#### Collapse pattern confirms Riemannian model

# Restructuring the economy from the top down

by Lydia Schulman

In late October when most of the country's economists were still hailing the Federal Reserve's Oct. 6 credit tightening measures as good medicine for the economy, the *Executive Intelligence Review*'s computerized econometric model projected that the impact of the measures would be devastating: an aggregate 15 percent loss in real economic output over an eight-quarter, continuous downturn through the end of 1981. The accelerating wave of layoffs—punctuated by the announcement of another 30,000 auto layoffs and 14,400 permanent steel layoffs the last week of November—bear out our warnings.

Our predictions were on target—and everyone else's wishful thinking—for two reasons. The first is the nature of the EIR model, which was uniquely designed to be sensitive to economic discontinuities such as an abrupt tightening of credit or a sharp rise in the price of energy. Secondly, the model was programmed on the basis of the right assumptions about the actual content of Federal Reserve Chairman Volcker's policy—that he had embarked on a policy of denying credit to the consumeroriented sectors of the economy and deliberately causing a collapse. This is what Volcker meant when he told Congress in mid-October that "the standard of living of the average American has to decline." And this is what he adumbrated in his November 1978 speech at Warwick University in Great Britain where he advanced "controlled disintegration" as the economic policy for the 1980s.

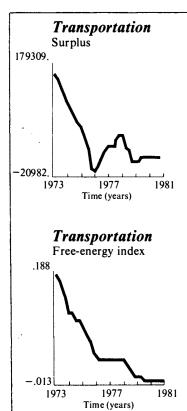
#### When the credit pinch hits ...

The EIR econometric model assumed that the Volcker measures were aimed at cutting back the margin of credit going to finance aggregate household and corporate deficits—not to slow money supply growth, rein in the monetary aggregates, or anything of the sort. We estimated the deficit at 8 percent by examining the current liquidity position of corporations and households, and noting that the rate of short-term credit creation during the second and third quarters exceeded the rate of inflation (and the rate of nominal GNP growth) by 8 percent, indicating a liquidity deficit of that amount.

On the basis of factoring in the relative liquidities of the different sectors of the economy, the model projected differing rates of collapse for the U.S. Commerce Department's 20 Standard Industrial Categories. The first victims of the Volcker credit crunch, the model showed, would be auto, construction, and agriculture, sectors of the economy with the highest ratios of short-term debt to liquid assets; the most illiquid sectors of the economy would be the first to instate layoffs and production cutbacks when the credit pinch hit.

The predictive abilities of the EIR's Riemannian econometric model stem from its fundamental differences with conventional econometric models such as the Wharton School's. The model analyzes causal relations among the sectors of tangible production, instead of trying to establish historical correlations between the different components of "Gross National Product." These correlations are inaccurate even in periods of apparent economic stability, and are wholly useless in periods of rapid economic dislocations like the present. The Riemannian model eliminates GNP entirely as a measure of economic activity, principally because it does not distinguish between productive and nonproductive activity—tangible output on the one hand, and overhead costs or service industry fluff on the other. (Overhead costs of industrial production and agriculture are useful, nonproductive activity, whereas services that do not

4 Economics EIR December 11-17, 1979



#### The Riemannian Forecasts. . .

The accompanying graphs are printouts from the computerized Riemannian econometric model of the U.S. economy developed by economist and U.S. presidential candidate Lyndon H. LaRouche, Jr.

In late October—when most economists were still claiming that the effect of the Federal Reserve's Oct. 6 credit tightening measures would be positive, the Riemannian model projected a devastating impact: an aggregate 15 percent loss in real output over an eight-quarter, continuous downturn through the end of 1981. On the basis of comparing the different sectors according to the relative liquidities of the economy, the model projected differing rates of collapse for the Commerce Department's 20 Standard Industrial Categories. The first victims of the Volcker credit crunch, the model showed, would be auto, construction, and agriculture, sectors with the highest ratios of short-term debt to liquid assets. The complete Riemannian model analysis first appeared in the Nov. 6-12, 1979 issue of the Executive Intelligence Review.

Depicted here are the effects of the Volcker policy on Transportation Equipment and the Total Economy. The graphs for the Transportation Equipment sector show spectacular dropoffs in both reinvestible economic surplus and in the rate of surplus creation (the "Free-energy" index). The layoffs and production cutbacks in the auto industry through early December have borne out the model's warnings about the impact of the Fed's tight money action.





contribute to the realization of real, tangible wealth are nonuseful, nonproductive.)

The model divides the tangible output of the economy into variable capital (the cost of replenishing the workforce), constant capital (the cost of replenishing plant and equipment), overhead costs, and reinvestible surplus. The rates of change of these categories are established by different equations expressing the relations among them.

The accompanying graphs depict the impact of the Volcker measures on the production of surplus and the rate of production of surplus, or the "free energy" index.

The graphs for the Transportation Equipment sector, which includes auto and auto parts production, show a spectacular dropoff in both reinvestible surplus and in the "free-energy" index.

#### Phase 2: steel disinvestment

The 13,000 layoffs announced by the U.S. Steel Corp. on Nov. 27 mark a new phase in the assault on American living standards and U.S. basic industrial capacity: a restructuring of the economy from the top. The unveiling of U.S. Steel's "rationalization" program—which was shortly followed by the British Steel Corp.'s announcement of 52,000 layoffs—is part of an internationally coordinated plan to shrink world steel capacity to bring it in line with "reduced demand"—Mr. Volcker's program for "controlled disintegration."

This policy, modeled on the 1930s cartels, was put forward in an especially forthright lead editorial of the "liberal" New York Times on Dec. 3, "When Giant Industries Falter": "Disinvestment is just as important to economic growth as investment. By closing obsolete facilities and abandoning production in which Americans no longer enjoy competitive advantages, the nation frees both human and capital for more profitable deployment."

Just what that "more profitable deployment" will look like was indicated by Father William Hogan, SJ. This gentleman, ensconced at the Jesuit Fordham University in New York City, is the reputed leading authority on the U.S. steel industry. Hogan predicted a period of protracted growth for steel and a shift in the industry's traditional markets. Demand from the auto industry will be permanently depressed, because of the "energy crisis" and the production of lighter automobiles. The one bright spot for the steel industry, according to Father Hogan, is the coal gasification business—mining equipment, coal slurry pipelines, etc.—which is going to take up a growing amount of U.S. steel production. Father Hogan predicts that U.S. coal production will rise to 1 billion tons a year from the current 600 million ton level before long. Father Hogan works closely with the U.S. Steel Corp. and in some quarters is known as an apologist for "Big Steel's" worst policies.

### **CREDIT**

# How Volcker produced a 20 percent inflation rate

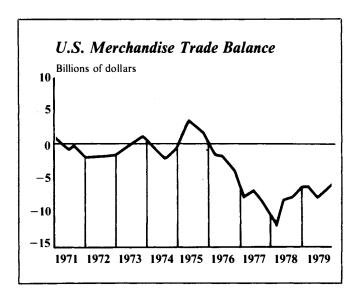
Despite Volcker's Oct. 6 vow to restrain inflation by restraining the money supply, the rate of inflation has remained at 14 percent, and inflationary credit growth has gotten worse, not better. Even if the oil-producing countries do not raise prices to the \$30 per barrel predicted for the Dec. 17 meeting of the Organization of Petroleum Exporting Countries, the U.S. economy is set for the worst inflation in the post-war period. This is the direct result of the Federal Reserve and administration's actions of the past two months.

All talk of fighting inflation to the contrary, Washington's actions deliberately promote inflation in the following ways:

- 1. High interest rates force credit away from productive activity and into speculation, including inflation-inducing speculation on secondary real estate markets, in commodities, and gambling investments.
- 2. High interest rates themselves add a gigantic sum to the interest bill of households, corporations, and the U.S. government.
- 3. The industrial shutdowns in steel, rubber, and other basic capital-goods industries are calculated to maintain rising prices, no matter how low demand for these products falls.
- 4. The rise in energy prices which the administration demand will push a further round of inflation through the economy.
- 5. Eliminating the dollar's reserve-currency role will force higher interest rates at home.

# Forcing credit into speculation

The general public is under the impression that money is tighter than it has been since the war, because the entire brunt of Volcker's credit-crunch has been directed against consumers and small businesses,



including farmers. November's spectacular drop in auto sales did not take place because consumers decided to not buy cars, but because financing for dealers' inventories and consumer purchases dried up immediately after Volcker's announcement of a credit crunch. Chrysler's sales fell by 40 percent, against 20 percent for the industry as a whole—despite a \$300 per vehicle rebate—because Chrysler could no longer obtain financing for its dealers, not because Chrysler cars suddenly became less attractive than Ford or General Motors cars. Unable to issue lower interest IOUs known as commercial paper, Chrysler could no longer finance its dealers or car buyers.

The Fed ordered bankers to institute what is called "non-price rationing" (no money no matter how much the borrower will pay) upon consumer and small-business loans. Although precise data are not yet available, it is evident from the sharp drop in October retail sales—a 3 percent drop after inflation—that the reduction has been drastic. Auto dealers around the country report that banks will either refuse to finance auto loans at all, or finance only large-ticket, shorter term loans, while finance companies are unable to raise funds at all.

The 8 percent drop in housing starts in October from September demonstrates how dangerous the condition of savings banks has become. During that month, thrift institutions lost \$1.4 billion in deposits—the worst month ever. Nationally, the savings banks receive on average 9 percent interest on their existing investments in mortgages and bonds, but must pay more than 12 percent for short-term funds to replace the lost deposits. As a group, the savings banks cannot long survive.

However, money is pouring into the most inflationary forms of short-term credit, and the Federal Reserve has imposed no restrictions whatever on this side of the credit system.

• During the past two weeks, money supply growth

has taken off. It rose by \$3.0 billion and \$1.3 billion in each of these weeks respectively.

- Much of the money supply growth is due to extremely generous injections of Federal Reserve credit into the banking system. Banking reserves, the base on which banks generate new loans, have grown by \$1.4 billion since Volcker's austerity plan came into effect. (Of course, after the alleged discovery of a \$4 billion "error" in the Fed's money supply data, attributed to New York's Manufacturers Hanover Trust, all numbers issued by the Fed may be suspect.) By the Fed's own figures, however, money supply is ballooning.
- Banks are channeling these reserves away from business loans and into inflationary, money market fluff, including financing of stock, bond, and commodities markets purchases. During the Fed's last reporting week, business loans fell by \$550 million, while total loans rose by \$800 million—a \$1.3 billion shift away from industry and into speculation.
- Money is also flooding into short-term (30 to 90 day) paper investments of all kinds. "Money market funds," which take investor's money and place it in shortterm paper, have run a land-office business since Oct. 7; their assets have ballooned by over \$14 billion, including \$3.7 billion during the last week in November.

Speculators who are looking for short-term gains in secondary real estate markets (buying and selling of existing buildings at higher prices) or other similar markets are untroubled by higher interest rates. Volcker's policy has not only left them unscathed, but placed the nation's credit resources at their command! Of course, elimination of the nation's personal income—the drop in living standards Volcker has sworn to bring about—will ultimately cause the collapse of these marekts, since no consumers will present themselves to buy houses at marked-up prices. In the meantime, the Fed is setting the economy up for a worse crash, by encouraging an inflationary binge.

Debt already occupies more than one-sixth of the total Federal expenditure, and about one-quarter of all household income after tax. The total indebtedness of the U.S. economy is more than \$3.5 trillion. Since Oct. 7, interest rates have risen by more than 3.5 percent adding \$100 billion to the interest expenses of business, households, and government. That is about as much as America's annual oil imports bill! Business will pay an additional \$40 billion in debt service, which must be tacked onto prices. Added to prices, this will push the inflation rate up by about 2 percent. Households will pay an additional \$25 billion, which must come out of necessary expenditures. It will aggravate the drop in personal income, already falling at a 10 percent annual rate in September, before the Volcker package came through.

Member Bank Reserves	
	es of Daily Figures, s of dollars)
June	40,105
July	40,900
Aug.	40,687
Sept.	40,958
Oct.	42,423
Nov. 28 (week ending)	42,944

U.S. Steel's announcement of 13,000 layoffs prepared the announcement of a 2.6 percent price increase for basic steel products. The company's strategy-detailed in an August, 1979 report prepared by the stockbrokers Paine Webber Jackson Curtis—is to reduce steel production faster than demand falls. Since 14 percent of all steel consumed in the United States goes to the auto industry, the bottom is about to drop out of steel demand. According to the insipid formulas peddled by Washington economists, this should moderate steel prices. Not so. The game is rigged.

The same applies to all of the basic industries. Overall, the index of basic materials prices rose by one-fifth in the year to November, from an index-level of 250 to over 300. The accompanying chart shows that production in non-ferrous metals, including copper, aluminum, lead, and zinc, fell by approximately the same amount, In all these industries, and others such as rubber, capacity reductions are underway that will reduce capacity faster than the depression reduces demand. The 20 percent annual rate of increase of basic materials prices, which pushes up the overall rate of inflation, will continue.

The administration's adventure in Iran—unless counteracted—will produce a rise in the OPEC oil price to \$30 per barrel at the Dec. 17 ministerial meeting of that organization in Venezuela. As a result, America's oil import bill will rise by more than \$35 billion. Because energy prices are passed on through the economy, adding to the cost of manufacturing and transportation at every point in the production and distribution cycle, the effect on the economy will be much greater than the simple cost, particularly if the price of coal, natural gas, and other energy sources rise correspondingly. At minimum, the OPEC price rise will add 3 percent to the inflation rate during 1980, and more if other energy sources also rise in price.

Most of the Treasury and Federal Reserve arguments in favor of eliminating the dollar as a reserve currency do not appear in the press most Americans read. They argue falsely that since the dollar has received such a beating on the foreign exchange markets-due to their incompetent policies-it must be thrown overboard as a reserve instrument. What they do not say is that foreign governments hold \$100 billion of United States government securities, as the most convenient way of holding their dollar reserves. Liquidation of these holdings—as foreign governments cease to keep dollars in their reserves—would devastate the market in U.S. government securities. This year, the government only raised \$28 billion on the credit markets to meet its deficit. Next year, the federal government will have to spend an additional \$25 billion on unemployment compensation and social security—because of the avalanche of layoffs—and will lose at least \$30 billion in tax revenues to the decline in economic activity. Under the most favorable—if they can be called that—conditions, the Treasury's deficit will rise to \$80 billion, or where it was in 1975 at the height of the recession. Under worse conditions, the deficit could rise well above \$100 billion. If foreign governments dump their holdings of U.S. securities—and they dumped almost \$10 billion in the last six weeks—the Treasury will have to raise that much additional cash by borrowing. The combined effects of higher deficits at the federal (not to mention state) level and the liquidation of foreign holdings of U.S. government debt will add a staggering 20 percent to total credit demand next year—and push interest rates up even higher.

There is a solution to this mess: If America acts with its European allies to create the gold-backed international monetary system Europe wants, as Lyndon LaRouche proposes, the dollar will rise back to its pre-1973 value.

In summation, Volcker has provoked an inflation rate of no less than twenty percent—counting only those price increases already in the pipeline—and potentially much, much higher.

#### **AUTO**

# Trigger for collapse

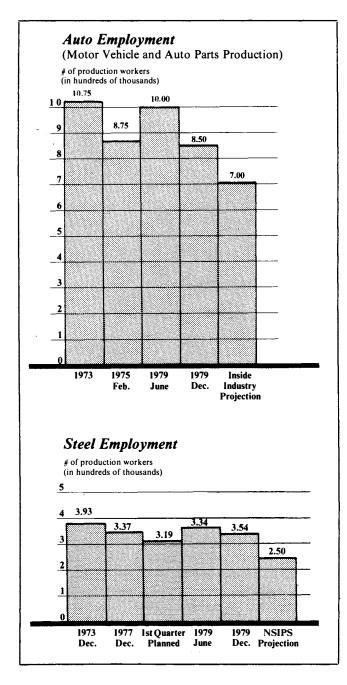
Auto layoffs now stand at 130,000 workers; profit losses for the auto industry during the third quarter totalled nearly \$1 billion dollars; and production levels are at the lowest point in 15 years and expected to go lower still.

Moreover, not just financially troubled Chrysler Corporation, but all of the Big Three automakers have slashed their December production below last year's levels: GM by 18 percent; Chrysler by 28 percent and Ford Motor Company by a staggering 49 percent. Output for the industry as a whole will be 25 percent below last December.

These developments were absolutely predictable. The Volcker credit crunch specifically targeted the heavily credit dependent auto industry, along with the housing sector. With consumers loans now available only at 18 to 25 percent interest rates, and with another oil hoax pushing the gasoline price into the stratosphere, auto sales have been dismal. During the first 50 days of the new model years, sales were off 18.8 percent from year-earlier levels.

The full dimensions of the auto collapse are indicated by facts such as these:

- As of Nov. 1, the auto industry had on hand an inventory of 1.75 million unsold cars—the largest inventory ever recorded on that date. Even large dealer rebates are not moving the 1980 models out of the dealers showrooms.
- Nearly 500 car dealerships have closed down in the 1979 model year that ended Sept. 30. The current profit on the sale of a \$4000 car—a slim \$110—is not enough to keep most dealers in business.
- In the week ending Nov. 30, 13 out of the industry's 43 U.S. assembly car plants were "temporarily" closed.
- On Nov. 30, the Ford Motor Company announced 30,000 additional "temporary" layoffs. This brings to



more than 40,000 the number of temporary layoffs. In addition, the Big Three auto-makers also have 100,000 production workers on indefinite layoffs, up from a 60,000 level in mid-August.

- Third quarter auto profits were off 66 percent at General Motors and 96 percent at Ford. Chrysler reported a whopping \$453 million loss, and Ford has announced that it will show a \$1 billion loss on its North American passenger car sales for 1979.
- Fleet sales of large cars and trucks to auto leasers such as Avis and Hertz and industry car fleets are down 30 percent from year-ago levels and expected to fall further.

The shutdown in auto this December is the worst in 15 years. It is hardly a seasonal downturn. In the worst months of the 1974-75 recession—the January-March period of 1975—there were approximately 200,000 auto workers on layoff out of a total of roughly 1.1 million workers employed in auto, truck, trailer-truck and partsproducing plants. There are already 130,000 layoffs in effect-two thirds of the January-March 1975 leveleven before the full force of the Volcker depression has

The auto collapse will have a tremendous ripple effect on the entire U.S. economy. The U.S. auto industry, along with its service and feeder industries, accounts for one-sixth of total Gross National Product and one-sixth of total U.S. employment. Its demise means a spread via the "ripple effect" to all other industries. The auto sector consumes 20 percent of all U.S. steel produced; 50 percent of all iron; 65 percent of rubber and more than 15 percent of U.S. glass production. Moreover, 18 percent of state tax revenues, upon which the welfare of state governments depends, comes from "taxes placed on motor vehicles," according to the Motor Vehicle Manufacturer's Association.

#### STEEL

#### End of the line

Close to 35,000 steel layoffs have been put into effect or announced since last June. This 10 percent reduction in the industry's workforce has hardly begun to reflect the impact of the Volcker credit crunch and the collapse of orders from the auto industry, steel's biggest customer. In addition, the bulk of the steel layoffs announced to date stem from the permanent closing of obsolete steel capacity, which is not going to be replaced.

The bombshell dropped by U.S. Steel on Nov. 27, 15 plant closings and 13,000 permanent layoffs, is just one piece of an international pattern of steel shutdown. Just three days after U.S. Steel's announcement, the British Steel Corp. (BSC) unveiled plans to axe 52,000 steel jobs (union estimates of the job losses range as high as 60,000), or more than a third of the workforce in BSC's basic steel and iron operations. Those British steelworkers who are lucky enough to find new employment could find themselves making anything from Harrier jets to golf clubs—as has literally been the fate of laid off British steelworkers over the last several years.

In continental Europe, the "Davignon plan" to shrink European steel capacity by 25 percent is proceeding apace, with another 5,000 layoffs announced by the French firm Usinor Nov. 30.

The strategy behind the Davignon plan, the big shutdown at the British Steel Corp., and U.S. Steel's only slightly less sweeping "rationalization" program is to reduce world steel capacity, hike prices, and disperse the steel workforce into labor-intensive, make-work jobs or the defense industry. This is the cartelization policy carried out by the Nazi regime in the 1930s, writ large.

On this side of the Atlantic, U.S. Steel's decision to padlock 15 plants or parts of plants is the final stage of a deliberate disinvestment process. The plants targetted by U.S. Steel should have been shut down years ago. U.S. Steel's 4,300-worker Youngstown, Ohio plant runs on antiquated open hearth furnaces, and has one mill driven by a steam engine installed in 1908:

U.S. Steel is acting under the leadership of David Roderick, also a board member of Morgan Guaranty Trust, the bank that is trying to grab a controlling stake in Krupp, the German steel giant, in order to asset-strip it, too. U.S. Steel is accelerating its "diversification" drive. The policy of "diversifying" out of steel production into fast-profit areas was initiated under the direction of the late chairman of the company, Edgar Speer, who at his passing last summer was hailed as the last of the great "steel men." Since 1977 investment by U.S. Steel in the chemical business has quintupled to \$500 million. During that same period U.S. Steel-also a top-ranking holder of U.S. coal reserves and leading supporter of coal-based energy for the U.S.—has been involved in a joint project with the Department of Energy to develop coal gasification methods, the inefficient energy production process pioneered by the Nazis.

U.S. Steel's plans to divest its steel operations have been long in the making. Similarly, the year-end shutdown of Jones & Laughlin's 1,400-man Brier Hill works, also located in Youngstown, has been in the planning stages since LTV's Jones & Laughlin merged with the bankrupt Youngstown Sheet & Tube in 1978.

In a matter of months there will be another ratched in steel employment and production reflecting the current 25 percent cut back in auto production from last year's levels and the near 10 percent drop in construction activity. In the last recession, the real crisis hit the steel industry after a lag in 1977-78, and then the crisis was deeper than that suffered by any industry: 56,000 unemployed workers, 17,000 of whom were never rehired.

Steel industry economists are now projecting a 10 percent total drop-off in steel consumption in 1980, which will translate into at least another 10 percent cut in the workforce over the year (probably more, because the production cuts will be made at the industry's oldest, most inefficient plants, which employ more than their share of the steel workforce). But even a 10 percent cut in consumption is a very conservative projection.

In September-before the Volcker measures were

announced—steel shipments to the auto industry totalled just 1.3 million—34.8 percent below last year's level. The shipment numbers for October and November—when the auto industry began to cut back in earnest—were much worse.

Meanwhile, the auto industry's share of steel shipments dropped down to 15.6 percent in September. In 1978 automakers took 21.7 percent of all steel deliveries shipped.

Steel shipments and production have not nosedived by a comparable amount as yet, because of increased shipments to steel service centers, industry middle men who in turn sell their inventories to final users of steel. But with demand from auto, consumer durables, the capital goods industries, and construction drying up, the steel service centers are now running down their inventories and cutting back their new orders to the steel industry.

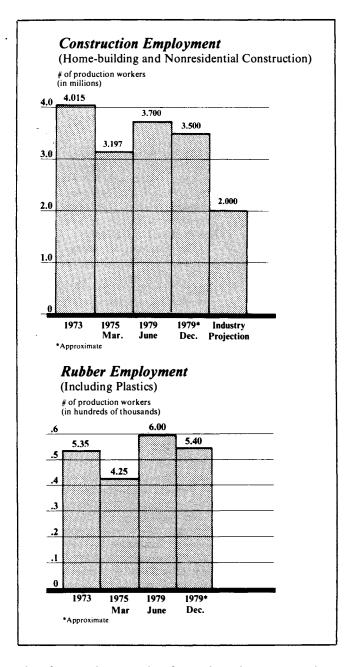
# **CONSTRUCTION**

# "Down so long"

According to a spokesman for the Mutual Contractors Association, the Washington-based association of large industrial contractors, the heavy construction industry is already so depressed that the Volcker credit crunch won't have that big an impact.

Things can and will get a lot worse, however. In late November, Mr. Charles Parker, project director of the National Association of Minority Contractors, reported that all of the projects of his association's members in the Washington, D.C. area had been put off until the first quarter of 1980. A similar situation existed around the country. "If interest rates come down by February or March, then our members say they'll go ahead with the projects. If not..." Mr. Parker is projecting a 15-16 percent official unemployment rate in the construction industry in 1980, and a real unemployment rate much higher.

Figures released in early December show that the volume of new construction contracts, for both residential and nonresidential construction, tumbled by 9 percent in October from October 1978. The big dent was caused by a staggering 41 percent plunge in so-called nonbuilding construction, due entirely to the moratorium on nuclear plant construction. Contracting for nonresidential construction rose a nominal 14 percent in October—a decline in deflated terms. However, industry economists note that the effect of the Fed's tight money policy won't begin to impact industrial plant construc-



tion for another couple of months, when corporations make the decision to scrap their capital investment plans.

In October new housing starts came in at a seasonally adjusted annual rate of 1.76 million units, down from 1.91 million in September. The home building industry is now projecting a drop to 1.1 million units in 1980, equal to the nadir of the 1974-75 home building depression.

One of the earliest effects of the Volcker measures was to drive mortgage rates up as high as 14 percent in states like California where there are no state usury laws in effect. A study on housing affordability prepared by the NAPM shows that with 14 percent mortgage rates, only 8 percent of the nation's households can afford to buy a \$65,000 home with a ten percent down payment.

In the 22 states where there are usury laws in force, mortgage money has simply dried up.

The unemployment picture for the industry is bleak. When the Volcker measures were first announced, the NAHB predicted that the result would be the layoff of 1.5 million construction workers, including 675,000 workers in the home building industry alone (3.7 million workers were employed in contract construction last June).

#### RUBBER

# A flat year ahead

Approximately 10 percent of the workforce in the rubber industry has been laid off over the last six months. At Goodyear, 3,000 production workers out of 30,000 are on furlough; 1,900 Firestone workers out of 18,000 are out; and Uniroyal has laid off 1,400 of its 15,000 hourly workers and 750 or 9 percent of its white collar workers. Mansfield, Mohawk, and a number of the smaller companies have been shutting down unprofitable plants and are headed out of business for good. Sources in Detroit report that Uniroyal—the Chrysler of the rubber industry—will not last past next June. Uniroyal employs 3,500 workers in the Detroit area alone.

As in steel, the situation is even worse than it looks. The above layoffs and closings reflect a permanent shutdown of "excess capacity" by an industry which is furiously trying to adjust to permanent depression conditions, especially in the auto industry. The "big three" companies are shutting down older capacity which still produces non-radial tires.

Yet, the "ripple effects" of the current 25 percent shutdown in the auto industry—which accounts for approximately 25 percent of rubber's market—are still to be felt. The Rubber Manufacturers Association in Washington is projecting a "flat year" for tires in 1980. Both the original equipment business (sales to the auto industry) and the replacement business are expected to be off by at least ten percent. "Trends in personal income are one of the key variables we look at in assessing the outlook for the industry," says Mr. Thaddeus Malesh of Firestone. The replacement business accounts for threequarters of the industry's tire sales, and with real income levels dropping precipitously, the rubber industry expects Americans to prolong the time before they replace the tires on their automobiles. The one hope of the industry is that by 1981 everyone's tires will be worn out and there will be a good year for the replacement business.