

Volatility is nothing new. Since 1935, market moves of 1% or greater happen over 50 times per year on average. However, volatility usually comes when we least expect it. That is the nature of volatility – asset prices fluctuate when there is uncertainty. Volatility is defined as "a tendency to change quickly and unpredictably," which also reflects how investors typically react to volatility. When markets turn volatile, investors' first instinct is to seek safety or a more defensive posture. Because of the human/emotional element, volatility also exhibits autocorrelation, or put more simply, volatility is often followed by more volatility.

As investors panic and rush for the exits, a supply/demand imbalance may occur, resulting in further pressure on asset prices – this self-fulfilling prophecy has a circular logic to it – the rush to sell leads to lower prices, which leads to a rush to sell. However, it's important to keep volatility in perspective and avoid overreacting. **Figure 1** illustrates the importance of staying invested – despite short-term losses caused by volatility, the market has tended to rise over the long-term.



Figure 1: Staying invested-Short-term volatility has led to long-term opportunity

Source: Morningstar, 12/31/87-12/31/18. This information is for illustrative purposes only and is not indicative of any investment. **Past performance is no guarantee of future results. An investor cannot invest directly in an index.** 

Just as important as staying invested is recognizing that the best time to prepare for volatility is before it happens. This is challenging to accomplish in practice because volatility can affect different asset classes at different times, or all at once. Investors have the potential to achieve greater long-term success by building resilient portfolios that seek to weather market volatility while still capitalizing on market opportunity.

In this piece, we review three types of volatility and provide solutions for building a resilient portfolio: equity volatility, fixed income volatility (interest rate risk and credit risk), and currency risk.

### 1. MANAGING EQUITY VOLATILITY

A company's performance can be impacted by several variables. These variables/risks are referred to as idiosyncratic, which is thought to be diversifiable risk. Systematic risk, on the other hand, is the risk inherent to the entire market – often characterized as Beta. Outside of company-specific risk, overall risk sentiment can be driven by factors such as monetary policy, geopolitical risk, trade concerns, or a combination of elements. Risks that start off in specific sectors, such as during the financial crisis or the energy crisis, suffer from contagion and spread throughout financial markets and the economy. The common theme is uncertainty and surprise.

Regardless of the cause, equity volatility will occur. When it does, it will often come as a surprise and may be exacerbated by a sudden change in risk sentiment, known as a "risk-off" environment, where there is a rush to exit positions and drive valuations further down.

In **Figure 2** we look at the Volatility Index (VIX), which measures the level of anticipated volatility for the S&P 500 Index. When the VIX spikes up in value (above the 30 level, for example), the market is inherently charging higher prices for the option to buy the index, which is known as implied volatility. Compared to fixed income, equities are a high-risk asset class – they have greater return potential and are expected to have greater volatility. In addition, they tend to represent larger allocations in investors' portfolios. Thus, it is critical for investors to diversify their equity positions by considering other asset classes or different styles of equity investing.

60 Equity volatility often hits when least expected. These two periods of lower volatility may have caused investo complacency, but they were both followed by a rapid onset of volatility. 50 Volatility Index (VIX) 40 Index Level 30 20 10 Ω 12/31/09 12/31/10 12/31/11 12/31/12 12/31/14 12/31/15 12/31/08 12/31/13 12/31/16 12/31/17 12/31/18

Figure 2: The "fear index" is used by investors as a measure of implied market volatility

Source: Bloomberg, as of 12/31/18. Past performance is no guarantee of future results. An investor cannot invest directly in an index.

### 2. MANAGING FIXED INCOME VOLATILITY

Volatility in bond markets is primarily driven by two types of fundamental risk: interest rate risk and credit risk. Interest rate risk is the relationship between interest rate trends and bond prices: when interest rates increase, the price of existing bonds declines because at higher interest rates, lower-yielding bonds are less attractive than the newer, higher-yielding bonds, and vice versa. Rate cuts can also represent a volatile environment for investors. In fact, the Fed cut interest rates for the first time in over a decade in August 2019 as a response to weak global growth, trade policy uncertainty, and muted inflation.

Diversifying your assets among a variety of investment styles helps ensure that your portfolio's overall return is not limited to the performance of just one type of bond, given that fixed income sector performance is cyclical in nature—which means that no one sector is consistently more favorable than any other. Of course, markets are unpredictable, and asset allocation and diversification do not assure a profit or guarantee against market loss.

As seen in **Figure 3**, fixed income sector performance varies from year to year, highlighting the importance of diversification. Since each sector can potentially outperform or underperform the market in any given period, diversification plays a key role in investing. In today's environment, investors can benefit from diversifying across the duration spectrum (shorter duration bonds for example) and within various asset classes to manage rising rate and credit risks.

Figure 3: The market cyclicality of fixed income asset classes

Annual total returns ranked in order of performance

Emerging Market Bonds are represented by J.P. Morgan EMBI Global Diversified Index.

Best	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	
1	U.S. Government Bonds 12.39	High-Yield Bonds 57.51	Convertible Bonds 16.77	Municipal Bonds 10.70	Emerging Market Bonds 17.44	Convertible Bonds 24.92	Convertible Bonds 9.44	Municipal Bonds 3.30	High-Yield Bonds 17.49	Convertible Bonds 13.70	Municipal Bonds 1.28	
	International Bonds 10.11	Floating Rate Loans 51.62	High-Yield Bonds 15.19	U.S. Government Bonds 9.02	High-Yield Bonds 15.58	High-Yield Bonds 7.42	Municipal Bonds 9.05	Emerging Market Bonds 1.18	Convertible Bonds 10.43	International Bonds 10.33	U.S. Government Bonds 0.88	
	Municipal Bonds -2.47	Convertible Bonds 49.13	Emerging Market Bonds 12.24	Corporate Bonds 8.35	Convertible Bonds 14.96	Floating Rate Loans 5.29	Corporate Bonds 7.53	U.S. Government Bonds 0.86	Floating Rate Loans 10.16	Emerging Market Bonds 10.26	Floating Rate Loans 0.44	
	Corporate Bonds -3.08	Emerging Market Bonds 29.82	Floating Rate Loans 10.13	Emerging Market Bonds 7.35	Floating Rate Loans 9.66	Corporate Bonds -2.01	Emerging Market Bonds 7.43	Floating Rate Loans –0.69	Emerging Market Bonds 10.15	High-Yield Bonds 7.48	Convertible Bonds 0.15	
	Emerging Market Bonds -12.03	Corporate Bonds 16.04	Corporate Bonds 8.47	International Bonds 5.17	Corporate Bonds 9.37	Municipal Bonds -2.55	U.S. Government Bonds 4.92	Corporate Bonds -0.77	Corporate Bonds 5.63	Corporate Bonds 6.18	International Bonds –1.82	
	High-Yield Bonds –26.39	Municipal Bonds 12.91	U.S. Government Bonds 5.52	High-Yield Bonds 4.38	Municipal Bonds 6.78	U.S. Government Bonds –2.60	High-Yield Bonds 2.50	Convertible Bonds –2.99	International Bonds 1.81	Municipal Bonds 5.45	Corporate Bonds -2.11	
	Floating Rate Loans –29.10	International Bonds 4.39	International Bonds 5.21	Floating Rate Loans 1.52	U.S. Government Bonds 2.02	International Bonds -4.56	Floating Rate Loans 1.60	High-Yield Bonds –4.64	U.S. Government Bonds 1.05	Floating Rate Loans 4.12	High-Yield Bonds –2.26	
Worst	Bonds	U.S. Government Bonds –2.20	Municipal Bonds 2.38	Convertible Bonds –5.18	International Bonds 1.51	Emerging Market Bonds -5.25	International Bonds –2.68	International Bonds -5.54	Municipal Bonds 0.25	U.S. Government Bonds 2.30	Emerging Market Bonds -4.26	
	International Bonds are represented by FTSE World Government Bond (WGBI) Non USD Index.					Corporate Bonds are represented by Bloomberg Barclays U.S. Credit Bond Index.						
	Municipal Bonds are represented by Bloomberg Barclays Municipal Bond Index.						Hig	High-Yield Bonds are represented by ICE BoA/ML U.S. High Yield Index.				
	U.S. Government Bonds are represented by Bloomberg Barclays U.S. Government Bond Index.						Co	Convertible Bonds are represented by ICE BofA Merrill Lynch Convertible Index.				

Source: Morningstar, December 31, 2018. Indices are unmanaged, and one cannot invest directly in an index. The indices above do not represent the performance of any specific investment. The chart above represents the fluctuating performance for various indices that represent certain asset classes, ranking them from highest to lowest based on annual total returns. International bonds are represented by the FTSE World Government Bond (WGBI) Non USD index. Municipal bonds are represented by the Bloomberg Barclays U.S. Government Bond Index. U.S. government bonds are represented by the Bloomberg Barclays U.S. Government Bond Index. Emerging market bonds are represented by the J.P. Morgan EMBI Global Diversified Index. Corporate bonds are represented by the Bloomberg Barclays U.S. Credit Index. High yield bonds are represented by the ICE BoA/ML U.S. High Yield Index. Convertible bonds are represented by the ICE BoA/ML U.S. High Yield Index. Convertible Index. Floating rate loans are represented by the S&P/LSTA Leveraged Loan Index. Past performance is no guarantee of future results. An investor cannot invest directly in an index.

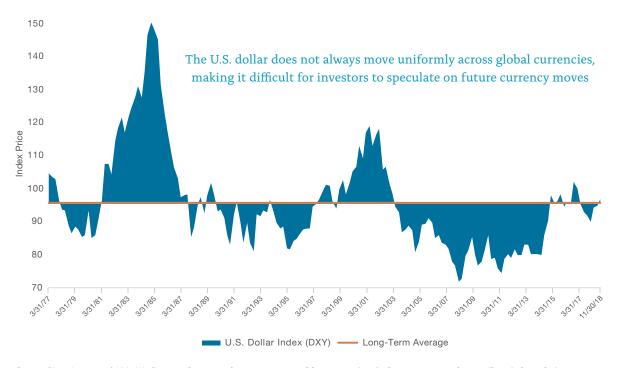
Floating Rate Loans are represented by S&P/LSTA Leveraged Loan Index.

### 3. MANAGING CURRENCY RISK

While international investing offers many benefits, including diversification, it can leave investors subject to a fair amount of currency volatility. Fluctuations in currency exchange rates can influence the total return of an investment. For example, the price of an international stock in a portfolio may rise on an absolute basis, but if the local currency of the company weakens against an investor's home currency, this may offset gains or even lead to a loss in this investment. To compensate for this risk, many investors look to manage or hedge currency risk within their portfolios.

**Figure 4** is a historical price chart of the U.S. Dollar Index (DXY), a commonly used representation of the value of the U.S. dollar to a basket of developed market currencies. It shows that the strength of the U.S. dollar relative to the basket of currencies in the U.S. Dollar Index is currently almost sitting on the long-term 40-year average. We see that there are no apparent historical patterns, and that the U.S. dollar does not always move uniformly across global currencies. Any speculation on the direction of currencies at any point is just that, speculation.

Figure 4: The U.S. Dollar tends to revert to the mean around the long-term average U.S. Dollar Index (DXY)



Source: Bloomberg, as of 12/5/18. Past performance is no guarantee of future results. An investor cannot invest directly in an index.

In the current global environment, political stability, trade negotiations, central bank monetary policy, and the possibility of a recession create a climate of heightened currency risk for international investors. That means investors will be seeking higher returns on their international investments to be fairly compensated for these elevated risks. Additionally, strategies that investment managers use to hedge currency risk are likely to become greater contributors to or detractors from investment performance.

## **OUR SOLUTIONS**

To build a resilient portfolio in the face of volatility, investors need a wide range of investment solutions that cross asset classes and style categories. At New York Life Investments, we offer a multi-boutique approach to building a lineup of resilient investment solutions, helping investors and financial advisors craft diversified portfolios that manage the variety of risks they face in volatile markets.

RESILIENT SOLUT	TONS FC	OR MARKET VOLATILITY				
MainStay Epoch U.S.  Equity Yield Fund  Class A: EPLPX Class I: EPLCX		<ul> <li>Quality bias and shareholder yield approach seeks to generate a high level of income while navigating equity market volatility</li> <li>Shareholder yield emphasizes more than just dividends, to also include share buybacks and debt reduction, which can help mitigate interest rate sensitivity by reducing equity duration</li> </ul>				
IQ Merger Arbitrage ETF MNA		<ul> <li>Serves as a volatility dampener by providing diversification and low correlation to the fixed income and equity markets</li> <li>Isolates equities from typical market influences, creating the potential for smoother and more consistent returns in varying market environments</li> <li>Access in a transparent, low-cost, tax-efficient, liquid ETF structure</li> </ul>				
MainStay MacKay Convertible Fund  Class A: MCOAX Class I: MCNVX		<ul> <li>Helps diversify volatility risk by seeking to provide the income stream of bonds, plus the growth potential of stocks (with historically less equity risk)</li> <li>Invests in convertible securities seeking to capture most of the upside of underlying stocks, while limiting downside participation during periods of heightened volatility</li> </ul>				
IQ Ultra Short Duration ETF	ULTR	<ul> <li>Seeks to provide higher risk-adjusted yield than traditional cash strategies while maintaining a duration target of less than one-year, which helps to manage the impact of interest rate volatility</li> <li>Access in a transparent, low-cost, tax-efficient, liquid ETF structure</li> </ul>				
MainStay MacKay Infrastructure Bond Fund MGVAX Class I: MGOIX		<ul> <li>Helps to manage credit risk, as municipal bonds have historically had higher and more stable credit ratings than corporates; half of the corporate bond market is now rated BBB, one rung above junk</li> <li>Taxable municipals also seek to provide consistent yield advantage over the Bloomberg Barclays U.S. Aggregate Index, as well as higher total return relative to most bond sectors</li> </ul>				
MainStay MacKay Short Term Municipal Fund  Class A: MSTAX Class I: MSTIX		<ul> <li>Helps manage the impact of interest rate volatility by seeking strong, after-tax total return by primarily investing in short-term municipal bonds with maturities between 1 and 3 years</li> <li>Team focuses on deep credit and market analysis to uncover attractive opportunities and market inefficiencies</li> </ul>				
IQ MacKay Municipal MMIN Insured ETF		<ul> <li>Helps manage credit risk by investing primarily in insured municipal bonds</li> <li>Helps manage the impact of interest rate volatility by seeking strong, after-tax total return through its actively managed investment approach</li> <li>Access in a transparent, low-cost, tax-efficient, liquid ETF structure</li> </ul>				
FTSE International ETF		<ul> <li>Seeks to reduce currency risk by hedging half of the currency exposure, a static 50% currency hedge eliminates the need to make a "bet" on currencies</li> <li>Provides exposure to foreign developed equities in a transparent, low-cost, tax-efficient, liquid ETF structure</li> </ul>				

# Resiliency is key to staying invested

History shows that investment success comes to those who stay invested in the markets over the long-term, through periods of short-term volatility. For many investors, staying invested in the face of market volatility can be challenging, given our behavioral instinct to flee the markets when losses mount.

The key to staying invested over the long-term is to build portfolio resiliency with strategies that can help mitigate specific asset class risks, including equity, bond and currency risk. Investors who can approach market volatility with a resilient portfolio strategy will be more likely to stay invested through volatile market cycles and in better position to capture opportunities for returns as they arise.

### **BEFORE YOU INVEST**

Before considering an investment in these Funds, you should understand that you could lose money.

**Market risk** may affect a single issuer, sector of the economy, industry or the market as a whole.

There are risks associated with **fixed-income** investments, including credit risk, interest rate risk, and prepayment and extension risk. In general, bond prices rise when interest rates fall and vice versa. This effect is usually more pronounced for longer term securities.

**Non-investment-grade** (high-yield or junk) securities present greater price volatility and more risk to principal and income than higher rated securities.

**Convertible** securities are subject to issuer default risk. The fund may also be forced to convert a convertible security at an inopportune time, which may decrease the fund's return.

**Foreign** investments subject the fund to risks, including political, economic, market, social and others within a particular country, as well as to currency instabilities and less stringent financial and accounting standards generally applicable to U.S. issuers.

Risks are enhanced for **emerging market** issuers.

**Dividend** payments are not guaranteed and the amount, if any, can vary over time.

Funds that invest substantially in **municipal securities** will be affected by tax, legislative, regulatory, demographic or political changes, as well as changes impacting a state's financial, economic or other conditions. A relatively small number of tax-exempt issuers may necessitate the fund investing more heavily in a single issuer and, therefore, be more exposed to the risk of loss than a fund that invests more broadly. A portion of the Fund's income may be subject to state and local taxes or the alternative minimum tax.

The principal risk of investing in **value stocks** is that the price of the security may not approach its anticipated value.

Investing in **smaller companies** involves special risks, including higher volatility and lower liquidity.

Investing in **mid-cap stocks** may carry more risk than investing in stocks of larger, more well-established companies.

**Floating rate loans** are generally considered to have speculative characteristics that involve default risk of principal and interest, collateral impairment, borrower industry concentration, and limited liquidity.

Funds that invest in **derivatives** have the potential for an increase in volatility of the Fund's NAV.

The principal risk of **mortgage-related** and **asset-backed securities** is that the underlying debt may be prepaid ahead of schedule, if interest rates fall, thereby reducing the value of the fund's investment. If interest rates rise, less of the debt may be prepaid.

**ETFs** trade like stocks, are subject to investment risk and will fluctuate in market value.

In **MNA**, certain of the proposed takeover transactions in which the Fund invests may be renegotiated, terminated or involve a longer time frame than originally contemplated, which may negatively impact the Fund's returns. The Fund's investment strategy may result in high portfolio turnover, which, in turn, may result in increased transaction costs to the Fund and lower total returns. The ETF should be considered a speculative investment with a high degree of risk, does not represent a complete investment program and is not suitable for all investors.

In **HFXI**, the Fund's ability to track the Underlying Index and Fund returns in general may be adversely impacted by changes in currency exchange rates, which can occur quickly and without warning.

### **Glossary**

**Active management** refers to a portfolio management strategy where the manager makes a specific investment with the goal of outperforming an investment benchmark index. Active management strategies typically charge higher fees than passive management. **Beta** is a measure of the volatility, or systematic risk, of a security or a portfolio in comparison to the entire market or a benchmark. **Duration** is a measure of the sensitivity of the price (the value of principal) of a fixed-income investment to a change in interest rates. Duration is expressed as a number of years. Rising interest rates mean falling bond prices, while declining interest rates mean rising bond prices. **Duration to worst** is the modified duration to the corresponding call date associated with yield to worst. Yield to worst is the bond yield computed by using the lower of either the yield to maturity or the yield to call on every possible call date. **Effective** duration is a duration calculation for bonds that have embedded options. This measure of duration takes into account the fact that expected cash flows will fluctuate as interest rates change. Effective duration can be estimated using modified duration if a bond with embedded options behaves like an option-free bond. Modified **duration** is a formula that expresses the measurable change in the value of a security in response to a change in interest rates. Modified duration follows the concept that interest rates and bond prices move in opposite directions. This formula is used to determine the effect that a 100-basis-point (1%) change in interest rates will have on the price of a bond.

#### **Index Definitions**

The **S&P 500®** Index is widely regarded as the standard index for measuring large-cap U.S. stock market performance. The **CBOE S&P 500 Volatility Index (VIX)** is a popular measure of the stock market's expectation of volatility implied by S&P 500 Index options. The ICE BofAML U.S. High Yield Index tracks the performance of below investment grade, but not in default, US dollar-denominated corporate bonds publicly issued in the US domestic market, and includes issues with a credit rating of BBB or below, as rated by Moody's and S&P. The **U.S. Dollar Index** (USDX, DXY, DX) is an index of the value of the United States dollar relative to a basket of foreign currencies, often referred to as a basket of U.S. trade partners' currencies. The Bloomberg Barclays U.S. Aggregate Bond Index is a broad-based flagship benchmark that measures the investment grade, U.S. dollar-denominated, fixed-rate taxable bond market. The **MSCI World Index** is a broad global equity index that represents large and mid-cap equity performance across 23 developed markets countries. It covers approximately 85% of the free float-adjusted

market capitalization in each country and does not offer exposure to emerging markets.

The **Bloomberg Barclays U.S. Corporate Index** measures the investment grade, fixed-rate, taxable corporate bond market. It includes USD denominated securities publicly issued by US and non-US industrial, utility and financial issuers. The **ICE BofAML U.S. Corporate Index** tracks the performance of US dollar denominated investment grade corporate debt publicly issued in the US domestic market. The **Bloomberg Barclays U.S. Treasury Index** includes public obligations of the U.S. Treasury. Treasury bills are excluded by the maturity constraint but are part of a separate Short Treasury Index. In addition, certain special issues, such as state and local government series bonds (SLGs), as well as U.S. Treasury TIPS, are excluded. STRIPS are excluded from the index because their inclusion would result in double-counting.

The FTSE World Government Bond (WGBI) Non USD Index measures the performance of fixed-rate, local currency, investmentgrade sovereign bonds. The Bloomberg Barclays Municipal **Bond Index** covers the USD-denominated long-term tax exempt bond market. The index has four main sectors: state and local general obligation bonds, revenue bonds, insured bonds and pre-refunded bonds. The Bloomberg Barclays U.S. Government Bond Index is composed of the Bloomberg Barclays Treasury Bond Index (all public obligations of the U.S. Treasury, excluding flower bonds and foreign-targeted issues) and the Bloomberg Barclays Agency Index (all publicly issued debt of U.S. Government agencies and guasifederal corporations, and corporate debt guaranteed by the U.S. Government). The J.P. Morgan EMBI Global Diversified Index is an unmanaged, market-capitalization weighted, total-return index tracking the traded market for U.S.-dollar-denominated Brady bonds. Eurobonds, traded loans, and local market debt instruments issued by sovereign and quasi-sovereign entities. The **Bloomberg Barclays U.S. Credit Index** measures the investment grade, U.S. dollardenominated, fixed-rate, taxable corporate and government related bond markets. It is composed of the U.S. Corporate Index and a non-corporate component that includes foreign agencies, sovereigns, supranationals and local authorities. The ICE BofA Merrill Lynch **Convertible Index** is an unmanaged market-capitalization weighted index of domestic corporate convertible securities -- to be included in the Index, bonds and preferred stocks must be convertible only to common stock and have a market value or original par value of at least \$50 million. The **S&P/LSTA Leveraged Loan Index** is a broad index designed to reflect the performance of U.S. dollar facilities in the leveraged loan market.

For more information about MainStay Funds® and IndexIQ ETFs, call 800-624-6782 for a prospectus or summary prospectus. Investors are asked to consider the investment objectives, risks, and charges and expenses of the investment carefully before investing. The prospectus or summary prospectus contains this and other information about the investment company. Please read the prospectus or summary prospectus carefully before investing.

For more information 800-624-6782 nylinvestments.com/funds nylinvestments.com/etfs



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