redure that is 99 percent perfect. See N. B. Ryder, "The time series of fertility in the United States," paper presented before the In-ternational Union for the Scientific Study of

- Population, London, 1969.
 6. R. G. Potter and J. M. Sakoda, *Demography* 3, 450 (1966).
- M. Orshansky, Soc. Secur. Bull. (March 1968). These estimates of the percentages of un-wanted births among poor and non-poor, and the estimates of the gross number of un-wanted births in the period 1960 to 1965, to 1965, discussed in the next section, are of the same order of magnitude as values presented in a

NEWS AND COMMENT

Science Service: Publishing Pioneer in Financial Trouble

9.

Science Service, Inc., a half-centuryold publishing organization that pioneered in attempts to promote the public understanding of science, is in danger of financial collapse. The Washington-based nonprofit corporation, whose board includes many distinguished figures from the scientific community, has been running at a big deficit for several years now and has recently appealed to the AAAS to rescue it through a merger or some other form of assistance. If help is not forthcoming, says E. G. Sherburne, Jr., the director of Science Service, "we'll have a hard time hanging on."

Science Service is best known for its popularized weekly magazine, Science News, which circulates some 115,000 copies; and for its conduct of the annual Science Talent Search, sponsored by the Westinghouse Educational Foundation, which seeks to identify outstanding high school seniors. The organization's financial problems have been the subject of rumors for some years now, but confirmation that Science Service is indeed in deep trouble still comes as something of a surprise. Last May Glenn T. Seaborg, chairman of the Atomic Energy Commission and currently the president of Science Service, delivered a major tribute to the organization and gave not a hint that there were any financial problems. Seaborg's speech, which was written by Sherburne, reviewed the achievements and prospects of the organization in favorable terms. "Despite the accomplishments of the past," Seaborg's speech concluded, "the future has even greater

possibilities for expansion and new developments."

preliminary approximation by F. S. Jaffe and

A. F. Guttmacher, *Demography* 5, 910 (1968). Our sample design for a new national study in 1970 which calls for a sample of "ever

in 1970 which calls for a sample of "ever married" women will provide a better basis

for making these estimates.
 R. Freedman, L. C. Coombs, L. Bumpass, Demography 2, 267 (1965).
 N. B. Ryder, in Fertility and Family Planning: A World View, S. J. Behrman, L. Corsa, R. Freedman, Eds. (Univ. of Michigan Press, Ann Arbor, 1969), pp. 99-123.
 C. F. Westoff, E. G. Mishler, E. L. Kelly, Amer. J. Sociol. 62, 494 (1957). Additional

for making these estimates.

In light of the information now available, that speech might fairly be characterized as "whistling in the dark." Science Service has declined to reveal any of its financial data to this reporter -even that data which nonprofit organizations are required to submit to the Internal Revenue Service on forms that are open for public inspection-and the IRS was unable to make the records available before this article went to press. Nevertheless, Sherburne acknowledges that Science Service has run at a deficit ever since he took over in 1966. Other sources at Science Service say that the deficit has mounted into the hundreds of thousands of dollars in some recent years, but Sherburne says the deficit has recently been diminishing.

The financial strain has shown up in a number of economy moves and stopgap measures. Last January Science Service abandoned its news and feature service for newspapers, and last summer Science News on two occasions skipped an issue and published biweekly in order to save money and staff. Science Service is also trying to sell for \$500,000 the four old buildings it owns in the 1700 block of N Street, NW, in Washington, D.C. According to informed observers, the organization also recently took out a bank loan to help tide it over the current troublesome period.

The problems of Science Service have been exacerbated by personnel wrangles in which two executives of the magaevidence pointing to the same hypothesis appears in the Princeton Fertility Study (unpublished tabulations).

- T. Frejka, *Population Stud.* 22, 394 (1968). For discussion of the relationships between these variables see N. B. Ryder and C. F. Westoff, *Population Res.* (March 1969) and A. A. Campbell, Fam. Planning Perspect. 1, No. 33 (1969) We thank Ansley J. Coale, Ronald Freedman,
- 15. Fred Jaffe, Suzanne Keller, and Norman B. Ryder for critical appraisals of the manuscript. We also acknowledge the able computer programming assistance of Andrea Smith.

zine, Science News, have been let go. One was Marcia Nelson, the circulation manager, who was fired, according to Sherburne, at least partly because her job had been largely taken over by a computerized subscription service. The other was Warren Kornberg, the editor of Science News for the past 4 years, who seems to have been fired or to have quit after a wrangle with Sherburne over whether the notoriously underpaid staff should get raises or not.

Kornberg's ouster caused a near revolution. Some staff members say they contemplated offering their resignations en masse unless Kornberg were reinstated but that idea was dropped when Kornberg said he wouldn't come back anyway. Though neither Kornberg nor Sherburne will discuss the reasons behind their rupture, staff members say the precipitating issue was apparently Kornberg's request for raises for the staff. "Warren felt he couldn't hire good people at the salaries we offer and he couldn't keep the people we have," says one staff writer. "So Warren got fired and we ended up getting raises anyway. It was incredible."

In its heyday, Science Service was perhaps the most renowned disseminator of science news to the general public in this country. It was founded as a nonprofit corporation in 1921, largely through the impetus and financial assistance of the late E. W. Scripps, a founder of the Scripps-Howard newspaper chain, who had long been concerned about lack of public understanding of scientific achievements. The organization's director for approximately four decades was the late Watson Davis, a respected popularizer and promoter of science.

Scripps' original goal was to increase the amount of science information in newspapers, so the initial emphasis of the new organization was to develop a new press service that would disseminate science news to the media. When the press service reached its peak in the 1940's, Science Service was mailing

news and features to more than 100 clients with a combined circulation of over 30 million. But the press service fell victim to changed times. In the science-conscious years following World War II, and more particularly following Sputnik, there was a mad scramble in the journalism profession to develop better coverage of science. Soon every daily paper with any pretensions had its own science writer or science staff, the major wire services and supplementary services had expanded their science coverage, and new specialized science syndicates sprang up. As a result there was less and less need for the product Science Service provided, and newspapers tended to use Science Service items as "filler" material back near the obituaries. Last January, in recognition of the changed situation, Science Service abandoned its press syndicate entirely and sold reprint rights from its news magazine to Newspaper Enterprise Association, a commercial outfit. Executives of Science Service take consolation in the idea that their press syndicate was in a sense "too successful." They say its goal was to get more science news into the papers, and when that goal had been reached, there was no longer a reason for the syndicate to survive.

50 Million Affected?

The remaining activities of Science Service fall primarily into two categories-publishing and youth activities. The organization publishes Science News, a weekly magazine which circulates some 115,000 copies among educated laymen, students, teachers, scientists, and others with a professional interest; the Science News Yearbook, an annual encyclopedia-type volume which has been published by Charles Scribner's Sons for the past 2 years; and various books, which are generally produced in collaboration with a commercial publisher. In the youth field, the organization sponsors, conducts, or coordinates such activities as Science Clubs of America; the International Science Fair; and the annual Science Talent Search, which seeks to identify and award scholarships to the most scientifically gifted high school seniors in the country. Science Service also sends out kits of science experiments to junior high school subscribers under the name "Things of Science." There are no good measures of the impact Science Service has had, but Seaborg claims the youth activities have "probably reached or affected more than 50,000,000 young people in one way or another."

Just what the root cause of Science Service's problems might be is unclear. Some observers think the organization, which has an annual budget of about \$1.5 million, is trying to do too much with too little, and is thus failing to perform a first-rate job in any one field. Others think the organization has suffered from a long history of careless management. Watson Davis had the reputation of running the organization out of his hip pocket, and the staff delights in telling anecdotes to the effect that, when Davis died, it was impossible to find out even how much money the organization had. Sherburne, who previously worked in educational television and at the AAAS as head of a program to promote public understanding of science, is said to have brought some order out of the chaos, but he too is regarded as less than a hardnosed businessman.

The youth activities of Science Service, which are partially supported by grants, break about even, according to Sherburne. Thus the bulk of the organization's deficit stems from losses on Science News, which has failed to attract enough advertising to become self-supporting. Advertisers are said to be uninterested in the magazine's polyglot readership (students, teachers, laymen, scientists, engineers, and others) either because they believe sales prospects are low among these groups or because they believe there is a better way to reach the particular group they are after. Compounding the problem in recent months has been the general sluggishness of the American economy, which has cut into the advertising revenue of virtually all magazines. Science *News* contracted with a new advertising organization (Scherago Associates, Inc., which also handles advertising for Science) last year. Scherago has managed to boost the ad revenue somewhat, but the deficit remains.

Science Service's chief hope for survival appears to be a merger with a more affluent organization. Science Service already has close ties with a number of prestigious scientific bodies. Its 15-member board of trustees includes three trustees appointed by the AAAS, three appointed by the National Academy of Sciences, and three appointed by the National Research Council (the remaining six trustees are appointed half by the E. W. Scripps Trust and half by journalistic representatives).* One of the trustees appointed by the AAAS—namely, Athelstan F. Spilhaus, who is currently the president of the AAAS—has taken a particularly vigorous role in pushing for a merger between Science Service and AAAS.

From Science Service's point of view, according to Sherburne, merger with the AAAS would provide enough money to keep the organization afloat and would even allow for an expansion of activities. Merger would also give Science Service the benefit of the "snob appeal" of the AAAS name, which, among other things, might help attract foundation support and also help get more scientists involved in youth activities. Sherburne believes that Science Service is well on the way toward solving its financial problems and could do so with only a little more time. "It's very frustrating," he said. "We're so close to breaking even but we're caught in the crunch of the financial situation today."

Potential for Expansion?

If Science Service can hang on, Sherburne and Seaborg foresee great potential for expansion into such areas as television services and minority group programs. They also suggest that *Science News* could quintuple its circulation with more funds for promotion.

From the AAAS point of view, according to Sherburne, a merger would have the advantage of helping the AAAS get into activities directed at the layman and at youth-two groups that some AAAS trustees have long been wanting to reach more effectively. The AAAS board has already discussed the possibility of "closer relations" at its past three meetings and the matter may come up for a definitive vote at the next board meeting in October. Legal opinion has suggested that while an outright merger might be difficult, there should be no problem in having the AAAS assume the assets and liabilities of Science Service, which would then presumably dissolve. But some AAAS trustees are said to be skittish about taking over Science Service because they believe that the organization is actually in much worse financial shape than it is acknowledging.

Compounding the difficulty of resolv-

* The trustees include Athelstan F. Spilhaus, Wallace R. Brode, and Bowen C. Dees, nominated by AAAS; Henry Allen Moe, Harlow Shapley, and Allen V. Astin, nominated by NAS; Glenn T. Seaborg and Leonard Carmichael nominated by NRC; O. W. Riegel and Gordon B. Fister, nominated by the journalistic profession; and John Troan, Ludwell Denny, and Edward W. Scripps II, nominated by the Edward W. Scripps Trust. Two positions are currently vacant. ing the question of a tie between Science Service and AAAS is an obvious conflict of interest on the part of some of the principals involved in the discussions. Spilhaus, who seems to be the chief advocate of the idea that the AAAS should help rescue Science Service, is on the board of Science Service and consequently must be considered at least partially responsible for whatever problems that organization may be having. He is thus in the position of asking one of his organizations (AAAS) to bail out another (Science Service). Similarly, Seaborg, the president of Science Service, although he is not yet on the board of AAAS, is about to become a candidate for the presidency-elect of AAAS. If the merger question is not resolved quickly, he, too, may end up

Foreign Aid: Reorganization Should Further Abet Research

The American foreign aid program with its history of frequent overhauls faces what could be its most drastic reorganization. Apparently in store for the program is separation of the loan and technical assistance functions now combined in the Agency for International Development (AID). The splitup of AID would come at a time when there are signs that the chronic research deficiency in the aid program might be remedied and with a little luck the reorganization should enhance the possibility.

An Administration message proposing the reshaping of the foreign assistance program has been anticipated since March and reportedly was ready for transmission to Congress in early August, but a decision was made to hold up the message until the House of Representatives returned from its $3\frac{1}{2}$ -week pre-Labor Day recess. There were rumors that a rearguard action by AID bureaucrats seeking to prevent the breakup of the agency had delayed the message and also that a patronage dispute between Senator Jacob K. Javits (R-N.Y.) and the White House over appointment of New Yorkers to some newly created AID posts had a retarding effect. Most close observers seem to agree that heavy pressure of other business simply caused the AID message to be bypassed, and they expect it to be sent to Congress this month.

The Administration proposals are said to follow in broad outline the recommendations in the report* by a Task Force on International Development appointed by President Nixon The President's message on foreign aid was released at noon on Tuesday as Science went to press. The message prescribed a reorganization of the aid program along the general lines discussed in this article.

and chaired by Rudolph A. Peterson, president of the Bank of America. The task force was created in September 1969 to look at the whole range of this country's foreign economic and military assistance programs and trade and investment relations with developing countries.

The group takes the view that, after a quarter of a century of foreign aid, it is desirable to make clearer separations of the three main categories of American foreign aid: (i) military assistance, (ii) welfare and emergency relief, and (iii) development assistance. The total budget for foreign aid in fiscal year 1969 was \$6.5 billion, with some \$3.4 billion in the category of military aid and other kinds of "security" assistance; \$370 million in welfare and emergency relief; and \$2.7 billion in development assistance. Development aid has followed a steadily downward trend in recent years, and the task force asks a reversal of this trend.

In administering development aid the task force urges that the United States seek to make development a "truly international effort," working in concert with other industrialized nations now able to mount substantial foreign aid efforts and also channeling more U.S. aid funds through international agencies. In U.S. bilateral programs the task force asks the government to rely more heavily on American private organizations. representing two organizations with possibly conflicting interests. The dilemma is one that is not altogether unusual in the clubby atmosphere of the high councils of science, but hopefully the participants in the current negotiations will come up with a solution that serves the best interests of both organizations involved, as well as the public they serve.—PHILIP M. BOFFEY

A major implication of the Peterson report is that the United States should move away from an aid program built around AID "missions" involving large numbers of American specialists and administrators working abroad. If the report's recommendations are followed the Administration will be confronted with the question of what to do about the sizable development operations now in progress, which do not seem to fit into the Peterson blueprint, and about the AID employees and contract workers manning these programs. Some observers predict that the existing aid structure may be very difficult to change.

In its main recommendations, the task force concurs with the views of several recent study groups on foreign aid, including an international committee headed by former Canadian Prime Minister Lester Pearson and also a group headed by John A. Hannah, now AID administrator. Hannah, who was president of Michigan State University when he chaired a committee scrutinizing the technical assistance program, is said to have cooled somewhat in his ardor to see the AID development loan and technical assistance functions separated, but it appears that he will be expected to preside at the dismemberment of his own agency.

To replace AID, the Peterson task force envisions four institutions dealing with development problems. The Peterson groups sees a future for the Overseas Private Investment Corporation (OPIC) created last winter by Congress to mobilize participation of U.S. private capital in development. OPIC would administer a broadened investment guarantee program and a small loan fund and would handle such related activities as preinvestment survey work.

The task force also favors creation of a U.S. Industrial Development Council headed by a presidential appointee. The council's role is left rather nebulous in the report, but it would apparently be expected to pro-

^{*} U.S. Foreign Assistance in the 1970's: A New Approach. Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The price is 30 cents.