

Variable Insurance Products

As disclosed in the current prospectus for your variable product, MassMutual and certain affiliated companies may receive compensation from certain funds or the fund advisers or sub-advisers to certain funds that are available as investment choices within variable annuity and variable life insurance contracts issued by MassMutual and certain affiliates. The list of the funds who pay such compensation or whose advisers or sub-advisers pay such compensation is provided below. Please note that each fund listed below is not available in every variable annuity and variable life insurance contract. Please refer to your prospectus for additional information regarding these payments.

Variable Annuity Contracts

Compensation we receive from Advisers and Sub-Advisers:

- **American Funds Insurance Series®**
 - American Funds Insurance Series® Global Small Capitalization Fund
 - American Funds Insurance Series® New World Fund
 - American Funds Insurance Series® Washington Mutual Investors Fund
- **BlackRock Variable Series Funds, Inc.**
 - BlackRock 60/40 Target Allocation ETF V.I. Fund
- **Columbia Funds Variable Insurance Trust**
 - Columbia VP Contrarian Core Fund
- **Fidelity® Variable Insurance Products**
 - Fidelity® VIP Contrafund® Portfolio
 - Fidelity® VIP Health Care Portfolio
 - Fidelity® VIP Overseas Portfolio
 - Fidelity® VIP Real Estate Portfolio
 - Fidelity® VIP Strategic Income Portfolio
- **Ivy Funds Variable Insurance Portfolios**
 - Macquarie VIP Asset Strategy Series
 - Macquarie VIP Growth Series
- **Invesco Variable Insurance Funds**
 - Invesco V.I. Diversified Dividend Fund
 - Invesco V.I. Discovery Large Cap Fund
 - Invesco V.I. Discovery Mid Cap Growth Fund
 - Invesco V.I. Equity and Income Fund
 - Invesco V.I. Global Fund
 - Invesco V.I. Global Strategic Income Fund



- Invesco V.I. Health Care Fund
- Invesco Oppenheimer V.I. International Growth Fund
- Invesco V.I. Main Street Fund®
- Invesco V.I. Technology Fund
- **Janus Aspen Series**
 - Janus Henderson Enterprise Portfolio
 - Janus Henderson Global Technology and Innovation Portfolio
 - Janus Henderson Overseas Portfolio
- **PIMCO Variable Insurance Trust**
 - PIMCO Commodity RealReturn® Strategy Portfolio
 - PIMCO Income Portfolio
- **MML Series Investment Fund and MML Series Investment Fund II**
 - MML Aggressive Allocation Fund
 - MML American Funds Core Allocation Fund
 - MML American Funds Growth Fund
 - MML Balanced Allocation Fund
 - MML Blend Fund
 - MML Blue Chip Growth Fund
 - MML Conservative Allocation Fund
 - MML Equity Fund
 - MML Equity Income Fund
 - MML Equity Index Fund
 - MML Foreign Fund
 - MML Fundamental Equity Fund
 - MML Global Fund
 - MML Growth Allocation Fund
 - MML Income & Growth Fund
 - MML Inflation-Protected & Income Fund
 - MML International Equity Fund
 - MML iShares® 60/40 Allocation Fund
 - MML iShares® 80/20 Allocation Fund
 - MML Large Cap Growth Fund
 - MML Managed Bond Fund
 - MML Managed Volatility Fund
 - MML Mid Cap Growth Fund
 - MML Mid Cap Value Fund
 - MML Moderate Allocation Fund
 - MML Money Market Fund
 - MML Total Return Fund
 - MML Short-Duration Bond Fund
 - MML Small Cap Equity Fund
 - MML Small Cap Growth Equity Fund



- MML Small Company Value Fund
- MML Small/Mid Cap Value Fund
- MML Sustainable Equity Fund
- **VY Investors Trust**
 - VY® CBRE Global Real Estate Portfolio
- **World Funds Trust**
 - Vest U.S. Large Cap 10% Buffer Strategies VI Fund

Compensation we receive from the Funds:

- **American Funds Insurance Series®**
 - American Funds Insurance Series® Global Small Capitalization Fund (Class 4)
 - American Funds Insurance Series® New World Fund (Class 4)
 - American Funds Insurance Series® Washington Mutual Investors Fund (Class 4)
- **BlackRock Variable Series Funds, Inc.**
 - BlackRock 60/40 Target Allocation ETF V.I. Fund (Class III)
- **Columbia Funds Variable Insurance Trust**
 - Columbia VP Contrarian Core Fund (Class 2)
- **Fidelity® Variable Insurance Products**
 - Fidelity® VIP Contrafund® Portfolio (Service Class 2)
 - Fidelity® VIP Health Care Portfolio (Service Class 2)
 - Fidelity® VIP Real Estate Portfolio (Service Class 2)
 - Fidelity® VIP Strategic Income Portfolio (Service Class 2)
 - Fidelity® VIP Overseas Portfolio (Service Class 2)
- **Ivy Funds Variable Insurance Portfolios**
 - Macquarie VIP Asset Strategy Series (Service Class)
 - Macquarie VIP Growth Series (Service Class)
- **Invesco Variable Insurance Funds**
 - Invesco V.I. Diversified Dividend Fund (Series II)
 - Invesco V.I. Health Care Fund (Series II)
 - Invesco V.I. Technology Fund (Series II)
 - Invesco V.I. Discovery Large Cap Fund (Series II)
 - Invesco V.I. Discovery Mid Cap Growth Fund (Series II)
 - Invesco V.I. Equity and Income Fund (Series II)
 - Invesco V.I. Global Fund (Series II)
 - Invesco V.I. Global Strategic Income Fund (Series II)
 - Invesco Oppenheimer V.I. International Growth Fund (Series II)
 - Invesco V.I. Main Street Fund® (Series II)
- **Janus Aspen Series**
 - Janus Henderson Enterprise Portfolio (Service Shares)



- Janus Henderson Global Technology and Innovation Portfolio (Service Shares)
- Janus Henderson Overseas Portfolio (Service Shares)
- **MML Series Investment Fund and MML Series Investment Fund II: (We receive compensation on all MML funds through either Service Class or Service Class I shares)**
- **VY Investors Trust**
 - VY® CBRE Global Real Estate Portfolio (Class S)
- **World Funds Trust**
 - Vest U.S. Large Cap 10% Buffer Strategies VI Fund (Class I)

Variable Life Insurance Policies

Compensation we receive from Advisers, Sub-Advisers or an Affiliated Company:

- **American Funds Insurance Series®**
 - American Funds Insurance Series® Asset Allocation Fund
 - American Funds Insurance Series® Global Small Capitalization Fund
 - American Funds Insurance Series® Growth-Income Fund
 - American Funds Insurance Series® New World Fund
 - American Funds Insurance Series® Washington Mutual Investors Fund
- **Columbia Funds Variable Insurance Trust**
 - Columbia VP Contrarian Core Fund
- **DWS Investments VIT Funds**
 - DWS Small Cap Index VIP
- **Fidelity® Variable Insurance Products Fund**
 - Fidelity® VIP Growth Portfolio
 - Fidelity® VIP High Income Portfolio
 - Fidelity® VIP Overseas Portfolio
 - Fidelity® VIP Health Care Portfolio
 - Fidelity® VIP Real Estate Portfolio
 - Fidelity® VIP Strategic Income Portfolio
- **Fidelity® Variable Insurance Products Fund II**
 - Fidelity® VIP Contrafund® Portfolio
 - Fidelity® VIP Index 500 Portfolio
- **Fidelity® Variable Insurance Products Fund V**
 - Fidelity® VIP Money Market Portfolio



- **Franklin Templeton Variable Insurance Products Trust**
 - Franklin Small Cap Value VIP Fund
 - Templeton Foreign VIP Fund
- **Goldman Sachs Variable Insurance Trust**
 - Goldman Sachs Large Cap Value Fund
 - Goldman Sachs Mid Cap Value Fund
 - Goldman Sachs Strategic Growth Fund
 - Goldman Sachs Strategic International Equity Fund
 - Goldman Sachs U.S. Equity Insights Fund
- **Invesco Variable Insurance Funds**
 - Invesco V.I. Core Plus Bond Fund
 - Invesco V.I. Diversified Dividend Fund
 - Invesco V.I. Health Care Fund
 - Invesco V.I. Technology Fund
 - Invesco V.I. Discovery Large Cap Fund
 - Invesco V.I. Discovery Mid Cap Growth Fund
 - Invesco V.I. Global Fund
 - Invesco V.I. Global Strategic Income Fund
 - Invesco V.I. Main Street Fund®
 - Invesco Oppenheimer V.I. International Growth Fund
- **Janus Aspen Series**
 - Janus Henderson Balanced Portfolio
 - Janus Henderson Enterprise Portfolio
 - Janus Henderson Forty Portfolio
 - Janus Henderson Global Research Portfolio
 - Janus Henderson Global Technology and Innovation Portfolio
 - Janus Henderson Overseas Portfolio
- **Lincoln Variable Insurance Products Trust**
 - LVIP American Century Disciplined Core Value Fund
 - LVIP American Century Value Fund
- **MFS® Variable Insurance TrustSM**
 - MFS® Growth Series
 - MFS® Investors Trust Series
 - MFS® New Discovery Series
 - MFS® Research Series
- **MML Series Investment Fund and MML Series Investment Fund II**
 - MML Aggressive Allocation Fund
 - MML American Funds Core Allocation Fund
 - MML American Funds Growth Fund
 - MML Balanced Allocation Fund
 - MML Blend Fund



- MML Blue Chip Growth Fund
 - MML Conservative Allocation Fund
 - MML Equity Fund
 - MML Equity Income Fund
 - MML Equity Index Fund
 - MML Foreign Fund
 - MML Fundamental Equity Fund
 - MML Global Fund
 - MML Growth Allocation Fund
 - MML Income & Growth Fund
 - MML Inflation-Protected & Income Fund
 - MML International Equity Fund
 - MML iShares® 60/40 Allocation Fund
 - MML iShares® 80/20 Allocation Fund
 - MML Large Cap Growth Fund
 - MML Managed Bond Fund
 - MML Managed Volatility Fund
 - MML Mid Cap Growth Fund
 - MML Mid Cap Value Fund
 - MML Moderate Allocation Fund
 - MML Money Market Fund
 - MML Total Return Fund
 - MML Short-Duration Bond Fund
 - MML Small Cap Equity Fund
 - MML Small Cap Growth Equity Fund
 - MML Small Company Value Fund
 - MML Small/Mid Cap Value Fund
 - MML Sustainable Equity Fund
- **T. Rowe Price Equity Series, Inc.**
 - T Rowe Price Blue Chip Growth Portfolio
 - T Rowe Price Equity Income Portfolio
 - T Rowe Price Mid-Cap Growth Portfolio
 - **VY Investors Trust**
 - VY® CBRE Global Real Estate Portfolio
 - **World Funds Trust**
 - Vest U.S. Large Cap 10% Buffer Strategies VI Fund



Institutional Insurance

Compensation we receive from Advisers, Sub-Advisers or an Affiliated Company:

- **Lincoln Variable Insurance Products Trust**

- LVIP American Century Capital Appreciation Fund (Standard Class II)
- LVIP American Century Disciplined Core Value Fund (Standard Class II)
- LVIP American Century International Fund (Standard Class II)
- LVIP American Century Ultra® Fund (Standard Class II)
- LVIP American Century Value Fund (Standard Class II)
- LVIP American Century Inflation Protection Fund (Standard Class II)
- LVIP American Century Inflation Protection Fund (Service Class)

- **American Funds Insurance Series®**

- American Funds Insurance Series® American High-Income Trust® (Class 1A)
- American Funds Insurance Series® Asset Allocation Fund (Class 1)
- American Funds Insurance Series® Capital World Bond Fund® (Class 1)
- American Funds Insurance Series® Capital World Growth and Income Fund (Class 1A)
- American Funds Insurance Series® Global Growth Fund (Class 1)
- American Funds Insurance Series® Global Small Capitalization Fund (Class 1)
- American Funds Insurance Series® Growth-Income Fund (Class 1A)
- American Funds Insurance Series® International Growth and Income Fund (Class 1)
- American Funds Insurance Series® New World Fund® (Class 1)
- American Funds Insurance Series® The Bond Fund of America® (Class 1A)
- American Funds Insurance Series® U.S. Government Securities Fund® (Class 1A)
- American Funds Insurance Series® Washington Mutual Investors FundSM (Class 1A)

- **BlackRock Variable Series Funds, Inc.**

- BlackRock Basic Value V.I. Fund (Class I)
- BlackRock Equity Dividend V.I. Fund (Class I)
- BlackRock International V.I. Fund (Class I)
- BlackRock Small Cap Index V.I. Fund (Class I)
- BlackRock Small Cap Index V.I. Fund (Class III)

- **BlackRock Variable Series Funds II, Inc.**

- BlackRock High Yield V.I. Fund (Class I)
- BlackRock Total Return V.I. Fund (Class I)

- **BNY Mellon Investment Portfolios**

- BNY Mellon IP MidCap Stock Portfolio (Service Class)
- BNY Mellon IP MidCap Stock Portfolio (Initial Class)



- **BNY Mellon Sustainable U.S. Equity Portfolio, Inc.**
 - BNY Mellon Sustainable U.S. Equity Portfolio (Initial Class)
- **Legg Mason Partners Variable Equity Trust**
 - ClearBridge Variable Mid Cap Portfolio (Class I)
 - ClearBridge Variable Small Cap Growth Portfolio (Class I)
- **Davis Variable Account Fund, Inc.**
 - Davis Financial Portfolio
- **Delaware VIP® Trust**
 - Macquarie VIP® Emerging Markets Series (Service Class)
 - Macquarie VIP® Emerging Markets Series (Standard Class)
 - Macquarie VIP® Small Cap Value Series (Standard Class)
 - Macquarie VIP® Small Cap Value Series (Service Class)
- **DFA Investment Dimensions Group Inc.**
 - DFA VA Global Bond Portfolio (Institutional Class)
 - DFA VA International Small Portfolio (Institutional Class)
 - DFA VA U.S. Large Value Portfolio (Institutional Class)
 - DFA VA U.S. Targeted Value Portfolio (Institutional Class)
 - DFA VIT Inflation-Protected Securities Portfolio (Institutional Class)
- **Eaton Vance Variable Trust**
 - Eaton Vance VT Floating-Rate Income Fund (Advisor Class)
 - Eaton Vance VT Floating-Rate Income Fund (Institutional Class)
- **Federated Hermes Insurance Series**
 - Federated Hermes High Income Bond Fund II (Primary Shares)
 - Federated Hermes Kaufman Fund II (Primary Shares)
 - Federated Hermes Managed Volatility Fund II (Primary Shares)
 - Federated Hermes Quality Bond Fund II (Primary Shares)
- **Fidelity® Variable Insurance Products Fund**
 - Fidelity® VIP Overseas Portfolio (Initial Class)
 - Fidelity® VIP Growth Portfolio (Service Class)
- **Fidelity® Variable Insurance Products Fund II**
 - Fidelity® VIP Contrafund® Portfolio (Initial Class)
 - Fidelity® VIP Disciplined Small Cap Portfolio (Initial Class)
 - Fidelity® VIP Equity-Income Portfolio (Initial Class)
 - Fidelity® VIP Emerging Markets Portfolio (Initial Class)
 - Fidelity® VIP Extended Market Index Portfolio (Initial Class)
 - Fidelity® VIP Extended Market Index Portfolio (Service Class 2)
 - Fidelity® VIP Growth Portfolio (Initial Class)
 - Fidelity® VIP Growth Opportunities Portfolio (Initial Class)



- Fidelity® VIP High Income Portfolio (Initial Class)
- Fidelity® VIP Index 500 Portfolio (Service Class)
- Fidelity® VIP International Index Portfolio (Service Class 2)
- Fidelity® VIP Investment Grade Bond Portfolio (Initial Class)
- Fidelity® VIP Total Market Index Portfolio (Service Class 2)
- Fidelity® VIP Value Strategies Portfolio (Initial Class)
- **Fidelity® Variable Insurance Products Fund III**
 - Fidelity® VIP Balanced Portfolio (Initial Class)
- **Fidelity® Variable Insurance Products Fund IV**
 - Fidelity® VIP Real Estate Portfolio (Initial Class)
 - Fidelity® VIP Real Estate Portfolio (Service Class)
- **Fidelity® Variable Insurance Products Fund V**
 - Fidelity® VIP Freedom 2005 Portfolio (Initial Class)
 - Fidelity® VIP Freedom 2010 Portfolio (Initial Class)
 - Fidelity® VIP Freedom 2015 Portfolio (Initial Class)
 - Fidelity® VIP Freedom 2020 Portfolio (Initial Class)
 - Fidelity® VIP Freedom 2020 Portfolio (Service Class)
 - Fidelity® VIP Freedom 2025 Portfolio (Initial Class)
 - Fidelity® VIP Freedom 2025 Portfolio (Service Class)
 - Fidelity® VIP Freedom 2030 Portfolio (Initial Class)
 - Fidelity® VIP Freedom 2030 Portfolio (Service Class)
 - Fidelity® VIP Freedom 2035 Portfolio (Initial Class)
 - Fidelity® VIP Freedom 2035 Portfolio (Service Class)
 - Fidelity® VIP Freedom 2040 Portfolio (Initial Class)
 - Fidelity® VIP Freedom 2040 Portfolio (Service Class)
 - Fidelity® VIP Freedom 2045 Portfolio (Initial Class)
 - Fidelity® VIP Freedom 2045 Portfolio (Service Class)
 - Fidelity® VIP Freedom 2050 Portfolio (Initial Class)
 - Fidelity® VIP Freedom 2050 Portfolio (Service Class)
 - Fidelity® VIP Freedom 2055 Portfolio (Initial Class)
 - Fidelity® VIP Freedom 2055 Portfolio (Service Class)
 - Fidelity® VIP Freedom 2060 Portfolio (Initial Class)
 - Fidelity® VIP Freedom 2060 Portfolio (Service Class)
 - Fidelity® VIP Freedom 2065 Portfolio (Initial Class)
 - Fidelity® VIP Freedom 2065 Portfolio (Service Class)
 - Fidelity® VIP Asset Manager Portfolio (Initial Class)
 - Fidelity® VIP Asset Manager Growth Portfolio (Initial Class)
 - Fidelity® VIP Bond Index Portfolio (Service Class 2)
- **Franklin Templeton Variable Insurance Products Trust**
 - Franklin Income VIP Fund (Class 1)
 - Franklin Mutual Global Discovery VIP Fund (Class 1)



- Franklin Mutual Global Discovery VIP Fund (Class 2)
- Franklin Rising Dividends VIP Fund (Class 1)
- Franklin Small Cap Value VIP Fund (Class 1)
- Franklin Small Cap Value VIP Fund (Class 2)
- Franklin Small-Mid Cap Growth VIP Fund (Class 1)
- Franklin Strategic Income VIP Fund (Class 1)
- Franklin Strategic Income VIP Fund (Class 2)
- Templeton Global Bond VIP Fund (Class 1)
- **Goldman Sachs Variable Insurance Trust**
 - Goldman Sachs VIT Core Fixed Income Fund (Service)
 - Goldman Sachs VIT International Equity Insights Fund (Institutional)
 - Goldman Sachs VIT Mid Cap Growth Fund (Institutional)
 - Goldman Sachs VIT Mid Cap Growth Fund (Service)
 - Goldman Sachs VIT Mid Cap Value Fund (Institutional)
 - Goldman Sachs VIT Small Cap Equity Insights Fund (Institutional)
- **Invesco Variable Insurance Funds**
 - Invesco V.I. Discovery Large Cap Fund (Series I)
 - Invesco V.I. Discovery Mid Cap Growth Fund (Series I)
 - Invesco V.I. Global Strategic Income Fund (Series I)
 - Invesco V.I. Global Fund (Series I)
 - Invesco V.I. Main Street Fund (Series I)
 - Invesco V.I. Main Street Small Cap Fund (Series I)
 - Invesco V.I. Core Plus Bond Fund (Series I)
 - Invesco V.I. American Franchise Fund (Series I)
 - Invesco V.I. Balanced-Risk Allocation Fund (Series I)
 - Invesco V.I. Comstock Fund (Series I)
 - Invesco V.I. Core Equity Fund (Series I)
 - Invesco V.I. Diversified Dividend Fund (Series I)
 - Invesco V.I. Equally-Weighted S&P 500 Fund (Series I)
 - Invesco V.I. Equity and Income Fund (Series I)
 - Invesco V.I. Global Core Equity Fund (Series I)
 - Invesco V.I. Global Real Estate Fund (Series I)
 - Invesco V.I. Government Securities Fund (Series I)
 - Invesco V.I. Government Money Market Fund (Series I)
 - Invesco V.I. Growth and Income Fund (Series I)
 - Invesco V.I. Health Care Fund (Series I)
 - Invesco V.I. EQV International Equity Fund (Series I)
 - Invesco Oppenheimer V.I. International Growth Fund (Series I)
 - Invesco V.I. Small Cap Equity Fund (Series I)
 - Invesco V.I. Technology Fund (Series I)

- **Ivy Funds Variable Insurance Portfolios**
 - Macquarie VIP Asset Strategy Portfolio (Service Class)
 - Macquarie VIP Science and Technology Portfolio (Service Class)
 - Macquarie VIP Balanced (Service Class)
 - Macquarie VIP Core Equity (Service Class)
 - Macquarie VIP Growth (Service Class)
 - Macquarie VIP High Income (Service Class)
 - Macquarie VIP International Core Equity (Service Class)
 - Macquarie VIP Mid Cap Growth (Service Class)
 - Macquarie Ivy Funds VIP Smid Cap Core (Service Class)
 - Macquarie Ivy VIP Value (Service Class)
- **Lazard Retirement Services, Inc.**
 - Lazard Retirement International Equity Portfolio (Service Class)
- **Legg Mason Partners Variable Income Trust**
 - Western Asset Core Plus VIT Portfolio (Class I)
 - Western Asset Long Credit VIT Portfolio (Class I)
- **Lord Abnett Series Fund, Inc.**
 - Lord Abnett Series Bond-Debenture Portfolio (Class VC)
 - Lord Abnett Developing Growth Portfolio (Class VC)
 - Lord Abnett Mid Cap Stock Portfolio (Class VC)
 - Lord Abnett Total Return Portfolio (Class VC)
- **MFS® Variable Insurance TrustSM**
 - MFS® VIT Growth Series (Initial Class)
 - MFS® VIT New Discovery Portfolio (Initial Class)
 - MFS® VIT Research Portfolio (Initial Class)
 - MFS® VIT Utilities Series (Initial Class)
 - MFS® VIT Value Series (Initial Class)
- **MFS® Variable Insurance TrustSM II**
 - MFS® VIT II Blended Research Core Equity Portfolio (Initial Class)
 - MFS® VIT II Government Securities Portfolio (Initial Class)
 - MFS® VIT II International Intrinsic Value Portfolio (Initial Class)
- **MFS® Variable Insurance TrustSM III**
 - MFS® VIT III Global Real Estate Portfolio (Initial Class)
 - MFS® VIT III Mid Cap Value Portfolio (Initial Class)
- **MML Series Investment Fund and MML Series Investment Fund II**
 - MML Aggressive Allocation Fund (Initial Class)
 - MML American Funds Core Allocation Fund (Service Class 1)
 - MML American Funds Growth Fund (Service Class 1)
 - MML Balanced Allocation Fund (Initial Class)

- MML Blend Fund (Initial Class)
 - MML Blue Chip Growth Fund (Initial Class)
 - MML Conservative Allocation Fund (Initial Class)
 - MML Equity Fund (Initial Class)
 - MML Equity Income Fund (Initial Class)
 - MML Equity Index Fund (Service Class I, Class II and III)
 - MML Focused Equity Fund (Class II)
 - MML Foreign Fund (Initial Class)
 - MML Fundamental Equity Fund (Class II)
 - MML Global Fund (Service Class I)
 - MML Growth Allocation Fund (Initial Class)
 - MML Income & Growth Fund (Initial Class)
 - MML Inflation-Protected & Income Fund (Initial Class)
 - MML International Equity Fund (Class II)
 - MML Large Cap Growth Fund (Initial Class)
 - MML Managed Bond Fund (Initial Class)
 - MML Managed Volatility Fund (Initial Class)
 - MML Mid Cap Growth Fund (Initial Class)
 - MML Mid Cap Value Fund (Initial Class)
 - MML Moderate Allocation Fund (Initial Class)
 - MML Short-Duration Bond Fund (Class II)
 - MML Small Cap Equity Fund (Initial Class)
 - MML Small Cap Growth Equity Fund (Initial Class)
 - MML Small Company Value Fund (Class II)
 - MML Small/Mid Cap Value Fund (Initial Class)
 - MML Sustainable Equity Fund (Initial Class)
 - MML Total Return Bond Fund (Class II)
 - MML U.S. Government Money Market Fund (Initial Class)
- **Morgan Stanley Variable Insurance Funds, Inc.**
 - Morgan Stanley VIF Emerging Markets Debt Portfolio (Class I)
 - Morgan Stanley VIF Global Strategist Portfolio (Class I)
 - Morgan Stanley VIF Growth Portfolio (Class I)
- **Northern Lights Variable Trust**
 - TOPS® Aggressive Growth ETF Portfolio (Class 1)
 - TOPS® Balanced ETF Portfolio (Class 1)
 - TOPS® Conservative ETF Portfolio (Class 1)
 - TOPS® Growth ETF Portfolio (Class 1)
 - TOPS® Moderate Growth ETF Portfolio (Class 1)
- **Neuberger Berman Advisers Management Trust**
 - Neuberger Berman AMT Mid-Cap Intrinsic Value Portfolio (Class I)

- Neuberger Berman AMT Mid-Cap Growth Portfolio (Class I)
- Neuberger Berman AMT Sustainable Equity Portfolio (Class I)

- **PIMCO Variable Insurance Trust**

- PIMCO All Asset Portfolio (Administrative Class)
- PIMCO All Asset Portfolio (Institutional Class)
- PIMCO Commodity RealReturn® Strategy Portfolio (Advisor Class)
- PIMCO Commodity RealReturn® Strategy Portfolio (Institutional Class)
- PIMCO VIT Dynamic Bond Portfolio (Institutional Class)
- PIMCO Emerging Markets Bond Portfolio (Advisor Class)
- PIMCO Emerging Markets Bond Portfolio (Institutional Class)
- PIMCO Global Bond Opportunities Portfolio (Unhedged) (Administrative Class)
- PIMCO Global Bond Opportunities Portfolio (Unhedged) (Institutional Class)
- PIMCO High Yield Portfolio (Administrative Class)
- PIMCO High Yield Portfolio (Institutional Class)
- PIMCO Income Portfolio (Institutional Class)
- PIMCO VIT International Bond Portfolio - U.S. Dollar-Hedged (Institutional Class)
- PIMCO VIT Long-Term U.S. Government Portfolio (Administrative Class)
- PIMCO VIT Long-Term U.S. Government Portfolio (Institutional Class)
- PIMCO VIT Low Duration Portfolio (Institutional Class)
- PIMCO Real Return Portfolio (Administrative Class)
- PIMCO Real Return Portfolio (Institutional Class)
- PIMCO Total Return Portfolio (Administrative Class)
- PIMCO Total Return Portfolio (Institutional Class)

- **Schwab VIT Portfolios**

- Schwab VIT Balanced Portfolio
- Schwab VIT Balanced with Growth Portfolio
- Schwab VIT Growth Portfolio

- **Schwab Annuity Portfolios**

- Schwab S&P 500 Index Portfolio

- **T. Rowe Price Fixed Income Series, Inc.**

- T. Rowe Price Limited-Term Bond Portfolio

- **T. Rowe Price Equity Series, Inc.**

- T. Rowe Price Blue Chip Growth Portfolio
- T. Rowe Price International Stock Portfolio
- T. Rowe Price Moderate Allocation Portfolio
- T. Rowe Price All-Cap Opportunities Portfolio



- **Pioneer Variable Contracts Trust**
 - Pioneer Bond VCT Portfolio (Class I)
 - Pioneer Equity Income VCT Portfolio (Class I)
- **Putnam Investment Management, LLC**
 - Putnam VT Income Fund (Class IA)
- **VanEck VIP Trust**
 - VanEck VIP Emerging Markets Bond Fund (Initial Class)
 - VanEck VIP Emerging Markets Fund (Initial Class)
 - VanEck VIP Global Hard Assets Fund (Initial Class)
- **Vanguard® Variable Insurance Funds**
 - Vanguard VIF Balanced Portfolio
 - Vanguard VIF Capital Growth Portfolio
 - Vanguard VIF Diversified Value Portfolio
 - Vanguard VIF Equity Income Portfolio
 - Vanguard VIF Growth Portfolio
 - Vanguard VIF High-Yield Bond Portfolio
 - Vanguard VIF International Portfolio
 - Vanguard VIF Mid-Cap Index Portfolio
 - Vanguard VIF Real Estate Index Portfolio
 - Vanguard VIF Short-Term Investment-Grade Portfolio
 - Vanguard VIF Total Bond Market Index Portfolio
 - Vanguard VIF Total International Stock Market Index Portfolio
 - Vanguard VIF Total Stock Market Index Portfolio
- **Voya Variable Portfolios, Inc.**
 - Voya International Index Portfolio (Class S)
 - Voya Russell™ Mid Cap Index Portfolio (Class S)
 - Voya Russell™ Small Cap Index Portfolio (Class S)

