

Ten years of Core Plus

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Introduction

In the world of fixed income investing, a Core Plus strategy is one that aims to enhance investment returns over a core bond portfolio, and does so by blending a core domestic portfolio of government and corporate bonds with a mix of “Plus” sectors. In many cases, Core Plus offers convenient and efficient access to global fixed income opportunities that are not typically included in core domestic bond portfolios, and often are not captured within an investor’s overall policy asset mix.

At PH&N Institutional, we have been managing fixed income portfolios according to a consistent philosophy and process for nearly 40 years, and recently celebrated the 10-year anniversary of our PH&N Core Plus Bond Fund. This paper shares our observations related to investor adoption of Core Plus in Canada, and perspectives gained from a decade spent managing a Core Plus Strategy.

Adoption of Core Plus in Canada

From an international perspective, Core Plus fixed income is a mature and established asset class,¹ but it is only within the past five to ten years that it has become widely adopted by Canadian investors. Recent investment policy trends explain this uptick in demand for Core Plus.

Two strong investment trends we have observed among Canadian institutional clients in the past decade have been reduced allocations to public market equities, and efforts to sustain overall portfolio returns during a period of significantly lower interest rates between 2009-2020 as compared to before the 2008-2009 Financial Crisis. Alongside these trends, we have also seen increased globalization of portfolios.

Despite the globalization trend in the broader portfolio context, among Canadian investors it has not generally extended to their public market fixed income allocations. For many Canadian investors, Core Plus in fixed income has been an efficient way to increase returns in what remains a significant portion of their asset mix, and to extend the fixed income investment opportunity set into global markets that for the most part, asset allocation decisions have not reached.

This significant re-tooling of the overall asset mix that we have seen from Canadian institutional investors has contributed to broader adoption and growth of Core Plus in Canada. During the last ten years, Core Plus funds’ assets under management have nearly tripled from CAD\$23.9 billion in 2013 to CAD\$65.7 billion in 2023,² and the PH&N Core Plus Bond Fund reached \$9.8 billion as of June 30, 2023. In that time, we have also successfully launched additional Core Plus strategies, namely the PH&N Short Core Plus Bond Fund and the PH&N Long Core Plus Bond Fund, to meet the needs of investors with different term structure and duration objectives.

PH&N Institutional’s fixed income philosophy

Underpinning our investment philosophy is the belief that diversified and actively managed fixed income portfolios can deliver superior returns with an attractive reward for risk profile. Our objective is to earn incremental returns over a market index, and to deliver stable value-added performance to investors.

The degree of diversification required to deliver a stable value-added experience depends on the fund’s objectives. For example, our core fixed income strategy – the PH&N Bond Fund – invests in federal and provincial government bonds as well as domestic investment grade corporate bonds. For this particular fund, a relatively narrow range of permissible strategies is sufficient to achieve its objectives.³

Given the positive outcomes for the PH&N Bond Fund, a natural starting point for delivering higher value-added returns might have been simply to do more with the same strategies – for example, increasing the range of interest rate anticipation strategies or increasing the permissible allocation range for corporate bonds in the fund. Certainly there is some room for this activity, but it is our view that meaningfully increasing value-added targets with an attractive reward-for-risk profile demands increased portfolio opportunities.

¹In the U.S. there were 126 Core Plus strategies available to institutional investors as of December 31, 2008, with over C\$790 billion in assets invested. Source: eVestment U.S. Core Plus Fixed Income Universe.

²eVestment Canadian Core Plus Fixed Income Universe, June 2023.

³Over the past 40 years, the PH&N Bond Fund has outperformed its benchmark, the FTSE Canada Universe Bond Index, in 71% of 160 calendar quarters with an annualized value-added return of 0.48%, for an information ratio of 0.54 as of June 30, 2023. Past performance is not indicative of future results. Please see Appendix 1 for comprehensive performance data and GIPS report.

Consistent with our philosophy of building diversified portfolios through an active multi-strategy approach, we have expanded our investment capabilities over the years to include opportunities such as commercial mortgages, high yield bonds, foreign issuers, private placements, emerging market debt, and others. Collectively, these capabilities feature in the opportunity set that makes up our PH&N Core Plus Bond Fund, alongside the core strategies of government and investment grade corporate bonds, as illustrated in Figure 2. Also shown is the benchmark – the FTSE Canada Universe Bond Index – as reference. (Please see our white paper The Case for Core Plus for a more detailed discussion and analysis of the Plus strategies within the PH&N Core Plus Bond Fund.)

A multi-strategy approach to fixed income investing

Our multi-strategy approach to fixed income investing includes interest rate anticipation as well as yield enhancement through a variety of liquidity and credit strategies; for example, by investing in provincial and corporate bonds. We manage actively across these strategy categories by tilting our portfolios to where we believe the most attractive opportunities for value-added returns exist given the prevailing economic and market conditions. As a result, the relative contribution to performance from these strategies will vary over time depending on market conditions, but over a typical market cycle we expect our relative performance will be tilted toward liquidity and credit strategies. In general, we believe these are the more predictable sources of value-added.

Figure 1: PH&N's multi-strategy approach to fixed income investing

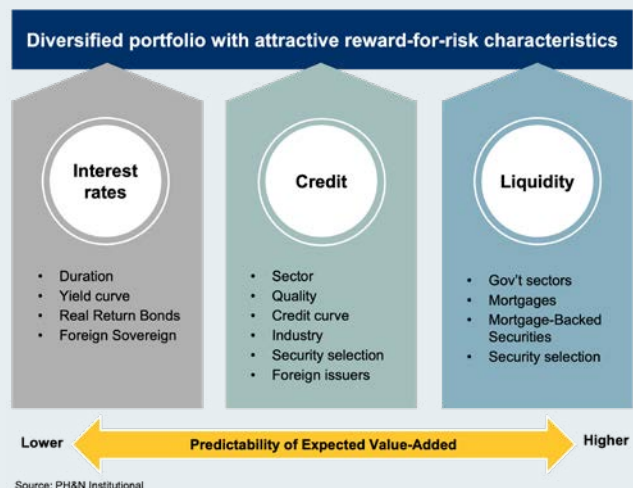
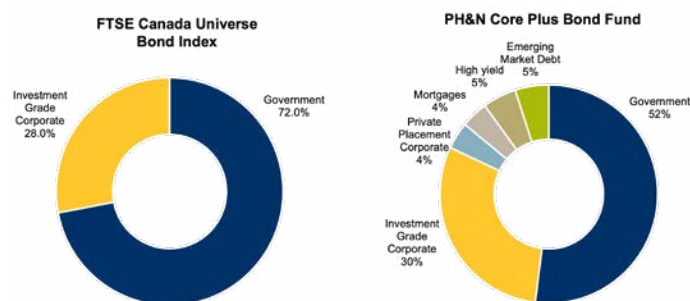


Figure 2: Composition of the FTSE Canada Universe Bond Index vs PH&N Core Plus Bond Fund



The allocations are based on the 10-year average realized weights for the period ending June 30, 2023. For illustrative purposes only. Source: PH&N Institutional, FTSE Global Debt Capital Markets Inc.

Importantly, increasing the number of potential investment opportunities is not about simply layering on additional sources of risk in the portfolio. Expanding the basket of potential strategies from which to build portfolios increases investment choice and allows us to better tilt our portfolios toward the most compelling return opportunities in different economic and market environments. Greater breadth of investment choice coupled with the ability to diversify our portfolio across markets and strategies improves our ability to deliver consistent incremental returns to investors – evidenced in the following analysis of our Core and Core Plus fixed income strategies.

Risk-adjusted returns of Core Plus vs Core

For the 10-year period since inception to June 30, 2023, the PH&N Core Plus Bond Fund earned an annualized value-added return of 1.17% over its benchmark, the FTSE Canada Universe Bond Index, compared to 0.61% for the median Core Plus strategy,⁴ placing the fund in the top decile of strategies over the period.

An important consideration for investors is the degree of risk taken to earn these incremental returns. The modest incremental annualized return volatility of the PH&N Core Plus Bond Fund versus the PH&N Bond Fund – shown in the table below – is such that the funds have had very similar information ratios over the past 10 years. Therefore, investors have been able to access the higher value-added returns of the PH&N Core Plus Bond Fund without accepting a disproportionately higher amount of risk. The batting average (percentage of quarters that performance is ahead of the benchmark) of the two funds is also quite similar, meaning that from a governance perspective, investors have been able to sustain confidence in the ability of the PH&N Core Plus Bond Fund to deliver on its higher value-added target in a variety of market environments.

⁴eVestment database 10-year period ending June 30, 2023.

July 1, 2013- June 30, 2023	PH&N Core Plus Bond Fund	PH&N Bond Fund	Median Core Plus Strategy
Annualized value-added	1.17%	0.49%	0.61%
Annualized volatility	5.1%	4.9%	5.1%
Information ratio	1.6	1.9	0.5
Batting average (quarters)	34/40 (85%)	35/40 (87%)	NA

Note: The information ratio (IR) calculation is the difference between portfolio return and benchmark return, divided by the standard deviation of those returns (tracking error). IR is often used to measure an investment manager's ability to generate excess return relative to the benchmark given the level of risk taken.

Importantly, these positive results for the PH&N Core Plus Bond Fund don't necessarily translate to the Core Plus category of strategies as a whole, as evidenced by the different outcomes on the above metrics for the median Core Plus strategy. Strategy selection, therefore, is an important input into the investment experience for Core Plus.

Reflecting on a decade of managing Core Plus

Our multi-strategy investment philosophy has been a critical driver of the ongoing build-out of our fixed income investment capabilities. We have pursued the higher value-added returns sought by investors through gradual expansion of the investment opportunity set applied in client portfolios. Core Plus represents the broadest application of our multi-strategy investment approach, and the results of the past decade have affirmed our philosophy around portfolio construction. Below, we briefly discuss below some of the key success factors in achieving the desired results for the PH&N Core Plus Bond Fund – some as expected when we launched the strategy, as well as a few enhancements that were made along the way.

Team structure and decision making

The PH&N Fixed Income Team is an integrated team of sector specialists who collaborate to build portfolios based on a wide variety of inputs. While ultimate responsibility for sector allocation decisions rests with one or two portfolio managers, those decisionmakers rely extensively on the input and expertise of a broader group of dedicated sector specialists. This collaboration across portfolio managers and sector specialists enables a broad range of views to be incorporated into investment decision making.

Retaining the Core in Core Plus

As a manager based in Canada and dedicated to serving Canadian clients, our starting point for designing a Core Plus bond portfolio was to consider the potential role for core

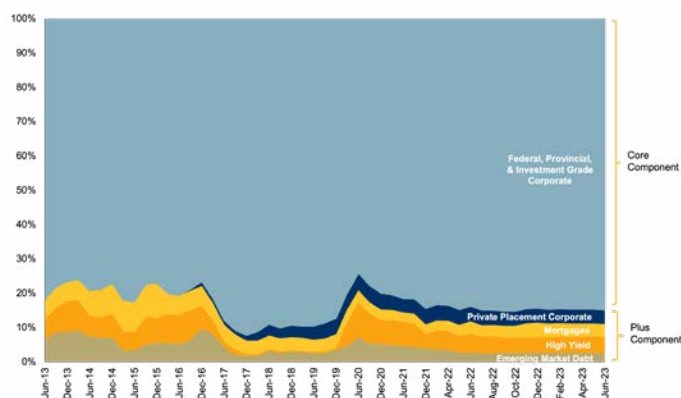
domestic investment opportunities in the portfolio. Although the PH&N Core Plus Bond Fund expands the investment opportunity set into global markets to pursue higher returns, domestic strategies continue to fulfill a significant role in meeting the fund's investment objectives.

Indeed, since the inception of the PH&N Core Plus Bond Fund ten years ago, domestic strategies have contributed roughly half of the fund's total value-added returns.⁵

Allocations to Plus strategies are relatively modest and vary over time

Given the importance of Plus strategies to meeting the PH&N Core Plus Bond Fund's value-added target, one might expect those Plus sectors to make up a significant allocation within a Core Plus portfolio. However, our experience has been that the objectives of the PH&N Core Plus Bond Fund can be achieved with tactical allocations to Plus strategies when these sectors offer the most compelling risk-adjusted return opportunities. Further, when applied tactically, allocations to these Plus sectors may be relatively modest and still contribute the necessary returns for the overall portfolio to achieve its objectives.

Figure 4: Tactical management of asset mix within PH&N Core Plus Bond Fund



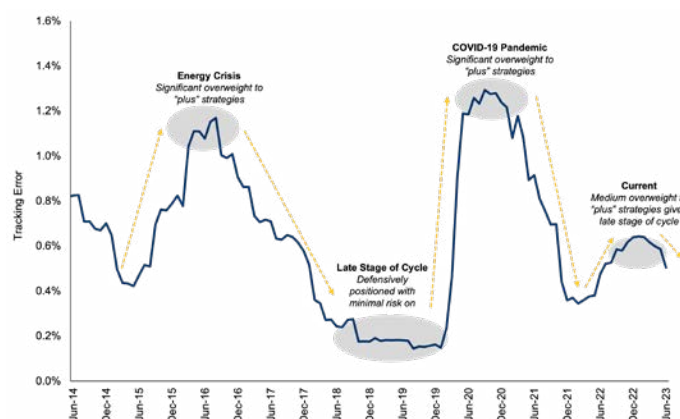
Source: PH&N Institutional

Tactical management of the PH&N Core Plus Bond Fund, particularly the Plus strategies, naturally results in fluctuations of the fund's tracking error, as illustrated in Figure 5. Periods of elevated tracking error generally correspond to periods when the fund has a higher allocation to Plus strategies because the risk-adjusted return potential for those segments of the market is compelling (e.g., during the energy crisis and Covid-19 pandemic). Conversely,

⁵The PH&N Core Plus Bond Fund's annualized value-added return since inception is 1.17%. Domestic strategies have contributed 0.55% of the fund's total value-added return since inception. Figures are as of June 30, 2023. Source: PH&N Institutional.

periods of low tracking error are generally associated with a more defensive posture marked by lower allocations to Plus strategies (e.g., 2018/2019 period) or times when there is minimal volatility in the market. Note that the impact on tracking error – even with relatively minor adjustments to the Plus allocations – can still be meaningful. As such, risk management is a key consideration in the active management of the fund.

Figure 5: PH&N Core Plus Bond Fund historical 1-year rolling tracking error



Tracking error for PH&N Core Plus Bond Fund versus FTSE Canada Universe Bond Index.

Source: PH&N Institutional, FTSE Global Debt Capital Markets Inc.

The importance of decision support tools (technology) to a multi-strategy investment framework

PH&N Institutional has invested in and applied proprietary technology to support investment decision making and portfolio construction, and as we have expanded the breadth of our multi-strategy investment framework to the PH&N Core Plus Bond Fund, these decision support tools have proven invaluable to our investment process. Not only do the decision support tools complement the views and experience of the sector specialists and portfolio managers, they also serve to provide a clear understanding of the risks associated with different portfolio alternatives.

Summary

The challenging yield environment that dominated fixed income markets for much of the post-Financial Crisis period and the general trend toward globalization in institutional investment portfolios have combined to result in healthy adoption of Core Plus strategies in Canada over the past five to ten years.

The PH&N Core Plus Bond Fund is a natural extension of PH&N Institutional's multi-strategy fixed income philosophy, and expanding into this asset class to offer clients a strategy with greater investment scope and enhanced return opportunity was a natural next step in expanding our investment capabilities. Since launching the PH&N Core Plus Bond Fund in 2013, we have seen more than 100 existing and new institutional clients⁶ invest in the strategy in order to access a broader range of domestic and global fixed income sectors and enhance the expected return profile of their fixed income portfolios.

Our team-based approach to decision making combined with our investment in risk management and decision-support tools mean that portfolio construction decisions are based on a broad range of inputs and perspectives, and that strong risk controls are in place to promote the stable return experience that we have been able to deliver to investors since launching the fund.

Appendix 1: Performance Data

Standard performance data for the PH&N Bond Fund and PH&N Core Plus Bond Fund, and GIPS report for the PH&N Core Plus Bond Fund.

PH&N Bond Fund — Performance Comparison as of June 30, 2023 (%)							
	3 Mo	1 Yr	2 Yr	3 Yr	4 Yr	5 Yr	10 Yr
PH&N Bond Fund	-0.51	3.75	-3.90	-3.11	-0.22	1.24	2.55
FTSE Canada Universe Bond Index	-0.69	3.15	-4.40	-3.75	-0.96	0.65	2.06
Relative Performance	+0.18	+0.60	+0.50	+0.64	+0.74	+0.59	+0.49

Series O returns.⁶ Total returns are gross-of-fee and reported in Canadian dollars. Periods less than one year are not annualized.

PH&N Core Plus Bond Fund — Performance Comparison as of June 30, 2023 (%)							
	3 Mo	1 Yr	2 Yr	3 Yr	4 Yr	5 Yr	10 Yr
PH&N Core Plus Bond Fund	-0.33	4.31	-3.84	-2.53	0.54	1.86	3.23
FTSE Canada Universe Bond Index	-0.69	3.15	-4.40	-3.75	-0.96	0.65	2.06
Relative Performance	+0.36	+1.16	+0.56	+1.22	+1.50	+1.21	+1.17

Series O returns.⁷ Total returns are gross-of-fee and reported in Canadian dollars. Periods less than one year are not annualized.

⁶As of June 30, 2023

⁷As of June 30, 2023

GIPS® Composite Report

RBC GAM Canadian Fixed Income - Core Plus (PH&N IM)

Inception date: July 1, 2013

Benchmark: FTSE Canada Universe Bond Index

Currency: CAD

Annual returns

Year end	Composite gross return (%)	Benchmark return (%)	Composite 3 yr std dev (%)	Benchmark 3 yr std dev (%)	Number of portfolios	Internal dispersion (%)	Composite assets (millions)	Firm assets (millions)
YTD 2023	3.02	2.51	6.38	6.19	2	0.02	11,552.7	548,509.2
2022	-11.20	-11.69	6.78	6.47	2	0.01	10,460.3	521,320.7
2021	-1.85	-2.54	4.85	4.70	2	0.03	10,083.8	608,286.9
2020	13.44	8.68	4.38	4.19	2	0.04	8,315.8	5.4
2019	6.90	6.87	3.60	3.57	2	-	6,062.6	469,295.9
2018	1.52	1.41	3.57	3.38	1	-	3,660.8	417,728.2
2017	3.80	2.52	4.43	4.22	1	-	2,791.9	417,179.7
2016	4.30	1.66	4.08	3.98	1	-	1,848.0	388,749.0
2015	3.95	3.52	n/a	n/a	1	-	1,461.1	383,256.3
2014	9.59	8.79	n/a	n/a	1	-	604.8	350,938.5
2013/7 - 2013/12	1.03	0.50	n/a	n/a	1	-	254.2	314,414.4

n/a = not applicable, Std dev = Standard deviation, SI = Since inception

Description of the Firm: For the purposes of Global Investment Performance Standards (GIPS®), RBC Global Asset Management is the asset management division of Royal Bank of Canada (RBC) operating under the following brands: RBC Global Asset Management (RBC GAM) in Canada, the U.S. (institutional), the U.K. and Hong Kong; PH&N Institutional; and BlueBay Asset Management (institutional). With offices around the world, RBC GAM offers a full range of global investment solutions in cash management and fixed income, equity, balanced, alternative, and specialty investment strategies through mutual funds, hedge funds, pooled funds and separately managed accounts. The RBC GAM group of companies has more than C\$521 billion (US\$385 billion) in assets under management as of December 31, 2022. RBC purchased Phillips, Hager & North Investment Management, including the assets of BonaVista Asset Management, on May 1, 2008, and BlueBay Asset Management on December 17, 2010. RBC GAM's lists of composite descriptions, limited distribution pooled fund descriptions and broad distribution pooled funds are available upon request.

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Composite Description: This composite includes portfolios which invest in government bonds, investment grade corporate bonds, mortgages, North American high yield bonds, global high yield bonds, and emerging market debt (including sovereign hard currency, sovereign local currency, and corporate debt). The duration range of the portfolios will be equal to the benchmark plus or minus 1 year. Derivative usage for the purpose of leverage, in aggregate but excluding leverage within all underlying absolute return strategies is restricted to 1.25x.

Benchmark: FTSE Canada Universe Bond index.

Gross of Fees: Gross-of-fee returns are presented prior to the deduction of management fees, but after the deduction of brokerage commissions and applicable non-resident withholding taxes paid.

Performance Calculations: Results are based on all fully discretionary accounts meeting the composite definition, including those accounts no longer with the firm. Returns are shown in Canadian Dollars, and include the reinvestment of all income. Additional information regarding policies for valuing investments, calculating performance, and creating GIPS® Reports is available upon request. Past performance is not indicative of future results.

Composite Dispersion: The composite dispersion of annual returns is indicated by the performance of individual accounts representing the equal weighted standard deviation of returns. Dispersion of returns is calculated for portfolios included in the composite for the full year. Calculations are based on gross portfolio returns if gross composite returns are presented. If only net composite returns are presented, then net portfolio returns are used in the composite dispersion calculation.

3-Year Standard Deviation: Periods with less than 3 years of data will show "n/a". Calculations are based on gross composite returns, if gross composite returns are presented. If only net composite returns are presented, then net composite returns are used in the calculation.

Derivatives, Leverage and Short Positions: As part of its investment strategy, a portfolio included in this composite uses derivatives, such as futures, currency forwards, and options, for hedging purposes to protect against losses from changes in interest rates and market indices. All futures positions are backed by assets, so that there is no leverage from using these strategies. Currency forwards are used to remove the risk of currency exposure when taking a position in a foreign bond market. Options are used to improve the yield of the portfolio or to implement a view on interest rate moves.

Fee Schedule: The standard management fee for portfolios in the mandate is 0.45% on first 10M/0.35% on next 10M/0.25% on next 480M/0.20% on amounts over 500M. This may not necessarily represent the actual fee charged. Limited distribution pooled fund unitholders MERs (%) are as follows for 2020: PH&N Core Plus Bond Fund: 0.04. This may not represent the actual MER charged.

Creation Date: This composite was created on September 30, 2013.

Composite History: For the period of July to September 2013 this composite only contained seed capital from RBC GAM. From October 2013 onwards this composite contains client funds.

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