The business environment ahead... and how to handle it

D. Bruce Merrifield

The decade of the 1980s will almost certainly be a major watershed period in which many well-known companies will disappear or be restructured, and other new companies will emerge as industrial leaders. Moreover, the growth, and in many cases, survival of many U.S. businesses in the 1980s will be primarily determined by two interacting factors. One of these is economic and the other involves technology. The economic factor relates to an adverse synergism between former U.S. tax laws and chronically high rates of inflation, which together are causing many American companies to liquidate their fixed assets, often without conscious awareness that they are doing so.

The technology-related factor arises from a worldwide explosion in the sciences that has generated in the last 30 years some 90% of the current knowledge in physics, chemistry, engineering, and the biological sciences. As a direct result, much of the capital now invested in this country is invested in obsolete products and processes. It is important to understand both the risks and unparalleled opportunities that are associated with these two factors, and the manner in which they affect the marketing function.

For example, inflation must be seen as a direct tax on fixed assets, and a simplistic equation for "real retained earnings" illustrates the relationship:

[Return on equity (ROE)]	−	[Dividends paid out]	−	[Rate of inflation]	=	[Real retained earnings]
15%	−	7%*	−	10%	=	−2%

(* Represents the average payout for U.S. companies.)

The equation shows that a company reporting a solid 15% return on equity is actually eroding its assets in "real" terms when inflation is running at 10% per year, and when it is paying out 40–50% of its earnings in dividends and has minimal debt (2/1 equity to debt ratio). Many capital intensive businesses (steel, automobiles, tires, textiles, etc.) don't report even a 15% ROE and are liquidating their assets at 5–15% per year.

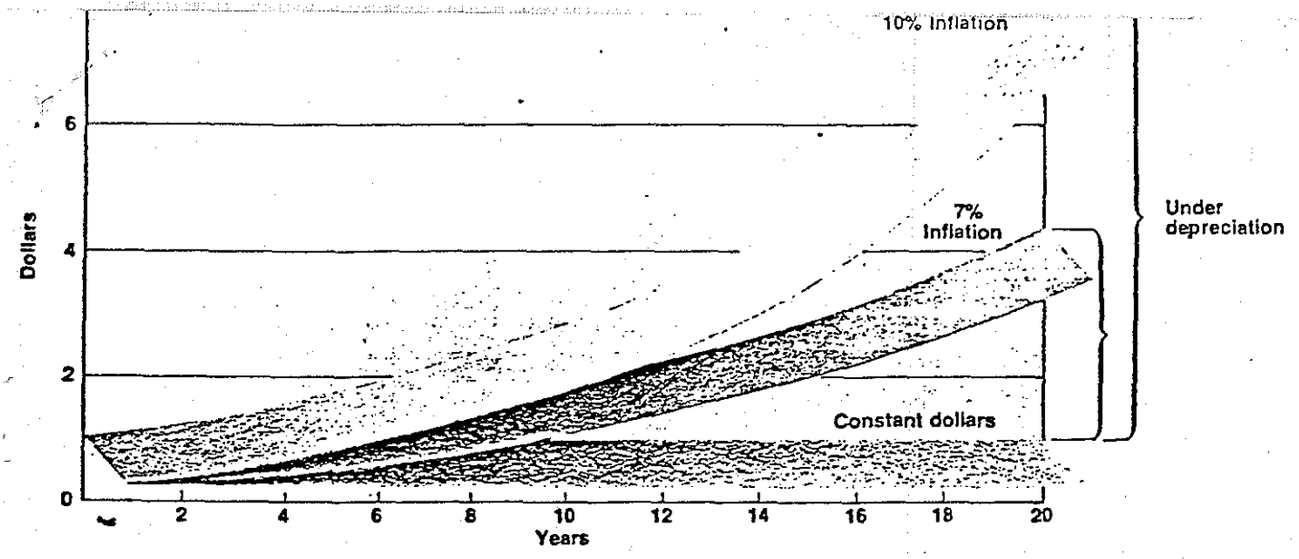
In principle, a company can reduce its dividend payout and/or leverage its assets (1/1 equity to debt ratio), but these strategies impact the market price and increase vulnerability to takeover. The net effect, therefore, is that tax laws that do not adjust for inflation provide rates of depreciation insufficient to reproduce the original assets at the end of their "useful life." Compounding the problem is that new technology is making assets obsolete long before their "useful life" is realized. The adverse synergism of these factors (inflation, tax laws, new technology) will likely lead to the demise of many well-known companies.

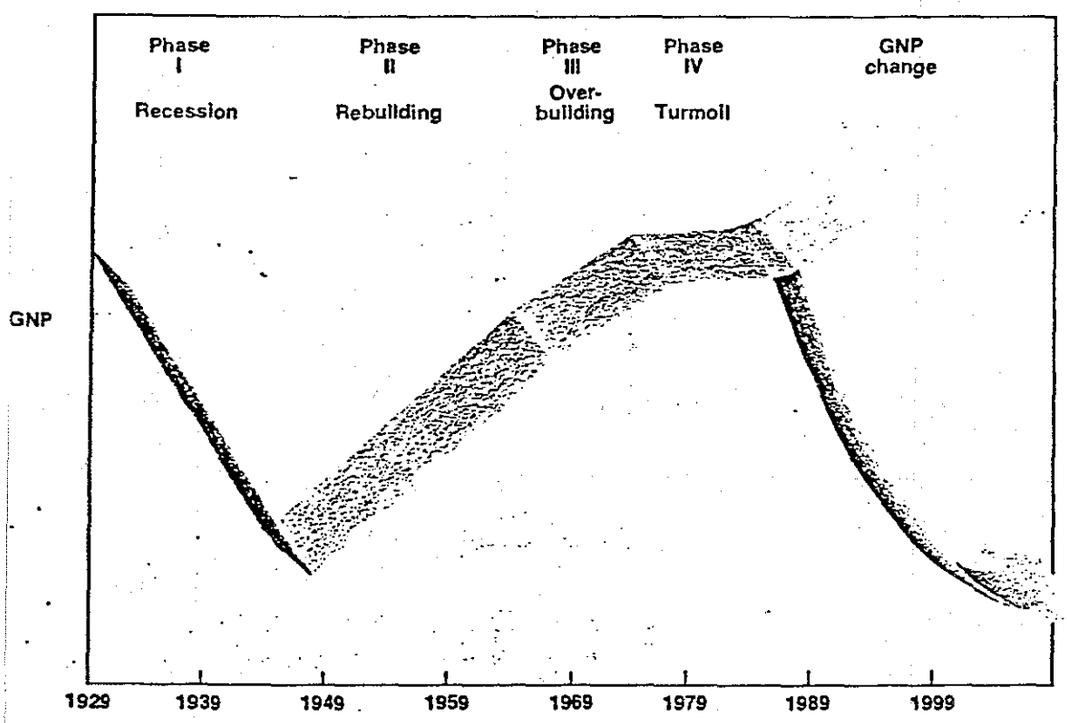
Let me illustrate the impact of inflation on depreciating assets by the following examples: $10 million investment in a manufacturing plant with a "useful life" of 20 years could (according to former tax laws) be recovered in depreciation allowances over that period. But at 10% inflation, the same plant would cost $80 million to replace. Moreover, the $70 million difference would not have been reserved. Instead the difference has been appearing on the balance sheet as false profits on which 46% taxes and 40–50% dividends will have been paid out. The new tax laws allowing more rapid rates of depreciation will somewhat mitigate the effects of inflation, but they only apply to new facilities now being built (Figure 1).

Therefore, the adverse political–economic climate that now exists for fixed-asset intensive operations has created a new set of business guidelines that can be summarized as follows: Given a policy of 2/1 equity to debt ratio and 40–50% dividend payout, any operation that has more than 60–70¢ of depreciating assets per dollar of sales cannot produce real retained earnings in a period averaging 10% inflation, and should be harvested or divested. The resulting cash flow should be allocated to either those types of businesses with appreciating assets and/or are "indexed to inflation" such as oil and gas, timber, land, financial and other services, distribution, etc.; or to low capital-intensive, high-growth, strongly proprietary (patented) products or processes with a high asset/turnover ratio.



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These options, however, may be unattractive for an established company since they necessitate radical changes in operating strategy. The anxiety involved in entering an unfamiliar business is multiplied by the reluctance to concede that the existing business may not survive, let alone grow. Good acquisitions carry a heavy premium in good will, and internally generated new ventures have had some notable failures. The dilemma is real.

There may be a logical explanation for this dilemma. In the early 1920s, Kondratieff first identified a 50-year recession–boom cycle, or "long wave," which at that time had persisted for 150 years and which seemed to characterize the capitalist economies. However, there was no apparent theoretical basis for these observations, and he was banished to a Siberian salt mine, since his predictions of periodic capitalist resurgence as well as collapse were not politically acceptable at the time.

Recently the M.I.T. economist J. Forrester rediscovered the same cycle. His data base comes from a "System-Dynamics National Model" built up in some detail from 15 major industrial sectors. Forrester identifies four phases in the 50-year cycle. The first is a 15-year recession period; the second is a 20-year massive reinvestment period; the third is a 10-year continued "over-building" period, and the fourth is a 5–10 year period of economic turbulence leading into the next recession (Figure 2).

This time it's different

However, it appears unlikely that a 1929-like depression will now or ever again recur. Although many well-known companies may not survive in their present form, we are seeing the emergence of new companies in new technologies at a rate that has never before occurred. Going back to 1929, the beginning of Phase I of the last Kondratieff–Forrester cycle, the economy was characterized by zero or negative GNP growth, high rates of inflation (10% per year), a low

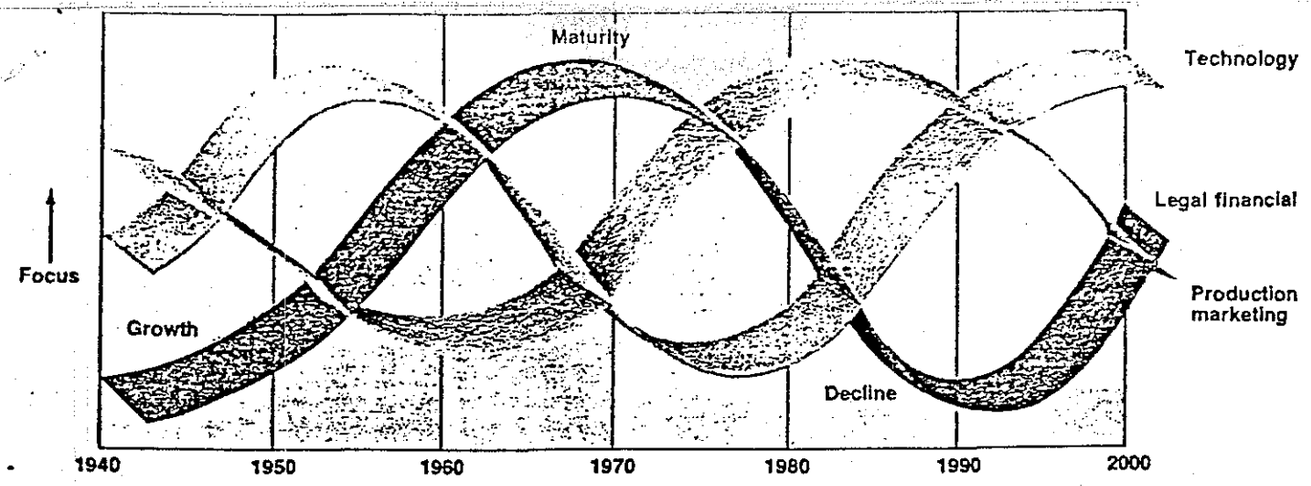


Figure 3. Management focus

return on investment (ROI) in capital intensive sectors, declining profits, increased debt, tightening credit, declining capital investments, high interest rates, and perhaps most importantly, over-capacity relative to worldwide demand. Moreover, the focus of management was no longer on production and marketing, but primarily on legal and financial aspects of business; and R&D budgets were both declining in constant dollars and were focused more tightly on short-term product optimization. Major new innovations tended to be discouraged or rejected. Management tended to be anxious and conservative. Plant facilities and equipment tended to have reached the limit of productivity for that state of the art, and justified little additional investment. The marketing function reflected these changes in decreasing budgets and diminished creativity (Figure 3). (This is a familiar syndrome some 50 years later.)

As the cumulative effects of over-capacity, cutbacks in investment, and conservative short-term focus management were felt, the world economies slid into depression. But a pool of underused new technology that had been accumulating for 30 years was now available to fuel a massive reinvestment in the capital sector. Management again looked to innovation, production, and marketing as the new technology resulted in much higher productivity and therefore decreasing inflation. The momentum of this second phase of the Kondratieff cycle continued beyond the point where demand and supply were again in balance (1965) to again produce a worldwide over-capacity in the basic industries. Moreover, these maturing technologies could no longer generate increased productivity to match rising costs, and inflation resumed. We are now in the final stage of the cycle with recession cycles deepening as many fixed asset intensive companies erode their assets in real terms.

The key factor in their self-liquidation is this inability to further increase productivity in obsolete facilities. The open-hearth furnace can no longer compete with the basic oxygen furnace, let alone with the new Swedish plasma technology. Even more significant is the fact that soon graphite-reinforced plastics that are stronger than steel, lighter than aluminum, and do not corrode or suffer stress fatigue, will further erode the metal markets. In fact, we can expect the new "engineering plastics" to progressively capture specialty markets that now use steel, aluminum, zinc, and copper, as an explosion in materials sciences provides an increasing array of cost/performance superior

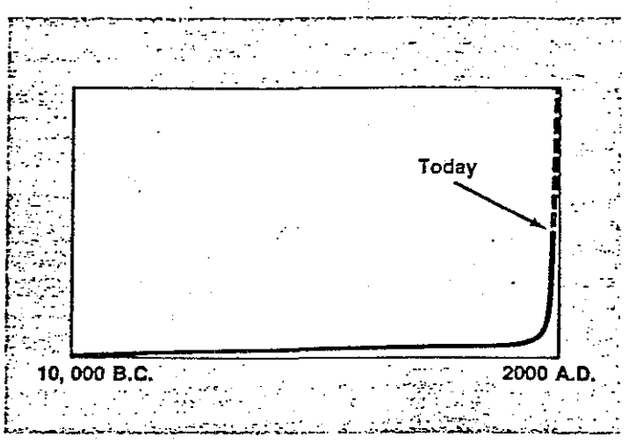


Figure 4. Technology explosion

options for many applications (Figure 4).

Similar revolutions are occurring in almost all areas of business. Another 30-year pool of underused technology has now accumulated that represents 90% of all knowledge ever developed in the sciences. This enormous pool of technology can be expected to spawn continually a proliferating array of new businesses that will be the IBM and Xerox of the next decade. For example, current work in biochemistry will see significant intervention into the learning process, memory, and the treatment of mental disease, as well as major progress in cure of viral diseases, including cancer. The life span will likely be extended many years, and genetic defects (diabetes, sickle cell anemia, certain forms of mental retardation) will progressively become correctable through genetic manipulations.

Electronics will tie the world together in "real time" through satellite and fiber optic communication systems, bringing electronic mail into our living rooms within a few years. Instant access to the Library of Congress and to other world data banks will become commonplace, producing an enormous growth in life-long continuing adult education, and introducing new dimensions to the marketing function for all businesses. Computer-aided design and optimal analysis theory will telescope engineering development time frames and further accelerate the demise of older facilities.

Equivalent revolutions are occurring in the area of energy and energy systems, the materials sciences, specialty chemicals, food sciences, packaging, and financial services.

These businesses will not only be high in growth rate, but will tend to be low in capital intensity and therefore much less vulnerable to inflation. Strong proprietary character will make them much more profitable because of their high asset/turnover ratios. Moreover, they will cause a progressive fragmentation of large market areas into many niche or specialty markets, each served by continually changing new products or processes.

The management of the future, therefore, is the management of change. Technology is the engine, and strategic planning is the guidance system. Marketing must function both as eyes and ears as well as in delivery. A disciplined process of selection from among this proliferating array of continually changing opportunities will become an increasingly important function.

A simplistic logic tree for doing this can be described in a three-step regime (Figure 5). Each of the questions has an expanded check list of critical factors designed to assess the probability of *commercial* success, once technical success can be demonstrated.

This "constraint analysis" has correlated with success in

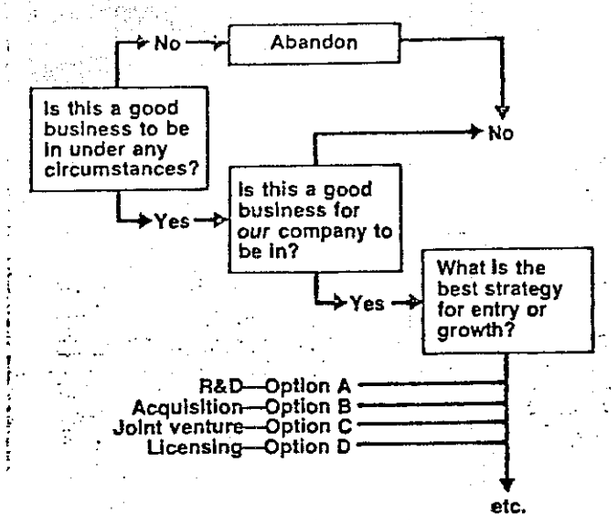


Figure 5. Strategic planning

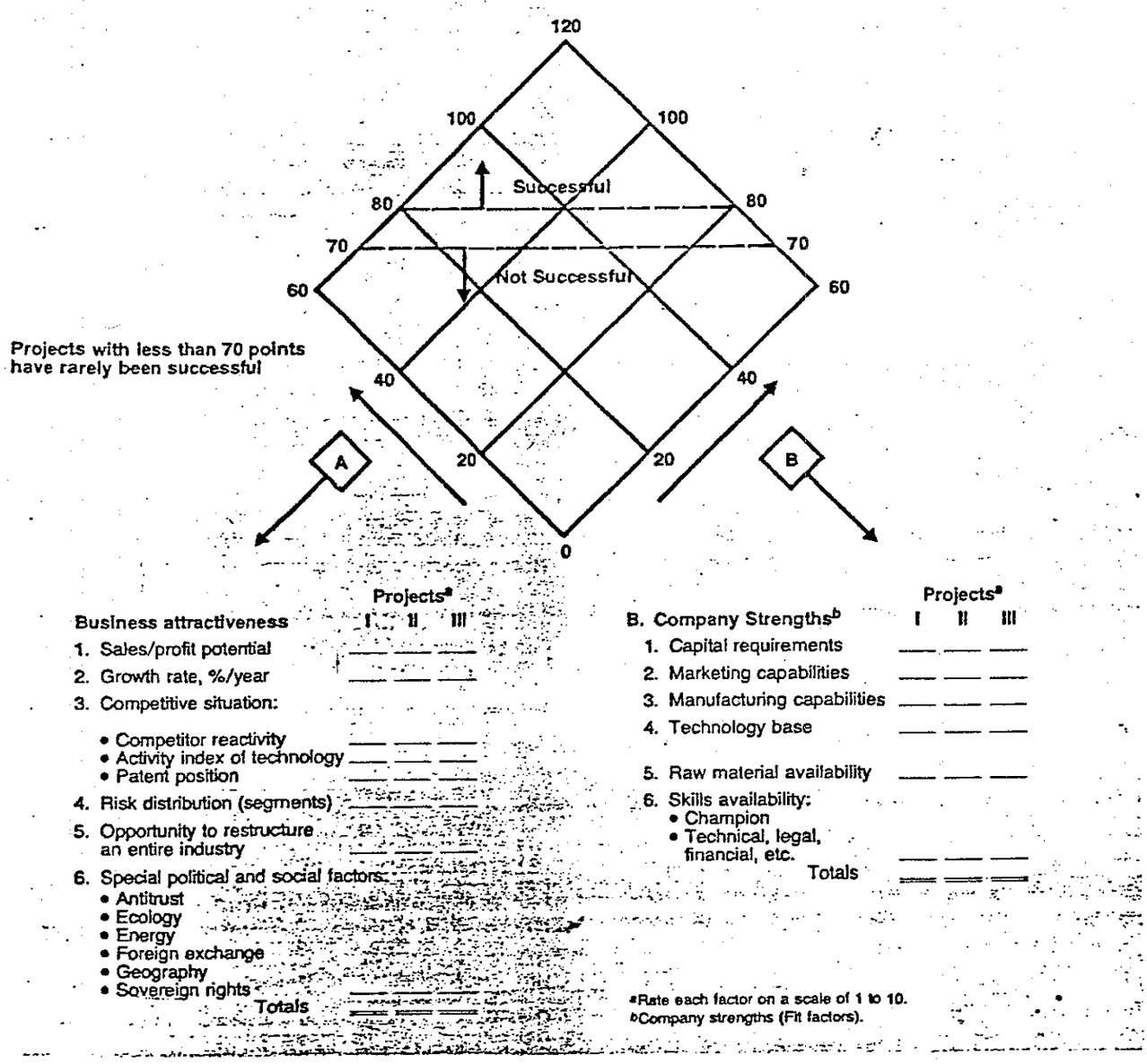


Figure 6. Score card for expanded constraint analysis

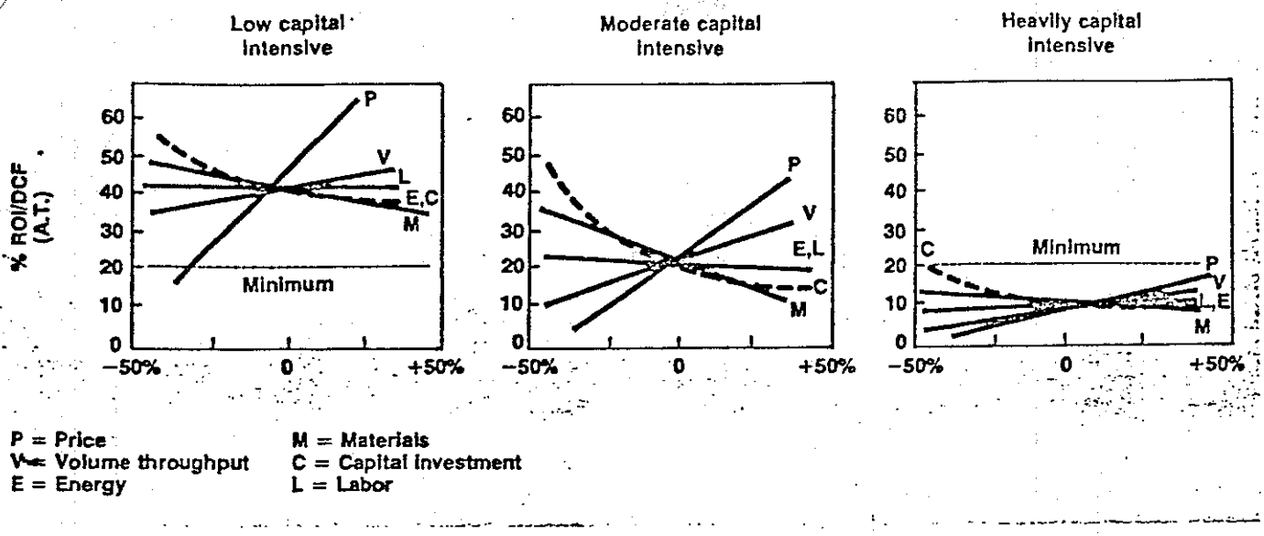


Figure 7. Effects on the discounted cash flow return on investment

8 out of 10 cases over a dozen years of use and is helpful in analyzing existing businesses or profit centers, as well as new ventures and R&D projects. (The 2-out-of-10 failures resulted from unexpected regulatory interventions and from the oil embargo, which altered the raw material economics.) Figure 6 shows an expanded check list of critical factors that need to be addressed. Each factor is scored on a scale of 0 to 10, giving a maximum possible score of 60 for "business attractiveness" and 60 for "company strengths." Statistically, those opportunities with scores of 80 points or higher were successful in 8 out of 10 cases. Below 70 points, the probability of success falls off rapidly.

The data base needed to quantify the six factors listed under "business attractiveness" and the six under "company strengths" should include a careful market segment analysis that defines real customer needs and the niches corresponding to those needs. Also useful is a sensitivity analysis of production and marketing costs as shown in Figure 7. This figure quantifies the effect upon the discounted cash flow return on investment (ROI/DCF) of each factor as it is independently changed. The steeper the slope, the more sensitive is the factor and the more carefully it needs to be analyzed and controlled. Using this type of analysis allows direct comparison of dissimilar opportunities for allocation of limited resources. Weaknesses must be specifically addressed and can often be corrected by acquisitions or by joint ventures with other companies having the needed strengths.

In summary, it appears unlikely that the U.S. will experience another 1929 collapse now or in the future. Instead, a major disproportionation will occur over the next decade, in which those companies that are innovative and are doing effective strategic planning will do exceedingly well, while others fail, are restructured, or are taken over. Once this traumatic readjustment period is over, the U.S. may be launched into one of the most growth-oriented periods in history. A continuous evolution of new technologies, combined with the obsolescence of older technologies in 5–10-year time frames, will preclude the 50-year cyclic buildup and collapse syndrome.

Moreover, it would appear that a creative marketing function will be both a necessary and increasingly important focus of management concern as this process unfolds. Progressive fragmentation of large markets into many smaller niche markets can be expected, with each niche served by its own best cost/performance solution for its needs. A meticulous and continuous process of market segmentation analysis will be a key requirement of the marketing function as new technology continuously develops new possibilities. Sales, advertising, distribution, and financing strategies are likely to remain in a continuous state of change.

This emerging era will put increasing emphasis on life-long continual personal growth and development, and upon the management of diversified business portfolios in order to mitigate the risk of sudden obsolescence. The quality of life in the U.S. and in other developed and developing countries may see an exponential improvement as these events take place. But the U.S., in particular, with its unparalleled depth, breadth, and strength of industrial infrastructure could be the major beneficiary.

Adapted with permission from a lecture before The Conference Board, October 1981.

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Conservatives Eyeing Tax Reform As Step To Pro-Business Federal Economic Role

In a turnabout, some conservatives are talking industrial policy. At the top of their wish list are tax proposals to lengthen depreciation and extend R&D credits.

BY BRUCE STOKES

While the Reagan Administration basks in its overwhelming election victory, which could be interpreted as an endorsement of President Reagan's minimalist approach to government, a loose coalition of businessmen and conservatives is advocating a concerted government effort to improve the international competitiveness of American industry.

"The laissez-faire conservatives' view of the role of government is simply inadequate in today's global economy," said conservative analyst Kevin P. Phillips, author of *Staying on Top: The Business Case for a National Industrial Strategy* (Random House, 1984). "Political conservatives must accept a new pro-business role for government—from coordination of economic and trade strategies to targeting of export assistance and credits—as a necessity."

The coming battle over tax reform will be the first test of conservatives' "competitiveness strategy." Several tax proposals being floated—such as lengthening depreciation periods and extending tax breaks for research and development—would, in the view of some, encourage investment in areas that improve U.S. competitiveness in the international economy.

In recent years, many liberals have advocated an industrial policy to revitalize failing industries through the creation of a bank to finance economic reconstruction and a national government-labor-industry board to direct these efforts. Such an industrial policy would target specific industries for government help.

In contrast, the conservatives' approach would improve productivity by restructuring the tax code, liberalizing antitrust laws and beefing up federal support for R&D, all spurring export-oriented economic growth.

"To be opposed to the industrial policy approach does not presume that government cannot and should not play an active role in economic growth," said Rep. Daniel E. Lungren, R-Calif. "Promoting economic growth is best achieved by fostering a competitive environment."

"The proper role for government is to create an environment for innovation," said Rep. Ed Zschau, a fellow conservative Republican from California.

Early next year, the President's Commission on Industrial Competitiveness will issue its report, which likely will urge closer government-industry cooperation in the economy. A 1983-84 Harvard Business School colloquium involving leading academics and corporate chief executives came to similar conclusions. Republicans in both the House and Senate have drafted competitiveness agendas. And top-ranking union and business leaders have been meeting regularly as the Labor-Industry Coalition for International Trade to suggest ways to use trade policy to improve competitiveness.

"Political conservatives must accept a new pro-business role for government—from coordination of economic and trade strategies to targeting of export assistance and credits," writes conservative analyst Kevin P. Phillips.

"A thread that runs through all these solutions, from left to right, is that someone has to take responsibility for this problem," said Jeff Faux, president of the Economic Policy Institute and an advocate of industrial policy.

With that responsibility would come considerable authority. "The bottom line politically is this: a new round of government involvement in the economy is developing, and the question is, who is to control it," noted Phillips.

EVERYTHING'S RELATIVE

Mainstream economists have generally blamed the mounting U.S. trade deficit on an overvalued dollar. "The over-all performance of the United States does not suggest a long-term problem of competitiveness," said the 1983 Economic Report of the President.

But increasingly, economists argue that more profound problems are at the root of the economy's international ills.

"Some overvaluation of the dollar may be unavoidable for the foreseeable future," said Bruce R. Scott, professor of business administration at Harvard University Business School. "We may have to [learn to] compete under these conditions. The exchange rate cannot always be used as an excuse."

A study by Scott and his associates at Harvard Business School, *U.S. Competitiveness in the World Economy* (1984), concluded the problem is "one of relative performance, not absolute decline," he

said. "The central issue is current performance compared with preceding decades, performance relative to our major competitors and performance relative to U.S. goals and commitments."

In 1960, for example, the U.S. share of world trade was 16 per cent; by 1980, it had fallen to 11 per cent, before major problems began with the dollar. Despite a positive export balance in high-technology products, U.S. manufacturers of items such as aircraft, computers, drugs, engines and electrical equipment have steadily lost market share to foreign competitors since 1970.

While these data are not new, the Harvard report contends that they have never been taken seriously enough because U.S. performance has traditionally been judged against the European track record, which is even worse. "That is like General Motors comparing itself with Chrysler while disregarding Toyota," notes the study. Japan and the countries of East Asia are now a more important market for U.S. exports than any of the major European nations and are a more important source of U.S. imports.

The Harvard researchers attribute the rise of the East Asian countries' economies to their determination to transform their competitive position. Asians chose those sectors of the economy they thought could be competitive in the future and then used the power of the state to bring those industries up to international standards.

"The Asian five [Hong Kong, Japan, Singapore, South Korea and Taiwan] have shown the world how to become rich by discrete and careful protectionism combined with comprehensive domestic organization for education, productivity, technological innovation and effective participation in the global corporate system," Scott said.

Not all business executives and conservatives would agree with this analysis, but there is a growing consensus that the competitive threat posed by the Pacific Basin nations is, in part, due to the activist role their governments play in their economies.

In response to the mounting East Asian challenge, the Harvard study calls for a "national strategy to utilize market mechanisms to emphasize work, saving and investment."

RAISING CAPITAL

Increasing the incentive for industrial investment by lowering the cost and increasing the availability of capital is crucial to improving U.S. international competitiveness, say many business leaders.

U.S. gross capital formation—total investment plus depreciation—was 18 per cent of gross domestic product in 1981, compared with 32 per cent in Japan. Moreover, much of the U.S. investment is short-term speculative investment.

One reason investment lags is that in 1981, American industry's average cost of capital was 16.6 per cent, compared with 9.2 per cent in Japan, says a Commerce Department study. Experts think this capital cost differential harms competitiveness as much as a wage differential.



Jack M. Albertine of the American Business Conference favors tax changes to cut the cost of raising capital from the stock market.

Most observers agree that reducing the federal budget deficit is the single most important thing that can be done about capital problems because government borrowing is crowding out corporate borrowers and raising the cost of capital.

In addition, some charge that tax laws are biased against the long-term investment needed for permanent improvements in productivity. They argue that the economy needs a mix of investments that go beyond the three-year strategy encouraged by current depreciation rules.

The Senate Republican Task Force on Industrial Competitiveness and International Trade, reflecting an interest in the computer industry by some members, suggests the opposite tax change for high-tech firms, allowing them to deduct investment costs immediately to cope with the rapidly changing nature of computer technology.

The President's commission and the Harvard study also recommend identical tax treatment for equity and debt. Now dividends are an after-tax cost, while interest payments are tax deductible. Thus raising money by selling stock is costlier than borrowing, discouraging companies from tapping potential shareholder capital. Equalizing tax treatment would cut the cost of capital raised from the stock market, according to Jack M. Albertine, president of the American Business Conference, a lobby for small and medium-sized high-tech firms.

Congress has already lent some support to such proposals. The 1984 Tax Reform Act has two provisions that directly affect investment. It now allows U.S. firms to write off R&D expenditures for foreign operations and reduces the long-term capital gains holding period from one year to six months, which Scott argues encourages speculation not long-term investment.

There seems to be support for more extensive cost-cutting initiatives. According to an Opinion Research Corp. survey in April and May, 71 per cent of 103 Washington opinion leaders think the high cost of capital has contributed to a lack of long-term investment in industrial capacity.

There is also widespread agreement among those concerned with improving U.S. competitiveness that the future well-

being of the economy is closely related to the level of private and government R&D.

In 1982, the United States spent 1.8 per cent of its gross national product on R&D, while Japan was investing 2.5 per cent, according to the President's commission.

In its waning days, the 98th Congress enacted what many think are key encouragements for private R&D, removing major antitrust impediments to joint R&D activity, extending copyright protection on semiconductors and toughening counterfeiting laws.

The President's commission already has recommended making the R&D tax credit permanent, a move strongly supported by the Chamber of Commerce of the United States and other business groups. The commission will also suggest a change in how the credit is calculated. Now it is incremental, based on the annual increase in expenditures; the commission would like to see it be based on the full amount of a company's R&D, which would tend to increase the credit.

To better coordinate federal R&D expenditures, which now account for roughly 43 per cent of the nation's total R&D, the commission is likely to recommend the creation of a Cabinet-level Science and Technology Department.

Many conservatives complain that fragmentation of U.S. trade laws and policies are a disincentive for businesses to enter the international market. "Our policy is a mess, and we do things that don't acknowledge the globalization of the market," said a commission staffer.

For example, "if other markets are governed by a monopoly, as is the case in telecommunications, and we have destroyed our monopoly [American Telephone & Telegraph Co.], that puts us at a competitive disadvantage," said Alan Wm. Wolff, a deputy U.S. trade representative in the Carter Administration.

The commission has discussed revision of antitrust laws so that a firm's size in the world market, not solely its size in the U.S. market, is considered when the legality of a merger is being judged.

The commission will likely propose streamlining export controls to reduce the time needed for government clearance of high-tech exports, an issue the 98th Congress wrestled with to no avail. It may also suggest expanding the scope of government remedies for unfair trade practices by foreign firms. It may suggest incentives for domestic industries that get import relief to improve their competitiveness, a move supported by the Senate task force on competitiveness.

TARGETING TAX REFORM

Most observers agree that over the next year, efforts to reform the tax system will be the single most important congressional activity affecting the U.S. position in the world economy. To date, debate over various proposals has not focused on their competitiveness implications. In fact, there is no agreement on what should be in a tax reform bill to maximize the economy's international strengths. But reform proponents agree that lower tax rates and reduced government subsidies are consistent with a more efficient industrial system.



"It may take a decade to accomplish" a competitiveness strategy, says Harvard University Business School professor Bruce R. Scott.

For example, the chamber points out that 75 per cent of corporate capital outlays come from internal cash balances. Thus, raising corporate taxes, says the chamber, would inhibit investment by reducing available financial resources.

In the eyes of many experts, key provisions in the major tax reform proposals would have an impact on competitiveness, and often in a counterproductive fashion.

The so-called fair tax plan, sponsored by Sen. Bill Bradley, D-N.J., and Rep. Richard A. Gephardt, D-Mo., would raise the corporate tax rate and eliminate the distinction in tax treatment between short and long-term capital gains, which may discourage long-term investment. It would also eliminate investment tax credits and the special R&D investment tax credit. And it would substantially increase the period over which assets are depreciated, which would discourage short-term investment.

By comparison, the "fast tax" plan, sponsored by Rep. Jack F. Kemp, R-N.Y., and Sen. Robert W. Kasten Jr., R-Wis., would reduce the corporate capital gains tax. It would also continue to permit rapid investment write-offs, which would discourage long-term investment. The plan would eliminate the consumer interest expense deduction, except for home mortgages and education loans, which would force people to save in order to pay cash for consumer purchases. Until that money was used for consumer purchases, it would be available through the banking system for investment. But the plan also would do away with investment tax credits and R&D tax credits.

Many conservatives argue that if the goal of tax reform is not just simplicity but improving the economy, then the income tax should be replaced with a tax on expenditures. The cash flow income tax, introduced by Rep. Cecil (Cec) Heftel, D-Hawaii, would exempt from taxation money that is saved or invested. Interest on consumer loans would no longer be deductible, but interest on borrowing for investment would. For corporations, new investments would be immediately subtracted from the tax base, rather than depreciated, encouraging new, but possibly short-term, investment.

The final Administration tax plan is not known. But on Nov. 27, the Treasury Department suggested lowering the corporate tax rate from a graduated rate of up to 46 per cent to a flat 33 per cent and proposed allowing companies to deduct half of all dividends they pay to shareholders, effectively lowering their costs of raising capital. It also suggested adjusting capital gains for inflation before taxing them, possibly creating an incentive to hold investments longer.

These proposals are in line with a competitiveness strategy. However, Treasury's plan would eliminate the investment tax credit, a move sure to be opposed by many industries.

Of the greatest importance to internationally oriented businessmen and economists, Treasury would replace the Accelerated Cost Recovery System (ACRS) of figuring depreciation with a Real Cost Recovery System (RCRS). ACRS allows large write-offs for companies that invest heavily in real estate, plant and machinery but has been of little use to electronics firms and others in the high-tech field. RCRS would index the basis of depreciable assets for inflation, and depreciation allowances would approximate real economic depreciation.

On the plus side for competitiveness strategy, such a change would probably shift investment away from real estate, a sector of the economy that can never be competitive internationally. But it may also drain some investment from heavy industry, where the United States has been losing ground internationally.

Many observers think tax reform is unlikely in the 99th Congress, and improving industrial competitiveness is certainly not the prime objective of reformers. However, the international ramifications of what is now largely a domestic issue may surface as a result of the debate on these proposals.

The White House position on tax reform will be crucial. "I think the Administration wants to decrease taxes on capital gains but won't increase them on consumption," said James P. Love, an economist with the Center for the Study of Responsive Law. "That won't increase savings and as a result doesn't have a prayer of increasing capital formation."

Other competitiveness strategy proposals are likely to be equally difficult to enact. "It is going to be hard to sell to business decision makers or to Members of Congress," said Allan D. Cors, director of governmental affairs for Corning Glass Works.

Similarly, survey data suggest that public opinion continues to be against government involvement in the economy. Only 37 per cent of the 103 Washington opinion leaders surveyed by Opinion Research Corp. thought government should provide loans and tax credits for selected high-risk ventures with strong export potential. And only 33 per cent of business executives polled in January by Louis Harris and Associates Inc. supported measures such as central strategic planning to save decaying industries.

The loose-knit nature of the various competitiveness proposals inhibits the creation of a neat legislative package that can be marketed to the public and Congress.

The President's commission, which would be uniquely qualified to educate the public, is scheduled to go out of business on Dec. 31.

LEFT AND RIGHT

The notion of a business-oriented competitiveness strategy has met a chorus of objections and raised questions from both the left and the right.

"It's the conservative philosophy under the label of competitiveness strategy," said a liberal House committee staffer.



"Promoting economic growth is best achieved by fostering a competitive environment," says California Republican Rep. Daniel E. Lungren.

Richard W. Rahn, chief economist for the chamber, questions the need for concerted public initiatives. "We were for a while losing competitiveness, but we passed the [1981 Economic Recovery Tax Act] and suddenly we are regaining our technological edge," he said.

Liberal proponents of industrial policy fear that merely creating a competitive environment will be insufficient. Without direct government support of industry, they say, the United States will be forced to compete with the newly industrial nations by cutting labor costs, thus reducing the American standard of living.

Business executives in traditional industries also criticize many of the capital investment incentive proposals now being suggested because they are oriented toward the development-capital needs of high-tech companies while neglecting the long-term plant investment needs of industries such as steel and autos.

Conservatives do not support targeting industries for help, but at the same time, the desire to create a more competitive economy is driven by an analysis that the United States is losing its competitive edge in high technology. The suggested policy responses would lower capital costs in all industries but would probably favor high-tech, capital-intensive firms. There is a similar bias in favoring rapid depreciation or cuts in short-term capital gains taxes. While competitiveness advocates do not explicitly favor targeting the Atari Inc.'s of the future over the Bethlehem Steels, their proposals would have that effect.

The distinction between liberal and conservative positions on government activities to improve competitiveness often turns on whether intervention is direct or indirect. Open support of specific industries would be too political, say many business leaders, and subject to pressure from special interests. "Without the capacity to plan out in the open," said Faux, "then it all becomes politics. As long as it's informal, then whoever has the resources will shape the strategy."

"Proponents of industrial policy have come up with concrete things that you can point to—a bank, a board—while the opponents have come with minor adjustments that seem more ephemeral," said James R. Morris, the chamber's survey research director.

Competitiveness strategy proponents are not sanguine about the chances for policy changes in the short-run. "It may take a decade to accomplish this," Scott acknowledged.

Nevertheless, even old-line conservatives such as Phillips see some form of conservative policy as inevitable. "American businessmen must set aside old concepts of laissez-faire and adjust to—even advocate—new kinds of business-government collaboration," he said. □

Inside the Administration

An Inside Washington Publication

An exclusive report on the Reagan Administration's economic, regulatory and management policies

Vol. 3 No. 18 September 7, 1984

Looking at a $290-292-billion defense spending bill

CONGRESS TO HOLD 'SUMMIT' TO REACH COMPROMISE ON DEFENSE SPENDING

Key congressional members on the Budget, Appropriations and Armed Services Committees are expected to meet this month in a highly unusual joint session — being billed as a 'Defense Summit' — to hammer out a compromise bill on defense spending which could total between $290-$292-billion. Informed sources say there is a growing consensus developing among key Republicans and Democrats that the Congress may be able to agree to a defense bill in the $290-292-billion range as contrasted to the Reagan Administration proposal of $299-billion approved by the Senate and the $286-billion level agreed to by the House. A key source said Senate Majority Leader Howard Baker (R-TN) has privately told key congressional members that he thinks a defense summit meeting is a "good idea." Sources say the meeting — which is expected to be held after Sept. 10 — was the idea of Sen. Lawton Chiles (D-FL) who is ranking

(continued on page 8)

NATIONAL LEAGUE OF CITIES CHARGES TREASURY IS POLITICIZING STATE FISCAL STUDY

The National League of Cities has charged the Treasury Dept. is attempting to inject politics into a broad congressionally-mandated study on federal and state fiscal issues saying a draft of the study "proceeds from the assumption that the deductibility of state and local taxes and the issuance of tax exempt bonds denote federal subsidies." In an Aug. 30 letter, Frank Shafroth, legislative counsel for the National League of Cities told Treasury Deputy Assistant Secretary Robert Rafuse that Treasury's contention "verges upon being a conclusion before the question has even been examined." One source said the Treasury Dept. is attempting to "shape the outline" so that it evolves into a "biased and self-serving proposal" to generate state and local government tax options that Treasury could cut to lower the federal deficit as the Reagan Administration prepares policy options to overhaul the tax system.

Shafroth told Rafuse "the pertinent section of the law [Local Government and Fiscal Assistance Amendments of 1983] calls upon the Secretary to examine the 'impact of state and local governments of'

(continued on page 8)

Without consulting the Justice Dept.

COMMERCE DRAFTING LEGISLATION TO EXEMPT BIG MERGERS FROM ANTITRUST LAWS

Secretary of Commerce Malcolm Baldrige has directed his staff to draft a specific legislative proposal to exempt big mergers subject to intense foreign competition from section 7 of the Clayton Act, a major federal antitrust law. Sources speculate that Commerce will ask the President to make the proposal part of his legislative agenda should he be re-elected in November. Sources say Baldrige has directed Commerce General Counsel Irving Margulies to draft the bill which is considered to be a "high priority" at the department. The Justice Dept., the agency responsible for enforcing federal antitrust laws, has not been consulted or asked to comment on Commerce's plans to propose new federal antitrust legislation although sources say Justice "may be consulted" before the bill is sent to Congress.

A key Justice Dept. source said last week he is unaware of Commerce efforts to amend federal antitrust laws and suggested it was being done secretly without the participation of Justice to avoid a conflict between the two agencies. During the past year, both agencies engaged in lively discussion over how

(continued on page 7)

OMB INVESTIGATION WILL DIRECT DOE TO COMPLY WITH PRESIDENTIAL PATENT ORDER

The Office of Management & Budget (OMB) is planning to order the Dept. of Energy (DOE) to comply with a presidential directive that orders federal agencies, "to the extent possible," to give private contractors the rights to patents for inventions developed with federal funds following an OMB investigation into the issue which was raised by Sen. Finance Committee Chairman Bob Dole. In an Aug. 24 letter to OMB's Associate Director Fred Khedouri, who oversees federal patent policy, Dole complained DOE practices are not consistent with Administration patent policy and are unfair to DOE private contractors. Dole was reportedly angered last month when DOE lobbied, without OMB approval, against legislation he authored to implement an agency-wide patent policy. He asked OMB to investigate DOE's patent

Zinc, the Cold-Fighter

Serendipity Spawns Research That Suggests the Metal Is Nothing to Sneeze At



GERALD MARTINEAU—THE WASHINGTON POST

By Judith Randal
Special to The Washington Post

In 1979, Karen Eby, a 3-year-old in Austin, Tex., was taking zinc gluconate as a dietary supplement because she had leukemia and—like many leukemic youngsters—was deficient in zinc. One day, when she was coming down with a cold, she refused to swallow the tablet and insisted on letting it melt in her mouth.

It was to change her father's life.

When Karen's sneezes, sniffles and scratchy throat vanished within hours, George Eby, an urban planner, couldn't help noticing. Had the child stumbled onto an important discovery? Or was this merely a fluke?

Eby dug into the considerable scientific literature on the healing properties of zinc and brought his findings to the attention of Dr. William Halcomb, the family's general practitioner, and nutritional scientist Dr. Donald Davis from the University of Texas' Clayton Foundation Biochemical Institute in Austin. At first, the three men used the compound on themselves when they had colds and gave it to relatives and friends. The results were so consistently promising that when Eby inherited some money, the trio recruited some cold sufferers for a more rigorously scientific trial.

Participants were volunteers who, without knowing which was which, took either actual zinc gluconate tablets or placebos—look-alike dummy lozenges. Ideally, these human guinea pigs would also have been tested to be sure they were actually infected with rhinoviruses—the known cause of common colds—but Eby and his colleagues could not afford to hire a microbiologist to do the analyses. However, Halcomb examined the recruits and disqualified those he suspected might have allergies or bacterial infections rather than bona fide colds.

Each volunteer was given either a seven-day supply of 180-milligram zinc gluconate tablets (each containing 23 milligrams of zinc) or an equivalent number of placebos. They were instructed to suck on them for at least 10 minutes to bring the tablets' contents into direct contact with the tissues of the throat where rhinoviruses replicate. (Cold viruses also spawn in the nasal passages, and Eby, Halcomb and Davis had earlier informally tried zinc nose drops and zinc nasal sprays. At effective concentrations, both were painful, and when diluted until they did not burn, they also did not work.)

Adults and youngsters weighing 60 pounds or more took two tablets at the outset, then one every two hours for as long as they were awake, but never more than 12 tablets a day for the adults and nine for the youngsters. For smaller children, the dosage was halved and six tablets a day was the limit. All were instructed to do nothing else for their colds for the duration of the study and to stop treatment entirely six hours after symptoms disappeared.

Because very few of the 146 participants embarked on the experiment with brand-new colds, the results weren't as dramatic as with young Karen. Still, test subjects who had actually used zinc gluconate were symptom-free in an average of 3.9 days, while it was typically 10.8 days before the placebo users were well again.

The researchers reported in the journal Antimicrobial Agents and Chemotherapy last year that, no matter how severe the cold, subjects receiving the zinc typically got better seven days sooner than those who received the placebo.

"It didn't matter," says Eby, "whether people had bad colds or mild ones or how long they had them when they entered our study; they got well about seven days earlier than they would have normally."

The publication of that first report has brought Eby, its senior author, letters and inquiries from all over the world. It has also brought him a venture capitalist of sorts, J.C. Godfrey, an organic chemist associated with the Center for Concept Development, a New York marketing research firm.

Godfrey has arranged, with the Food and Drug Administration's approval, to have a group of Florida physicians repeat the study that Eby, Halcomb and Davis conducted in Texas. If these physicians get similar results, more than two dozen other studies will be launched to be certain that zinc gluconate is not only effective against colds, but also safe.

"Among the things we need to nail down in order to get the FDA's ultimate approval," says Godfrey, "is what the ideal dose is and whether there are some people for whom zinc gluconate may be hazardous. George chose the 23-milligram dose arbitrarily, because that is what Karen had been taking, but we really don't know whether a smaller dose would work just as well or a larger one would work even better. And, oh yes, there's the matter of zinc gluconate's bitter taste."

Some people find this taste merely unpleasant, but 12 of the 83 Texas volunteers who took zinc gluconate felt sick to their stomachs and two of these actually threw up. Godfrey, who has served as a flavor consultant to major food companies, has come up with several formulations—one of them sugar-free—that make the tablets taste like hard candy. Nonetheless, it is still uncertain whether the tablets will retain their apparent effectiveness if they are also made palatable.

Meanwhile, back in Austin, two things have happened. One is that Karen Eby, now 8, has recovered from her leukemia. The other is that her father has set up George Eby Research Inc.—a nonprofit, tax-exempt public charity to delve further into the therapeutic potential of zinc. Eby has been notified that his patent of a zinc gluconate lozenge to shorten the duration of colds will be issued Jan. 22. Assuming the lozenges eventually win FDA approval, sales will help to fund further research.

Still, full FDA approval will probably take at least three years, and Eby is already champing at the bit. If he can get funding, he plans to launch studies that will pit zinc against herpes viruses—both genital and oral—and then to probe further the common metal's alleged ability to detoxify insect stings and snake bites and relieve menstrual cramps.

Even this tall order will, says Eby, barely scratch the surface of zinc's potential since there are also reports in the scientific literature of its activity against dozens of other viruses. Zinc may be good for boosting the aging immune system and for treating certain types of prostate gland inflamation.

"I intend to stay in medical research," he says. "True, I don't have scientific credentials. But you don't have to be highly trained in medicine to offer leadership." ■

Judith Randal is the science correspondent in the Washington bureau of the New York Daily News.

The Risks

Zinc gluconate is available without prescription at some pharmacies and health food stores. But before trying it, talk it over with your doctor. Then, if you decide to go ahead, do not exceed the dose Eby and his colleagues used in Texas and do not take the tablets for more than a week.

A recent study at Memorial University in Newfoundland found preliminary evidence suggesting that long-term use of 300 milligrams of zinc a day—about the same zinc dose that Eby and Halcomb administered—may have adverse effects on blood cholesterol and the body's immune system. Besides, prophylactic use of zinc—taking it to *prevent* the onset of colds—has been found not to work.

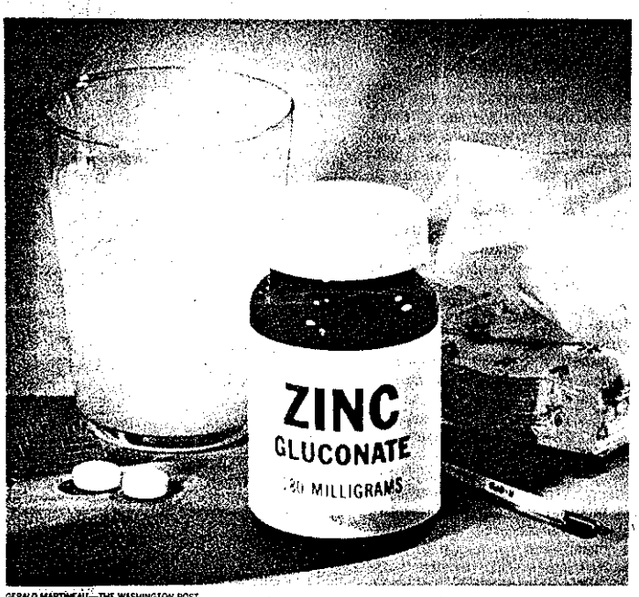
Eby warns, too, that zinc gluconate can cause oral irritation. This is most likely to happen if you fall asleep with a tablet in your mouth. Also a good idea—to prevent queasiness—is to avoid taking the tablets on an empty stomach and to nibble on soda crackers if your stomach protests.

Finally, any zinc gluconate you buy should contain only zinc gluconate. Some formulations are enriched with even worse-tasting ingredients, such as liver extract, that won't do anything for a cold.

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— Judith Randal

U.S. Trade Representative **William E. Brock** still hopes to get one major trade bill through Congress this year that will include a grab bag of proposals he considers crucial.

But his aides and trade experts on the Hill are concerned that any trade measure will become a Christmas tree hung with baubles providing trade relief to the auto, steel, copper, shoe and tuna-processing industries, to name a few.

It is possible—though unlikely—that the bill will reach the Senate floor as early as next week, when the legislative calendar is relatively empty.

Some congressional trade specialists are pressing the Reagan administration to include some provisions of a trade remedy bill, sponsored by Rep. Sam Gibbons (D-Fla.), chairman of the House Ways and Means subcommittee on trade.

Despite Gibbons' reputation as a free trader, the bill has been attacked as protectionist for its attempts to widen the definition of unfair trade practices to include such things as Mexico's selling of natural gas to domestic industries at lower prices than the gas it exports to the United States.

Even the administration's short list for the trade bill includes at least two sticky issues: the extension of the Generalized System of Preferences (GSP), which gives Third World nations special tariff status for imports of certain products into this country, and a proposal to grant free trade status to Israel.

GSP is not popular with a Congress that faces pressures from constituents to restrict imports rather than to let more foreign goods in. Yet there seems to be a recognition that GSP is important and should be continued, though it is likely that goods from some of the emerging industrial powers in the Third World will be removed from the GSP list.

On the surface, the proposal to grant free trade status to Israel should have clear sailing in Congress since both Tel Aviv and the administration favor it. But it has been attacked in committee hearings by California farm interests, who voice fear that their markets will be taken over by low-priced Israeli produce.

☆ ☆ ☆

TRADE REORGANIZATION . . . Brock has played the good soldier and kept quiet about any differences he may have with the administration's trade reorganization plan, the pet project of **Commerce** Secretary **Malcolm Baldrige,** whose large department would take in Brock's specialists.

But according to sources in the administration and on Capitol Hill, Brock is balking at Baldrige's efforts to declare the creation of a **Department of International Trade and Industry** a top priority for next year if President Reagan wins reelection.

Baldrige won White House support for the bill even though it was opposed by many trade and economic specialists in the administration.

☆ ☆ ☆

ON AND OFF THE FIELD . . . Staff members from Brock's office spend a good deal of their time facing their Japanese counterparts across the conference table. On Tuesday, however, they met at a Hains Point ball field, where the USTR baseball team handily defeated a team from the Japanese Embassy, 28 to 7.

Brock's office should only do as well in trade negotiations.

—*Stuart Auerbach*

pg A19, July 22