MASSACHUSETTS HOUSING FINANCE AGENCY RETIREMENT SYSTEM

INVESTMENT POLICY STATEMENT

Updated
April 2018

The purpose of this document is to set forth the goals and objectives of the Massachusetts Housing Finance Agency Retirement System and to establish guidelines for the implementation of investment strategy.

Any revisions to this document may be made only with the approval of the Board of the Massachusetts Housing Finance Agency Retirement System.

The Retirement Board recognizes that a stable, well-articulated investment policy is crucial to the long-term success of the Retirement System. As such, the Board has developed this Investment Policy Statement with the following goals in mind:

- To clearly and explicitly establish the objectives and constraints that govern the investment of the Retirement System's assets,
- To establish a long-term target asset allocation with a high likelihood of meeting the Retirement System's objectives given the explicit constraints, and
- To protect the financial health of the Retirement System through the implementation of this stable long-term investment policy.

I. Massachusetts Housing Finance Agency Retirement System Goals

The Massachusetts Housing Finance Agency Retirement System was established to provide retirement income for Massachusetts Housing Finance Agency Retirement System employees and their families. The Retirement System's assets are structured to provide growth from capital gains and income, while maintaining sufficient liquidity to meet beneficiary payments.

II. Investment Objectives

The investment strategy of the Massachusetts Housing Finance Agency Retirement System is designed to ensure the prudent investment of funds in such a manner as to provide real growth of assets over time while protecting the value of the assets from undue volatility or risk of loss.

A. Risk Objectives

- To accept a level of market risk consistent with moderate interim volatility without sacrificing the potential for long-term real growth of assets.
- To use extensive diversification to minimize exposure to company and industry-specific risks in the aggregate investment portfolio.
- To avoid extreme levels of volatility that could adversely affect the Massachusetts Housing Finance Agency Retirement System's participants.
- To limit the likelihood of investment return patterns that could negatively impact the funded status of the Retirement System.

B. Return Objective

- Within the risk constraints outlined above, to achieve the highest real return possible.
- To achieve, over long time periods, investment returns consistent with the actuarial assumed rate of return on assets of 7.50%.

III. Investment Constraints

A. Legal and Regulatory

The Massachusetts Housing Finance Agency Retirement System is a qualified defined benefit plan governed by the Massachusetts General Laws, Chapter 32. Investment procedures and restrictions stipulated under these regulations must be followed.

The Board intends that the assets of the Retirement System at all times are invested in accordance with the provisions of Massachusetts State laws and, specifically, 840 C.M.R., the "investment regulations" established and maintained by the Public Employee Retirement Administration Commission (PERAC). The Board will retain legal counsel when appropriate to review contracts and provide advice with respect to applicable statutes and regulations.

B. Time Horizon

The Retirement System will be managed on a going-concern basis. The assets of the Retirement System will be invested with a long-term time horizon (twenty years or more), consistent with the participant demographics and the purpose of the Retirement System.

C. Tax Considerations

The Retirement System is a tax-exempt entity. Therefore, investments and strategies will be evaluated only on the basis of expected risks and potential returns.

IV. Risk and Return Considerations

The Retirement Board of the Massachusetts Housing Finance Agency Retirement System recognizes that a persistent positive relationship exists between risk and return, whether risk is described as possibility of loss or as interim volatility. The Board also recognizes that investors are rarely compensated for risks that can be eliminated through diversification. Within the risk and return parameters discussed above, the Board accepts the risks associated with investing in the capital markets (market risks), but will minimize wherever possible those risks for which the Retirement System is unlikely to be compensated (non-market or diversifiable risks).

V. Diversification

The Board of the Massachusetts Housing Finance Agency Retirement System recognizes that a primary element of risk control is diversification. Therefore, investments will be allocated across multiple classes of assets, chosen in part for their low correlation of returns. Within each asset type, investments will be distributed across many individual holdings, thus further reducing volatility. In addition, each investment manager's guidelines will specify the largest permissible investment in any one asset, and will set other diversification requirements.

The Retirement System's aggregate equity portfolio will be diversified by individual issue, by capitalization, and by industry. (International equity portfolios will be diversified by country, as well). The Retirement System's aggregate fixed income portfolio will, at a minimum, be diversified by individual issue, by issuer, by maturity, and by industry. The Retirement System's aggregate real estate portfolio will be invested across a spectrum of geographic regions and property types.

The specific degrees of diversification within the above asset classes will be addressed in each manager's investment guidelines.

VI. Asset Allocation

The Retirement Board recognizes that the allocation of monies to various asset classes will be the major determinant of the Retirement System's return and risk experience over time. Therefore, the Board will allocate investments across those asset classes which, based on historical and expected returns and risks, provide the highest likelihood of meeting the Retirement System's investment objectives.

A. Permissible Asset Classes

Because investment in any particular asset class may or may not be consistent with the objectives of the Retirement System, the Board has specifically indicated in Appendix A those asset classes that may be utilized when investing the Retirement System's assets.

B. Expected Returns, Risks, and Correlations for Permissible Asset Classes

The risk and return behavior of the Retirement System will be driven primarily by the allocation of investments across asset classes. In determining the appropriate allocation, the expected return and risk behavior of each asset class and the likely interaction of various asset classes in a portfolio must be examined. Appendix B lists the expected return, volatility, and correlations for each permissible asset class.

C. Long-Term Target Allocations

Based on the investment objectives and constraints of the Retirement System, and on the expected behavior of the permissible asset classes, the Board will specify a long-term target allocation for each class of permissible assets. These targets will be expressed as a percentage of the Retirement System's overall market value, surrounded by a band of permissible variation resulting from market forces.

The long-term target allocations are intended as strategic goals, not short-term imperatives. Thus, it is permissible for the overall System's asset allocation to deviate from the long-term target, as would likely occur during manager transitions, asset class restructurings, and other temporary changes in the Retirement System. Deviations from targets that occur due to capital market changes are discussed below.

The Retirement System's target allocations for all permissible asset classes are shown in Appendix C.

D. Rebalancing

In general, cash flows to and from the Retirement System will be allocated in such a manner as to move each asset class toward its target allocation.

The Board recognizes that, periodically, market forces may move the Retirement System's allocations outside the target ranges. The Board also recognizes that failing to rebalance the allocations would unintentionally change the Retirement System's structure and risk posture. Consequently, the Board has established a process to rebalance the allocations periodically.

On at least an annual basis, if any strategic allocation is outside the specified target range, assets will be shifted to return the strategy to the target range. The specific plan for rebalancing will identify those assets that can be shifted at the lowest possible risk and cost, if the rebalancing cannot be accomplished solely by allocating contributions and withdrawals.

E. Changes to Asset Allocation

Once established, permanent changes in the Retirement System's target asset allocation will take place only in response to significant changes in the objectives and constraints of the Retirement System, or in response to material changes in the fundamental nature or appropriateness of the asset classes themselves.

VII. Review of Investment Policy, Asset Allocation, and Performance

The Investment Policy Statement will be reviewed at least annually, and specifically upon each actuarial valuation, to ensure that the objectives and constraints remain relevant. However, the Board recognizes the need for a stable long-term policy for the Massachusetts Housing Finance Agency Retirement System, and major changes to this policy statement will be made only when significant developments in the circumstances of the Retirement System occur. The Board will notify PERAC of any changes to this document within ten days of the effective date of those changes.

The asset allocation of the Retirement System will be reviewed on an on-going basis, and at least annually. When necessary, such reviews may result in a rebalancing of asset allocations.

In general, the Board intends that the Retirement System will adhere to its long-term target allocations, and that major changes to these targets will be made rarely and only in response to significant developments in the circumstances of the Retirement System.

The Board will specifically evaluate the performance of the Retirement System relative to its objectives and to the returns available from the capital markets during the period under review. In general, the Board will utilize relative, rather than absolute, benchmarks in evaluating performance. The total performance of the Retirement System will be evaluated relative to the investment objectives and constraints identified in this investment policy statement. Specifically, the total Fund performance will be evaluated relative to a "custom benchmark" that weights the returns of market indices on the basis of the Retirement System's target investment structure, to assess the implementation of the Retirement System's investment strategy.

VIII. Voting of Proxies

In accordance with the fiduciary and other obligations imposed on investment managers by either their agreements with the Retirement Board or ERISA guidelines, all trades executed by managers must be for the exclusive benefit of the Retirement System's participants and beneficiaries. Managers are expected to seek best execution on all trades.

The Board recognizes that the voting of proxies is important to the overall performance of the Retirement System. The Board has delegated the responsibility of voting all proxies to the investment managers. The Board expects that managers will execute all proxies in a timely fashion. Also, the Board expects the managers to provide a full accounting of all proxy votes, and upon request, a written explanation of individual voting decisions. The Board intends to review the managers' proxy voting on at least an annual basis.

IX. Investment Costs

The Board intends to monitor and control investment costs at every level of the Massachusetts Housing Finance Agency Retirement System.

- Professional fees will be negotiated whenever possible.
- Where appropriate, passive portfolios will be used to minimize management fees and portfolio turnover.
- If possible, assets will be transferred in-kind during manager transitions and Retirement System restructurings to eliminate unnecessary turnover expenses.
- Managers will be instructed to minimize brokerage and execution costs.

To the extent that it is prudent, the Board intends to further reduce costs by participation in securities lending programs and commission recapture programs, and through the use of transition managers.

X. Management Structure

To diversify the Retirement System's assets so as to minimize the risk associated with dependence on the success of one enterprise, the Board has decided to employ a multi-manager team approach to investing Retirement System assets.

A consultant will be employed whose responsibilities will be to: 1) provide risk and return assumptions for various asset classes, 2) to diversify the Retirement System so as to minimize risk, while enhancing the probability of achieving the Retirement System's return objectives, and 3) to evaluate the performance and compliance of investment managers.

Investment managers will be employed to utilize individual expertise within their assigned area of responsibility. Each separate account manager will be governed by individual investment guidelines.

XI. Forbidden Assets and Strategies

Within their investment guidelines, each investment manager will be furnished with a list of asset types and investment strategies that are forbidden. Typical forbidden assets are naked option positions and tax-exempt bonds. Typical forbidden strategies are leveraged derivatives, short sales, and gross market timing.

APPENDIX A

PERMISSIBLE ASSET CLASSES

Asset Class	Purpose
Public Domestic Equity	Total Return Potential
Public Foreign Equity	Total Return Potential Diversification
Private Equity	Total Return Potential
Investment Grade Bonds	Return Stability Income
TIPS	Inflation Protection Income
High Yield Bonds	Total Return Potential Diversification
Emerging Markets Bonds	Total Return Potential Diversification Income
Real Estate	Total Return Potential Diversification Income
Infrastructure	Diversification Income Inflation Protection
Natural Resources/Commodities	Inflation Protection Diversification

APPENDIX B

TWENTY-YEAR ANNUALIZED RETURN AND VOLATILITY EXPECTATIONS[1]

Asset Class	Expected Return (%)	Volatility (%)
Fixed Income		
Cash Equivalents	2.9	1.0
Short-term Investment Grade Bonds	3.1	1.5
Investment Grade Bonds	3.6	4.0
Investment Grade Corporate Bonds	4.2	7.0
Long-term Government Bonds	3.5	13.0
Long-term STRIPS	3.7	20.0
TIPS	3.3	7.5
High Yield Bonds	5.4	12.5
Bank Loans	5.0	10.0
Foreign Bonds	2.1	9.0
Emerging Market Bonds (major)	4.9	11.5
Emerging Market Bonds (local)	5.4	14.5
Equities		
U.S. Equity	7.3	18.0
Developed Market Equity	7.1	20.0
Emerging Market Equity	9.4	25.0
Frontier Market Equity	8.9	23.0
Global Equity	7.5	19.0
Private Equity/Debt	8.9	24.0
Buyouts	9.3	25.0
Venture Capital	9.2	35.0
Mezzanine Debt	6.6	17.0
Distressed Debt	6.6	22.0
Real Assets		
Real Estate	6.7	18.0
REITs	6.8	28.5
Core Private Real Estate	5.5	12.0
Value Added Real Estate	6.9	19.0
Opportunistic Real Estate	8.5	25.0
Natural Resources (Public)	7.2	23.0
Natural Resources (Private)	8.8	23.0
Commodities (naïve)	4.6	18.0
Infrastructure (Public)	7.2	18.0
Core Infrastructure (Private)	6.6	15.0
Non-Core Infrastructure (Private)	8.5	23.0
Other		
Hedge Funds	5.2	8.5
Long-Short	4.4	10.0
Event-Driven	5.9	9.0
Global Macro	5.3	8.0
Risk Parity (10% vol)	5.6	11.0
Tactical Asset Allocation	4.6	12.5

[1] Source: Meketa Investment Group 2018 Annual Asset Study.

Appendix B

Correlation Expectations for Major Asset Classes[1]

	TIPS	Investment Grade Bonds	High Yield Bonds	U.S. Equity	Developed Market Equity	Emerging Market Equity	Private Equity	Real Estate	Natural Resources (private)	Commodities	Core Infrastructure (private)	Hedge Funds
TIPS	1.00											
Investment Grade Bonds	0.80	1.00										
High Yield Bonds	0.30	0.20	1.00									
U.S. Equity	0.00	0.05	0.70	1.00								
Developed Market Equity	0.15	0.05	0.70	0.90	1.00							
Emerging Market Equity	0.15	0.05	0.70	0.80	0.90	1.00						
Private Equity/Debt	0.05	0.05	0.65	0.85	0.80	0.75	1.00					
Real Estate	0.10	0.20	0.50	0.50	0.45	0.40	0.45	1.00				
Natural Resources (private)	0.10	0.10	0.45	0.65	0.60	0.60	0.55	0.45	1.00			
Commodities	0.35	0.05	0.40	0.35	0.55	0.60	0.30	0.15	0.65	1.00		
Core Infrastructure (private)	0.30	0.30	0.60	0.55	0.55	0.50	0.45	0.60	0.60	0.35	1.00	
Hedge Funds	0.20	0.05	0.70	0.80	0.85	0.85	0.65	0.45	0.65	0.65	0.60	1.00

[1] Source: Meketa Investment Group 2018 Annual Asset Study.

APPENDIX C

ASSET ALLOCATION TARGETS

	Target	Range
Public Domestic Equity	25%	20% to 30%
Public Foreign Equity (Developed)	10%	6% to 14%
Public Foreign Equity (Emerging)	10%	6% to 14%
Private Equity[1]	10%	6% to 14%
Investment Grade Bonds	10%	12% to 18%
TIPS	6%	6% to 14%
High Yield Bonds	6%	3% to 9%
Emerging Markets Bonds	5%	3% to 7%
Real Estate	10%	7% to 13%
Natural Resources & Commodities	3%	1% to 5%
Infrastructure	5%	< 8%
Cash	0%	< 5%

Based on the expected asset returns, risks, and correlations cited in Appendix B from Meketa Investment Group's 2018 Asset Study, this target allocation exhibits an expected 20-year annual return of 7.5% and an expected annual standard deviation of 13.8%.

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1 The uncalled portion of the Retirement System's private equity portfolio will be invested in public domestic equities.