desperately needed—is in external relations. Argonne had a fortress mentality."

There is an extremely unlikely possibility that the Administration could decide that the national labs should follow the AEC into oblivion. Otherwise the omens for Argonne look favorable. A DOE press release on the change in contract says that DOE will extend its contract with Argonne and that its Chicago operations office "will negotiate the expected five year contract."

A DOE veteran knowledgeable about the national labs review says the perception at DOE that Argonne "was quietly going to seed," has changed and that the recent contract action is "tangible evidence of greatly increased confidence in Argonne and Argonne's future" at DOE.

—JOHN WALSH

"Sclerosis" Blamed for Economic Stagnation

Democracies may be choked by the special interest groups they foster, Mancur Olson says

"Economic sclerosis" is the term University of Maryland economist Mancur Olson uses in describing the rigidity that afflicts American enterprise in the latter 20th century. With support from the National Science Foundation (NSF), Olson has written a new book, *The Rise and Decline of Nations*,* that boldly claims to explain how this economic disease grows and why it is likely to attack any democratic society that remains stable and affluent.

His theory, in the words of one NSF staffer familiar with it, is "big-think economics, as opposed to the kind of work we usually sponsor, which is full of equations." The new book has been criticized for its lack of "hard data crunching" or empirical research. Yet it has sparked interest because of its breadth and plausibility.

Olson's theory works as follows. In societies that permit free trade and free organization, coalitions will form around marketable goods and services. Groups of producers, like those who grow wheat or own oil, will organize to protect their assets and, if possible, boost profits by raising prices. Physicians and lawyers do much the same in joining professional societies. Labor unions organize workers to bargain for wages.

In the early stages of this coalition-building process, there are relatively few interest groups, and their memberships are small compared to the society in which they operate. As they develop, they try to impose a variety of specialized rules on the economy that supports them. By law or collusive contract, they make penalties for those who would market the same goods or services outside the group. They also offer selective advantages to those who join and cooperate. Because these groups are small (Olson says they typically include no more than 1 percent of the people in their state), they have no incentive to boost members' welfare by boosting the state's welfare. Instead, they concentrate on promoting their own narrow interests, even at the cost of retarding the general economy. A modest effort at self-aggrandizement may bring great rewards.

As time goes by, tariffs, price supports, monopoly prices, wage guarantees, and business codes grow more numerous. All are intended to channel commerce into areas that benefit the special groups that fought for them. The combined effect is to create obstacles to trade and to prevent innovation. The economy suffers. In the past, nations suffering from this affliction have enjoyed renewed growth after a cataclysm has intervened to wipe out existing trade barriers, or when new territory has been opened for development. Sometimes the power of a domestic group is undercut by low-cost imports, if the imports are not blocked. Rarely has any nation abolished special interest codes voluntarily.



Mancur Olson

Olson's theory has something to say about inflation and business cycles, as well. Inflation may be a common symptom of nations in a sclerotic condition, Olson believes, because it offers a brief measure of relief from economic stagnation. Special interest groups, being run by committee rule, generally maneuver slowly. For this reason, they cannot always adjust their demands upward as rapidly as the nominal value of goods and services increases. This is particularly true if inflation appears suddenly, without warning. Thus inflation may be tolerated because it temporarily devalues the cost of products within the control of special interests. In time, this form of relief fails because the special interests soon catch up and raise their demands in pace with inflation.

In the contrary case, during periods of sudden price decline, the advantage held by interest groups is intensified. Those who operate outside the protection of a group may be forced to lower prices or wages. But the interest groups, again moving slowly, haggle over proposals while the storm rages around them. They may not reduce their demands until a recession has already damaged the economy. After a period of negotiation, they may begin to adjust, but by then investment in new projects will have been cut short, worsening the prospects for recovery. Thus Olson sees a real risk that the inflexibility of special interest groups can lead in bad times to a "vicious downward spiral."

It would be difficult to prove this thesis with numerical data, simply because the volume of information required would be overwhelming. Thus Olson cites several broad historical economic trends as evidence of its validity. His chief example of a democracy that has survived without invasion, revolution, or

**The Rise and Decline of Nations: Economic Growth, Stagflation, and Social Rigidities* (Yale University Press, New Haven, Conn., 1982.)

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dictatorship is Britain. He writes that Britain harbors "precisely the powerful network of special interest organizations that the argument developed here would lead us to expect in a country with its record of military security and democratic stability." Today Britain has one of the lowest economic growth rates among all the democracies, despite the fact that from the middle of the 18th to the middle of the 19th centuries it had one of the fastest rates of growth. This is due, Olson believes, to the gradual accumulation of special interest organizations that inhibit growth. The "British disease," he says, will afflict any democracy that remains stable for a long period.

Looking at the rest of Europe, Olson finds positive evidence that social disruption and reorganization may encourage growth. He reports a colleague's finding that 51 percent of the associations existing in the United Kingdom in 1971 had been founded before 1939. Only 37 percent of the French, 24 percent of the West German, and 19 percent of the Japanese organizations existed before the war. Postwar economic growth in the latter three nations has been described as a "miracle," Olson notes. He argues that it is due to the elimination of long-established privileges held before the war by unions and business groups.

A student of Olson's also made an analysis of growth patterns in the United States. He found that those settled later, primarily western states, had a higher average growth rate than those settled early in U.S. history. In addition, states belonging to the Confederacy, which experienced a social cataclysm during the Civil War, have had a higher growth rate since the war than those on the winning side. Olson attributes this to the destruction of special interest groups in the South.

In a third analysis, Olson looked at towns in England and Europe to see how they fared over two centuries. He found that, except in the case of national capitals, the towns that were the largest and wealthiest in 1600 ceded rank to new towns that rose rapidly to the top by 1800. In England, the third-ranked town, York, fell to 17th place in this period, while Manchester, Liverpool, and Birmingham rose from obscurity to second, third, and fourth rank. Olson believes their success was chiefly due to the relative freedom from the oppressive business codes of the guilds. For the most part, he argues, the guilds retarded the growth of the prosperous towns where they had the greatest influence.

If Olson's theory of economic sclerosis is correct, what does it imply for government policy-makers? Olson says that some readers thought he might be advocating revolution or dictatorship as a means to higher national productivity. This is not the case. Olson's policy recommendations are mild and, by his own description, unoriginal. The most important is that the government should maintain an "open and competitive environment." He writes that "If the government is always intervening on behalf of special interests, there is no macroeconomic policy that can put things right." It would be an accomplishment simply to refrain from adopting new tariffs and subsidies. In an ideal world, existing special interest legislation might be repealed.

Second, Olson makes the commonsense recommendation that countries fighting inflation should apply controls, such as constraints on money supply, in a steady and gradual fashion rather than in sharp bursts. Olson mentions the case of a Danish cartel that waited 10 years to change its prices, even though it was losing profits throughout the period. Government policy must demonstrate resolve if it is to budge slow-moving interest groups.

Third, during times of "unnaturally high" unemployment, Olson suggests the government should offer temporary rewards to companies that raise wages slowly. This might encourage employers to spend available cash on hiring new workers, he says, rather than on raising the pay of those already employed.

Perhaps the most frequent criticism of Olson's work is that there are many other plausible explanations of the trends he cites. Consider the example of the recent boom in the nations defeated in the second world war. A former colleague of Olson's at Maryland, Robin Marris, argued that this spurt of growth actually reflected something he called "catch-up": the rapid rebuilding of industry with the most advanced technology. The absence of interest groups was less important, in Marris' view.

Olson agrees that many factors other than the degree of interest group sclerosis affect economic performance. He concedes that more empirical research is needed if his ideas are to gain acceptance. But he also believes that his thesis has an advantage over most others. "The strongest argument in its favor," he says, "is that it is a simple theory that explains so very much. It is supported not so much by one piece of evidence as by the variety of evidence." Few economists dare to generalize as broadly as Olson, and this boldness is what makes his work intriguing.—ELIOT MARSHALL

Legislation Would Take Program Away from NCI

The House Appropriations Committee has passed a proposal to transfer funding responsibility for an important international program on toxic chemicals from the National Cancer Institute to the office of the director of the National Institutes of Health. Representative David Obey (D–Wisc.) sponsored the measure, citing, in his opinion, inappropriate behavior by the NCI. Institute officials allegedly pressured the international program not to publish controversial data on benzene after they met with industry representatives (*Science*, 3 September, p. 914). Institute and program officials deny any improper actions.

The program is conducted by the World Health Organization's International Agency for Research on Cancer (IARC) and evaluates the carcinogenicity of chemicals. Many governments regulate chemicals based on conclusions reported in IARC monographs. The controversy over benzene arose when IARC for the first time ventured into the area of quantitative risk assessment, estimating how much risk is associated with certain levels of exposure.

The NCI now contributes about $500,000 annually to the monograph program's budget of $700,000. The legislation to shift the program's funding is part of a House appropriations bill that is expected to be voted on when Congress returns from recess.

—Marjorie Sun

Genex Raises $19 Million from Stock Offering

The Genex Corporation took a gamble on the Stock Exchange on 29 September and it came out reasonably well. At a time when new issues in general and biotechnology stocks in particular are supposed to be out of favor, the Rockville, Maryland, company raised $19 million from its first public stock offering. Its offering sold out on the first day, but its share prices have since declined.

One of the largest biotechnology companies to start up in the past few