Financial processes split from physical wealth production

by Anthony K. Wikrent

three decades has decoupled financial processes from the underlying real physical economy, allowing financial turnover to increase 43,000% from 1956 to 1990, while real economic output and consumption, per capita, per operative, and per household, have fallen by one-third to one-half. Even the greatly flawed measure of national income accounting, Gross Domestic Product (GDP)—which fails to adequately differentiate between productive economic activity, and parasitical economic activity—has only increased 13-fold, compared to the 430-fold increase in financial turnover (see Figure 1).

In 1956, when the U.S. GDP was \$425.2 billion, the total turnover in U.S. financial markets—the total value of all buying and selling of assets in all types of financial markets, both primary (initial offerings) and secondary—was \$534.0 billion, just 25.6% larger than GDP. The correspondence, close to one to one, between GDP and financial turnover, reflected the fact that most financial transactions were generated—i.e., called into being—by some need of the real, physical economy.

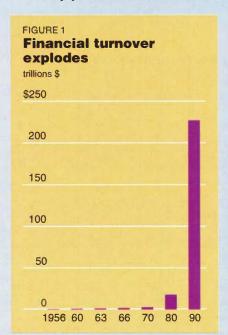
By 1990, U.S. GDP had grown to \$5.546 trillion, but the total financial turnover—fueled by the removal of restrictions intended to steer financial flows into productive economic activities, and the development of entirely new financial instruments which simply did not exist in 1956—had grown to \$226.922 trillion, 41 times more than GDP. Financial transactions no longer bore any relation to the needs of the real physical economy; indeed, with the development of financial derivatives (such as futures and options), financial transactions were calling

other financial transactions into being, in a self-feeding process of speculation, arbitrage, and usury.

The decoupling of finance from the real economy is clearly seen in the foreign exchange market. Figure 2 shows the relationship between U.S. foreign exchange trading, and U.S. imports and exports of physical goods. It clearly shows the sudden shift in the relationship between 1970 and 1980. In the 1950s and most of the 1960s, the conversion of the dollar into other national currencies was driven almost entirely by actual foreign trade, or travel. In addition to imports and exports, there were also the receipts of investment income from overseas; payments of investment income

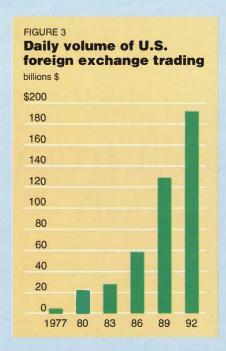
from the United States to overseas; net military transactions—U.S. military assistance to other countries; other types of services that Americans paid for overseas; and remittances, pensions, and other transfers from the United States to other countries (which occurs, for example, if a retired U.S. citizen living in Costa Rica has his or her Social Security check, or corporate retirement check, sent to Costa Rica).

There was at this time *no* foreign exchange trading caused by speculation. In its research, *EIR*'s economics staff found an article titled "Sales of Foreign Currency at New York Drop; Good Exchange Rates Abroad Cited" in the *Wall Street Journal* of June 11, 1959. The article is devoted entirely





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to a discussion of the need for *travellers* to exchange their dollars for the foreign currency of the overseas country to which they are travelling. There is no mention, or even hint, of any other reason for foreign exchange to take place. The assertion that there was no speculative trading in foreign exchange is further validated by a number of books from around the same time, all of which deal with foreign exchange trading caused by foreign travel, importing and exporting, and remittances overseas.¹

The numbers for foreign exchange in 1956, 1960, 1963, 1966, and 1970, in **Table 1** are calculated by adding the dollar value

of imports, plus exports, plus international transactions (as listed above).² The accuracy of the resulting sums, as a reflection of foreign exchange trading, is likely to lessen, as one approaches 1971, when the British effectively pulled the plug on the world monetary fixed-exchange-rate system pegged to a gold-backed U.S. dollar. However, in comparison to **Figure 3** (discussed below), the actual amount of U.S. foreign exchange could be double the *EIR* estimates, without greatly affecting the general trend in the relationship between foreign exchange and actual merchandise trade.

Moreover, the greatest part of the world's speculative foreign exchange trading before 1971, was associated with the Eurodollar market, and both markets were (and are) centered in the City of London, not New York City. By 1970, the Eurodollar market, though huge at the time, amounted to only around \$70 billion.³

The figures for U.S. foreign exchange trading shown in Table 1, in 1980 and 1990, are based on actual survey measurements of the market by the U.S. Federal Reserve. In April 1977, the Fed surveyed, for one month, trading at 44 banks, probably representing around 98% of all foreign exchange activity in the United States at that time. The survey found that there was \$4.8 billion in daily foreign exchange trading in the United States. Multiplied by 244 working days in a year, that is about \$1.2 trillion. After 1977, the Federal Reserve conducted a survey of foreign exchange activity every third year, during the month of April of the year that the study was done. Figure 3 shows the actual results of the Federal Reserve surveys conducted in April of every third year, beginning in 1977. The 1990 number in Table 1 is a computer-generated exponential fit of the survey results for 1989 and 1992.

Many of the numbers in Table 1 were constructed on estimates of trading of a particular class of instruments, "anchored" by one or more observations. In other words, actual figures for the turnover in many U.S. financial markets, are not readily available for public scrutiny, and had to be estimated.

The equity, or stock, market

The one market for which good, hard data are available, is the equity, or stock, market. As can be seen from Table 1, U.S. equity markets account for less than 1% of total financial turnover. Yet every day you hear, on radio or television, the economy being generally measured by how high the Dow-Jones Industrials Average has risen.

And the Dow-Jones itself is actually a very small part of the equity markets. The U.S. equity market is comprised of the New York Stock Exchange; the American Stock Exchange; the National Association of Securities Dealers Quotation System (NASDAQ), an "over-the-counter" market, rather than an "exchange"; and the regional stock exchanges, such as the Midwest Stock Exchange and the Pacific Stock Exchange. In 1990, there were 1,774 companies listed on the New York Stock Exchange; 859 on the American; 4,132 on NASDAQ, and a few hundred more on the regional exchanges.

The Dow-Jones is the average of the prices of only 30 stocks—less than one-half of 1% of the companies that have issued

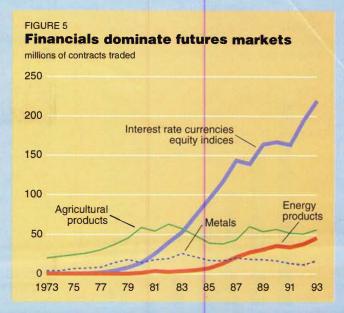
TABLE 1				
Dollar value of	f trading in	U.S.	financial	markets

Shaded area denotes off-balance sheet. Italics denote an estimate by EIR Economics Staff.

billions \$							
	1956	1960	1963	1966	1970	1980	1990
Equity markets trading	\$ 36.3	\$ 47.0	\$ 61.2	\$ 127.9	\$ 136.0	\$ 522.0	\$ 1,751.0
U.S. government securities trading	275.8	478.0	722.1	1,090.8	1,890.7	4,840.0	26,084.5
Futures trading	150.0	165.0	203.0	249.9	329.5	5,584.2	152,717.0
Foreign exchange trading	41.0	47.0	54.5	73.6	110.8	5,449.0	36,000.0
Corporate debt trading	18.7	35.1	56.3	90.4	169.8	821.2	3,972.0
State and municipal bonds	12.3	23.2	37.2	59.7	112.1	542.0	2,621.5
Options trading, on exchange	na	na	na	na	na	45.8	79.1
Mortgage derivatives	na	na	na	na	na	na	3,697.0
OTC swaps, forwards, options	na	na	na	na	na	na	?
Total	534.0	795.3	1,134.4	1,692.3	2,748.9	17,804.2	226,922.1
U.S. Gross Domestic Product	425.2	513.4	603.1	769.8	1,010.7	2,708.0	5,546.1
Turnover divided by GDP	1.256	1.549	1.881	2.198	2.720	6.575	40.916
GDP as percent of turnover	79.62%	64.56%	53.17%	45.49%	36.77%	15.21%	2.44%

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public stock in the United States. The Dow-Jones is actually a weighted average; that is, it is adjusted to account for things like stock splits of the companies used for the index, since Dow-Jones, publisher of the *Wall Street Journal*, began the average in 1884.

Why is it that the U.S. economy is supposedly measured by this Dow-Jones industrials average, which actually is looking at an absurdly small part of the financial markets? Could it be that the powers and principalities that have created, and feed off, this maelstrom of financial turnover, would have the American public remain ignorant of the true, monstrous size of the financial markets?

Hard data are also available, since 1981, for the turnover in the U.S. government securities market, which is comprised of Treasury bills, Treasury notes, and Treasury bonds. The data come from the Federal Reserve Bank of New York, which must track this market, so it has some idea of what it is doing, since it is the entity, though privately owned (i.e., not owned by the U.S. government), that is charged with carrying out, by buying and selling U.S. government securities, the monetary policy of the Board of Governors of the Federal Reserve.

In addition, there are also data available for 1949, from a study of all U.S. over-the-counter security markets done by the Wharton School of the University of Pennsylvania, and published in 1958. Wharton surveyed brokers and securities dealers, during the last three months of 1949.⁵ There are also data for 1957, when a scandal in the U.S. government securities markets caused the Treasury Department and the U.S. Federal Reserve to undertake

another survey of this particular market.6

To obtain figures for 1956, 1960, 1963, 1966, 1970, and 1980, EIR used a computergenerated "exponential fit" of the data available for 1949, 1957, and 1981-94. The result is portrayed in Figure 4. As can be seen, just using the exponential fit to estimate the figure for 1980 would yield a figure that was probably twice the actual amount, so another exponential fit was done, using only the data for 1981-94. But, even if the EIR estimates are off by a factor of 100%, it is clear that the error would be insignificant compared to the hyperbolic growth exhibited by the real data, from 1981-94, in relation to the amount of trading actually measured in 1949 and 1957.

The data for turnover in the futures markets in 1970, 1980, and 1990, are based on the number of contracts traded, which is reported by the organized exchanges, such as the Chicago Board of Trade, the Chicago Mercantile Exchange, and the New York Commodity Exchange.7 To obtain the dollar value of turnover, EIR multiplied these numbers by the average value per contract for 1978-80, which was calculated by ACLI Research in 1981. The figures for earlier years were estimated on computer-generated exponential fit of data from 1960-70, with 1960 set at \$165 billion, half the 1970 figure, on the basis of a graph accompanying the ACLI data, which showed that the number of futures contracts traded in 1961 and earlier years was about half the number traded in 1970.8

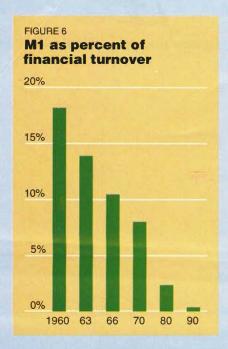
Are these estimates for turnover in the U.S. futures markets accurate? **Figure 5** shows the number of futures contracts traded, by type, from 1970 to 1993. Note that

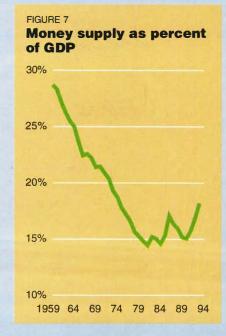
"financials" futures contracts, based on such things as interest rates, currencies, or equity indices, simply did not exist in the early 1970s. Since the late 1860s, futures trading during an entire century was based on agricultural commodities. But after the City of London pulled the plug on the world's fixedexchange rate system in 1971, and after the Bank of England, and then the U.S. Federal Reserve, deregulated interest rates in the late 1970s, financial contracts came to dominate the futures markets. he average value for interest rate contracts is around 10 times that of agricultural and other commodities, while the average value of currency contracts is twice that of agricultural and other commodities. If anything, the number for 1990 is probably too low, since an average price in

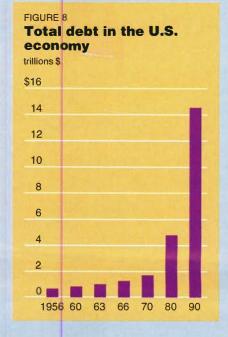
A note on our sources

The graphics in this Special Report were prepared using two principal sources. The market basket, labor force, and related charts are drawn from he EIR economics database (consisting of roughly 500 tables), built up over the last 15 years, to cover the United States from the 1700s to the present, and 137 other nations from the 1960s to the 1990s. Data come from many agencies, including the U.S. government, U.N., OECD, and industry and trade groups.

Data for financial charts come from government, U.N. (IMF, World Bank, GATT, WTO), private banking, and research agencies.







1978-80 is used.

Finally, beginning in mid-1993, the Chicago Mercantile Exchange itself began to release figures of the nominal value of contracts traded at the CME each month. In November 1993, the CME boasted that it had set a new monthly record of 13.466 million contracts traded, representing a dollar value of \$8.8 trillion. By late 1994, this monthly value had doubled. On. Jan. 3, 1995, the CME boasted that its total volume for 1994 had jumped 54%, to 226.3 million contracts traded, worth nearly \$200 trillion. Soon thereafter, the CME ceased to provide a figure for the dollar value of contracts traded.⁹ This, for just one leading U.S. futures market. While the CME traded 103.9 million contracts, from January to June 1995, its rival, the Chicago Board of Trade, traded 109.7 million contracts. The New York Mercantile Exchange traded 39.2 million contracts.

The figure for corporate debt trading is another computer-generated exponential fit, based on the 1949 data in the Wharton study, and data for 1987-91, for "Institutional Trading of Corporate Debt," from the Securities Industry Association.¹⁰

Except for 1949 data from the Wharton study, no data were available for the turnover in the state and municipal bond market. The Wharton study figures show that this market was nearly twice as large as the corporate bond market, but to be conservative, *EIR* arbitrarily chose to set the state and municipal bond market at two-thirds the size of the corporate bond market. By 1990, the U.S. government securities, futures, and

foreign exchange markets were so huge, that the *EIR* estimate of the state and local bond market could be quadrupled, with a hardly noticeable increase in the sum of financial turnover in all markets together.

Options on agricultural commodities were outlawed in the United States in the 1930s, and were not re-introduced until the opening of the Chicago Board Options Exchange in 1971. Data for 1980 and 1990 are taken from the same source as data for turnover in the equity market. 11

The market for mortgage derivatives is an even more recent development than the options market. Though the Federal National Mortgage Association (Fannie Mae) had created a secondary market in mortgages, it was not until 1981 that Fannie Mae created the first mortgage-backed securities by pooling together hundreds of separate mortgages into one financial instrument. That this market grew from nothing in 1981, to \$3.1 trillion in 1989, suggests how large is the demand for new instruments to fuel increasing financial turnover. 12

OTC swaps, forwards, and options

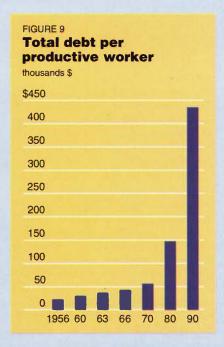
Finally, there is a line for Over-the-Counter (OTC) swaps, forwards, and options. These are new financial instruments, all derivatives, that have been created since 1980. Many of these instruments are tailored for the purchasers, and supposedly there is not much of a liquid secondary market for these instruments; hence, there is apparently little turnover. On the other hand, the use of these instruments often begets

trading in exchange-traded instruments, particularly futures and options, driving further turnover in those markets. From 1989 to 1990, the nominal value of OTC derivatives outstanding increased from \$5.436 trillion, to \$7.888 trillion, an increase of \$2.452 trillion. From 1990 to 1991, this figure increased another \$2.622 trillion, to \$10.510 trillion.¹³

How this vast increase in financial turnover has obliterated any connection between the real economy and the financial system, can also be seen by comparing M1 money supply—coin, currency, and checking deposits—to both GDP and the financial turnover. Figure 6 shows that, as the various financial bubbles have ballooned, actual money has almost disappeared as a comparative percentage of financial turnover. This is hardly surprising, as almost anything in the real world, where growth rates of 2-6% per annum are the norm, is going to shrink dramatically in comparison to the monstrous growth of financial turnover, which grew 29.4% per annum from 1980 to 1990.

Perhaps more interesting is the collateral damage the growth of financial turnover has inflicted on the relationship between money supply and GDP. As Figure 7 shows, around 1960, real money in circulation amounted to just under one-third of GDP, meaning that the money supply was turning over slightly more than three times a year. Put another way, one dollar was chasing a little over three dollars of goods and services in this period.

By 1980, however, M1 money supply had fallen to just 15% of GDP. The money



supply was turning over six times each year—velocity was twice as fast as 20 years before. Or, to put it another way, one dollar was chasing six dollars of goods and services.

Now, the classic definition of inflation is too much money chasing too few goods. Here, we see that the United States had clearly entered an environment in which price *deflation* was to be expected. Yet, the history of this period is of a terrible war on price *inflation*, with the entire middle class of the United States now threatened with being wiped out as war casualties.

The stupendous growth of financial turnover points to the solution to this seeming paradox. The financial deregulation that spawned the growth in financial turnover, also effectively allowed a privatization of the money-creation power in the economy. M1 money supply, in effect, was the store of value, and means of payment. for the ignorant masses. For the financial elite who attended the racetrack of financial turnover, new instruments, such as computer-debited and -credited "investment" accounts were created, which served the same store of value and means of payment functions as M1 money supply.

These privatized money supplies—largely outside the control and purview of the federal government or the Federal Reserve—in fact grew so explosively during this period, that the ingredients were indeed present for the classic recipe for inflation: too much money, and too few goods (given the collapse shown in *EIR*'s market baskets). How, then, was the back of inflation broken?

By breaking the backs of the middle class and the poor, in the form of the declining real personal and household earnings of the past 20-plus years.

More collateral damage done by the increase in financial turnover, is reflected in Fi res 8 and 9. The graphs themselves are almost indistinguishable from those showing the growth of financial turnover. The increase in debt is merely a reflection of the fact that more paper has been floated, to feed the growth in financial turnover. It is not really the case that the explosive increase in debt since 1970 is the result of increasingly hard-pressed households taking on more debt in a desperate attempt to cling to a standard of living which is inexorably eroding. That is certainly occurring, but consumer debt as a percentage of total debt barely changes: 26.3% in 1960 and 26.0% in 1990. (Consumer debt as a percentage of personal disposable income, however, leaps from 60.8% in 1960, to 95.8% in 1990.)

What is the purpose of this massive turnover? Why is this paper being shuffled back and forth so quickly by the securities dealers and speculators? The fact is that "speculators" have been superseded by new beasts, "traders." A trader takes large positions in a market for a very short period of time-sometimes just minutes-hoping to skim off a relatively small price movement in that market. A trader is often happy to skim off a price movement of a mere 1%, or even less. One percent of \$1 billion is \$10 million. One-half of 1% is \$5 million. Just one-tenth of 1% of \$1 billion is \$1 million. The skimming off of small price movements from this whirlwind of financial turnover is arbitrage.

In November 1994, Euromoney magazine assembled a group of seven derivatives speculators and traders to talk about what they were doing, what they thought the financial markets were doing, and what computer models they were applying in their trading. What they had to say sheds light on how a trader thinks.

Mark Tarpley, chief investment officer of Quorem Capital Management, noted that "we're not interested in equilibrium, but in what's going to cause the next price move to equilibrium."

Nick Idelson, head of quantitative analysis and technical trading for Midland Global Markets, declared, "Mathematically, there are still long-term inefficiencies [in the markets]. They just aren't as good as they used to be. You could still build a portfolio that would outperform most public futures funds if you do it carefully. If you can trade every few days, say.

"I'm not talking cash equities. We trade equity indices, and we trade various futures and spot foreign exchange, so we can turn things over to exploit better short-term inefficiencies. When we're turning things over quickly, we're turning them over several times a day, maybe even faster. I have here a number of models, computer models, coming through to my pager. You can easily get three trades in an hour. . . .

"The aim is to make money on a consistent basis. Prediction of price, for example, is completely unintersting as far as we're concerned. We want to predict risk/reward and trade a sensible portfolio across a number of different markets."

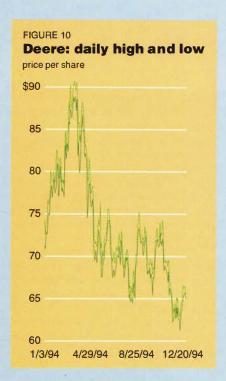
What traders are simply doing, is trying to skim off a small percentage price movement on a multimillion- or multibillion-dollar position they have taken in a market. They turn over a billion dollars in paper, and they are going to make a million dollars. And they are doing this 50 or 100 times, sometimes thousands of times, a year.

What is the effect of this skim trading on the real economy? Assume that you have a small country, the entire economy of which is based on only one company: Deere and Co., the world's largest manufacturer of farm and garden equipment (see **Table 2**). At the end of September 1994, Deere's manufacturing operations had almost exactly \$1 billion in long-term debt.

There are no readily available data for the turnover of this debt (Deere's bonds). However, **Figure 10** shows the daily high and low of Deere's stock price for every trading day in 1994. There is clearly a pattern of about 10% swings in the movement

TABLE 2	
Deere &	Co.
dollars in million	s

Long-term debt \$1, Sales \$6,479 \$7,	073
Sales \$6,479 \$7,	000
	663
Net profit \$168 \$	604
Capital \$204 \$	230
Research and development \$270 \$	276
Inventories (balance sheet) \$464 \$	698
Employment 33,070 34,	252
Wage bill \$879 \$	963
Insurance, health care claims and \$479 \$ benefits	578
Pension net cost \$123 \$	104



of the stock's price, especially after April. But note also that there is always a significant spread between the high and the low prices on any one day. This may be as little as 1%, but that is all that a trader is looking for, to skim that one-tenth of 1%.

Now, assume that your small country, based on Deere and Co., decides to deregulate its financial markets, and allow speculation, trading, arbitrage, etc. Assume that the traders are able to turn over Deere's \$1 billion in debt once every month, and skim off one-tenth of 1%, or \$1 million. That would be \$12 million a year that would be extracted from the productive economy, based solely on Deere's production of farm and garden equipment.

Now assume that the traders are able to increase the turnover to once every week, skimming off \$1 million a week, or \$52 million a year. What if this had been in 1993? Where would that \$52 million have come from? Would it have come out of the \$168 million in net profit?

That would have shrunk your economy's profit by almost one-third. That would not have been good for the stock price of Deere and Co., and it would look very bad for your stock market index, since Deere is the only stock in your economy. It might be so bad for Deere's stock price, that it would destroy the pattern in the stock price the traders had identified and come to depend on.

What if ...?

What if the traders have sunk their fangs into other markets? What if they are skimming off \$52 million in the market for Deere's bonds, and another \$52 million in the market for Deere's stock?

Perhaps you issue \$100 million in bonds to pay them. Now they can turn over that new debt too, and skim off more money. The more the merrier, as they say.

So, if you don't want that \$104 million skimmed off, to be extracted from Deere's profits, what do you do? Where does the money come from?

Well, you begin to look at things you can cut. Maybe you can cut capital expenditures, or you can cut research and development. Then you begin to destroy Deere's potential for future productive activity. Maybe you can cut down on inventories—a favorite game of American business management for the past ten years or so.

Or maybe you begin to look at your employment costs. Maybe you can cut your wage bill. Maybe you can tell your employees, "Well, you know, we've got \$104 million less profits this year, so we don't think we're going to be able to afford to pay you that much." And maybe, if the workers don't like that, you look at something else, like their insurance, their health care claims, and their benefits or pensions.

All this, so that the income stream the traders and speculators are siphoning off through their arbitrage and their games, can continue to be paid.

The explosive growth of financial turnover has radically transformed the financial instruments themselves. U.S. government securities, for example, were considered the safest of investments, the perfect vehicle for assuring an investment income while preserving the original capital-the classic widows-and-orphans test. In 1981. the turnover in the U.S. government securities market was 9.7 times the \$616.4 billion of U.S. government paper outstanding. In 1994, some \$3.126 trillion in U.S. government paper was being turned over 14.9 times a year. In other words, a trader would hold a particular instrument of U.S. government debt an average of just over five weeks in 1981, but by 1994, the average holding time had fallen to just three and one-half weeks. If the 25% of U.S. government securities held by the various federal government trust funds are excluded, then the turnover rises even more, and the average amount of time a U.S. government debt instrument is actually held is only 13 trading days.

Cause and effect almost impossible to separate

Here, cause and effect become almost impossible to separate, because the effect of the increased turnover has been to transform a 30-year U.S. government bond, paying 6-8% interest, into a one-year bond paying 30% interest or more. Back in the 1970s and earlier, a U.S. government bond was an instrument that was bought with the intention of holding it until its maturity. The bond coupon was clipped each year, to collect the 4.5% interest each year. Rather simple, and rather boring, but very stable, very safe, and very predictable.

Now, however, computer valuation models are used to determine what the future value of the bond will be, to assist in determining the present value. At the end of 1994, with expectations of future inflation higher than today, an "investor" was willing to pay 29 cents for what would become a dollar in 30 years. Now, the future dollar is valued at 37.5 cents. The price of a U.S. government 30-year bond, therefore, has risen 29.3% in the past year. In effect, the entire future dollar is being collected in one current year, thanks to the ability to skim a few hundred basis points off the turnover each month. Presto! A 30-year bond, paying 6-8% interest, held only 13 days, then sold to capture the arbitrage, and replaced with another bond to be held for the next 13 days, provides the same net effect as holding a one-year bond paying 30%. The price skimming is often accomplished through the use of bond futures contracts. Note the rapid growth of turnover in the futures market, from 1980 to 1990, in comparison to the growth in the U.S. government securities market (cf. Table 1). The most popular futures contracts in the past few years, have been those based on U.S. government securities, and are euphemistically called "interest rate futures."

We leave it to the reader to ponder what this is doing to the creditworthiness of U.S. government securities. We will point out that the traders are actually not interested in holding an instrument until maturity. They have no intention of being debt collectors. They do not want to be caught holding the paper they are trading if and when a financial catastrophe occurs, such as the bankruptcy of Orange County, California; the demise of Barings PLC; or a default on its debt by a Newtered U.S. government. Their operative principle is the Greater Fool Theory: No matter how much they overpay for a piece of paper, they will always find someone else willing to pay even more for

The prognosis should be clear. Since, as Lyndon LaRouche has emphasized, the economy is essentially a living organism, the changed relationship between financial turnover and the real economy, between 1956 to 1990, has produced exactly the same relationship as that of a cancer cell to its host organism. Originally, the cancer cell is part of the organism, existing in a one-to-one symbiosis with the cells surrounding it. But, as the cell turns cancerous, and begins to replicate itself faster than do the surrounding cells, a distinct tumor forms. It no longer exists in symbiosis with surrounding tissue, but overwhelms surrounding tissues, killing them off by arrogating to itself a larger and larger share of the nutrients and oxygen flowing to that area of the organism.

Were the economy a human patient in a cancer ward, you would hear the weeping, as the doctor informed the family that the tumor had progressed to the point that the patient had but a few weeks, perhaps, at most, months, left to live.

Notes

- See, for example, Paul Einzig, The History of Foreign Exchange, MacMillan and Co., 1964; or Raymond F. Mikesell, Foreign Exchange in the Postwar World, The Twentieth Century Fund, 1954.
- 2. Economic Report of the President, February 1991, p. 402, Table B-102.
- 3. See W.M. Clarke, *The City in the World Economy*, The Institute for Economic Affairs (London), 1965, Chapter 3, "Foreign Exchange . . ." [sic].
- 4. Data for equity market trading are taken from various issues of the annual Department of Commerce/Bureau of the Census Statistical Abstract of the United States. In the 1984 edition, for example, see p. 522, Table 871, in Section 17, "Banking, Finance, and Insurance."
- Irwin Friend, et al., The Over-The-Counter Securities Markets, McGraw-Hill, 1958, p. 116, Table 3-2.
- Treasury-Federal Reserve Study of the Government Securities Market, Part II, "Factual Review for 1958," p. 140, Table C-2.
- 7. See various editions of Statistical Abstract of the United States. In the 1984 edition, for example, see p. 524, Table 876, in Section 17, "Banking, Finance, and Insurance."
- Perry J. Kaufman, Handbook of Futures Markets: Commodity, Financial, Stock Index, and Options, John Wiley and Sons, pp. 1-28, Table 1.
- Those with access to the Internet may wish to visit the Chicago Mercantile Exchange site at http://:www.cme.com.
- 10. Securities Industry Association, 1992 Fact Book, page 28.
- 11. See note 4.
- Data are taken from Frank J. Fabozzi and Franco Modigliani, Mortgage and Mortgage-Backed Securities Markets, Harvard Business School Press, 1990.
- U.S. Government Accounting Office, May 1994, Financial Derivatives: Actions Needed to Protect the Financial System, p. 187, Table IV6

Standing on the edge of the cliff

by John Hoefle

It should be obvious by this point, that the process defined by a financial bubble growing at hyperbolic rates, which depends for its existence upon a physical economy which is shrinking, is a process which must ultimately collapse.

When most people think of collapses, they think in terms of sharp drops in stock markets, runs on banks, devaluations of currencies, hyperinflations, or similar shocks, in which sections of the financial system are strained, but the system itself survives.

What is coming, unless governments intervene by way of virtually 180-degree policy shifts, is a completely different kind of collapse—the disintegration of the global economic and financial systems themselves.

Imagine what might happen, were the holders of all the financial claims in the bubble, to try to cash out at one time. As we shall see, there isn't nearly enough money in circulation to cover the claims. That would leave the financial markets in the unenviable position of either writing off those claims in excess of the money supply, or increasing

the money supply to cover the claims. Either way, they're doomed.

The cash-out problem

As we said, there simply isn't enough money in circulation to cover the claims. *EIR* estimates that annual financial turnover has more than doubled in the last five years, to about \$500 trillion in 1995 (see **Figure 1**). This is a rough estimate to be sure, but the process which it describes is such that an error of 25% or so would make no difference. After all, the claims couldn't have been cashed out in 1990 either.

Note that the turnover is grouped into two categories, *on-balance-sheet* and *off-balance-sheet*. The on-balance-sheet category is for more traditional items such as assets and liabilities, whereas the off-balance-sheet figures are where you hide the derivatives and other forms of gambling. As you can see from Figure 1, the off-balance-sheet component of financial turnover has been growing much faster than the on-balance-sheet component, reflecting the explosion of speculation over the last few years.

