

distribution of income in Britain. Continuous, reliable, and conceptually well-founded estimates, however, had to wait until a relatively few decades ago, when the improvements of the population and industrial censuses, as well as of the statistics generated by income tax collections, began to yield the underlying data on which such estimates could be built.

In the United States, the first annual estimates covering any considerable stretch of years were those published at the National Bureau in 1921 and 1922 by W. I. King and Oswald Knauth (1). They covered years 1909 to 1918 and were later revised and extended to 1928 by King (2). It was on the basis of these experiments that the Department of Commerce undertook to establish its famous official estimates of national income, and it is in conjunction with this historic departure that Kuznets entered on the central area of his lifework. The Commerce Department's first publication tells the story (3).

In view of the previous extensive investigation [by the National Bureau of Economic Research], a member of its staff, Dr. Simon Kuznets, was retained

by the Bureau of Foreign and Domestic Commerce to plan and supervise this study. Dr. Kuznets, who was in full charge of the work, was responsible for the preparation of the final estimates, as well as the organization and text of the report.

Kuznets' work on national income is notable, in the first place, for its scrupulous attention to the conceptual foundations of the estimates. He insisted on the social judgments needed to separate economic activity from the rest of life and productive from non-productive activities. He dealt openly with the desired reach of the estimates from marketed production to activities outside the scope of markets, with the consistent treatment of intermediate goods, and with the tangled problems of valuing varied outputs at a given time and of correcting for price changes over time. Kuznets stressed the relativity of his or any answers to the social values of time and place, to the nature of family, industrial, and governmental organization, and to the problems to which the figures are designed to apply. Nor was he satisfied with the provisional answers he gave. He early saw that solving the problems of national income estimation would

need continuing work. He helped to found the Conference on Research in Income and Wealth and for many years guided its program. The year 1970 saw the appearance of volume 33 in the series *Studies in Income and Wealth*.

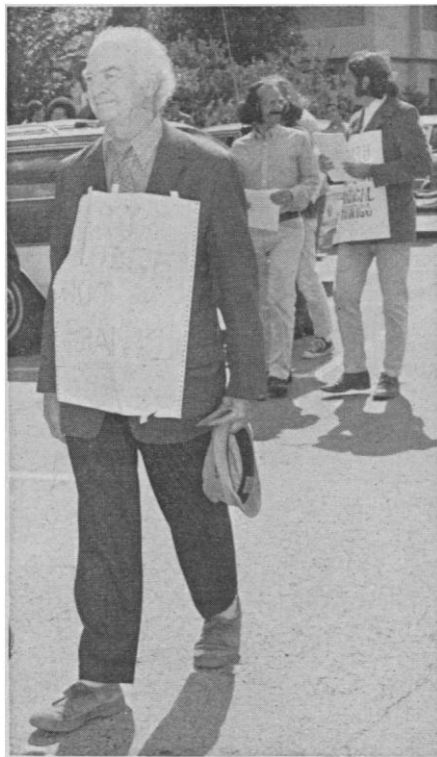
In this country, Kuznets himself did the pioneer work in establishing the modern estimates of national product in each of its three principal manifestations. In the first, national product emerges as the sum of expenditures by different classes of users on different classes of goods (4). In this form, it is the principal statistical basis for modern studies of the relations between income, consumer expenditure, and investment. It is, therefore, the empirical counterpart of the Keynesian model of the economic system and of the short-term changes in output and employment that it illuminates. It was, indeed, the joint appearance in the mid-1930's of Keynes's general theory and of the early Kuznets report on gross national product and its expenditure components which made it possible to give quantitative expression to the Keynesian revolution in economic thought.

Next, as the sum of "incomes produced," national product is built up as the sum of the wages, interest, rent, and dividends paid out, and of the retained earnings of firms in the economy's many industrial sectors (5). Taken in conjunction with information about the labor and capital employed, national product in this form allows us to study the relations between resource input and productivity, on the one side, and output, on the other. It is, therefore, the basis of much of what we know about the physical sources of output growth.

Finally, as the sum of incomes of all types received by individuals or families, national income provides the framework for studies of income distribution and of the changing relative status of the rich and the poor, the blacks and whites, the rural dweller, and the urbanite (6).

Kuznets pushed his work on national problems back in time and across international boundaries. Having established the American estimates for the years since 1919, he was anxious to project them into the 19th century as the basis for studies of long-term growth. With the help of W. H. Shaw (7), Kuznets extended his own estimates to 1869 (8). Others have now pushed the calculations by years as

Pauling Pickets



Where did the campus revolution go? To the Western front, apparently, where all is not so quiet at Stanford University. At left is Linus Pauling, winner of Nobel prizes for chemistry and for peace. Pauling took to the picket lines last month to protest the university's prosecution of a tenured professor of English, H. Bruce Franklin. Franklin was suspended with pay by Stanford President Richard W. Lyman in February of this year and barred from the campus by court injunction. The university's formal charges against Franklin are that he prevented Henry Cabot Lodge from speaking on Vietnam and later "incited" students to occupy a computer center.

A unique academic court, a jury of Franklin's peers made up of seven elected faculty members, is deciding whether his tenure should be discontinued. The hearing is expected to last all day every day for weeks. Pauling and some of the faculty object to the entire proceeding. Firing Franklin, they say, would spell doom for academic freedom. Spelled also on Pauling's printout is a further view: "Try Lodge—Not Franklin."—D.S.