allocations to reflect a particular market view, with the objective of enhancing portfolio returns. Both types of strategies can be implemented either by physically moving securities or by using an overlay strategy.

According to Exhibit 13, the most common approach to the management of portfolio allocation is passive range-based rebalancing, for both larger (≥$1 billion in assets) and smaller (<$1 billion in assets) plans. Smaller plans, however, are significantly more likely than larger plans to use passive calendar based rebalancing (28% of smaller vs. 2% of larger plans). Across both size categories, active strategies (particularly asset allocation overlays) are currently less frequently employed.

Exhibit 13: Asset allocation management approach by plan size

*Which of the following best describes your current approach to the ongoing management of your portfolio allocation?*

Base: All respondents, n=104, Larger companies n=50, Smaller companies n=54
Exhibit 14 measures the extent to which plan sponsors expect to alter their active versus passive approach to managing portfolio allocation. Most plans are content to maintain their current strategies. However, while the sample size is small, the 17% of pension fund managers who are interested in changing their approach are more likely to be moving towards active allocation strategies — another potential source of alpha to help them reach their return destinations.

**Exhibit 14: Changes to asset allocation management approach**

<table>
<thead>
<tr>
<th>% of respondents</th>
<th>Approaches</th>
</tr>
</thead>
<tbody>
<tr>
<td>Looking to change approach</td>
<td>Passive range-based rebalancing: 17%</td>
</tr>
<tr>
<td></td>
<td>Passive calendar-based rebalancing: 6%</td>
</tr>
<tr>
<td></td>
<td>Active allocation: 33%</td>
</tr>
<tr>
<td></td>
<td>Active allocation overlay: 33%</td>
</tr>
<tr>
<td></td>
<td>Other: 11%</td>
</tr>
<tr>
<td></td>
<td>Don’t know: 17%</td>
</tr>
</tbody>
</table>

“Are you looking to change your approach to the ongoing management of your portfolio’s asset allocation?”
Base: All respondents, n=104

“When changing your approach to your asset allocation, will you be using or changing any of the following?”
Base: Looking to change allocation strategy, n=18; due to the small base size, responses to this question should be viewed as directional rather than precise.
In the following sections we report first on the extent to which plan sponsors are separating beta (or market returns) from alpha (returns attributable to active management skills) in managing and measuring total portfolio performance. We then examine their use of, and attitude toward, tools of investment management that have the potential to enhance portfolio performance and in some cases, to implement alpha/beta separation. Specifically we examine portable alpha, derivatives and currency management strategies.

**Alpha and Beta: The building blocks of total return**

In general, the traditional approach to portfolio construction involves a two-step process: first, determine an optimal strategic allocation based on passive index returns and second, “fill the asset allocation buckets” through careful manager selection. In this approach, beta (as measured by index returns) dictates alpha. (For example, if 35% of the portfolio is allocated to active Canadian large cap equity, then 35% of assets are being dedicated to alpha generation within this asset class.) Allocating more assets to, for example, small cap or emerging market equity, typically involves a change to the underlying strategic (beta) allocation. By separating alpha from beta, portfolios can be constructed, taking into consideration the expected return, risk and correlations within and between the alpha and beta components of return, providing greater diversification and potentially resulting in portfolios with improved risk/return tradeoffs.

This perspective on total portfolio return is being adopted, to varying degrees, by plan sponsors. We asked respondents whether they currently separate alpha from beta for performance reporting and objective setting purposes, and found a group divided — 31% do, an additional 23% are considering it, and 43% do not intend to make this distinction; with more corporate than non-corporate plans (37% vs. 24%) responding in the affirmative. Further adoption of this alpha/beta approach requires new tools for portfolio evaluation and strategy implementation.
Portable alpha

Portable alpha is a tool for implementing the separation of alpha and beta, allowing investors to extract and keep a particular manager’s excess returns, without keeping the associated market exposure. Portable alpha can be used in conjunction with traditional active management, absolute return (market neutral or non-directional hedge fund) or overlay strategies. As a simplified example: an investor looking to fill a large cap equity allocation, but who prefers the alpha associated with a market neutral or non-directional hedge fund strategy, could buy large cap futures to gain market (beta) exposure and invest in a multi-strategy hedge fund manager to deliver a desired level of alpha.

The vast majority (87%) of those surveyed were familiar with the term “portable alpha.” As shown in Exhibit 16, of those familiar with the concept, 54% already use or are considering a portable alpha strategy. A greater percentage of larger plans ($1 billion plus) have already implemented the approach (23% vs. 5%).
Those using a portable alpha strategy generally do so in relation to the S&P. However, most of those considering portable alpha are interested in strategies involving the Scotia Capital Universe Bond Index.

Exhibit 16: Portable alpha

Percentage familiar with "portable alpha"

<table>
<thead>
<tr>
<th>All respondents</th>
<th>Large plans ($1BN+)</th>
<th>Smaller plans ($1BN)</th>
</tr>
</thead>
<tbody>
<tr>
<td>87%</td>
<td>96%</td>
<td>78%</td>
</tr>
</tbody>
</table>

Percentage using or considering "portable alpha"

<table>
<thead>
<tr>
<th>Already use a portable alpha strategy</th>
<th>Considering using a portable alpha strategy</th>
<th>Not considering the use of a portable alpha strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>14%</td>
<td>40%</td>
<td>46%</td>
</tr>
</tbody>
</table>

Exhibit 17: Use of asset classes in portable alpha strategies

% of respondents

<table>
<thead>
<tr>
<th>Currently Use (n=13)</th>
<th>Considering (n=49)</th>
</tr>
</thead>
<tbody>
<tr>
<td>S&amp;P</td>
<td>62%</td>
</tr>
<tr>
<td>S&amp;P/TSX</td>
<td>8%</td>
</tr>
<tr>
<td>Scotia Capital Universe Bond Index</td>
<td>8%</td>
</tr>
<tr>
<td>EAFE</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>0%</td>
</tr>
<tr>
<td>None</td>
<td>0%</td>
</tr>
<tr>
<td>Don’t Know</td>
<td>6%</td>
</tr>
</tbody>
</table>

"Are you familiar with the term 'portable alpha,' that is, a return or alpha stream that is added to or overlaid on a portfolio without changing the asset allocation of the underlying portfolio?"
Base: All respondents, n=104

"Do you already use or are you considering implementing a portable alpha strategy?"
Base: Familiar with Portable Alpha, n=90

"For which of the following asset classes are you currently using a portable alpha strategy?"
Base: Use Portable Alpha Strategy, n=13; due to the small base size, responses to this question should be viewed as directional rather than precise.

"For which of the following asset classes are you considering using a portable alpha strategy?"
Base: Considering Portable Alpha Strategy, n=49
Derivative strategies

Derivatives (i.e., futures, options, swaps) play a role in implementing many of the strategies covered in this survey — hedge funds, portable alpha, rebalancing and overlays. These investment tools appear to have a significant level of acceptance among plan sponsors. In fact, 56% of those surveyed are currently using derivatives, with another 18% considering their use.

How are plan sponsors using derivatives? As Exhibit 18 illustrates, plan sponsors have been utilizing synthetic strategies primarily to address the foreign property rule limitations (no longer in effect) and as a cost effective vehicle for gaining access to markets.

Exhibit 18: Reasons for use of synthetics

% of respondents

<table>
<thead>
<tr>
<th>Purpose</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable plan to address foreign property rule</td>
<td>71%</td>
</tr>
<tr>
<td>Used as component of a portable alpha strategy</td>
<td>24%</td>
</tr>
<tr>
<td>Used as component of a beta strategy</td>
<td>31%</td>
</tr>
<tr>
<td>Cost effective vehicle for gaining access to markets</td>
<td>53%</td>
</tr>
<tr>
<td>Other</td>
<td>28%</td>
</tr>
</tbody>
</table>

*Are you currently using synthetic strategies in your plan (for example, derivatives, futures or forwards)??*
Base: All respondents, n=104

*For what purpose are they used?*
Base: Use synthetic strategies, n=58

1. The value of derivative securities is dependent upon the performance of underlying assets or securities. If the underlying assets do not perform as expected, the value of the derivative security may decline. Generally, derivatives are more volatile and are riskier in terms of both liquidity and value than traditional investments.
As Exhibit 19 shows, corporate institutions are slightly more likely to use synthetic strategies than their non-corporate counterparts, while larger plans are significantly more likely to use these strategies than smaller plans.

As seen in Exhibit 20, when those already using synthetic strategies in U.S. or EAFE equities were asked what changes they would make in their use of synthetics, the most often cited response was a move to cash markets and to full active management (referenced to a benchmark).
As reflected in Exhibit 21, when the 46 respondents not using derivatives were asked what might be preventing their use, the majority (81%) cited Investment Committee or Trustee guidelines, 58% said it was due to limited expertise in using derivatives and 38% said it was due to their perception of derivatives as an implicit form of leverage (in some cases, multiple answers were provided).

It remains to be seen whether plan sponsors’ current experience and familiarity with derivatives will support a broader adoption of other derivative-based strategies for enhancing return and managing risk.

**Currency management**

As seen in Exhibit 22, among the 41% of plan sponsors who use currency management, the majority uses passive hedging to reduce the risks involved with foreign currency exposure. Larger plans are significantly more likely than smaller plans to use currency management (58% vs. 26% respectively).
As reflected in Exhibit 23, it is clear that plan sponsors are interested in learning more about currency management. In addition, almost a third of respondents plan to revisit their currency decision if they increase their allocation to non-domestic assets. Of this group, the majority would employ an active management strategy.

Over both one-year and three-to-five year horizons, slightly more than half of plan sponsors expect a rise in the value of the Canadian dollar in relation to the U.S. dollar.
While over half of plan sponsors expect an increase in the value of the Canadian dollar in the next three to five years (51% expect an increase, 13% no change, 19% a decrease), only 41% have implemented currency management strategies. If the expectation that many plans will move above 30% non-domestic exposure within three years is met, this is an area where increased activity and attention could be anticipated.
We undertook this survey to separate fact from fiction, to gain a broad perspective on the challenges plan sponsors face — and to gauge the extent to which they are exploring new investment strategies and concepts to meet their investment objectives within the context of the FPR’s repeal.

We find that there is clarity and consensus around the biggest challenges faced by plan sponsors today, namely — achieving target returns while managing risk in what they perceive to be a low return and low interest rate environment. However, with an expanding investment opportunity set to choose from, and a diversity of plan-specific objectives and constraints, there is less unanimity in the strategies these investors are using or considering in their search for higher returns.

There is also general agreement that the elimination of the FPR will result in most plans having more than 30% of their assets in non-Canadian investments within 3 years. A significant number believe this percentage will increase to more than 40% in 5 years. However, less than a fifth of plan sponsors indicated that they would be making a significant change in the near term as a result of the FPR’s repeal. This response, coupled with the large majority indicating that they plan to revisit their strategic asset allocations, leads us to surmise that as a whole, plan sponsors will be taking a methodical, measured approach to evaluating and implementing changes to their portfolio strategies.

Executive committee and trustee guidelines are cited as barriers to adoption of some of the strategies included in our survey. This, we think, is likely to be a major factor in the rate of speed regarding implementation and change going forward. In short, plan sponsors are combining the familiar with the new and evolving, at their own pace, and in line with their specific investment goals, policies and expertise.

**Asset size matters**

We see evidence of multiple paths being taken by plan sponsors surveyed when we observe the differences between those plans with assets under $1 billion and those with $1 billion or more.

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1. Given the small base number of respondents, these results should be looked at as directional indicators of differences between larger, $1 billion plus plans, and smaller, below $1 billion plans.
In general, a greater proportion of larger vs. smaller plans are actually implementing newer and evolving strategies and tools — portable alpha, currency management and synthetics.

- Plan sponsors with larger plans are significantly more likely to foresee changes in their alternative asset categories than those with smaller plans (68% vs. 52%), primarily in terms of new non-domestic alternatives.

**Foreign Property Rule repeal**

- The plan sponsors utilizing synthetic strategies today are using them primarily as a result of their past needs to address the now repealed Foreign Property Rule (71%) and as a cost effective vehicle for gaining access to markets (53%).
- The anticipated changes cited most often by those plan sponsors already using synthetic strategies, particularly in U.S. equities, are moving to cash markets and full active management (referenced to a benchmark).
- Those moving assets because of the FPR elimination envision increased allocations to a wide range of non-domestic strategies (most notably international and global equities) and a greater use of currency management.
- The majority (71%) of respondents believe that the greatest opportunities within alternatives lie in non-domestic vs. domestic asset categories.

**Looking ahead**

The combination of innovative strategies and tools and the broader set of global investment opportunities now available with the repeal of the FPR has the potential, over time, to significantly impact the diversification and shape of Canadian pension plan portfolios. Our survey suggests that Canada’s plan sponsors are surveying their evolving investment landscape, evaluating its benefits and continuing to build the expertise required to take advantage of new strategies, tools and opportunities to improve portfolio efficiency.

We are committed to listening to our clients, positioning ourselves to address their current and future needs, and to helping Canada’s plan sponsors navigate their expanding investment horizons.
GLOSSARY OF TERMS

Some of the terms used throughout this survey are open to multiple interpretations. Below are the definitions we have assigned throughout the conduct of our research.

**Absolute return**
Strategies that are typically managed with the objective of producing positive returns under all market conditions — usually stated as a set percentage return or a stated return above a stable, cash- or inflation-based index (e.g., LIBOR, 3-month T-bills or CPI).

**Active asset allocation management**
An asset allocation approach in which the manager seeks to enhance returns by actively shifting the portfolio mix to reflect a market view, either by buying and selling physical assets or using an overlay strategy.

**Alpha**
Two definitions of alpha apply, as used in this study:
- That component of total return attributable to a manager’s skill (i.e., in excess of a specified market benchmark). This is the “alpha” on which asset managers are often judged.
- Return in excess of the underlying, multi-index “policy” or strategic benchmark’s return. Generated by a variety of the sources explored in this report, this is the “alpha” on which plan sponsors frequently judge themselves.

**Alternative assets**
For the purpose of this study we defined alternative assets to include real estate, hedge funds, private equity and currency management.

**Beta**
Commonly used to represent pure market-related or index return, exclusive of any excess return that may be generated by manager skill. Used generally to represent market or index exposure. More technically, beta is a portfolio’s or security’s regression coefficient with respect to a given market index.

**Currency as a source of alpha**
A strategy in which multiple currency market views are expressed (e.g., CAD vs. USD) with positions commonly established through futures and forward contracts to generate return.
Foreign Property Rule
The Foreign Property Rule (FPR) restriction limited investments in foreign property to 30%. The FPR was repealed on June 29, 2005.

Global equities
Includes the U.S. and EAFE (Europe, Australia, Asia and Far East).

Income Trusts
An investment trust that holds assets which are income producing. The income is passed on to the unit holders. Some of the most popular income trusts are Real Estate Investment Trusts (REITs) and Natural Resource Trusts.

International equities
Excludes the U.S. and Canada. Includes EAFE (Europe, Australia, Asia and Far East).

Passive calendar-based rebalancing
An asset allocation approach in which the manager rebalances back to the strategic asset allocation on a calendar basis (e.g., monthly, quarterly), to maintain portfolio efficiency.

Passive management
An asset management style which mirrors the stock and sector weightings in a market index, with the objective of duplicating the movements in that index very precisely.

Passive range-based rebalancing
An asset allocation approach in which the manager rebalances when deviations from the strategic asset allocation go beyond a specified range, to maintain portfolio efficiency.

Portable alpha (Alpha transport)
This is a tool for implementing the separation of “alpha” from “beta.” Portable alpha is a return or alpha stream that is added to or overlaid on a portfolio without changing the asset allocation of the underlying portfolio. This allows the investor to keep a particular skillful manager’s excess returns without having to keep the underlying market exposure.
JPMorgan Asset Management wishes to thank all 104 institutions who participated in the Evolving Trends of Canadian Pension Plans Survey. Without their participation, this report would not have been possible.

The following participating institutions generously agreed to have their names listed in this report:

3M Canada
Abitibi Consolidated Inc.
Alberta — Universities Academic Pension Plan
Alberta Teachers’ Retirement Fund Board
Alcan Inc.
Algomna Steel Inc.
Aliant Inc.
Bayer Inc.
BCE Inc.
Business Development Bank of Canada
Canada Mortgage & Housing Corporation Pension Fund
Canadian Broadcasting Corporation
Canadian Medical Protective Association
Canadian Pacific Railway
Canadian Utilities Limited
CanWest Global Communications Corp.
Certain Bargaining Employees of N.B. Hospitals Pension Plan
City of Ottawa
City of Saskatoon
Colleges of Applied Arts & Technology Pension Plan
Dalhousie University
Dofasco Inc.
Domtar Inc.
Export Development Canada
Falconbridge Limited
General Electric Canada Inc.
Gestion Ferique
Goodyear Canada Inc.
Great-West Life Assurance Company
Honeywell Limited
Hospitals of Ontario Pension Plan
Hudson’s Bay Company
Hydro One Inc.
Hydro-Québec
Imperial Tobacco Canada
Ironworkers Ontario Pension Fund
Ispat Sidbec Inc.
IWA Forest Industry Pension Plan
Kruger Inc.
Labatt Brewing Company Limited
Manitoba Teachers' Retirement Allowances Fund Board
Manitoba Telecom Services Inc.
Maple Leaf Foods Inc.
Memorial University of Newfoundland
Metropolitan Toronto Pension Plan
Michelin North America (Canada) Inc.
Nav Canada
New Brunswick Public Service Superannuation
Nova Chemicals Corporation
NSAHO Pension Plan
Ontario Power Generation Inc.
Operating Engineers Local 955 Pension Trust Fund
Operating Engineers’ Pension Plan
Ottawa Carleton Regional Transit Commission
Petro-Canada
Pratt & Whitney Canada
Procter & Gamble Inc.
Pulp & Paper Industry Pension Plan
Queen’s University
Regina Civic Employees’ Superannuation and Benefit Plan
Royal Bank of Canada
Saskatchewan Healthcare Employees' Pension Plan
Saskatchewan Municipal Employees' Pension Plan
Saskatchewan Power Corporation
Saskatchewan Teachers’ Superannuation Commission
Saskatchewan Wheat Pool Inc.
Sears Canada Inc.
Shell Canada Pension Trust
Simon Fraser University
Smurfit-Stone Container Canada Inc.
SNC-Lavalin Group Inc.
Société de Transport de Montréal
Teck Cominco Limited
Telecommunication Workers Union
Telus Corporation
The Anglican Church of Canada
TransCanada Pipe Lines Limited
UBC Investment Management Trust Inc.
Université de Sherbrooke
Université Laval
University of Regina
University of Saskatchewan
Via Rail Canada Inc.
Ville de Laval
Ville de Québec
Workers’ Compensation Board Northwest Territories & Nunavut
Workers Compensation Board of Alberta
Workplace Safety & Insurance Board of Ontario
York University
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