

## Money, Credit, and Periodic Crises

Notes by Mason Gaffney

The conventional economist, even more than the ordinary person, is terrified of being thought different, or outside the loop, or "poorly trained," or "unaware" of what others are saying. Ordinary texts therefore keep in step with each other, in stupefying conformity.

Conformity has some social value, especially of course to the extent that the conventional wisdom is true, and when the alternative is chaos. However, conformity breeds habits of suppressing observation, and shutting out facts that do not fit one's model. It also lets a few influential people manipulate and intimidate and exploit others by controlling their "training," and defining quality, and dehumanizing those outside what they call "the mainstream."

This leads to error at all times, but more so in times of change and crisis. Therefore, rather than use an ordinary text, I present you with these notes. They follow convention where convention seems to warrant it, but amend conventional doctrine with the writer's own thoughts based on direct observation.

### THE AMOUNT OF MONEY

There were about \$550 billion of checking deposits and currency in circulation, 1985. In 2005 there are \$1366 billion. Deposits and currency constitute "M1." They are about 1/7 of the GNP.

The ratio of GNP/M1 is what the usual macro text today calls "velocity." More exactly it is "GNP-velocity." "Velocity" alone, in proper banking parlance, means transactions-velocity or deposit turnover. This is a much higher figure that covers the use of money in all intermediate transactions, not just those that enter into GNP.

### HOW LIQUIDITY IS CREATED

How can anyone or any bank create net liquidity? A's asset is always B's debt on its flip side, so some have argued that there is no net effect when debts are created. That would be a false inference from a true premise. Banks do create liquidity, in spite of the flip side. The flip side makes it tricky and hazardous, which puts thrills and chills in the Magic Mountain of banking. People have been doing it nonetheless for centuries.

How do banks do it? Basically, it is a matter of exchanging IOUs. When a bank creates new deposits, it works like this. It finds a borrower who will pledge some asset (collateral) to secure payment of a loan. It takes the borrower's IOU and records it on the asset side of its balance sheet. In return, it gives the borrower the bank's IOU, now called a demand deposit (dd). (Originally it was a bank "note," a piece of paper reading "will pay to the bearer on demand...") This dd goes on the liability side of the bank's balance sheet.

In the American colonial period, the original banks did not even accept deposits. They started, rather, by creating bank notes (like deposits, these are bank demand liabilities). There was little currency circulating for them to accept as deposits, so instead they created a currency by

accepting collateral in return for issuing bank notes. When you cut through the fog, the effect is the same as though title to the collateral were now chopped into small units, circulating in bearer form.<sup>1</sup>

Why does the borrower pay interest to the bank? The bank's IOU is worth more because it is liquid: the borrower can spend it immediately, and the bank must be able to cover, i.e., to redeem it. Banks borrow short, but lend long. The bank's IOU is liquid because the bank spends money to make it so. That is how it uses the interest it receives from borrowers.

Banks use their income to create liquidity by:

- guarding your money;
- paying cash on demand, from an attractive building in a convenient location;
- clearing checks;
- attracting enough other depositors so its clearing balances are not negative for long;
- holding reserves;
- having some net worth as a cushion (and justifying it by paying dividends on their capital);
- maintaining a reputation for always meeting their obligations on demand.

For those benefits, depositors are willing to forego interest income. If they don't like what they are getting they "disintermediate." Then banks have to contract.

Banks play the percentages, and are never literally in a position to perform on their contracts, that is, to redeem all their deposits on demand. Some have advocated "100% reserve" banking, to avoid that. This cause is a remote dream and a diversion from reality.

The workable alternative is to require banks to stay highly liquid by restricting their loans to commercial paper or "real bills" secured by highly liquid collateral like accounts receivable. Banks and their economist-spokesmen resist this policy, which they parody and flay mercilessly with all the considerable influence and authority at their command. We will return to the subject.

### **COST OF CREATING LIQUIDITY**

The cost of creating liquidity varies with several factors, some of which have natural equilibrating effects.

Cost per dollar of deposits rises with:

- velocity (deposit turnover);

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<sup>1</sup>An 18th century mansion in Suffolk, England, Heveningham Hall, is owned today by an impenetrable Swiss corporation, ID Investment Development, whose shares are held in bearer form. This was newsworthy in the *London Times*, 28 March 91, because of suspicions that the anonymous bearer is Saddam Hussein. Our interest here is that banking essentially accomplishes the same thing: it divides up de facto ownership of the collateral and lets it circulate in bearer form.

renewal frequency of loans (loan turnover);  
cost of funds;  
share of assets that must be held in dead reserves;  
cost of bank capital—required dividend rate times required volume of capital;  
cost of suitable location and improvements;  
taxes on banks (generally very light);  
operating expenses.

Cost per dollar of deposits *falls* with:

average size of checks;  
average size of loans;  
average period of loans (converse of renewal frequency, already cited, repeated here for emphasis to offset usual neglect).

### **SOME TECHNICAL LIMITS ON DESTABILIZING EFFECTS**

There are several normal equilibrating effects that tend to maintain stability and limit radical changes in deposit expansion. They may be overwhelmed by other destabilizing factors at times. Some stabilizing factors are:

- a. Higher velocity raises the cost of maintaining accounts, and reduces incentives to expand M1. Reducing M1 is a factor tending to reduce V also.
- b. High liquidity preference by public and slow V reduces bank costs, encourages expansion. Thus, even liquidity preference, the prime cause of "glitches" in Keynesian macro theories, is not all bad.
- c. High liquidity preference holds down cost of funds, encourages bank expansion.
- d. Low yields on investments reduce costs of holding capital and reserves, tending to offset the discouragement to expansion. Low yields for non-bank lenders and direct loans tend to drive funds into banks.

Those are not definitive observations. They are intended to show there are damping factors tending to limit instability. Some model-builders get carried away showing major changes springing from positive feedback loops triggered by minor causes. They may do us a service to warn that instability is possible, but it is a disservice to mis-specify the effective causes of instability. To destabilize, a cause must be powerful enough to overwhelm various natural equilibrating effects.

### MAJOR LIMITS ON DEPOSIT EXPANSION

The ability of banks to create money at will has frightening inflationary possibilities. Any one bank is limited by loss of reserves to other banks, but what is the limit on all banks expanding together?

**LIMIT #1:** Confidence of public in ability of banks to redeem deposits in cash on demand.

There are many episodes in history of cash withdrawals and runs on banks. It happened many times in the 19th century. The Federal Reserve Act of 1913 was supposed to end all that, but failed in 1929. In 1933 there was a bank "holiday" to short-circuit a dangerous positive feedback loop, "the fear of fear itself."

However, that was only froth on the wave, and a convenient device for guilty bankers to shift blame to their depositors. The fears of depositors were in fact well-founded, as we will see later.

Cures from the 1930s:

deposit insurance;

tighter bank examination, and controls on quality of bank loans;

"Glass-Steagall," or separating investment banking (floating new securities) from commercial banking (checking deposits);

cartel protection for banks, viz:

caps on allowable interest rates paid by banks to attract customers;

limits on charters for new banks;

higher margin and collateral requirements on loans;

tight limits on inter-territorial competition, giving surviving banks virtual franchises on their turfs;

FHA insurance on mortgage bank loans;

greater power for Federal Reserve Bank to supply notes on demand;

elevation of Federal Reserve notes to being the basic legal tender, as we went off gold, and gold clauses in contracts were illegalized.

Associated with the last two was a major expansion of federal debt, much of which the banks bought. With all its faults, federal debt supplied a more stable collateral security behind bank loans than the volatile common stocks and real estate on which they had been lending before, and which had collapsed. This may be the main real point behind the otherwise shaky Keynesian case for deficit spending.

**LIMIT #2:** Federal Reserve Board controls.

a. Reserve requirements, as ratios to total deposit liabilities.

b. Amount of Federal Reserve deposits, the medium in which reserves must be held.

Public demand for paper money (notes) determines the ratio between Federal Reserve notes and Federal Reserve deposits.

The F.R. Bank determines the amount of the sum of notes and deposits by making loans to the U.S. Treasury, which it does by buying Treasury securities (bonds, bills, and notes). It buys some from the Treasury direct, and others from the public, on the "open market." These "open market operations" are the major operating variable in F.R. Board policy. F.R. Board intentions are traditionally treated like military secrets, lending an aura of mystery, intrigue, and class warfare to the whole business.

Treasury securities thus back Federal Reserve notes and deposits. The securities so used are said to be "monetized." Actually, any other asset used for collateral is also monetized, and I will so use the term. (Curiously, many economists are stuffy about the usage, and insist on reserving "monetizing" for what happens to U.S. securities.)

F.R. Bank expansion is loosely limited by its own gold reserves. Under the international gold standard, it was tightly limited by gold. An import balance, if unrelieved by foreign loans, caused an outflow of gold and forced a tight money policy, correcting the imbalance.

Today, more or less the same effect is achieved, but without automaticity, by tightening money to correct an import balance. This necessity greatly limits the power of central banks to pursue independent national policies. They can reestablish their independent scope of action by devaluing their currencies. That, however, if done often, undermines confidence in the local currency and leads people to do business in a more stable foreign currency, totally undermining the power of central banks.

**c. F.R. Bank lending to member banks.**

This also creates deposits, but on a small scale. The rate charged was formerly called the "rediscount rate," and now simply "the discount rate." It is symbolic of the F.R. Board's mysterious intentions, and closely monitored for that reason.

**d. Qualitative controls on bank lending.**

The F.R. Board has certain powers over the kind of collateral that is eligible to secure bank loans, i.e., to be monetized. The ones used today are primarily margin requirements applied to loans made for the purpose of buying and carrying common stock; and restrictions on loans for some kinds of consumption (but not consumption of housing, which on the contrary receives favored treatment). The first of these serves to limit the monetization of common shares of corporations. It does not, however, limit the monetization of the assets of corporations. These are monetized every time a corporation pledges them to a commercial bank as loan security.

The F.R. Bank is one agency that examines banks as well. Here is an opportunity to apply qualitative controls more generally. Bank examination should see that banks remain liquid.

What is "liquidity"? Required reserves provide an element of liquidity that is only specious. They are in dead storage and can never be used. So why are they required? Ceremony, symbolism, tradition, and mystery. Those are thought to help sustain confidence. The need for such mumbo-jumbo reveals the basic instability of banking.

What is called "secondary liquidity" is provided by keeping a substantial part of bank assets in short-term loans that are financing the working capital of businesses and that are therefore automatically self-liquidating in a few months. This "secondary" liquidity is actually primary, since the "primary" reserves are dead and can't be used.

The idea that liquidity is important is known as the "commercial loan theory," a.k.a. the "real bills doctrine." In England, it is called the "banking school" position. An early and eloquent advocate was Adam Smith, in *The Wealth of Nations*.

Ordinary texts today foolishly dismiss it, citing the studies of Lloyd Mints, the predecessor of Milton Friedman at Chicago. Adam Smith, the apostle of laissez faire, is too regulation-minded for Chicago, the arbitrator of modern market orthodoxy. Chicago orthodoxy, now articulated by Milton Friedman, brooks no twilight shadow of qualitative control on bank lending.

The valid idea in "real bills"—not to be confused with "real estate"—is that banks should *avoid* lending on real estate collateral and for long terms.<sup>2</sup> The article on reserve by H.D. Simpson, "Real Estate Speculation and the Depression," gives you some good reasons why. Default on real estate loans was the major cause of bank failures from 1929-1933, the period in which half the nation's banks failed. Chicago orthodoxy has taken that disastrous cataclysm and stuffed it down the memory tubes. The resulting collective amnesia is one of the greatest, most brazen feats of thought control in history.

Here are three reasons why Chicago orthodoxy cannot tolerate the real bills doctrine:

1. It implies there is some systemic weakness in the market, which lets collapses be generated endogenously. Chicago ideology demands that collapses be caused only by errors of short-term policy judgment on the F.R. Board. It cannot accept the reality of a land-value boom-and-bust cycle driven by its own internal dynamic of factors outside the banking system.

2. It implies that banks need to be monitored more closely and specifically than they like to be. Chicago accepts general "quantitative" controls, and rather tight ones at that, in order to be rid of all specific "qualitative" controls. It is this ideology, in the names of Reaganomics and Deregulation, that led directly to the \$500 billion S&L fiasco we will spend the rest of our lives paying for.<sup>3</sup>

3. It withdraws a major support from the value of real estate, an interest with which Chicago identifies. It also tends to desanctify property as a good in itself, property for the sake of property. Rather, it points up the danger of using land as a "store of value" instead of using it simply as a factor of production.

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<sup>2</sup>As with any doctrine over time, "real bills" has picked up incidental ancillary connotations. Some of these are distorted and indefensible. It is not always clear whether these indefensible incidentals are introduced by confused friends, or crafty enemies, or both. The point for you, in either case, is to stick with the valid essentials of the doctrine. Stay on the track and overcome distractions.

<sup>3</sup>Nothing daunted, Chicago orthodoxy blames the whole thing on deposit insurance. This rather overlooks the fact that the same thing happened in 1929 without any deposit insurance. The common factor then and now was the monetization of real estate, basing finance on a land bubble.

So why are banks in such trouble today? Because they followed Chicago and flouted the real bills doctrine and are stuck with non-performing (defaulted) long-term loans backed by real estate collateral in agriculture, in energy, in some urban areas, and overseas. In a larger sense, most corporate debt is secured by pledging corporate real assets, in every industry.

Why is bank regulation justifiable? Adam Smith never questioned it, because there are things that individuals can do one at a time that they cannot do collectively; and one of those things is liquidating real estate investments. Real bills as a policy says, make the banks stick with "self-liquidating" loans that turn into money through sale of the collateral to consumers. That is something that *can* be done collectively, because it is done routinely, daily, in the normal course of production and exchange.

Land, in sharpest contrast, is not self-liquidating because the corpus of land is not sold to consumers in the course of ordinary use and consumption. The cash flow from unappreciating land is just enough to pay interest on its purchase price. The cash flow from appreciating land is less than enough, and must be augmented each year by additional outside payments.

**LIMIT #3:** U.S. Treasury controls

**a.** Does this mean shifting U.S. Treasury deposits from the Fed, which is the Treasury's official banker, to banks in the private sector?

Not since about 1863. Andrew Jackson was strong on this, but the Treasury gradually was hemmed in. In a small way the Treasury can still shift in the aggregate by holding larger or smaller cash balances on deposit. This potential power is little used today.

**b.** Issuing securities.

When the banks are lacking other "eligible" (credit-worthy) borrowers the Treasury can lead them to expand by selling securities. This led the bank expansions from 1933 to 1946. During the Great Depression the banks welcomed the outlet. During the Great War the F.R. Bank became a major buyer, to hold down interest rates ("support the market") and expand reserves so all banks could buy bonds. The F.R. Bank became a tool of the Treasury.

Gradually the F.R. Bank increased its autonomy, because with so many Treasury securities in the hands of the public the F.R. Bank can buy and sell in the open market without regard to what the Treasury is doing.

Until 1979 the F.R. Bank was still committed to supporting the market, at a stable interest rate. But inflation got out of control. In October 1979 the F.R. Bank cut loose. This supposedly "Reaganesque" policy was actually pushed through by a Carter appointee, Paul Volcker. This reduced the Treasury's power and increased the F.R. Board's power. Interest rates soared; growth of the money supply became more regular and moderate.

At the same time, interest on the national debt rose sharply. Government debt turns over in a few years, so interest costs rise, after a short lag, when market interest rates rise. Interest payments are now a major element on the cost side of the federal budget.

**c.** The Comptroller of the Currency, a Treasury official, is charged with examining the national banks, a duty that may be performed with more or less vigor.

It is a lever that could be used for applying selective controls on the quality of credit. If we get lucky it will be so used before it is too late.

**d.** The Treasury influences tax policy, and administers the laws.

Tax policy affects the investment opportunities open to everyone, including banks. Banks themselves receive special tax treatment, very favorable to banks. (They are allowed to deduct bad loan reserves as current expenses, even though the money is not spent, and such reserves are counted as part of bank capital.)

**LIMIT #4:** The market

**a.** Demand for loans.

1. Investment opportunities. People borrow generally to invest and earn a "profit." The relevant measure of profit that is commensurable (and therefore comparable) with interest rates is the "rate of return" on investments, a.k.a. "internal rate of return," "marginal efficiency of capital" (the Keynesian term), the marginal productivity of capital, etc. When people borrow to consume, "time preference" is relevant.

There have been periods when banks had excess reserves and still did not expand their loans. Some attribute this to lack of demand for loans, caused by lack of "investment opportunities."

2. The share of investments that require loans. Many investments are made directly from the cash flow of businesses.

3. The share of loans that are made by banks of deposit. There are other lenders, too, like insurance companies, pension funds, federal land banks. Even commercial banks make loans from funds deposited in savings accounts that are not checkable.

Some believe that we are running out of investment outlets. This has long been an essential part of Marxist eschatology:<sup>4</sup> "the declining rate of profit" is the phrase Marx used. Americans like Alvin H. Hansen and Walter Prescott Webb have tied this in with the doctrine of the closing of the frontier. It was an essential ingredient in the original Keynesian compote. (Latter-day Post-Keynesians are having to come to grips, after long resistance, with the reality of high real interest rates.)

Martin Bailey and others have shown that the range of investment outlets that open up at very low interest rates is nearly infinite. Filling in San Francisco Bay and Lake Michigan and the Gulf of Mexico are his examples.<sup>5</sup>

**b.** "Credit-worthiness" of borrowers.

We have seen that the share of eligible collateral that is monetized by banks depends on their costs relative to those of competing lenders. Next we ask what determines the sum of "bankable"

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<sup>4</sup>Eschatology (esk-uh-tahl-uh-jee): a belief concerning the ultimate destiny of mankind."

<sup>5</sup>Bailey's examples may have been poorly chosen. He may have overlooked the institutional barriers to acquiring legal rights to fill in underwater sites; or the cyclical barrier of excessive asking prices by holdout owners, which we consider later. He certainly overlooked the environmental movement to preserve wetlands. What is more persuasive today is the reality of capital shortage and high real interest rates.

collateral that may be pledged to secure loans. The amount of money is the product of the two factors.

The basis on which lenders ration or allocate credit among borrowers is not marginal productivity, but collateral security. Likewise the basis of expanding loans is collateral security, regardless of investment opportunities. This is the point of Nicholson's article on reserve, "The Fallacy of Easy Money." Money is never easy for those lacking bankable assets on which to borrow.

This helps explain the otherwise mysterious and frustrating phenomenon, which sometimes occurs, of excess reserves and low interest rates failing to stimulate lending at a time when many businesses desperately need credit and want to expand. Such a time, for example, is now, May 1991.

Another such time, more notorious and aggravated, was after the collapse of collateral values in the Great Crash, 1930 and thereafter. The few "credit-worthy" borrowers were swamped with lenders, so recorded interest rates were very low. But the majority of ineligible borrowers could not borrow, even at high rates. (Another cause is the drop of bank capital, discussed *infra*.)

The most eligible borrower then was the U.S. Treasury. Treasury debts are "non-defaultable" because they are backed by the ability of the Treasury to raise taxes AND to borrow from the F.R. Bank, which can lend simply by printing money that is legal tender for the payment of taxes and other debts, and which no one can force it to redeem in anything but more money, which it can also print. The Treasury moved into the breach, slowly at first and then rapidly during World War II. It issued new debt, which the banks seized and "monetized."

Today, private collateral values have moved back up, *way* back up. Almost anyone can borrow on his home, for almost any purpose, including "living high on the old homestead." The banks have now monetized these new collateral values. Real estate has displaced federal debt as the major backing of our money supply. Many economists now worry about the increased defaultability of the loans that back our money supply, and "fragility" of the banking structure. Recent events seem to justify these worries.

There is direct conflict between high land values and the rate of return on productive, job-making real investments. High land values may mean low rates of return on new investments. The high land values are supported by siphoning off part of cash flow to income payments to those who own the land, or to those who lend entrepreneurs funds to buy it. The combination of high credit-worthiness with low returns on newly created capital can only spell trouble: banks expand as real investment falls. At the same time, rising land values discourage saving and encourage consumption, e.g., by using home-equity loans.

When land is so overpriced as to cut deeply into rates of return on job-making new investment, banks turn to taking land itself as collateral. When land gets so overpriced the borrowers can't pay the loans, banks panic, freeze up, and stop originating new loans. Then as old debts are paid, the money goes into the bank and never comes out again. What banks have created, they can destroy. Just as expanding banks issue new money, contracting banks swallow it up again.

This is a major source of the notions of oversaving and cash-hoarding, notions so common in depressions. "Where has all the money gone?" people ask, and look under the mattresses of misers. Most of it has simply been retired by banks that collect old debts without originating new ones.

c. Major kinds of loan collateral; basis of valuation.

The following are major kinds of collateral, and factors determining their volume and valuation:

1. U.S. Treasury securities, determined by the U.S. Government.
2. Volume of trade  $\times$  mean period that inventories are in stock, or that accounts are receivable. (This is the basis of "real bills.")
3. Amount of durable capital; valuation of same. There is a cap on valuation: cost of reproduction. There is no floor under values of durable capital, however. Once capital has been produced, value depends on discounting expected future cash flows. When expected flows fall, and discount rates rise, present values fall.
4. Valuation of land. This depends at all times only on discounting expected future cash flows, and never has any anchor or basis in cost of production. It is highly subject to changes in expectations, and hypersensitive to discount rates.

The financial system is most vulnerable to collapse when an unexpected sharp rise of interest rates pulls the plug on #3 and #4, above. #4, land values, are especially sensitive to interest rates; and doubly so in a rising market, such as that which prevailed in farming in the 1970s; and in California urban sprawl areas from 1974-1981 or so, and again 1984-1988. In a rising market land values are based on this formula:

$$L = a / (i - g) \quad (1)$$

where  $L$  is value,  $a$  is current cash flow,<sup>6</sup>  $i$  is nominal interest rate, and  $g$  is anticipated annual rate of growth of cash flow (both  $i$  and  $g$  are expressed as decimals, that is the %/100). Cash flow is measured in current dollars, to be consistent with the use of nominal interest rates.<sup>7</sup>

Show yourself how hypersensitive  $L$  is to small changes in  $i$  by working out some numerical examples. For starters, let  $i$  rise from .08 to .12 while  $g$  is constant at .07. (You may hold  $a$  constant at  $a=1$ ). Be sure to do these problems—you may need the skill on an exam.

Show yourself what happens if  $g$  falls; and if  $i$  rises when  $g$  falls. You will see what a shaky basis for bank loans  $L$  is.

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<sup>6</sup>This is cash flow imputable to land. That means one does *not* deduct interest on any debt incurred to buy land. However, one *does* deduct interest on debt incurred to improve land, or buy improvements to land. One also deducts imputed interest on equity capital used to improve land.

Just to read that, it may sound complex and arbitrary. The principle is really simple and reasonable: to find the product imputable to land, deduct all non-land costs.

<sup>7</sup>Alternatively, one can use real interest rates, and measure cash flow in dollars of constant purchasing power.

Formula (1) applies literally only to land. However in California, during the recent real estate frenzy<sup>8</sup>, most income properties were trading based on that valuation formula, and with little equity contributed by the buyer. The result was "negative cash flow." Negative cash flow is what you get when your debt service is greater than your operating cash flow, a.

On a long-term debt, debt service is 97% interest in the first few years.

To get that from (1), solve (1) for a-Li

$$a-Li = -Lg \quad (2)$$

(2) shows that if you finance your purchase 100% at the bank, the interest exceeds the operating cash flow by Lg. That is, the hypothecated (mortgaged) real estate does not yield enough cash to pay interest on the debt each year. That difference is "negative cash flow." The borrower has to get that cash from some other source.

In practice borrowers seldom get 100% financing anymore. But values have been so high relative to cash flows that they would get 70% financing and still suffer negative cash flow. That is, a was less than 70% of Li.

The debt service therefore comes only partly from the mortgaged real estate. The difference has to come from the other incomes of the borrower. Many borrowers assumed that values would continue to rise so that soon they could borrow more on the same real estate, using a second deed of trust, to pay the negative cash flow. And they assumed that rents would continue to rise, so in a few years the operating cash flow would exceed .7Li. Many of them lucked out. Others didn't: a federal agency is clearing the wreckage today, and sticking us taxpayers for \$500 billion or so.

The same factors that freeze up the circulation of capital, as described in the readings from Jevons, Haberler, Gaffney, Ricardo, et al., also act to pull the plug on valuations of land and durable capital. Thus a banking contraction or collapse is caused by the same real factors that make macroeconomic trouble anyway. It can be a fearful combination.

The trick, when the economy gets caught out too long, is to segue from collaterals #3 and #4 to #1 and #2. However, with too high a share of capital frozen in #3, alternative #2 takes a while to redevelop. That leaves #1, the Keynesian solution. It is a way to solve the banking crisis. But in terms of reviving the market economy and producing private goods, we need to re-stimulate #2.

#### d. Bank capital or net worth.

Bank expansion is limited also by bank capital. The net worth of banks is perhaps 5% of their total liabilities. (1993, efforts are bringing this up towards 8%—*BusinessWeek*, Jan ?? 93, p.72.) This figure includes "capital," "surplus," and "reserves for losses." Neither their own prudence nor their regulators' prudence are likely to let them expand much beyond that, regardless of reserves. A few major defaults cut deeply into their net worth and force them to contract. This helps explain the "mystery" of why banks would not expand after the banking collapse of 1929-1933, even though they had excess reserves. Today again, the pressure is on high to raise more capital for banks.

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<sup>8</sup>Did you know you grew up during a frenzy, or did you think the world was always like that?

This matter tends to be shrouded in secrecy because banks avoid disclosing the volume of defaulted loans. In the Great Depression they deferred accounting "recognition" of losses by hanging on to foreclosed real estate for years and years. They took advantage of a form of mythology allowed by GAAP (Generally Accepted Accounting Principles) whereby capital gains and losses do not occur until they are "recognized" by some overt act like sale, or formal ceremony like "write-down." This mythology is taken much more seriously than its intrinsic credibility warrants.

In 1991, not surprisingly, powerful interests are pushing for a return to the same kind of deception. One of their spokesmen is Paul Craig Roberts: "Depressed real estate prices are not only an important reason why we are in recession but they are likely to make it all but impossible for us to spend our way out of it." We must lower taxes to "breathe life back into real estate values, save many financial institutions from failure, and save the government—or taxpayers—billions of dollars in bailout costs. ... The downward spiral will have a long way to go if regulators succeed in forcing financial institutions to 'mark-to-market,' or value at current market prices their long-term investments."<sup>9</sup>

The practice is obvious nonsense. Losses are actually taken when assets lose value, regardless of formal recognition. The banks knew then, as they know now, that their net worth was much too low. They chose to give the public other reasons to explain their low enthusiasm for expanding. The public and the banking professors let them get away with it: the clout of organized bankers is awesome; the eagerness of the public to be deceived and gulled is frightening.

Note in passing here a vital distinction between the volume of loans outstanding and the volume of new loans. The first is a static economic "fund," a store of value. The second is a "flow" of new investment. The fund of M1 depends on the volume of loans outstanding, but the flow of real investment depends on the volume of new loans.

A bank that lends long gets repaid only slowly, and can therefore originate only a small volume of new loans each year, relative to its assets. A bank whose borrowers default is in the same pickle, only worse. And their pickle becomes everyone's pickle to the extent that we depend on them to finance the flow of investment that keeps the Great Wheel of economic life turning.

## MONEY SUBSTITUTES AND AGGREGATE LIQUIDITY

### a. Do money substitutes increase net liquidity?

As with demand deposits (dds), there is a flip side to savings accounts, time deposits, CDs, S&L deposits, CMAs, MMFs, NOW accounts, etc., and that is the liability of some debtor. But with M2, just as with M1, there is some net increase in liquidity that is manufactured by the intermediaries. That is how they earn their spread, and persuade their depositors to accept less interest than they could get by lending directly.

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<sup>9</sup>*Business Week*, 18 Feb 91, p.18. This comes from an economist who calls himself a supply-sider and a free-market booster. His inconsistency in those matters results from his consistency in supporting rent-takers at any cost.

The intermediaries borrow short and lend long. It is just that they do not borrow quite so short as banks. Their deposits are not transferable on demand, and do not serve as media of exchange. They do however serve as stores of liquidity, as the usual text says.

How important this is depends on how seriously you take demand-side economics. The usual text takes it seriously, and therefore emphasizes the benefits that stem from this sense of liquidity created by M2. M2 lets individuals hold less M1, and therefore makes the sum of individuals try to hold less of it. They fail in that, but make it circulate faster and raise aggregate demand.

**b. Does M2 create net wealth?**

No, obviously, the flip side totally counterbalances the top side. But that's not the end of it in this world of illusions. Debt and credit may create significant illusions of wealth, because many debtors are not aware they are debtors, particularly public debtors.

Consider the City of Riverside. Through its Department of Public Utilities, it is liable for about \$400 million of the debt of IPA, a "joint power authority" that built the Intermountain Power Project, a huge coal-fired power plant in Utah. Not one voter in a thousand knows a thing about it. This results from a combination of citizen apathy and bureaucratic secrecy.

I didn't know about it myself until I was appointed a member of the City Public Utility Board, and even then it was like pulling teeth to get information from staff. Straight talk was considered ill-mannered, like spitting on the Persian rugs.

Meantime, the bondholders are very conscious of their assets. Depositors in banks that hold those bonds are very aware of their accounts.

Again, some firms have "lines of credit" at banks. These are a contingent liability of the banks, but do not appear on the books as dd liabilities. Yet the firms that have them are certainly made more liquid.

Again, suppose Standard & Poor's dropped our bond rating from AA to B. We would be just as obligated to pay as before, and feel no richer; but the bondholders would feel a lot poorer.

The world of credit is a world of confidence and illusion, so there is lots of room for magicianism, deception, and "financial wizardry." That is how we deviate from the simple logic that every asset is someone else's liability. Credit is highly conventional, institutionalized, interdependent, fragile, and vulnerable to loss of confidence. Read on!

## **MONEY MARKET FUNDS AND LOSS OF REGULATORY CONTROL**

**a.** "Money-market funds" (MMFs) are now included in M1. You can transfer them by check, like dds, so they are a means of payment.

**b.** MMFs do not create new deposits by expanding, as banks can. They can only lend money they have previously received from depositors. They still monetize the collateral they lend on, as banks do. However, what the MMFs monetize, the banks cannot. One asset can only be monetized by one lender at one time (unless someone cheats, as in the case of a Florida repo firm exposed circa 1985). MMFs are a new variety of bank, competing for both depositors and

borrowers, but not creating new money. Their significance is that they are a step or two ahead of regulation; and are uninsured.

M1 is affected by two factors: the sum of bankable collateral; and the share of same that is monetized. That share depends on how many borrowers can borrow from banks cheaper than from other lenders. This in turn depends on the cost of creating liquidity, which is the service that commercial banks provide. MMFs will only increase M1, net, if they can create liquidity cheaper than banks can.

MMFs do represent some loss of regulatory control. There is little regulation and no insurance. But "money market" in the title means they lend only short, which is a selective control on the lines of the real bills doctrine. The fact that they spotted opportunities in the money market may suggest that regular commercial banks were neglecting it—a bad sign about the banks, of which more later.

### **HOW BANKS ARE SEDUCED INTO ILLIQUIDITY**

Confidence in banks is something of a collective good: it depends on collective behavior more than individual behavior. Thus, each individual bank is tempted to sail closer to the wind than is good for banks collectively. To cut costs, banks are lured into the following:

**a. Long-term loans.**

One loan agreement lasts for many years, and it costs staff time to evaluate and make loans.

**b. Large loans.**

Many of our larger banks are now in so deep with Brazil and Argentina that a default by just one debtor would wipe out the bank's capital (which is just 5% or so of the bank's total assets, remember).

**c. Pre-collateralized loans.**

The collateral is the basis of lending, not the use of the money.

**d. Reducing employees per dollar of assets.**

This occurs when loans grow faster than employees. But who then is to oversee the loans? Continental Illinois evidently did not know where all its money was.

**e. Reducing capital (net worth) per dollar of assets.**

This, too, occurs by letting loans grow faster than capital. Granting "credit lines" that do not appear as bank liabilities on the books is one newly burgeoning angle on this.

**f. Starving employees.**

Holding down salaries of loan officers, controlling them by subjecting them to arbitrary rules, restricting their use of judgment. What is likely to happen when an underpaid, faceless loan officer disposes over big bucks of other peoples' money and deals with ambitious smoothies and sharpies? Use your imagination.

All those things that cut costs for the bank endanger its liquidity and reduce its service to the community. What makes them think they can get away with it? Banks can take comfort in recalling that if they get into deep trouble there is a history of federal aid. In the 1930s the HOLC and RFC and farm credit agencies took over billions of defaulted mortgages. In the 1970s the S&Ls were rescued. In the 1980s they ran wild again, only more so, investing directly in real estate, using funds raised from federally insured accounts. \$500 billion in bad debts was dumped on the taxpayers.

The banks might feel with some justice that the federal government is devoted to supporting real estate values by continually pumping in credit. It is one of those short-run solutions that keeps inflating the problem it is designed to correct: a vicious spiral, or positive feedback loop, with no good end in view.

## **LOSS OF CONFIDENCE IN U.S. FINANCIAL INSTITUTIONS**

### **a. Early warnings.**

Arthur Uppgren and Stahlr Edmunds, Cassandras from twenty years back, warned about the inadequacy of FDIC reserves, and were just sneered at as mossbacks and old fogeys who just didn't understand. Yet, in 1984 the FDIC had in the neighborhood of \$20 billion to insure \$1,500 billion—that is less than 1.5%. Continental Illinois alone took \$4.5 billion of that. (The famous Chrysler bailout, by comparison, took \$1.5 billion, and was paid back. Continental Illinois is forever.)

Around 1970 a loophole in banking laws was discovered that let banks get into real estate through REITs (Real Estate Investment Trusts). Heavy losses resulted. Fortunately the system escaped.

### **b. Hot money.**

The largest banks, those over \$10 billion in assets, have 60% of their deposits uninsured (because in CDs or accounts over \$100k). So size is no safeguard. These are world institutions, with worldwide depositors, ready to cut and run at a whiff of trouble.

As it turned out, FDIC elected to cover the uninsured deposits, too. This was nice for a few big depositors, but outright theft from the small depositors in solvent banks whose funds were malappropriated to cover the uninsured. Not to worry: stick it to the general American taxpayer, who in turn will add it to the national debt and stick it to future taxpayers. This is getting ridiculous, and not funny.

### **c. S&Ls.**

When interest rates soared after October 1979 (the Volcker Revolution) the S&Ls were devastated. Most of their money was out at low interest rates for thirty- and forty-year terms. 25% of our 3,500 S&Ls closed or were saved by merger, 1981-1985. In 1985 the Beverly Hills S&L bellied up, and it was a post-1979 creation. S&Ls are using uninsured CDs on a massive scale now, with \$109 billion outstanding, and investing directly in real estate. Yet their net worth, in the aggregate, is estimated at zero or less.

**d. Looting by insiders.**

1982, Chase Manhattan lost \$285 million because of Drysdale Securities "mismanagement." Accusations of insider dealing were made, lawsuits were filed and won. Whether Chase recovers the money is something else. Drysdale dealt only in good, sound, "safe" U.S. Treasury securities.

ESM, a Ft. Lauderdale, Fla. firm dealing in "repos" (see text), used the same Treasury securities as security for loans—legally in the form of sales—to several different buyers. Very careless buyers, obviously. ESM was being looted by its own management. Result: failure of a large Cincinnati S&L, and temporary closure of all Ohio S&Ls, April 1985. May 14, nervous Maryland depositors ran on an S&L and all of Maryland's state-insured S&Ls had to be protected by executive order placing a \$1,000/month limit on withdrawals.

Kent Rogers with his WestPac Corporation and its "Share the Wealth Real Estate Program" allegedly took B of A for \$133 million, and others for a grand total of \$500 million, disclosed in April 1985. No one can find where the money went. Some colorful felons are allegedly involved.

The directors and officers of the Heritage Bank of Anaheim were sued by the FDIC, which alleged insider looting. (They denied it.) The State Banking Department closed this bank in 1984, due to losses from bad loans on—guess what?—real estate.

Nothing, perhaps, destroys fragile public confidence in trustee institutions so much as insider looting and breach of trust. Nothing brings looting to light so quickly as a drop in the real estate market.

**e. Low net worth.**

Wall Street seer Henry Kaufman is quoted that many banks today have no real net worth at all, when their bad loans are deducted from assets, as some day they must be.

The capital of thirty-one out of the fifty largest U.S. banks is less than 5% of their assets. The lowest in 1982 was our own B of A, with 3.4%. There is a ray of sunshine: it is doing a lot better now. The FDIC standard for banks that IT regulates is 5%, and they are currently raising that to 5.5%, and aiming for an ultimate 9%. (FDIC supervises 9,300 state banks, non-members of the Federal Reserve system. The F.R. Board and Comptroller of Currency regulate national banks.)

**f. Bank failures.**

Some 100 bank failures occurred in 1985, compared with ten in 1981. The curve is sharply upwards, beginning in 1982.

The FDIC is currently reporting hundreds more banks as "problem banks," i.e., potential failures.

**g. Kinds of loans in trouble.****1. Real estate.**

The major collateral behind defaulted loans is that in energy, agriculture, and real estate. Domestic loans rather than foreign loans are the main problem. Shades of 1929-1933! Read H.D. Simpson, "Real Estate Speculation and the Depression." Lesser problems are in shipping, plagued by overcapacity; and electric utilities, really part of energy.

## 2. Foreign loans.

I wouldn't sleep well over the foreign loans, either. If they have not yet brought down any banks it is only thanks to vigorous intercession by federal and international agencies. In 1984 Argentina refused to pay, and was granted a loan from various international agencies to pay interest on old debt. Mexico and Brazil and Argentina and Bolivia and Poland, to name a few, are sick sick sick. There is now outstanding \$700 billion in worldwide international debt. Brazil, the world's most indebted developing nation, owes \$97 billion. The United States owes more, but 45% of Brazil's export income is required to service its debt!<sup>10</sup>

It's not just Latin America, although they have a big chunk. Urban real estate values being what they are, "little" Hong Kong is a giant. Its real estate began crashing in 1983. Many large U.S. banks were creditors of Carrian Investments Ltd. of Hong Kong, whose assets have disappeared in the back alleys of Suzie Wong.

## 3. Energy.

An early energy loser was Penn Square Bank, Oklahoma City, 1982. It brought down SeaFirst of Seattle, which had to accept being merged into B of A; and raised serious questions about the management of Continental Illinois, leading to its debacle of 1984. But note that Texas Commerce BancShares Inc., which managed to avoid loan losses in energy per se, has \$342 million of defaulted loans in—guess what?—urban real estate in Houston, where vacancy ratios are now higher than in any major American city.

### **h. Concealment of losses.**

The Continental Illinois case revealed a bank that was not reporting all its defaulted loans—no more than half, in fact. They had at least \$4.5 billion of them, and had recognized only \$2.3 billion at the time they were bailed out in 1984. Penn Square Bank of Oklahoma City, which had led them down the primrose path, had done the same in 1982. Some loan officers were covering up their messes by lending bad debtors more money with which to pay interest. (This maneuver is called "Ponzi finance," after a financial magician who worked his illusions in the 1920s.) Anything to save face while they prayed for divine intervention, evidently not forthcoming.

### **i. Runs on banks.**

Bank failures became big news in 1985, and the public consciousness of their possible need to stage runs on banks has been raised. All that stops it is deposit insurance, which, as we saw, has turned out to be a way of transferring losses to the federal debt. In March 1985 Ohio closed all its S&Ls for a while to stop a run originating with the failure of ESM, a Florida repo firm. California, like Ohio and Maryland, has private rather than federal insurance for some "Thrift and Loan" Companies, sixty-seven of them. One of these, Western Community MoneyCenter in the Bay Area, failed, spring of 1984, and its deposits are still frozen.

FCA of Irvine suffered a large deposit run in 1984, and was bailed out like Continental Illinois, as which it is almost as large. The \$4.5 billion bailout of Continental Illinois is of course the largest case, and best-known. Much earlier, the Franklin Bank of Long Island failed, but that

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<sup>10</sup>Read David Felix on the Baring Crisis, etc.

was considered a "fluke" associated with the shadowy international Michele Sindona with romanticized Vatican connections. In 1980 it was 1st Pennsylvania, a \$325 million bailout. Our own Crocker bank took large real estate losses and fell into the arms of a foreign parent.

In 1984 the trend was for several major banks to sell their headquarters and branch buildings and sites for needed cash, to beef up their capital. An excellent move, actually, but unfortunately also a sign of weakness and interpreted as such.

#### **j. Self-regulation.**

Here was what I told students in 1985: most discouraging is the bull-headed, intransigent, righteous attitude of banking leaders in the face of all that. CBA is supporting AB3469 (Ross Johnson, La Habra (R)), which would now let California state banks invest directly in real estate and land development, using subsidiaries to keep a little fictional distance from these direct investments in durable equities.

Shades of 1927, when Congress passed the McFadden Act, letting national banks lend on real estate. California's action puts pressure on Congress to let national banks do the same thing, to compete. Meantime the FDIC, zagging, is trying to ban all direct real estate investment by all banks.

But this comes at a time when national leadership has a strong ideological commitment to deregulation. So who is likely to win? How rigid and doctrinaire will the ideologues be, faced with the difficult facts cited above?

Today, January 1991, we know part of the answer to that question. Banks and S&Ls kept right on making bad loans on real estate, underwritten by deposit insurance and a rigid ideology that ruled out qualitative controls on lending. The resulting catastrophe has been quietly added to the federal debt. Enjoy the Super Bowl! Enjoy watching battlefront coverage! Tomorrow you get to pay the piper.

**ADDENDA, after 1993**

1. Steven Greenhouse, 1993. "Central-Bank gripes about a new world." *New York Times* 23 Aug D1,5.

Central banks losing power. a) Intl money flows, \$1tr/day, move exchange rates; b) ARMs etc., tied to bank rates, increase pressure not to raise them (or to raise them?); c) Now, banks have offshore branches, so when F.R. raises res reqs at home, they shift to offshore branches; d) S&Ls now bundle mortgages and sell packages direct to investors, whose rates are unaffected by fed controls on S&Ls (such as they are); e) disintermediation (but this is an old story now), so "finance cos." (money mkt funds?) have larger role. f) Mutual funds, which are not part of M-2.

Greenspan takes all that as an excuse to go discretionary. Benj. Friedman applauds; Allan Meltzer disagrees.

2. Kenneth Howe, 1993. "One giant regulator proposed for banks." *San Francisco Chronicle*, 24 Nov, B1.

Reg system now consists of four competing agencies:

- a. Office of Comptroller of Currency (OCC). Regulates national banks.
- b. Fed regs bank holding cos., some state-chartered banks, and *foreign banks*.
- c. FDIC regs state-chartered banks that do not belong to fed; can also examine *any* institution it insures.
- d. Office of Thrift Supervision regs thrift holding cos.; supervises state-chartered S&Ls.

BankAmerica is examined by fed, because it is a holding co.; OCC, because they own nat. banks; and FDIC.

Banks pay regulators to perform the exams.

Banks can choose who examines them, by choosing their charter. OCC is stricter, so many banks are switching to state charters, e.g., Continental Bank Corp., Chicago.