Investment Management Process

Brian Prokop, P.Eng., CFA
CEO, CCO, UDP, AR (PM)
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Table of Contents

Introduction

The purpose of this paper is to detail the various tasks and processes Link Plan Management (LPM) performed pertaining to 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) and are rebalanced on a regular basis to ensure a plan members' asset allocation stays consistent with the risk profile established during the sign-up phase. The second option, or the default option, is a Target Date Fund managed by Blackrock Canada. If a plan member does not wish to do the questionnaire their contributions will be invested in the Target Date Fund.

Links' Portfolio Management process consists of the followings 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 30 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.

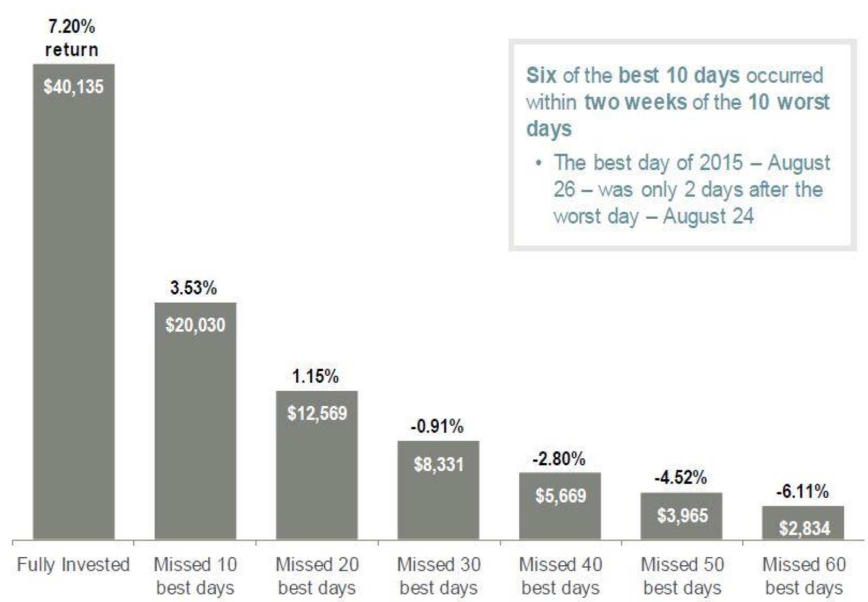
Link portfolios will allocate investments in the major asset classes of Cash, Fixed Income and Equity. The fixed income and equity asset classes will have additional sub-classes to assist in the diversification process.

Asset Allocation Strategies

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

Strategic Asset Allocation (SAA) is a strategy that sets target % 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 graphic below illustrates. Assuming an average of 252 trading days per year, the return for the portfolio below is cut by ~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

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 2006 - A Primer on Tactical Asset Allocation Strategy Evaluation by Tokat and Stockton 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, the decision to hedge the Canadian Dollar to investments outside of Canada when possible is a logical decision for us to make. 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 or not 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 if there are no hedged alternatives available.

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.

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 (CAD $ Hedged)

Represented by the S&P 500 Canadian Dollar Hedged 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% coverage of available market capitalization.

US Mid Cap Stocks (CAD $ Hedged)

Represented by the S&P MidCap 400 Canadian Dollar Hedged Index. The S&P MidCap 400® has provided investors with a benchmark for mid-sized companies (market cap between US$2 and $10 billion) since June 18, 1991.

US Small Cap Stocks (CAD $ Hedged)

Represented by the Russell 2000® Canadian Dollar Hedged Index. This Index measures the performance of the small-cap segment of the U.S. equity universe and is comprised of the smallest 2000 companies in the Russell 3000 Index, representing approximately 10% of the total market capitalization of that Index. A typical US small cap stock has a market cap between US $300 million and $2 billion.

International Stocks (CAD $ Hedged)

Represented by the MSCI EAFE Investable Markets Index (IMI) 100% Hedged to CAD, which captures large, mid and small cap representation across Developed Markets countries around the world, excluding the US and Canada. With 3,188 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 2,679 constituents, the index covers approximately 99% 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. 10-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
CASH	Cash	0.15%	yes	yes	yes	no	no
FIXED INCOME	Canada	1.38%	yes	yes	yes	yes	yes
	US	5.16%	yes	yes	yes	yes	no
	International	7.33%	yes	yes	yes	yes	yes
EQUITIES	Canada	11.71%	yes	yes	yes	yes	yes
	US Large Cap	12.40%	yes	yes	yes	yes	yes
	US Mid Cap	14.76%	no	no	yes	yes	yes
	US Small Cap	14.76%	no	no	no	yes	yes
	International	11.74%	yes	yes	yes	yes	yes
	Emerging Markets	13.22%	no	no	no	yes	yes

Table prepared by Link Plan Management. Data are as of January 14th, 2012 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), Canada Equity (S&P/TSX Composite Total Return), US Large Cap Equity (S&P 500® Total Return), US Mid Cap Equity (S&P MidCap 400® Total Return CAD-Hedged), US Small Cap Equity (Russell 2000® 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 during the 2008-2013 period. As markets become more global and inter-connected, portfolio diversification will be most effective at the major asset class level (Cash vs. Fixed Income vs. Equity).

	1995 - 2000				2008 - 2013			
	U.S. Large Company Stocks	U.S. Small Company Stocks	International Large-Company Stocks	Emerging Markets Stocks	U.S. Large Company Stocks	U.S. Small Company Stocks	International Large-Company Stocks	Emerging Markets Stocks
U.S. Large Company Stocks	1				1			
U.S. Small Company Stocks	0.62	1			0.95	1		
International Large-Company Stocks	0.69	0.60	1		0.91	0.84	1	
Emerging Markets Stocks	0.67	0.64	0.71	1	0.84	0.80	0.91	1

Table prepared by Link Plan Management. Source: Charles Schwab Investment Advisory, Inc. and Morningstar Direct.

Diversifying a portfolios 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 2016 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 Small-Cap ETF returning 17.27% vs. 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.

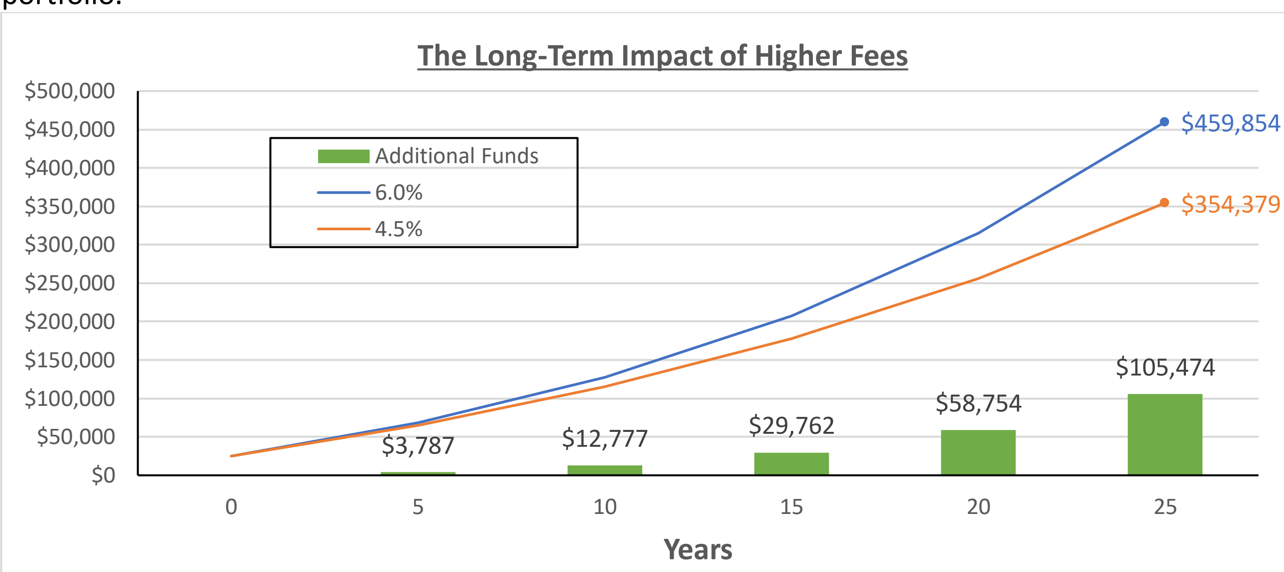
Long-Term Impact of Lower Fees

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 2017 Morningstar Global Fund Investor Experience Study reported a median asset-weighted expense ratio of 2.23% 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 over 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 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 31st, 2021, the % of various actively managed U.S. & Canadian Equity funds that underperformed their respective benchmarks during the period listed.

Country	Fund Category	Comparison Index	3-Year (%)	5-Year (%)	10-Year (%)	15-Year (%)
USA	All Large-Cap Equity	S&P 500	67.6	72.7	82.5	92.3
	All Mid-Cap Equity	S&P MidCap 400	49.4	59.2	73.1	94.8
	All Small-Cap Equity	S&P SmallCap 600	54.8	66.7	83.5	95.7
	Government Long Bonds	Barclays US Government Long	96.0	100	97.3	N/A
	Investment-Grade Long Bonds	Barclays US Government/Credit Long	94.1	90.3	98.4	97.7
Canada	Canadian Equity	S&P/TSX Composite	94.4	95.7	83.1	*

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 819 US equity funds in the top quartile as of June 2019 2015, only 4.8% managed to stay in the top quartile as of June 2021. If you expand the time horizon to five years, the picture is worse with only 3.2% of multi-cap funds able to stay in the top quartile for each year.

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 31st, 2021 there were 964 "regular class" ETFs available to purchase in Canada (Source: National Bank Financial, Bloomberg). Reducing this list down to a small selection of high quality investments requires the imposition of 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, % 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 % Weightings in Government and Investment Grade Corporate Bonds.

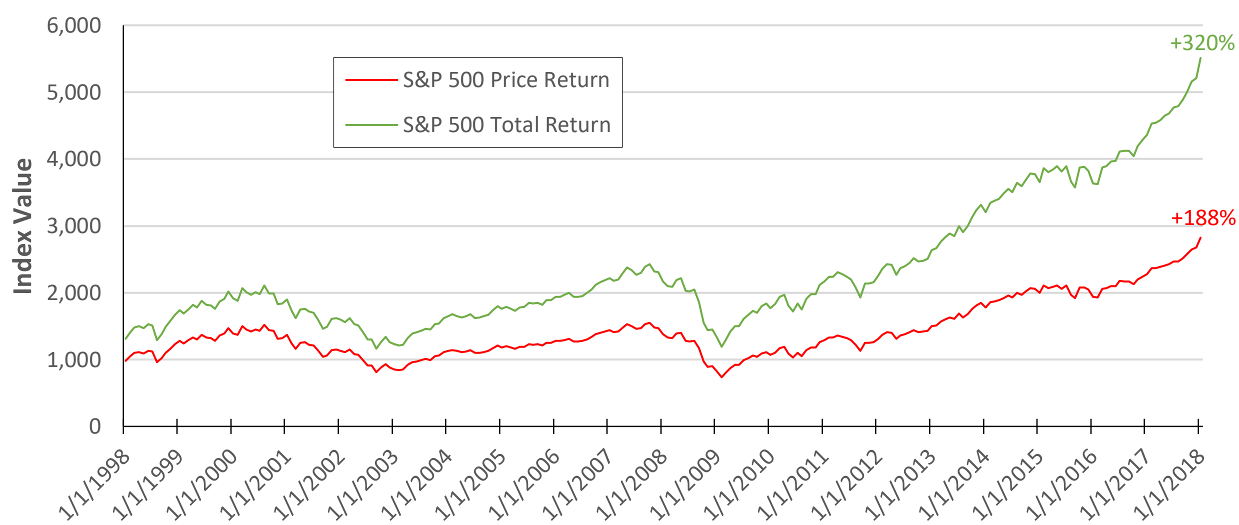
After a thorough process, Link arrived at a list of 10 ETFs which became the building blocks of the portfolios. Note that (CAD-hedged) refers to the fact that currency risk has been removed from the investment, which was discussed earlier. The following table summarizes the ETFs along with their Management Expense Ratio (MER).

Major Asset Class	Sub-Asset Class	ETF Name	Ticker	MER (%)
CASH	Cash	Purpose High Interest Savings ETF	PSA	0.16
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	0.38
EQUITIES	Canada	iShares Core S&P/TSX Capped Composite Index ETF	XIC	0.06
	US Large Cap	Vanguard S&P 500 Index ETF (CAD-hedged)	VSP	0.09
	US Mid Cap	iShares S&P U.S. Mid-Cap Index ETF (CAD-Hedged)	XMH	0.16
	US Small Cap	iShares U.S. Small Cap Index ETF (CAD-Hedged)	XSU	0.36
	International	iShares Core MSCI EAFE IMI Index ETF (CAD-Hedged)	XFH	0.22
	Emerging Markets	iShares Core MSCI Emerging Markets IMI Index ETF	XEC	0.27

Data provided by Purpose Investments, iShares Canada and Vanguard Canada. MERs are as of December 31st, 2017.

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 no 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. The graph covers the period from January 1st, 1998 to January 1st, 2018.

All ETFs in Links 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	0.59	Monthly	Dec 31, 2021
FIXED INCOME	Canada	Vanguard Canadian Short-Term Bond Index	2.03	Monthly	Dec 31, 2021
	US	Vanguard U.S. Aggregate Bond Index (CAD-hedged)	1.87	Monthly	Dec 31, 2021
	International	Vanguard Global ex-U.S. Aggregate Bond Index (CAD-hedged)	2.90	Monthly	Dec 31, 2021
EQUITIES	Canada	iShares Core S&P/TSX Capped Composite Index	2.42	Quarterly	Dec 31, 2021
	US Large Cap	Vanguard S&P 500 Index (CAD-hedged)	1.07	Quarterly	Dec 31, 2021
	US Mid Cap	iShares S&P U.S. Mid-Cap Index (CAD-Hedged)	0.91	Semi-Annual	Dec 31, 2021
	US Small Cap	iShares U.S. Small Cap Index (CAD-Hedged)	0.73	Semi-Annual	Dec 31, 2021
	International	iShares Core MSCI EAFE IMI Index (CAD-Hedged)	2.31	Semi-Annual	Dec 31, 2021
	Emerging Markets	iShares Core MSCI Emerging Markets IMI Index	2.79	Semi-Annual	Dec 31, 2021

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

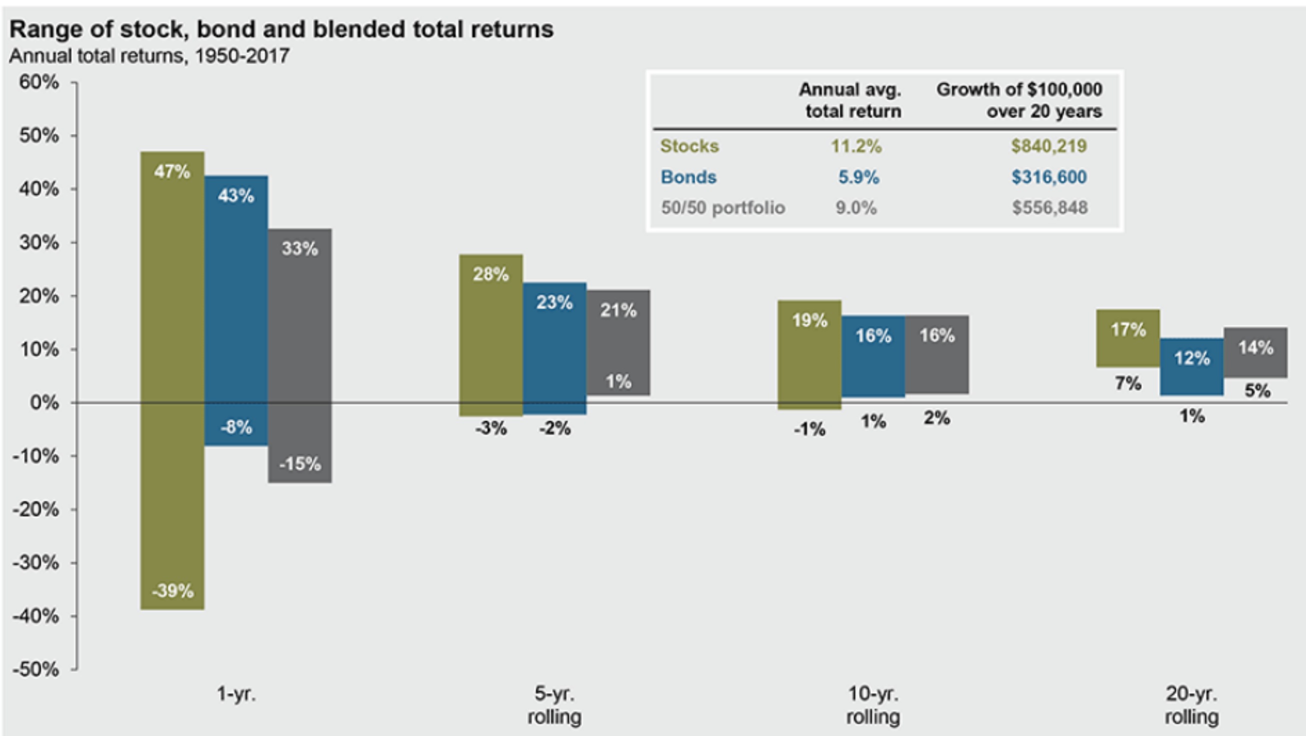
Client Questionnaire & Risk Score

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 Q12018 "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.



Source: Barclays, Bloomberg, FactSet, Federal Reserve, Robert Shiller, Strategas/Ibbotson, J.P. Morgan Asset Management.
Returns shown are based on calendar year returns from 1950 to 2017. Stocks represent the S&P 500 Shiller Composite and Bonds represent Strategas/Ibbotson for periods from 1950 to 2010 and Bloomberg Barclays Aggregate thereafter. Growth of $100,000 is based on annual average total returns from 1950 to 2017.
Guide to the Markets – U.S. Data are as of August 31, 2018.

J.P.Morgan
Asset Management

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. As this paper has shown, 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 effect 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 % weightings as well.

The following table summarizes the historical volatility of Link portfolios, using data from the past 10 years as of August 31st, 2017.

Risk Profile	Investment Strategy	Questionnaire Score		Volatility	
		Min	Max	Min	Max
Low	Very Conservative	26	34	4.90%	6.62%
Low/Med	Conservative	35	47	6.83%	8.44%
Medium	Balanced	48	60	8.70%	9.70%
High	Growth	61	73	10.92%	12.57%
Very High	Aggressive Growth	74	82	13.10%	15.25%

Table prepared by Link Plan Management using data provided by Morningstar, Bloomberg, Dow Jones S&P, FTSE and MSCI. Backward looking data such as this cannot be assumed to remain the same going forward.

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 0.17%.

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 2. 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) 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 members risk score. Over time, assets will drift from their original targets due to differing rates of market performance. The principle purpose of rebalancing is to minimize risk, not maximize returns. The following graphic illustrates how the asset allocation of a portfolio changed from Dec 31st, 2008 to December 29th, 2017. The initial asset allocation has shifted from a bond/equity split of 50%/50% to a 35%/65% split. Therefore, the risk level in this portfolio has increased significantly at a time when the investor is now 8 years older. Typically, the opposite of what should happen, being the older an investor gets the more risk-averse they become.

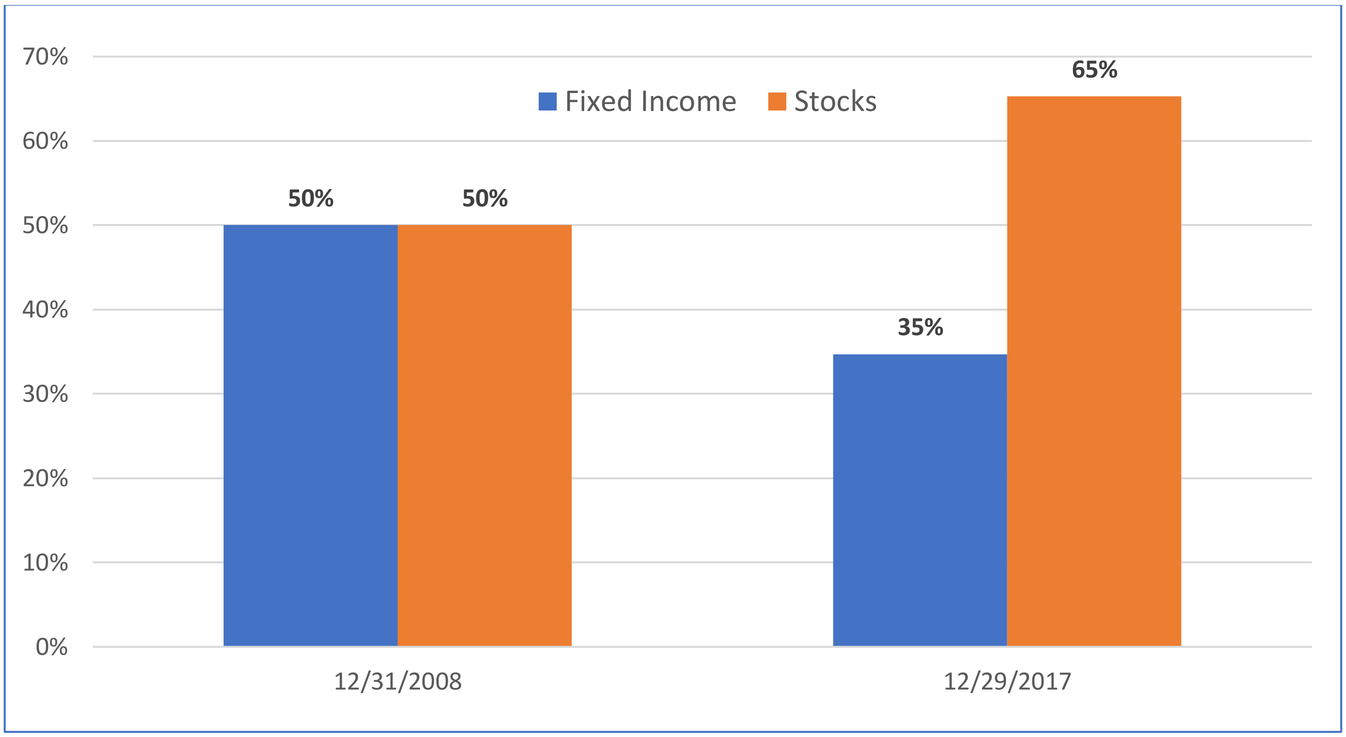


Chart prepared by Link Plan Management. Initial portfolio allocation: iShares Core Canadian Universe Bond Index (35%), Vanguard Total Bond Market ETF (15%), iShares Core S&P/TSX Capped Composite Index ETF (15%), iShares Core S&P 500 Index ETF (CAD-Hedged) (20%) and iShares MSCI EAFE Index ETF (CAD-Hedged) (15%). Historical data provided by YAHOO Finance using daily closing prices for both dividends and splits.

ETF Monitoring

Studies by Vanguard in 2010 and 2015 concluded that other than the fact that rebalancing should occur, the frequency with which it occurs has a negligible effect over the long-term. Link portfolios will be rebalanced on a quarterly basis.

The Canadian ETF market is growing rapidly, exhibiting a compounded annual growth rate of 23% over the past 10 years. In 2017 there were 169 new product launches from 24 providers and ~$26 billion in inflows, a 56% increase over the previous annual record set in 2016 (Source: National Bank Financial).

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 principle determinant of the long-term volatility and performance of a portfolio
- 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

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Bloomberg Barclays Indices	https://www.bloombergindices.com/
Canadian ETF Association	http://www.cetfa.ca/
FTSE Russell	http://www.ftserussell.com/
Investopedia	http://www.investopedia.com/
Morningstar Canada	http://www.morningstar.ca/
Morningstar USA	http://www.morningstar.com
MSCI	https://www.msci.com/
Portfolio Visualizer	https://www.portfoliovisualizer.com/
Purpose Investments	https://www.purposeinvest.com/
S&P Dow Jones Indices	http://ca.spindices.com/
SPIVA®	http://ca.spindices.com/spiva/
TMX Money	https://www.tmxmoney.com/
Toronto Stock Exchange	https://www.tsx.com/
Vanguard Investments Canada	https://www.vanguardcanada.ca/
Yahoo Finance	https://ca.finance.yahoo.com/