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Reports of the National
Bureau of Economic Research**THE NATIONAL INCOME AND ITS PURCHASING POWER**
By Willford I. King. (Just off Press). 394 pages; 133
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51 Madison Avenue
New York"...We are called upon...to Mediate"
Presidential Address of Thomas S. Adams

THE year 1929, for the National Bureau of Economic Research, Inc. was one of steady progress. In publication, it was marked by the appearance of the first volume of the monumental study of International Migrations, and by the successful general survey, Recent Economic Changes. No great gift of prophesy is required to foresee that the latter work will leave a profound impress upon the economic thinking and teaching of the next decade.

Financially, the year was marked by a healthy growth in resources and income—in particular by the generous grant of the Rockefeller Foundation, with its challenge and obligation to raise a similar amount from other sources. Educationally, it has brought a promising innovation in the authorization of three Research Associates who, in the helpful environment of the Bureau, will be enabled to prosecute, we hope to completion, research projects of their own choosing.

Finally, during the course of the year, the Bureau moved into a more comfortable home. At the end of the year, in short, the Bureau finds itself with more research projects under way, with an income more nearly adequate, with larger opportunities and larger responsibilities, than at the beginning of the year.

As an organization for economic research, the Bureau has passed the probationary stage and has taken on the settled habits and steadier outlook of an established institution. It has staked out for itself in the public domain of economic knowledge a fairly distinct claim and is industriously driving forward its improvement work along the lines of National Income, Business Cycles, Price Trends and Interrelations, Bond Yields and Interest Rates, Profits, and International Migration.

This group of major or what the financier might call "long-dated" researches will be diversified from time to time by shorter excursions into attractive fields of research such as Health Insurance, Public Works as a Factor of Stabilization, Trends in Philanthropy and Corporate Giving, and by those periodical surveys of the movement of economic society which already in the brief history of the Bureau have proved so enlightening to the public and so helpful to the Bureau itself.

Such in broad outlines, as I see it, is the promising policy or program of research which the Bureau has adopted. In pursuing and expanding it, however, I hope that we shall never lose sight of the distinctive purpose with which, and largely for which, the Bureau was created: the purpose of fact-finding in the more controverted fields of economic and social science, under conditions of critical examination and review which insure for those findings, the acknowledged qualities of impartiality and fearlessness.

To seek economic truth is not, fortunately, our peculiar province. To establish controverted economic and social facts is our distinctive task; and for this task we have been endowed with an unusual protective apparatus which permits us to penetrate safely zones of social conflict in which the ordinary investigator would be distracted and discredited.

There is an insignia or order of merit greater even than that for distinguished scientific service: the moral crown of acknowledged fairness in fields of social science which are clouded by inevitable controversy. To deserve that crown is an aim which, I trust, the Bureau will pursue, with scriptural "cunning" to be sure, but with unshaken purpose. It is not enough to search. Through the quiet dissemination of uncolored facts we are called upon, in a sense, to mediate.

Seasonal Movements in Production and Trade

National Bureau begins computation of indices to measure seasonal variations in supply of raw materials and finished goods.

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NEW light is thrown on short time fluctuations in production and trade in a study of seasonal variations, by Dr. Simon Kuznets, of the Research Staff of the National Bureau of Economic Research, the preliminary results of which were announced today.

The purpose of this study is to discover inter-connections among seasonal swings in receipts, stock, production, shipments, employment and sales in various industries, such as textiles, foodstuffs, iron and steel, and other commodities.

Work has been begun on the computation of seasonal indices for large groups of industries. This collection will undoubtedly be of interest to business men and to students of economics.

Will Show Business Practices

In addition to seasonal indices, certain operating ratios will also be given which will prove of practical interest. Ratios of stocks to production or to shipments and of stocks to sales, given annually for a large number of industries, throw considerable light on the variety of business practices. If taken for a long enough period they will, it is believed, reveal changing tendencies such as, for instance, "hand-to-mouth" buying.

Study of the first group, cotton textiles, has yielded interesting results in measuring the direction and amplitude of seasonal swings in receipts of raw materials, their consumption, stocks of raw materials and of finished goods, and sales by wholesalers and retailers. Only the most significant indices have been chosen for presentation here.

NATIONAL BUREAU'S LATEST
BOOK JUST OFF THE PRESS

The National Income and Its Purchasing Power, with 394 pages, 133 tables and 60 charts, is now being distributed to subscribers. This report shows how the \$89,416,000,000 income of the almost 120,000,000 people of the United States has grown from one-third that amount in 20 years, and how it is distributed.

Contributing subscribers to the research work of the National Bureau of Economic Research who pay the minimum of \$25, receive advance copies of all the Bureau's publications, including bound volumes, monographs and news bulletins, during the period of their subscription.

Contributing subscribers enrolling during April, 1930, will receive a complimentary copy of *The National Income and Its Purchasing Power* and all the other publications to be issued during the ensuing twelve months.

They have been arranged so as to show seasonal movements in the flow and stocks of goods, beginning with raw materials and ending with the passing of the finished commodity into the hands of ultimate consumers.

The periods for which the indices have been computed cover recent years. The number of years included varies from five to ten, seven being the most common.

What the Chart Shows

In the accompanying chart, on page 3, the main feature is the amplitude of the seasonal swings. Marketing of raw cotton by farmers shows large fluctuations directly determined by the cotton harvest. Marketing is at its highest during the last quarter of the year, and below the year's average during the first eight months. The swing is from a low of 19% of the year's average in July, to 268% in October.

Stocks of raw cotton in public warehouses follow the movements of cotton marketing. They show the same decline throughout the first seven months of the year and a rise thereafter. There are, however, two significant differences. Stocks continue to be high up to January and decline only in the latter month, while marketing declines in November. The second and more important difference is in amplitude. The low in stocks is 49% of the year's average and the high is 147%. The swing here is only 98% of the annual average, as against 249% for cotton marketing.

Stocks of raw cotton at textile mills again show a seasonal movement similar to that in marketing and, hence, to that in stocks at public warehouses. Again there are significant differences. Stocks at mills remain high all through the first quarter of the calendar year and begin to decline only in April, while stocks at warehouses decline in January. The amplitude of the seasonal swing in mill stocks is smaller than the amplitude of the corresponding swing in warehouse stocks. The low in mill stocks is 66% of the year's average, the high 122% and the total swing is 56% as against 98% for stocks at warehouses.

Spring and Fall Peaks

The seasonal movement in consumption of raw cotton shows a slightly different direction and a materially smaller amplitude. There are two peaks, one in spring and the other in fall, whereas all preceding series show only one peak. The amplitude of the seasonal swing in consumption is rather small. The year's low is 85% of the year's average, the high 112%. Here the swing is only 27%. Thus, it is seen, there is a gradual decline in the amplitude of the seasonal change as the flow of the raw material is traced from the farmers to its consumption in the industrial process.

Production of finished goods is not subject to any greater seasonal variation than the consumption of the

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NATIONAL BUREAU OF ECONOMIC RESEARCH, INC.

THE National Bureau of Economic Research, Incorporated, was organized in 1920 in response to a growing demand for exact and impartial determinations of the facts bearing upon economic, social, and industrial problems.

The Bureau seeks not merely to determine facts, but to determine them under such auspices as shall make its findings carry conviction to Liberals and Conservatives alike. It deals only with topics of national importance which are susceptible of quantitative treatment.

By issuing its findings in the form of fact reports, entirely divorced from propaganda, the Bureau hopes to aid all thoughtful men, however divergent their views of public policy, to base their discussions upon objective knowledge as distinguished from subjective opinion.

No report of the Research staff may be published without the approval of the Board of Directors. Rigid provisions guard the Bureau from becoming a source of profit to its members, directors or officers, and from becoming an agency for propaganda.

The Bureau assumes no obligation to present or future contributors, except to determine and publish facts.

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raw material. Thus, none of the indices for finished cotton goods, knit underwear, and work clothing, all of which have been plotted together, shows large swings and all exhibit the two peaks, the one in spring, the other in fall. The seasonal movement in the production of these three groups of commodities is, respectively, 35%, 24% and 35% of the year's average.

When stocks of finished commodities in the hands of manufacturers are reached, it is found that the seasonal movement almost disappears. The seasonal range of stocks of finished cotton goods (dyed, bleached and printed) in the hands of converters is only 6% of the year's average. For the stocks of work clothing it is 11%.

Shipments of finished cotton goods, knit underwear and work clothing show seasonal swings similar to those in production. In knit underwear the fall peak in shipments is materially higher than the fall peak in production, while in finished cotton goods the reverse is true. There is a more significant difference in amplitude. The seasonal swing for the three shipment series is respectively, 26%, 34% and 46% of the year's average. With the exception of finished cotton goods, the series show a higher seasonal amplitude in shipments than in production.

Stocks Low in Midsummer

There are no continuous series available representing stocks in the hands of wholesalers, but the seasonal index can be computed from month-to-month and year-to-year changes as given in the Bulletins of the Federal Reserve Banks. For two districts the computed indices are shown in the chart. The similarity of these indices provides a partial proof of their reliability.

It is to be seen that these stocks exhibit a seasonal movement that suggests preparedness for wholesale sales. The low in stocks is in midsummer and there are two unequal peaks, a smaller one in spring and a much higher one in Fall. If these stocks are compared with sales it is found that there is a correspondence to the two uneven peaks in wholesale sales, the smaller one in spring, the larger one in fall. In the matter of monthly dating there is a tendency for stocks to precede sales by one month. This is particularly true of the index for the Philadelphia Federal Reserve District.

The seasonal swing in wholesaler's stocks is 27% to 28% of the year's average. The swing in wholesalers' sales is 45%. Thus, wholesalers, and not manufacturers, bear the burden of carrying stocks of finished commodities for the seasonal trade.

Analysis of Retail Sales

Retail sales by special departments of department stores are available continuously for the Boston Federal Reserve district. Two groups of commodities have been chosen, distinguished by a considerable difference in their seasonal pattern. Cotton dress goods are essentially summer goods and are not affected by the holiday trade. Knit underwear has two peak seasons, one in June and a much higher one during the holiday shopping in December. The interesting thing is that in both groups the seasonal movement is large. The seasonal swing in sales of cotton dress goods is 107% of the year's average, in knit underwear, 173%. Both swings are greater than any other noted since the consideration of the marketing of raw cotton by farmers.

Employment Movement Slight

Employment in the manufacture of cotton goods, as reflected in the number of employees on the payroll of selected enterprises, shows a slight seasonal movement. The low in August is 93% of the year's average, the highs in March and May are 104% each, so that the total swing is only 11%.

Indices of Seasonal Variations, Raw Cotton and Cotton Goods
Index for Each Month as Per Cent of the Year's Average

