

or in the pipeline, for schemes to retrain jobless scientists. "It is conceivable we will be able to support a few of them," an NSF official said last week, but this can only be at the expense of other projects since the NSF has no special funds for conversion projects.

No congressman is harmed among his constituents by expressing concern in unemployment and several bills designed to reduce unemployment in various ways have been introduced. Two which concern scientists and engineers specifically are those proposed by Senator Edward M. Kennedy on January 26 and by Congressman Robert N. Giaimo and John W. Davis, on February 10. Both bills are based on a version introduced by Kennedy last year which called for an expenditure of \$450 million in converting the orientation of the economy from defence to civilian needs. Kennedy has now prepared an expanded version of his bill, cosponsored by fifteen other senators, which asks for \$500 million over three years to achieve conversion of the nation's scientific and technical manpower. The bulk of the programmes called for in the bill would be administered by the National Science Foundation, with the Small Business Administration overseeing a number of programmes designed to help small research and development firms convert to civilian operations.

The bill asks Congress to establish three national policies designed to create full employment among scientists and engineers; first, that scientists must have continuing opportunities for employment "in positions commensurate with their professional and technical skill"; second, that Federal support of civilian research and development should be raised to and maintained at the same level or above that of defence related research and development; and third, that the total Federal investment in science and technology should continue to grow at the same rate as the gross national product.

Specific programmes authorized by the bill include \$225 million (over a three year period) to be distributed by the NSF in the form of conversion fellowships to jobless scientists and engineers enabling them to retrain in other jobs. Another \$65 million would enable the NSF to support "community conversion corporations", non-profit organizations located in communities particularly affected by defence cutbacks, the function of which would be to attract civilian research and development funds and provide on-the-job retraining for scientists and engineers. A third NSF programme would dispense \$45 million to state and local governments to carry out conversion programmes, and another \$45 million would be allotted to the Small Business Administration

for grants to assist small scientific firms in their conversion. Altogether some 20,000 people would be affected.

Reintroducing the bill this January, Kennedy spoke of the "immense human suffering and personal tragedy" as well as loss of national investment involved in scientific unemployment, adding that "individual scientists who interrupt their careers—as many are now forced to do in seeking other employment—may find it impossible to re-enter the scientific job market, in view of the rapidity with which new scientific knowledge is generated". Strong words were also used by Congressman John W. Davis, who introduced the House version of the bill; government policies, he said, "have allowed one of our most important national resources, our brain trust of scientists, engineers and technicians, to wither on the vine". The Davis-Giaimo bill, similar to the Kennedy bill except that it asks for expenditures of only \$450 million, calls for science and technology to be converted not simply to serve the consumer needs of society but also to the resolution of social ills; "science must serve society in coping with such problems as unemployment, poverty, crime, race relations, pollution, nutrition, housing, health care, transportation, education and social alienation".

#### HARVARD

### Investment Policies

THE Harvard Committee on University Relations with Corporate Enterprise under Professor Robert W. Austin of the Harvard Business School has spelled out a judicious line to follow on the university's policy as a stockholder. The committee was appointed in April 1970 after a bout of discussion of the proposal that Harvard (and other universities) should help to vote two independent stockholders to the board of General Motors. The report of the Austin committee is unlikely to provide an automatic means of resolving future conflicts of this kind but it should at least help to ensure that future arguments are well informed.

The starting point for the committee's recommendations is the view that universities must put first their commitment to free enquiry, that within this concept lies the freedom of individuals to take up the professions that seem to them to be right and that there are political as well as practical reasons why university funds cannot be used for purposes other than the pursuit of truth. That said, the committee affirms the right of universities to comment on political questions where these affect academic freedom or government financing, their duty to pay some heed to the condition of the community in

which they are sited and the need in relations with corporate enterprise to balance "the potential drying up of financial resources" against the danger that the academic climate could be so heated up that students and teachers were distracted.

The committee says that the first consideration when a university is seeking to invest money is to seek the best return. Not merely is this the only simple policy but there is a need to meet as fully as possible the growing cost of operating universities if only to retain their independence. The committee says, indeed, that in investment policy, the rule to seek the maximum return should be abandoned only in the light of the university's duty "to the more or less immediately surrounding community". But the committee does agree that there are some kinds of financial investments which should be excluded, although it emphasizes that the ideal of investment security is hard to attain. It would, however, avoid investments in tobacco companies, South African corporations and corporations that practise racial or other forms of discrimination. "If the university would not consider buying stock in gambling houses, even where legal and however attractive financially—as presumably it would not—it cannot close its eyes to the moral factors" in these examples.

Once a stockholder, a university is entirely within its rights to seek to influence a corporation, according to the committee. "It need not remain passive in the face of substantial evidence that the company is acting in an antisocial way." The committee does, however, consider that universities should stop short of litigation or the collecting of proxies to force particular policies on corporations and joining with other tax exempt organizations in policing the conduct of business corporations. "It is no answer that Harvard investments have not been big enough to give it an influential voice in corporate decisions. Certainly the university should vote its stock on occasions in favour of change for the symbolic effect of a great university's taking a position on a social problem."

But how can a university know its corporate view? The committee says that the way in which the university decided to vote for the General Motors management in the spring of 1970 may have been right, but was not seen by all members of the university to be responsible. What the committee suggests is that there should be a university officer with a small staff who would sift all suggestions about the non-financial aspects of Harvard's role as an investor, and make recommendations to the corporation of the university, ultimately responsible for the treasurer's activities.