2021 value of behaviourally informed financial advice study

Can behavioural economics improve outcomes for clients?

A study on the value of behaviourally informed financial advice

Some types of advice are more likely to be sought out and followed than others. When you're sick, you're likely to seek out medical advice and then follow your doctor's instructions—after all, your health is at stake. If you're building a house, you'll probably heed the advice of an architect, as your family's safety is at stake.

Interestingly, we tend to see much more hesitancy when it comes to seeking and following the advice of financial professionals. Only about half of Canadians seek advice from an advisor[1] and, as we'll show later on, not all the advice they're given is followed. This is somewhat counterintuitive, as the advice of a financial professional can be immensely helpful when making complex and risky financial decisions that have enduring consequences for your future. So much so, in fact, that studies have shown that investors who receive professional advice enjoy a level of wealth that is almost four times higher after 15 years than investors without advisors.[2]

However, despite its apparent value, many people fail to seek out and follow professional financial advice. Why? Today, we have access to more information at the touch of our fingers than could have been imagined a generation ago. While empowering, this can lead to a do-it-yourself overconfidence, which, in the case of financial investments, can have serious and enduring negative consequences that only become evident many years into the future. Such problems arise because people continuously underestimate how difficult it is to critically analyze, synthesize, and evaluate all available information to properly guide our decisions.

Despite its apparent value, many people fail to seek out and follow professional financial advice.

With this in mind, we sought to determine if we could draw on behavioural economics (BE) principles to increase the likelihood of following professional financial advice, to improve potential financial outcomes for those who do seek it out, and to transform the investor-financial professional relationship, improving outcomes for both parties. In that spirit, Manulife Investment Management commissioned BEworks to design and execute a study to answer these questions.

We begin with a brief discussion of the behavioural biases that likely prevent investors from appreciating the value of professional advice, adhering to recommendations, and achieving better outcomes. We then turn to an outline of the experiment we conducted, followed by the key results from that experiment. Finally, we conclude by presenting our behaviourally informed recommendations that financial professionals can use to improve outcomes for investors.

[1] "The Canadian Financial Capability Survey," www.canada.ca/en/financial-consumer-agency/programs/research/canadian-financial-capability-survey-2019.html, 2019.
[2] "The Gamma Factors and the Value of Financial Advice," http://aeconf.com/Articles/May2019/aef200115.pdf, 2019.

Basics of BE

To understand why people don't always make decisions in their best interests, such as the use of professional financial advice, we can turn to BE, a field of research that aims to understand why people make the decisions that they do. BE seeks to unpack the social, cultural, psychological, and emotional factors that influence people's attitudes and beliefs and, ultimately, their behaviours.

A traditional economics approach assumes that people always use the information available to them to make rational decisions; that is, decisions that would result in the best possible outcome for themselves. Given the demonstrated value of professional financial advice, this approach would predict that people would consistently seek and follow advice.

A BE approach, on the other hand, acknowledges that we don't always behave rationally, as we don't approach every decision with thorough analysis. Humans rarely have the time, energy, or resources to search information exhaustively, weigh every variable, and double-check the answers. Because of this, people often seek a decision that may be good enough given the effort they want to expend, but may not be ideal at all. While we may sometimes carefully analyze certain decisions—for example, when deciding what car to buy or university to attend—for most of our decisions, we rely on a combination of intuition, prior experience, and mental shortcuts. Unfortunately, we're not perfect at separating decisions for which we should carefully consider alternatives from decisions for which we should just follow our gut.

But while our reliance on these mental shortcuts simplifies our decision-making process, making everyday decisions quicker and easier, it also makes us vulnerable to behavioural biases, which can cause undue harm. While there are many biases that have been thoroughly researched and validated over almost 50 years of research (many of which we've written about in previous articles), we hypothesized that certain ones would have disproportionate effects in the context of investment decision-making. What follows is a brief overview of the most prominent biases we believe are likely to play a role.

1. **Overconfidence: The tendency for individuals to overestimate their knowledge and skills, particularly if their overconfidence is unfounded.** Overconfident investors have an unhealthy belief in their own ability to predict market outcomes and rose-coloured self-belief that they can avoid the mistakes and pitfalls that happen to other investors. They're likely to overtrade, be careless, neglect risk, and are less willing to follow advice.[3]
2. **Illusion of control: The tendency for individuals to believe they can exert control over essentially random outcomes.** In the context of investment decision-making, this bias inflates how much control investors feel they have over unpredictable events, such as future market performance. Those with higher levels of illusion of control bias believe that they can consistently pick the best investments at the best time.
3. **Representativeness: The tendency to believe that current conditions will continue indefinitely.** As humans, we tend to focus too much on current conditions without considering how they might change in the future. In investment decision-making, this bias manifests in the belief that current market conditions will continue well into the future, without consideration of risks that might lead to vastly different returns.
4. **Loss aversion: People's excessive sensitivity to the risk of losses.** The emotional discomfort of losing money far exceeds the pleasure of winning an equal amount. This leads people to ignore the possibility of gains and to focus too much on the possibility of losses. Excessive loss aversion may lead to overallocation to low-risk, low-return investments with a corresponding long-run failure to achieve sufficient returns and achieve financial goals.

The powerful influence of these four biases may override the advice provided by financial professionals, leading investors to disregard that advice or to not seek it out at all. Fortunately, the biases are also large and systematic enough to allow us to predict people's behaviour. This predictability allows us to leverage these biases to nudge people toward better choices and outcomes by intelligently designing a landscape of environmental and internal factors that shapes how our choices play out.

People often seek a decision that may be good enough given the effort they want to expend, but may not be ideal at all.

[3] "The perils of overconfidence: Why many consumers fail to seek advice when they really should," https://www.researchgate.net/publication/326159371_The_perils_of_overconfidence_Why_many_consumers_fail_to_seek_advice_when_they_really_should, 2018.

Our experiment

Simulating investment portfolios

We recruited a random online sample of 2,991 North American consumers to take part in an online, simulated investment decision-making exercise. Participants were instructed to invest a hypothetical CAD$250,000 to achieve the best returns at the end of five years (see Appendix 1). They were offered a cash prize of CAD$100 for the best portfolio returns to closer approximate real-life decision-making and encourage thoughtful engagement.

To help participants construct their portfolios, we presented them with a realistic list of 36 mutual funds from the Morningstar database, disguising the actual funds with generic names (e.g., U.S. Equity Fund). The available funds included both high and low returns as well as high and low volatility, and we categorized them as equity, fixed-income, and money market funds with both domestic and international exposure. We also presented real historical risk and return data. Since the participants were unaware that the data was true data from five years ago, once they made their selections, we were able to instantly calculate the true portfolio performance over the course of five years.

BE communication tactics

Each participant was randomly assigned to one of six experimental conditions. Although all participants received the same asset allocation advice—recommending that they allocate 60% of their hypothetical portfolio to equity, 30% to fixed income, and 10% to money market—the language used to deliver the advice to the participant was altered so we could study the effects of different styles of behaviourally informed advice. Our behaviourally informed communication conditions were crafted with the aim of overcoming the aforementioned biases, in addition to avoiding information overload.

Financial advice communication techniques

Basic asset allocation advice (control)

Prepared in collaboration with three CFA charter holders and three behavioural economists at BEworks and staff at Manulife Investment Management. Used as a control condition, it was considered to be the most basic financial advice that a financial professional would offer, and it was delivered in a very plain manner, mostly focused on providing information and education.

Simply directive

We emphasized certain information most relevant for investment decisions and actions, therefore reducing the risk of information overload and decision paralysis.

This condition formed the foundation on which all other BE tactics were layered; that is, all the other experimental conditions used both the simply directive advice and the particular behaviourally modified advice.

Leverage expertise

This condition sought to leverage the assumed human tendency to trust and follow the advice of authorities or experts in their field. This tactic is often used in the real world: If you've ever seen a commercial that told you that "Four out of five dentists recommend...," then you've been subjected to an appeal to expertise.

In our experiment, this condition highlighted what financial experts would normally advise in the participant's situation, relying on expected deference to experts and authority.

Example: "Expert investors with a 5-year time horizon have an asset allocation of 60% equity, 30% fixed income, and 10% money market."

Integrated BE

This condition fused elements from several of the conditions above to achieve the additive effect of addressing the individual biases.

Social norms

People's reference groups (e.g., friends, family, and others like them) are often the strongest influence on behaviour; people like to do what others like them are doing. If you've ever chosen to eat at a restaurant because you saw that it had lots of other diners, then you've been subjected to the concept of social proof.

This condition framed recommendations as common for people in the peer group or community of the investor, the idea being that leveraging social proof helps investors feel safe and more comfortable with the investment recommendations.

Example: "Most Canadian investors follow an asset allocation of 60% equity, 30% fixed income, and 10% money market."

Extremeness aversion

In situations in which they're presented with several choices, people have the tendency to avoid extremes, preferring middle-of-the-road options.[4]

In this condition, we leverage this bias by framing investment recommendations as a comfortable medium-level choice between the two extreme examples of either taking on too much risk and not taking on enough. Specifically, this condition was designed to concretize the recommendation of 60% equity/30% fixed-income/10 % money advice as that comfortable medium-level choice among other extreme options.

Example: "If you had a longer time horizon, for example 15 years, I might suggest you could take on more risk with an 80% equity and 20% fixed-income split that would be expected to pay off in the long-term."

We stress that the only advice offered in the videos was that of a recommended asset allocation. We consider asset allocation to be one of most basic types of advice a financial professional would normally give a client, as well as one of the most important in determining long-term financial success. Although we focused only on the asset allocation decision in this study, it could be replicated for other types of advice normally offered by financial professionals, such as stock selection, savings, and tax and estate planning.

[4] For example, see "Choice in Context: Tradeoff Contrast and Extremeness aversion," https://www.jstor.org/stable/3172740?seq=1, 1992.

The results and key findings

Each of the above conditions was intended to increase the likelihood that respondents would follow the asset allocation advice proposed in the video they saw, advice that was intended to help investors pick optimal asset allocations and, therefore, better portfolios.

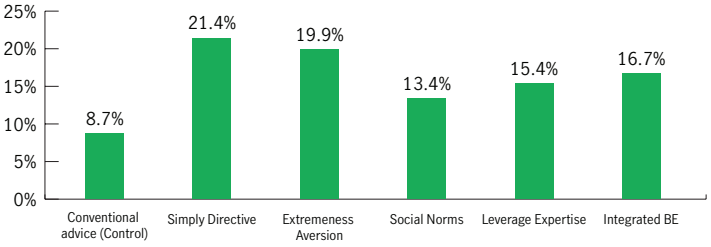
There are four main findings from our study.

1 Behaviourally modified recommendations can increase adherence to professional advice

An important finding of our research is that a significant portion of the advice given by advisors to their clients isn't followed. Only 13.2% of our respondents said they have an advisor and that they follow the advice given.

Our results reveal that, in general, participants who received behaviourally informed advice were about *twice as likely* to follow the exact recommendations given to them compared with participants who heard basic advice (i.e., the control condition). Advice with language aimed at avoiding extremes (the extremeness aversion condition) was highly effective, as was our integrated BE approach (recall that all of the BE conditions were built on top of the simply directive condition).[5]

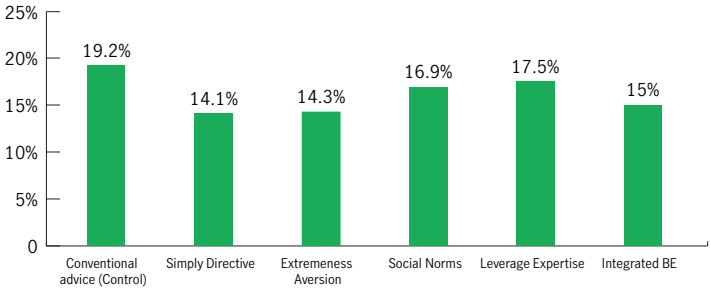
BE can help increase adherance to advice
Percent of investors who followed advisor recomendations exactly



Source: BEworks Research Institute - The Value of Behaviorally Informed Advice Study, 2021

In addition to BE advice making it more likely that investors would follow the professional advice exactly, it also lessened the average deviation from the advice; that is, investors in the control group significantly deviated from the asset allocation advice offered, on average deviating by 13% to 36% more than investors who received BE advice. Once again, the effect was particularly strong for those under the extremeness aversion and integrated BE conditions.

Absolute deviance from 60% equity recommendation



Source: BEworks Research Institute - The Value of Behaviorally Informed Advice Study, 2021

Interestingly, the one exception to this trend was the leverage expertise condition. This did not significantly increase advice adherence compared with the control, a finding that somewhat goes against the common assumption that people listen to experts. We hypothesize that this may be the case for one or more of several reasons:

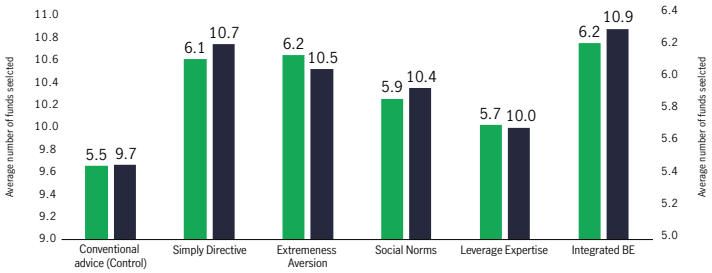
- Respondents may have disregarded the expert advice because they may have thought that they know more about investing than they actually do—or more than the experts. This may be due to overconfidence bias.
- The study may have fallen victim to reactance, meaning that participants didn't like being told what do to.
- There may have been feelings of perceived opportunism by respondents. Sometimes, reminding someone of your expertise can trigger them into thinking that you may be taking advantage of their relative lack of knowledge, so the respondents may not have fully trusted the expert advice.

[5] We note that in the leverage expertise condition, while the percentage of those who followed the advice was slightly higher than the control, the percentage was not sufficiently higher to be statistically significant.

2 Behaviourally modified advice led to greater portfolio diversification

We now turn to the question of whether behaviourally informed advice can drive investors to choose more optimal portfolios. Our results demonstrate that behaviourally informed advice led our participants to select significantly more diverse portfolios compared with our control. This diversification effect reflected in both participants' tendency to choose a greater number of funds to invest in and the selection of more diverse fund types,[6] thereby spreading risk. The number of funds and number of types of funds selected for investment was significantly greater than our control for simply directive, integrated BE, extremeness aversion, and social norms. Again, the exception was the condition that used tactics that leveraged financial professionals' authority and expertise.[7]

BE-influenced participants chose more funds and more types of funds



Average number of funds chosen (left axis)

Average number of fund types selected (right axis)

Source: BEworks Research Institute - The Value of Behaviorally Informed Advice Study, 2021

[6] See Appendix B for the list of funds separated by asset class.

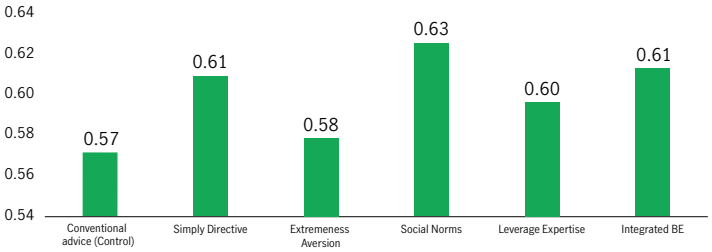
[7] While participants in that condition did have a higher average number of funds selected than the control, the differences were not large enough to be statistically significant.

3 Behaviourally modified advice led to portfolios with better risk/reward dynamics

To evaluate the risk and reward dynamics of the hypothetical portfolios our participants built, we calculated their Sharpe ratios[8] using real measures of returns and volatility of the funds the participants had chosen.

Our results indicate that since investors who heard advice rooted in BE were more likely to follow the advice given by the financial professional on asset allocation (60/30/10) and to diversify within asset classes (i.e., to choose multiple equity funds rather than just one), the portfolios they constructed had significantly superior Sharpe ratios than those portfolios created by investors in our control group. Specifically, the BE conditions that yielded the highest Sharpe ratios compared with those in the control group were social norms and the integrated BE condition. Advice that offered simple directives aimed at reducing information overload achieved marginally significant positive effects; conversely, the leverage expertise and extremeness aversion conditions didn't offer any significant Sharpe ratio improvements over the control condition.

BE can help improve portfolio risk/reward
Sharpe ratio of participants' portfolios



Source: BEworks Research Institute - The Value of Behaviorally Informed Advice Study, 2021

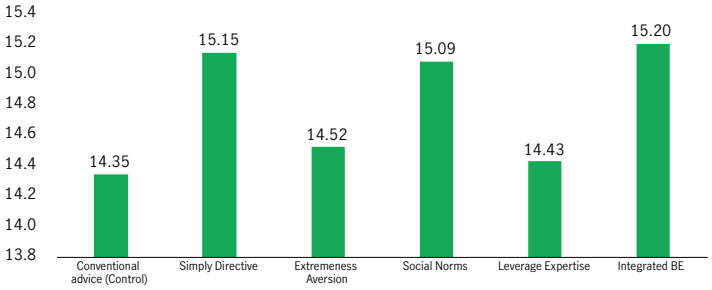
[8] Sharpe ratio is a measure of excess return per unit of risk, as defined by standard deviation. A higher Sharpe ratio suggests better risk-adjusted performance.

4 BE advice produced more favourable investor perceptions of financial professionals

Relative to typical financial advice, certain forms of BE advice delivery improved perceptions of and intentions toward financial professionals. Specifically:

- **Behaviourally informed advice increased perceptions of working with a financial professional** —In particular, participants given advice that leveraged social norms perceived the benefits of working with a financial professional as being greater than those who received traditionally formulated advice.
- **Behaviourally informed advice increased trust in financial professionals** —Simply directive and integrated BE had significantly higher trust scores than did those in the control group.
- **Behaviourally informed advice increased likelihood of consulting financial professionals in the future** —Participants who heard BE advice (in particular, simply directive, social norms, and integrated BE) reported that they were more likely to consult a financial professional for an important future financial decision.

BE can improve perceptions of financial professionals
Likelihood of consulting with an advisor in the future



Source: BEworks Research Institute - The Value of Behaviorally Informed Advice Study, 2021 The results are based on three questions regarding the likelihood of consulting with an advisor in the future, in which the participants rated the likelihood from 1 (Extremely unlikely) to 7 (Extremely likely). The Y axis is thus a restricted range of the possible values of answering 3 on all three questions to 21. The latent variable is not an average of all three but is instead a calculation based on correlations of the items and patterns between groups.

We note that tactics aimed at extremeness aversion and leveraging financial professionals' authority and expertise failed to meaningfully improve investor perceptions of financial professionals.

One important note is that while some of these numbers may seem small at first glance, these effect sizes are typical of psychological research using randomized controlled trial experiments. Moreover, we manipulated the participants in this experiment with just a five-minute recorded advice video of a fictional financial professional. The statistical significance of our results demonstrates that a real financial professional following this strategy over longer and more consistent discussion is likely to have the same positive results but with *much* stronger effects.

Conclusions and recommendations

We know that encouraging investors to seek and follow professional financial advice creates better outcomes. Our study has also revealed **that the way in which that advice is delivered** can have major outcomes for clients and financial professionals and the relationship between them. In short, incorporating BE tactics into the way financial professionals interact with their clients has the power to create tangibly superior outcomes, and, therefore, financial professionals should incorporate the insight of behavioural economics to enhance their relationship with their clients and to improve their clients' portfolios.

From a quantitative perspective, relative to typical advice, behaviourally informed communication increased clients' willingness to follow their financial professional's guidance. Clients receiving behaviourally informed advice also selected portfolios that were more diversified across and within asset classes, resulting in an improved Sharpe ratio. Significant qualitative benefits were apparent as well: Clients receiving behaviourally informed advice reported higher perceived benefits of working with a financial professional and greater trust in the financial professional. Perhaps most importantly for both financial professionals and clients, participants indicated a higher likelihood of consulting with a financial professional in the future.

In general, the benefits were greatest for individuals who received simplified directives aimed at overcoming choice overload and advice that appealed to social norms (i.e., by framing financial professionals' recommendations as something already being widely followed by people like them), as well as those who received the integrated BE advice, which combined multiple behavioural tactics. This research therefore provides solid evidence-based recommendations for tactics that financial professionals can use to boost clients' perceptions of their value as a financial professional, improve adherence to their advice, and optimize clients' financial outcomes.

Given this, we set out the following recommendations.

1. Focus on delivering advice that cuts through to a small number of key points, rather than providing clients with information that's not immediately relevant. Somewhat counterintuitively, giving clients too much information may confuse them and turn them off investing in general.
2. Contextualize advice with respect to the desired goals and behaviours of the community that clients would identify as their peer group (e.g., fellow medical practitioners, friends and neighbors; in other words—don't be afraid to leverage social norms.
3. Consider the context and present the ideal choice as being in the middle of less optimal alternatives. The ideal choice might be the optimum between one with low risk but insufficient returns and another with high returns but excessive variance and risk.
4. Steer away from relying on the persuasive power of your expertise or authority. Our findings show that this has the potential to backfire.
5. Ideally, leverage this insight with an integrated approach that simultaneously overcomes as many of the biases as possible.

One critical point to reiterate is that while some of the numerical improvements noted above (e.g., number of funds chosen or likelihood to consult with a financial professional in the future) may seem small, **the fact that we saw statistically significant results with just a few small word changes in a five-minute video that only touched on asset allocation speaks volumes**. As we know, conversations with financial professionals are normally much longer than five minutes, are recurring rather than a one-off, and include many types of advice such as stock selection, savings, tax, and estate planning. Considering this, we're confident that if financial professionals were to leverage the techniques mentioned above in all their ongoing conversations with clients, we'd see even *stronger* results.

Admittedly, these recommendations encompass merely a *fraction* of the behavioural tactics that can help financial professionals convey the value of their services and improve outcomes for their clients. The rigorous experimental approach of this research reveals important insight regarding which tactics will be effective and which should be avoided. Understanding the variety of cognitive factors at play should form a crucial part of any financial professional's approach to helping his or her clients. While this study provides the reasoning behind incorporating BE into your interactions with clients, in order to learn how to incorporate the tactics described above, we suggest taking the "Behavioural economics for financial professionals" training course.

If there's one lesson to be learned from our research, it's that financial decision-making and perceptions of advice are complex and shaped by a diversity of psychological biases. One thing is clear: When financial professionals and clients work collaboratively and in a trustful manner, the benefits are limitless.

Incorporating BE tactics into the way financial professionals interact with their clients has the power to create tangibly superior outcomes.

Appendix A

Instructions given to our experimental investors

"Imagine that you have recently inherited $250,000, and you have decided to invest that money for the next five years. You will want to maximize the amount of money that will be available and yet you will not want to risk losing it as well. You will choose your investments from a list of mutual funds. You will be asked to indicate how much of the total you would allocate to any or all the funds. Your allocation will determine your return on your investments.

"To assist you in your decisions, you will be shown a video below on current topics related to investment decision-making. You will then see a list of investment options to choose from, categorized by fund type. You will indicate (as a percentage value) how much of your $250,000 investment you would allocate towards each of the presented mutual funds. You can allocate funds to one, a few, most, or even all the available mutual funds depending on your preference. The only constraint is that the total allocated must equal 100%.

"Please take your time as if you were making a real decision with your own money and therefore assuming real risk. Please imagine that these are real investment funds. At the end of the investment decision-making exercise, we will ask you some questions regarding the details of the available investments to determine whether you considered the options carefully. We will also be able to calculate the performance of your portfolio from the funds you select. To make this more interesting, there will be a prize of $100 awarded to the respondent who creates the best investment portfolio."

Appendix B—fund options

Disguised Fund Name	3 Yr Standard Deviation	1 Year	3 Year	5 Year
Canadian Equity				
Canadian Companies: Large-cap securities.	7.00	1.04	14.00	11.52
Canadian Growth: Long-term capital growth.	5.85	1.98	12.04	8.65
U.S. Equity				
American Growth: Long-term capital growth.	18.32	35.22	26.92	23.30
Nasdaq Index: Large non-financial companies.	11.77	26.87	26.93	22.95
U.S. Growth: Long-term capital growth.	18.34	32.16	24.00	20.47
Global Equity				
Global Technology: Long-term growth.	13.19	33.13	27.14	19.40
Global Portfolio: Global equity securities.	9.05	19.65	25.00	18.28
Entertainment and Communications: Long-term capital appreciation.	11.36	22.81	24.35	20.25
Global Growth: Diversified non-Canadian equities.	17.13	22.18	22.98	15.87
Asia Pacific Equity				
Asian Equity: Asian-pacific companies.	10.59	13.79	15.31	6.29
Indo-Pacific: Indo-pacific region companies.	10.76	2.53	15.96	7.89
Asia USD: Under-valued Asian equities.	8.46	-1.10	11.96	6.12
Australasia: Asia and Pacific rim companies.	13.61	8.38	13.38	5.62
Real Estate Equity				
Global Real Estate: High total investment from real estate.	13.43	23.49	16.02	12.26
Real Estate: Investment in real estate companies.	10.10	11.69	16.87	13.18
Real Estate Investment Trust: Quarterly real estate income distributions.	7.95	9.81	8.62	14.43
Residential and Commercial: Regular current income.	9.24	6.36	4.93	8.84
Real Estate Securities: Global entities engaged in real estate.	15.40	22.47	16.03	13.63
Canadian Fixed Income				
Canadian Bonds: Income with capital preservation.	2.65	4.36	3.61	4.65
Bond Fund: High income bonds and debentures.	4.27	4.14	2.33	3.04
Global Fixed Income				
US Bond: US Dollar denominated Canadian bonds.	10.21	21.41	9.66	5.92
Corporate Global: Investment and non-investment grade bonds.	9.10	20.28	12.19	8.74
Global Fixed Income: Global bonds.	2.18	2.30	1.04	1.92
Global Bond: International fixed income.	9.01	15.58	5.93	4.28
High Yield Fixed income				
Emerging Markets: High yield emerging markets debt.	8.36	20.12	11.94	9.60
American High Yield: Lower quality US fixed income.	8.19	18.72	13.92	10.67
Emerging Markets Bond: Government debt securities.	8.36	19.34	11.20	8.87
Canadian Money Market				
Cash Management: Income with liquidity.	0.10	1.08	1.14	1.15
Savings: Current income with capital preservation.	0.03	0.91	0.97	0.96
Canadian Money Market: Income, capital preservation and liquidity.	0.04	0.97	1.06	1.07
Money Market: High liquidity.	0.00	0.10	0.10	0.10
Short Term Income: Higher income short term duration.	1.32	-0.87	-0.22	-0.10
U.S. Money Market				
US Money Market U$: US money market securities in US dollars.	8.64	20.48	10.81	5.10
US Money Market: Canadian money market securities in US dollars.	8.64	19.88	10.53	5.01
Premium US Money Market: Money market with currency diversification.	8.64	19.90	10.52	5.02
Short Term Corporate: Shorter term corporate debt securities.	8.64	19.70	10.36	4.90

Manulife Investment Management

About BEworks

BEworks's goal is to serve as pioneers in the field of behavioral science. Carefully applied, this discipline can unlock consumer's needs, motivate teams with purpose, and empower leaders to drive with aspiration. The firm distinguishes itself with its rigorous commitment to evidence-based insights and cutting-edge scientific methods.

Today, BEworks has the world's largest team of experts in behavioral science. All practitioners are accomplished researchers, hold advanced graduate degrees, and have extensive experience in applying BE to complex strategic, marketing, operational, and policy challenges. BEworks is a global consultancy, training Academy, and Research Institute. The company is headquartered in Toronto, Canada and supports firms and government agencies throughout North America, LATAM, EU, and Japan.

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