remitting the money home. For example, Ford Motor Company's West German subsidiary may borrow from Deutsche Bank, while Ford headquarters postpones payment to its West German branch for Pinto engines turned out at Ford's plant in Cologne. On top of this, there is the flood of hot money that old European families are sending in the United States through various channels to gain higher interest rates—such as the flight capital leaving France and Germany (see Economics). All of this swells the money supply. Volcker is clamping down on a money supply that he himself has sent careening out of control.

With corporate debt service now more than 60 percent on internally generated funds, as will be documented below, the money supply is growing just to roll over a portion of this debt. By cutting back money supply, Volcker must cut back on production. Currently, plans to integrate the domestic with the international money markets, through interfacing Fedwire to the Clearing House International Payments System (see EIR, May 5), and with the planned introduction of international banking facilities (IBFs) sometime this fall, the central bank's ability to control money through reserve management or any other method will be reduced to minimum.

Production debacle

But the effects of the cutoff of credit to the economy are already foreshadowed by the following developments:

- On May 4, General Motors announced that it was delaying its five-year, \$40 billion capital-spending program because of the crunch in auto sales. In April, when the Big Three automakers withdrew their earlier cash rebate program, auto sales occurred at a 5 million units anualized rate, far down from their nearly 10 million units per year sales rate of a few years ago.
- Mortgage rates reached 15.82 percent, the Federal Home Loan Bank Board announced May 4. The FHLB announcement a few weeks ago that it is allowing a greater increase in variable rate mortgages offered by savings and loan associations means that interest rates for housing will go up, not down, in months to come. Housing starts which dropped precipitously by 25 percent during the first quarter to a 1.2 million starts per year may fall below 1 million soon.
- The rate of bankruptcies among small and medium-sized businesses, already 50 percent higher than last year, will accelerate under the new environment Volcker has created.
- Take-home wages, corrected for inflation and taxes, have been plummeting, and will fall even further.
- The household rate of savings, down to 3.7 percent in March, the lowest level in 20 years, will perhaps go even lower.

Financial Survey

The debt time bomb Volcker has triggered

While the Federal Reserve Board has in its possession all the raw data needed to present the picture of the crushing debt level corporations and households now operate under, EIR assumes that the Fed has either neglected to assemble the information we display below, or has suppressed it. Any public with an awareness of the actual debt picture in the United States would not tolerate Fed Chairman Volcker's current credit tightening for another week

Volcker's interest-rate strategy is like an arsonist reaching for a match: he has no regard for what he destroys, nor does he comprehend the staggering damage he will ultimately do.

Right now, the per capita debt load in the United States is heavier than it was during 1929—or 1974-75, when the oil hoax threw the economy into deep recession. This debt increase is built up against, and has contributed to the fall in, household income and real corporate profits.

What happens, then, when Volcker's interest rates contract production while feeding the costs of financing corporate debt? Starting with small and medium-sized firms, this signals an illiquidity panic and mass bankruptcies. At that point, it is simply a matter of lack of confidence and cash reserves—the latter are down to almost nothing—before the illiquidity problem turns into a conflagration. Companies like Chrysler, Massey-Ferguson, Braniff, Eastern Airlines, Conrail, and General Public Utility are swept into the crisis. Before long, the far from secure Fortune 500 companies, whose balance sheets show major illiquidity weaknesses, are drawn in as well.

Financially overextended families will be wiped out as Volcker's recession drives the current 7.5 million level of official unemployment to the 9 million range. The household savings rate is already at a 30-year low, and savings will not preserve many families from bankruptcy.

The illiquidity scope

The most striking feature of the overall corporate picture is the inability of liquid assets to keep up with long- or short-term debt growth, and the increasing shortening of maturities on corporate debt. Figure 1

Figure 1
Comparison of corporate liquid assets, long-term debt, and short-term debt (billions of current dollars)

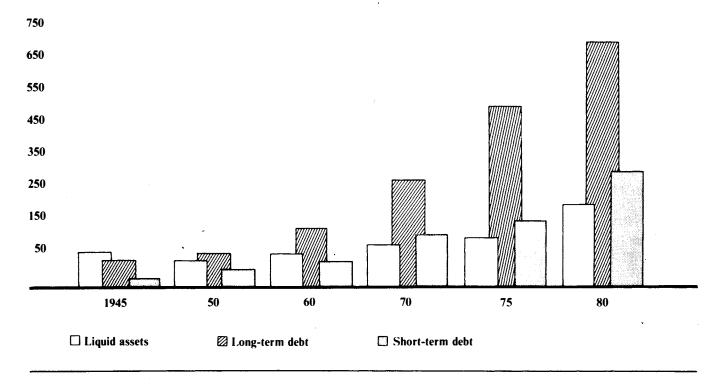


Figure 2

Liquidity ratios

(I-IV = billions of current dollars)

(V-VII = liquidity ratios)

Year	I Liquid assets	II Long-term debt	III Short-term debt	IV Total short-term liabilities	V Ratio I/IV	VI Ratio I/III	VII Ratio II/III
1945	\$ 38.7	\$ 35.5	\$ 8.0	\$ 33.1	1.17	4.84	4.44
1950	44.0	56.4	14.5	64.7	0.68	3.03	3.89
1960	51.4	122.1	31.9	109.6	0.47	1.62	3.84
1970	69.5	281.8	88.6	261.8	0.27	0.78	3.25
1971	78.8	318.3	91.2	278.5	0.28	0.86	3.49
1972	88.0	352.6	104.2	313.6	0.28	0.85	3.38
1973	101.0	393.9	127.9	378.6	0.27	0.79	3.08
1974	105.4	441.3	158.5	349.3	0.30	0.66	2.78
1975	125.2	477.2	152.2	347.0	0.36	0.82	3.14
1976	139.0	515.8	163.1	379.0	0.37	0.85	3.16
1977	141.0	566.2	190.0	426.2	0.33	0.74	2.98
1978	151.3	624.5	221.2	507.5	0.30	0.68	2.82
1979	170.2	693.7	264.6	617.3	0.28	0.64	2.62
1980	193.2	758.1	289.9	667.2	0.29	0.67	2.62

tables and graphs:

System; statistics supplied by the Banking Department of the Federal Reserve, Washington, D.C.; The Economic Report of the President, January 1981, published by the Council of Economic Advisers; and the Bureau of Labor Statistics.

Figure 3 Relationship of corporate debt to internal funds

(billions of current dollars)

Year	I Corporate interest debt service	II Gross corporate internal funds	III Ratio of I/II
1946	\$ 1.19	\$ 7.83	15.2%
1947	1.34	12.61	10.6
1948	1.53	18.77	8.2
1949	1.61	19.29	8.3
1950	1.73	17.82	9.7
1951	1.93	19.71	9.8
1952	2.21	21.16	10.5
1953	2.42	21.14	11.5
1954	2.53	23.45	10.8
1955	2.75	28.80	9.6
1956	3.13	28.66	10.9
1957	3.71	30.40	12.2
1958	4.12	29.59	13.9
1959	4.54	35.03	13.0
1960	5.28	34.69	. 15.2
1961	5.74	35.28	16.3
1962	6.32	41.58	15.2
1963	6.94	44.54	15.6
1964	7.61	50.13	15.2
1965	8.64	56.09	15.4
1966	10.82	60.49	17.9
1967	12.43	61.27	20.3
1968	15.31	62.34	24.6
1969	19.99	61.67	32.4
1970	23.36	58.85	39.7
1971	23.75	73.50	32.3
1972	26.91	85.00	31.7
1973	36.72	91.70	40.0
1974	49.66	85.60	58.0
1975	46.72	119.70	39.0
1976	49.44	134.20	36.8
1977	56.09	156.10	35.4
1978	70.62	171.90	41.1
1979	93.10	190.60	48.8
1980	115.29	197.00	58.5

shows the overshadowing of liquid assets by debt. In 1945, at the end of World War II, when there was heavy corporate borrowing, corporate liquid assets—currency, checking accounts, and short-term holdings—were still larger than either long- or short-term debt aggregates. This was the last time that would be the case. By 1950, long-term debt already exceeded liquid assets of all U.S. corporations. By 1970, short-term debt was also larger than liquid assets.

If at any one time corporations had to cover all their short-term debt out of their liquid assets, how successful would they be? In 1945, the liquidity ratio—liquid assets divided by short-term debt—was 4.84. For every dollar

of short-term debt, a corporation carried \$4.84 of liquid assets, meaning that it could set aside one-fifth of its liquid assets to cover its short-term debt, and it would still have approximately four-fifths left to meet other needs. Under today's conditions, one can see how radically this has changed: a corporation does not even have enough in its treasury to cover its short-term debt. Currently, the liquidity ratio is 0.67, meaning that liquid assets can cover only two-thirds of each dollar of corporate debt. The liquidity ratio declined in 1976-80 from 0.85 to 0.67, a drop of over 20 percent.

Even more telling is a broader liquidity ratio measuring liquid assets against short-term liabilities, the

Figure 4
Relationship of interest to corporate debt
(in billions of current dollars)

Year	I Corporate credit*	II Annual growth in corporate credit	III Annual growth in interest debt service paid	IV Ratio III/II
1960	\$ 152.2	\$10.4	\$ 0.73	7.0%
1961	160.1	7.9	0.47	5.9
1962	173.9	13.9	0.57	4.1
1963	186.7	12.7	0.62	4.9
1964	200.2	13.5	0.67	5.0
1965	220.1	19.9	1.02	5.1
1966	244.0	23.9	2.12	9.1
1967	270.2	26.2	1.61	6.2
1968	302.0	31.8	2.88	9.1
1969	336.7	34.7	4.67	13.4
1970	372.1	35.4	3.37	9.5
1971	406.1	33.9	0.39	1.2
1972	452.7	46.7	3.16	6.8
1973	515.0	62.3	9.80	15.7
1974	589.9	74.9	12.93	17.3
1975	615.7	25.8	-2.94	-11.4
1976	660.6	44.9	2.72	6.1
1977	733.7	73.1	6.65	9.1
1978	819.2	85.5	14.53	17.0
1979	915.6	96.4	22.47	23.3
1980	1,002.3	86.7	22.19	25.6

^{*}Nonfinancial corporate business borrowings of corporate and mortgage bonds, bank loans, commercial paper, and finance company loans.

latter including short-term bank borrowings but also other categories of short-term debt, primarily commercial paper and some corporate trade paper. This gauge is more accurate because under present circumstances most corporations rely on many short-term liabilities other than bank loans.

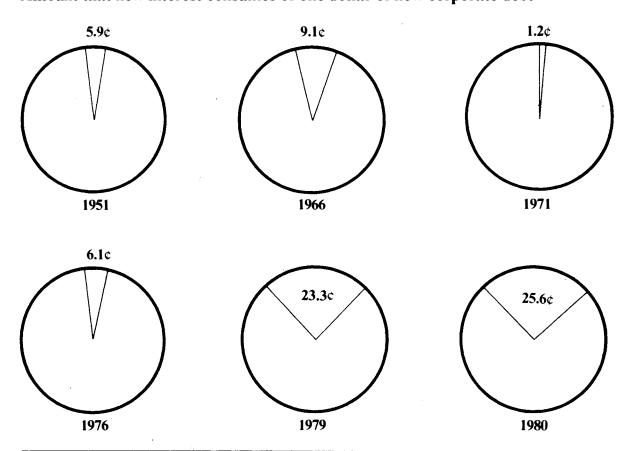
In 1945, corporations had \$1.17 in liquid assets to each dollar of their short-term liabilities. In 1980, they had only 29 cents in liquid assets for every dollar of short-term liabilities. Corporations could only cover roughly the first quarter of their short-term liabilities. When it is considered that the averages presented in Figure 2 include all U.S. corporations, including the relatively cash-rich Exxons, ITTs, IBMs, and General Electrics, one can appreciate how poorly financed the small and medium-sized corporations in the U.S. are, with liquidity ratios in many cases of 0.10 or less. Moreover, one realizes that the averages of the big corporations themselves are not all that impressive. In short, one sees how illiquid the entire U.S. corporate structure has become, especially since Volcker took office in the autumn of 1979.

While the growth of short-term liabilities is outstripping the size of liquid assets, a second development is making matters even more dangerous. U.S. corporations, under the Volcker high-interest regimen, are being shut out of the long-term markets: corporate bonds, corporate mortgage bonds, and long-term loans from banks, or term loans (about 40 percent of all bank lending to corporations is for more than one year). This year, for example, there is a huge pileup of corporations waiting to go to market for long-term bond offerings for capital formation; but they can't afford to pay 14 to 16 percent for 15 to 40 years, which is the range into which Volcker has driven quality long-term bonds.

To compensate, corporations are forced to borrow short-term, even for some long-term needs. Short-term debt is, of course, more volatile and more expensive, and must be rolled over more frequently, sometimes 5 to 10 times a year. This corporate nightmare is indicated in the drop of the debt maturity ratio from 4.44 in 1945—\$4.44 of long-term debt to every dollar of short-term debt—to 3.49 in 1971 and 2.62 in 1980. This situation makes financing more expensive while reflect-

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Figure 5
Amount that new interest consumes of one dollar of new corporate debt



ing the magnitude of the illiquidity crunch.

Volcker's policy has accentuated this shift with a vengeance. Paul Volcker is directly and intentionally ruining the balance sheet of American corporations. This further opens up corporations to takeover by anti-industrial firms, and destroys the profitability, productivity, and output levels of American corporations. Council on Foreign Relations member Volcker, in a 1978 speech in Leeds, England, acknowledged this policy to be "controlled disintegration."

Interest-rate wizardry

Given the deterioration of American corporate balance sheets, it is crucial to observe two developments: the growth of corporate debt in general, and the specific growth of interest payments on the debt, sometimes called interest debt service.

The steep upward climb in interest rates, especially after Volcker took over the chairmanship of the Fed in August 1979 and launched his Columbus Day weekend interest-rate massacre six weeks later, has had the following effect on debt levels. In 1978, the average prime

lending rate was an already high 9.06 percent; in 1979 it skyrocketed to an average of 12.67 percent, registering most of the increase after August of that year. In 1980, Volcker shot the prime rate average to 15.27 percent, and kept it even higher, at almost 18.0 percent, for the first quarter of 1981.

Correspondingly, the amount of interest on corporate debt—corporate interest debt service—was \$1.73 billion in 1950 (Figure 3). This rose to \$5.28 billion in 1960 and \$23.36 billion in 1970. By 1975, the level was \$46.72 billion.

In 1978, the corporate interest debt service was \$70.62 billion. By 1980, under Volcker, it had leapt to \$115.29 billion, an increase of 63 percent over two years. As a percent of gross interna

with some adjustments for inventory and depreciation valuations), corporate interest debt service rose from 41 percent in 1978 to 58.5 percent in 1980. The equivalent of 60 percent of all corporate funds are going to pay for interest payment on the debt.

The effect of this explosion can be better appreciated when one compares the annual increment of interest

Figure 6
Relationship of household debt to disposable income

(I, II and IV = billions of current dollars)

Year	I Sum of household debt*	II Disposable Income	III Ratio I/II	IV Interest debt service on I	V Ratio IV/II
1945	\$ 20.462	\$1,491.1	13.8%	\$ 0.974	0.07%
1950	56.701	206.6	27.4	2.623	1.3
1955	112.391	275.0	40.9	5.553	2.0
1960	180.408	352.0	51.3	9.893	2.8
1965	285.634	475.8	60.0	16.190	3.4
1970	393.158	695.3	56.5	27.952	4.1
1971	435.400	751.8	57.9	29.172	3.9
1972	491.800	810.3	60.6	33.051	4.1
1973	560.800	914.5	61.3	42.937	4.7
1974	605.500	998.3	60.7	52.088	5.2
1975	651.400	1,096.1	59.4	51.985	4.7
1976	734.600	1,194.4	61.5	58.129	4.9
1977	864.800	1,311.5	65.9	70.373	5.4
1978	1,013.800	1,462.9	• 69.3	91.162	6.2
1979	1,158.300	1,641.7	70.6	119,321	7.3
1980	1,242.900	1,821.7	68.2	140.324	7.7

^{*}Household debt equals the sum of consumer installment credit plus household mortgage debt.

payment on corporate debt to the increment of the total debt service. In this case, one fully comprehends the geometric quality of interest rates: interest can multiply debt faster and faster, until the interest increment spins wildly out of control and the interest increment is consuming more and more of the growth of the debt as a whole.

In 1960, the increment of *interest* debt service divided by the increment in total debt was 7 percent (see column 4 of Figure 4). This means that 7 percent of the new debt incurred for that year was represented by the amount of new interest paid that year above the level of interest paid the year before. Another way of stating the same point is that 7 cents of each new dollar of debt incurred in 1960 was new interest paid for debt built up prior to 1960. By 1980, this level was 25.6 percent, meaning that over a quarter of each dollar in new debt that corporations took out that year went to pay for new interest on debt (Figure 5).

Consider what this means: in 1960, a corporation borrows \$100 million. Ninety-three million dollars of that could be used for capital investment, payrolls, and so forth. But in 1980, a corporation that borrowed \$100 million had to put \$25.6 million toward paying the increment of interest on old debt. This left \$74.6 million to spend.

The fact that this critical ratio went from 17.0 percent in 1978 to 25.6 percent in 1980, an increase of

50 percent, confirms exactly how destructive Volcker's policy has been.

Household income

Household income has likewise been ravaged. One way to calculate this is to divide total household debt—mortgage plus consumer debt—by U.S. population to get a per capita debt picture for every citizen in the U.S. This calculation yields the following result. The average household debt per capita is:

1970	\$2,152	
1975	\$3,343	
1980	\$6,104	

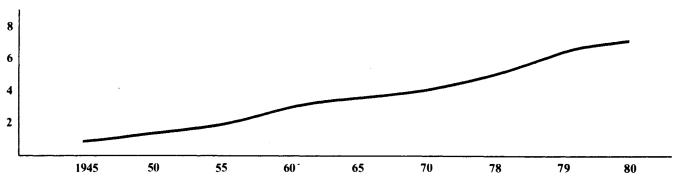
That is, per capita debt in the U.S. tripled over the last decade. Even considering that there was a 100 percent inflation rate for the decade of the 1970s, this still means a doubling of per capita household debt in real terms.

This debt increase must be seen against a background of falling real wages. When adjusted for taxes and inflation, the average weekly disposable income for a worker with three other dependents, according to the Department of Labor, ran as follows:

1970	\$90.20
1975	\$90.35

Figure 7
Interest paid per dollar of disposable income





January 1980	\$85.90
December 1980	\$82.64
February 1981	\$81.80

That is, between 1975 and January 1980, real income fell by 5.0 percent. Over the next 13 months, real income fell another 5.5 percent.

This occurred at the same time that the savings rate of households fell from over 6.0 percent to 3.7 percent, that is, the average worker was saving less, but also consuming less.

What role did interest rates play? This can be estimated in two ways. First, interest debt service as a percentage of real (i.e., tax-adjusted, but not inflation-adjusted) disposable income rose from 0.07 percent in 1945 to 7.7 percent in 1980, with a hefty 25 percent

growth in the ratio occurring during Volcker's tenure (Figure 6). This means that 7.7 cents of each dollar of disposable income goes to pay the interest component on debt service (Figure 7). For many households, the current level is closer to 15 to 20 cents' interest on every dollar.

As for the increase of the interest component of debt service in relation to the increase in total debt service, this ratio for households closely mirrors the ratio for corporations, moving from 12 percent in 1960 to 24.8 percent by 1980 (Figure 8).

Volcker is inflationary

The chief feature of Volcker's high interest rates is not only the destruction of liquidity positions and productivity of corporations, but the fact that high

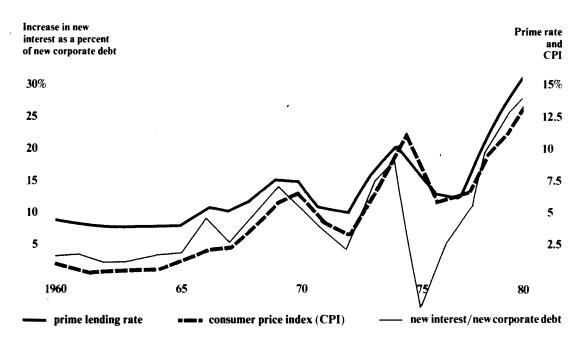
Figure 8
Growth in household debt and interest

(billions of current dollars)

	I	II	III	
Year	Annual increase in household debt*	Annual increase in interest on debt	Ratio of II/I	
1960	\$ 15.306	\$ 1.842	12.0%	
1965	. 25.281	1.538	6.1	
1970	19.498	1.964	10.1	
1975	45.900	-0.103	-0.2	
1976	83.200	6.194	7.4	
1977	130.200	12.194	9.4	
1978	149.000	20.789	14.0	
1979	144.500	28.159	19.5	
1980	84.600	21.003	24.8	

^{*}Household debt equals the sum of consumer installment credit plus household mortgage debt.

Figure 9
Comparison of prime lending rate, CPI, and ratio of new interest to new corporate debt



interest rates are the engine of hyperinflation. The wildest-eyed, money-printing Keynesian could not have increased the rate of inflation as fast as Volcker has managed to do, nor swollen the money supply as fast.

As Figure 9 shows, the relationship is extremely close between 1) the prime lending rate, 2) the percent of new corporate debt required to pay new interest on old debt, and 3) inflation as measured by the Consumer Price Index. Plotted against different scales, these three data series grow at almost precisely the same rate during the past two decades. The comparison tells us that inflation is intimately related to the growth of corporate debt burdens. Inflation compels corporations to assume additional debt, in order to finance increases in the prices of inputs, and also compels them to pass on such price increases and some of their additional debt service costs to consumers. Conversely, the growth of debt service, particularly short-term debt, feeds price increases.

By adding a violent kicker to the geometric growth rate of corporate debt costs, higher interest rates increase the rate at which corporations must raise prices to push up their cash flow income. When higher interest rates decrease production, then this enlarged base of debt must be refinanced out of a smaller production base, which leads to higher prices—despite the recessions—or internal looting of corporations. In 1980, oil

prices did not rise much, but the CPI shot through the ceiling at a 13.5 percent rate.

A similar exemplification of this point is that while it took about \$500 million increase in deflated new corporate liabilities to produce a 1 percent growth in the Federal Reserve's industrial production index, in 1980, it takes about \$9 to \$10 billion increase in new corporate liabilities to move the same industrial production index up one point.

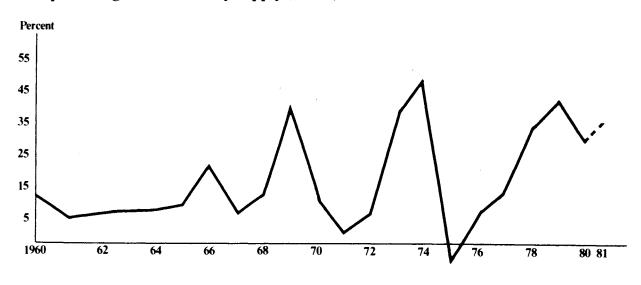
Figure 10 shows that in the 1967-68 recession, the 1973-74 recession, and the most recent Volcker recession the amount of new interest payments that borrowers had to make for that year consumed over 30 percent of the money supply. Put another way, in each of the three years, 1978-80, the money supply M2B, grew more than \$100 billion during the year (Figure 11). But of that increase, an average of 35 percent during this period is attributable solely to the new interest costs incurred in the process of financing old debt.

However, while the average ratio of new interest payments to new money supply was stable at less than 10 percent during the early 1960s, that ratio "stabilized" at 20 percent or more for the 1970s.

Given this tremendous U.S. debt burden, a burden Volcker's policies are intensifying, an abrupt inability to refinance the debt will have the most destructive effect conceivable.

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 $\begin{array}{c} {\rm Figure} \ 10 \\ {\rm Annual} \ increase \ in \ corporate \ and \ household \ interest \ debt \ service \\ {\rm as} \ a \ percentage \ of \ new \ money \ supply} \ (M2B) \end{array}$



Annual increase of interest debt service and annual increment of money supply (billions of current dollars)

