



# Investment Management Process

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## Introduction

This white paper discusses the various tasks and processes employed by Link Plan Management (LPM) regarding the research and construction of portfolios for plan members. Our principal goal is to ensure the risk profile of a plan member is properly matched to a diversified investment portfolio which will assist them in realizing their investment objectives and financial goals.

Plan participants have two portfolio options available to them. The first is a customized solution tailored to a plan members' unique risk tolerance, time horizon and investment objectives. The portfolio is constructed based on responses to Links' proprietary investor profile questionnaire that the plan member completes. All of Links' questionnaire-based portfolios use low-cost, Index-Tracking Exchange Traded Funds (ETFs) or Mutual Funds (MFs) and are rebalanced on a regular basis to ensure a plan members' asset allocation stays consistent with the risk profile established during the onboarding phase. In the Multi-Employer Pension Plan (MEPP defined contribution plans), the second option, or the default option, is a Target Date Fund managed by Blackrock Canada. If a plan member does not wish to participate in the questionnaire, their contributions will be invested in the Target Date Fund within 30 days of enrollment.

Links' Portfolio Management process consists of the following steps:

- Establishing an Asset Allocation Strategy
- Determining Which Asset Classes to Use
- Selecting ETFs to Use in the Portfolios
- Determining a Plan Participants' Risk Profile and Investment Objectives
- Ongoing ETF Monitoring and Portfolio Rebalancing

## Asset Allocation – The Foundation

Over the past 40 years, research has shown that asset allocation, how you spread investments across different asset classes, is the primary determinant of a portfolio's risk and return. The landmark 1986 paper *Determinants of Portfolio Performance* by Brinson, Hood and Beebower, concluded that asset allocation accounts for ~94% of a portfolio's total return and volatility over time. Subsequent studies by Ibbotson and Kaplan (2000) and The Vanguard Group (2007, 2012 and 2017) confirmed these findings. Link believes that investing in multiple asset classes helps reduce portfolio volatility (risk) and better positions the investor for long-term success. This concept was first introduced in 1952 by Harry Markowitz and serves as the foundation for Modern Portfolio Theory (MPT). MPT states that optimal portfolios can be created by considering the relationship between risk and return and proposes that it is possible to construct a portfolio that maximizes expected return for a given level of risk. Mr. Markowitz and William Sharpe received the Nobel Prize in Economics in 1990 for their research and today MPT is the most widely used and accepted framework for constructing diversified investment portfolios.

Link portfolios will allocate investments in the major asset classes of Cash, Fixed Income and Equity. The fixed income and equity asset classes will have extra sub-classes to help diversify portfolios.

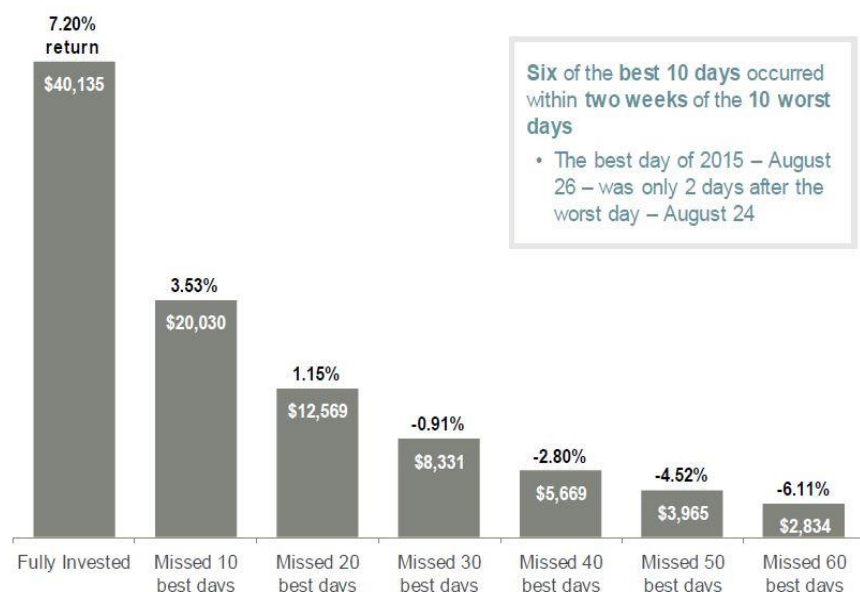
## Asset Allocation Strategies

Asset allocation strategies typically fall into two categories, Strategic and Tactical.

**Strategic Asset Allocation (SAA)** is a strategy that sets target percentage allocations for various asset classes and periodically rebalances the portfolio back to the original allocations. A SAA strategy does not involve market timing, and it helps protect investors from the emotion of investing in equity markets. For example, during a market decline an emotional decision would be to sell equities in a portfolio and go to cash out of fear of further declines. This is well known to be a poor decision as the two graphics below illustrate (two different time periods to show consistency of performance - Jan 1998 to Dec 2017 and July 2004 to July 2024). Assuming an average of 252 trading days per year, **the return for the portfolio below is reduced by 70 to 80% by missing only 0.4% of the trading days (best 20).** This is an excellent example that supports the phrase "time in the market, not timing the market".

### Returns of the S&P 500

Performance of a \$10,000 investment between January 1, 1998 and December 29, 2017



#### PLAN TO STAY INVESTED

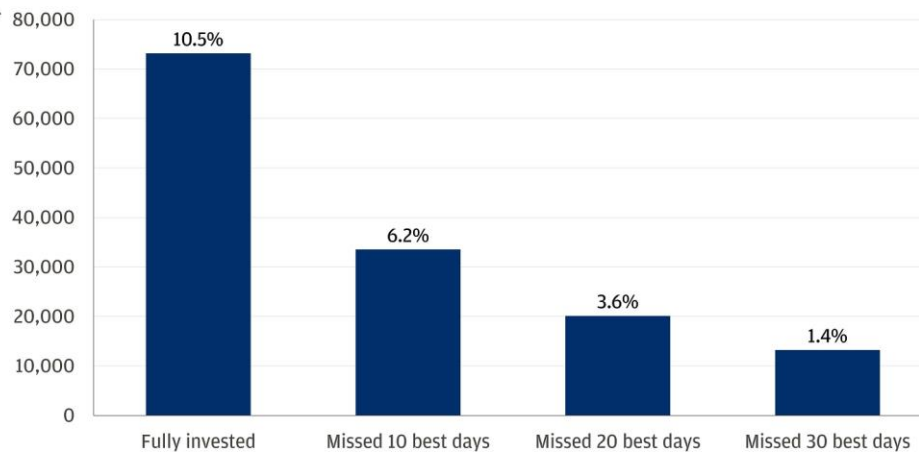
Trying to time the market is extremely difficult to do. Market lows often result in emotional decision making. Investing for the long term while managing volatility can result in a better retirement outcome.

Source: J.P. Morgan Asset Management analysis using data from Bloomberg. Returns are based on the S&P 500 Total Return Index, an unmanaged, capitalization-weighted index that measures the performance of 500 large capitalization domestic stocks representing all major industries. Indices do not include fees or operating expenses and are not available for actual investment. The hypothetical performance calculations are shown for illustrative purposes only and are not meant to be representative of actual results while investing over the time periods shown. The hypothetical performance calculations for the respective strategies are shown gross of fees. If fees were included returns would be lower. Hypothetical performance returns reflect the reinvestment of all dividends. The hypothetical performance results have certain inherent limitations. Unlike an actual performance record, they do not reflect actual trading, liquidity constraints, fees and other costs. Also, since the trades have not actually been executed, the results may have under- or overcompensated for the impact of certain market factors such as lack of liquidity. Simulated trading programs in general are also subject to the fact that they are designed with the benefit of hindsight. Returns will fluctuate and an investment upon redemption may be worth more or less than its original value. Past performance is not indicative of future returns. An individual cannot invest directly in an index. Data as of December 29, 2017.

**J.P.Morgan**  
Asset Management

## Performance of the S&P 500: Missing Best Days

Annualized performance of a \$10,000 investment from July 2004 through July 2024



Source: J.P. Morgan Asset Management analysis using data from Morningstar Direct. Returns are based on the S&P 500 Total Return Index, an unmanaged, capitalization-weighted index that measures the performance of 500 large capitalization domestic stocks representing all major industries. Past performance is not indicative of future returns. An individual cannot invest directly in an index. Analysis is based on the J.P. Morgan Asset Management Guide to Retirement. Data as of July 31, 2024.

**Tactical Asset Allocation (TAA)** is an active strategy that seeks to adjust the SAA of a portfolio based on forward-looking market forecasts. Portfolio managers will attempt to add value by taking advantage of certain situations in the marketplace by overweighting (or underweighting) asset classes they expect to outperform/underperform over some future time frame. A successful TAA strategy relies heavily on a managers' ability to model upcoming economic and market events and successfully execute an appropriate trading strategy. A study by Vanguard in 2022 – Portfolio Construction Framework by Vanguard's Investment Strategy Group showed that over all time periods, TAA strategies have not produced statistically significant excess returns to SAA strategies.

All Link portfolios will utilize a Strategic Asset Allocation strategy.

### Asset Classes

Link will provide participants with exposure to the following asset classes in their portfolios, determined by the risk profile that has been assigned to them.

First, a brief note on currency-hedging. As Link is not a tactical investment manager, we do not hedge currency. Changes to the CAN/US or CAN/Euro exchange rates will affect investment returns depending on whether the CAN dollar strengthens or weakens against said currency. By making a conscious decision to hedge, Link is in effect "making a call" on the direction of exchange rates. This does not fit into our overall philosophy, which is long-term, index-tracking portfolio construction and as such we will not make these tactical decisions. Portfolios will only include unhedged ETFs whenever possible.

### Cash

Cash represents investments in highly liquid, risk-free, short-term securities of 12 months or less. Cash does not exist in a portfolio to drive growth, rather it acts as a cushion for volatility and downside that exists throughout the rest of the portfolio. Cash allocations will be higher for the more risk-averse portfolios. Cash balances will be invested in a high interest savings fund to receive a yield.

### Canadian Bonds

Represented by the Bloomberg Barclays Global Aggregate Canadian Government/Credit 1–5-year Float Adjusted Bond Index. This Index measures the investment return of investment-grade securities issued in Canada—including government, government-related and corporate products—all with maturities between one and five years.

### US Bonds (CAD \$ Hedged)

Represented by the Bloomberg Barclays U.S. Aggregate Float Adjusted Bond Index (CAD Hedged). This Index is market-capitalization-weighted and represents a wide spectrum of public, investment-grade and taxable fixed income securities in the U.S. It includes government, corporate and international dollar-denominated bonds, as well as mortgage-backed and asset-backed securities, all with maturities of more than one year.

### International Bonds (CAD \$ Hedged)

Represented by the Bloomberg Barclays Global Aggregate ex-USD Float Adjusted RIC Capped Index (CAD Hedged). This Index is market-capitalization-weighted and represents a wide spectrum of the global investment-grade, fixed rate, and fixed income markets outside the U.S., all with maturities of more than one year.

### Canadian Stocks

Represented by the S&P/TSX Composite Index. This Index has provided investors with a premier indicator of market activity for Canadian equity markets since its launch in 1977. With approximately 95% coverage of the Canadian equities market, it is the primary gauge for Canadian-based, Toronto Stock Exchange listed companies.

### US Large Cap Stocks

Represented by the S&P 500 Index. Launched in 1957, the S&P 500® Index is widely regarded as the best single gauge of large-cap U.S. equities. The index includes 500 leading companies and captures approximately 80% of available market capitalization.

### US Mid Cap Stocks

Represented by the S&P Midcap Index. This Index has provided investors with a benchmark for mid-sized companies (market cap between US\$2 and \$10 billion) since June 18, 1991.

### International Stocks

Represented by the MSCI EAFE Investable Markets Index (IMI) 100%, which captures large, mid and small cap representation across 21 Developed Markets around the world, excluding the US and Canada. With 2703 constituents, the index is comprehensive, covering approximately 99% of the free float-adjusted market capitalization in each country.

### Emerging Markets Stocks

Represented by the MSCI Emerging Markets Investable Markets Index, which captures large, mid and small cap representation across 24 Emerging Markets countries. With 1206 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.

## Volatility

In the investment industry, volatility is denoted by the statistical measure of standard deviation, which describes the variation of an investment's return around its average or some prior time-period, typically 10 years. Historically, investments with higher standard deviation have produced higher returns as investors require higher compensation for taking on more risk.

Each of the above asset classes have their own unique risk/return characteristics. As plan participants take on more risk, asset classes with historically higher risk (standard deviation) are added to their portfolio.

The following table summarizes the asset classes plan participants will have exposure to, which is dependent on the risk profile they fall into. Ten-year standard deviation (risk) data is included as well:

| Major Asset Class   | Sub-Asset Class | 10-Year Standard Deviation | Risk Profile |         |        |          |      |
|---------------------|-----------------|----------------------------|--------------|---------|--------|----------|------|
|                     |                 |                            | Low          | Low/Med | Medium | Med/High | High |
| <b>CASH</b>         | Cash            | 0.48%                      | yes          | yes     | yes    | no       | no   |
| <b>FIXED INCOME</b> | Canada          | 1.92%                      | yes          | yes     | yes    | yes      | yes  |
|                     | US              | 7.11%                      | yes          | yes     | yes    | yes      | no   |
|                     | International   | 7.11%                      | yes          | yes     | yes    | yes      | yes  |
| <b>EQUITIES</b>     | Canada          | 13.01%                     | yes          | yes     | yes    | yes      | yes  |
|                     | US Large Cap    | 13.10%                     | yes          | yes     | yes    | yes      | yes  |
|                     | US Mid Cap      | 14.96%                     | no           | no      | yes    | yes      | yes  |

|  |                  |        |     |     |     |     |     |
|--|------------------|--------|-----|-----|-----|-----|-----|
|  | International    | 11.92% | yes | yes | yes | yes | yes |
|  | Emerging Markets | 12.93% | no  | no  | no  | yes | yes |

Table prepared by Link Plan Management. Data are as of April 30<sup>th</sup>, 2025 and provided by Morningstar, S&P Dow Jones, MSCI and FTSE Russell. Index representation is as follows: Cash (CIBC WM 91 Day Treasury Bill), Canada Fixed Income (FTSE TMX Canada Short-Term Bond), US Fixed Income (Bloomberg Barclays US Aggregate Bond Total Return CAD-Hedged), International Fixed Income (S&P International Sovereign Ex-U.S. Bond CAD-Hedged), Canada Equity (S&P/TSX Composite Total Return), US Large Cap Equity (S&P 500<sup>®</sup> Total Return), US Mid Cap Equity (S&P Midcap 400<sup>®</sup> Total Return), International Equity (MSCI EAFE IMI), Emerging Markets Equity (MSCI Emerging Markets IMI).

## Correlation

In portfolio management, correlation refers to the degree with which two investments move in relation to one another and is represented as a number between -1.0 and +1.0. If two securities exhibit a -1.0 correlation they are said to be perfectly negatively correlated, where a +1.0 correlation results in perfect positive correlation. A correlation of 0 between two investments signifies no meaningful correlation exists.

Link portfolios provide exposure of up to six equity sub-classes, which over the past 20 years have shown an increasing correlation to each other as the table below shows. For example, the correlation between U.S. Large and Small Company stocks has gone from 0.62 in 1995-2000 to 0.95 currently. As markets become more global and interconnected, portfolio diversification will be most effective at the major asset class level (Cash vs. Fixed Income vs. Equity).

Diversifying a portfolio's equity weighting by sub-classes still provides value because while correlation measures the extent that two investments “move together”, it does not describe the magnitude of the relationship. As an example, in 2024 the Vanguard Mid-Cap ETF and the Vanguard Small-Cap ETF displayed a positive correlation of 0.97, they moved in the same direction 97% of the time. However, the return numbers tell a different story with the Mid-Cap ETF returning 10.56%. From one year to the next it is very difficult to predict which sub-asset class will be the top performer so having exposure to many of them is a prudent strategy.

## Investment Strategy – Why Indexing?

Index investing was first made available to U.S. investors in 1976, and since then has seen incredible growth. This is primarily due to its long-term performance and the inability of active managers to consistently outperform their benchmark indices.

Indexing is a passive investment strategy commonly known as “buy and hold”. By contrast, an active investment strategy attempts to provide investors with superior risk-adjusted returns by actively buying and selling securities. Indexing has many advantages over an active management strategy such as diversification, simplicity and potential for tax efficiency. However, the most significant advantage lies in the substantial difference in fees and subsequent long-term effect on a portfolios’ end value.



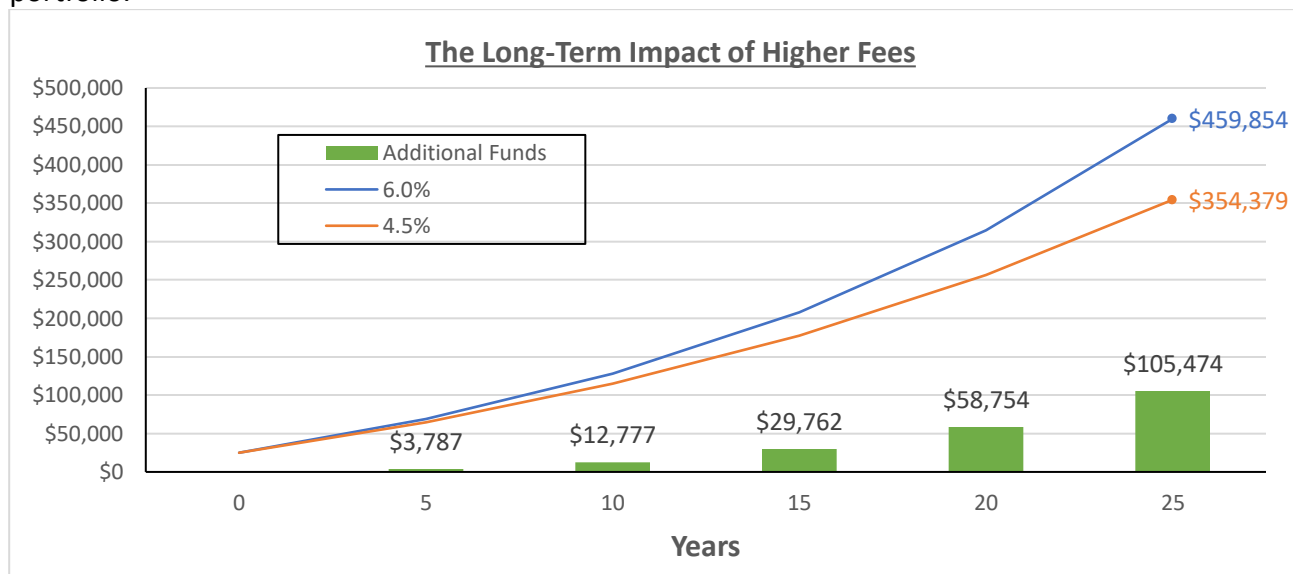
## Long-Term Impact of Lower Fees

Index funds do not seek to outperform their market; they are in fact “the market” that they track. Active managers require investment into research, personnel and trading to uncover investment opportunities and act on them. Ultimately, an active fund will carry a higher Management Expense Ratio (MER) than an index fund and over time, these higher MERs will have a profound impact on the long-term performance and value of a portfolio. The 2022 Morningstar Global Fund Investor Experience Study reported a median asset-weighted expense ratio of 1.9% for Allocation funds and 1.75% for Equity funds domiciled in Canada.

All ETFs that Link uses will carry a MER < 0.4%, considering this the following exercise illustrates the impact an extra 1.5% annual fee has on the ending value of a portfolio. For the purposes of this illustration the following variables were used:

- Starting Investment: \$25,000
- Net Annual Return (ETF): 6.0%
- Net Annual Return (Alternative): 4.5%
- Annual Fee Difference: 1.5%
- Additional Monthly Amount Invested: \$500
- Time Period: 25 years

In this example, the investor is left with an additional \$105,474 after 25 years, an increase of ~ 30% over a higher cost alternative. There is no question that fees have a significant long-term effect on a portfolio.



Graph prepared by Link Plan Management. Lines are smoothed and do not represent actual portfolio growth which will exhibit volatility.

## Active vs. Passive Performance

As the graph above shows, it can be extremely difficult in the long term for higher-fee active managers to outperform an index-tracking ETF. There is no better source to corroborate this than an

organization called S&P Indices Versus Active...or SPIVA®. Among the many publications SPIVA® produces, two of them garner much attention.

### Active vs. Passive Scorecard

Produced semi-annually, this publication reports the performance of actively managed mutual funds versus that of their benchmarks. Country-specific scorecards are available along with multiple asset class comparison data. The table below shows data for the period ending December 31<sup>st</sup>, 2024, the percentage of various actively managed U.S. & Canadian Equity funds that underperformed their respective benchmarks during the period listed.

### Percentage of Active Funds UNDERPERFORMING Respective Benchmarks

| Country     | Fund Category               | Comparison Index                   | 3-Year (%) | 5-Year (%) | 10-Year (%) | 15-Year (%) |
|-------------|-----------------------------|------------------------------------|------------|------------|-------------|-------------|
| USA & Int'l | All Large-Cap Equity        | S&P 500                            | 85.0       | 76.3       | 84.3        | 89.5        |
|             | All Mid-Cap Equity          | S&P MidCap 400                     | 74.6       | 80.0       | 77.3        | 87.5        |
|             | Emerging Markets            | S&P/IFCI Composite                 | 77.2       | 75.2       | 87.4        | 88.2        |
|             | International Funds         | S&P World Ex-US Index              | 78.1       | 81.5       | 85.3        | 88.3        |
|             | Government Long Bonds       | Barclays US Government Long        | 96.0       | 100        | 97.3        | *           |
|             | Investment-Grade Long Bonds | Barclays US Government/Credit Long | 94.1       | 90.3       | 98.4        | 97.7        |
| Canada      | Canadian Equity             | S&P/TSX Composite                  | 89.9       | 92.5       | 95.5        | *           |

Table prepared by Link Plan Management using data provided by SPIVA®. \*There is currently no data for Canadian Equity over the prior 15-Year period.

### The Persistence Scorecard

The S&P Persistence Scorecard, released twice per year, tracks the consistency of top performers over yearly consecutive periods and measures performance persistence through transition matrices. It's one thing to outperform a benchmark, it's something else to consistently do it. Out of all 508 US equity funds in the top quartile as of December 2021, **only 0.39%** managed to stay in the top quartile as of December 2023. **If you expand the time horizon to five years, the picture is worse with NO (zero) funds able to stay in the top quartile.** If we focus on lesser performance of funds that performed in the TOP HALF as of December 2019, only 3.11% were able to remain in the TOP HALF by December 2023.

## Security Selection

As discussed, the decision to use Index-tracking ETFs was heavily influenced by:

- The long-term effect of higher fees is significantly negative for an investor
- Historical underperformance of active managers

As of December 31<sup>st</sup>, 2024 there were 1542 “regular class” ETFs available to purchase in Canada (Source: Bloomberg). Reducing this list to a small selection of high-quality investments requires imposing certain criteria.

### ETF Exclusion Factors

- Non-Index Tracking (one exception being the ETF for the cash asset class)
- Single Sector Focus
  - For Stock ETFs, this includes NASDAQ-100 & Preferred Shares
  - For Bond ETFs, this includes Convertible, Floating Rate, High Yield, Senior Loan, Target Maturity, Government-only and Corporate-only
- Focus is on Alternative, Multi-Asset or Volatility Strategies
- Single Country or Region Focus (such as Asia-Pacific or Europe)
- Leveraged or Inverse Strategies
- Trades in US \$’s
- Fund Assets Under Management (AUM) < \$50,000,000
- Management Expense Ratio (MER) > 0.50%
- Trading History < 3 years. The exception being where the holdings of an ETF are a single or small basket of other ETFs with a > 3-year trading history.

From here, the Portfolio Manager incorporated several Qualitative factors, listed below, to arrive at a final recommended list.

#### Equity ETFs

Average Annual Total Return, Average Annual Volatility, Management Expense Ratio, Sharpe Ratio, R-Squared, Percentage Weight of Top 10 Holdings, Dividend Yield, Average Market Cap of Holdings, Price/Earnings Ratio, Price/Book ratio and Sector % Weightings within ETF.

#### Bond ETFs

Average Credit Quality, Effective Duration, Average Term to Maturity, Current Yield, Portfolio Percentage Weightings in Government and Investment Grade Corporate Bonds.

After a thorough process, Link arrived at a list of nine ETFs which became the building blocks of the portfolios. Note that (CAD-hedged) refers to the fact that currency risk has been removed from the

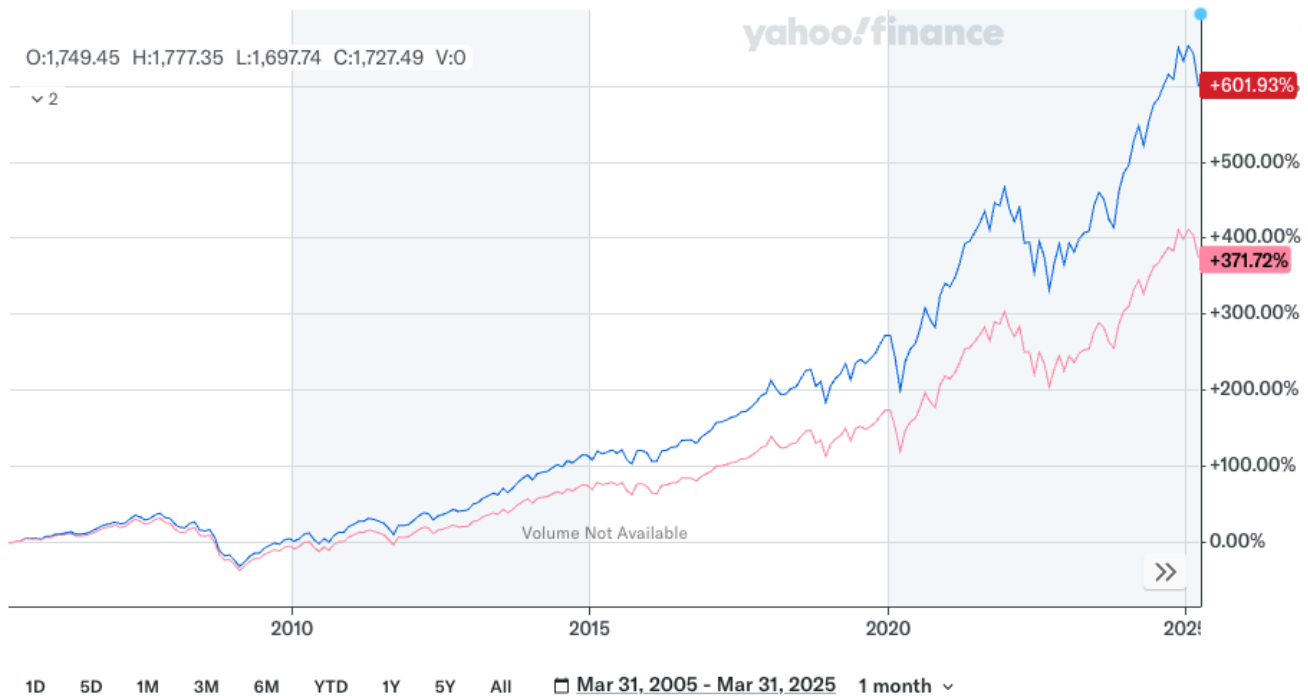
investment, which was discussed earlier. The following table summarizes the ETFs along with their Management Expense Ratio (MER).

| Major Asset Class | Sub-Asset Class  | ETF Name  | Ticker | MER (%) |
|-------------------|------------------|---|--------|---------|
| CASH              | Cash             | Purpose High Interest Savings Fund ETF                        | PSA    | 0.17    |
| FIXED INCOME      | Canada           | Vanguard Canadian Short-Term Bond Index ETF                   | VSB    | 0.11    |
|                   | US               | Vanguard U.S. Aggregate Bond Index ETF (CAD-hedged)           | VBU    | 0.22    |
|                   | International    | Vanguard Global ex-U.S. Aggregate Bond Index ETF (CAD-hedged) | VBG    | 0.39    |
| EQUITIES          | Canada           | iShares Core S&P/TSX Capped Composite Index ETF               | XIC    | 0.06    |
|                   | US Large Cap     | BMO S&P 500 Index ETF   | ZSP    | 0.09    |
|                   | US Mid Cap       | BMO S&P U.S. Mid-Cap Index ETF                                | ZMID   | 0.22    |
|                   | International    | BMO MSCI EAFE IMI Index ETF                                   | ZEA    | 0.22    |
|                   | Emerging Markets | iShares Core MSCI Emerging Markets IMI Index ETF              | XEC    | 0.28    |

Data provided by BMO (Bank of Montreal), Purpose Investments, iShares Canada, Vanguard Canada and Morningstar. MERs are as of April 30, 2025.

## Dividends

Research has shown that reinvesting dividends in high quality securities leads to higher long-term returns. If a security has a Dividend Reinvestment Plan (DRIP) available, additional shares can be purchased for little to no additional cost for the investor. Effectively, a DRIP is a form of dollar cost averaging along with ensuring that portfolios do not accumulate cash which may not align with the target asset allocation set out initially. The graph below illustrates the impact of reinvesting dividends in the S&P 500 over the past 20 years:



Graph prepared by Link Plan Management using data provided by Yahoo Finance. Period covered is March 31, 2005 to March 31, 2025.

Quite simply, reinvesting dividends resulted in an outstanding total return of 602%, as compared to a still simple return of 371%

All ETFs in Link portfolios pay a dividend which will be reinvested for the benefit of plan members in a DRIP. The following table summarizes the dividend frequency and current distribution yields for all the LINK portfolio ETFs.

| Major Asset Class | Sub-Asset Class  | ETF Name  | Distribution Yield (%) | Dividend Frequency | As of Date   |
|-------------------|------------------|---|------------------------|--------------------|--------------|
| CASH              | Cash             | Purpose High Interest Savings                             | 3.99                   | Monthly            | Mar 31, 2025 |
| FIXED INCOME      | Canada           | Vanguard Canadian Short-Term Bond Index                   | 2.82                   | Monthly            | Mar 31, 2025 |
|                   | US               | Vanguard U.S. Aggregate Bond Index (CAD-hedged)           | 3.09                   | Monthly            | Mar 31, 2025 |
|                   | International    | Vanguard Global ex-U.S. Aggregate Bond Index (CAD-hedged) | 3.24                   | Monthly            | Mar 31, 2025 |
| EQUITIES          | Canada           | iShares Core S&P/TSX Capped Composite Index               | 2.75                   | Quarterly          | Mar 31, 2025 |
|                   | US Large Cap     | BMO S&P 500 Index   | 1.00                   | Quarterly          | Mar 31, 2025 |
|                   | US Mid Cap       | BMO S&P U.S. Mid-Cap Index                                | 1.24                   | Quarterly          | Mar 31, 2025 |
|                   | International    | BMO Core MSCI EAFE IMI Index                              | 2.61                   | Quarterly          | Mar 31, 2025 |
|                   | Emerging Markets | iShares Core MSCI Emerging Markets IMI Index              | 2.66                   | Semi-Annual        | Mar 31, 2025 |



Table prepared by Link Plan Management using data provided by Morningstar. Distribution Yield (%) is the annual yield an investor would receive if the most recent fund distribution stayed the same going forward. Dividends are not guaranteed to remain the same, this is only for illustrative purposes.

## Determining a Plan Participants' Risk Profile

### Client Questionnaire & Risk Score

The goal of the questionnaire provided to plan members is to assess, for each plan member:

- The **Time Horizon** of their investment account
- Their level of **Risk Tolerance**
- The **Investment Objective** of the investment account

## Time Horizon

Simply put, the longer an investors' time horizon, the more exposure to equity investments they can tolerate. Time horizon is critical in establishing an asset allocation model, as investors with a shorter time horizon need to be wary of overexposure to equities. A high equity allocation may have adverse effects when they need to be reduced or sold entirely. This can put the investor at the mercy of the current market environment, which may be undesirable. The following graphic appears in the Q12025 "Guide to the Markets" from J.P. Morgan Asset Management and illustrates the significant difference between returns on a rolling 1-yr vs. 20-yr holding period.

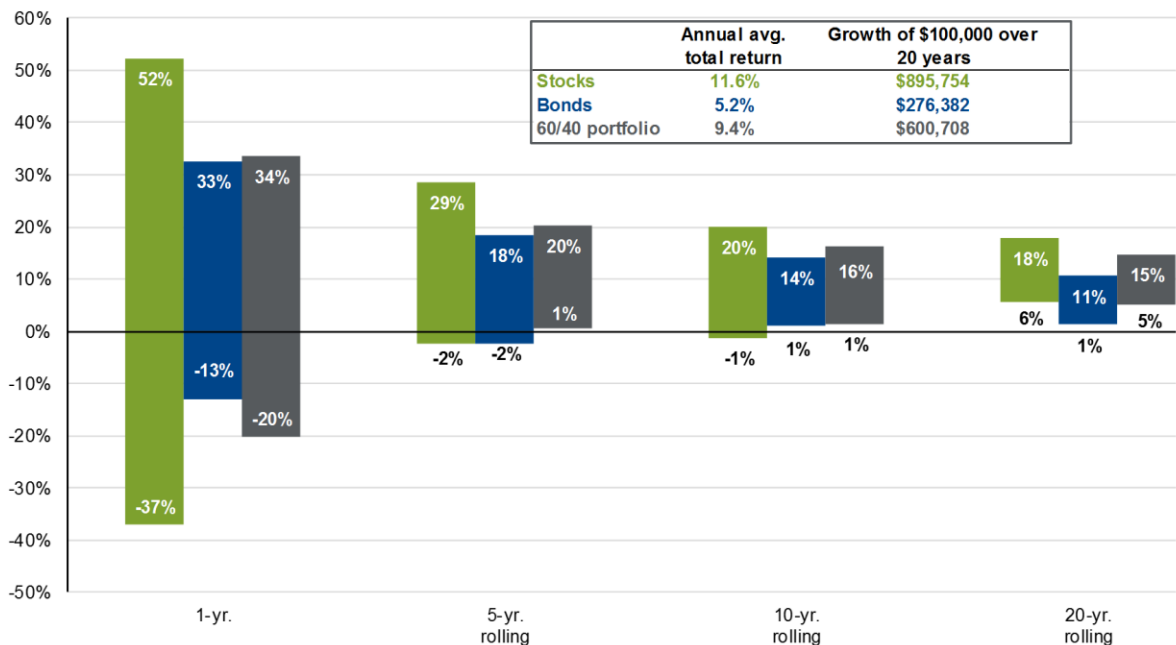


### Time, diversification and the volatility of returns

GTM U.S. 65

#### Range of stock, bond and blended total returns

Annual total returns, 1950–2024



Source: Bloomberg, FactSet, Federal Reserve, Standard & Poor's, Strategas/Ibbotson, J.P. Morgan Asset Management. Returns shown are based on calendar year returns from 1950 to 2024. Bonds represent Strategas/Ibbotson for periods prior to 1976 and the Bloomberg Aggregate thereafter. Growth of \$100,000 is based on annual average total returns from 1950 to 2024. Guide to the Markets – U.S. Data are as of March 31, 2025.

**J.P.Morgan**  
ASSET MANAGEMENT

Investing Principles

65

## Risk Tolerance

This describes a plan member's

1. Emotional capacity to withstand portfolio volatility
2. Financial ability to recover from actual portfolio losses

Volatility can wreak havoc on an investor's psyche, causing an emotional roller coaster that oscillates between fear and excitement. A well-designed, diversified portfolio attempts to smooth out the

volatility but inevitably it cannot be completely removed. Asset classes all exhibit their own unique volatility, and the questionnaire will help Link establish which portfolio volatility a plan member can tolerate, and thus which asset allocation is most appropriate for them.

Over time, even a well thought out plan and investment strategy may still have unexpected developments. A plan member may presume they have 20 years until they need to access their funds, until a life event creates a need to access funds early. This may result in financial losses depending on current market conditions, so the capacity of the plan member to absorb these actual dollar losses is a crucial factor in determining their risk tolerance.

### Investment Objectives

Investment Objectives can also be described as the “purpose” of the investment account. Common examples include retirement, education planning, tax-efficiency, philanthropy or current income. Investment objectives affect asset allocation as they affect time horizon (retirement vs current income) along with actual securities used in a portfolio (taxable vs tax-deferred/tax-free).

When the questionnaire process is completed, a plan member is assigned a risk score between 26 and 82 that will recommend a specific portfolio for them. Each risk score has a unique asset allocation, historical risk (volatility) value and ETF composition. So, while portfolio 36 and 46 both fall in the Low/Med risk profile and conservative investment strategy, the asset allocation will differ and therefore the ETF percentage weightings will differ as well.

### Ongoing Communication

Once a plan member is assigned a risk score, it is imperative that life and financial changes be relayed to Link so that, if necessary, their risk score can be adjusted. Life events such as a birth, death or marriage, and financial events such as an inheritance, promotion or significant unplanned expense. Events like these may cause a plan member to rethink their risk score, which can be accomplished by taking a few minutes to redo the investor questionnaire.

Link will ensure these types of events are communicated to us by reaching out annually to each plan member and inquiring as to whether changes in their life may have created a need to reconsider their risk profile. We will also encourage plan members to be proactive with communicating these events to us as well.

## Portfolio Choices

As mentioned previously, there are two portfolio options for plan participants.

### Questionnaire-Based

Taking a few minutes to complete Links’ proprietary investor profile questionnaire results in a customized portfolio specific to a plan members risk tolerance, time horizon and investment



objectives. Portfolios will hold between six and nine ETFs depending on the asset allocation of the portfolio with an average MER of 0.18%.

### Identifying Inconsistent Responses

A critical component of Link’s portfolio recommendation process is a rules-based system that identifies inconsistencies in questionnaire responses. This is a significant factor in the profile/portfolio determination process to help us ensure plan members are investing in a portfolio appropriate for them. We review responses to four related questions and flag answers that contradict one another as it relates to volatility comfort levels and return expectations.

For example (the questions are abbreviated versions of the originals):

Question A: Which of the following statements best describes the level of volatility you are comfortable with?

- a) As little as possible
- b) Some
- c) High
- d) Significant

Question B: Which portfolio are you most comfortable investing in?

| Portfolio | 12 Month Loss | 12 Month Gain |
|-----------|---------------|---------------|
| A         | -2%           | +3%           |
| B         | -5%           | +6%           |
| C         | -12%          | +10%          |
| D         | -20%          | +15%          |

The answer to Question A will dictate “acceptable” answers to Question B. In this example if a plan member chooses “As little as possible” or “Some” for Question A, our system will flag the application if Question B is answered “C” or “D”. Since volatility is correlated with the magnitude of gains/losses in the market, stating you have a low volatility threshold while being willing to accept a double-digit decline over 12 months is clearly a contradiction.

Contradictions are initially addressed by a Portfolio Manager, who will discuss the responses with the plan member, explaining why their application was flagged. After the discussion, the plan member must review and amend the relevant questions, so they are consistent and in keeping with their level

of volatility tolerance. As mentioned, we use four questions to establish consistency in responses from plan members, and it only takes one inconsistent answer for the application to be flagged.

### Target Date Fund (TDF)

The second option (and the default option) is the Target Date Fund managed by Blackrock Canada. Target Date Funds set a strategic asset allocation based on the age of the investor at the time of sign-up and over time, as that investor ages, their strategic asset allocation is adjusted to reflect a shorter time to retirement. Each Target Date Fund is a composition of several other Blackrock managed funds.

## Portfolio Rebalancing

Rebalancing an investment portfolio is vital to ensuring the asset allocation is appropriate for a plan member's risk score. Over time, assets will drift from their original targets due to differing rates of market performance. The principal purpose of rebalancing is to minimize risk, not maximize returns. Typically, the older an investor gets the more risk-averse they become.

## ETF Monitoring

Vanguard issued a study (Nov 2022) which concluded that other than the fact that rebalancing should occur, the frequency with which it occurs has a negligible effect over the long-term. When factoring costs into the discussion, Vanguard recommends quarterly to annual rebalancing. Link portfolios will be rebalanced on a quarterly basis.

The Canadian ETF market is growing rapidly, exhibiting a compounded annual growth rate of 12% year over year. In 2024, there were 231 new product launches from over 20 providers and ~\$75 billion in inflows, a new record, exceeding the \$58 billion record set in 2021 by 30% (Source: TD).

Link will actively monitor new and existing ETFs with the goal of uncovering additional ways to add value for plan member portfolios. Any changes to the core portfolio ETFs will have to pass the same strict criteria and process to be considered a replacement or addition.

## Conclusion

Link Plan Management is a firm believer that the long-term success of an investment plan is directly influenced by the following:

- Properly matching the Risk Tolerance, Investment Objectives and Time Horizon of an investor to a risk-appropriate, diversified portfolio
- Asset allocation is the principal determinant of the long-term volatility and performance of a portfolio
- Rebalancing regularly is prudent and contributes to better long term portfolio performance.
- Passive, Index-tracking investments are a superior long-term solution when compared to an active management strategy
- Strategic Asset Allocation is preferable to Tactical Asset Allocation
- Fees have a significant effect on the long-term value of a portfolio
- Reinvesting Dividends result in significant long-term additional performance

Link has built its investment portfolios on the foundation of these principles and philosophies, backed by decades of research over multiple market cycles. As the investment industry continues to evolve, we will continue to look for ways to add value for our plan participants.



Our state-of-the-art technology platform coupled with a rigorous due diligence portfolio construction process will provide companies and their employees with what we believe is an exceptional investment solution.

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## Data Sources & Tools

|                             |   |
|-----------------------------|---|
| Bank of Montreal GAM        | <a href="https://www.bmogam.com">https://www.bmogam.com</a>                             |
| BlackRock Canada            | <a href="https://www.blackrock.com/ca">https://www.blackrock.com/ca</a>                 |
| Bloomberg Barclays Indices  | <a href="https://www.bloombergindices.com/">https://www.bloombergindices.com/</a>       |
| Canadian ETF Association    | <a href="http://www.cetfa.ca/">http://www.cetfa.ca/</a>                                 |
| FInvestopedia               | <a href="http://www.investopedia.com/">http://www.investopedia.com/</a>                 |
| Morningstar Canada          | <a href="http://www.morningstar.ca/">http://www.morningstar.ca/</a>                     |
| Morningstar USA             | <a href="http://www.morningstar.com">http://www.morningstar.com</a>                     |
| MSCI                        | <a href="https://www.msci.com/">https://www.msci.com/</a>                               |
| Portfolio Visualizer        | <a href="https://www.portfoliovisualizer.com/">https://www.portfoliovisualizer.com/</a> |
| Purpose Investments         | <a href="https://www.purposeinvest.com/">https://www.purposeinvest.com/</a>             |
| S&P Dow Jones Indices       | <a href="http://ca.spindices.com/">http://ca.spindices.com/</a>                         |
| SPIVA®                      | <a href="http://ca.spindices.com/spiva/">http://ca.spindices.com/spiva/</a>             |
| Toronto Stock Exchange      | <a href="https://www.tsx.com/">https://www.tsx.com/</a>                                 |
| Vanguard Investments Canada | <a href="https://www.vanguardcanada.ca/">https://www.vanguardcanada.ca/</a>             |
| Yahoo Finance               | <a href="https://ca.finance.yahoo.com/">https://ca.finance.yahoo.com/</a>               |