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PITTSBURGH'S PENSION PLAN: THE BLACK
HOLE THAT WON'T GO AWAY

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*Allegheny Institute Report #02-11
October 2002*

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Key Findings

- During the past five years the City of Pittsburgh has issued \$294 million in pension bonds in an effort to shore up the badly under-funded pension plan for City workers. The bulk of the proceeds from the bond issues were invested in the stock market.
- Interest payments from the operating budget on the two bond issues are now costing City taxpayers \$18 million annually.
- Largely as a result of declines in stock prices and continued increases in pension benefits, the percentage of funded pension liabilities has fallen from a high of 67% at the beginning of 2000 to just over 50% in 2002 - and will probably be under 45% in January 2003.
- Adding the two bond issues to the pension fund's unfunded liabilities will result in record-high pension-related obligations of roughly \$690 million at the beginning of 2003.
- Possible steps to resolve this massive financial problem include adopting a less costly medical benefit program for retirees and channeling the savings into the pension fund, finding savings in other areas of the City's operating budget, and reducing the growth rate of pension liabilities. Failure to adopt such measures will increase the probability that the City will be forced into bankruptcy, with significant adverse consequences for the Pittsburgh region.

The Background

Roughly five years ago, in a desperate effort to escape the consequences of making overly generous pension promises to its employees, the City of Pittsburgh borrowed nearly \$300 million to invest in the stock and bond markets through its municipal pension fund. This paper examines the context of that decision and its results. It also suggests steps that could be taken today that might avert a future financial crisis that is threatened, in part, by the decision to borrow.

Pension funds are supposed to provide reasonable assurance that pension promises ("defined benefits") made by employers to their workers can be met. Pensions are said to be "fully funded" when the amount of money in the pension fund is equal to the value of all the benefits which have been promised to existing and future retirees.¹ In Pennsylvania, the amount of money that is supposed to be contributed to the plan is governed, in part, by state law.

At the beginning of 1995, the City's pension plan² was only 17% funded, meaning that no money had been set aside for 83% of the benefits that had been promised to workers. This was equivalent to a \$500 million black hole.

With state-mandated requirements to increase funding levels significantly above the \$17-\$18 million annually that was already programmed, the City faced the unpleasant prospect of either raising taxes or shifting money from other parts of the budget into the pension plan.

At roughly the same time, as the U.S. stock market boom gathered steam, investment bankers wheeled out a hot, new product: pension bonds for hard-pressed municipalities which were having trouble funding their pension plans. The deals looked enticing, particularly for cities where politicians had promised municipal employees generous pensions but had neglected to put sufficient money aside to pay for them. Pittsburgh was an easy mark.

The investment bankers came up with a very enticing proposition: why not borrow much of the money needed and put it into the plan? So long as the interest due on the bonds was less than the return on the invested funds, you might persuade the taxpayers that you would be ahead of the game. The stock market of the late 1990s made this an attractive marketing point. (Of course, the principal due on the bonds also had to be paid back, but most of this could be conveniently scheduled for the distant future.)

While some analysts pointed out that this proposition was not much different from recommending that a deep-in-the-hole gambler take out a sizable loan to help win back his

¹ The calculation of the present value of future benefits and earnings on the fund is a complex exercise and generally requires the services of a professional actuary.

² Throughout this note I use the term "plan." In reality, there are three distinct plans, so far as beneficiaries are concerned. However, their financial management has been consolidated in Comprehensive Municipal Pension Trust Fund, so it seems appropriate to refer to "a plan" in this analysis.

losses and maybe come out ahead, pension bonds seemed to offer a clever way out of the politicians' dilemma. At the very least, it offered them the chance to shift some of the worry about pension security away from the minds of municipal workers and onto the backs of more numerous taxpayers.

Pittsburgh Bites the Apple

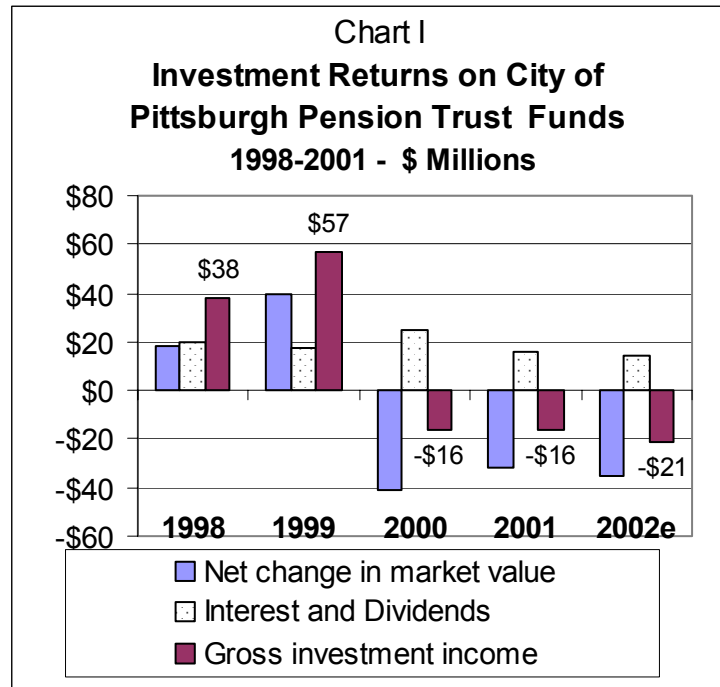
Pittsburgh first nibbled on the investment bankers' apple in late 1996, when the City issued \$37.7 million in pension bonds, of which \$35.5 million was deposited in the municipal pension fund. The City's operating budget (and taxpayers) was also called upon to meet the initial annual interest rate bill of \$1.7 million for the borrowing. Largely as a result of the fund infusion, the funded pension ratio moved up to 24%.

With the stock market continuing its merry ride upward, the City went back to the well in March 1998 in a major way, selling \$256 million in pension bonds. The bond issue was structured so that by the year 2008, \$254 million will still be outstanding. In an effort to keep borrowing costs down, the City agreed to forego the option of "calling" the bonds back before maturity, in case interest rates were to decline (as they have subsequently). The borrowing cost was at an average interest rate of 6.56% or nearly \$17 million annually.

Investing the Proceeds

The bulk of the proceeds from the pension bond issues were put into the stock market.³ In recent years, the City has opted for a mix of 65% in stocks and 35% in fixed income instruments. The pattern of investment gains and losses for the period is depicted on in Chart I. The author has included his estimates for 2002, which assume a 14% decline in the value of the fund's equity portfolio (the S&P 500 index was down 18% as of mid-August).

³ \$15.1 million of the 1998 issue was used to retire a similar amount of the 1996 borrowing, so that the current level of pension bonds outstanding is only \$276 million.



In addition to the funds provided by pension bonds, the City has continued to contribute roughly \$8 million annually to the fund, as well as the \$17.9 million in annual interest payments on the pension bonds. In addition, there are employees' contributions of \$11 million and a state subsidy of \$16 million (See Table II).

Although the first two years after the 1998 borrowing showed fine returns (Chart I), the most recent period has been decidedly negative for fund performance. A very rough measure of fund performance is to take the average yearly investment returns for the period 1998-2001 and divide it by the average year-end asset levels for the same period. This works out to 3.66%, well under the cost of the bond borrowings. If we add a reasonable estimate for performance in 2002, the average return falls to just 2.02%. In short, by any measure, the pension bonds, with their heavy interest burden, have been a poor gamble to date.

Continued Growth in Liabilities

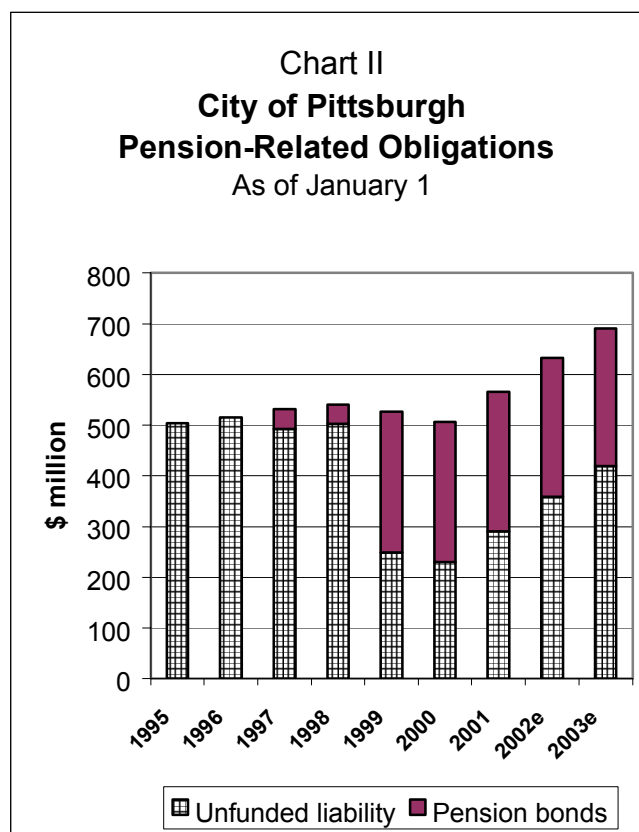
At the same time that pension fund assets are declining, liabilities have been increasing. There appears to be a normal "creep" of about 3% a year in liabilities (see Table I). In 2001, Mayor and Council put through changes to the plan, which are reported to have added an additional \$23 million to pension plan liabilities beginning in 2002.⁴ Thus, the combination of poor investment performance and increased pension fund liabilities has driven the funded pension ratio back down from its high of 67% at the beginning of 2000 to just over 50% at the beginning of this year - and close to 45% by next year. While this

⁴ Pittsburgh Post Gazette, 10/4/2001.

still looks favorable compared to the 19% ratio of 1995, it overlooks the burden posed by the pension bond issues.

The estimated unfunded liability at the beginning of 2003 is roughly \$420 million (Table I). When combined with the amount of outstanding pension bonds, as Chart II demonstrates, the City's pension-related obligations will total \$690 million, substantially in excess of the \$515 million reached at the beginning of 1996.⁵

A final issue is the existence of a substantial, totally unfunded retiree benefit that is costing the City almost as much as its regular contribution to the pension fund: post-retirement healthcare benefits. Last year, the cost for the average beneficiary was \$5,515 or \$7.0 million overall. The cost of this benefit, begun in 1993, has increased 24% over the past five years.



Source: City of Pittsburgh, Comprehensive Annual Financial Report; author's estimates for 2002 and 2003.

⁵ A key assumption used by the City in estimating the size of unfunded liability is the future investment return on fund assets. At 9% for the past five years, it has clearly been too high, and has had the effect of lowering the calculated unfunded liability.

What is to Be Done?

What alternatives are available to the City at this point? It seems appropriate to start by ruling out further pension bonds. Pittsburgh has gone through an expensive lesson in why borrowing for stock market investments is dangerous, particularly for a municipality that starts from a weakened financial position.

Leaving aside the question of investment managers' performance and the directives under which they have been operating, there are two parameters that City government can manage directly, to a certain extent: the annual contributions to the fund by the City and its employees, and the level and growth rate of pension liabilities.

In recent years, the City has contributed roughly \$8 million annually to the fund. This is substantially less than the \$20 million that was being paid in the early 1990s, although if we include interest being paid on the pension bonds today, the combined amount exceeds \$20 million. However, we should also take note of the \$7 million annual expense for post-retirement health benefits. It seems reasonable to ask current retirees to shift to a less costly medical plan (perhaps with greater co-payment and deductible features, such as most other retirees survive on) and to channel the savings into the pension plan. At the same time, the City should increase somewhat its current contribution rate in the near-term, perhaps to \$12 million annually.

Other potential offsetting savings in City operations could be found in areas such as garbage collection services and the number of firehouses. Many of these services are still geared to a city with substantially greater population than the Pittsburgh of 2002. Initiatives in these areas have been discussed frequently, but with little action to date.

On the pension liability side, rescission of last year's increase in benefits would apparently reduce liabilities on the order of \$23 million. The basic principles in any such exercise should be to reduce the growth rate of liabilities and increase the annual contributions from both the City and its employees so that the unfunded liability can gradually be reduced to a manageable amount over the next 37 years (a time period mandated by the State). Such an exercise should include conservative assumptions regarding both investment returns (currently programmed at an unrealistic 9%) and State aid. Indeed, in view of the City's extremely weak financial position, it might be useful to start with a discussion of what constitutes "a realistic annual contribution" over the next 37 years and to make adjustments in plan contributions and benefits around that anchor.⁶

Most observers close to City finances are skeptical that City officials would seriously consider such an approach to the funding problem. The political costs to most incumbents are seen as outweighing the longer run benefits of financial soundness. If this is true, then there seem to be two remaining alternatives: massive state aid or bankruptcy in the not so distant future.

⁶ Since the full calculation of such an exercise should include substantial input from an actuary, I have not attempted it here.

The first seems highly unlikely, since there are other communities in comparable difficulties that would demand comparable assistance, and the State has its own budget problems. The second seems much more probable and, indeed, is a rational, ultimate outcome. Bankruptcy would make it much easier for those in charge to consider the necessary changes to the pension and health plan benefits, as well as making it easier to put basic City operations on a sounder economic basis. It might make it more feasible to restructure the bulk of the pension bonds outstanding, with considerable savings in interest. (One need look no further than the on-going restructuring of USAir, now that it has entered into Chapter 11 bankruptcy, to see how bankruptcy permits managements to make badly needed adjustments.)

Such an outcome, in my opinion would be unfortunate. It would severely damage the reputation of the City - and the region - and increase the challenges of marketing Pittsburgh to investors, tourists, and business people from around the world. It would probably increase the cost of financing County and other nearby municipal governments substantially, and thus contribute to higher tax burdens throughout the region. The citizens of Pittsburgh would find themselves ultimately ruled by courts and their appointees, rather than their freely elected officials.

In short, although the apparent size of the problem is somewhat less than it was five years ago, the sorry state of Pittsburgh's pension plan, plus the new burden of servicing \$276 million of pension-related general obligation debt, constitutes a challenge of the highest order for its elected officials and citizens.

TABLE I
CITY OF PITTSBURGH
PENSION-RELATED OBLIGATIONS
(As of January 1)

	1995	1996	1997	1998	1999	2000	2001	2002e	2003e
1 Accrued liability	\$606,574,000	\$633,271,000	\$649,895,000	\$675,091,000	\$685,248,000	\$697,647,000	\$712,979,000	\$740,000,000	\$754,800,000
2 Plan assets	\$102,951,000	\$118,331,000	\$156,975,000	\$173,053,000	\$436,614,000	\$467,609,000	\$423,058,432	\$381,249,539	\$335,802,000
3 Unfunded liability	\$503,623,000	\$514,940,000	\$492,920,000	\$502,038,000	\$248,634,000	\$230,038,000	\$289,920,568	\$358,750,461	\$418,998,000
4 Percentage funded	17.0%	18.7%	24.2%	25.6%	63.7%	67.0%	59.3%	51.5%	44.5%
5 Pension bonds outstanding	\$0	\$0	\$37,710,000	\$37,710,000	\$277,935,000	\$276,375,000	\$274,785,000	\$273,155,000	\$271,485,000
6 Total City of Pittsburgh obligation (3+5)	\$503,623,000	\$514,940,000	\$530,630,000	\$539,748,000	\$526,569,000	\$506,413,000	\$564,705,568	\$631,905,461	\$690,483,000

Memo: Pension bonds outstanding

1996 borrowing	\$37,710,000	\$37,710,000	\$22,070,000	\$21,510,000	\$20,920,000	\$20,290,000	\$19,620,000
1998 borrowing			\$255,865,000	\$254,865,000	\$253,865,000	\$252,865,000	\$251,865,000

Memo: Annual growth in accrued liabilities (line #1)

4.4%	2.6%	3.9%	1.5%	1.8%	2.2%	3.8%	2.0%
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Source: City of Pittsburgh, Comprehensive Annual Financial Report, various years; author's estimates for 2002 and 2003

TABLE II
Calculations for Net Asset Change in Pension Trust Funds

	2001	2002e
Additions to assets		
Contributions		
Employer	\$7,994,062	\$8,000,000
Plan members	\$10,320,120	\$11,000,000
State	\$16,000,000	\$16,000,000
	\$34,314,182	\$35,000,000
Investment income		
Net change in fair value of assets	-\$32,147,967	-\$35,000,000
Interest and Dividends	\$16,167,186	\$14,000,000
Gross investment income	-\$15,980,781	-\$21,000,000
Investment expenses	-\$1,334,794	-\$1,350,000
Misc.	\$167	\$3,000
Total Additions	\$16,998,774	\$12,653,000
Deductions		
Benefit payments	\$56,737,898	\$56,000,000
Refunds of contributions	\$1,015,653	\$1,100,000
Administrative Expenses	\$1,054,116	\$1,000,000
Total Deductions	\$58,807,667	\$58,100,000
Net change in plan assets	-\$41,808,893	-\$45,447,000
Plan assets, beginning of year	\$423,058,432	\$381,249,539
Plan assets, end of year	\$381,249,539	\$335,802,539

Source: For 2001, City of Pittsburgh Comprehensive Financial Report, p. 17. Author's estimates for 2002.