

Objective

The fund seeks as high a level of current income as Putnam Management believes is consistent with preservation of capital.

Portfolio Managers

Michael V. Salm

(industry since 1989)

Brett S. Kozlowski, CFA

(industry since 1997)

Jatin Misra, PhD, CFA

(industry since 2004)

Current unit value

Class IA: \$9.64

Class IB: \$9.62

Credit qualities are shown as a percentage of the fund's net assets. A bond rated BBB or higher (A-3 or higher, for short-term debt) is considered investment grade. This chart reflects the highest security rating provided by one or more of Standard & Poor's, Moody's, and Fitch. To-be-announced (TBA) mortgage commitments, if any, are included based on their issuer ratings. Ratings may vary over time. Cash, derivative instruments, and net other assets are shown in the not-rated category. Payables and receivables for TBA mortgage commitments are included in the not-rated category and may result in negative weights. **The fund itself has not been rated by an independent rating agency.**

Putnam VT Mortgage Securities Fund

Seeking opportunities throughout the universe of mortgage-related bonds

Broad securitized opportunities

The fund invests in multiple mortgage sectors, including agency MBS and CMOs, non-agency RMBS and CMBS, and ABS.

Higher potential returns

By investing in mortgage-backed bonds, the fund can offer the potential for higher returns than an investment strategy focused only on agency MBS.

Leading research

The fund's portfolio managers use proprietary models to assist in the evaluation of mortgage-backed bonds and to manage the fund's interest-rate risk.

Diversification across bond market sectors

Agency pass-through	82.2%
Commercial MBS	42.6
Agency CMO	40.0
Residential MBS (non-agency)	19.3
Asset-backed securities (ABS)	1.5
Net cash	9.9

Allocations will vary over time. Allocations may not total 100% of net assets because the table includes the notional value of derivatives (the economic value for purposes of calculating periodic payment obligations), in addition to the market value of securities.

Maturity breakdown

0 to 1 year	-47.0%
1 to 5 years	83.1
5 to 10 years	53.5
10 to 15 years	10.2
Over 15 years	0.1

Portfolio quality

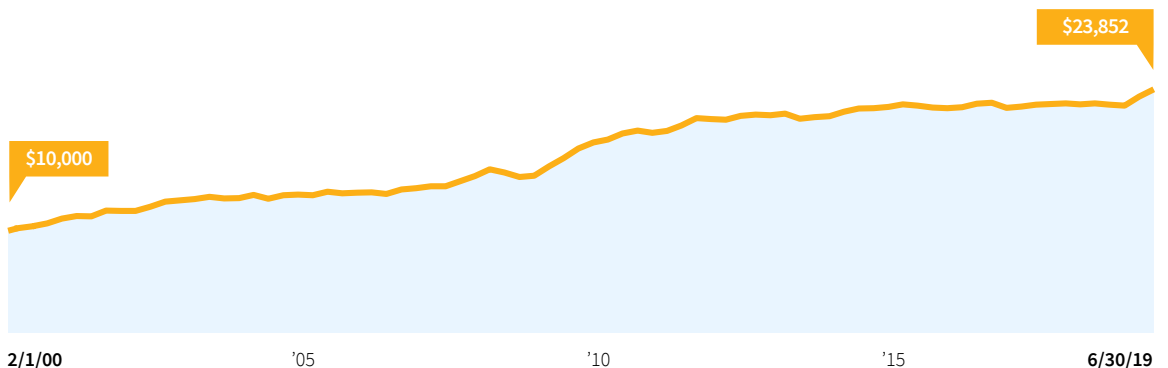
AAA	116.3%
AA	8.3
A	9.1
BBB	7.2
BB	3.9
B	5.6
CCC and below	3.0
Not rated	-53.4

Allocations will vary over time. Due to rounding, percentages may not equal 100%.

A negative percentage reflects the effect of fund strategies that are designed to enhance performance if certain securities decline in value.

Growth of a \$10,000 investment

The fund has returned an average of 4.6% annually since inception. (Class IB)



Current performance may be lower or higher than the quoted past performance, which cannot guarantee future results. Share price, principal value, and return will vary, and you may have a gain or a loss when you sell your shares. All total return figures are at net asset value. The charges and expenses of the insurance company separate account level are not reflected. To obtain the most recent month-end performance, contact your variable annuity provider, who has more information about their variable annuity and variable life products that invest in Putnam managed products. For a portion of the period, this fund limited expenses, without which returns would have been lower.

**Not FDIC insured
May lose value
No bank guarantee**

Lipper rankings

(1B shares)	
1 year	50% (8/15)
3 years	43% (6/13)
5 years	86% (12/13)
10 years	25% (2/7)

Lipper category

U.S. Mortgage funds

Number of holdings

703

Net assets

\$56.63M

Average effective duration

2.89

The Bloomberg Barclays U.S. MBS Index is an unmanaged index of agency mortgage backed pass-through securities (both fixed-rate and hybrid ARM) guaranteed by Ginnie Mae, Fannie Mae, and Freddie Mac. The Bloomberg Barclays GNMA-Bloomberg Barclays U.S. MBS Linked Benchmark represents performance of the Bloomberg Barclays GNMA Index through April 18, 2018, and performance of the Bloomberg Barclays U.S. MBS Index thereafter. You cannot invest directly in an index.

Lipper rankings for class IB shares are based on total return without sales charge relative to all share classes of funds with similar objectives as determined by Lipper. Variable annuities are long-term investment vehicles intended for retirement planning. Annuities have insurance related charges and tax considerations, and are offered by contract only.

For informational purposes only. Not an investment recommendation.

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Putnam Retail Management
FS038_VT 317427 7/19

Annual performance at net asset value (all distributions reinvested)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 YTD
Class IA	5.3%	7.1%	2.2%	-0.2%	4.5%	-0.3%	0.4%	2.3%	-0.6%	7.3%
Class IB	5.2	6.8	1.9	-0.5	4.3	-0.7	0.2	2.0	-0.9	7.2
BBG Barclays U.S. MBS Index	5.4	6.2	2.6	-1.4	6.1	1.5	1.7	2.5	1.0	4.2
BBG GNMA-Bloomberg Barclays U.S. MBS Linked Benchmark	5.5	9.0	2.0	-2.6	4.9	0.9	1.1	2.3	0.7	4.2

Annualized total return performance

	Class IA (2/1/00) NAV	Class IB (2/1/00) NAV	BBG Barclays U.S. MBS Index	BBG GNMA- Bloomberg Barclays U.S. MBS Linked Benchmark
1 year	6.53%	6.14%	6.22%	6.22%
3 years	2.38	2.09	2.06	1.00
5 years	1.95	1.68	2.56	2.24
10 years	3.65	3.37	3.23	2.85
Life of fund	4.84	4.58	4.87	4.57

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Average effective duration provides a measure of a fund's interest-rate sensitivity. The longer a fund's duration, the more sensitive the fund is to shifts in interest rates.

Not all share classes are available on all platforms.

Consider these risks before investing: Funds that invest in government securities are not guaranteed. Mortgage- and asset-backed securities are subject to prepayment risk, which means that they may increase in value less than other bonds when interest rates decline and decline in value more than other bonds when interest rates rise. The fund may have to invest the proceeds from prepaid investments, including mortgage- and asset-backed investments, in other investments with less attractive terms and yields. The fund's investments in mortgage-backed securities and asset-backed securities, and in certain other securities and derivatives, may be or become illiquid. The fund's exposure to privately issued mortgage-backed securities and mortgage-backed securities issued or guaranteed by the U.S. government or its agencies or instrumentalities may make the fund's net asset value more susceptible to economic, market, political and other developments affecting the housing or real estate markets. Bond investments are subject to interest-rate risk (the risk of bond prices falling if interest rates rise) and credit risk (the risk of an issuer defaulting on interest or principal payments). Interest-rate risk is generally greater for longer-term bonds, and credit risk is generally greater for below-investment-grade bonds. Default risk is generally higher for non-qualified mortgages. Risks associated with derivatives include increased investment exposure (which may be considered leverage) and, in the case of over-the-counter instruments, the potential inability to terminate or sell derivatives positions and the potential failure of the other party to the instrument to meet its obligations. Unlike bonds, funds that invest in bonds have fees and expenses. The value of investments in the fund's portfolio may fall or fail to rise over extended periods of time for a variety of reasons, including general economic, political, or financial market conditions; investor sentiment and market perceptions; government actions; geopolitical events or changes; and factors related to a specific issuer, geography (such as a region of the United States), industry, or sector, such as the housing or real estate markets. These and other factors may lead to increased volatility and reduced liquidity in the fund's portfolio holdings or in relevant markets. You can lose money by investing in the fund.

Your clients should carefully consider the investment objective, risks, charges, and expenses of a fund before investing. For a prospectus containing this and other information for any variable annuity or variable life product that invests in Putnam managed products, call the Putnam Client Engagement Center at 1-800-354-4000. Your clients should read the prospectus carefully before investing.