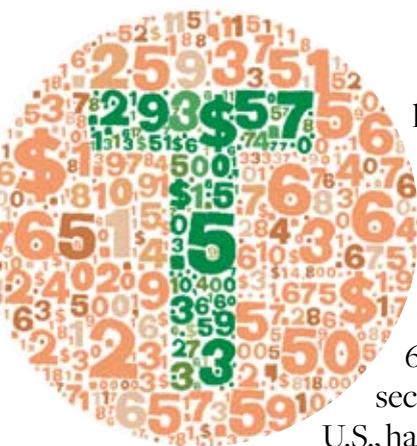




PUBLIC RETIREMENT FUNDS ACROSS THE U.S. ARE IGNORING A LOOMING CRISIS, ONE FED BY UNDERFUNDING AND POOR INVESTMENTS—AND PAPERED OVER BY ACCOUNTING GIMMICKS. FUTURE GENERATIONS OF TAXPAYERS WILL FOOT THE BILL. **By DAVID EVANS** Illustrations by GEORGE BATES



The Chicago Transit Authority retirement plan had a \$1.5 billion hole in its stash of assets in 2007. At the height of a four-year bull market, it didn't have enough cash on hand to pay its retirees through 2013, meaning it was underfunded to the tune of 62 percent. The CTA, which manages the second-largest public transit system in the U.S., had to hope for a huge contribution from the Illinois state legislature. That wasn't going to happen.

Then the authority found an answer. "We've identified the problem and a solution," said CTA Chairman Carole Brown on April 16, 2007. The agency decided to raise money from a bond sale. A year later, it asked Illinois Auditor General William Holland to research its plan. The state hired an actuary, did a study and, on July 17, concluded that the sale of bonds would most likely result in a loss of taxpayers' money. Thirteen days after that, the CTA ignored the warning and issued \$1.9 billion in bonds. Before the year ended, the pension fund was paying out more to bondholders than it was earning on its new influx of money. Instead of closing its funding gap, the CTA was falling further behind.

Public pension funds across the U.S. are hiding the size of a crisis that's been looming for years. Retirement plans play accounting games with numbers, giving the illusion that the funds are healthy. The paper alchemy gives governors and legislators the easy choice to contribute too little or nothing to the funds, year after year. The misleading numbers posted by retirement fund administrators mask this reality: Public pensions in the U.S. had total liabilities of \$2.9 trillion as of Dec. 16, according to the Center for Retirement Research at Boston College. Their total assets are about 30 percent less than that, at \$2 trillion.

That lack of funds explains why dozens of retirement plans in the U.S. have issued more than \$50 billion in pension

obligation bonds during the past 25 years—more than half of them since 1997—public records show. The quick fix for pension funds becomes a future albatross for taxpayers. In the CTA deal, the fund borrowed \$1.9 billion by promising to pay bondholders a 6.8 percent return. The proceeds of the bond sale, held in a money market fund, earned 2 percent—70 percent less than what the fund was paying for the loan.

The public gets nothing from pension bonds—other than a chance to at least temporarily avoid paying for higher pension fund contributions. Pension bonds portend the possibility of steep tax increases. By law, states must guarantee public pension fund debts.

"What appears to be a riskless strategy

is actually very risky," says David Zion, director of accounting research for New York-based Credit Suisse Holdings USA Inc. "If the returns on the pension bond-financed assets don't exceed the cost of servicing the debt, the taxpayers bear the brunt."

With the recession that started in December 2007, cities and states are running huge deficits, which they're closing by cutting services and firing employees. The economic downturn gives state legislatures another reason to cut back on funding pensions.

Government retirement plans nationwide don't calculate their shortfalls based on market values of their assets and liabilities, says Orin Kramer, chairman of the New Jersey State Investment Council, which oversees that state's pension fund. Fund accountants resort to a grab bag of tricks to get by. They set unrealistically high expected rates of return to reduce governments' annual contributions. And they use smoothing techniques to paper over investment reverses so they make losing years look like winners. Accountants do that by averaging gains and losses, usually over a five-year period—sometimes for as long as 15 years of investment returns. That means actual results of any one year aren't used to calculate how much a state legislature contributes, which can delay governments catching up with losses for more than a decade. This ruse can pass the buck to future taxpayers, who will pay for the retirement benefits of today's government workers.

Passing the Buck

U.S. state and local governments have sold more than \$50 billion of pension bonds in the past 25 years.

PENSION BOND ISSUANCE, IN BILLIONS

1997	New Jersey	\$2.8
2003	Illinois	10.0
2008	Chicago Transit Authority	1.9
2008	Puerto Rico	2.9
2008	Connecticut	2.2

Sources: Bond offering statements

“There are accounting gimmicks in pension land which create economic fictions and which disguise the severity of the real problem,” Kramer says. “Unfortunately, pension board members don’t have much of an appetite for disclosing inconvenient truths.”

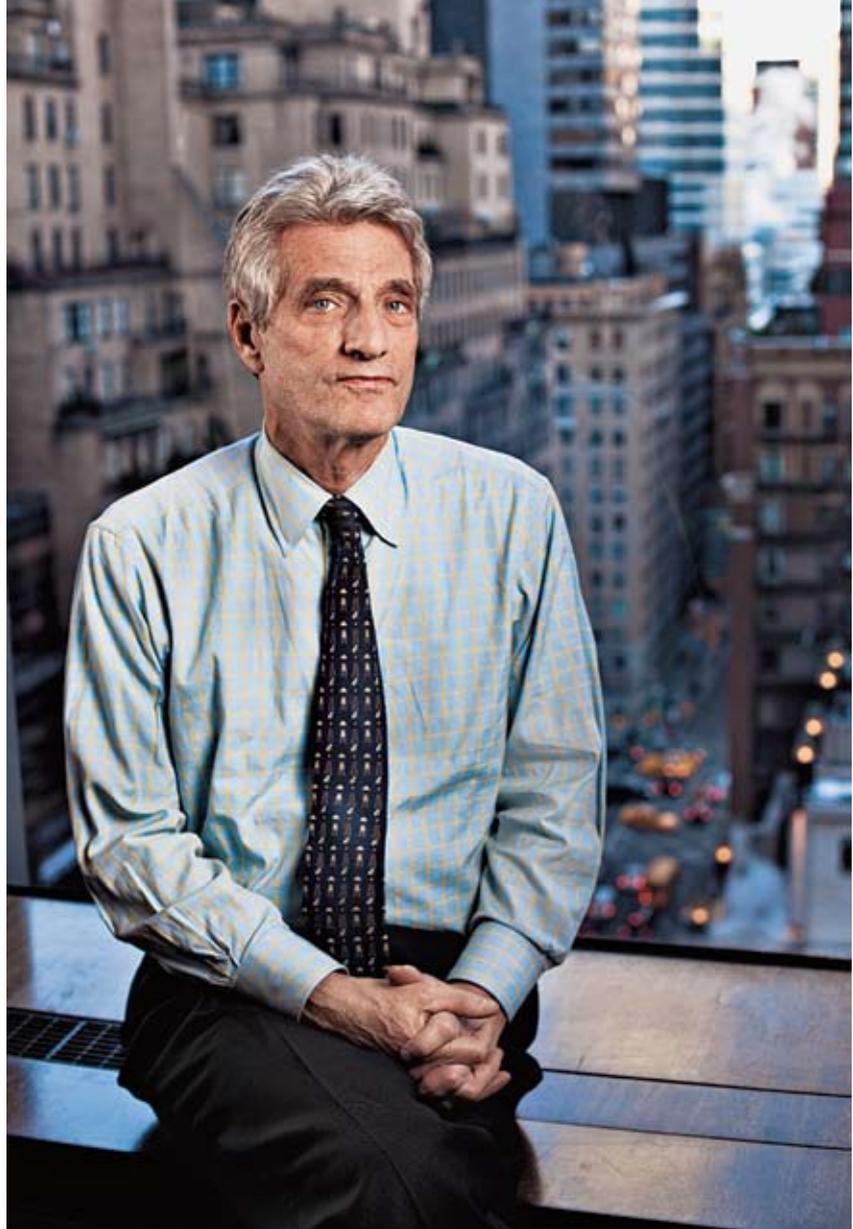
The Teacher Retirement System of Texas, the seventh-largest public pension fund in the U.S., reports each year that its expected rate of return is 8 percent. Public records show the fund has had an average return of 2.6 percent during the past 10 years.

The nation’s largest public pension fund, California Public Employees’ Retirement System, has been reporting an expected rate of return of 7.75 percent for the past eight years, and 8 percent before that, according to Calpers spokesman Clark McKinley. Its actual annual return during the decade from Dec. 31, 1998, to Dec. 31, 2008, has been 3.32 percent, and last year, when markets tanked, it lost 27 percent.

“It’s pitiful, isn’t it?” says Frederick “Shad” Rowe, a member of the Texas Pension Review Board, which monitors state and local government pension funds. “My experience has been that pension funds misfire from every direction. They overstate expected returns and understate future costs. The combination is debilitating over time.” Rowe, 62, is chairman of Greenbrier Partners, a private investment firm he founded in Dallas 24 years ago.

Texas teacher retirement fund spokesman Howard Goldman and Calpers’s McKinley declined to comment on Rowe’s views.

Most public pension funds, like the one in Chicago, were already treading water before the 2008 stock market crash. Now they’re closer to sinking. State government pension fund assets in the U.S. fell



Orin Kramer, who oversees retirement funds, says public pension plans use accounting tricks.

30 percent in the 14 months ended on Dec. 16, losing \$900 billion, according to the Center for Retirement Research.

Fund managers don’t have many options for increasing assets. They need adequate funding from state legislatures, which in many cases they don’t get. Beyond that, they’re at the mercy of financial markets. Typically, public pension funds put 60 percent of their assets in stocks, 30 percent in fixed

income, 5 percent in real estate and the rest in riskier investments such as hedge funds and commodities. That mix requires the nonbond assets to earn double-digit gains in order to reach expected rates of return.

The easiest way for retirement plans to increase cash is to issue pension obligation bonds. For the funds, that means borrowing money at no risk—because the bonds are backed by taxpayers.

‘IT’S PITIFUL, ISN’T IT?’ SAYS FREDERICK ROWE, WHO MONITORS TEXAS RETIREMENT PLANS. ‘PENSION FUNDS MISFIRE FROM EVERY DIRECTION. THIS IS DEBILITATING.’



Frederick Rowe of the Texas Pension Review Board says most systems understate future costs.

A government retirement plan can't go bankrupt, even if it's insolvent; state treasuries must put up the money if a fund runs dry.

What for retirement plans in the U.S. has been a simple solution—issuing \$50 billion in pension bonds—has become a growing headache for the public. “When the actuary is finished with his magic, where did the money go?” asks Jeremy Gold, who was one of the first actuaries to work for a Wall Street firm when he joined Morgan Stanley in 1985. The answer, he says, is that future taxpayers may cover what fund administrators had hoped to get from investment returns.

For investors, these debt sales are similar to ordinary municipal bonds. Because both forms of debt are ultimately backed by taxpayers, credit rating firms give them high grades for safety. The difference for bondholders in states is that pension bonds aren't tax-exempt. General obligation bonds are typically used to pay for construction of schools, hospitals and other public works; pension bonds just fund needy retirement plans. For

that reason, Congress decided in 1986 that pension bond income should be subject to federal income taxes.

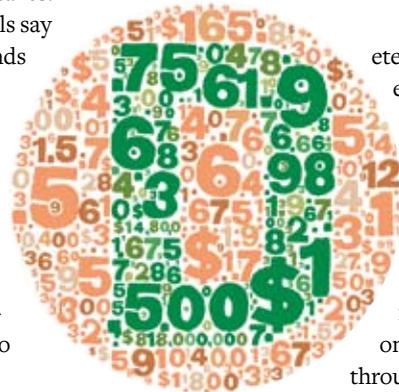
Government officials say they issue pension bonds believing that their fund managers can earn more money from investing the proceeds than what they have to spend in interest payments to bondholders. The government of Puerto Rico borrowed \$2.9 billion through pension bonds in 2008, betting that it could reap annual returns of 8.5 percent investing the money, while paying its bondholders 6.5 percent.

“The risk is minimal,” says Jorge Irizarry, who was chairman of the Employees Retirement System of Puerto Rico from August 2007 through December 2008. A political appointee, he departed after his party lost the governorship in November. Before working for Puerto Rico, Irizarry was an executive at

PaineWebber Group Inc. from 1986 to '98.

So far, Puerto Rico's wager isn't paying off. The 8.5 percent expected rate of return has instead been a loss of more than \$200 million, according to a Dec. 12 presentation by fund administrators to legislators. “It was an arbitrage transaction, and the market has turned against us,” says Carlos Garcia, former president of Banco Santander Puerto Rico, who replaced Irizarry as chairman of the pension fund in January. “I don't know if the benefits intended will be realized.”

Actuaries consistently permit public pension funds to report artificially high expected rates of return—most often 8 percent and as much as 8.75 percent. That's more than the 6.9 percent billionaire investor Warren Buffett sets for his Omaha, Nebraska-based Berkshire Hathaway Inc.'s pension fund. “Public pension promises are huge and, in many cases, funding is woefully inadequate,” Buffett wrote in his 2008 letter to shareholders. “Because the fuse on this time bomb is long, politicians flinch from inflicting tax pain, given that the problems will only become apparent long after these officials have departed.”



etermining how much expected rates of return should be isn't complicated, says Rowe, who oversees Texas pension funds. “Why do they choose high expected rates of return?” he says. “The only reason is to sneak through promising a lot to pensioners—which means worrying about it later. It's madness.”

The Governmental Accounting Standards Board, a nonprofit group that provides guidance for accountants, has rules for financial reporting by public pension funds. A study commissioned by the U.S. Senate Finance Committee, released on July 10, 2008, found that GASB guidelines could be meaningless. “GASB operates independently and has no authority to enforce the use of its standards,” the report

said. Each state sets its own rules. The GASB rules don't mention pension bonds.

Illinois sold the largest pension bond issue ever, \$10 billion in 2003, to shore up its state pension funds. In 2007, former Governor Rod Blagojevich proposed an even larger, \$16 billion pension bond issue, as the state's unfunded pension liability exceeded \$40 billion. The legislature impeached Blagojevich in January after he allegedly sought bribes in return for filling President Barack Obama's vacant U.S. Senate seat.

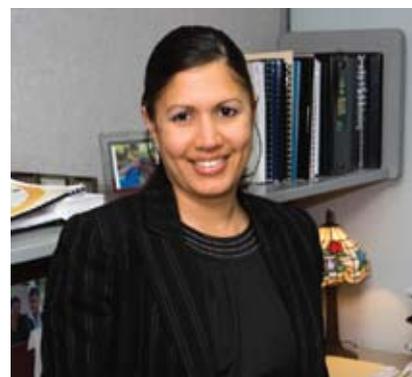
When the Chicago Transit Authority decided to issue debt in 2008, it did its own calculations. The CTA concluded it could borrow \$1.9 billion, paying an interest rate of 6 percent to bondholders, and invest the proceeds to receive its expected rate of return of 8.75 percent. Such an annual return would add \$52 million a year to bolster the fund.

The CTA chose to ignore not only Illinois's auditor general but also its own actuarial firm, Detroit-based Gabriel Roeder Smith & Co. The company had determined there was just a 30 percent chance of earning 8.75 percent. "We executed the best transaction we could, given the legislative and political restraints," says CTA Chairman Brown, who is also co-head of municipal finance at Chicago-based Mesirov Financial Inc.

Since the bond sale, the authority has held the money as cash, earning 2 percent. And, with the credit crunch forcing municipal bond interest rates up to attract buyers, the CTA wasn't able to sell bonds with a 6 percent return. A team of underwriters, including Goldman Sachs Group Inc., JPMorgan Chase & Co. and Morgan Stanley, sold the CTA bonds in August 2008, at a yield of 6.8 percent, so the fund had to pay bondholders more than it had expected. "There is negative arbitrage," Brown says. "It's better than having dumped the money into the equity market."

The one group that benefits from the pension bond sales is the CTA's retirement plan members. The authority is responsible for contributing more than twice as much to the fund as its employees. Thus the retirees are virtually certain to enjoy pension contribution savings from the pension bonds, the auditor general's report says.

Neither workers nor the government are thrilled with the public pension system in Puerto Rico. As of 2005, the



Ana Reyes took a job as a government lawyer in Puerto Rico, not knowing the commonwealth had stopped giving new hires a pension. **Hector Gaitan**, left, a former actuary for the pension plan, says the fund has more liabilities than it publicly reports.

Caribbean island's government pension, with 278,000 participants, had assets that totaled just 19 percent of its long-term liabilities. That made it less funded than any state retirement fund in the U.S., public records show. Puerto Rico's pension system is a model for common mistakes made by public funds across the U.S.

Puerto Rico, a U.S. commonwealth with a population of 4 million, has underfunded its main public pension fund since 1951 to save cash. The island, whose capital building in Old San Juan is as close to the turquoise ocean waves as are the tourists taking photos on the edge of the beach, is far from being a financial paradise.

The legislature has repeatedly ignored annual suggested contributions calculated by its own actuaries, according to the Employees Retirement System's records.

Puerto Rico's legislature raised pension benefits without funding the increased expense 30 years ago. Edmund Garza, the retirement system's administrator from 1992 to '96, says pensions were boosted from 45 percent of average salary to 75 percent after 30 years of employee service. "They didn't prepare a detailed actuarial analysis to see the financial impact of this decision, but definitely it was huge," Garza, 47, says.

The government skipped nearly \$2 billion in contributions urged by its actuaries from 2000 to '05, according to fund records. The pension system continued a course toward insolvency as it

**THE ACTUARY FOR
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GOVERNMENT
CONTRIBUTIONS.
'THOSE COMMENTS
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TERMINATED.'**

paid out more in benefits than it took in.

By 2005, the Employees Retirement System had \$12.3 billion of pension obligations with just \$2.3 billion of assets. Puerto Rico itself has a BBB- credit rating, one notch above junk, from Standard & Poor's.

"We are very near bankruptcy," says economist Jose Villamil, speaking of the commonwealth. He is founder of Estudios Tecnicos Inc., a San Juan-based economics consulting firm. "The budget is out of control; the treasury is in sad shape."

In 2007, the actuary for the Puerto Rico fund, Hector Gaitan of Buck Consultants LLC, recommended that the legislature

make an annual contribution of \$564 million. "The financial status of the System will continue to deteriorate," Gaitan said in a Feb. 12, 2007, letter to the pension board that urged a boost in commonwealth contributions. The legislature ignored Gaitan's warning. It chose to put \$398 million into the pension fund. Just months after Gaitan suggested bigger government contributions to the retirement system, the pension board dismissed Gaitan and his firm.

"Those comments may have gotten us in trouble," says Gaitan, seated at his desk in a small cramped office in a San Juan business park landscaped with palm trees.

NEW JERSEY ISSUED \$2.75 BILLION IN PENSION BONDS IN 1997, AS THEN GOVERNOR WHITMAN SAID THAT WOULD SAVE TAXPAYERS \$47 BILLION. SO FAR, THE STATE HAS LOST MORE THAN \$500 MILLION ON THOSE BONDS.

UBS's Puerto Rican Connections

UBS AG, the Swiss financial giant, has found a little slice of paradise in Puerto Rico.

In 2007, UBS Financial Services Inc. of Puerto Rico, a wholly owned subsidiary of Zurich-based UBS, became financial adviser to the island's Employees Retirement System, which provides pensions for 278,000 government workers and retirees. In 2008, UBS took the lead when the fund sold \$2.9 billion in pension bonds, producing \$27 million in fees for the Swiss bank and its co-underwriters. The bonds, which are backed by anticipated future government contributions to the fund, were rated just one step above junk by Moody's Investors Service, Standard & Poor's and Fitch Ratings.

A UBS mutual fund manager bought \$1.5 billion of the securities and put them into 20 UBS mutual funds, which the bank sells to investors for a series of upfront and annual fees. The bonds now make up about 17 percent of the funds' \$8.9 billion in assets. Another UBS mutual fund last year lent \$148.7 million to 11 of the UBS mutual funds that bought the pension bonds.

"I've never seen such a blatant series of conflicts of interest," says James Cox, professor of law at Duke University School of Law in Durham, North Carolina. Cox, who has published three books on finance and law, including *Securities Regulation: Cases*

and *Materials* (Aspen Publishers, 2006), says a bank shouldn't provide advice to a bond issuer, underwrite the bonds and buy them for mutual funds that it manages.

In many parts of the world, UBS is in retreat. Switzerland's largest bank by assets eliminated 5,777 employees worldwide in 2008, reported losses of \$16.77 billion and will sell toxic assets to the Swiss central bank for \$39.1 billion. On Feb. 18, UBS agreed to pay the U.S. government \$780 million to settle allegations that it had helped thousands of wealthy Americans evade taxes. It remains a financial powerhouse on the island.

UBS is the biggest asset manager in Puerto Rico, with 147 financial advisers and 32,166 retail accounts as of Feb. 12, according to the company. UBS received more than \$50 million in annual fees from its Puerto Rico mutual funds, according to their latest 12-month reports. UBS charged its fund investors a 4.75 percent upfront commission.

Five of UBS's mutual funds, Puerto Rico Fixed Income Funds I through V, owned more than \$1 billion of the pension fund bonds as of Sept. 30, and the pension debt made up 30 percent of the funds' assets. The pension bonds, with a yield of 6.5 percent, have lost about 10 percent of their value in the past year, according to data compiled by Bloomberg.

UBS sold the mutual funds mostly to individual investors, the bank says. Most shareholders bought the funds before UBS purchased the pension bonds. "The public wasn't aware they were buying a pig in a poke," Cox says. "This whole thing appears to be engineered by UBS as a way of syndicating bonds without disclosing to the public the very substantial risk of those bonds."

UBS Puerto Rico President Miguel Ferrer, who serves as chairman of most of the UBS Puerto Rico funds, says he sees nothing improper. "We have no conflicts at all," he says. "We do each job



UBS Puerto Rico President **Miguel Ferrer** says his company has avoided conflicts.

GABRIEL GONZALEZ

“We were terminated shortly thereafter.” Irizarry, who chaired the fund’s board until Dec. 31, declined to say why the board dismissed Gaitan.

Gaitan says the retirement system’s underfunding may actually be an additional \$1 billion or more than the fund reports, because the board relies on outdated mortality tables based on 1960s statistics to compute its future obligations. The shorter life spans in those outdated tables reduce the apparent size of the fund’s liabilities.

The legislature has taken one step to improve pension funding—on the backs of employees hired after Dec. 31, 1999.

New employees are denied fixed annual pensions. They must self-fund their retirement accounts. The legislature diverts 9.275 percent of salary pension contributions for new workers to help scrape together the money needed to provide pensions for pre-2000 employees. By not making pension payments to employees hired after 1999, the pension fund will cut future liabilities.

The states of Alaska and Michigan, like Puerto Rico, have eliminated traditional public pension funds for new employees in the past 12 years.

Ana Reyes, an attorney in Puerto Rico, decided to take a job with the city of Caguas

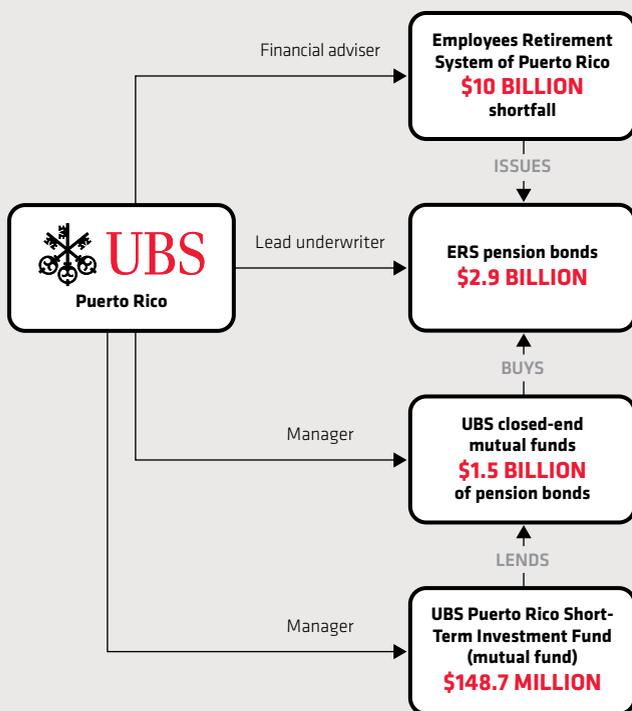
in 2008 so she could lock into a government pension. “I wanted to have a good life when I get old,” Reyes, 33, says. “That was my insurance.”

Reyes, who lives in the island’s Central Mountain Range 20 miles (32 kilometers) south of San Juan, says she didn’t know that new employees get no retirement payments funded by the government. “If I’d known this, I might have made a different career decision,” says Reyes, who is the mother of a 2-year-old girl. “When I started here, they didn’t explain that.”

Even states that have had fully funded pensions—such as New Jersey in the ‘90s—now have retirement plans with

Many Hats

UBS advised Puerto Rico’s employees retirement system, underwrote its bonds and managed the mutual funds that bought them.



UBS Puerto Rico closed-end funds are sold to retail investors and are exempt from SEC registration and compliance with the Investment Company Act of 1940. Sources: Bond offering statements, quarterly reports, UBS funds

independent of the others. We follow all the rules that have to be followed.” UBS’s role as adviser to the retirement system didn’t affect its selection of UBS as underwriter of the pension fund’s bonds, he says. “We were selected because we have the wherewithal to do what we do,” he says. “It wasn’t that I made

the decision.” Ferrer says Puerto Rico’s pension fund board made that choice. The UBS mutual fund’s loan to other UBS mutual funds wasn’t tied to the purchase of the pension bond, he says.

The mutual funds’ offering statements to potential investors contain sections called “conflicts of interest risk,” which describe UBS’s roles in running the funds, selling securities to and buying them from the funds and establishing their values.

“There may be few or no market makers in the shares,” the offering statements say. UBS charges fees of 1 percent of the mutual fund assets annually. While the funds don’t carry an exit fee, the shares aren’t traded on any exchange. Although UBS publishes prices for the shares monthly, the funds are closed-end, meaning UBS doesn’t agree to buy back the shares for customers who want to cash out. There are no public records of UBS Puerto Rico fund trading prices or volumes.

Ferrer says mutual fund shareholders buy and sell billions of dollars of the funds each year through UBS.

Thanks to a loophole in U.S. securities law, funds established in Puerto Rico and sold only to residents of the island aren’t required to register with the Securities and Exchange Commission. They’re also exempt from the Investment Company Act of 1940, so they avoid that law’s restrictions on transactions between funds and their managers.

Mercer Bullard, a professor at the University of Mississippi School of Law, says the 1940 law was passed to halt abuses of mutual fund shareholders that he sees being repeated in Puerto Rico. “These are precisely the kinds of conflicts that led to passing the Investment Company Act,” he says. “It’s a series of conflicted relationships designed to put money in UBS’s pocket at the expense of its clients.”

Puerto Rico was exempted from the act’s provisions after SEC General Counsel David Schenker testified in 1940 that “they are so far away from America that the policing aspects are quite difficult.”

DAVID EVANS



Actuary **Jeremy Gold** says \$50 billion in pension bonds may haunt future taxpayers.

fewer assets than future liabilities and aren't moving to plug the gaps. New Jersey Governor Jon Corzine, a former co-chief executive officer of Goldman Sachs, has proposed allowing government pension funds to put off half their pension contributions because of the state's growing deficit during the recession.

Corzine's suggestion follows a recent New Jersey pension track record of mistakes. When the state's pensions were healthy in the '90s, the state legislature eliminated nearly all of its annual pension contributions for nearly a decade, while adding \$4.6 billion of benefits.

New Jersey sold \$2.75 billion of pension bonds in July 1997. Then Governor Christine Todd Whitman said at the time that the bonds would save taxpayers \$47 billion and make the system fully funded. "You'd be crazy not to have done this," Whitman said in a Bloomberg News interview in June 1997. "It's not a gimmick. This is an ongoing benefit to taxpayers."

Whitman's prediction hasn't held up. While the state pays pension bondholders a fixed 7.64 percent interest rate, the fund has earned 4.8 percent annualized since the bond sale, according to Tom Bell, spokesman for the New Jersey Treasury Department.

New Jersey's pension bonds haven't saved taxpayers \$47 billion. To date, the state has lost more than \$500 million on those bonds, according to state records.

"Governor Whitman came up with this outrageous gimmick in order to give people tax cuts," says Kramer, chairman of the board that oversees New Jersey state pension funds.

As the global economic crisis deepens, public pension funds will lose more money. The solution shouldn't be more accounting tricks, Kramer says. "Virtually every pension system has suffered losses in excess of 20 percent since they created the last set of artificial numbers," he says.

The best step forward would be for states to negotiate benefits down, increase pension contributions and reduce the expected rate of return, Texas pension oversight board member Rowe says.

Public pension funds have to stop pushing the costs of retirement benefits for current workers into the future, actuary Gold says. "You're putting a bigger burden on your children," he says. "It amounts to a transfer from tomorrow's taxpayers to today's employees." **B**

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To write a letter to the editor, send an e-mail to bloombergmag@bloomberg.net or type **MAG <Go>**.

Searching Pension Bonds

You can use the Muni Search (SRC) function to find a listing of pension bonds sold by U.S. municipal borrowers, including Puerto Rico. Type SRC <Go>, select any of the 10 choices under Custom Criteria Sets and type 2 <Go> to clear any existing criteria. Click on State and Region and then on All and press <Menu>. Click on Bond Purpose and then on Pension Funding and press <Menu>. Finally, click on Coupon/Maturity/Size and then on Outstanding and press <Menu>. Click on Search Database and type 1 <Go> to display the search results, a 94-page listing of outstanding pension bonds sold by U.S. states, cities and Puerto Rico.

To refine your search and view only Puerto Rico's pension bonds, press <Menu> to return to the Muni Search screen. Click on State and Region and then on All to clear the selection, and then click on Puerto Rico and press <Menu>. Click on Search Database and type 1 <Go> to run the search. Type 3 <Go> for a description of a 30-year pension bond issued by Puerto Rico in January 2008, as shown at right. On the description page, type

9 <Go> to view the latest trade history, type 11 <Go> for regulatory filings or type 12 <Go> to view recent debt rating changes. Type GY <Go> to view a historical graph of the bond's yield.

Type PURO <Go> for a menu of financial, legal and other Web sites related to Puerto Rico. For news on Puerto Rico, type NI PUERTO <Go>.

BETH WILLIAMS

MUNICIPAL BOND DESCRIPTION Page 1/ 6	
EMPLOYEES RETIREMENT SYS GOVT COMPLTH PUERTO RICO CUSIP:29216MAC(4)	
INSTL SR PENSION FOG-SER A	
TICKER: EMPGEN CPN: 6.15 MATURITY: 7/01/2038 DATED: 1/31/2008 STATE: PR	
Test note.	
MS48 Trades	
SECURITY INFORMATION	
ISSUE TYPE	REVENUE BONDS
MATURITY TYPE	CALL, SINK
COUPON TYPE	FIXED
PRICE/YIELD @	ISSUE 100.000/ 6.150
COUPON FREQ.	MONTHLY
TAX PROVISION	FED BF/CMATH TAX-EXPT
FORM	BOOK-ENTRY
RATINGS WATCH CATER	
MOODY'S	Baa3 STA
GLOBAL	A1 NEG
S&P	BBB- STA
FITCH	BBB- STA
TRADING INFORMATION	
1ST SETTLE DATE	1/31/2008
NEXT SETTLEMENT DATE	2/23/2009
INTEREST ACCRUAL DATE	1/31/2008
1ST COUPON DATE	3/01/2008
NEXT PAR CALL	7/01/2018 @ 100
NEXT SINK DATE	7/01/2034 @ 100
FOR \$ 133500M	
WEEK OF SALE	1/28/2008
NOTES: Personal Office Firm	
JE NET ED ONTS JB PRTS	
View Documents	