Federal Pay Scales Cause Empty Labs

An experienced scientist in government employ makes about $18,000 a year. He'll never make more than $26,000 at the current rate for top echelon people, but in the outside world, he might make double the money.

Chances are he is already in the outside world.

Only 10 percent of U.S. scientists work for the Government, mainly in chemistry and agricultural sciences. And the 4.5 percent pay raise for Federal employees recently proposed by President Johnson and now before the Congress is not likely to precipitate an onslaught of scientists and engineers in search of Government jobs. At best, it may slow the siphoning off of talent by industry and universities.

Civil Service Commission officials report employment headaches are getting worse. Two years ago, recruiting science graduates was a challenge. Now it's formidable: it's not only hard to get them, it's hard to keep them.

The shortage has reached such proportions that last month Washington launched a new program to entice graduates of junior colleges and technical schools into jobs as engineering aides and science assistants. The theory is that some of the gaps in scientific brain power can be filled by scientists who are freed from routine chores.

The scope of manpower problems varies from agency to agency, from discipline to discipline. The most conspicuous lack is in engineering and physical science. Though the space agency still offers enough glamor and challenge to draw qualified people in reasonable numbers, the Department of Defense is short several hundred first-rank scientists and engineers, with no relief in sight. DOD's high-power "think" affiliates such as the Institute for Defense Analyses and the Rand Corp. (which are outside Government salary scales) can fill their jobs, but even they say they are having trouble attracting the caliber of scientist they want.

University research projects, which ironically are often Government supported, seem to hold as much attraction as jobs in industry. In either case, the Government goes without.

Apart from the Federal establishment, the bulk of scientific talent in this country is evenly divided between academia and industry. Universities have 35 percent of 243,000 scientists reporting to the National Register in 1966; industry has 34 percent; statistically, the highest median salary reported by scientists in industry and business was $15,300. What the median figure doesn't tell is that starting salaries of $12,000 are the rule for physicists, chemists and engineers in industry and that $50,000 for "senior" talent is not uncommon. Government scientists start at $9,000 to $10,000 and can go only to $25,890.

Competition for engineers and physical scientists is significantly affected by salary because the nature and challenge of the work in business and Government is likely to be similar, Federal officials say.

In biological sciences, where Government vacancies are not as extensive, money is not so prime a factor. Biochemists, geneticists, pharmacologists and medical doctors who are looking for jobs probably weigh the virtues of Government versus universities, not industry. In this scale Government has a better chance. The National Institutes of Health, for example, pay young Ph.D's about $1,300 less to start than industry's $12,800. But NIH offers enough prestige and research opportunity to make up for it. However, equal footing gives way in competition for senior research scientists, and NIH officials fear a real decline in quality if the $25,890 pay ceiling isn't raised soon. The difference between $12,000 and $11,000 can be tolerated by a young scientist who feels Government service gives him certain professional advantages. But when a 40-year-old man with three children has to choose between $25,000 at NIH and $45,000 at a medical school, he's going to go back to the university.

The President's 4.5 percent pay boost doesn't apply to anyone above the $17,550–$23,013 pay level. Despite its effort to approach equivalency with industry, so far it does nothing to alleviate the problem at the top.

However, the proposal does call for parity of pay with private industry, even at upper levels, by 1969.

A special committee, headed by Frederick R. Kappel, retired board chairman of American Telephone and Telegraph Company, has been named by the President to study and recommend changes in top Federal salaries.

Comparative Median Salaries

	Government	Universities	Industry
Chemistry	$12,000	$11,000	$12,800
Meteorology	$11,700	$12,000	$12,000
Physics	$12,900	$11,000	$14,600
Mathematics	$12,900	$11,000	$13,500
Agricultural Sciences	$10,000	$12,000	$10,000
Biological Sciences	$12,500	$13,100	$13,900

National Science Foundation

Ph.D. Reform in Social Sciences

The social sciences and humanities, long the poor relations of graduate education in the United States, are about to come into their own—thanks to a large infusion of non-Governmental money.

Ten major universities and the Ford Foundation are taking a lead in the fields that Congress has been urging on Federal planners in recent months. They have announced a joint seven-year program of some $200 million in grants to graduate students. The universities are contributing $160 million, and the Foundation $41,5 million.

The total equals some 10 percent of the funds the Federal Government is now spending yearly on the same disciplines. Washington, however, will pick up some of the universities' matching expenditures.

Though the program is starting with 10 outstanding universities, it will be expanded. The Foundation expects to provide funds totaling "several million dollars over the next five or six years" to additional graduate schools for specific Ph.D. program reforms.

The Ford Foundation, in announcing the effort, expressed concern with more than simply increasing the level of support for Ph.D.-oriented programs. It seeks to streamline the Ph.D. program, allowing candidates to slice three years off their current time.

Currently, graduate students in the social sciences and humanities, principally for lack of funds, spend 7.5