

The immediate threat of a derivatives collapse

by John Hoefle

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We are on the eve of the worst financial collapse in six centuries, a collapse which will devastate the world in which we live, and cause many among us to wonder how we let such a thing happen, why we didn't stop it when we had a chance.

The trigger for this global financial disintegration will be the derivatives market, which has grown like wildfire over the past few years, in a frenzy of gambling, and gambling with borrowed money at that (**Figure 1**).

The notional value of world derivatives has grown from \$1 trillion at the end of 1986, to some \$45 trillion at the end of 1994. Not even the drug trade, which is growing at a rate of 25% a year, has grown that fast.

As fast as the derivatives bubble has grown, it is collapsing even faster. Just the losses which have been reported, add up to over \$35 billion, and the losses which get reported are just the tip of the iceberg (**Figure 2**).

Nearly all the major players in the derivatives markets, including the big commercial banks, investment banks, hedge funds, mutual funds, and others, invest on margin, meaning they only put up a small portion of the purchase price of the derivatives they buy, and allow the institutions to which they sell derivatives to do the same.

This leverage allows them to buy and sell derivatives far beyond their ability to pay. The rationale behind this is that since they can always sell the derivative to someone else, their risk is only the difference between what they paid and what they can sell it for.

If I buy a \$1 million derivative on margin for \$10,000—1%—then sell it for \$11,000, I make a \$1,000 profit without ever having to come up with the \$1 million. If the price goes down, and I sell it for \$9,000, then I lose \$1,000. This is the way the derivatives players figure their risks.

This process works, after a fashion. As long as there is someone out there who wants to buy your derivatives for something near what you paid for them, you can survive. Should the price drop below what you can afford to cover, you go bankrupt, but the market itself survives. But what happens to this pyramid scheme when there are no buyers?

When there are no buyers, everyone who holds derivatives is suddenly liable for the face amount: Your \$10,000 has bought you \$1 million of debt, which you can't pay. You're broke, and therefore your creditors are broke, because you can't cover your debts to them. What erupts, is a chain-reaction collapse. The leverage which allowed the bubble to expand so rapidly, changes to *reverse leverage*, and the system disintegrates, virtually overnight.

This is the situation we are rapidly approaching.

Since the bankruptcy of Orange County, California last December, the global derivatives market has begun to implode. Within weeks, the Mexican financial system crashed, propped up by the promise of \$52 billion in rescue funds.

At the end of February, Barings Bank, one of the crown jewels of the British Empire, failed; another of those jewels, the Anglo-Venetian S.G. Warburg, is in the process of being bailed out by Swiss Bank Corp. Lloyd's of London, which insured the British Empire in more ways than one, is mortally wounded. Crédit Lyonnais, the biggest bank in the world outside Japan, has required repeated bailouts by the French government. Two huge Japanese banks are merging to form

FIGURE 1

World derivatives growth

(trillions \$)

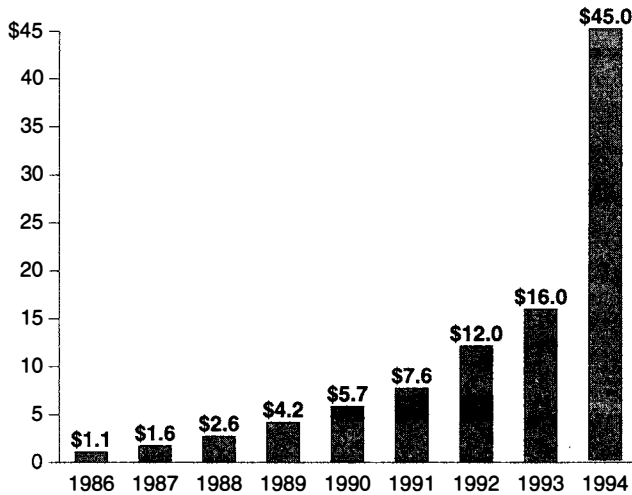
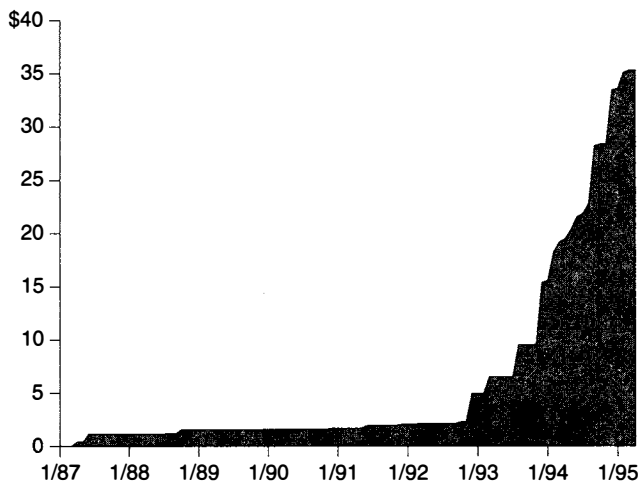


FIGURE 2

World derivatives losses

(cumulative total, billions \$)



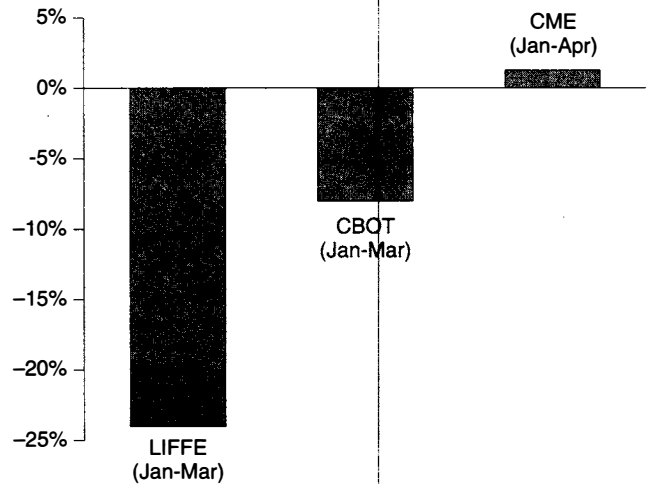
the world's largest bank, hoping they can ride out the growing storm. In New York, the investment banks are suffering, and the rumors grow that a major New York commercial bank has gone under, its doors kept open only by a massive federal life-support action.

During the first three months of 1995, the volume of trading on the London International Financial Futures and Options Exchange (LIFFE), which has set trading records for 12 successive years, dropped 24% compared to the first three months of 1994 (Figure 3). During the first quarter,

FIGURE 3

Derivatives trading volumes

(percent change between 1994 and 1995)



LIFFE had only one day in which 1 million or more trades were conducted, compared to 12 such days in the same period last year. The decline continued into April, when only 8 million futures and options were traded, a 35% decline from a year earlier.

The Chicago Board of Trade experienced an 8% drop in trading in the first quarter, compared to the same period in 1994. Trading in Treasury bond futures, the CBOT's largest contract, dropped 7% during the same period.

Trading on the Chicago Mercantile Exchange increased 12% during the first quarter over the first quarter of last year, but fell far short of the 54% growth experienced during 1994. The bulk of the progress occurred in January, when trading was up 37% over the year before. Year-to-year growth fell to 6% in February, and to just 0.3% in March. The bottom fell out in April, when trading volume fell to its lowest level since December 1993. Trading volume was down 39% from March, and 29% over April 1994, cutting the January-to-April increase to just 1%.

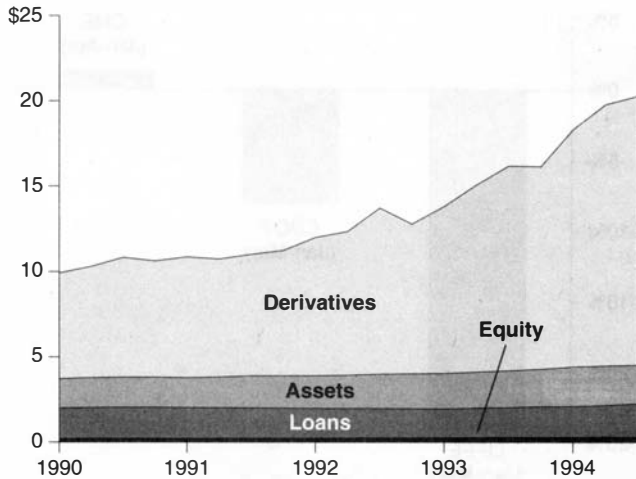
One effect of this trading decline, is that some brokers in the City of London and in Chicago have stopped trading, and others have cut back their trading staffs. The traders who remain, are working for smaller commissions, as the firms fight over what business is left.

The decline on the listed exchanges is significant, and provides a glimpse of what is under way, but the bulk of derivatives trading is done in what is called the over-the-counter market, directly between the big banks, investment houses, and other players. While the figures for the first quarter of 1995 are not yet available, there are signs that the explosive growth of OTC derivatives trading has also come to an end.

FIGURE 4

U.S. banks are addicted to derivatives

(trillions \$)



The derivatives holdings by U.S. banks, as reported by the Federal Deposit Insurance Corp., grew by \$3.9 trillion in 1994, but more than half of that growth occurred in the first quarter alone (Figure 4).

The total amount of derivatives held by U.S. banks grew just over \$2 trillion—17%—in the first quarter, followed by an increase of \$1.4 trillion—10%—in the second quarter. Growth slowed dramatically to \$446 billion—3%—in the third quarter, and to just \$5 billion—0.03%—in the fourth quarter.

It would not be at all surprising to see that derivatives have declined, when the first quarter statistics are released. But even if the bankers manage to put it off another quarter or two, the writing is on the wall.

Some 85% of these derivatives holdings are concentrated in seven banks: Citicorp, Chemical, J.P. Morgan, Chase Manhattan, Bankers Trust, BankAmerica, and First Chicago (Figure 5). As you can see, the derivatives exposures at these banks dwarf their assets, and make them extremely vulnerable to any drop in the derivatives markets.

One effect of these derivatives problems can be seen in the trading revenues of the top seven money center trading banks (Figure 6). These seven banks reported gross trading revenues of \$3.9 billion in 1994, a decline of \$4.4 billion—53%—from the record \$8.3 billion in trading revenue reported in 1993, and the lowest such total since 1989.

For the fourth quarter of 1994, these seven banks reported trading revenues of \$584 million, a 54% drop from the \$1,409 million reported in the third quarter.

The high point for trading revenue was the second quarter of 1993, when the banks reported \$2,246 million. For the first quarter of 1995, trading revenue increased to \$868 million, a

FIGURE 5

They're not banks anymore

(trillions \$)

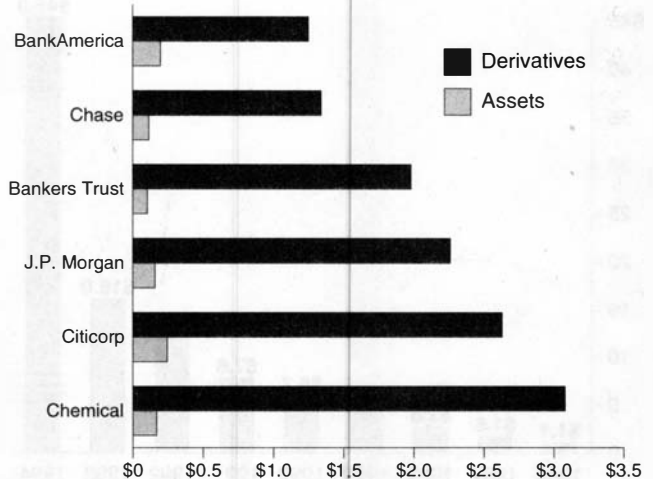
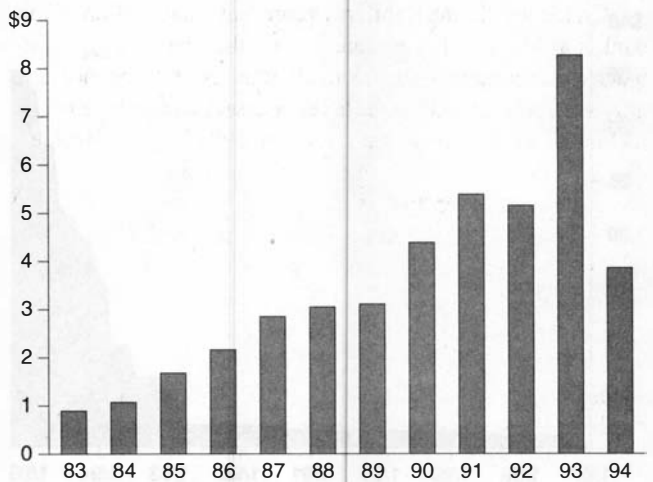


FIGURE 6

Top seven banks' gross trading revenue

(billions \$)



54% increase over the fourth quarter of 1994, but well below the \$1,515 million average quarterly level in 1993 and 1994.

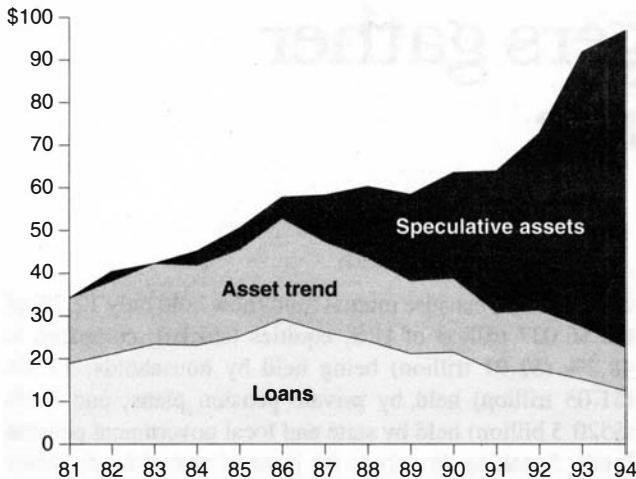
The bulk of the first quarter trading revenue—72%—came from just two banks, Citicorp and J.P. Morgan. The big loser was Bankers Trust, which suffered a trading loss of \$78 million, compared to an average trading revenue gain of \$264 million a quarter in 1993 and 1994.

Let's take a closer look at Bankers Trust which, until recently, has been the poster boy of the derivatives market. Bankers Trust is a bank in name only, having transformed

FIGURE 7

Bankers Trust loans and assets

(units)



itself into a trading house. **Figure 7** shows this clearly. In 1981, more than half of the bank's assets were loans; by 1994, loans made up only about one-fifth of the bank's assets.

On the graph, the light gray represents that portion of the bank's assets which are loans, while the medium gray and black areas combined represent all other assets. The medium gray section shows what the level of assets would have been, had the ratio of loans to total assets in 1981 been maintained for the entire period, while the black section shows the increase in assets over that level.

As you can see, Bankers Trust abandoned traditional banking, and rushed headlong into speculation. Having chosen to live by speculation, it will now die by speculation.

Figure 8 shows the relative volumes of Bankers Trust's stockholders' equity, balance-sheet assets, and off-balance-sheet derivatives holdings. The little black square in the bottom left hand corner is the equity, or net worth of the bank.

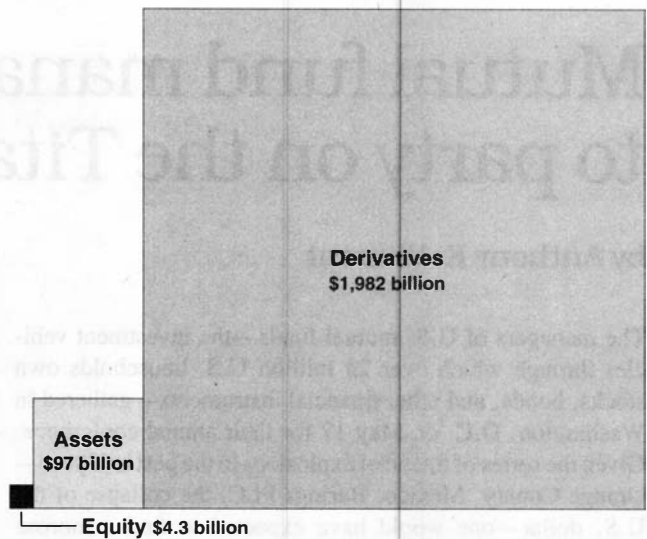
At \$4.3 billion, Bankers Trust's equity capital is 4.4% of its assets, and only 0.2% of its derivatives, while its assets are just 5% of its derivatives. A loss of just 0.2% of its total derivatives holdings, would be enough to wipe the bank out completely.

Such a drop has, in fact, already occurred. Our estimate is that the recent devaluation of the dollar—the currency in which some 60% of the world's derivatives are denominated—combined with the reverse leverage from the \$35 billion in losses already recorded, has knocked out between \$5 trillion and \$9 trillion of the derivatives bubble, or between 10% and 20% of the entire thing.

This is what got Barings and Warburg, and this is what

FIGURE 8

Bankers Trust New York Corp., 1994



will get the rest. False accounting may keep the doors open for a while longer, but the damage is real, and growing.

Take another look at Figure 8. Imagine that instead of showing the relationship between the bank's financial numbers, it shows the relationship between a man with cancer, and his malignant tumor. That gives you a pretty good idea of the state of the speculative bubble, and why this bubble cannot continue.

The financial experts would have you believe that they can manage their way out of the crisis, which is like a doctor telling a patient with a 500-pound tumor that he will be fine, as long as he watches his diet and gets some exercise. The truth is, unless the tumor is removed, the patient is doomed.

The global financial system is coming down. No government, no banker, no power on earth can stop that from happening. If it blows without any controls, which is what we're starting to see, the result will be disintegration, chaos, and death, a total breakdown of the fabric of society.

This is precisely what happened six centuries ago, when a devastating financial crash led to the collapse of the physical economy. One of the results of that collapse was the Black Death, which wiped out half the population of Europe.

In closing, what must be understood, is that this process of collapse has already begun. Africa is a good example of how it works: So much money has been sucked out of Africa to feed the bubble, that the continent is dying.

What is happening in Africa today, is what will soon happen to the rest of the world, unless there is a dramatic change in economic policy. When you've seen what the collapse has done to Africa, why wait to see what it will do to the rest of the world?