FROM: Mark Mathers  
Deputy State Treasurer, State Treasurer's Office  
RE: 2008 Annual Program Review

Section 166.450 of the Revised Statutes of Missouri (RSMo) requires an annual review of the Missouri Higher Education Savings Program (or “MOST”) by the director of investments of the state treasurer's office and the reporting of findings to the MOST Board. The statute requires a review of five areas:

- Board administration
- Financial status
- Investment policy
- Participation rate
- Continued viability

Therefore, in accordance with these requirements, I am pleased to present the following findings from my review for calendar year 2008. When possible, I have attempted to use comparative data on other states' plans available from the College Savings Plan Network (CSPN) to supplement my analysis of Upromise’s quarterly reports. I am available to discuss these findings at your convenience.

I. Board Administration

Upromise Investments Inc., a division of Upromise, Inc. assumed responsibility as program manager for the MOST Plan on June 3, 2006. The Board and the State Treasurer's Office worked closely with Upromise and monitored their management of the program. The Board met quarterly during 2008, as required by law.

II. Financial Status

In this section of the report, we review the financial status of our major partners and summarize the investment performance of the most popular investment options within the MOST Plan.

A. Financial Status of MOST Partners

During the second half of 2007, we witnessed the beginning of the U.S.’s deepest recession since World War II, which to date has led to the demise of Lehman Brothers, Bear Stearns, Wachovia Bank, Washington Mutual and others. Many other financial institutions have struggled to remain profitable. That fact reinforces the need to review the financial status of our major partners and counterparties.
As a result of reductions to the federal government’s subsidies to student lenders and dislocations in the student loan industry, Moody’s downgraded SLM Corporation, the parent company of Upromise, in early 2009 from “Baa2” to “Ba1”, which is below investment grade. Standard & Poor’s and Fitch continue to maintain investment-grade ratings for SLM although Fitch has SLM on negative credit watch. SLM’s credit rating is less of an issue for the MOST plan because none of the investments of the new MOST plan are secured by SLM; however, further downgrades to SLM Corporation’s rating would be an indicator that there continues to be concerns regarding the company’s profitability.

The two investment managers for the Direct Plan, The Vanguard Group and American Century Companies Inc., remain strong franchises. Although neither company is publicly traded and thus do not publish financial statements we can examine, our research of their funds indicates that both companies managed to avoid issues related to subprime mortgages or SIV’s that other mutual fund firms had to face in 2008. Vanguard is now the top U.S. mutual fund as measured by assets under management, holding more than 10% of the total mutual fund market.

In terms of the credit risk of underlying investments in the Direct Plan, the Vanguard Interest Accumulation Fund invests in non-collateralized guaranteed investment contracts (GIC’s) with insurance companies and banks but Vanguard requires a “AA” rating for such entities. The TIAA-CREF Guaranteed Option is invested in funding agreements with TIAA Life Insurance Company, which remains AAA-rated.

B. Performance of MOST Underlying Funds

Last year was one of the worst years on record for domestic and international stock markets, with the S&P 500 index for large-cap stocks dropping 37% and the MSCI EAFE’s return (the benchmark most commonly used for international stocks in developed countries) even worse at -43%. Given the severity of these losses, it would be unreasonable to expect any of the underlying equity funds in the MOST lineup not to show significantly negative returns. The passive index funds used for the age-based options in the Direct Plan in fact are intended to track their benchmark indices, but the stand-alone actively managed equity funds in the Direct and Advisor Plan generated negative returns as well.

Rather than simplistically look at whether underlying funds in MOST had either positive or negative return for the year, though, State Treasurer’s staff and Upromise are responsible for comparing funds’ performance against benchmark indices selected as the most appropriate measure for each fund’s specific style and capitalization level. For instance, a large-cap value fund’s performance is tracked against the Russell 1000 Value index, an index composed entirely of large-cap value stocks. An actively managed fund is expected to outperform its benchmark index over the long-term but may experience periods of underperformance and/or volatility where the fund’s return may exceed or fall below the index slightly. The chart on the following page shows the variance between underlying funds’ returns and their benchmark, which is known in the financial industry as “alpha”.

The MOST Direct Plan offers participants a wide range of investment choices including three different tracks of age-based options composed of Vanguard index funds, three different 100% Equity Options and five stand-alone American Century actively-managed funds. Because the three age-based tracks (Conservative, Moderate and Aggressive) are composed entirely of index funds, their performance should track that of their composite benchmarks and would be expected to rise and fall over time in line with the broad market indices they are intended to
mirror. In 2008, this was generally the case as the age-based and fixed income Vanguard funds had very minimal tracking error.\(^1\)

The five stand-alone equity funds offered in the Direct Plan are managed by American Century and are offered to allow participants to either customize a portfolio of their own or supplement their investments in the age-based or 100% Equity Option portfolios. Since these funds are actively managed, their performance will likely vary from their benchmark, with the obvious intent being to outperform their benchmark. In 2008, the five American Century funds' performance was mixed as the Equity Growth and Growth portfolios strongly outperformed their benchmark indices. In a difficult year, the International Growth and Real Estate portfolios significantly underperformed their benchmarks. American Century made the decision to terminate its sub-advisory relationship for its real estate fund with JP Morgan in 2008 and in late 2008 hired a permanent new fund manager.

In early 2009, as part of the annual review of the Direct Plan required by our Investment Policy, we also reviewed the asset allocations for our age-based options to confirm that the allocation between equities and fixed income still made sense for participants in light of losses in the equities markets. Many 529 plans, as well as target date retirement funds, have come under criticism for having allocations that were improperly weighted towards equities and therefore being too aggressive, especially for the age bands closest to the college entrance date of the beneficiary. The conclusion of our review was that the plan adequately addresses this issue by providing three age-based options, including a Conservative option that is weighed towards fixed income funds, which investors can match to their own risk tolerance as well as offering three stand-alone fixed income options.

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\(^1\) The returns of the Vanguard Developed Market Fund and Prime Money-Market Fund actually exceeded that of their benchmarks, the MSCI EAFE index and Citi 3-month T-bill index respectively. In each case, the composition of the index varied from the fund’s characteristics. Therefore, we will be re-setting the benchmarks in 2009-2010 to better measure the funds’ performance. For instance, the Prime Money-Market Fund’s benchmark should include securities such as commercial paper and other non-Treasury securities that this fund purchases.
In the Advisor Plan, a lineup of stand-alone funds are offered to brokers, who then customize portfolios for their clients based on clients’ cash flow needs and risk tolerances. These funds are offered from multiple fund families and in different styles and capitalizations. The Board approved a number of significant changes to the Advisor Plan lineup in mid-2007 to lower overall costs for the program and address style-cap gaps in the 2006 lineup. The performance of the 2008 lineup is shown in the chart above. Of particular concern is the Legg Mason Value Fund, which made a number of poor decisions in 2007 and 2008. The fund’s performance has rebounded somewhat in early 2009, and staff and Upromise continue to closely monitor the fund.

It should be noted the MOST Direct Plan and Advisor Plan were each ranked in the Top 5 among all state plans by savingforcollege.com for their 1-year fund performance in 2008.

III. Investment Policy

The Missouri Higher Education Savings Program adopted a formal investment policy governing its investments in mid-2007. The policy establishes objectives for the structuring the investment options in the Direct and Advisor Plan, formulates policies for selecting appropriate investment managers and the use of specific investment vehicles, and establishes an investment performance process for underlying funds in the Plan. The plan is an important statement by the Board in terms of defining its fiduciary responsibilities and standards for State Treasurer staff and MOST partners. The policy was modified in 2008 to place the decision to place or release a fund to/from “WATCH” status under the Director of Investments of the State Treasurer’s Office rather than at the board level.

IV. Participation Rate

In this section, we examine the participation rate of the MOST program. By examining the participation rate for the program, one can attempt to gauge the relative success the state’s program has had in reaching the state’s residents and encouraging them to increase college savings—the original goal of the IRS section authorizing these programs. The relative success or failure of states’ various 529 programs rests on many different factors including the effectiveness of marketing efforts, demographic and economic conditions, cost structure and the abilities and resources of states’ partners to attract and retain assets. However, one facet that has remained a constant is the competition for assets among states’ program managers. As the field of firms in the 529 industry has shrunk, this competition for assets remains fierce as evidenced by the decline in fees among plans issuing new RFP’s in the last 18 months.
A. Growth of Plan in 2008

The MOST plan had shown steady growth, on generally the same trajectory as the 529 industry as a whole, since its launch in late 1999 through 2007. This growth is attributable to both the appreciation of assets in the plan and the contributions of new and existing account owners. However, due to the depreciation of assets in MOST, total plan assets dropped from $1.25 billion in assets in 2007 to $1.09 billion by the end of 2008.

The drop in MOST’s assets represents a decline of 13%. This compares to a decline of 19% nationally among 529 plans. Within the Direct Plan, age-based options remain the single most popular type of investment option holding steady at 54% of Direct Plan assets.

While a review of the assets in the MOST plan is informative, it is difficult to separate the effect of the capital appreciation (or depreciation) of assets versus the actual growth of participants. A useful measure of participation in a plan is the number of beneficiaries enrolled in the plan. Since 2003, we had seen steady growth of 8,000 to 12,000 new beneficiaries per year. However, in 2007, the number of new beneficiaries enrolled increased more than 15,000. In 2008, despite the bear market, Upromise reported an increase of almost 10,479 beneficiaries in the plan. As the reality of the bear market began to sink in with investors throughout the year and with losses intensifying in the last quarter of 2008, the number of new enrolled accounts continued to wane with each quarter in 2008. This represents a real challenge for the plan, especially if stock returns continue to be weak in future years and as we continue to be mired in a recession.
Contributions by existing and new account owners also showed a significant decline in 2008 (see chart, right). Contributions declined more than $54 million, or 21%, from 2007.

Given the magnitude of this drop-off, we requested Upromise to provide a further analysis of the data. Specifically, we asked Upromise to compare the contributions between 2007 and 2008 of account owners that were in the Direct Plan as of December 31, 2007. In that way, we can strip out the contributions of account owners who joined MOST in 2008 and just look at the contributions of account owners from the previous year to 2008.

The chart below provides a comparison of these account owners based on the percentage change in contributions. Overall, contributions among existing account owners declined $75 million. Even more disconcerting is the number of account owners that were in the plan at the end of 2007 that made no contributions in 2008. This group made $68 million in contributions in 2007 but no contributions in 2008.

<table>
<thead>
<tr>
<th>Group</th>
<th>Contribution Group</th>
<th>Unique Accts</th>
<th>Contributions 2007</th>
<th>Contributions 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-50%</td>
<td>6,789</td>
<td>$32,257,350.80</td>
<td>$7,550,555.04</td>
</tr>
<tr>
<td>2</td>
<td>-50%=&gt;-20%</td>
<td>6,279</td>
<td>$22,870,419.54</td>
<td>$13,944,840.15</td>
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<tr>
<td>3</td>
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<td>2,117</td>
<td>$6,199,859.31</td>
<td>$5,223,275.23</td>
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<tr>
<td>4</td>
<td>-10%=&gt;-0%</td>
<td>2,479</td>
<td>$6,322,151.32</td>
<td>$6,019,759.30</td>
</tr>
<tr>
<td>5</td>
<td>0%</td>
<td>16,039</td>
<td>$46,228,437.18</td>
<td>$46,228,437.18</td>
</tr>
<tr>
<td>6</td>
<td>10%=&lt;0%</td>
<td>5,309</td>
<td>$10,948,741.29</td>
<td>$11,608,533.37</td>
</tr>
<tr>
<td>7</td>
<td>20%=&lt;10%</td>
<td>1,878</td>
<td>$4,223,473.48</td>
<td>$4,869,603.45</td>
</tr>
<tr>
<td>8</td>
<td>50%=&lt;20%</td>
<td>3,542</td>
<td>$7,189,594.71</td>
<td>$9,655,843.67</td>
</tr>
<tr>
<td>9</td>
<td>50%+</td>
<td>8,953</td>
<td>$12,142,554.54</td>
<td>$36,547,056.81</td>
</tr>
<tr>
<td>10</td>
<td>No 2008 Contrib.</td>
<td>14,727</td>
<td><strong>$68,316,045.63</strong></td>
<td><strong>$0</strong></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>68,112</td>
<td>$216,698,627.80</td>
<td>$141,647,904.20</td>
</tr>
</tbody>
</table>

In looking further at this sub-group of account owners who made no contributions in 2008, $21.4 million represents account owners whose beneficiary reached the age of 18. We can naturally assume these account owners ceased making contributions because their beneficiary was entering college. This phenomenon probably occurs every year. However, after excluding these contributions as well as transfers and rollovers out of the plan, that still leaves $45 million in contributions among account owners in the plan at the end of 2007 that ceased making
contributions where there is no ready explanation. We think it is likely that this group represents two cases: (1) families who have experienced financial difficulties in 2008, due to layoffs or other issues, and therefore may have felt forced to cut back their 529 contributions, and (2) account owners who felt “burned” by the markets and/or lost confidence in investing in the markets.

We believe that this trend, while apparently a national one, has significant ramifications for the MOST plan. Attracting these “lost” customers back to the plan should be an emphasis in 2009 and perhaps beyond that.

B. Redemptions

Another area we have examined in recent years has been the annual redemptions, or withdrawals, from MOST. Redemptions have basically doubled from 2005 to each of the last three calendar years. The chart, right, breaks out redemptions into three main categories: (1) qualified withdrawals which are used by account owners to cover tuition and other qualified expenses, (2) non-qualified withdrawals which might be used for ineligible expenses, for example, or might simply represent withdrawals from the plan in the event of a beneficiary choosing not to pursue higher education, and (3) rollovers out of MOST into other 529 plans. In 2008, we continued to see an increased in qualified withdrawals that are used for qualified college expenses. This is a normal phenomena associated with a maturing 529 plan like MOST. Account owners who signed up with MOST in 1999-2001, for instance, are now seeing their beneficiaries enter college and are using MOST appropriately to help pay for college expenses. The amount of rollovers out of the plan, which would be a signal that MOST account owners are leaving MOST for other states’ plans, actually declined from 2007 to 2008.

<table>
<thead>
<tr>
<th>Year</th>
<th>MOST Plan Redemptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>42,444,000</td>
</tr>
<tr>
<td>2006</td>
<td>54,593,000</td>
</tr>
<tr>
<td>2007</td>
<td>65,746,861</td>
</tr>
<tr>
<td>2008</td>
<td>83,196,437</td>
</tr>
</tbody>
</table>

![MOST Plan Redemptions Chart](image-url)
Another method of analyzing participation in the MOST program is to make a comparison of Missouri to our peers, namely other states. Appendix A provides data for each state’s 529 assets. In this table, we compared two separate measures of participation: (1) 529 assets per capita and (2) the penetration rate. The penetration rate is defined here as the ratio of total 529 Plan accounts to the total number of households in the state. Because of the many differences in states’ programs, demographics and geography, the purpose of this review was not to make individual comparisons of state’s programs. Several states, such as Virginia and Maine, attract a much greater percentage of out-of-state monies because of the fee structure provided to the investment advisors marketing these programs. Investment advisors in non-resident states may advise placing their clients in these states’ 529 programs due to the financial incentives provided.

As noted previously, though, the rate of decline in MOST assets in 2008 actually was better than national trends. As the chart on the above shows, MOST’s assets declined 13%, while total 529 assets in the U.S. showed a 19% decline. We believe that only a small portion of that relative outperformance is attributable to superior returns for MOST’s underlying funds. Clearly, other states’ plans also saw a significant number of participants choose to reduce or eliminate their 529 contributions in 2008, we believe.

The following chart provides another measure against national statistics, this time comparing MOST assets on a per-capita basis (MOST assets divided by Missouri’s population) to total 529 assets per capita. In terms of 529 assets per capita, Missouri now ranks 31st with $184 in 529 assets per capita. This compares to the national median of $221.
In terms of the penetration rate, Missouri also ranks 31st among states, with an estimated 4.4% of Missouri households having a MOST account. This compares to the median nationally of 5.4%. One factor for the lower participation in Missouri is that family income in Missouri is slightly less than the national average.

**D. Comparison to Peer States**

For several years, the annual report on MOST has compared the MOST program to a peer group of other Midwestern states. This year’s report updates these statistics.

The chart on the right once again compares 529 assets per capita. Missouri ranks near the middle of this peer group. The average per-capita 529 assets of this peer group is $215 per person. We would note that in Iowa, Wisconsin and Kansas, those states have had long-standing relationships with their respective program managers. Additionally, in contrast to MOST, in both Wisconsin and Kansas their asset managers -- Wells Fargo and American Century respectively – do not sell any other direct plans. As a result, undoubtedly these two plans have attracted a sizeable number of out-of-state clients. The same dynamic holds true for Kansas’ relationship with Schwab, which manages the Schwab 529 College Savings Plan. While we adjusted Kansas’ figures by 60% to reflect out-of-state accounts, we did not do the same for Iowa or Wisconsin due to the lack of data from those states. We suspect, though, that there may be significant non-resident participation in Iowa and Wisconsin as well, thereby somewhat inflating those states’ numbers.

In terms of its penetration rate, Missouri ranks near the middle of this peer group although once again well below Iowa, Illinois, Kansas and Wisconsin. The average penetration rate for this peer group is 5.6%, compared to Missouri’s rate of 4.4%. Overall, then, Missouri ranks near the middle of the pack among all states and this peer group of Midwestern states. This has been the case since 2005. After examining this data for a number of years, it now seems obvious to us that it is difficult for a plan to make up or lose ground quickly relative to other states.


V. Continued Viability

The MOST program remains a viable college savings program. In Upromise’s 2½ years of operation in Missouri, we have seen strong growth in contributions to the plan, which rose from a range of $180-195 million during TIAA-CREF’s last three full years of operations to $253.7 million under Upromise in 2007. We also saw an upswing in the number of new beneficiaries enrolled in the plan, which shows growth of new customers, and much better participation in the Advisor Plan among Missouri-based brokers.

However, with the severe downturn of the economy and stock markets in 2008, the MOST plan is faced with a new challenge, namely, how to continue to encourage saving for college in the midst of rapidly growing unemployment and worries among almost everyone about investments. This challenge is compounded by the signing of SB 863 in 2008, which extends the state tax deduction now to all 529 plans. The decline in contributions from $253.7 million in 2007 to less than $200 million in 2008 should be considered a warning sign rather than an isolated event. In addition to the overall decline in contributions, we have noticed that quarterly new enrollments in the Advisor Plan have dropped sharply.

Facing this challenge, the State Treasurer’s Office and Upromise have launched several new initiatives to focus our efforts. These include:

1. Development of a marketing plan with quantified goals for enrollments, sales and awareness for the first time.

2. Educational efforts to existing account owners that include mailings devoted to current events in the markets and focused marketing of selected investment options. For instance, one of our mailings in 2009 will provide a deeper explanation of the fixed income options offered in the plan in order to highlight choices for investors who are now seeking lower-risk investment alternatives.

3. The launch of a new MOST website later this summer that includes new investment tools for customers. These investment tools will more effectively guide investors to appropriate options based on their risk tolerances.

Additionally, the State Treasurer’s Office and Upromise are exploring several new initiatives including a grant program for low- and moderate-income families. Lastly, the development of a 529-qualified bank CD plan, which has been held up by regulatory issues, will need to re-examined by the board and staff. In our view, all of these efforts are needed to meet the continuing challenges in the 529 marketplace.