Leasing the PA Turnpike - A Pension Financing Perspective

The House Transportation Committee
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Similarities of Leasing to Pension Plans (Defined Benefit Pensions)

- Long-term economic perspective
- Stream of annual payouts – an annuity
- Net cash flow management is critical
- Investment assumptions are most critical in the assessment of financial status
- Requires ongoing management and periodic recalibration of assumptions

Differences between PA Turnpike Leasing and Pension Plan

- No "exclusive-use" provision of assets
- No ongoing contributions made into the lease – effectively a "paid-up" pension plan
- Experience gains and losses may impact current payouts and certainly future payouts

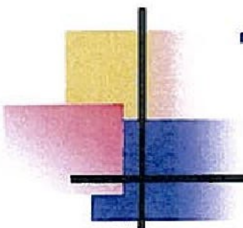
Financial Modeling Facts

- The first 10 years are most critical in determining long-term financial viability
- Principal needs to be preserved during this period
- Timing of payouts matters considerably over 75 years
  - End of year vs. beginning of year
  - Quarterly vs. year end payments
- $1 earning 7.5% per year is worth $226 in year 75.

Interrelated Variables - Any change impacts the model
The Administration's Lease Proposal

1) Initial amount deposited - $10.5 B
2) Initial annual payouts – $980 M or 9.3%
3) Annual increase in payments – 2.5%
4) Time horizon of lease - 75 years
5) Annual investment expectations – 12%

Usually 4 of these variables are assumed are you are solving for the 5th



Retirement Diversification
Target Retirement Funds

Fund Name	Current Age	%Stock /Bonds	Yrs. to Retirement	Avg. Return since 10/27/03*
Retirement 2045	20s	90/10	About 40	10.56%
Retirement 2035	30s	90/10	About 30	9.87%
Retirement 2025	40s	79/21	About 20	8.72%
Retirement 2015	50s	63/37	About 10	7.95%
Retirement 2005	60s	57/42	In Retirement	6.79%
Retirement Income	70s	55/45	In Retirement	6.04%

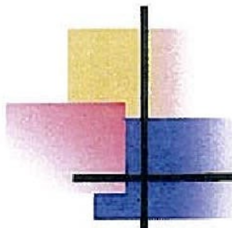
Annual Fund Fees <.21% or $21.00 per $10,000 invested*

* Illustrations shown are for Vanguard Funds

An Illustrative Retirement Payout Model
(With a 90% likelihood of success)

June 14, 2008 Wall Street Journal
http://online.wsj.com/article/SB121259350492445223.html
(*75 year estimate by RC Dreyfuss)

Years in Payout Period	Typical Asset Mix Stocks/ Bonds	Sustainable Annual Asset Withdrawal Rate
10	15% / 85%	9.3%
15	30% / 70%	6.4%
20	30% / 70%	5.1%
25	40% / 60%	4.4%
30	40% / 60%	3.8%
35	40% / 60%	3.5%
75*	70% / 30%	<3.0%



Proposed turnpike lease does not have assumptions consistent with a 75 year scenario.

Issue 1- The assets are assumed to earn 12%

- This is based on SERS historical returns
- Traditional pensions plans assume returns ranging from about 7.5% to 8.5% - Investment mix about 70% stocks, 30% bonds
- New contributions can adjust assets to actual experience

PA Turnpike Lease Assumptions

- Issue 2 - The initial annual payout rate of 9.4% is too high
  - Based upon 12% returns, the fund is depleted at year 36
  - Based upon 7.5% returns, the fund is depleted at year 15

- Issue 3 - How does the volatility impact payouts?
  - What are the payout consequences of superior vs. poor investment years?
  - Consider asset averaging – commonly used pension valuation technique
  - Could also establish payout "floors" and "ceilings"
  - Will need to periodically revise the financial assumptions

Potential remedy to improve viability of the proposed financial model – Revise assumptions

- Utilize an investment assumption of 6% to 7.5% for this or in any comparable analysis
- Starting with an initial balance of $10.5 B
- Using 7.5% interest (discount) rate with a 2.5% annual payout increase yields an initial payout of approximately $515 M (about a 4.9% payout rate) for a 75 year duration
  - Same assumptions as above with a constant payout would yield $762 M or 7.26% payout rate

Conclusion

- Lease assumptions need to be revised to facilitate a proper analysis and improve the viability of this option.
- Non-economic considerations as well
- Impact of legacy costs
- Your questions

The State's Rosy Scenarios

Richard C. Dreyfuss
06.18.08

We live in uncertain times. This maxim is often heard in the corridors of the state Capitol where Excel spreadsheets support the marketing of new initiatives based on long-term financial assumptions. While the time horizon for many state officials is that of the upcoming state budget, others are focused on analyzing the next 30-plus years with an unabashed sense of confidence.

A review of three current Pennsylvania projects reveals that many in the Rendell administration are giddy with a sense of unbridled capitalism and optimism regarding the future of the state. So much so that they almost seem to minimize the role of government.

Perhaps there is too much bullishness for everyone's good. Consider:

Example 1: The proceeds from the proposed 75-year Pennsylvania Turnpike lease are presumed to be invested with the State Employees Retirement System and projected to earn an annual rate of return of 12 percent. But SERS maintains a long-term investment horizon of 8.5 percent annually for pension assets. And the national average for public pension plans is about 8 percent. Many pension plans in both the public and private sectors are lowering long-term investment expectations for a variety of macro- and micro-economic reasons.

A more realistic range, given the nature of the proposed lease, would be 6 percent to 7.5 percent. And let's not forget that SERS this year will first have to get out of the red before it can achieve even its own projected 8.5 percent return, let alone the 12 percent return projected for the money provided by a turnpike lease. Double-digit growth in SERS investments is not likely to be achieved again anytime soon.

Example 2: The Pennsylvania Access to Basic Care health-care reform plan recently passed the House. The plan is predicated on federal subsidies increasing at an average rate of 11.2 percent per year and an annual average per-capita growth rate in total health-care costs of 3.6 percent until 2017. Neither is likely, with a federal government deep in debt and health-care costs rising steeply (see next example).

Example 3: To fund health-care coverage for state retirees, a significant portion of the costs are projected to increase at 7 percent in 2008, 6 percent in 2009 and 5 percent in 2010 and beyond. Ironically, the assumption for the asset growth that would cover these costs is 8.5 percent, although it is not clear what entity would invest the assets. Perhaps this will be added to the SERS charter as well.

To help stimulate the economy and produce these kinds of returns, Pennsylvania should aggressively lower tax rates. But this will prove hard, given that many politicians have a singular focus on increasing the size and scope of government under the premise that they can offer universal solutions to our many problems.

Government's only revenue ultimately comes from the private sector, which is tasked with generating the high returns that the turnpike proceeds and other investments would require. Ironically, some would consider returns as high as 12 percent as derived from "excess profits."

As it stands, the consistently bullish assumptions offered by state officials carry significant risks to taxpayers, risks that are not being considered or discussed. It is clear these assumptions are designed to maximize the likelihood of public support for their proposals. In all three cases, any significant unfavorable variation from their rosy projections would lead to higher taxes now or down the road.

Are we and the next generation of taxpayers prepared for this?

Sound public policy suggests we would be well-served to have a comprehensive understanding of the likely scenarios and related contingencies well before any votes are taken.

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