Frequently Asked Questions on MPERS' New Leverage Authority

What is leverage and how is it used in an investment portfolio?

Leverage is defined in many ways. In MPERS' case, it represents the ability to borrow funds and use those funds to invest across the existing investment portfolio. The difference between the borrowing costs and the return earned on the investments is the benefit to the system.

On a basic level, what do you expect to gain by applying leverage to the portfolio?

By applying leverage to the portfolio, MPERS expects to achieve greater liquidity, improved opportunity for investing during periods of market volatility, and enhanced long-term returns.

How do these improvements impact my benefit from MPERS?

Your retirement benefit is defined in the Missouri statutes. The performance of the investment portfolio does not change that. The enhanced long-term returns equate to a better funded retirement system, and lead to lower contributions from the State Road Fund. The savings to the State Road Fund can then be used to put more money into roads and bridges, and enhance the public safety needs provided by the Missouri State Highway Patrol.

Does the borrowing represent the debt of MoDOT or the Highway Patrol?

The approved borrowing authority is specifically for MPERS, and does not represent additional debt for MoDOT or the Missouri State Highway Patrol.

Are other pension plans using leverage?

Yes. In Missouri, using leverage is common among pension plans. Missouri's largest statewide pension plans utilize leverage in some form (MPERS is the last to formally approve the strategy). The use of leverage is also becoming a growing trend for pension plans throughout the country. For example, the California Public Employees Retirement System (CALPERS) recently approved a very similar structure to what MPERS' Board approved.

Does it bother you that leverage is not more widely utilized across public pension plans?

No. MPERS (and all of the largest Missouri plans) has been at the forefront of many leading investment ideas, with proven success.

Do individual investors use leverage?

Yes. Many individuals use leverage during their lifetime. For example, anyone who uses a bank loan to purchase a home or a vehicle uses leverage for the purchase. Funds are borrowed to invest in the house or vehicle. Many college educations are funded with borrowed funds. These are all forms of leverage used by individuals.

Occasionally individual investors will use leverage in personal investment portfolios, whether it be to make a levered real estate investment or simply using margin in brokerage accounts. The vast majority of individuals either do not have the knowledge, the net worth, or the risk management skills to successfully utilize leverage in personal investment portfolios. The real difference in “who” (individual versus institutional investors) uses leverage lies in the time horizons available for the investor. Leverage is far better suited for investors with long-term investment horizons. Individuals are typically investing for a specified goal or objective with a finite time horizon (i.e., buying a home, retirement, etc.), while institutional investors oftentimes have indefinite time horizons.

How long has the use of leverage been under consideration by the Board of Trustees?

Staff began researching the possibilities more than three years ago and introduced the subject to the Board more than two years ago. This subject has likely received more time and attention than almost any other matter in MPERS’ investment history.

How does the leverage authority factor into the various asset allocations that were considered?

The leverage authority could be applied to any asset allocation. It was specifically modeled for the Board and applied to the current asset allocation. Below are the asset allocation proposals that were under consideration, including the option with the leverage authority that was ultimately adopted.

2020 MPERS' MIXES (RISK & RETURN)

	Policy	20% Leverage	60/35/5	Enhanced Real Assets
Global Equity	40.0%*	48.0%*	57.5%	35.0%
Private Equity	10.0%	12.0%	2.5%	12.5%
Total Equity	**50%**	**60%**	**60%**	**47.50%**
TIPS	5.0%	6.0%	7.2%	5.0%
Core Bonds	10.0%	12.0%	14.4%	10.0%
Long Govt/Credit	7.5%	9.0%	10.9%	7.5%
Private Debt	7.5%	9.0%	2.5%	7.5%
Total Fixed Income	**30%**	**36%**	**35%**	**30%**
Private Real Assets	10.0%	12.0%	2.5%	12.5%
Core Real Estate	10.0%	12.0%	2.5%	10.0%
Total Real Assets	**20%**	**24%**	**5%**	**22.5%**
US Leverage Cost	0%	-20%	0%	0%
Total Cash	**0%**	**-20%**	**0%**	**0%**

Expected Return 10 yrs	**6.29%**	**6.99%**	**5.52%**	**6.36%**
Expected Return 30 yrs	**7.31%**	**8.11%**	**6.67%**	**7.41%**
Projected Risk	**11.53%**	**13.82%**	**11.73%**	**11.59%**
Sharpe Ratio (10 years)	**0.39**	**0.38**	**0.32**	**0.39**
Sharpe Ratio (30 years)	**0.43**	**0.41**	**0.37**	**0.43**

How much money does MPERS expect to earn on the investments made using leverage?

The use of leverage is projected to increase MPERS' expected return by 0.7% annually, roughly $16 million annually, and lower the total required employer contributions to the system by an estimated $277 million over a 15-year period.

Why did the previous investment policy prohibit the use of leverage?

This was a risk control measure that dates back to 2004. The use of leverage introduces incremental risk to an investment portfolio (with risk defined as volatility of returns). MPERS' portfolio is more diversified today than ever before and has a 10-year risk profile lower than 99% of peers. This allows the Board to consider adding some incremental risk to the portfolio, and the modeling suggests MPERS would remain below the average risk profile of peers even when using the full 20% leverage authority.

Is now the right time to be increasing risk in the investment portfolio?

The short answer is yes. While there is always market-timing risk, the intention is to gradually add leverage into the portfolio to mitigate the risk of market timing. The COVID-19 pandemic has also led to what seems to be a transition period in the economy, which often leads to increased volatility in the markets. Rather than selling assets to raise cash, the approved leverage facility will provide a valuable source of funds for taking advantage of volatile market environments.

You often reference the low-risk profile of the fund and seem to take pride with that fact, yet acknowledge that leverage will increase the risk profile of the fund. Why are you willing to accept that risk?

Pension systems are in the business of managing risk, not avoiding risk. The real question with risk management is whether the fund is adequately compensated for taking the incremental risk. Over the long term, the added flexibility that comes with the use of leverage will be beneficial for the fund.

You mention the changing markets during the COVID-19 pandemic. Would a leverage facility have been beneficial to MPERS during the market downtown in March 2020?

Yes. The market volatility that occurred in March 2020 was a perfect example of where the added flexibility of leverage would have greatly improved MPERS' investment performance. Absent the flexibility to access new capital during the downturn and given that we try to remain fully invested at all times, MPERS was forced to liquidate various fixed income and real estate strategies to rebalance the portfolio and remain in compliance with investment policies. MPERS effectively played defense to remain compliant with policy instead of playing offense and investing new capital during an attractive entry point (during the down market). If adding leverage to the portfolio were an option, MPERS could have purchased additional equity exposure with funds obtained through leverage authority. Given the strong rebound in the equity markets, it is estimated that MPERS' portfolio would have conservatively earned an additional $100 million of income by investing new funds during the downturn.

MPERS has made big strides in recent years to improve investment performance and the funding status of the plan. Does introducing new risk to the system put this progress at risk?

No. To the contrary, the use of leverage represents a natural step to allow MPERS' to maintain the current path of progress. Since MPERS began committing resources to the investment portfolio in 2003, the system has transformed from one of the worst performing plans in the country to one that continually ranks among the top 10% of the peer universe. Over that time the investment team has grown and is well regarded across the country. The added flexibility provided by the leverage authority simply provides MPERS' seasoned staff with more tools to continue improving MPERS' investment performance.

What happens if returns are negative?

In a negative return environment, a leveraged portfolio will experience additional losses relative to a non-levered portfolio. Negative returns are to be expected and modeled into MPERS' projections, but the long-term expected return of the portfolio is 7%. The use of leverage will be incremental to performance as long as the portfolio generates a return above the borrowing costs. MPERS' modeling anticipates the portfolio will outperform borrowing costs roughly two-thirds of the time.

If you needed to dial back or completely unwind the leverage facility, how would you do it?

Depending on the amount of leverage employed at the time, the process could take a few minutes or a few years to accomplish. Each of the lending proposals under review allows for a transition period should the bank not want to renew financing, at which point MPERS would seek a replacement leverage provider or start the gradual unwinding of the program.

Why are you so convinced this will work?

The key to that question is keeping a long-term perspective. The amount of leverage approved by the Board will lead to incremental returns and income to the fund as long as MPERS outperforms the borrowing rate (which we projected to average 3%). If real concern is outperforming the projected 3% borrowing rate, then the long-term return assumption of 7% should be reconsidered. Again, the key is keeping a long-term perspective, and having the staying power to ride out the short-term market movements.

Why does leverage often have such a negative connotation?

The negativity around leverage is likely a combination of it being a misunderstood strategy, and the wide number of foreclosures and bankruptcies attributed to the excessive use of leverage. When used appropriately, it is a powerful and effective tool. When used in excess, the increased risks can lead to the complete failure of a business or investment strategy.

Now that it is approved, how do you expect to roll out this strategy?

The initial deployment of leverage will depend on future market movements, but would likely be driven by another event that would otherwise cause MPERS to rebalance the investment portfolio. In that case, leverage would provide a source of funds to invest during attractive entry points in lieu of selling other assets.

How much leverage do you expect to use in normal market environments?

The policy change limits the use of portfolio leverage to 20% (a 1.2x leverage ratio), which if fully deployed equates to roughly $470 million using current asset values. As a general rule, we would expect to generally maintain 10% or 1.1x leverage with increases/decreases driven by market opportunities.

Did MPERS solicit external guidance from investment consultants and legal counsel regarding the appropriateness and legality of using leverage?

Yes. MPERS' general investment consultant (NEPC) formally modeled the use of leverage in the recent asset/liability study, and recommended the Board approve the use of leverage to enhance the return of the current asset allocation mix. Likewise, external counsel reviewed the concept of utilizing leverage and concluded MPERS had the express authority to invest and the Board had the authority to implement the necessary policies to incorporate leverage into the asset allocation.

What other factors did the Board consider in making this decision to incorporate leverage into the portfolio?

The leverage authority was reviewed as part of a broader asset/liability study submitted to the Board of Trustees by NEPC, MPERS' independent investment consultant. The Board considered a number of factors in the decision, ranging from the actuarial return target of the system and the expected contributions into the system over the coming years. A link to the complete asset/liability study can be found here.