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THE BEHAVIOR OF CONSUMPTION IN BUSINESS DEPRESSION

BY
ARTHUR R. TEBBUTT



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THE BEHAVIOR OF CONSUMPTION
IN BUSINESS DEPRESSION

BY

ARTHUR R. TEBBUTT

Instructor in Business Statistics



DIVISION OF RESEARCH

BUSINESS RESEARCH STUDIES — NO. 3

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FOREWORD

It is the policy of the Harvard Graduate School of Business Administration to publish from time to time in this series of Business Research Studies the results of some of the investigations undertaken both by members of the teaching and research staff and by advanced students. In accordance with this policy the present monograph on the Behavior of Consumption in Business Depression has been prepared by Mr. Arthur R. Tebbutt, Instructor in Business Statistics.

CLINTON P. BIDDLE, *Director of Research*

MELVIN T. COPELAND, *Chairman of the
Committee on the Doctor's Degree*

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of the Bureau of Business Research*

PREFACE

There is a tendency on the part of most people to assume that the consumption of goods in general by the ultimate consumer has declined drastically in this depression. It seems obvious, of course, that this should be the case. Our government also apparently has accepted this assumption in the carrying out of its present policy for revival of business, and the success or failure of its plans will seemingly be determined by the increase or decrease in consumption which results.

A short while ago, however, I was greatly surprised by the statement that even during the severe depression through which we have been passing in the years 1930 to 1932 consumption of goods by the ultimate consumer had probably increased over the level existing in the preceding period of prosperity. That such might be the condition of affairs seemed on first thought nothing short of ridiculous, but it is obvious upon reflection that one could neither prove nor disprove the statement without statistical information. Here in the United States we have no all-inclusive statistics concerning the behavior of the ultimate consumption of goods. We do possess some accurate statistics of certain types of production, but it is production for only a narrow range of goods, goods which for the most part are not used by the consumer but only by the producer who uses them to make the goods he manufactures—goods which may never be used directly by us as individuals. It is clear that conclusions drawn from a study of movements in the production of producers' goods, as we may call them, avail us nothing for meeting the question, and we are still in the dark concerning consumption of goods by the ultimate consumer.

Has the public consumed more, or less, in depression than it did in the preceding period of prosperity? We might also ask ourselves the further question whether if it consumed more, how much more; if less, how much less. The answers to these questions are fundamental to a correct understanding of the present depression. More important still, they may point to the proper way of leading us to a recovery that will be basically and inherently sound. In these days of strong-arm attempts to regulate the business cycle, it is essential that we know among other things the correct answer to the question raised above. It will not do to assume an answer, for if our assumption is wrong the regulatory attempts, no matter how strong the arm that forces them, are bound to lead in a relatively short time to disaster. We want to know what is responsible for the decline in business. If we know that there has been a very sharp decline in the consumption of producers' goods and only a relatively small decline in the consumption of consumers' goods, then it would seem obvious that if we are to pull ourselves out of depression the thing to do is to find ways and means of boosting sharply the consumption of producers' goods and of increasing only slightly the consumption of consumers' goods. In this case it would not be feasible to push forward only the consumption of consumers' goods if our object is to get business back to normal. For this purpose it is more essential to increase the consumption of producers' goods.

It is the testing of the correctness of the assumption that individuals consume much less in depression than in prosperity that is the object of this bulletin. I am grateful to Professor J. Schumpeter and to Professor W. L. Crum of the Department of Economics for advice and suggestions given in the carrying out of this study. I also wish to thank Professors M. T. Copeland, T. H. Brown, M. P. McNair, C. I. Gragg, and C. N. Schmalz of the Business School, Mr. S. Siegel of William Filene's Sons Company, and Mr. E. S. Boardman of the Federal Reserve Bank of Boston for constructive criticisms and suggestions.

ARTHUR R. TEBBUTT

JULY 27, 1933

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THE BEHAVIOR OF CONSUMPTION IN BUSINESS DEPRESSION

The importance of the behavior of consumption during the business cycle is an economic fact which is little appreciated and less understood. Many divergent views prevail concerning the movement of consumption in prosperity and depression. On the one hand we have the seemingly simple generalization given by the layman that the consumption of goods increases in time of prosperity and decreases in time of depression; on the other hand, we have some business cycle theorists stating that consumption increases at all times, whether it be prosperity or depression, but that the rate of increase is much greater in times of depression than in times of prosperity. Actual knowledge of the matter can be ascertained only by a study of the facts, but the facts are exceedingly meagre. What the consumer actually consumes in the way of goods is a subject that is yet to be explored, and the difficulties which surround the pioneer who ventures into this unknown field are very great. This study makes an attempt to explore quantitatively part of this unknown field with special reference to the period 1928-32, and while the conclusions reached may be criticized as to their absolute accuracy, it is felt that they are representative of the relative movement of consumption in this prosperity-depression period.

That the United States entered into a period of declining business in 1929, that this decline broadened with the passing of time into a major depression in 1930 and 1931, and assumed the proportions of an "abnormal" depression in 1932, a type of depression that has not taken place in this country since the seventies, is a generally accepted fact. Current business indices prove this point beyond doubt. The long declines that have taken place in commodity prices at wholesale and retail, in security prices, in production, trade, employment, and distribution, are facts that do not need repeating. The very extent of the present period of declining business should make this interval from 1928 to 1932, covering the end of a boom and a period of the worst type of depression known, a particularly significant one from the viewpoint of behavior of consumption.

The word "consumption" taken by itself may refer to the using up of goods of an exceedingly wide variety and by an unlimited class of consumers. We as individuals eat bread, butter, and meat; we drink coffee

and tea; we wear clothes; we read books. The cotton mill consumes cotton. The automobile industry consumes steel, copper, rubber, and a host of other commodities. The consumer must be defined both as to the type of commodity which he consumes, and, what is more important to us, as to the type of consumer he is. It is all-important to note this difference between the consumer who in using up a commodity manufactures a raw material for another commodity, and the one who uses it up for his own satisfaction. Consumption of producers' goods or capital goods, which are instrumental in the production of other goods, will have a characteristic movement in depression radically different from that of goods which are used up once and for all by individuals.

That consumption of producers' goods has fallen off drastically in this business depression is clear from the exceedingly sharp decline that has taken place in industrial production: *e.g.*, that which has occurred in the index of industrial production compiled by the Federal Reserve Board (Table 1).

If industrial production was 50% lower in 1932 than it was in 1929, it appears certain that the consumption of goods ordinarily used in such production was also radically below the level prevailing in 1929. The production index itself measures the falling off in the consumption of producers' goods, and gross earnings statements of those companies engaged in the manufacture of such goods reflect further the decreasing consumption of their products, price declines considered. Consumption of producers' goods obviously tends to move with the business cycle, rising in a period of prosperity and falling in a period of depression.

Before turning to a discussion of the consumption of goods by the ultimate consumer, it may be well to consider further the changes in production. Table 1 presents in detail selected industrial groups included in the index of industrial production of the Federal Reserve Board. The date of June 1929 was chosen since that month marked the high point of the composite index, while that of July 1932 marked the low point in that year. The individual industries may have been higher or lower at other times during the period 1928 to 1932, but any such divergence will not affect greatly the percentage declines which have been calculated for the period.

An examination of this table reveals some rather startling results. It may be noted that the decline in industrial production as a whole was 54% in this period, manufacturing production declining 55% and production of minerals 44%. A consideration of manufacturing by itself reveals exceedingly sharp declines in iron and steel (83%), lumber (71%), and automobiles (78%); while lesser declines took place in other manufacturing industries, the smallest decreases occurring in those industries nearest the consumer—food products (16%), leather and products (29%), petroleum refining (17%), and tobacco products (17%). In the output of mineral products, sharp declines occurred in the production of bituminous coal (55%), shipments of iron ore (94%), zinc production (72%), lead production (72%), and undoubtedly in copper production, for which lack of statistical data makes it impossible to measure the decline. This analysis clearly depicts the exceedingly sharp decreases that have taken place in the production of producers' goods, and it may be possible that such reductions are primarily responsible for the depressed state of business in 1932. Those industries which produce directly for the ultimate consumer are not present to any great extent in the Federal Reserve Board index of production; but those which are included

show much smaller declines, and certainly are in a different category from those industries which produce goods to be used for further production.

The consumption of the mass of the population of the United States cannot be measured, however, by the consumption of producers' goods. The fact that the using up of producers' goods has declined substantially in the period 1928 to 1932, as pointed out above, is not *prima facie* evidence that the using up of consumers' goods has also declined sharply during this period. The analysis made above of declines by industries points to this conclusion, but a lack of data on the physical output of those industries closest to ultimate consumer demand makes it impossible to state whether there has actually been a decline during this period, and if so, how extensive it has been. Information must be gathered from other sources.

Before considering in detail the consumption of consumers' goods by the ultimate consumer, let us examine briefly the position of the mass of individual consumers in this country. The very fact that industrial production has fallen as sharply as 54% from June 1929 to July 1932 makes it evident that a great number of our working population is unemployed; and unemployment estimates, while admittedly not very

Table 1. Indexes of Production Compiled by the Federal Reserve Board

(Adjusted for Seasonal Variation, 1923-25 = 100)

	June, 1929	July, 1932	Percentage Change
Industrial Production.....			
Manufactures.....	125	58	-54
Iron and Steel.....	127	57	-55
Textiles.....	148	25	-83
Food Products.....	120	60	-42
Paper and Printing.....	96	81	-16
Lumber.....	127	85	-33
Automobiles.....	94	27	-71
Leather and Products.....	153	33	-78
Petroleum Refining.....	108	77	-29
Rubber Tires and Tubes.....	170	141	-17
Tobacco Products.....	146	68 (Aug.)	-53
Minerals.....	138	114	-17
Coal.....	114	64	-44
Bituminous.....			
Anthracite.....	102	46	-55
Petroleum.....	84	55	-35
Iron Ore Shipments.....	135	104	-23
Copper (mined).....	128	8	-94
Zinc.....	124
Lead.....	120	34	-72
Silver.....	110	31	-72
	95	40	-58

accurate for the United States as a whole, lend some support to this statement. In addition to this great number of people out of work, we have many others who are working on a part-time basis. For those who are working, in a great majority of cases wage rates have been reduced, in some cases sharply; and hence pay roll figures show a considerable decline during this period 1928 to 1932. Unemployment, part-time employment, and reductions in wages and salaries have reduced total dollar purchasing power of workers to a very marked degree. But the declining total dollar purchasing power can still buy as many goods for consumption if the prices which consumers pay for those goods have come down in proportion. It is obvious, however, that regardless of the drop in retail prices which has taken place those consumers who have been without employment altogether are in no better position to buy commodities of one sort or another except by drawing on savings of various types or obtaining credit than if the prices had remained fixed at their relatively higher levels. In addition, the fear of being unemployed has undoubtedly lessened purchases on the part of those who are now working; the very extent of the present business depression may have cut down their consumption. It is the behavior of this consumption of goods by the ultimate consumer during the period 1928 to 1932 that concerns us in this study. Does the mass of our people consume more, or less, during depression than in prosperity? Have the consumers in the United States raised or lowered their standard of living, or have they kept it constant during this period?

The standard of living, taken by itself, is a somewhat abstract concept, and varies greatly with the personal viewpoint. A high standard for one class of society may be a very low standard for another class, and vice versa. Regardless of the class of society to which a man belongs, it is essential that he buy food; that he wear clothes; that he provide himself with shelter; that he acquire fuel and light, together with furniture and furnishings; and then there are the other things which to him make life worth living, a host of miscellaneous items on which he ordinarily spends his money after taking care of his bare necessities. The proportions of his income which he spends on these various groups will differ according to his income, and yet the proportion in each case will give a rough indication of the individual's standard of living. The higher a man's income is, the lower the proportion he ordinarily tends to spend for food and clothing, and the greater the proportions he spends on housing and those miscellaneous items which, while not absolutely necessary to his welfare, yet add greatly to his comfort and convenience,

as well as to his prestige. In Table 2, below, we have presented the relative importance of the various items consumed by the working man for the United States as a whole, taken from the United States Bureau of Labor Statistics, and an individual estimate for the professional man living in Cambridge, Massachusetts.

Table 2. Cost of Living Budgets
Proportions of Income Applied to Elements of Living Costs

Item	Working Man's Family in United States	Professional Man's Family in Cambridge, Massachusetts
Food.....	38.2%	12.0%
Clothing.....	16.6	7.9
Shelter.....	13.0	20.1
Light and Fuel.....	5.2	3.3
Furniture and Furnishings.....	5.1	3.3
Miscellaneous.....	21.3	53.3

For purposes of this discussion, we shall assume the standard of living to be defined as the total consumption of all consumers' goods; any decrease in the consumption of any particular good will represent a reduction of the standard of living; any increase, a raising of the standard of living. We shall be especially interested in the shifts in consumption which have taken place during the period 1928 to 1932, since a knowledge of such changes in consumption of various products is of particular importance to the student of the business cycle.

As stated at the beginning of this study, statistical data concerning the actual physical volume of consumption of the various products are meagre, and even where they exist the accuracy of the figures is subject to criticism. Use has been made of whatever figures have been available, but in many instances, particularly in regard to clothing and miscellaneous items, it has been necessary to carry through a long and detailed research to obtain estimates of actual consumption. These estimates, of course, are open to question, but the basis of the data presented will be discussed so that the reader may become acquainted with their background. The logical approach to the problem concerning the behavior of consumption in the business cycle seems to lie in a somewhat detailed consideration of the actual consumption of food, clothing, housing, fuel and light, furniture and furnishings, and miscellaneous items which the individual consumes in his ordinary everyday life.

Food

The very necessity of keeping alive demands that the individual consume food. That he may consume different kinds of food is readily admitted; but, depression or no depression, the consumption of food

must remain at approximately the same level. Indeed it may be expected that with the slight increase in population that has taken place, the consumption of food would increase, but such a movement may be counteracted more or less by the decrease in waste which might be expected in a time of business depression. Hence, it is logical to suppose that food consumption as measured by the available statistics would remain the same or perhaps fall off slightly over the period 1928 to 1932, the decline depending particularly on the degree of increase in the economy of food usage.

Let us examine the statistics. In Table 3, below, is presented the actual monthly average consumption of wheat flour computed for the period 1919 to 1932.

Table 3. Monthly Average Consumption of Wheat Flour
(Million Barrels)

Year	Consumption
1919.....	8.16
1920.....	8.24
1921.....	8.57
1922.....	9.29
1923.....	9.30
1924.....	9.72
1925.....	9.49
1926.....	9.63
1927.....	9.39
1928.....	9.46
1929.....	9.48
1930.....	9.56
1931.....	8.94
1932.....	8.51

Source: *Survey of Current Business*.

It may be noted at once that in the much shorter depression of 1920-1921, consumption of wheat flour did not decline at all. In the present period consumption advanced into 1930, fell about 6% from 1930 to 1931, and about 4% from 1931 to 1932. The somewhat lower level of consumption in 1932 as compared with 1928 and 1929 is negligible indeed when compared with the very sharp declines that have taken place in industrial production during this same period, and can be accounted for to some extent at least by the probable decline in the consumption of fancy pastries and other bakery delicacies, the demand for which is probably characteristic of business prosperity, but not of depression.

The buying of meats (Table 4) shows very little change during business depression, although the movements vary for different types of meats. Considering total meats, consumption fell very slightly in 1921, and in the present depression the movement has been sideways, the total in 1932 being somewhat higher than that in 1925. Consumption of beef and veal remained practically at a constant level from 1928 to 1931,

and the small drop of about 7% in 1932 can be ascribed without doubt to a substitution of other meat for the more expensive beef. Consumption of pork increased during the 1920-21 depression; consumption in 1929, however, was even lower than that in 1928, and while

Table 4. Monthly Average Consumption of Meats
(Million Pounds)

Year	Total Meats	Beef and Veal	Pork (including Lard)	Lamb and Mutton
1919.....	854	432	384	39
1920.....	856	401	417	38
1921.....	853	375	435	43
1922.....	929	412	481	36
1923.....	1053	427	588	38
1924.....	1078	440	600	38
1925.....	1024	461	525	39
1926.....	1033	480	513	42
1927.....	1047	447	559	42
1928.....	1056	401	611	44
1929.....	1058	404	608	46
1930.....	1029	398	577	54
1931.....	1043	398	588	57
1932.....	1029	398	604	57

Source: *Survey of Current Business*.

the decline continued more sharply into 1930, the rise in 1931 and 1932 brings it to a level only slightly below the high point of 1928. Consumption of lamb and mutton is about 20% higher than that of 1928. The consumption of meats, on the whole, has not shown any great decline in the current period of depression. While some shifting has taken place among the various kinds of meats consumed, largely because of differences in prices charged for the products, it seems that the people as a whole are consuming just as much meat in depression as they were in prosperity.

Consumption of fish also does not seem to have changed in the period under consideration. Landings of fresh fish at principal ports (Table 5) show an in-

Table 5. Landings of Fresh Fish at Principal Ports and Shipments of Canned Salmon

Year	Fish, Monthly Average Landings (Million Pounds)	Canned Salmon, Monthly Average Shipments (Thousand Cases)
1919.....	17.7	...
1920.....	16.2	...
1921.....	14.2	...
1922.....	14.9	467
1923.....	16.3	471
1924.....	17.0	542
1925.....	20.0	527
1926.....	22.1	525
1927.....	24.1	513
1928.....	24.7	474
1929.....	31.1	457
1930.....	32.2	512
1931.....	25.2	460
1932.....	25.2	481

Source: *Survey of Current Business*.

crease over the number of pounds landed in 1928, while the shipments of canned salmon in 1932 were higher than shipments in 1928 and 1929.

Turning to other products we find the same holding up of consumption in this prosperity-depression period.

Table 6. Monthly Average Consumption of Butter
(Million Pounds)

Year	Consumption
1919.....	126.8
1920.....	129.5
1921.....	143.8
1922.....	149.7
1923.....	156.4
1924.....	164.7
1925.....	166.4
1926.....	174.0
1927.....	174.1
1928.....	173.4
1929.....	176.0
1930.....	176.6
1931.....	181.1
1932.....	183.2

Source: *Survey of Current Business*.

Apparent consumption of butter (Table 6) was higher in 1932 than at any other time on record, and has increased in every year since 1928 to a level considerably above that in the prosperity period. Consumption of cheese (Table 7) also was higher in 1932 than at the beginning of the period, despite a small decline from the 1931 level. Consumption of tea and cocoa as measured by imports (Tables 8 and 9) shows about the same movement as the consumption of other food products during this period of 1928 to 1932.

The using up of fruits and vegetables together with food products of other varieties cannot be measured at all accurately during this period. As has been stated previously, consumption data are not adequate, and it becomes necessary to utilize information such as tonnage terminated by the railroads to measure

Table 7. Monthly Average Consumption of Cheese
(Million Pounds)

Year	Consumption
1920.....	31.3
1921.....	31.7
1922.....	34.0
1923.....	35.7
1924.....	39.0
1925.....	40.6
1926.....	42.5
1927.....	40.9
1928.....	41.1
1929.....	38.3
1930.....	40.8
1931.....	46.5
1932.....	44.1

Source: *Survey of Current Business*.

consumption for various commodities (Table 10). In the study of data showing the tonnage terminated by Class I railroads (railroads having annual operating revenues of one million dollars or more) for various individual commodities, it readily becomes apparent

Table 8. Monthly Average Imports of Tea
(Million Pounds)

Year	Imports
1919.....	6.7
1920.....	7.5
1921.....	6.4
1922.....	8.1
1923.....	8.8
1924.....	7.7
1925.....	8.4
1926.....	8.0
1927.....	7.4
1928.....	7.5
1929.....	7.4
1930.....	7.1
1931.....	7.2
1932.....	7.9

Source: *Survey of Current Business*.

that the tonnage terminated has fallen off over the period 1928 to 1932, even for those commodities for which consumption figures enumerated above show increases. The percentage declines in the majority of cases, however, are very small in comparison with the sharp decreases shown previously in production series. Hence it seems that tonnage terminated, while an indication to some extent of the consumption of various food products, is not a reliable indicator. The transportation of commodities by the railroads alone is not mandatory, and competition by truck has probably increased to a much greater extent as the depression has deepened. No figures are available for the tonnage of commodities carried by truck, and the very fact that this competition exists, and has been increasing, undoubtedly accounts to some extent for the declines

Table 9. Monthly Average Imports of Cocoa
(Thousand Long Tons)

Year	Imports
1919.....	14.6
1920.....	12.8
1921.....	11.3
1922.....	12.8
1923.....	15.4
1924.....	14.1
1925.....	14.2
1926.....	15.9
1927.....	15.8
1928.....	14.1
1929.....	18.0
1930.....	13.9
1931.....	15.6
1932.....	17.8

Source: *Survey of Current Business*.

in tonnage terminated by the railroads. Railroad data, then, cannot be utilized as measures of consumption by the individual.

Another possible source of data lies in the reported sales of the various chain stores which deal chiefly in food. Dollar sales are available for the period under consideration, and in one case actual food tonnage sold is presented. For the Great Atlantic & Pacific Tea Company monthly average sales in millions of dollars and in thousands of tons for the years 1929 through 1932 are as follows:

	Monthly Average Sales (Million Dollars)	Monthly Average Sales (Thousand Tons)
1929.....	85.7	392.1
1930.....	90.1	430.5
1931.....	86.5	470.0
1932.....	72.9	442.4

Source: Survey of Current Business.

In interpreting chain store figures, it is necessary to keep in mind the number of stores which the chain operates. The number of stores operated by the Great

Atlantic & Pacific Tea Company was approximately the same in 1932 as in 1929, and yet the tonnage sold was considerably greater in the depression year 1932 than in the boom year 1929. Sales in dollars, of course, were lower because of the sharp drop that has taken place in prices. The drop in tonnage sales from 1931 to 1932 is accounted for partly by a decrease in the number of stores operated, and partly by the addition of stores by competing chains, so that the decline does not necessarily mean decreased consumption of food. Placing the sales of each chain organization on a sales-per-store basis would not help measure food consumption either, for if two competing chain stores are in the same locality, where previously there was only one chain store, a drop in sales per store for the one first established does not indicate a decreased consumption of food in that locality. Statistics for the independently owned food stores are non-existent. Hence no absolute indication of food consumption can be drawn from retail data as they exist at present.

Disregarding railroad and chain store data for the reasons stated above and confining ourselves to data

Table 10. Indexes of Tonnage Terminated by Class I Railroads for Selected Groups of Commodities (1928 = 100)

Commodity	1928	1929	1930	1931	1932 (Estimated)
Wheat flour.....	100	99.8	100.5	93.6	83.4
Cereal foods.....	100	91.2	92.2	91.9	84.0
Mill products.....	100	101.2	98.8	80.0	58.5
Oranges and grapefruit.....	100	217.7	156.3	215.4	179.8
Apples.....	100	88.8	88.8	78.7	66.4
Bananas.....	100	99.7	104.9	93.0	84.2
Grapes, fresh.....	100	82.4	81.0	53.6	40.8
Potatoes, other than sweet.....	100	97.3	95.5	88.2	73.2
Vegetables, fresh, N.O.S.....	100	103.9	106.1	93.6	88.8
Products of agriculture, N.O.S.....	100	108.0	106.7	89.6	75.5
Fresh meats, N.O.S.....	100	102.3	98.8	100.0	91.0
Meats, cured, dried, or smoked.....	100	109.0	102.1	92.9	80.5
Packing house products.....	100	99.6	81.6	77.4	75.3
Poultry, dressed.....	100	112.0	111.7	109.9	99.0
Eggs.....	100	93.8	96.2	92.6	68.4
Butter.....	100	106.5	110.6	112.6	110.5
Cheese.....	100	100.0	97.0	84.7	75.4
Leather.....	100	94.6	85.5	74.7	57.9
Anthracite.....	100	102.8	101.5	94.9	76.8
Salt.....	100	98.6	91.0	87.3	76.8
Sugar.....	100	109.9	108.2	99.7	79.4
Table syrups.....	100	90.4	79.6	66.1	53.9
Furniture, metal.....	100	100.9	75.9	54.5	31.7
Furniture, other than metal.....	100	102.5	66.4	54.5	32.4
Beverages.....	100	94.8	107.5	80.7	41.2
Cotton cloth and cotton fabrics, N.O.S.....	100	101.8	70.5	64.8	55.0
Canned food products, N.O.S.....	100	104.8	97.5	81.0	66.0
Tobacco, manufactured products.....	100	89.3	89.8	81.7	76.6

concerning the consumption of individual commodities, it is evident that the consumption of food on the whole has not decreased in this prosperity-depression period. Shifts in consumption from one product to another have taken place to some extent, but the total consumption, so far as it can be measured, has remained at about the same level in depression as that attained in the preceding period of prosperity. The population of this or any other country must consume food in order to live, and it appears that in the United States the inhabitants have maintained even in this depression period the same standard of living as regards quantity of food that they had in the days of the previous prosperity.

Clothing

Let us now turn to the consumption of clothing. Do people on the whole consume fewer, or more, clothes in depression than in a period of prosperity? On this matter we have scarcely any quantitative data at all. To help find an answer to this question, it has been necessary to carry through a fairly elaborate piece of research; and while the results obtained are nothing but estimates, the movements shown are borne out by a logical analysis of the facts. Some changes in quality, of course, have undoubtedly taken place, but it has not been possible to make adjustments for them. The estimates are believed to be the best obtainable for the actual physical consumption of clothing under present conditions of inadequate data.

Preparatory to a consideration of the consumption of clothing in detail, it may be well to describe the statistical procedure involved. The Federal Reserve Board publishes monthly indexes of department store sales that cover the period 1928 to 1932, but such indexes, as they represent dollar volume and not actual physical sales, are not adequate for our purpose (Table 11).

Table 11. Indexes of Department Store Dollar Sales
(1923-25=100)

Year	Sales
1919.....	78
1920.....	94
1921.....	87
1922.....	88
1923.....	98
1924.....	99
1925.....	103
1926.....	106
1927.....	107
1928.....	108
1929.....	111
1930.....	102
1931.....	91
1932.....	70

Source: Federal Reserve Bulletin.

Various individual reserve districts also publish indexes of dollar sales volume for department stores, not only for total sales but for sales by various groups of articles. These figures enable one to determine the movements by classes of articles sold by department stores, but only for particular reserve districts and only in terms of dollars. It seemed desirable, if possible, to have total and group figures for the country as a whole, and while it was not possible to secure actual sales figures in physical units, typical dollar sales figures showing the percentage changes from one year to the next were obtained from the Controllers' Congress of the National Retail Dry Goods Association for the years 1928 to 1932 (Table 12). The sales reported by various types of chain stores have also been investigated, but the insurmountable difficulties of analysis which appeared in the discussion of food consumption as measured by sales of food chains were also present in the case of clothing. Sales by independently-owned unit stores are not available. From the foregoing it must be clear that while we cannot measure all consumption, we can confine ourselves to a sample such as that measured by department stores; and the conclusions drawn from this sample, because of the nature of the department store field, seem applicable to consumption as a whole.

Since the sales figures were expressed in units of dollars, it became necessary to separate the price element and the volume element, which together make up the dollar value of sales. To obtain the physical volume of sales, the price element had to be eliminated. A measure of retail prices useful for this purpose was not available over the whole period 1928 to 1932, but the Fairchild index of retail prices as applicable to the first of each month was available for the years 1931 and 1932. This index is constructed from the prices reported by 36 retail organizations in 24 cities throughout the United States for the various products which they sell; and while prices of fashion goods are not included, the articles considered in the make-up of the index are useful for our purpose. Whether more price goods are being sold, whether women are buying more, or less, hosiery, underwear, shoes, etc. in 1932 than in 1928, whether men are purchasing more shirts, suits, shoes, underwear, etc. is the very question we want to investigate. It is only by having a price index for these various articles that it is possible to estimate actual consumption of them, and the Fairchild index fills a long-felt need for information useful in analyzing changes in the consumption field.

The Fairchild index of retail prices refers to prices as of the first of the month. These index numbers have been recomputed to get a measure for each month as a

Table 12. Department Store Dollar Sales
Annual Median Percentage Changes for Stores with
Sales Volume between \$2,000,000 and \$5,000,000

Department	1929	1930	1931	1932
	1928	1929	1930	1931
Silks and Velvets.....	91	88	80	73
Woolen Dress Goods.....	83	80	94	85
Linens.....	101	88	92	76
Cotton Wash Goods, Rayons, Linings.....	98	90	75	74
Domestics, Muslins, Sheetings, etc.....	101	92	87	80
Patterns.....	94	102	92	84
Blankets and Comfortables.....	106	89	88	76
Laces, Trimmings, Embroideries.....	81	84	78	68
Ribbons.....	78	79	92	70
Notions.....	100	94	92	80
Toilet Articles, Drug Sundries.....	101	102	96	88
Silverware.....	100	92	89	70
Jewelry.....	100	89	81	64
Umbrellas, Canes, Parasols.....	90	74	85	73
Art Needlework, Art Goods.....	93	85	80	87
Stationery.....	104	97	88	79
Books and Magazines.....	105	89	83	84
Neckwear and Scarfs.....	100	85	87	86
Handkerchiefs.....	102	91	80	71
Millinery.....	99	97	91	77
Gloves.....	105	104	95	79
Corsets, Brassieres.....	103	102	87	81
Hosiery.....	101	92	84	77
Knit Underwear, (all materials).....	98	91	82	77
Silk and Muslin Underwear.....	102	93	93	78
Petticoats and Slips.....	102	100	91	91
N negligees.....	102	96	89	77
Infants' Wear.....	104	94	86	75
Small Leather Goods.....	99	91	87	68
Women's Shoes.....	99	93	89	78
Children's Shoes.....	101	97	94	79
Women's Coats and Suits.....	97	91	85	71
Women's Dresses.....	102	87	79	68
Popular-Priced Dresses.....	111	96	92	79
Blouses and Skirts.....	96	113	79	83
Juniors' and Misses' Coats and Suits.....	97	91	92	75
Juniors' and Misses' Dresses.....	104	95	90	77
Girls' Wear.....	105	96	87	84
Sports Wear, Sweaters, etc.....	101	111	97	81
Aprons and House Dresses.....	103	99	95	77
Maids' and Nurses' Uniforms.....	104	107	104	91
Furs.....	95	93	65	80
Men's Clothing.....	99	92	88	76
Men's Furnishings.....	101	95	88	76
Men's Hats and Caps.....	103	91	82	76
Boys' Wear.....	101	94	84	76
Men's and Boys' Shoes.....	101	92	86	75
Furniture.....	100	85	93	74
Oriental Rugs.....	90	93	77	57
Domestic Floor Coverings.....	101	81	84	74
Draperies, Curtains, Upholstery.....	104	88	86	79
Lamps and Shades.....	101	92	95	68
China and Glassware.....	101	87	83	75
Electrical Household Appliances.....	103	105	82	77

Table 12. Department Store Dollar Sales—Continued

Annual Median Percentage Changes for Stores with
Sales Volume between \$2,000,000 and \$5,000,000

Department	$\frac{1929}{1928}$	$\frac{1930}{1929}$	$\frac{1931}{1930}$	$\frac{1932}{1931}$
Miscellaneous House Furnishings.....	95	94	90	81
Gift Shop.....	97	87	77	72
Pictures, Framing, Mirrors.....	94	82	81	71
Radios, Talking Machines, Records.....	106	98	56	60
Toys.....	99	93	88	78
Sporting Goods, Cameras.....	84	91	79	91
Luggage.....	104	77	73	64
Restaurant, Fountain.....	100	95	89	81
Candy.....	103	93	85	82
Beauty Shop, Barber Shop.....	..	96	83	85
Total Main Store.....	101	92	86	78
Piece Goods, Domestics.....	98	91	88	81
Small Wares.....	104	88	91	86
Hosiery, Underwear, Corsets.....	..	99	84	82
Aprons and House Dresses.....	..	105	87	85
Juniors', Misses', Women's Coats.....	..	94	99	74
Juniors', Misses', Women's Dresses.....	..	96	86	70
Millinery.....	..	101	115	71
Girls' and Infants' Wear.....	..	100	97	76
Men's and Boys' Wear.....	105	97	101	80
Home Furnishings.....	106	87	76	78
Shoes.....	..	98	96	87
Total Basement.....	..	96	92	80
Total Store.....	101	94	88	79

Source: *Departmental Merchandising and Operating Results of Department Stores and Specialty Stores*. The above figures are reproduced with the permission of the Controllers' Congress of the National Retail Dry Goods Association.

whole; an average of the January 1 and February 1 indexes, for example, is taken to represent the month of January, and a similar procedure is used for the rest of the monthly figures. An annual average of these monthly indexes has also been computed for the years 1931 and 1932 (Table 13). From fragmentary indexes of retail prices, also published by Fairchild, it was possible to extend the composite index back to the years 1930 and 1929, but such extensions were not possible for the various groups of articles sold. The carrying back of these figures from 1931 into 1928 has been made on a wide variety of bases. It does not seem desirable in this bulletin to review in detail the many steps that have been taken, but a general survey of the statistical procedure involved should aid in an appreciation of the estimates obtained.

In every case, the price indexes as presented in the Fairchild indexes for the various groups have been used as a base for the extension of the indexes into the past. Wherever possible retail price indexes formerly available have been used in approximating the movements for the period 1928 to 1932, and much aid is afforded on this score by the retail price indexes compiled by the Massachusetts Commission on the Necessaries of Life. From the files of that Commission, retail price data were obtained for men's furnishings (hats, gloves, collars, hosiery, shirts, underwear, and shoes) and for women's clothing (underwear, cotton goods, hats, hosiery, corsets, and shoes) which have been of great value in measuring movements prior to the appearance of the Fairchild indexes. While the data, of course, apply only to Massachusetts, it has seemed logical to

Table 13. Fairchild Retail Price Indexes¹

(January 1, 1931 = 100)

	1931	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
Composite Index.....		99.0	97.2	95.8	94.9	93.8	92.7	91.1	89.6	88.2	86.8	85.5	84.1	91.6
Piece Goods.....		99.1	97.4	96.2	95.0	93.9	93.0	90.4	87.5	85.6	84.1	82.4	80.1	90.4
Silks.....		98.6	95.5	93.2	90.8	89.0	88.1	86.6	85.0	85.6	82.0	80.8	79.2	87.9
Woolens.....		99.1	97.4	96.3	95.5	95.0	94.4	92.4	89.5	87.9	86.8	84.9	82.7	91.8
Cotton Wash Goods.....		99.7	99.4	99.4	98.8	97.7	96.5	92.7	88.2	85.5	83.7	81.5	78.7	91.8
Women's Apparel.....		99.3	97.7	96.3	95.6	94.8	93.8	92.4	90.7	89.5	88.3	87.4	86.0	92.7
Hosiery.....		99.1	97.1	96.1	95.3	93.2	91.5	90.2	88.7	87.4	85.7	84.7	83.4	91.0
Aprons and House Dresses.....		100.0	99.3	98.5	98.1	97.8	97.2	95.5	94.3	92.6	90.8	89.6	88.2	95.2
Corsets and Brassieres.....		99.8	99.7	98.7	96.6	95.4	95.4	92.1	94.3	93.6	93.3	92.8	92.4	95.6
Furs.....		98.1	95.6	94.3	93.0	92.3	91.9	89.8	87.8	86.9	85.8	84.7	82.0	90.2
Underwear.....		99.2	96.1	93.3	93.0	91.8	90.0	89.1	87.9	86.1	84.7	84.0	82.4	89.8
Shoes.....		99.6	98.4	97.6	97.8	98.0	97.3	94.9	91.8	90.1	89.6	89.0	87.6	94.3
Men's Apparel.....		99.2	98.0	97.5	97.3	96.2	95.0	93.8	92.6	91.3	89.7	88.2	86.8	93.8
Hosiery.....		98.9	97.5	96.7	96.1	94.7	93.3	92.1	91.0	89.6	86.6	84.9	83.6	92.1
Underwear.....		99.2	98.0	97.1	96.5	94.3	92.6	91.3	89.3	86.9	84.5	83.4	82.6	91.3
Shirts and Neckwear.....		99.7	98.6	97.6	97.3	96.6	94.6	93.0	92.5	91.9	90.7	89.0	87.7	94.1
Hats and Caps.....		99.1	97.3	96.6	96.5	98.0	94.4	93.1	92.7	91.5	89.9	87.7	85.9	93.6
Clothing, including Overalls.....		99.8	99.6	99.4	99.0	97.9	97.0	96.1	94.4	92.7	91.3	89.6	88.3	95.4
Shoes.....		98.6	97.0	98.0	98.9	98.1	97.8	97.1	94.6	92.5	95.3	94.9	93.3	96.7
Infants' Wear.....		100.0	99.3	98.7	97.3	95.6	94.6	93.2	92.4	91.9	91.3	90.7	89.7	94.6
Socks.....		99.9	99.1	98.5	96.5	94.5	92.3	90.2	90.7	90.9	90.7	90.7	88.9	93.6
Underwear.....		100.0	99.6	99.2	97.1	94.6	94.0	92.6	91.0	90.4	89.6	89.1	88.4	93.8
Shoes.....		100.0	99.2	98.4	98.3	97.9	97.6	96.7	95.6	94.6	93.5	92.4	91.7	96.3
Domestics.....														
Sheets.....		100.1	99.7	98.7	98.0	97.0	94.5	92.2	90.5	88.6	86.6	84.7	81.7	92.7
Blankets and Comfortables.....		99.7	97.9	96.4	96.0	95.1	94.0	92.0	89.2	87.4	85.8	84.3	83.3	91.8
Furniture.....		99.5	98.7	98.4	97.8	96.3	93.6	90.6	89.0	88.6	87.4	86.4	85.5	92.7
Floor Coverings.....		99.2	97.5	96.3	95.8	95.4	94.7	93.8	93.4	92.4	91.9	89.7	86.2	93.9
Musical Instruments.....		97.7	94.8	93.9	90.2	85.4	83.3	79.7	75.6	73.9	70.7	68.2	65.8	81.5
Luggage.....		99.4	98.5	97.8	95.3	92.4	89.6	85.7	82.8	80.4	78.8	77.8	76.5	87.9
Electrical Household Appliances.....		99.8	99.0	98.3	98.2	97.3	95.9	95.1	94.3	93.8	91.8	90.1	90.3	95.3
China and Glassware.....		99.5	98.3	97.5	98.1	98.7	98.0	97.2	96.6	96.5	95.8	94.6	93.0	97.0

¹Indexes have been adjusted to represent each month as a whole.

assume that the movements are representative for the country as a whole. Use has been made also of the cost of living indexes of the United States Bureau of Labor Statistics, the National Industrial Conference Board, and the Massachusetts Commission on the Necessaries of Life, particularly the index numbers referring to clothing, and furniture and furnishings (available only in the Bureau of Labor Statistics compilation). In a few cases, the wholesale prices of finished goods have been used to approximate the past retail price movements. The percentage changes in these indexes from 1931 to 1928 have been applied to the groups included in the Fairchild index. The indexes carried back in this manner appear in Table 14, while these same indexes adjusted to the base 1928 are shown in Table 15. It is interesting to note that the

group indexes carried back independently in this fashion when made up into a composite index, approximate the composite index as carried back by Fairchild (through November, 1929).

What we have so far, then, are annual percentage changes of dollar sales by certain groups of articles, and retail price indexes by selected groups of commodities for the period to be considered. From the percentage changes, dollar sales indexes (1928=100) have been computed, as shown in Table 16. Wherever possible the price element in dollar sales has been eliminated through application of the price index, and indexes of actual physical sales (1928=100) are shown in Table 17.

It may be noted at once that the physical volume of all goods sold by department stores increased in 1929,

Table 13. Fairchild Retail Price Indexes¹—Continued

(January 1, 1931=100)

	1932	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
Composite Index.....	82.4	80.7	79.7	78.7	77.5	76.0	74.6	73.8	73.6	73.5	73.0	72.2	72.2	76.3
Piece Goods.....	77.8	77.3	76.1	75.4	74.0	72.1	71.4	71.0	70.9	71.0	70.6	70.0	70.0	73.2
Silks.....	78.4	77.1	75.9	74.4	71.8	69.1	66.9	65.8	66.2	66.1	65.5	64.7	64.7	70.1
Woolens.....	80.2	78.0	76.6	75.9	75.1	74.3	73.7	73.5	73.6	73.3	72.7	71.6	71.6	74.9
Cotton Wash Goods.....	77.2	76.8	75.9	75.8	75.1	72.9	71.4	71.6	71.3	73.7	73.8	73.7	73.7	74.2
Women's Apparel.....	83.9	81.9	80.4	79.3	78.1	76.9	75.6	75.0	75.2	75.4	74.9	74.2	74.2	77.6
Hosiery.....	81.2	79.4	77.8	76.1	73.9	70.5	67.0	65.5	65.0	64.6	64.2	63.6	63.6	70.7
Aprons and House Dresses.....	87.8	87.0	85.7	83.5	81.9	81.2	80.3	79.8	79.7	80.1	78.6	76.8	76.8	81.9
Corsets and Brassieres.....	91.6	90.5	89.6	88.9	88.3	87.7	86.5	85.6	85.6	85.0	84.1	84.1	84.1	87.3
Furs.....	77.2	73.0	70.8	70.1	68.1	66.4	66.5	67.5	70.0	71.8	71.6	70.9	70.9	70.3
Underwear.....	80.2	78.5	77.0	75.9	75.1	74.3	73.2	71.8	71.1	71.1	71.4	71.3	71.3	74.2
Shoes.....	85.6	83.2	81.7	81.5	81.4	81.1	80.5	80.0	80.0	80.2	79.6	78.7	78.7	81.1
Men's Apparel.....	84.7	82.5	81.3	80.5	79.8	78.8	76.5	75.3	74.7	74.6	74.2	73.5	73.5	78.0
Hosiery.....	81.6	80.3	79.0	78.0	77.4	73.9	70.4	70.1	70.7	70.5	69.8	68.6	68.6	74.2
Underwear.....	81.0	78.4	76.3	75.4	74.8	74.2	73.3	72.5	72.1	71.7	71.3	71.0	71.0	74.3
Shirts and Neckwear.....	86.2	84.7	83.7	82.9	82.2	80.7	79.2	78.6	78.1	78.5	78.9	78.1	78.1	81.0
Hats and Caps.....	83.6	81.0	80.3	79.0	77.4	75.6	73.3	71.2	70.4	70.6	70.4	70.4	70.4	75.3
Clothing, including Overalls.....	86.3	84.4	83.7	83.3	82.5	81.3	79.4	76.3	74.3	74.1	73.7	72.8	72.8	79.3
Shoes.....	89.8	87.0	85.2	85.0	84.9	84.2	83.6	83.3	82.7	82.2	81.3	80.3	80.3	84.1
Infants' Wear.....	87.7	86.6	86.0	84.8	83.6	81.3	79.0	78.5	78.2	77.5	77.1	76.7	76.7	81.4
Socks.....	87.0	86.2	85.0	83.7	82.3	77.3	73.5	74.1	74.1	74.1	74.0	74.0	74.0	78.8
Underwear.....	87.5	86.4	84.9	83.2	81.5	80.3	79.4	78.2	77.0	75.3	74.0	74.1	74.1	80.2
Shoes.....	91.0	89.6	88.3	87.5	86.9	86.2	84.1	83.3	83.8	83.4	83.2	83.0	83.0	85.9
Domestics.....														
Sheets.....	78.8	77.7	76.9	75.7	74.5	73.0	70.7	69.7	70.2	70.7	70.5	69.2	69.2	73.1
Blankets and Comfortables.....	81.9	81.4	80.8	79.8	78.9	77.9	76.8	76.4	76.6	77.0	76.4	75.1	75.1	78.3
Furniture.....	82.9	80.2	79.3	78.6	77.8	77.3	76.2	74.4	74.4	74.8	74.8	74.8	74.8	76.9
Floor Coverings.....	83.7	83.3	83.1	82.8	82.5	81.9	81.4	80.9	80.2	80.1	80.8	81.1	81.1	81.8
Musical Instruments.....	64.0	62.7	62.0	61.3	60.4	59.0	58.4	58.6	57.6	56.8	57.1	56.5	56.5	59.5
Luggage.....	75.2	73.6	71.9	70.1	68.3	67.0	65.5	64.0	63.4	62.9	62.1	62.3	62.3	67.2
Electrical Household Appliances.....	88.8	86.7	84.9	83.5	82.5	81.6	80.9	80.5	80.4	79.3	78.3	77.8	77.8	82.1
China and Glassware.....	91.8	91.2	90.4	89.1	87.8	86.9	85.6	84.8	84.8	83.5	82.0	82.1	82.1	86.7

¹Indexes have been adjusted to represent each month as a whole.

Table 14. Retail Price Indexes

(January, 1931 = 100)

	1928	1929	1930	1931	1932
Composite Index.....	119.6	118.4	108.0	91.6	76.3
Piece Goods.....	128.3	125.3	112.3	90.4	73.2
Silks.....	135.0	130.0	110.0	87.0	70.1
Woolens.....	137.0	133.0	110.0	91.8	74.9
Cotton Wash Goods.....	113.0	113.0	108.0	91.8	74.2
Women's Apparel.....	118.7	116.2	110.2	92.7	77.6
Hosiery.....	162.0	140.0	127.0	91.0	70.7
Aprons and House Dresses.....	112.0	112.0	112.0	95.2	81.9
Corsets and Brassieres.....	112.0	112.0	112.0	95.6	87.3
Furs.....	118.0	117.0	106.0	90.2	70.3
Underwear.....	108.0	107.0	104.0	89.8	74.2
Shoes.....	100.0	100.0	100.0	94.3	81.1
Men's Apparel.....	116.8	117.5	113.2	93.8	78.0
Hosiery.....	133.0	131.0	125.0	92.1	74.2
Underwear.....	108.0	111.0	106.0	91.3	74.3
Shirts and Neckwear.....	117.0	116.0	115.0	94.1	81.0
Hats and Caps.....	110.0	113.0	109.0	93.6	75.3
Clothing, including Overalls.....	122.0	118.0	110.0	95.4	79.3
Shoes.....	111.0	116.0	114.0	96.7	84.1
Infants' Wear.....	120.0	116.0	109.0	94.6	81.4
Socks.....	119.0	115.0	108.0	93.6	78.8
Underwear.....	119.0	115.0	108.0	93.8	80.2
Shoes.....	122.0	118.0	111.0	96.3	85.9
Domestics.....					
Sheets.....	117.4	114.0	106.6	92.7	73.1
Blankets and Comfortables.....	131.5	127.7	119.4	91.8	78.3
Furniture.....					
Floor Coverings.....	107.0	104.0	101.0	92.7	76.9
Musical Instruments.....	108.0	105.0	102.0	93.9	81.8
Luggage.....	113.0	112.0	102.0	81.5	59.5
Electrical Household Appliances.....	107.0	105.0	104.0	87.9	67.2
China and Glassware.....	110.0	107.0	104.0	95.3	82.1
	112.0	109.0	106.0	97.0	86.7

Table 15. Retail Price Indexes

(1928=100)

	1928	1929	1930	1931	1932
Composite Index.....	100	99.0	90.3	76.6	63.8
Piece Goods.....	100	97.7	87.6	70.5	57.1
Silks.....	100	96.3	81.5	65.1	51.9
Woolens.....	100	97.1	86.0	67.0	54.7
Cotton Wash Goods.....	100	100.0	95.6	81.2	65.7
Women's Apparel.....	100	97.9	92.8	78.1	65.4
Hosiery.....	100	92.0	78.4	56.2	43.6
Aprons and House Dresses.....	100	100.0	100.0	85.0	73.1
Corsets and Brassieres.....	100	100.0	100.0	85.4	78.0
Furs.....	100	99.8	89.8	76.4	59.6
Underwear.....	100	99.1	96.3	83.2	68.7
Shoes.....	100	100.0	100.0	94.3	81.1
Men's Apparel.....	100	100.6	97.0	80.3	66.8
Hosiery.....	100	98.5	94.0	69.3	55.8
Underwear.....	100	102.8	98.2	84.6	68.8
Shirts and Neckwear.....	100	99.2	98.3	80.4	69.2
Hats and Caps.....	100	102.7	99.1	85.1	68.5
Clothing, including Overalls.....	100	96.7	90.2	78.2	65.0
Shoes.....	100	104.5	102.7	87.1	75.8
Infants' Wear.....	100	96.7	90.8	78.8	67.8
Socks.....	100	96.6	90.8	78.7	66.2
Underwear.....	100	96.6	90.8	78.8	67.4
Shoes.....	100	96.7	91.0	78.9	70.4
Domestics.....					
Sheets.....	100	97.1	90.8	79.0	62.3
Blankets and Comfortables.....	100	97.2	90.8	69.1	59.6
Furniture.....	100	97.2	94.4	86.6	71.9
Floor Coverings.....	100	97.2	94.5	87.0	75.8
Musical Instruments.....	100	99.2	90.3	72.2	52.7
Luggage.....	100	98.2	97.2	82.2	62.8
Electrical Household Appliances.....	100	97.3	94.6	86.6	74.6
China and Glassware.....	100	97.3	94.7	86.6	77.4

Table 16. Indexes of Dollar Volume of Sales for Department Stores
(1928 = 100)

Department	1928	1929	1930	1931	1932
Silks and Velvets	100	91	80	64	47
Woolen Dress Goods	100	83	66	62	53
Linen	100	101	80	82	62
Cotton Wash Goods, Rayons, Linings	100	98	83	66	40
Domestics, Muslins, Sheetings, etc.	100	101	93	81	65
Patterns	100	94	90	88	74
Blankets and Comfortables	100	106	94	83	63
Laces, Trimmings, Embroideries	100	81	68	53	36
Ribbons	100	78	62	57	40
Notions	100	100	94	86	60
Toilet Articles, Drug Sundries	100	101	103	90	87
Silverware	100	100	92	82	57
Jewelry	100	100	80	72	46
Umbrellas, Canes, Parasols	100	99	67	57	42
Art Needlework, Art Goods	100	93	79	63	55
Stationery	100	104	101	89	70
Books and Magazines	100	105	93	77	65
Neckwear and Scarfs	100	100	85	74	64
Handkerchiefs	100	102	93	74	53
Millinery	100	99	96	87	67
Gloves	100	105	100	103	72
Corsets and Brassieres	100	103	105	91	74
Hosiery	100	101	93	78	60
Knit Underwear (all materials)	100	98	89	73	56
Silk and Muslin Underwear	100	102	95	80	60
Petticoats and Slips	100	102	102	93	85
Negligees	100	102	98	87	67
Infants' Wear	100	104	97	83	62
Small Leather Goods	100	99	90	78	53
Women's Shoes	100	99	92	82	64
Children's Shoes	100	101	98	92	73
Women's Coats and Suits	100	98	89	76	54
Women's Dresses	100	102	89	70	48
Popular-Priced Dresses	100	111	107	98	77
Blouses and Skirts	100	100	96	85	71
Juniors' and Misses' Coats and Suits	100	97	88	81	61
Juniors' and Misses' Dresses	100	104	99	80	60
Girls' Wear	100	105	101	88	74
Sports Wear, Sweaters, etc.	100	101	112	108	87
Aprons and House Dresses	100	103	102	97	75
Maids' and Nurses' Uniforms	100	104	111	115	105
Furs	100	95	89	58	46
Men's Clothing	100	99	91	80	61
Men's Furnishings	100	101	96	84	64
Men's Caps and Hats	100	103	94	77	59
Boys' Wear	100	101	95	80	60
Men's and Boys' Shoes	100	101	93	80	61
Furniture	100	100	84	78	58
Oriental Rugs	100	90	84	65	37
Domestic Floor Coverings	100	101	82	69	51
Draperies, Curtains, Upholstery	100	104	92	70	62
Lamps and Shades	100	101	93	88	60
China and Glassware	100	101	88	72	54
Electrical Household Appliances	100	103	108	89	69
Miscellaneous House Furnishings	100	95	89	80	65
Gift Shop	100	97	84	65	47
Pictures, Framing, Mirrors	100	94	77	62	44
Radios, Talking Machines, Records	100	98	97	54	32
Toys	100	99	92	81	63
Sporting Goods, Cameras	100	84	76	60	55
Luggage	100	104	80	58	47
Restaurant, Fountain	100	100	95	84	68
Candy	100	103	96	82	67
Beauty Shop, Barber Shop	100	100	96	80	68
Total Main Store	100	100	96	80	68
Piece Goods, Domestics	100	98	89	80	62
Small Wares	100	104	92	78	63
Hosiery, Underwear, Corsets	100	100	99	83	68
Aprons and House Dresses	100	105	99	91	77
Juniors', Misses', Women's Coats	100	100	94	93	69
Juniors', Misses', Women's Dresses	100	100	96	82	57
Millinery	100	100	101	116	82
Girls' and Infants' Wear	100	100	100	97	74
Men's and Boys' Wear	100	105	101	102	82
Home Furnishings	100	106	92	70	55
Shoes	100	100	98	94	82
Total Basement	100	100	96	88	70
Total Store	100	101	95	83	66

*1929 = 100

1930, and 1931, and that a decrease did not take place until the abnormal depression year of 1932. Let us examine, however, at this point the data for clothing and determine if possible whether the movement of the figures admits of a logical explanation.

Women's Clothing

A cursory glance over the items showing sales of women's clothing, presented in Table 17, reveals a

number of illuminating facts. There have been declines, of course, but the magnitude of these declines has been small indeed when compared with those sharp decreases in the consumption of producers' goods previously described. In the year 1932 only two departments—cotton wash goods and women's higher-priced dresses—showed a decline of over 25% from 1928, and sales of twelve items were greater than in 1928. Further, we note that in the depression year of

Table 17. Indexes of Physical Sales of Department Stores

(1928=100)

Departments	1928	1929	1930	1931	1932
Silks and Velvets.....	100	94.5	98.2	98.3	90.6
Woolen Dress Goods.....	100	85.5	76.0	92.6	96.9
Cotton Wash Goods, Rayons, Linings.....	100	98.0	92.1	81.3	74.6
Corsets, Brassieres.....	100	103.0	105.0	106.5	94.9
Hosiery.....	100	109.8	118.6	138.8	137.6
Knit Underwear (all materials).....	100	98.9	92.4	87.8	81.5
Silk and Muslin Underwear.....	100	103.0	98.6	107.0	100.5
Petticoats and Slips.....	100	103.0	106.0	111.8	123.7
Negligees.....	100	103.0	101.7	104.5	97.6
Infants' Wear.....	100	107.5	106.8	105.4	91.4
Women's Shoes.....	100	99.0	92.0	87.0	78.9
Children's Shoes.....	100	101.0	98.0	97.6	90.0
Women's Coats and Suits.....	100	100.1	95.9	97.3	82.6
Women's Dresses.....	100	104.2	95.9	89.6	73.4
Popular-Priced Dresses.....	100	113.5	115.3	125.5	117.7
Blouses and Skirts.....	100	98.1	116.4	108.8	108.6
Misses' Coats and Suits.....	100	99.1	94.8	103.7	93.3
Misses' Dresses.....	100	106.2	106.7	114.0	105.5
Juniors' and Girls' Wear.....	100	107.3	108.8	112.7	113.1
Sports Wear, Sweaters, etc.....	100	103.2	120.7	138.3	133.0
Aprons and House Dresses.....	100	103.0	102.0	114.1	102.6
Maids' and Nurses' Uniforms.....	100	104.0	111.0	115.0	105.0
Furs.....	100	95.2	99.1	76.0	77.2
Men's Clothing.....	100	102.4	100.0	102.3	93.8
Men's Furnishings.....	100	101.8	97.7	104.5	95.8
Men's Hats and Caps.....	100	100.3	94.8	90.5	86.2
Boys' Wear.....	100	100.4	98.0	99.6	91.3
Men's and Boys' Shoes.....	100	96.6	90.6	91.9	79.2
Luggage.....	100	106.0	82.3	70.6	74.8
Total Main Store.....	100	102.0	103.0	104.4	97.2
Total Basement.....	...	101.0	106.3	114.9	109.7
Total Store.....	100	102.0	105.2	108.3	103.5

1931 there were increases in fifteen departments over the year 1930 and only eight declines, while 1932 showed declines for all but four. The influence of fashion has been predominant and many of the increases and decreases for the individual departments can be explained by this factor alone. Consumption of women's clothing on the whole did not decrease until the abnormally depressed year of 1932, and even then the volume of consumption was still relatively high.

Let us examine the items in detail. Sales of silk and velvet piece goods fell from 1928 to 1929, advanced in 1930 and 1931, and fell again in 1932. Woolen dress goods increased in both 1931 and 1932 after declines in the preceding two years. Consumption of cotton wash goods, rayons, and linings has declined about 25% from 1928. Sales of corsets and brassieres have advanced each year until 1932, an increase presumably attributable to the influence of fashion, because of the vogue for the molded silhouette. Hosiery has had one of the sharpest advances of all, 39% more stockings being sold in 1931 than in 1928; and only a slight decline took place in 1932. Women seem to insist on using silk stockings regardless of the depression, and while the sharp increase in consumption may be due in substantial part to a lowering of quality, replacement demand seems to persist in spite of depressed conditions.

The decline in consumption of the low-priced knit underwear has been counteracted in part by the increased sales of the silk underwear department. Sales of petticoats and slips increased regularly through 1932. Negligees, however, advanced through 1931, but declined about 7% in 1932. Sales of infants' wear have declined steadily from 1929. Sales of women's shoes have declined over the period, while children's shoes show a less pronounced drop.

The sales of women's outer garments reflect clearly changes in style and in buying habits. Movements in the aggregate indicate about the same physical volume sold as in the pre-depression period. The influence of fashion is probably responsible for the sharper decline in sales of women's coats and suits than in sales of misses' coats and suits, the figures for the latter department being less than 10% below those for 1928. That fewer higher-priced dresses were sold in depression is undoubtedly a continuation of the downward trend already in evidence for such merchandise; instead of having one very good dress suitable for all occasions women now have several less expensive dresses. Sales of popular-priced dresses increased appreciably. Blouses and skirts, misses' dresses, juniors' and girls' wear, and sportswear all sold in greater volume in 1932 than in 1928. And for many of these items, such, for instance, as those in the sportswear classification, it seems clear

that fashion considerations have been paramount. In fact it is scarcely going too far to say that for many types of merchandise the forces of fashion are apparently superior to the forces of depression.

Sales of aprons and house dresses also were higher as women returned to the household duties of the pre-boom period. In contrast, it is interesting to note the increase in sales of maids' and nurses' uniforms (these figures are value figures). While a large group of women are now doing their own housework, still another group, probably those with fixed incomes, the amount of which previously had not permitted the hiring of maids because of high wages, have been enabled to pass over household duties to servants who now are willing to work at lower wages. Sales of furs, as might be expected, were sharply below the level of 1928.

Consumption of other articles of women's clothing, where price indexes are not available, can be judged to some extent from an examination of the value indexes in Table 16. The sharp decline in retail prices as shown by the Fairchild composite index renders it likely that prices for other articles not included in the index have also fallen. Hence a drop in value figures is to be expected when the period 1928 to 1932 is considered as a whole, and only a moderate decline in value indicates an increase in the sale of the particular commodity to be considered. On this basis the decreases in value of 64% in sales of laces, trimmings, and embroideries and of 66% in sales of ribbons probably indicate a decline in actual consumption over the period. On the other hand a 36% decrease in sales value for neckwear and scarfs, a 47% decline for handkerchiefs, a 33% decline for millinery, and a 28% decline for sales of gloves reflect a consumption at about the prosperity level.

Men's Clothing

With less of the style element characterizing their clothing, men during depression have worn their clothes longer than they would under normal business conditions. While the figures in Table 17 apparently indicate that men have consumed less clothing than in prosperity, the sales by department stores have undoubtedly been affected by those of the chain stores which sell low-priced men's clothes only. The department store figures show that sales of men's clothing and men's furnishings have fluctuated irregularly downward throughout the period, and although the level in 1931 in both cases was higher than that in 1928, fairly marked declines took place in 1932. The decline in both the above categories from 1929 to 1930, the rise to 1931, and the decline in 1932, indicate that at all times men in the aggregate tend to buy only so many

clothes as are absolutely necessary, and that while they may postpone demand for new clothing (as in 1930) by wearing their existing clothes a little longer, their supply of suits and furnishings is so small that replacement soon becomes essential (as in 1931). Sales of boys' wear remained relatively steady until 1931, declining in 1932. Hats and caps, together with men's and boys' shoes, show declines in sales over the period. Purchases of hats and shoes admit of a longer postponement than purchases of suits and furnishings, and the low cost of getting an old hat cleaned or worn-out shoes repaired easily accounts for this decrease.

Clothing: Summary

The foregoing analysis of the consumption of women's and men's clothing during the period 1928 to 1932 presents an interesting contrast. The consumption of women's clothing in the aggregate is certainly no lower, and in all probability is greater, in the depression period of 1932 than in the prosperity period of 1928; that of men may be somewhat lower, but not markedly so. Of course, those articles of clothing that are characteristic of the luxury class have declined, as would normally be expected. Furthermore, those groups of articles which admit of a prolonged postponement because of the possibility of repairing also show an expected decrease. Most significant is the fact that people in general at all times, both in prosperity and in depression, have only a minimum supply of clothing which is replaced as it wears out.

Shelter

We have seen that, so far as food and clothing are concerned, consumption is about as great in depression as in prosperity. The consumption of shelter cannot be examined in such detail as the two preceding subjects. Residential building has declined sharply, and yet vacancies in residential dwellings are large. What has happened has been a doubling up of families who are now sharing one dwelling where before they had occupied two dwellings. Socially, of course, this situation is not desirable, and from this point of view it represents a distinct lowering of the standard of living that can be laid definitely at the door of the business depression. The fact that families share a dwelling when there are a great many dwellings vacant, suggests the existence of a rent level which is too high when compared with the income level, but an examination of this factor cannot be entered upon in a study of this nature. So far as housing is concerned, then, the existence of business depression has undoubtedly lowered the standard of

living for the people as a whole. They are consuming less house space now than formerly.

Fuel and Light

The consumption of fuel by householders is rather difficult to estimate. The fact that families formerly living separately are now living together would account for some decrease (how much it is impossible to say) without any corresponding lowering of heat standards. Anthracite, a fuel ordinarily used for household heating, has been replaced by other fuels, particularly oil and bituminous coal and coke, and some persons in higher income brackets have substituted gas. All these considerations make it impossible to interpret at all accurately the indexes of tonnage of anthracite terminated (1928=100) by the Class I railroads in the United States, which are as follows:

1928	100.0
1929	102.8
1930	101.5
1931	94.9
1932	76.8 (est.)

Anthracite tonnage held up remarkably well in 1930 and suffered only a small decline in 1931, some indication that through the year 1931, at least, the people's standard of living as regards heat was practically unchanged. The sharp decline that took place in 1932 however, might point to some reduction in heat standards.

Electricity and gas, of course, can be used for fuel as well as for lighting, and hence it seems desirable to consider them as one group. Monthly average sales of electric power to domestic consumers are presented in Table 18. At once it will be noted that sales of

Table 18. Monthly Average Domestic Sales of Electric Power
(Million Kilowatt Hours)

Year	Sales
1928.....	718
1929.....	815
1930.....	918
1931.....	982
1932.....	999

Source: Survey of Current Business.

electric power have increased in every year of the period 1928 to 1932. While the rate of increase from 1931 to 1932 was lower than that of preceding years, the increase in domestic consumption in this depression period is still quite marked. Turning to gas we get a

somewhat different picture. Monthly average sales of gas to domestic consumers are presented in Table 19.

Table 19. Monthly Average Domestic Sales of Gas
(Billion Cubic Feet)

Year	Sales
1928.....	20.4
1929.....	20.8
1930.....	20.8
1931.....	20.3
1932.....	19.6

Source: *Survey of Current Business*.

Here we note a decline in 1931 and a further decrease in 1932. Some explanation for this decrease in the past two years can be gathered from Table 20, where we see a falling off in the number of customers who use gas.

Table 20. Domestic Customers of Manufactured Gas
(Monthly Average in Thousands)

Year	Number
1928.....	8,165
1929.....	8,370
1930.....	8,456
1931.....	8,441
1932.....	8,220

Source: *Survey of Current Business*.

Gas is ordinarily used for cooking purposes, but in this depression people have evidently turned to some other cooking fuel. An illustration from the experience of a fair-sized gas company, located in southern New England, is appropriate. Of the customers lost in the depression period, investigation showed that in about 25% of the cases, houses that had formerly used gas were now vacant, and that in the other 75% of the cases, customers were no longer using gas because it

was too expensive. This experience, together with the figures in Tables 19 and 20, indicates that some of our population, primarily those who are very poor, have been forced to use other means of fuel and lighting because of the depression. The standard of living formerly maintained for fuel and lighting has been reduced somewhat in this abnormal depression period.

Furniture and Furnishings

In discussing the consumption of furniture and house furnishings, it is again necessary that we use as our data sales of this type of article by the department stores (Table 21). Consumption of furniture increased from 1928 to 1929, decreased into 1930, rose in 1931 to a level only about 10% below that existing in 1928, and declined in 1932. That sales of furniture should hold up so well until the abnormally depressed year of 1932 seems surprising. Consumption of floor coverings, china and glassware, and miscellaneous furnishings also show marked decreases in 1932 as compared with 1928, but sales of electrical household appliances advanced substantially until 1931. Sales of sheetings and blankets were higher in 1932 than in 1928. Other series measuring value only would give about the same results.

It is not surprising that consumption of furniture and furnishings as measured by new sales should decline in the depression period. What is surprising is that the decline should be so small. Some decrease would ordinarily be expected because of the very nature of this type of good—the ability to make it last longer by careful use. That the decrease has not been much greater than it is indicates that demand for furniture and furnishings is relatively inelastic, being composed essentially of demands on the part of newly-married couples who establish new homes and to a lesser degree only by replacement of old pieces.

Table 21. Indexes of Physical Sales of Department Stores
(1928 = 100)

Department	1928	1929	1930	1931	1932
Furniture.....	100	102.9	89.0	90.1	80.7
Domestic Floor Coverings.....	100	103.9	86.8	79.3	67.3
Lamps and Shades.....	100	102.5	96.7	100.0	77.4
China and Glassware.....	100	103.8	93.0	83.2	69.8
Electrical Household Appliances.....	100	105.8	114.2	102.8	92.5
Miscellaneous House Furnishings.....	100	96.4	92.5	90.9	84.0
Domestics, Muslins, Sheetings.....	100	104.0	102.5	102.5	104.3
Blankets and Comfortables.....	100	109.0	103.5	120.1	105.7

Miscellaneous Items

Data on the consumption of those items which are ordinarily included in any family budget study under the heading of "miscellaneous" are exceedingly spotty. The group includes some articles which are consumed immediately after purchase and some which are of the nature of capital goods and last an indefinite period of time, such as the automobile. For those items in this group which are sold by department stores, it has not been possible to obtain price indexes to deflate dollar sales, but a comparison of sales values over the 1928-1932 period throws some light on the probable consumption of these articles (Table 22). As has been stated before, prices of nearly all commodities have come down substantially; and where the value figures do not show too great a reduction, the chances are that sales in physical volume are at least as great as in years when total values were larger. Following this line of reasoning, it appears that consumption of notions, toilet articles and drug sundries, stationery, books and magazines, toys, and possibly candy has increased or remained about the same over the period. The sharper declines in value that have taken place in sales of jewelry, umbrellas and canes, art and needlework goods, gifts, and sporting goods and cameras probably indicate a decline in consumption of these articles, although the extent of the decline, when price decreases are taken into consideration, is not in all cases very great. Sales of radios were undoubtedly higher in 1930 because of the influx of lower-priced sets, but a sharp decline has probably taken place in 1931 and

1932. Radios are semi-durable goods and do not wear out except over a long period of time, so that sales represent new consumption; use of radios already installed has without doubt kept at its former level. Sales of luggage increased 6% in 1929, but 1932 sales were approximately 25% below the 1928 level, a decrease which is to be expected in depression because of the very nature of the article.

Data on consumption of cigarettes as measured by tax-paid withdrawals are presented in Table 23. Consumption increased sharply from 1928 to 1929, rose again in 1930, and declined in the next two years to a level slightly below that of the year 1928. As the depression has widened, some people who formerly smoked cigarettes either have stopped using them or are not consuming so many; others have changed from buying ready-made cigarettes to buying the tobacco and paper and rolling their own. The number of automobiles in use as estimated from figures of production and registrations also shows a falling off in the depression period. Some people who formerly owned automobiles no longer own them. The consumption of gasoline however, indicates that the actual use of automobiles increased through the year 1931, and that it was not until the abnormally depressed year of 1932 that people began to use their automobiles less than formerly (Table 24). The number of telephones in use at the end of the year increased through 1930, but declines in 1931 and 1932 carried the number in use to a level below that of 1928 (Table 25), as more people have felt forced to dispense with this service.

Table 22. Indexes of Dollar Volume of Department Store Sales

(1928=100)

Department	1928	1929	1930	1931	1932
Notions	100	100	94	86	69
Toilet Articles, Drug Sundries	100	101	103	99	87
Silverware	100	100	92	82	57
Jewelry	100	100	89	72	46
Umbrellas, Canes, etc.	100	90	67	57	42
Art Needlework, Art Goods	100	93	79	63	55
Stationery	100	104	101	89	70
Books and Magazines	100	105	93	77	65
Gift Shop	100	97	84	65	47
Radios, Talking Machines, Records	100	98	97	54	32
Toys	100	99	92	81	63
Sporting Goods, Cameras	100	84	76	60	55
Candy	100	103	96	82	67
Beauty Shop, Barber Shop	...	100*	96	80	68

*1929=100

Table 23. Monthly Average Consumption of Cigarettes
(Million)

Year	Consumption
1919.....	4,427
1920.....	3,718
1921.....	4,239
1922.....	4,464
1923.....	5,371
1924.....	5,917
1925.....	6,663
1926.....	7,454
1927.....	8,008
1928.....	8,826
1929.....	9,920
1930.....	9,969
1931.....	9,454
1932.....	8,632

Source: *Survey of Current Business*.

Table 24. Monthly Average Consumption of Gasoline
(Million Barrels)

Year	Consumption
1919.....	6.82
1920.....	8.43
1921.....	8.96
1922.....	10.66
1923.....	13.06
1924.....	15.42
1925.....	18.66
1926.....	21.82
1927.....	24.73
1928.....	27.37
1929.....	31.04
1930.....	32.00
1931.....	33.62
1932.....	30.98

Source: *Survey of Current Business*.

Table 25. Telephone Stations in Service at the End of the Year
(Million)

Year	Number of Stations
1928.....	15.9
1929.....	16.9
1930.....	17.2
1931.....	16.9
1932.....	15.1

Source: *Survey of Current Business*.

While the number of items examined in this miscellaneous section of the family cost of living budget form a relatively small proportion of the great many included in the group, the conclusion seems fairly clear that, for those items studied, consumption is lower in depression than in the preceding period of prosperity, but not much lower; and the declines that have occurred have taken place for the most part in the year 1932, the third year of continuing depressed business. Hence the standard of living with respect to consumption of articles in this miscellaneous group has declined during the depression.

General Summary

Any of the present measures of business conditions shows a sharp decline from the prosperity period of 1928 and the boom period of 1929 to the depressed condition existing in 1931 and 1932. Consumption of goods by the mass of the people, on the other hand, has held up remarkably well considering the extreme severity of the business depression. The population at large consumes just as much food in depression as in prosperity; and the analysis of clothing sales by department stores points to the same conclusion as regards clothing for women, with only a moderate decline for men. Quantitative measurements of the actual consumption of fuel and light are rather hard to make because of the merging of two or more families in one dwelling house, but such decline as may have taken place has been slight. Consumption of furniture and furnishings and consumption of miscellaneous items on the whole show decreases, but the drops in aggregate consumption in these groups, as well as in fuel and light, are relatively small when compared with the severe decreases that have taken place in the various measures of business conditions during the period 1928 to 1932. Consumption, then, does not fluctuate entirely with business conditions; only in cases of severe adversity in business, such as the prevailing conditions in 1932, does consumption appear to decline at all substantially, and even then not in the same proportion as the decline which takes place in business as a whole.

Conclusion

The preceding analysis throws some light on the present behavior of the business cycle, and affords some explanation of the causes of the previous period of prosperity and the present period of depression. Actual consumption of goods remained practically the same in depression as in prosperity, excluding the abnormally depressed year of 1932, and then the declines were not great. Hence it is probable that production of these consumption goods (data in general are not available except in scattered instances) has not fallen off greatly over this 1928 to 1932 period. A sharp drop has taken place, as we have seen, in the production of producers' goods, such as lumber, iron, steel, lead, and zinc, and of durable consumption goods, such as the automobile; it is these declines which seem to account for the depressed business conditions existing today.

A high rate of activity in those industries producing producers' goods characterized the period of prosperity existing in the years 1925 to 1929; a low rate of activity in these same producers' goods industries characterizes the period of depression from 1930 through 1932. Is this difference which exists between these two periods the basic cause of prosperity or of depression? That such is the case is strongly suggested by the results of this study. Business recovery, then, must, under normal conditions, chiefly await an improvement in the activity of those industries which produce producers' goods.

It is impossible under present conditions to construct an index of total consumption. The results of this study, however, reveal that, in the aggregate, consumption of goods by the ultimate consumer has remained at a very high level even during depression. Consumption of producers' goods, on the other hand, has declined

drastically from the levels existing in the preceding period of prosperity. Judging the character of stagnation in business solely on the basis of consumption, we find that the depression is marked by sharply reduced consumption of producers' goods. That the way out of depression is to increase the consumption of producers' goods seems evident, and only in this way can balanced recovery take place.

At the present time, however, if such a balanced recovery does occur, it does not seem likely that it can be attributed in any large part to the current activities of the Administration. Founded on the misconception that actual consumption of consumers' goods must have declined drastically during the depression, and using erroneously the movements of the Federal Reserve Board Index as a measure of such consumption, present measures have apparently as their main purpose the raising of the level of consumption by the mass of our people. Such an object is to be commended, of course, over the long run, and we all hope that with the advances in sciences and the arts American ingenuity and inventiveness will make it possible for our people to enjoy boundless increases in consumption in the future. Now, however, the long-run outlook for consumption is not important. Of immediate significance is the balanced recovery of business. The results of this study show conclusively that consumption of consumers' goods held up very well through 1931, and the decline in the exceedingly depressed year of 1932 was not drastic. Consumption of producers' goods, on the other hand, suffered unprecedented declines during this depression period. To get business back to normal, then, means that we must have an increase in the production of producers' goods. Such an increase will require new investments of capital, and these will take place only as confidence is inspired among the investing public in the soundness and permanency of the recovery.

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