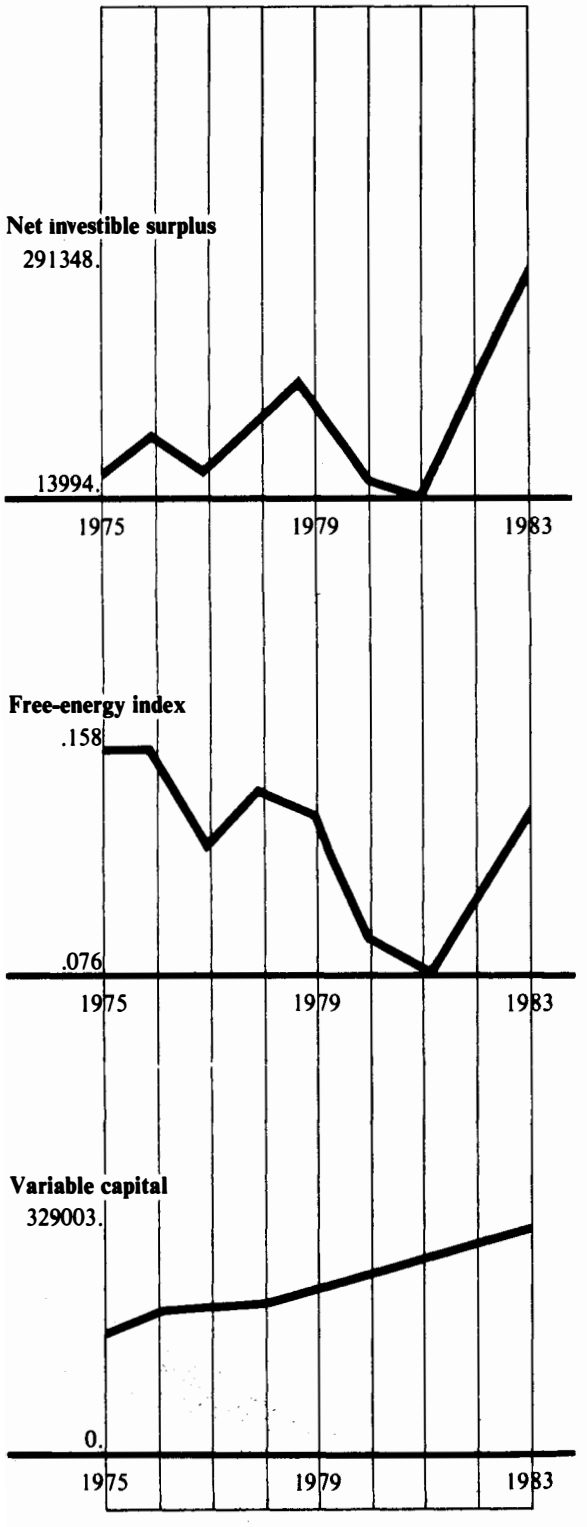
Graphs 1, 2, 3:

The industrial impact of stabilized rates of increase of oil prices on the total U.S. economy
(note different scales)



Why the economy major increase in

by David Goldman

The full magnitude of the increase in defense spending in the 1981 Federal Budget will not be known until several months of savage wrangling in Congressional committees are over. However, it is apparent that the administration and Congress are, at the moment, decided on a major rise in defense spending. The desirability and feasibility of this course of action are becoming the focus of the national debate over America's strategic posture, which will be determined in large measure by current decisions on defense spending policy.

An important group of defense planners, among them some prominent members of the International Institute for Strategic Studies, are warning that a "quick fix" for the defense sector "would repeat the errors of the *Blitzkrieg* economy" of Nazi Germany. *EIR* simulated a defense buildup using the Riemann-LaRouche computer econometric model, and determined that this warning is accurate. The U.S. economy cannot sustain a rise in defense spending of anywhere near the proportions required to restore parity with the Soviet Union in the near term.

Proposals for increasing military spending range from the 3.3 percent rise in constant-dollar spending (from about $130 billion in FY 1980 to $142 billion in FY 1981), to an American Enterprise Institute study proclaiming that spending would have to reach $500 billion by 1985 in order to match what the Soviets have done. Since the Pentagon currently has $85 billion available in unspent authorizations, and Congress will doubtless amend the administration's proposals upward, no accurate prediction can be made of the actual level to be anticipated. For purposes of projection, the model was programmed to examine a $30-billion per year rise during the next four years, a figure in the middle range of proposals now circulating.

Examination of military spending is one of those cases which demonstrate, with no ambiguity whatsoever,

can't sustain a arms spending

the atrocious fallacies inherent in the concept of Gross National Product, and the hopeless futility of econometric models employing GNP projections. The simple question concerning defense output is, can sufficient tangible product of the right kind be deducted from the productive sectors of the economy, and diverted to a dead-end economic activity?

Defense spending, of course, contributes nothing to the reproduction of the physical economy. It merely consumes. Under some circumstances the spinoff effects of military R and D have a profoundly beneficial impact on other economic sectors. In addition, the expansion of the capital goods sector for military purposes may create economies of scale which benefit the economy as a whole. However, there is no reason to suspect such developments in the case of a two- to three-year crankup of existing capacity for military purposes. In any case, these are the factors which must be considered.

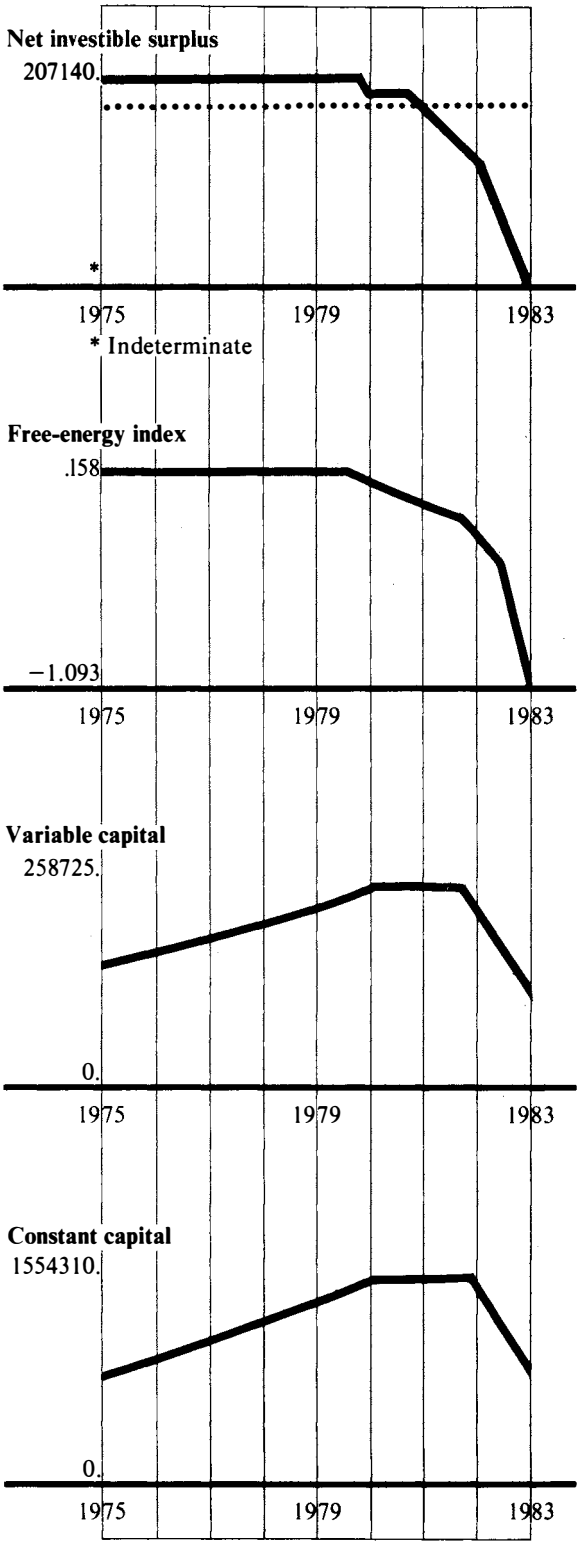
The Riemann-LaRouche model, which includes a 25-sector input-output capability for simulation of the behavior of the U.S. economy, is uniquely qualified to answer questions of this sort. For the present simulation, it was assumed that the $30-billion per annum increment in defense spending would be assigned to the sectors with the highest proportion of defense shipments: (by Standard Industrial Classification) metals, metal products, transportation equipment, electrical equipment, non-electrical machinery, and instruments. The $30 billion assigned to those sectors reflect steel plate, copper wire, specialty steels, forging facilities, bearings, silicon chips, machining capacity, and so forth, which would then not be available to other sectors, proportionally according to their capital-intensivity.

For the total economy, this reads out as a $30-billion per year transfer among sectors, and a $30-billion per year (cumulative) reduction of surplus tangible product available for reinvestment (past current payments to the

Graphs 4-7:

The industrial impact of a $30 billion rise in defense spending on the total U.S. economy

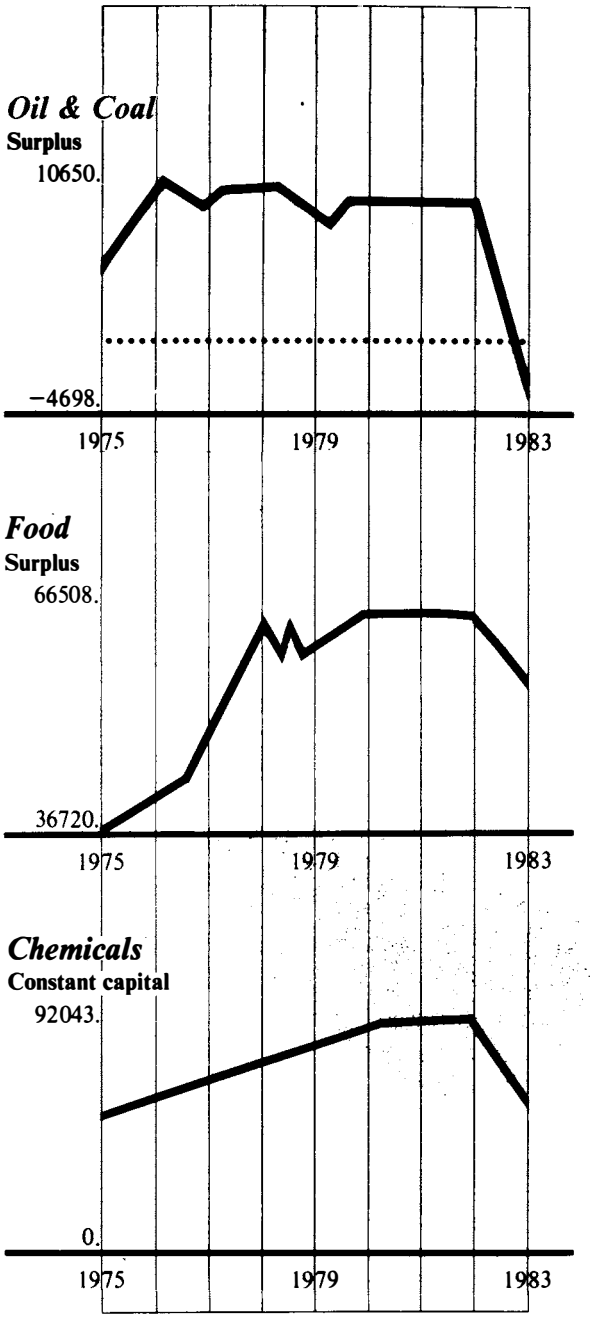
(note different scales)



Graphs 8-14:

The industrial impact of a $30 billion rise in defense spending on sectors of the U.S. economy

(note different scales)



goods-producing labor forces and fixed and circulating capital costs).

Since it is not yet known precisely what defense goods will be produced, it was possible to assign the transfers within the economy only on the basis of general criteria associated with past conditions. This procedure is deemed valid because the administration promises few structural changes in American armaments. It is further assumed that, under the terms of the Defense Production Act of 1951, defense orders will have priority in allocation of raw materials, capital goods, and labor supply—i.e., that the administration is really serious about making the defense buildup happen. For reasons elaborated in detail in the section of this report dealing with the state of American military research and development, it was not considered appropriate to consider adjustments in productivity of different sectors arising from employment of new technologies.

These assumptions reflect *EIR*'s best knowledge at pesent, and are subject to considerable revision. However, the conclusions concerning the general behavior of the economy under conditions of the kind of defense effort now proposed will stand.

The basic conclusion of the study, contained in the accompanying series of computer-generated graphs, is that by 1983, the demands of the defense sector will so disrupt other sectors that defense production itself will begin to fall. In late 1982, the economy will enter the kind of crisis that Germany experienced in 1938-1939, with well-known consequences. During 1983, even those industries which benefitted earlier will begin to contract sharply, and fall below their 1980 production levels by the beginning of 1984.

The 'neutral' scenario

As *EIR* has emphasized in earlier discussions of computer econometrics, no model can "predict" economic developments; at best it can project the consequences of a certain mix of economic policy decisions. Therefore, the impact of the cited rise in defense spending was projected against a "neutral" background, reflected in Graphs 1 to 3. Assuming energy price increases in the range of 30 percent per annum (compared to 100 percent in 1979), the economy would—all other conditions held constant—show a significant rise during the period 1980-1984. Graph 1, of investible tangible surplus under the "neutral scenario," shows a modest increase from $139 billion per year at the end of 1979 to almost $300 billion at the end of 1983. Graph 2, measuring the "free energy" of the economy (S' divided by the combined expenditures for capital and labor during each annual period), shows a modest recovery as well—although not back to pre-1974 levels. Finally, the variable capital measure (Graph 3), the tangible product allocated to the consumption of

the goods-producing labor force, rises somewhat faster during the years 1979-83 than during 1975-79.

In short, the background is modest growth, with neither major disruptions nor major improvement. The improvements shown are somewhat exaggerated, because the data employed are in current dollars, and projections carry along the inflationary bias of preceding years.

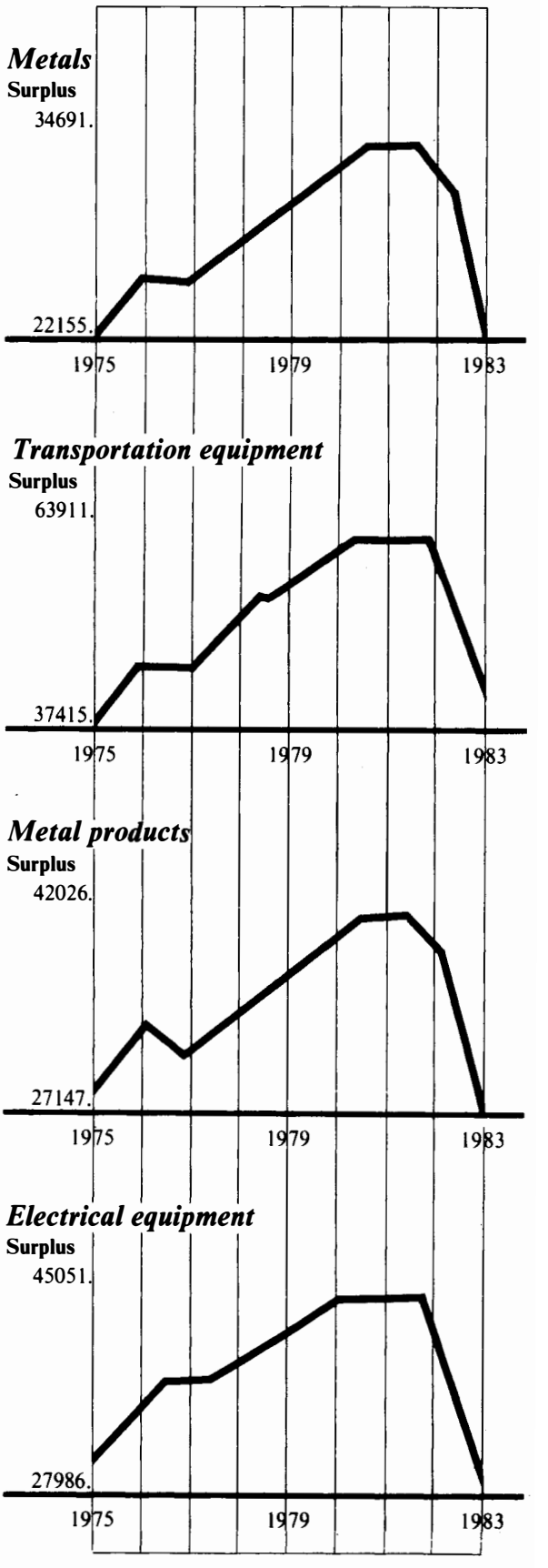
By contrast, Graphs 6 and 7, showing variable capital (factor cost) and constant capital (user cost) under the defense buildup scenario, indicate major economic disruption. In both cases, economic growth (in current dollars) plateaus during 1980-1982; in real terms, this is a falloff of more than 10 percent per year. During 1982-1983, both categories drop back sharply to the mid-1970s level, a drop which, again, is much sharper in deflated terms.

Graphs 4 and 5, showing the investible surplus of the total economy, and the "free energy" index for the total economy, indicate a crisis of uncontrollable magnitude behind these numbers. In fact, assuming a continued high level of defense output, the graphs—Graph 4 becomes indeterminate—indicate the economy would not be able to reproduce itself during 1984, in a classical breakdown crisis. This is similar to the 1938-1939 crisis in the German economy, which Hitler solved by appropriating the Austrian, Czech, Dutch, and French economies in rapid succession.

Turning to the behavior of the individual sectors, the mechanism becomes more comprehensible. Graphs 8 to 10 show the behavior of the oil and coal, chemicals, and food processing Standard Industrial Categories, which will suffer from the diversion of tangible product to the military. Graphs 11 to 14 show the behavior of the Metals, Metal Products, Electrical Equipment, and Transportation Equipment sectors, which will initially benefit from increased defense spending.

In the first set of graphs, roughly the same pattern prevails, although with different intensity. In all three cases, sectoral surplus (output above and beyond operating expenses measured in consumption of tangibles) levels off in current-dollar terms, i.e., falls in real terms. Food processing and chemicals, Graphs 9 and 10, fall back sharply starting in 1982, although less rapidly in the former than the latter (reflecting the lower capital-intensity of the food sector). Graph 8, showing the oil and coal SIC, indicates a disaster of much worse proportions, reflecting the direct competition of this sector for capital goods, especially shipbuilding and drill-rig manufacturing facilities, with the defense sector. The behavior of these SICs is selected from among 18 "non-military" categories.

Graphs 11 to 14, showing four of the six "military-related" sectors, are even more significant. Predictably,



they show a spectacular boom; transportation equipment, electrical equipment, metal products, and metals, all increase output dramatically. However, during 1981, the curves suddenly level off, and, during 1982, fall off sharply. By the end of 1983, their output is below the level experienced before the rise in defense spending. Industrial sectors, on which these depend, will be so disrupted that necessary inputs will not be available.

This order of problem is anticipated by some Pentagon planners, who warn that a strict allocation system prioritizing shipments to the military might have a perverse effect on defense production by jeopardizing the health of the civilian sector.

It is clear from the above analysis that "Gross National Product" analyses of the type widely circulated by Data Resources, Inc., are meaningless with respect to this type of problem. Using Keynesian demand functions, DRI and other conventional econometric models are cranking out estimates for GNP, employment, and inflation under different assumptions concerning the volume of military spending. Such models are not capable of relating the redistribution of tangible output to the economy's capacity for future production.

The worst case of such thinking appeared in the *Wall Street Journal* Jan. 28 under the byline of University of Michigan professor Paul McCracken, former chairman of President Nixon's Council of Economic Advisors. McCracken argued that between 1958 and 1968, while the nation spent a considerably higher portion of GNP than presently on defense, overall inflation and unemployment were much lower than during the late 1970s, when the proportion of GNP spent on defense fell sharply. Post hoc ergo propter hoc, Prof. McCracken argues that the United States can afford to increase defense spending by 17 percent per year through 1985, at which point 8.6 percent of GNP would again go to defense.

What the Republican economist does not mention is the composition of GNP in tangible terms. In 1958 half of the nation's workforce was employed in tangible-goods production. Now, only one-third is. Life insurance companies, shopping malls, and gambling casinos may add to GNP, but they are no use whatever in producing military hardware. Fundamentally incompetent measures of economic activity such as GNP can lead, fairly directly, to fundamentally incompetent policy decisions on the most important questions of policy.

The origin of the Riemannian model

The Riemannian economic model was developed by a team of specialists under the direction of contributing editor Lyndon LaRouche. The model's computer application was announced on April 25, 1979, after a trial run successfully proved the model's unique predictive power.

That first major test of model capabilities involved statistical data from the 1968-73 period. The computer, on the basis of that data, was asked to predict what would occur over the 1974-78 period under conditions of a 400 percent increase in the price of oil. The "LaRouche model" was able to produce charts and diagrams describing the behavior of various economic parameters. The results were virtually identical with what occurred in fact during the 1974-78 period.

In principle, the LaRouche model has existed since the mid-1950s. From that period, LaRouche has been associated with a *causal method* of analysis which proceeds from the economy as a whole as the primary datum. LaRouche developed his approach with to solve the two major deficiencies of all presently employed national and world economic models.

First, no distinction, is made by other models between productive and nonproductive economic activity, where by productive, LaRouche's model defines a useful material alteration of nature resulting in tangible wealth.

Secondly, other models take inadequate or no account of qualitative changes in the technological base of the economy. The reason for this lack is that, since technology introduces "discontinuities" to the economic process, continuous models cannot accommodate technological changes.

LaRouche's model is "Riemannian" in precisely that sense. In Bernhard Riemann's 19th century discovery and description of the phenomenon of shock waves, he gave a specific example of the evolution of a physical "manifold" toward a point of discontinuity, with subsequent qualitative reordering of the manifold, retaining its integrity as a new type of physical entity. In LaRouche's model, technological change is seen to have economic shock-wave character in that general sense.