

Victims of derivatives losses bring tales of woe to Congress

Beginning in the spring of 1993, the world's derivatives markets have become increasingly unstable. The collapse of Ferruzzi Finanziari of Italy in August 1993, followed by the near-collapse of Metallgesellschaft, the 17th largest industrial firm in Germany, touched off a chain reaction of derivatives losses that has yet to end. In July, Charles County, Maryland, an outlying suburb of the nation's capital, announced that it had temporarily lost almost its entire operating budget of \$24 million because of losses in derivatives contracts that the county was not legally authorized to buy.

The rapidly mounting losses, and the proximity of the Charles County situation, spurred some lawmakers to ignore the regulators (such as Federal Reserve Chairman Alan Greenspan) who have been arguing that everything is under control, and to pick up their investigations again. On Oct. 5, the House Banking Committee, chaired by Rep. Henry B. Gonzalez (D-Tex.), held hearings to hear from institutions that have lost money because of financial derivatives.

Alan McDougle: 'myriad of esoteric products'

Mr. McDougle spoke on behalf of the Government Finance Officers Association (GFOA):

GFOA [is] a professional association of almost 13,000 state and local government officials, both elected and appointed, whose responsibilities include all the disciplines related to public finance.

In early 1994, GFOA and the Municipal Bond Investors Assurance Corporation (MBIA) conducted a survey to determine the extent of the use of derivative products in connection with the issuance of debt in the municipal market. . . [which] showed that state and local government finance officers use derivatives for several reasons. While these reasons vary with the instruments themselves, derivatives are generally employed for 1) managing debt and reducing total interest payments; 2) as a hedge against interest rate swings; and 3) as a means of increasing investment return.

The GFOA/MBIA survey revealed some interesting details. . . . Only 4% of these respondents classified themselves as being very knowledgeable about derivatives and 20% felt they knew only the basics. A wide majority, 76%, indicated that they had only some or no knowledge of derivatives. The nonusers also had some instructive responses: While 51% questioned whether derivatives would benefit their jurisdictions, 38% believed these products to be too complex, 36% felt derivatives were too risky, and 25% are

not legally authorized to use derivatives. . . .

"Best practices" dictate that safety, liquidity, and yield, be considered (in that order), [thus] instruments with a high degree of market and credit risk may be inappropriate because they are volatile. Because of the liquidity needs of governments to pay operational expenses, payrolls, etc., instruments that are inherently risky, that may become illiquid, or that are long-term, are inappropriate for short-term cash management purposes, although they may be appropriate instruments for pension funds which traditionally and properly invest in long-term instruments of many types. This lack of liquidity impacts yield as well, inasmuch as huge losses may be incurred and a low return realized if the instrument must be sold at a loss. Finally, where interest rates impact the market for securities, yield is likely to suffer as well. No one, not even the experts, can be certain of the direction the markets or interest rates will take. If cash will be required, a jurisdiction ought not be placing its funds in derivatives.

Derivative products can be quite attractive to state and local governments. After all, even small governments have significant amounts of money to invest, due to the timing of tax receipts, or substantial borrowing needed to finance public facilities. The pressure for increased returns or reduced borrowing costs in times of tight budgets is a significant factor affecting decisions to use particular instruments. But finance officers, as custodians of public funds, have the continuing responsibility for balancing safety, liquidity and yield. GFOA has long advised its members to exercise caution in its investment of these funds. . . .

Let me point out some characteristics of state and local governments that are pertinent to this discussion. In addition to the 50 state governments, there are 38,933 general purpose local governments—counties, municipalities, and townships—as well as school districts and special districts. About 85%, or 33,211, of these general purpose local governments have populations under 10,000.

Small jurisdictions that are unable to afford highly skilled investment experts to handle their funds depend on public servants who may be part-time employees, and officials with numerous other responsibilities. These positions are held by persons who may or may not be finance professionals. The levels of expertise and understanding vary between jurisdictions, especially with regard to complex and unfamiliar products. . . .

Specific GFOA concerns about the use of derivatives

include risks incurred such as legal, credit, market, and operating risk, as well as concerns regarding the complexity of the products, the appropriate use of derivatives and the marketing of these products. . . . While these same categories of risks are present in many financial transactions, the complex features of derivatives and their customization is beyond the experience of many finance officials and serve to magnify the dangers. . . .

Another GFOA concern . . . is suitability. Finance officers report that [derivatives] are being aggressively marketed to governments, which are assured in many cases by the sales force that the products are safe, government-guaranteed, and will protect principal. If the value begins to decline, some finance officers have been assured that they will bounce back. In short, many cautious finance officers believe that they have been misled and that these products have been misrepresented, in part due to a lack of understanding by the broker/dealer trading them and in part because of the large commissions dealers earn. There is a decided lack of unbiased information regarding specific derivatives, even from outside investment advisers or bond counsel, who are often not familiar with these instruments.

While industry representatives have challenged the inclusion of CMOs, IOs, and POs in any discussion about derivatives, their inherent features logically entitle them to such classification. CMOs have been frequently represented by many dealers as being ordinary mortgage-backed securities, while in fact the securities are derived from underlying pass-through mortgage pools and divided into separate classes of securities. . . .

In response to increased interest on the part of its membership in the use of derivative products, as well as the intense marketing of these products to state and local government finance officers by the broker/dealer community, GFOA adopted two statements dealing with the use and regulation of derivatives at its 1994 Annual Business Meeting in June. . . .

The first [is] a recommended practice which offers guidance to public entities thinking about using derivatives. . . . The statement represents "best practices" for finance officers to gauge the appropriate use of derivative products for their jurisdictions. GFOA urges finance officers to exercise extreme caution in the use of derivatives instruments and to consider their use only when they have developed a sufficient understanding of the products and the expertise to manage them. . . .

In the second statement, the GFOA policy, as it does with respect to other financial markets, supports the clarification or issuance of suitability rules for derivatives to assure that the products recommended by a broker or dealer are appropriate for the state or local government entity. The Association also has urged that the accounting standard setting process for derivative products be accelerated so that those who depend on financial reports have reliable information on which to base their decisions. The policy also supports setting

reasonable capital requirements for brokers and dealers, and urges that regulatory gaps related to securities firms and insurance companies that are dealers of derivative products be closed.

Industry participants have criticized GFOA's position as overlooking recent actions and expressions of concern from federal agencies and ignoring the assurances provided by regulators and some industry experts that reports of problems in the derivatives market are overblown. In fact, industry representatives—including some who have appeared before this committee recently—attempted to intervene during the GFOA membership's consideration of this issue and to thwart a vote on these positions. . . .

Dr. Philip Speegle: 'We were in shock!'

Dr. Speegle represents Odessa College, Odessa, Texas:

Odessa College has traditionally been very conservative in financial and fiscal matters and has worked diligently to keep our *ad valorem* tax rates as low as possible. With the cost of education increasing and revenues periodically declining, the source of funding was become more challenging. Odessa College traditionally invested its funds in certificates of deposit or treasury bills, but in the late 1980s or early '90s, the rates of return on these type of investments were pitifully low. The Texas Public Funds Investment Act specifically authorized other types of investments besides certificates of deposit or treasury bills. Among these authorized investments were collateralized mortgage obligations directly issued by a federal agency or instrumentality of the United States. It is our understanding that these CMOs were triple-A rated and guaranteed by the Federal National Mortgage Association and Federal Home Loan Mortgage Corporation. One would think how much safer can you be? Recent events would indicate to the contrary.

I want to emphasize the point that we are a relatively small institution. We cannot afford and do not have a sophisticated investment staff who can understand and fully appreciate sophisticated investment instruments. Our Chief Financial Officer at the time of these investments was the person primarily responsible for making investments. Let me point out, however, that he had many other duties. He was also in charge of the maintenance and repair of buildings, the grounds, the custodian services, the personnel, paychecks, the accounting system, purchasing and inventory, and many other duties.

Between 1990 and the fall of 1993, the college's investment in CMOs produced a good rate of return and there was no indication of problems with regard to these investments. I believe that neither the financial officer, the board of trustees, nor I had any significant understanding of the true risk we were taking by investing in these CMOs. The returns we received on our investment were utilized to supplement our increasing budget needs and to hold down the need for increasing our *ad valorem* tax rate. In retrospect, it is quite easy to say we should have realized the profits that we were

Derivatives market losses, by entity

(millions \$)

Date	Loser	Amount lost	Instrument and/or cause
April 1987	Merrill Lynch	\$335	Mortgage derivatives
April 1987	First Boston	50	Bond options
June 1987	Volkswagen	260	Forex futures
June 1987	British local authorities	500	Interest rate swaps and swaptions
October 1988	Klöckner	380	Commodities hedging
December 1989	Chemical	33	Options model error
June 1990	Imperial Life	11	Forex futures
1990	Hedged Securities Associates Inc.	100	Stock options
1989-91	Lazlo Tauber	25	Forex forwards
1990-91	ABN Amro	70	Mark-to-market valuation after forex fraud
June 1991	Allied Lyons	275	Forex options
Total 1987-91		\$2,039	
March 1992	J.P. Morgan	50	Mortgage strips
October 1992	Nippon Steel	130	Forex derivatives
October 1992	Louisiana State Retirement Fund	43	Mortgage derivatives
1992	Central Bank of Malaysia (Bank Negara)	2,660	Forex derivatives
Total 1992		\$2,883	
March 1993	Showa Shell Sekiyu	1,580	Forex forwards
August 1993	Ferruzzi	1,000-22,000	Forex swaps
Spring 1993	Sandusky County, Ohio	5.5	Mortgage derivatives
Spring 1993	Portage County, Ohio	5	Mortgage derivatives
Spring 1993	Putnam County, Ohio	0.5	Mortgage derivatives
November 1993	Hyperion Capital Mgmt. (mutual funds)	35.6	Mortgage derivatives
December 1993	Kashima Oil	1,450	Forex derivatives
December 1993	Banesto		Unconfirmed reports derivatives involved
December 1993	MG Corp. (Metallgesellschaft)	1,340	Energy derivatives
1993	Central Bank of Malaysia (Bank Negara)	3,000	Forex derivatives
Total 1993		\$10,416.6	
January 1994	Codelco, Chile	206	Copper and precious metals futures and forwards
February 1994	George Soros (hedge fund)	600	Leveraged forex and interest rate derivatives
February 1994	Michael Steinhardt (hedge fund)	1,000	Leveraged forex and interest rate derivatives
February 1994	Julian Robertson (hedge fund)	875	Leveraged forex and interest rate derivatives
February 1994	Bear Stearns	25	Mortgage derivatives
February 1994	Kidder Peabody	500-3,000	Mortgage derivatives
February 1994	Donaldson Lufkin Jenrette	5	Mortgage derivatives
February 1994	Goldman Sachs	100-640	Forex and interest rate derivatives, also bonds
March 1994	Askin Securities (Granite Partners hedge funds)	600	Mortgage derivatives
March 1994	City Colleges of Chicago	19.2	Mortgage derivatives
March 1994	Gibson Greetings Inc.	23	Leveraged interest rate swaps
March 1994	Eastern Shoshone Tribe	0.725	Mortgage derivatives
1st Qtr. 1994	HYM Financial Inc.	12	Mortgage derivatives
1st Qtr. 1994	LaSalle National Corp.	45	Structured notes
1st Qtr. 1994	Bankers Trust	250	Structured notes
1st Qtr. 1994	Wayne Hummer	4	Mutual fund bailout

Date	Loser	Amount lost	Instrument and/or cause
April 1994	Minnetonka Fund (Cargill)	\$100	Mortgage derivatives
April 1994	Proctor & Gamble	157	Leveraged DM-US\$ spread
April 1994	Mead Corp.	12.1	Leveraged interest rate swaps
April 1994	Dell Computer	34.6	Leveraged forex and interest rate swaps and options
April 1994	Marion Merrell Dow	12	Askin hedge fund
April 1994	Orange County, Calif.	147	Leveraged portfolio to buy derivatives
May 1994	Canadian Imperial Bank Commerce (Wood Gundy)	10	Financial futures
May 1994	Arco (Pension Fund)	22	Structured notes
May 1994	Air Products & Chemicals	113	Leveraged interest rate and forex swaps
May 1994	Nordbanken (Carnegie Group)	33	Unknown
May 1994	Vaircana Ltd. (hedge fund)	700	Arbitrage on European bonds
June 1994	Pacific Horizon Funds (BankAmerica)	67.9	Structured notes
June 1994	Zweig Cash Fund	0.415	Mutual fund bailout
June 1994	Florida State Treasury and Florida League of Cities	175	Mortgage derivatives
June 1994	Virginia Retirement System	66	Futures
June 1994	Pat Robertson's Int'l. Family Entertainment	2.1	Unknown
June 1994	Balsam	400	Forex options
June 1994	Paine Webber (fund bailout)	268	Mortgage derivatives (mutual fund bailout)
June 1994	CS First Boston	40	Forex, indexes (repay for unauthorized deriv. trades)
Summer 1994	Investors Equity Life Insurance Co. (Hawaii)	100	Interest rate futures
Summer 1994	Coastal States Life Insurance Co. Georgia	Unknown	Mortgage derivatives
2nd Qtr. 1994	Harris Trust & Savings	51.3	Mortgage derivatives
2nd Qtr. 1994	Federal Paper Board	11	Unknown
July 1994	Paramount Communications	20	Interest rate swaps
July 1994	Glaxo	150	Structured bonds and mortgage derivatives
July 1994	Mound, Minnesota	0.5	Piper Jaffrey
July 1994	Maple Grove, Minnesota	1.2	Piper Jaffrey
July 1994	Andover, Minnesota	0.4	Piper Jaffrey
July 1994	Metro. Sports Facilities Commission	1.3	Piper Jaffrey
July 1994	Vermilion, Ohio	0.18	Mortgage derivatives
July 1994	Rockefeller Center Properties	3.5	Interest rate swaps
August 1994	Minnesota Orchestral Association	2	Piper Jaffrey
August 1994	Charles County, Maryland	6	Mortgage derivatives
August 1994	Piper Jaffrey Mutual Funds	700	Mortgage derivatives
August 1994	Argonaut Capital Mgmt. (hedge fund)	110	Interest rate futures, stock indexes, commodities, forex
August 1994	Fleet Financial Group	5	Structured notes (mutual fund bailout)
August 1994	Weyerhaeuser pension fund	22.1	see 1990 Hedged Securities Assoc.
August 1994	Caterpillar Financial	13.2	Caps and swaptions
August 1994	Donaldson Lufkin and Jenrette Securities Corp.	30	Mortgage derivatives

Date	Losers	Amount lost	Instrument and/or cause
August 1994	Fundamental Family of Funds	\$ 6.75	Inverse floaters
August 1994	Merrill Lynch	25	Mutual fund bailout
August 1994	Independent Bancorp of Arizona	50	Mortgage derivatives
August 1994	University of Minnesota	13	Askin hedge fund
September 1994	Wyoming Retirement Board	10	Piper Jaffrey
September 1994	State of Florida	90	Piper Jaffrey
September 1994	Jackson, Ohio	0.36	Mortgage derivatives
September 1994	Odessa College, Texas	11	Mortgage derivatives
September 1994	Kidder Peabody	2,500	Mortgage derivatives
September 1994	Community Asset Management Inc.	4.93	Structured notes and mortgage derivatives
September 1994	Northern Trust Co.	3.5	Mutual fund bailout
September 1994	Wilmington Trust Co.	8.8	Structured notes (mutual fund bailout)
September 1994	Prudential Securities Inc.	10	Mortgage derivatives (mutual fund bailout)
September 1994	Kidder Peabody Group	7	Structured notes (mutual fund bailout)
September 1994	Community Asset Management	5	Mutual fund bailout
3rd Qtr. 1994	Barnett Banks (fund bailout)	100	Structured notes (mutual fund bailout)
3rd Qtr. 1994	United Services (fund bailout)	93.25	Mutual fund bailout
3rd Qtr. 1994	ABN Amro (fund bailout)	45	Mutual fund bailout
3rd Qtr. 1994	Value Line (fund bailout)	40.45	Mutual fund bailout
3rd Qtr. 1994	Retirement Systems Consultants	0.1	Unknown
3rd Qtr. 1994	Boatsman's Bancshares (fund bailout)	5	Mutual fund bailout
3rd Qtr. 1994	Norwegian Municipality Pension Fund	7	Interest rate options
3rd Qtr. 1994	Colonia (German holding company)	76	Exotic options
3rd Qtr. 1994	Union Bank (fund bailout)	20	Mutual fund bailout
1994	Jackson, Ohio	0.344	Unknown
1994	Medani	50	Structured notes
1994	AIG	90	Derivatives revaluation
1994	Kidder Peabody	10	Amortizing swap pricing
Total 1994		\$10,532.704	
Total 1987-94		\$25,871.304	
Anticipated or forecast:			
February 1994	Various U.S. insurance companies	16,000	Forex and interest rate derivatives, also bonds
October 1994	World Bank	1,093	Interest rate swaps and other derivatives
October 1994	Fannie Mae	506	Interest rate swaps and other derivatives
October 1994	FirstFed Michigan	401	Interest rate swaps and other derivatives
October 1994	Sears, Roebuck	400	Interest rate swaps and other derivatives
October 1994	I.B.M.	147	Interest rate swaps and other derivatives
October 1994	Cuyahoga County, Ohio	100	Reverse repurchase agreements
Total anticipated or forecast		\$18,647	
Grand total		\$44,518.304	

making had to involve substantial risk. However, in the past we never experienced any difficulty in selling the CMOs at any time in order to meet the financial obligations of the college.

In 1994 interest rates began to rise. Suddenly the college was faced with the situation that the investments had become difficult to sell and if sold, would bring 50% or less of the original purchase price. The reduction in value occurred quickly and over a very short period of time. We were in shock!

Scrambling to keep the doors of the institution open, we did sell a portion of the investments at a loss of \$2.7 million in order to make the March 1994 payroll. This bought us enough time to consult with financial advisers and bond counsel who quickly analyzed our situation and suggested the best course of action was to hold the investments as opposed to selling them into a panic market that could result in a loss of \$10 to \$12 million to the college.

The college was now facing a crisis. We were able to negotiate a loan by virtue of a bond issue with one of our local banks. This bond issue was for \$6 million and could be drawn on as needed. This allowed us to make future payroll, meet accounts payable, and keep the institution solvent. Because of other debts, the college filed and successfully completed a validation suit that allowed us to complete an additional bond issue for \$6.2 million which was negotiated and sold to another bank in Odessa. This second bond issue allowed us to pay a tax anticipation note of approximately \$4 million and to provide additional operating funds and cash flow to complete the 1993-94 school year and provide financial solvency for the 1994-95 year.

Because of this large debt we suddenly acquired, the college had to reduce the operating budget of the institution for 1994-95 by \$2,050,000. We very strongly reduced any travel and greatly reduced capital outlay and equipment for the institution. We instituted a hiring freeze and have made every effort not to replace anyone who leaves employment at the institution. We have basically reduced expenditures in nearly all areas. We eliminated one long distance service that we had and accelerated some plans to reduce our athletic program. We even cut utility bills (perhaps the least popular move among the students), but we did it. . . .

The consequences of Odessa College's investment in CMOs is not only measured in dollars and budget reductions. It has also affected the lives of many individuals. An early retirement program was initiated which resulted in 22 senior faculty and staff taking early retirement. While the program was voluntary in nature, it did result in the loss of many experienced and valued educators. Our Chief Financial Officer has resigned after 12 years of service with the college and has relocated out of state. I have personally decided to utilize my retirement income and have agreed to work for the college at a salary of \$1.00 per year. The stress of the last several months has adversely affected my health and I have

requested the selection of a new president by August of 1995.

Where is the college today? The college has CMOs with a face value of \$29 million. They were purchased for approximately \$22 million and it is my understanding they have a value today of \$10 million or less. The college has adopted a substantially more conservative investment policy that precludes the use of CMOs or derivatives in any form as an investment for the institution.

The bond ratings of the college have been lowered by a rating agency from an A to BAA. While this is still an investment grade rating, the college has in past years worked diligently to obtain the higher rating and it will take a great deal of effort and many years to regain the confidence of these rating agencies.

The college is committed to place ourselves in a position where we can operate the institution without depending on the investments. While we plan to be in a position to hold such investments until maturity, we would immediately sell such investments if the value ever returns or we will sell or exchange all or a portion at an earlier date if our financial advisers deem it prudent. In any case, it leaves what was once an above-average financially secure institution in a difficult position in which future moves will be dictated by the vagaries of the financial market.

Bottom line: Odessa College will survive, leaner and certainly wiser, but Odessa College will survive!

How can you help us? We are not asking for a handout nor are we asking for a bailout by the federal or state government. The mistakes have been made and we are dealing with the consequences as our resources permit. However, we feel small political institutions, such as Odessa College, need clearer signposts as to what is advisable or inappropriate. We now know about derivatives. However, what is next? Five or ten years ago it was junk bonds; now derivatives. What will it be in the future? Enterprising and energetic marketing of new products are likely to continue. . . .

Roger Fink: investing or gambling?

Mr. Fink is the attorney for Charles County, Maryland:

. . . As a country lawyer and public servant trying to understand the volatility of these securities, I have tried to simplify their complexity in my own mind. In that regard, it looks to me like the broker/dealers have found a fine line between investing and gambling. When one invests in some object, it seems that the risk of gain or loss in that investment is always tied to some intrinsic or inherent value of that object, be it 100 shares of ABC Company, 100 acres of land, a Chippendale desk, or an Impressionist painting. The risk of gain or loss in gambling, on the other hand, is one of chance—tied to some extrinsic object or random event beyond the control of reasoned predictability. By linking the risk of gain or loss to certain external indices such as interest rate fluctuations, foreign exchange rates, commodities prices, prepayment rates, or other financial variables, the reasoned predictability of the future value of derivative securi-

ties, like so many clouds in the sky, presents more than a tangible, objective forecasting challenge to the investor. The likelihood of gain or loss is, at best, incredibly difficult to predict and, at worst, an outright gamble. Fortunately, Charles County has survived its encounter with derivative and exotic securities investments, although it has cost a lot for the people involved and a great expenditure of time and resources diverted to this crisis management from the more important day-to-day issues of government. . . .

Vernon Hill: 'We were never informed'

Mr. Hill is a Business Council member of the Eastern Shoshone Tribe in Wyoming:

. . . For the year ending Dec. 31, 1993, our auditors have estimated that we have an approximate loss of \$93,000 on sales and an approximate unrealized loss of \$725,000 on the securities remaining in our portfolio. We expect the current loss in value will be significantly higher than these amounts.

The Tribe was not able to timely detect the problems with the mortgage derivatives because monthly statements it received from MGSI did not price current holdings based on actual trading prices. MGSI provided third party pricing figures as a substitute for the months of November 1993 through February 1994. The third party pricing differed from actual trading prices by a significant amount. In March 1994, MGSI began sharing actual trading prices with the Tribe. The actual trading prices reflected the substantial loss in value and made the Tribe aware for the first time of the problems with the mortgage derivatives.

It is the Tribe's position that the risk inherent in the mortgage derivatives purchased by the Tribe was not fully disclosed or fully explained by MGSI. If the Tribe had been fully informed, we would not be here today. Before the securities were purchased, the Tribe received miscellaneous correspondence from MGSI (usually handwritten notes) which were the only documents that described the type of investment the Tribe was urged to make. These documents only provided summary details of the proposed investments representing them as easily marketable, government backed, and having high monthly cash flow. The Tribe never received prospectuses covering the securities, even when initial offerings were purchased. When the mortgage derivatives were purchased, the Shoshone Business Council believed it held secure government-backed bonds. They were never given the opportunity to fully evaluate the risks associated with the mortgage derivatives. . . .

We urge Congress to inquire why the Federal National Mortgage Association and the Federal Home Loan Mortgage Corporation, federally chartered corporations, are involved in developing such volatile securities. We don't expect Congress to protect us from a bad investment, but we also don't expect the federal government to facilitate a situation where unsophisticated investors can be led to believe that their investment is backed by the federal government. . . .