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PART V

FLOW OF FINISHED COMMODITIES TO ULTIMATE CONSUMERS, AT THE COST TO THEM

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PREFACE

PART V assembles the results of the analysis presented in the preceding Parts and provides annual estimates, 1919–33, of the flow of finished commodities and related services to ultimate consumers, at the cost to them. This final series is obtained through a sequence of measures that include estimates of: (1) changing transportation costs and distributive margins; (2) inventories of finished commodities in the hands of distributors, and changes in them; (3) the flow of finished commodities, already considered, at their cost to ultimate consumers, in both current and 1929 prices; (4) the flow of commodity groups, not treated in any preceding Part; (5) the total flow of finished commodities and related services to ultimate consumers at the cost to them—this last set of estimates being the final result of the analysis in both this and the preceding Parts. Throughout Part V the estimates are of movable commodities and exclude construction activity, which is treated separately in Part VI.

1 TRANSPORTATION CHARGES AND DISTRIBUTIVE MARGINS

The groundwork for estimating annual changes over the period in transportation charges and distributive margins was laid in Part IV. For the former, the survey of the available data, which cover freight charges on steam railways, led to the conclusion that the first step in the only possible procedure would be to estimate transportation costs as they would have been had the relative charges (in percentages of the value of the commodity at its origin) been the same in each year of the period. In carrying out this step, we obtain the estimate by applying to the value of finished commodities destined for domestic consumption in 1929 prices the percentage transportation charge established for every major group in 1929 (Table V–1). The resulting measure of transportation costs in 1929 prices does not reflect possible shifts in weight of the different minor commodity groups within each of the four major commodity classes in Table V–1. But as will be seen, the effects of these shifts on the final estimates are relatively unimportant, even when measured for transportation and distributive costs combined; and their magnitude in the final estimates would be insignificant, were they to be measured for transportation costs alone.

Second, we apply to the value of transportation charges in 1929 prices (Table V–1, lines 2 and 8 of each major section) indexes that reflect their annual variation in each major commodity class. These indexes are constructed for each class by a similar procedure. Since 1928 the annual freight charges per ton in *Statistics of Railways* for some 55 finished commodities were distributed among the major commodity classes, and an average freight charge per ton computed for each class (an average weighted by the tonnage reported). A similar classification was carried through and a set of weighted averages computed for the 25 finished commodities for which freight charges were reported for 1922 (for details see Table IV–1 and Note A to it). For 1922 and 1928 the ratio of the average charge per ton in each major class to the over-all average rate per ton of revenue freight was computed; and this ratio, interpolated in the intervening years along a straight line, was applied to the over-all rate for each year to obtain a specific freight charge per ton in each major commodity class. For years prior to 1922 the ratio for 1922 was held constant, and applied to the annual over-all rate per ton of revenue freight. The result of all these computations is a continuous series of estimates of the average freight charge for each major commodity class for each year, 1919–33.

The conversion of these series to relatives, with the value for 1929 as 100, yields the index of variation in freight charges (Table V–1, line 3 of each section).

The application of these indexes to the transportation charges in 1929 prices yields the estimate of transportation costs in current prices. The estimates are patently highly approximate, even apart from the fact that we took no account of the possible difference or variation in the difference between railroad freight charges and charges incident to other types of commodity transportation. However, throughout this period railroad transportation was the preponderant means of moving commodities from the place of production to the distributive or consuming agencies; and the estimates are, it is hoped, the best that could be made with the available data. Even substantial errors in the measure of transportation costs would have slight effect on the reliability of our final totals. At their highest, i.e., for perishable commodities in 1932, freight charges were about 14 per cent of the cost of commodities at their origin, or about 7 per cent of the final cost to consumers. Hence an error of as much as 20 per cent in transportation costs would amount to an error of less than 1.5 per cent in the final totals.

Subject to the qualifications arising from the approximate character of the estimates in Table V–1, the indication that they give of the movement of transportation costs as compared with that in the value of the commodities at producers' prices is of interest. In 1919 and 1920 relative transportation charges were lowest, amounting in percentages of the values at their origin to between 6 and 7 for perishable commodities, 1.1 and 1.3 for semidurable, 2.8 and 3.2 for consumers' durable, and about 2 for producers' durable. After 1920 freight rates rose and commodity prices declined. As a result, the relative burden of transportation costs became appreciably heavier in 1921 and 1922, the percentages rising to over 10 for perishable commodities, about 2 for semidurable, about 4 for consumers' durable, and about 3 for producers' durable. With the reduction in freight rates from 1922 to 1923, the relative burden of transportation costs declined somewhat, but still remained higher than before 1921. Another significant change in the relative weight of these costs occurred with the drastic decline in commodity values during the recent depression. This decline was followed by only a minor and belated drop in freight rates. Consequently in 1932, the year in which the burden of transportation costs was heaviest, the percentages to the value of commodities at their origin were as high as 13.9 in the perishable group, 4.4 in the semidurable, 4 in the consumers' durable, and 2.9 in the producers' durable. The fact that our estimates are based exclusively upon freight rates may have exaggerated the rigidity of the absolute costs and the rise in the relative costs during the recent depression. But the general conclusion of Table V–1 that transportation costs fail to rise and to decline as promptly and as fully as producers' prices, and therefore serve to damp the fluctuations in the values of the commodities as they pass from their producers to their distributors and finally to ultimate consumers, would probably be confirmed by more comprehensive measures of transportation costs.

The analysis of changes in distributive margins over the period begins with the summary of the various items of evidence considered in detail in Part IV. This summary is represented by the general index of distributive gross margins (Table V–2, line 1). For lack of more detailed data, we assume that the relative changes shown in line 1 apply equally to the two branches of trade, retail and wholesale, and to the major commodity groups within each branch; and it is in accordance with this assumption that Table V–2 is constructed. To the distributive margins for each major commodity class for each branch of trade in 1929, as ascertained in Part III, we apply the general index of gross margins, to obtain the annual variation in margins over the period.

The eight series of varying distributive margins obtained in Table V–2 are again approximations. We believe, however, that they make possible a better estimate of the sales of finished commodities within the major groups than would be obtained were we to hold to the assumption that distributive margins remained constant over the period. What effect the tentative elements in the analysis have upon the final totals can be learned clearly only from following the application of both the estimated transportation costs and the distributive margins in the derivation of these totals below.

2 ANNUAL CHANGES IN INVENTORIES OF FINISHED COMMODITIES

Of the estimates of the flow of finished commodities already considered, output, adjusted for imports and exports, represents the stage nearest the outflow of commodities to ultimate consumers and users. If it could be assumed that producers, wholesalers, and retailers sell each year to the final buyers a volume of commodities equal to that pro-

duced and destined for domestic consumption, it would be possible at the present stage of the analysis to measure the flow of finished commodities to ultimate consumers, at the cost to them. This measure would be obtained by adding to the estimated output, adjusted for imports and exports, the varying transportation costs and distributive margins as measured in Tables V–1 and V–2.

But it is dangerous to assume that for a given year production, adjusted for imports and exports, represents sales to ultimate consumers. To begin with, producers of finished commodities may retain part of the current output in stock or sell from the existing stock of commodities produced during earlier years. Similarly, wholesalers may sell during a given year an amount smaller than their purchases, with a resulting increase in their inventories; or an amount larger than their purchases, with a resulting decrease in their inventories. A similar discrepancy between purchases and sales, both considered in terms of the same price level, may arise at the retail link of the distributive system. In short, any stage at which inventories of finished commodities are held may be a source of discrepancy between current output, adjusted for imports and exports, and sales to ultimate consumers.

We must, therefore, adjust for changes in inventories before we derive the annual sales of finished commodities to final consumers. The character of this adjustment, as actually followed out, was determined by two limitations. First, no account is taken of the possible changes in inventories of finished commodities in the hands of their producers, because the data on producers' inventories cover both raw materials and semifinished products and the finished commodities held by them in stock; and there is no way of segregating these two constituent parts of the inventories. The scanty data that are available indicate that the producing establishments tend to hold the preponderant part of their inventories in raw materials or semifinished commodities; and that producers' holdings of finished commodities are small in comparison with those held by wholesalers and retailers.

Second, in order to derive estimates of sales in current prices, measures are needed of inventories of finished commodities in terms of their current valuation (whether at cost or market, or at their sales price), because the measures of distributive gross margins are based upon margins derived from adding inventories at the beginning of the year (at current valuation) to purchases during the year, subtracting inventories at the end of the year (at current valuation), and comparing the residual with sales during the year (see Preface to Part IV). Hence in adjusting current output, corrected for imports and exports, for changes in inventories, we need the latter in terms of fluctuating current valuation. Only when sales in 1929 prices are estimated (see Table V–7) do we need inventories at the successive year-ends expressed in terms of a constant price level.

These considerations explain why we confined the estimates of finished inventories to those held by wholesale and retail trade. They also indicate the purpose of the procedure followed in Tables V–3 through V–5, which consisted primarily in applying inventory-sales ratios to a tentative estimate of sales for each of the four major classes of each branch of trade. The three important steps were: (a) the derivation of the first approximation to the volume of sales; (b) the derivation of the inventory-sales ratios for each year in the period; (c) the repeated application of the inventory-sales ratios to the successive approximations to the volume of sales, resulting in final estimates of inventories of finished commodities, at current valuation.

The methods used in deriving the first approximation to the annual volume of sales in the major divisions of wholesale and retail trade are obvious in Table V–3. In all major divisions the pivotal figure was that of sales for 1929, derived in Part III. The interpolating indexes were based on the volume of production, adjusted for imports and exports (derived in Part II), and modified so as to allow for the varying transportation costs and distributive margins (derived in Tables V–1 and V–2). For wholesale trade the allowance is made for transportation charges and the varying distributive charges made by wholesalers. For retail trade the allowance is made for transportation charges; sales by wholesalers, weighted by the percentage of wholesale sales going to retailers in 1929; and the varying distributive margins realized by retailers.

The resulting indexes of sales are subject to two limitations. The less important is that since the interpolating indexes are based largely upon the movement of output, no account is as yet taken of changes in wholesale and retail inventories and their effect upon sales. This limitation is overcome by successive approximations, given fully in Table V–5 and discussed below.

The second limitation is much more important, and in the present state of the data, hardly to be

overcome. It arises from the assumption implicit in Table V–3 that the distribution of the output destined for domestic consumption, for each major group of finished commodities, among various types of movement in the distributive channels—direct sales by producers to ultimate consumers, sales by producers to wholesalers and by the latter to retailers, sales by producers to wholesalers and by the latter direct to ultimate consumers, sales by producers direct to retailers—remains throughout the period at the 1929 proportions. This assumption is all the more important in that it is applied again in the subsequent derivation of the final estimate of the flow of finished commodities to ultimate consumers (see Table V–6). It is forced upon us by the lack of any data on the possible changes in the proportionate allocation of finished commodities among the various forms of movement along the distributive channels of the national economy.[1] Its effect is to underestimate sales in those years in which finished commodities were handled by the distributive system more extensively than in 1929; and to overestimate sales in those years in which this handling was less extensive than in 1929.

To measure the precise effects of the possible deviation of the real situation from this rigid assumption is difficult, but that they are probably small is suggested by two considerations. First, the variation is likely to be primarily in the extent to which commodities pass through wholesale channels, in addition to passing through the hands of retailers; since in all groups, except producers' durable, direct sales to ultimate consumers by either producers or wholesalers are small and not likely to undergo changes that would affect appreciably the final estimates. But wholesale margins are relatively small, varying from 10 to 15 per cent of final values; and an increase in the proportion of commodities handled by wholesalers as large as one from 40 to 80 per cent would mean an increase in the final values of only 4 to 6 per cent. Second, changes in the proportion of commodities going through wholesale channels are largely the result of the shifting importance of types of retail organization. But data on the distributive margins seem to indicate that those types of retail outlet that are likely to dispense with the services of wholesalers, e.g., chain stores and large department stores, usually have somewhat higher distributive margins than retail units that tend to purchase from wholesalers. If the distributive margins are higher, any change in the proportion of commodities handled by wholesalers does not exercise its full effect on the total spread between producers' values and the cost of the commodities to ultimate consumers.

Thus, the assumption of a constant proportionate distribution of the flow of finished commodities among the various types of movement in the distributive system, for each of the four major commodity classes, is likely to have but a small effect on the final estimate of sales; hence upon the estimate of inventories arrived at eventually in Table V–5. Moreover, with the data now available, little can be done to modify this assumption although for one major commodity class, perishable, an approximate check of the results can be attempted. The availability of annual data on retail prices for several commodities in this class makes it possible to adjust for the varying spread between producers' values and cost to ultimate consumers in a fashion different from that employed in Tables V–1 to V–3. We can take for each minor commodity group for which retail prices are available the flow destined for domestic consumption, in producers' 1929 prices (from Part II), and multiply it by an index of retail prices. The result is the final value of the flow of output destined for domestic consumption, a counterpart of the results obtained by major commodity groups in Table V–3.

In Table V–a the results arrived at by the two methods are compared in the form of indexes and estimates of the cost to consumers of the perishable commodities, produced in each year and adjusted for imports and exports. In carrying through the first method, i.e., adding varying transportation charges and distributive margins and assuming a constant proportionate allocation of the flow among the distributive channels, we add to the total retail sales estimated in Table V–4 the direct sales to ultimate consumers by producers and by wholesalers (obtained by applying the 1929 proportions to the value of production and wholesale sales for each year). In carrying through the second method, i.e., multiplying the flow destined for domestic consumption by the index of retail prices, adjustment must be made for the fact that the minor commodity groups covered in Table V–4 fall short of the total perishable class. This is done by applying the index, with 1929 as 100, based on the estimated total cost to consumers for the groups included in Table V–4 to the final sales value for total perishable in 1929

[1] Such data for a recent year have just become available with the release of the 1935 Census reports on Distribution of Sales of Manufacturing Plants and on Retail and Wholesale Trade.

Table V-a

COMPARISON OF TWO ESTIMATES OF THE VALUE OF PERISHABLE COMMODITIES DESTINED FOR DOMESTIC CONSUMPTION AT THEIR COST TO ULTIMATE CONSUMERS

	ABSOLUTE VALUE (*millions of dollars*)			INDEXES, 1929 = 100		
	BY METHOD 1: ADDITION OF TRANSPORTATION COSTS AND DISTRIBUTIVE MARGINS (TABLE V–6, LINE 4)	BY METHOD 2: USE OF RETAIL PRICES (1929 VALUE X INDEX BASED ON TABLE V–4, LINE 1 UNDER TOTAL)	DIFFERENCE AS PERCENTAGE OF (1)	BY METHOD 1	BY METHOD 2	ABSOLUTE DIFFERENCE BETWEEN INDEXES
	(1)	(2)	(3)	(4)	(5)	(6)
1919	23,500.1	22,308.2	—5.1	86.7	82.3	—4.4
1920	25,389.4	25,642.3	+1.0	93.7	94.6	+.9
1921	19,390.0	21,007.2	+8.3	71.5	77.5	+6.0
1922	19,888.3	19,787.4	—.5	73.4	73.0	—.4
1923	21,326.5	21,196.9	—.6	78.7	78.2	—.5
1924	22,189.5	22,552.2	+1.6	81.9	83.2	+1.3
1925	23,749.9	23,934.6	+.8	87.6	88.3	+.7
1926	25,212.6	25,696.5	+1.9	93.0	94.8	+1.8
1927	24,637.2	25,344.1	+2.9	90.9	93.5	+2.6
1928	25,691.3	25,533.9	—.6	94.8	94.2	—.6
1929	27,106.0	27,106.0	.0	100.0	100.0	.0
1930	24,373.4	25,127.3	+3.1	89.9	92.7	+2.8
1931	19,997.3	20,329.5	+1.7	73.8	75.0	+1.2
1932	16,554.4	17,103.9	+3.3	61.1	63.1	+2.0
1933	17,201.8	17,076.8	—.7	63.5	63.0	—.5

The comparison reveals some disparity between the results of the two methods. But in most years the difference in the two dollar totals is less than 2 per cent, and the difference between the two indexes less than 1.5. With respect to direction of change from year to year, there is agreement in all years except for the change from 1921 to 1922, and 1932 to 1933. The most striking differences in the dollar totals and in the indexes occur in 1919, 1921, and, to a much smaller extent, in 1930 and 1932. They may be due either to the deficiencies of our estimate of transportation and especially of distributive costs, or to the defects in the retail price data, especially their coverage of a group of commodities somewhat different from those included in the output totals under the minor commodity groups. Since, of the two possible sources of discrepancy, the second appears to have the greater weight, it was decided to use the estimate obtained by the first method, namely, by adding to producers' values the varying transportation charges and distributive mark-ups.

The first approximation to the annual volume of sales established, the next step was to obtain the ratio of inventories at the end of each year in the period to the sales during the year. These series of inventory-sales ratios appear in the second line of each section of Table V–5; the mode of their derivation is described in detail in Note A to that table. The general procedure may be noted briefly here: first, to establish the ratio for 1929, on the basis of the detailed data on inventories and sales for that year available in the Censuses of Wholesale and Retail Trade; second, to do likewise with the less detailed Census data for 1933; third, to work out indexes of the movement of the inventory-sales ratios for other years by utilizing the data in R. C. Epstein's *Source-Book of Industrial Profits,* Federal Reserve Board data on inventories and sales in various branches of wholesale trade and for department stores, and the corporate data on sales and inventories of manufacturing corporations; fourth, to apply the computed indexes to the basic figure for 1929, thus obtaining inventory-sales ratios for the other years in the period. The main, and a rather important, weakness of the procedure is the paucity of data bearing specifically on the variations of the inventory-sales ratios in the different subdivisions of retail and wholesale trade. But if the general indication of the series is true, such variations are within relatively narrow limits; and even substantial errors in the ratios are not likely to have important effects on the final estimates of sales. At any rate, it appeared more advisable to utilize the available data and allow the inventory-sales ratios to vary over time than to follow the only other possible method, namely, to assume constancy in these ratios throughout the period.

The first approximation to the volume of sales

and the annual variation in the inventory-sales ratio established, the analysis proceeded to the successive approximations to the volume of sales and of inventories. Both the first approximation to inventories (Table V–5, line 3 of each section), and the difference between inventories at successive year-ends (line 4) are in terms of the valuation by their holders, i.e., at their cost or wholesale market value, whichever is lower. Hence, in order to correct the first approximation to sales by the first approximation to the difference in inventories, the latter must be translated from a cost or wholesale market basis to a sales-price basis. The data for this translation are already available in the series of distributive mark-ups in Table V–3. The differences in inventories at successive year-ends raised to a price level comparable to that in the first approximation to sales (Table V–5, line 5 of each section), the latter can be corrected and the second approximation to the volume of sales obtained. Then the operations can be repeated: the inventory-sales ratios applied to the second approximation, a new set of inventories and differences in the inventories computed, these differences (second approximation) raised to the sales-price basis, and this new set of differences applied to line 1 to yield a third approximation to the volume of sales.

This calculation of successive approximations could be repeated many times, with the eventual inevitable result that the differences among successive year-ends in the n^{th} approximation would be exactly identical with the differences in the $n + 1st$ approximation. For practical purposes, however, such precision is unnecessary and the laborious calculations can be stopped when changes' introduced by the next approximation become small. We terminated this sequence of successive approximations when the average change introduced by the next approximation would be less than 10 per cent of the absolute value of a given set of first differences in the inventory series. An exception had to be made for retail inventories of producers' durable commodities, but the inventory changes in this group were so small compared with the volume of sales that it appeared unimportant to carry the approximation beyond the sixth. In most groups (Table V–5, line 11), the third approximation sufficed.[2]

[2] In reading this report in manuscript Solomon Fabricant suggested a short-cut method of arriving at a *final* approximation of inventory changes. This method could be applied only to some of the series in Parts V and VII (in the latter Part computations similar to those just described are carried out for inventories of *all* commodities). For those groups for which the application of Mr. Fabricant's shorter and more definitive method was possible, the results differed but little from those obtained by the method of successive approximations. Consequently, it was considered best to retain the results derived by successive approximations and to avoid the laborious recalculations that would have been necessitated by the adoption of Mr. Fabricant's procedure at such a late stage in the study.

3 THE FLOW OF FINISHED COMMODITIES (ALREADY CONSIDERED) TO ULTIMATE CONSUMERS

Given the measure of changes in inventories of finished commodities (in Table V–5) and of transportation charges and distributive mark-ups (in Tables V–1 and V–2), it is possible to estimate the flow of finished commodities to ultimate consumers, at the current cost to them. The procedure by which these estimates are obtained is set forth in detail in Table V–6.

As already indicated, this procedure assumes that throughout the period the proportionate allocation of finished commodities among the various types of movement through the distributive channels is, for each major commodity class, the same as in 1929; and it was pointed out that the errors arising from this assumption are not likely to be large. In accordance with it, the flow of finished commodities to ultimate consumers is estimated for each major commodity class in two steps: the first yields the flow before correction for changes in inventories; the second consists of this correction. To measure the flow before correction for inventories, we add direct sales to ultimate consumers by producers and by wholesalers (derived by applying the 1929 ratio of direct sales to the estimated volume of production and of wholesale sales); and add also sales by retailers (derived by combining direct sales by producers to retailers with sales by wholesalers to retailers, here again using the proportions established for 1929). The resulting total, representing the flow to ultimate consumers from producers, wholesalers, and retailers, is then adjusted for changes in the inventories of finished commodities held by distributors.

Table V–6 thus uses the results of the analysis in Part V and is subject to the limiting assumptions made there; but it incorporates an additional refinement in the measurement of changes in the combined total of transportation costs and distributive mark-ups. In the preceding tables in Part V variations in transportation and distributive costs were measured without regard to possible changes in the weight of different minor commodity groups within each major commodity class; largely because this shift in weight would

have introduced only an insignificant change in our estimate of changes in inventories. But in Table V–6, where the measure of transportation charges and distributive mark-ups is applied directly in order to estimate the cost to consumers of commodities flowing to them, it seemed advisable to gauge the effect of shifts in the weights of minor commodity groups within each major commodity class. This was done by: (a) raising the producers' value for each minor commodity group by the 1929 spread between producers' values and the cost to ultimate consumers; (b) comparing the result with output destined for domestic consumption for each year in the period at producers' values.

The changes in total spread for perishable and semidurable commodity classes revealed by these computations were scarcely significant, amounting to fractions of a per cent of the 1929 spread. But for the two durable commodity classes the shift in weights within each class produced significant effects. For this reason the estimating of the flow of commodities to ultimate consumers in these two classes included an additional step: upon measuring the total flow to ultimate consumers from producers, wholesalers, and retailers, and before the correction for changes in inventories, the total spread between producers' values and the cost to consumers was further adjusted for the effect of the shift in the importance of the different minor commodity groups within each of these two major commodity classes (see Table V–6, lines 6, 7, and 8 for these commodity classes).

The successive computations and estimates presented in Table V–6 yield a measure of the flow of finished commodities to ultimate consumers, at the cost to them in terms of a changing price level. The derivation of the measures of the same commodity flow in terms of a constant price level, 1929, is set forth in Table V–7.

In measuring the flow of commodities at the 1929 price level we assume that producers' values as well as all the additions to them in the form of transportation costs and distributive mark-ups remain, for the various commodity groups, at their 1929 level throughout the period. If we assume again, as before, a constant proportionate allocation of commodity flow among the various types of movement in the distributive channels, the absolute spread between producers' values and cost to consumers can vary either because the number of commodity units changes, or because of the shift in the relative importance of various minor commodity groups within each major commodity class. The first source of possible changes in the spread is eliminated if the spread is expressed in percentages of the value of commodities at producers' prices. The second type of change, which will remain even in the percentage spread, can be measured by a computation analogous to that made for Table V–6: the volumes at 1929 producers' prices for each minor commodity group are raised for each year by the percentage spread in 1929, and the ratio of their sum for each major commodity class to the total value for that class in producers' prices will describe changes in the spread resulting from changes in the composition of that class. As in the estimates in current prices, these changes proved to be insignificant for the perishable and semidurable commodity classes.

Thus to measure the cost to consumers in 1929 prices of output, adjusted for imports and exports, all one need do is: (1) for perishable and semidurable commodities, to extrapolate the cost-value in 1929 for other years by the changes in the volume destined for domestic consumption, at producers' 1929 prices; (2) for the two classes of durable commodities, allow also for the effect of shifts in the weight of minor commodity groups within each major commodity class.

However, in order to measure the *flow to consumers* a further adjustment for changes in inventories is needed; and, obviously, these inventory changes are to be expressed in the same price level, viz., the sales price to consumers in 1929. But the estimates of inventories available so far measure them in terms of current valuation by their holders, rather than at a constant sales price. The consequent translation of inventory totals to a constant price basis constitutes the distinctive step in the procedure presented in Table V–7; and is described more fully in Note A to that table.

The general assumption adopted is that inventories are valued by their holders at cost or market (replacement) value, whichever is lower. Proceeding upon this assumption and utilizing both the Bureau of Labor Statistics price data and the information on stock-turnover, which indicates the average age of inventories held,[3] we can compile price indexes that show for every year-end the approximate price level of inventories on a cost or current market basis (see these indexes in Note A to Table V–7). With these price measures at hand, we can ascertain changes in the current valuation of inventories, translate these inventories to the

[3] This information on stock-turnover was provided largely by the data on corporate inventories and sales published since 1926 in *Statistics of Income*.

levels of 1929 valuation by their holders, and then raise them by the 1929 mark-up in order to express them in the same price level in which the flow to ultimate consumers is to be measured.

Table V–7 thus repeats briefly all the calculations set forth at length in Tables V–1 to V–6. Some, such as the calculations of varying transportation and distributive costs, are omitted as superfluous when the measure is in terms of a constant price level; of others, e.g., those in Table V–5 used for approximating final inventories, Table V–7 borrows the ultimate results; still other calculations it repeats for volumes of commodities measured in constant prices; and it introduces a new set of estimates to adjust inventories for changes in their current valuation. The result is a final set of estimates of the flow of finished commodities to ultimate consumers, at the cost to them in the average price levels of 1929.

4 COMMODITIES OUTSIDE THE MARKET SYSTEM

The flow of movable commodities considered heretofore included only those that appeared on the market, since all our consecutive estimates started with the distribution of sales by producers and thus failed to include producers who retained all or part of their product for consumption within their enterprise or family unit. Such cases are not infrequent. They can be considered now so far as data are available that will allow an approximation to their magnitudes.

Because movable finished commodities and the volume of construction are treated separately, it is advisable to distinguish two types of production whose results are utilized within the producing unit: one in which the enterprise uses construction materials in order to carry through some construction work with its own forces; another in which the enterprise retains part of its product for its own consumption, or purchases unfinished products (not classifiable as construction materials) and from them manufactures a finished product that is to be retained for consumption without appearing on the market. The first type of intra-enterprise activity, probably the most widespread kind of production outside the market by business enterprises, is to be considered in the construction estimates in Part VI. At present we deal with the second type of intra-enterprise activity.

Instances of such activity may be found among industrial or other urban enterprises. A textile mill may buy machinery parts, and employ its own forces to build finished equipment from these parts. While the estimates presented so far do attempt to cover the value of parts not consumed in the production of finished equipment for sale, they necessarily fail to include the additional value of labor employed to produce equipment for own use. A given industrial establishment may also purchase raw or semifinished materials, not classifiable as parts, and use them to produce a finished commodity that never appears on the market. Unfortunately, there are no data that would reveal the magnitude of such intra-enterprise production of finished commodities. Still it may be surmised that the volumes, especially as compared with those covered in the estimates so far, are insignificant, at least for non-farm business establishments.

But on such intra-enterprise production and consumption within the farm unit, where it is likely to be of most importance, data are available. It is possible to measure the volume of commodities, all perishable, grown on farms and retained for the consumption of the producers' family; and to estimate the gross production of the farm livestock that is used for productive work on farms and can thus be classified as a producers' durable commodity, as distinct from livestock raised for slaughter, which, in our classification, belongs to unfinished commodities.

The estimates of the value of products retained by farmers for their own consumption (Table V–8), are by the Bureau of Agricultural Economics, and relate to crop years. However, the bulk of commodities retained by farmers for consumption are dairy products, chickens and eggs, and meats, all of which are calculated on a calendar year basis; it was, therefore, considered unnecessary to introduce the minor but laborious refinement of translating the total estimate to the basis of calendar years. The valuation of commodities retained is in prices usually received by farmers for such commodities, and from our point of view, properly so: the avoidance of transportation and distribution services should be reflected in a reduced cost of these commodities to their ultimate consumers. The estimates indicate that the volumes, ranging from one to two billion dollars, constitute a significant addition to the totals, already derived, of the flow of perishable commodities to ultimate consumers.

The livestock on farms used as productive equipment include horses, mules, and milk cows. Though part of them may be sold by their owners and breeders to other farmers or to non-farm purchasers, none of the estimates has so far covered

he volumes involved; and in the estimates made it this stage it is impossible to distinguish between he production of livestock thus sold and that of ivestock retained by the breeder himself (see Table V–9). Measurement of the total production of capital livestock is attempted by estimating he gross increase in the value of livestock on arms arising from births and the appreciation in he value of young livestock with their growth to nature age. Since, as in all other capital goods, we estimate *gross* capital formation, no account is taken of the decrease in the value of livestock due to deaths or the passing of livestock beyond the most valuable age level.[4]

Notes A, B, and C to Table V–9 give in tabular form the detailed procedure by which the gross increase in value in each of the three types of livestock is derived. Table V–9 itself shows the results of these computations and indicates a gross increase in value ranging from 160 to 500 million dollars. This item is to be added to the previous estimates of the flow of producers' durable goods to their ultimate users.

[4] No attempt has been made to take account of a possible increase in value beyond the age of four. While this results in an underestimate of gross capital formation represented by gross increase in the value of livestock on farms, the omission is relatively small and serves to reduce materially the labor of estimation.

5 TOTAL FLOW OF FINISHED COMMODITIES AND RELATED SERVICES

The final totals of the flow of finished commodities and related services to ultimate consumers, at the cost to them, in both current and 1929 prices, are given in Table V–10, which contains also the percentage distribution in each year of the period of the grand total and of other significant totals.

The estimates in Table V–10, and still more those in Tables V–6 and V–7, parallel the estimates in Tables II–5 and II–7. Both sets of tables refer to the flow of finished commodities and related services. But whereas the measures in Part II reflect the *output destined for domestic consumption,* those in Part V reflect the actual *flow to ultimate consumers and users;* [5] and whereas the estimates in Part II value the output at *producers' prices,* those in Part V value the flow at the *cost to consumers and ultimate users.* Close comparison of the two sets of tables would thus show the effect on the estimates of the consideration of changes in inventories and of the inclusion of transportation and distributive charges.

[5] With respect to commodity coverage the strict parallelism is not between Table V–10 and Tables II–5 and II–7, but between Tables V–6 and V–7 and the tables in Part II. In Part II no account is taken of production outside the market system.

Table V—1

SEGREGABLE TRANSPORTATION CHARGES, BY MAJOR COMMODITY GROUPS, 1919–1933

This table presents measures of segregable transportation charges applicable to the output of finished commodities and to the value of finished commodities destined for domestic consumption. These charges are estimated at both current and 1929 prices. For the derivation of the volume of transportation charges and of an index of their annual movement see the notes following this table and the comments in the Preface to Part V, Section 1.

Table V—2

DISTRIBUTIVE MARGINS, WHOLESALE AND RETAIL TRADE IN FINISHED COMMODITIES, BY MAJOR COMMODITY GROUPS, 1919–1933

In this table the distributive margins are expressed as percentages of the volume of sales. Comments on the table will be found in the Preface to Part V, Section 1.

Table V—3

PRELIMINARY INDEXES OF WHOLESALE AND RETAIL SALES OF FINISHED COMMODITIES, 1919–1933

The preliminary indexes given in this table are obtained by combining the estimates in Tables V—1 and V—2. The indexes are preliminary in that they do not take account of changes in inventories of finished commodities in the hands of wholesalers and retailers. They are computed for subsequent use in deriving measures of net change in distributive inventories of finished commodities and of the flow of these commodities to ultimate consumers (see Table V—5 and its Note A).

Additional comments will be found in the Preface to Part V, Section 2.

Table V-1

SEGREGABLE TRANSPORTATION CHARGES, BY MAJOR COMMODITY GROUPS

(thousands of dollars)

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
A Perishable															
1 Output in producers' 1929 prices (Tables II-3 and II-7)	13,566,783	13,443,357	13,766,192	14,095,641	14,675,953	15,621,176	15,504,372	16,317,778	16,603,806	16,815,779	17,796,692	17,426,343	16,557,075	15,698,578	16,164,289
2 Railroad transportation charges in 1929 prices (1929 percentage used for all years)[1]	1,234,577	1,223,345	1,252,723	1,282,703	1,335,512	1,421,527	1,410,898	1,484,918	1,510,946	1,530,236	1,623,293	1,585,797	1,506,694	1,428,571	1,470,950
3 Index of freight rates, 1929 = 100[2]	92.8	98.9	119.5	112.1	103.0	104.0	103.2	101.3	101.3	101.7	100.0	99.6	100.6	100.0	93.5
4 Transportation charges in current prices, line 2 x line 3	1,145,687	1,209,888	1,497,004	1,437,910	1,375,577	1,478,388	1,456,047	1,504,222	1,530,588	1,556,250	1,623,293	1,579,454	1,515,734	1,428,571	1,375,338
5 Output in producers' current prices (Table II-3)	17,446,883	18,753,483	13,270,609	13,278,094	14,323,730	14,793,254	15,907,486	16,839,947	16,338,145	17,034,384	17,796,692	15,945,104	12,765,505	10,313,966	10,361,309
6 Output, incl. transportation charges in current prices, line 4 + line 5	18,592,570	19,963,371	14,767,613	14,716,004	15,699,307	16,271,642	17,363,533	18,344,169	17,868,733	18,590,634	19,419,985	17,524,558	14,281,239	11,742,537	11,736,647
7 Value of commodities destined for domestic consumption in producers' 1929 prices (Table II-7)	12,262,917	12,786,900	13,227,324	13,609,161	14,220,596	15,169,508	15,090,435	15,949,691	16,246,434	16,455,885	17,406,974	17,103,405	16,292,953	15,453,725	15,996,788
8 Transportation charges in 1929 prices (same percentage as used to derive line 2 above)	1,115,925	1,163,608	1,203,686	1,238,434	1,294,074	1,380,425	1,373,230	1,451,422	1,478,425	1,497,486	1,584,035	1,556,410	1,482,659	1,406,289	1,455,708
9 Transportation charges in current prices, line 3 x line 8	1,035,578	1,150,808	1,438,405	1,388,285	1,332,896	1,435,642	1,417,173	1,470,290	1,497,645	1,522,943	1,584,035	1,550,184	1,491,555	1,406,289	1,361,087
10 Value of commodities destined for domestic consumption in producers' current prices (Table II-5)	15,766,152	17,837,194	12,748,038	12,814,522	13,873,485	14,362,119	15,480,153	16,453,224	15,990,522	16,675,051	17,406,974	15,653,688	12,562,375	10,178,866	10,250,213
11 Value of commodities destined for domestic consumption, incl. transportation charges, in current prices	16,801,730	18,988,002	14,186,443	14,202,807	15,206,381	15,797,761	16,897,326	17,923,514	17,488,167	18,197,994	18,991,009	17,203,872	14,053,930	11,585,155	11,611,300
B Semidurable															
1 Output in producers' 1929 prices (Tables II-3 and II-7)	5,373,021	4,762,307	5,206,558	5,900,377	6,449,817	5,852,399	6,633,307	7,033,980	7,416,254	7,389,133	7,718,429	6,796,927	6,549,685	5,698,070	5,320,923
2 Railroad transportation charges in 1929 prices (1929 percentage used for all years)[1]	150,445	133,345	145,784	165,211	180,595	163,867	185,733	196,951	207,655	206,896	217,079	190,314	183,391	159,546	148,986

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
3 Index of freight rates, 1929 = 100[2]	63.6	67.7	81.7	76.7	75.2	80.9	85.3	88.6	93.7	99.1	100.0	99.5	99.4	101.6	101.1
4 Transportation charges in current prices, line 2 x line 3	95,683	90,275	119,106	126,717	135,807	132,568	158,430	174,499	194,573	205,034	217,079	189,362	182,291	162,099	150,625
5 Output in producers' current prices (Table II-3)	7,522,229	8,376,898	5,893,824	6,578,920	7,546,286	6,665,882	7,435,937	7,582,630	7,668,407	7,647,753	7,718,429	6,259,970	5,076,006	3,646,765	3,926,841
6 Output incl. transportation charges in current prices, line 4 + line 5	7,617,912	8,467,173	6,012,930	6,705,637	7,682,093	6,798,450	7,594,367	7,757,129	7,862,980	7,852,787	7,935,508	6,449,332	5,258,297	3,808,864	4,077,466
7 Value of commodities destined for domestic consumption in producers' 1929 prices (Table II-7)	5,104,641	4,515,223	5,011,537	5,752,085	6,323,739	5,737,382	6,427,532	6,781,282	7,266,580	7,321,885	7,720,777	6,801,228	6,533,928	5,657,421	5,313,731
8 Transportation charges in 1929 prices (same percentage as used to derive line 2 above)	142,930	126,426	140,323	161,058	177,065	160,647	179,971	189,876	203,464	205,013	216,182	190,434	182,950	158,408	148,784
9 Transportation charges in current prices, line 3 x line 8	90,903	85,590	114,644	123,531	133,153	129,963	153,515	168,230	190,646	203,168	216,182	189,482	181,852	160,943	150,421
10 Value of commodities destined for domestic consumption in producers' current prices (Table II-5)	7,491,697	8,340,225	5,886,244	6,574,894	7,542,120	6,658,685	7,417,742	7,562,889	7,654,058	7,638,233	7,720,777	6,268,919	5,084,222	3,651,242	3,928,948
11 Value of commodities destined for domestic consumption, incl. transportation charges, in current prices	7,582,600	8,425,815	6,000,888	6,698,425	7,675,273	6,788,648	7,571,257	7,731,119	7,844,704	7,841,401	7,936,959	6,458,401	5,266,074	3,812,185	4,079,369
C Consumers' Durable															
1 Output in producers' 1929 prices (Tables II-3 and II-7)	3,276,694	3,393,580	2,526,898	3,712,002	5,071,066	4,886,861	5,801,671	6,392,912	5,657,221	6,134,857	6,361,363	4,471,359	3,595,285	2,392,437	2,712,173
2 Railroad transportation charges in 1929 prices (1929 percentage used for all years)[1]	137,621	142,530	106,130	155,904	212,985	205,248	243,670	268,502	237,603	257,664	264,831	187,797	151,002	100,482	113,911
3 Index of freight rates, 1929 = 100[2]	90.8	96.7	117.0	109.7	101.7	103.5	103.7	102.8	103.8	105.2	100.0	87.8	84.6	81.5	81.6
4 Transportation charges in current prices, line 2 x line 3	124,960	137,827	124,172	171,027	216,606	212,432	252,686	276,020	246,632	271,063	264,831	164,886	127,748	81,893	92,951
5 Output in producers' current prices (Table II-3)	3,938,586	4,873,181	3,196,526	3,956,994	5,289,122	4,989,485	5,801,671	6,105,231	5,476,190	6,018,295	6,361,363	4,279,091	3,228,566	2,024,002	2,291,786
6 Output incl. transportation charges in current prices, line 4 + line 5	4,063,546	5,011,008	3,320,698	4,128,021	5,505,728	5,201,917	6,054,357	6,381,251	5,722,822	6,289,358	6,626,194	4,443,977	3,356,314	2,105,895	2,384,737
7 Value of commodities destined for domestic consumption in producers' 1929 prices (Table II-7)	3,330,748	3,353,707	2,556,487	3,768,585	5,117,547	4,887,994	5,736,334	6,339,441	5,561,597	5,989,519	6,252,522	4,420,585	3,582,713	2,395,193	2,708,194

Table V-1 (Concluded)

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
8 Transportation charges in 1929 prices (same percentage as used to derive line 2 above)	139,891	140,856	107,372	158,281	214,937	205,296	240,926	266,257	233,587	251,560	262,606	185,665	150,474	100,598	113,744
9 Transportation charges in current prices, line 3 x line 8	127,021	136,208	125,625	173,634	218,591	212,481	249,840	273,712	242,463	264,641	262,606	163,014	127,301	81,987	92,815
10 Value of commodities destined for domestic consumption in producers' current prices (Table II-5)	3,998,676	4,815,059	3,230,802	4,012,732	5,326,932	4,985,833	5,733,956	6,056,286	5,382,374	5,877,636	6,252,522	4,229,414	3,215,992	2,025,448	2,288,133
11 Value of commodities destined for domestic consumption, incl. transportation charges, in current prices	4,125,697	4,951,267	3,356,427	4,186,366	5,545,523	5,198,314	5,983,796	6,329,998	5,624,837	6,142,277	6,515,128	4,392,428	3,343,293	2,107,435	2,380,948
D Producers' Durable															
1 Output in producers' 1929 prices (Tables II-3 and II-9)	4,987,627	4,688,358	2,948,604	3,337,014	4,585,782	4,280,727	4,671,620	5,095,923	4,789,652	5,246,879	6,230,785	5,044,233	3,271,259	1,829,275	2,006,012
2 Railroad transportation charges in 1929 prices (1929 percentage used for all years)[1]	114,715	107,832	67,818	76,751	105,473	98,457	107,447	117,206	110,162	120,678	144,104	116,017	75,239	42,073	46,138
3 Index of freight rates, 1929 = 100[2]	106.2	113.2	136.9	128.3	115.1	113.2	109.5	104.7	101.8	99.3	100.0	97.5	98.9	104.0	104.6
4 Transportation charges in current prices, line 2 x line 3	121,827	122,066	92,843	98,472	121,399	111,453	117,654	122,715	112,145	119,833	144,104	113,117	74,411	43,756	48,260
5 Output in producers' current prices (Table II-3)	5,641,006	5,611,965	3,222,824	3,146,804	4,682,083	4,319,254	4,634,247	5,050,060	4,756,124	5,183,916	6,230,785	4,776,889	2,878,708	1,509,152	1,622,864
6 Output incl. transportation charges in current prices, line 4 + line 5	5,762,833	5,734,031	3,315,667	3,245,276	4,803,482	4,430,707	4,751,901	5,172,775	4,868,269	5,303,749	6,374,889	4,890,006	2,953,119	1,552,908	1,671,124
7 Value of commodities destined for domestic consumption in producers' 1929 prices (Table II-7)	4,627,109	4,290,531	2,686,569	3,141,178	4,346,051	4,015,512	4,348,443	4,750,755	4,398,896	4,780,384	5,684,774	4,617,623	3,003,056	1,712,835	1,877,936
8 Transportation charges in 1929 prices (same percentage as used to derive line 2 above)	106,424	98,682	61,791	72,247	99,959	92,357	100,014	109,267	101,175	109,949	130,750	106,205	69,070	39,395	43,193
9 Transportation charges in current prices, line 3 x line 8	113,022	111,708	84,592	92,693	115,053	104,548	109,515	114,403	102,996	109,179	130,750	103,550	68,310	40,971	45,180
10 Value of commodities destined for domestic consumption in producers' current prices (Table II-5)	5,231,003	5,128,158	2,929,562	2,962,796	4,430,011	4,051,261	4,318,170	4,706,449	4,367,025	4,724,907	5,684,774	4,371,347	2,643,576	1,413,651	1,518,918
11 Value of commodities destined for domestic consumption, incl. transportation charges, in current prices	5,344,025	5,239,866	3,014,154	3,055,489	4,545,064	4,155,809	4,427,685	4,820,852	4,470,021	4,834,086	5,815,524	4,474,897	2,711,886	1,454,622	1,564,098

DISTRIBUTIVE MARGINS, WHOLESALE AND RETAIL TRADE, BY MAJOR COMMODITY GROUPS

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
1 General index of gross distributive margins	98.0	86.0	92.0	98.0	98.3	98.6	98.9	99.2	99.5	99.8	100.0	101.0	102.0	103.0	112.0
Perishable															
2 Distributive margin, wholesale trade as percentage of wholesale sales, 1929 margin from Table III-3 x line 1	12.1	10.6	11.3	12.1	12.1	12.1	12.2	12.2	12.2	12.3	12.3	12.4	12.5	12.7	13.8
3 Distributive margin, retail trade as percentage of retail sales, 1929 margin from Table III-4 x line 1	22.8	20.0	21.4	22.8	22.9	23.0	23.0	23.1	23.2	23.3	23.3	23.5	23.8	24.0	26.1
Semidurable															
4 Distributive margin, wholesale trade as percentage of wholesale sales, 1929 margin from Table III-3 x line 1	14.6	12.8	13.7	14.6	14.6	14.7	14.7	14.8	14.8	14.9	14.9	15.0	15.2	15.3	16.7
5 Distributive margin, retail trade as percentage of retail sales, 1929 margin from Table III-4 x line 1	30.9	27.1	29.0	30.9	31.0	31.1	31.2	31.2	31.3	31.4	31.5	31.8	32.1	32.4	35.3
Consumers' Durable															
6 Distributive margin, wholesale trade as percentage of wholesale sales, 1929 margin from Table III-3 x line 1	12.3	10.8	11.6	12.3	12.4	12.4	12.5	12.5	12.5	12.6	12.6	12.7	12.9	13.0	14.1
7 Distributive margin, retail trade as percentage of retail sales, 1929 margin from Table III-4 x line 1	31.6	27.7	29.6	31.6	31.7	31.7	31.8	31.9	32.0	32.1	32.2	32.5	32.8	33.2	36.1
Producers' Durable															
8 Distributive margin, wholesale trade as percentage of wholesale sales, 1929 margin from Table III-3 x line 1	14.1	12.4	13.2	14.1	14.2	14.2	14.2	14.3	14.3	14.4	14.4	14.5	14.7	14.8	16.1
9 Distributive margin, retail trade as percentage of retail sales, 1929 margin from Table III-4 x line 1	23.5	20.6	22.1	23.5	23.6	23.7	23.7	23.8	23.9	24.0	24.0	24.2	24.5	24.7	26.9

Footnotes to Table V-1

[1] The 1929 transportation charge for the consumers' perishable group is that shown in Table III-1, plus an allowance for coal transportation. The latter was calculated by applying the 1929 freight revenue per ton for anthracite and bituminous coal as derived from Freight Commodity Statistics, 1929 to the respective 1929 tonnages destined for household consumption (Table II-1 (d) and (e)). By this method a coal transportation charge of $242,651 thousand was estimated. For the other three groups the 1929 figures are obtained directly from Table III-1.

[2] The index of freight rates is an index of freight revenue per ton for a selected group of commodities. From 1928 to 1935 such data were derived from figures presented in the annual reports of the Interstate Commerce Commission on Freight Commodity Statistics, Class I Steam Railways in the United States. Commodities included as representative of consumers' perishable were those indicated in Note A to Table IV-1 with two exceptions: figures for miscellaneous manufactures were omitted and figures for anthracite coal were added. Those used for semidurable were the same as shown in the Note; and those used for consumers' and producers' durable the same except that miscellaneous manufactures were not included. A similar calculation was carried out in 1922 on the basis of a special survey of the Interstate Commerce Commission covering that year. The figures for the remaining years were interpolated on the basis of the movement of the freight revenue per ton for all commodities, a series available for every year.

Table V-3

PRELIMINARY INDEXES OF WHOLESALE AND RETAIL SALES OF FINISHED COMMODITIES

(dollar values in millions)

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
I Wholesale															
A Perishable															
1 Cost to wholesalers; 1929 figure from Table III-3 multiplied by index of output incl. transportation charges	12,524.3	13,453.4	9,946.1	9,919.9	10,574.3	10,966.9	11,699.8	12,367.2	12,040.0	12,524.3	13,087.0	11,804.5	9,618.9	7,917.6	7,904.5
2 Wholesale mark-up, derived from Table V-2	13.8	11.9	12.7	13.8	13.8	13.8	13.9	13.9	13.9	14.0	14.0	14.2	14.3	14.5	16.0
3 Preliminary estimate of sales	14,252.7	15,054.4	11,209.3	11,288.8	12,033.6	12,480.3	13,326.1	14,086.2	13,713.6	14,277.7	14,916.8	13,480.7	10.994.4	9,065.7	9,169.2
4 Index, line 3, 1929 = 100	95.5	100.9	75.1	75.7	80.7	83.7	89.3	94.4	91.9	95.7	100.0	90.4	73.7	60.8	61.5
B Semidurable															
1 Cost to wholesalers; 1929 figure from Table III-3 multiplied by index of output incl. transportation charges	3,438.8	3,822.1	2,715.2	3,026.9	3,467.5	3,069.9	3,428.1	3,503.3	3,549.9	3,546.3	3,582.1	2,912.2	2,374.9	1,719.4	1,841.2
2 Wholesale mark-up, derived from Table V-2	17.1	14.7	15.9	17.1	17.1	17.2	17.2	17.4	17.4	17.5	17.5	17.6	17.9	18.1	20.0
3 Preliminary estimate of sales	4,026.8	4,383.9	3,146.9	3,544.5	4,060.4	3,597.9	4,017.7	4,112.9	4,167.6	4,166.9	4,208.0	3,424.7	2,800.0	2,030.6	2,209.4
4 Index, line 3, 1929 = 100	95.7	104.2	74.8	84.2	96.5	85.5	95.5	97.7	99.0	99.0	100.0	81.4	66.5	48.3	52.5
C Consumers' Durable															
1 Cost to wholesalers; 1929 figure from Table III-3 multiplied by index of output incl. transportation charges	2,432.0	2,999.4	1,987.7	2,471.7	3,296.9	3,114.4	3,626.2	3,820.6	3,427.8	3,427.8	3,765.1	3,967.4	2,662.1	2,011.5	1,261.6
2 Wholesale mark-up, derived from Table V-2	14.0	12.1	13.1	14.0	14.2	14.2	14.3	14.3	14.3	14.4	14.4	14.5	14.8	14.9	16.4
3 Preliminary estimate of sales	2,772.5	3,362.3	2,248.1	2,817.7	3,765.1	3,556.6	4,144.7	4,366.9	3,918.0	4,307.3	4,536.9	3,048.1	2,309.2	1,449.6	1,662.5
4 Index, line 3, 1929 = 100	61.1	74.1	49.6	62.1	83.0	78.4	91.4	96.3	86.4	94.9	100.0	67.2	50.9	32.0	36.6
D Producers' Durable															
1 Cost to wholesalers; 1929 figure from Table III-3, multiplied by index of output incl. transportation charges	2,304.5	2,291.7	1,325.6	1,297.5	1,922.1	1,771.7	1,899.2	2,067.4	1,947.6	2,120.9	2,549.2	1,955.2	1,180.3	622.0	667.9
2 Wholesale mark-up, derived from Table V-2	16.4	14.2	15.2	16.4	16.6	16.6	16.6	16.7	16.7	16.8	16.8	17.0	17.2	17.4	19.2
3 Preliminary estimate of sales	2,682.4	2,617.1	1,527.1	1,510.3	2,241.2	2,065.8	2,214.5	2,412.7	2,272.8	2,477.2	2,977.9	2,287.6	1,383.3	730.2	796.1
4 Index, line 3, 1929 = 100	90.1	87.9	51.3	50.7	75.3	69.4	74.4	81.0	76.3	83.2	100.0	76.8	46.5	24.5	26.7
II Retail															
A Perishable															
1 Cost to retailers; 1929 figure from Table III-4, multiplied by index of producers' direct sales to retailers plus wholesalers' sales to retailers	17,802.2	19,129.9	14,256.5	14,335.5	15,298.9	15,873.8	16,957.2	17,940.8	17,476.5	18,192.9	19,004.0	17,183.0	14,019.9	11,559.6	11,663.7
2 Retail mark-up, derived from Table V-2	29.5	25.0	27.2	29.5	29.7	29.9	29.9	30.0	30.2	30.4	30.4	30.7	31.2	31.6	35.3
3 Preliminary estimate of sales	23,053.8	23,912.4	18,134.3	18,564.5	19,842.7	20,620.1	22,027.4	23,323.0	22,754.4	23,723.5	24,782.2	22,458.2	18,394.1	15,212.4	15,781.0
4 Index, line 3, 1929 = 100	93.0	96.5	73.2	74.9	80.1	83.2	88.9	94.1	91.8	95.7	100.0	90.6	74.2	61.4	63.7

Table V-3 (Concluded)

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
B Semidurable															
1 Cost to retailers; 1929 figure from Table III-4, multiplied by index of producers' direct sales to retailers plus wholesalers' sales to retailers	7,757.3	8,536.6	6,102.5	6,841.1	7,837.8	6,938.4	7,742.9	7,915.9	8,026.9	8,024.6	8,116.8	6,602.5	5,390.6	3,905.6	4,212.9
2 Retail mark-up derived from Table V-2	44.7	37.2	40.8	44.7	44.9	45.1	45.3	45.3	45.6	45.8	45.9	46.6	47.3	47.9	54.6
3 Preliminary estimate of sales	11,224.8	11,712.2	8,592.3	9,899.1	11,357.0	10,067.6	11,250.4	11,501.8	11,687.2	11,699.9	11,844.0	9,679.3	7,940.4	5,776.4	6,513.1
4 Index, line 3, 1929 = 100	94.8	98.9	72.5	83.6	95.9	85.0	95.0	97.1	98.7	98.8	100.0	81.7	67.0	48.8	55.0
C Consumers' Durable															
1 Cost to retailers; 1929 figure from Table III-4, multiplied by index of producers' direct sales to retailers plus wholesalers' sales to retailers	3,999.5	4,831.6	3,251.2	4,064.0	5,412.2	5,096.1	5,902.5	6,231.5	5,567.0	6,102.5	6,450.8	4,341.4	3,296.4	2,070.7	2,361.0
2 Retail mark-up, derived from Table V-2	46.2	38.3	42.0	46.2	46.4	46.4	46.6	46.8	47.1	47.3	47.5	48.1	48.8	49.7	56.5
3 Preliminary estimate of sales	5,847.3	6,682.1	4,616.7	5,941.6	7,923.5	7,460.7	8,653.1	9,147.8	8,189.1	8,989.0	9,516.5	6,429.6	4,905.0	3,099.8	3,695.0
4 Index, line 3, 1929 = 100	61.4	70.2	48.5	62.4	83.3	78.4	90.9	96.1	86.1	94.5	100.0	67.6	51.5	32.6	38.8
D Producers' Durable															
1 Cost to retailers; 1929 figure from Table III-4, multiplied by index of producers' direct sales to retailers plus wholesalers' sales to retailers	975.5	955.1	552.7	553.8	823.1	755.5	807.0	879.0	821.0	891.8	1,073.2	824.2	499.0	266.2	287.6
2 Retail mark-up, derived from Table V-2	30.7	25.9	28.4	30.7	30.9	31.1	31.1	31.2	31.4	31.5	31.5	31.9	32.5	32.8	36.8
3 Preliminary estimate of sales	1,275.0	1,202.5	709.7	723.8	1,077.4	990.5	1,058.0	1,153.2	1,078.8	1,172.7	1,411.4	1,087.1	661.2	353.5	393.4
4 Index, line 3, 1929 = 100	90.3	85.2	50.3	51.3	76.3	70.2	75.0	81.7	76.4	83.1	100.0	77.0	46.8	25.0	27.9

Table V—4

SPECIAL ANALYSIS OF VARIATIONS IN THE SPREAD BETWEEN VALUE AT PRODUCERS' PRICES AND COST TO CONSUMERS, PERISHABLE COMMODITIES, BY MINOR COMMODITY GROUPS, 1919–1933

This analysis is based essentially on a comparison of producers' prices and retail prices. Data for such a comparison are available only for perishable commodities, and not for all the minor commodity groups within that major commodity class. The analysis is presented as evidence supplementary to that obtained by the basic procedure of estimating variations in the spread (the procedure followed in Parts IV and V).

For further discussion see the Preface to Part V, Section 2.

Table V-4

SPECIAL ANALYSIS OF VARIATIONS IN THE SPREAD BETWEEN VALUE AT PRODUCERS' PRICES AND COST TO CONSUMERS, PERISHABLE COMMODITIES, BY MINOR COMMODITY GROUPS

(dollar values in thousands)

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Food and kindred products															
1 Estimated cost to consumers in 1929 prices[1]	13,863,862	14,093,027	14,891,973	15,318,591	15,714,355	16,733,291	16,501,994	17,326,532	17,531,809	17,352,757	18,232,697	18,092,482	17,020,557	16,175,684	17,096,478
2 Retail price index, Bureau of Labor Statistics	118.6	129.8	97.8	90.4	93.3	93.1	100.5	102.5	99.2	98.5	100.0	93.9	77.4	65.2	63.6
3 Cost in current prices, line 1 x line 2	16,442,340	18,292,749	14,564,350	13,848,006	14,661,493	15,578,694	16,584,504	17,759,695	17,391,555	17,092,466	18,232,697	16,988,841	13,173,911	10,546,546	10,873,360
4 Output destined for domestic consumption in producers' current prices (Table II-5)	12,214,524	13,173,292	9,182,202	9,132,838	9,913,611	10,363,038	11,251,870	11,790,523	11,536,908	11,926,334	12,391,985	11,143,296	8,643,342	6,718,792	7,043,145
5 Spread, line 3 - line 4, divided by line 3 (percent)	25.7	28.0	37.0	34.0	32.4	33.5	32.2	33.6	33.7	30.2	32.0	34.4	34.4	36.3	35.2
Cigars, cigarettes, etc.															
1 Estimated cost to consumers in 1929 prices[1]	1,450,402	1,609,957	1,447,218	1,381,947	1,448,424	1,673,774	1,726,952	1,633,992	1,837,547	1,873,658	2,000,136	1,825,021	1,894,914	1,718,314	1,732,929
2 Retail price index, National Industrial Conference Board	120.2	137.1	131.7	111.3	105.8	105.8	105.8	103.4	105.8	105.8	100.0	94.3	96.1	96.1	85.1
3 Cost in current prices, line 1 x line 2	1,743,383	2,207,251	1,905,986	1,538,107	1,532,433	1,770,853	1,827,115	1,689,548	1,944,125	1,982,330	2,000,136	1,720,995	1,821,012	1,651,300	1,474,723
4 Output destined for domestic consumption in producers' current prices (Table II-5)	1,008,426	1,195,453	1,053,013	1,002,084	1,050,287	1,073,172	1,094,381	1,127,181	1,164,465	1,168,706	1,243,643	1,141,773	1,154,860	1,006,624	910,650
5 Spread, line 3 - line 4, divided by line 3 (percent)	42.2	45.8	44.8	34.8	31.5	39.4	40.1	33.3	40.1	41.0	37.8	33.7	36.6	39.0	38.2
Drug, toilet and household preparations															
1 Estimated cost to consumers in 1929 prices[1]	866,563	920,676	849,723	1,077,285	1,186,658	1,232,071	1,296,304	1,282,884	1,440,109	1,674,125	1,791,420	1,683,545	1,703,773	1,512,428	1,613,256
2 Retail price index, National Industrial Conference Board	88.5	101.0	91.0	84.2	96.0	106.6	114.7	114.7	108.5	105.4	100.0	105.6	96.9	97.1	94.8
3 Cost in current prices, line 1 x line 2	766,908	929,883	773,248	907,074	1,139,192	1,313,388	1,486,861	1,471,468	1,562,518	1,764,528	1,791,420	1,777,824	1,650,956	1,468,568	1,529,367
4 Output destined for domestic consumption in producers' current prices (Table II-5)	750,431	848,749	615,335	685,604	768,761	792,997	851,479	865,793	926,031	1,017,152	1,075,868	976,335	888,747	695,317	707,739

Table V-4 (Concluded)

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
5 Spread, line 3 - line 4, divided by line 3 (percent)	2.1	8.7	20.4	24.4	32.5	39.6	42.7	41.2	40.7	42.4	39.9	45.1	46.2	52.7	53.7
Mfd. fuel and lighting products															
1 Estimated cost to consumers in 1929 prices[1]	740,086	838,681	916,546	1,074,071	1,037,216	1,164,886	1,388,018	1,643,267	1,648,828	1,947,772	2,191,753	2,154,576	1,962,942	2,059,433	1,814,512
2 Retail price index, gasoline, Facts and Figures of the Automobile Industry	118.9	139.3	122.8	117.7	102.6	97.8	103.7	109.2	98.5	97.8	100.0	93.1	79.3	83.7	83.2
3 Cost in current prices, line 1 x line 2	879,962	1,168,283	1,125,518	1,264,182	1,064,184	1,139,259	1,439,375	1,794,448	1,624,096	1,904,921	2,191,753	2,005,910	1,556,613	1,723,745	1,509,674
4 Output destined for domestic consumption in producers' current prices (Table II-5)	688,062	1,064,992	721,702	896,886	753,805	789,137	1,000,883	1,230,587	962,751	1,157,180	1,241,642	1,050,417	728,870	820,738	702,558
5 Spread, line 3 - line 4, divided by line 3 (percent)	21.8	8.8	35.9	29.1	29.2	30.7	30.5	31.4	40.7	39.3	43.3	47.6	53.2	52.4	53.5
Coal															
1 Cost to consumers in current prices (Table II-1)	1,080,749	1,458,482	1,324,040	990,419	1,492,533	1,343,382	1,100,608	1,382,515	1,255,849	1,191,949	1,205,525	1,079,972	863,078	661,585	638,632
2 Output destined for domestic consumption in current prices (Table II-1)	419,537	556,763	487,270	363,935	562,680	508,231	383,535	513,433	452,490	416,413	412,250	366,321	290,470	209,529	198,282
3 Spread, line 1 - line 2, divided by line 1 (percent)	61.2	61.8	63.2	63.3	62.3	62.2	65.2	62.9	64.0	65.1	65.8	66.1	66.3	68.3	69.0
Total of above groups															
1 Cost to consumers in current prices	20,913,542	24,056,648	19,693,142	18,547,788	19,889,835	21,145,576	22,438,463	24,097,674	23,778,143	23,936,194	25,421,526	23,573,542	19,065,570	16,051,744	16,025,756
2 Output destined for domestic consumption in current prices	15,080,980	16,839,249	12,059,522	12,081,347	13,049,144	13,526,575	14,582,148	15,527,517	15,042,645	15,685,785	16,365,388	14,678,142	11,706,289	9,451,000	9,562,374
3 Spread, line 1 - line 2, divided by line 1 (percent)	27.9	30.0	38.8	34.9	34.4	36.0	35.0	35.6	36.7	34.5	35.6	37.7	38.6	41.1	40.3

[1] Output destined for domestic consumption in producers' 1929 prices from Table II-7 raised by the 1929 mark-up derived from Table III-5.

Table V—5

DERIVATION OF INVENTORIES OF FINISHED COMMODITIES, WHOLESALE AND RETAIL TRADE, MAJOR COMMODITY GROUPS, 1918–1933

This table shows in detail the successive application of the inventory-sales ratios to the preliminary estimates of the volume of sales, and the final measures of net change in inventories of finished commodities. The preliminary estimates of the volume of sales are based largely upon the measures in Table V—3 and the estimates in Part III (see Note A to Table V—5). The derivation of the inventory-sales ratios is described in Notes B and C following this table.

Further comments will be found in the Preface to Part V, Section 2.

Table V-5

INVENTORIES OF FINISHED COMMODITIES, WHOLESALE AND RETAIL TRADE

(dollar values in millions)

	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
I Wholesale																
A Perishable																
1 Volume of sales, first approximation		14,991.0	15,838.7	11,788.7	11,882.9	12,667.8	13,138.7	14,017.8	14,818.3	14,425.9	15,022.4	15,697.4	14,190.4	11,569.0	9,544.0	9,653.9
2 Inventory-sales ratio, per cent		6.31	6.19	6.42	6.96	6.04	6.04	6.15	5.95	5.79	5.87	5.67	5.13	5.72	5.49	5.53
3 Inventories, first approximation, line 1 x line 2	733.1[1]	945.9	980.4	756.8	827.0	765.1	793.6	862.1	881.7	835.3	881.8	890.0	728.0	661.7	524.0	533.9
4 Net difference in inventories, first approximation		+212.8	+34.5	-223.6	+70.2	-61.9	+28.5	+68.5	+19.6	-46.4	+46.5	+8.2	-162.0	-66.3	-137.7	+9.9
5 Net difference expressed in terms of sales value (i.e. multiplied by mark-up shown in line 2, Table V-3)		+242.2	+38.6	-252.0	+79.9	-70.4	+32.4	+78.0	+22.3	-52.8	+53.0	+9.3	-185.0	-75.8	-157.7	+11.5
6 Volume of sales, second approximation, line 1 - line 5		14,748.8	15,800.1	12,040.7	11,803.0	12,738.2	13,106.3	13,939.8	14,796.0	14,478.7	14,969.4	15,688.1	14,375.4	11,644.8	9,701.7	9,642.4
7 Inventories, second approximation, line 6 x line 2	721.2[1]	930.6	978.0	773.0	821.5	769.4	791.6	857.3	880.4	838.3	878.7	889.5	737.5	666.1	532.6	533.2
8 Net difference in inventories, second approximation		+209.4	+47.4	-205.0	+48.5	-52.1	+22.2	+65.7	+23.1	-42.1	+40.4	+10.8	-152.0	-71.4	-133.5	+.6
9 Net difference expressed in terms of sales value		+238.3	+53.0	-231.0	+55.2	-59.3	+25.3	+74.8	+26.3	-48.0	+46.1	+12.3	-173.6	-81.6	-152.9	+.7
10 Volume of sales, third approximation, line 1 - line 9		14,752.7	15,785.7	12,019.7	11,827.7	12,727.1	13,113.4	13,943.0	14,792.0	14,473.9	14,976.3	15,685.1	14,364.0	11,650.6	9,696.9	9,653.2
11 Final (third) approximation of net difference expressed in terms of sales value		+238.4	+51.7	-231.5	+58.6	-62.0	+26.5	+74.6	+25.7	-48.0	+46.9	+11.6	-174.0	-80.6	-153.4	+1.6
B Semidurable																
1 Volume of sales, first approximation		4,026.8	4,383.9	3,146.9	3,544.5	4,060.4	3,597.9	4,017.7	4,112.9	4,167.6	4,166.9	4,208.0	3,424.7	2,800.0	2,030.6	2,209.4
2 Inventory-sales ratio, per cent		14.45	12.96	17.48	16.92	15.22	15.83	15.23	13.51	14.72	13.87	12.30	12.52	10.80	10.65	11.20
3 Inventories, first approximation, line 1 x line 2	483.6[2]	581.9	568.2	550.1	599.7	618.0	569.5	611.9	555.7	613.5	577.9	517.6	428.8	302.4	216.3	247.5
4 Net difference in inventories, first approximation		+98.3	-13.7	-18.1	+49.6	+18.3	-48.5	+42.4	-56.2	+57.8	-35.6	-60.3	-88.8	-126.4	-86.1	+31.2
5 Net difference expressed in terms of sales value (i.e. multiplied by mark-up shown in line 2, Table V-3)		+115.1	-15.7	-21.0	+58.1	+21.4	-56.8	+49.7	-66.0	+67.9	-41.8	-70.9	-104.4	-149.0	-101.7	+37.4

Table V-3 (continued)

	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
6 Volume of sales, second approximation, line 1 - line 5		3,911.7	4,399.6	3,167.9	3,486.4	4,039.0	3,654.7	3,968.0	4,178.9	4,099.7	4,208.7	4,278.9	3,529.1	2,949.0	2,132.3	2,172.0
7 Inventories, second approximation, line 6 x line 2	469.7[2]	565.2	570.2	553.7	589.9	614.7	578.5	604.3	564.6	603.5	583.7	526.3	441.8	318.5	227.1	243.3
8 Net difference in inventories, second approximation		+95.5	+5.0	-16.5	+36.2	+24.8	-36.2	+25.8	-39.7	+38.9	-19.8	-57.4	-84.5	-123.3	-91.4	+16.2
9 Net difference expressed in terms of sales value		+111.8	+5.7	-19.1	+42.4	+29.0	-42.4	+30.2	-46.6	+45.7	-23.3	-67.4	-99.4	-145.4	-107.9	+19.4
10 Volume of sales, third approximation, line 1 - line 9		3,915.0	4,378.2	3,166.0	3,502.1	4,031.4	3,640.3	3,987.5	4,159.5	4,121.9	4,190.2	4,275.4	3,524.1	2,945.4	2,138.5	2,190.0
11 Final (third) approximation of net difference expressed in terms of sales value		+111.9	+1.9	-16.2	+45.9	+24.6	-43.7	+36.3	-53.3	+52.6	-30.0	-65.0	-99.6	-145.1	-106.6	+21.0
C Consumers' Durable																
1 Volume of sales, first approximation		2,704.2	3,279.6	2,195.2	2,748.5	3,673.5	3,469.9	4,045.3	4,262.1	3,824.0	4,200.2	4,425.9	2,974.2	2,252.8	1,416.3	1,619.9
2 Inventory-sales ratio, per cent		14.89	14.76	17.57	16.17	14.09	15.23	13.88	12.93	12.65	12.78	12.64	13.19	15.28	20.77	17.24
3 Inventories, first approximation, line 1 x line 2	327.4[3]	402.7	484.1	385.7	444.4	517.6	528.5	561.5	551.1	483.7	536.8	559.4	392.3	344.2	294.2	279.3
4 Net difference in inventories, first approximation		+75.3	+81.4	-98.4	+58.7	+73.2	+10.9	+33.0	-10.4	-67.4	+53.1	+22.6	-167.1	-48.1	-50.0	-14.9
5 Net difference expressed in terms of sales value (i.e. multiplied by mark-up shown in line 2, Table V-3)		+85.8	+91.2	-111.3	+66.9	+83.6	+12.4	+37.7	-11.9	-77.0	+60.7	+25.9	-191.3	-55.2	-57.4	-17.3
6 Volume of sales, second approximation, line 1 - line 5		2,618.4	3,188.4	2,306.5	2,681.6	3,589.9	3,457.5	4,007.6	4,274.0	3,901.0	4,139.5	4,400.0	3,165.5	2,308.0	1,473.7	1,637.2
7 Inventories, second approximation, line 6 x line 2	317.0[3]	389.9	470.6	405.3	433.6	505.8	526.6	556.3	552.6	493.5	529.0	556.2	417.5	352.7	306.1	282.3
8 Net difference in inventories, second approximation		+72.9	+80.7	-65.3	+28.3	+72.2	+20.8	+29.7	-3.7	-59.1	+35.5	+27.2	-138.7	-64.8	-46.6	-23.8
9 Net difference expressed in terms of sales value		+83.1	+90.5	-73.9	+32.3	+82.5	+23.8	+33.9	-4.2	-67.6	+40.6	+31.1	-158.8	-74.4	-53.5	-27.7
10 Volume of sales, third approximation, line 1 - line 9		2,621.1	3,189.1	2,269.1	2,716.2	3,591.0	3,446.1	4,011.4	4,266.3	3,891.6	4,159.6	4,394.8	3,133.0	2,327.2	1,469.8	1,647.6
11 Final (third) approximation of net difference expressed in terms of sales value		+83.2	+90.1	-81.4	+46.2	+76.3	+21.5	+36.6	-5.9	-67.8	+45.0	+27.3	-162.9	-66.1	-57.8	-24.8
D Producers' Durable																
1 Volume of sales, first approximation		2,783.1	2,715.1	1,584.6	1,566.1	2,325.9	2,143.7	2,298.1	2,502.0	2,356.8	2,570.0	3,088.9	2,372.3	1,436.3	756.8	824.7

Table V-5 (Continued)

	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
2 Inventory-sales ratio, per cent		11.71	11.61	13.82	12.71	11.08	11.98	10.91	10.17	9.95	10.05	9.94	11.21	14.00	20.52	18.33
3 Inventories, first approximation, line 1 x line 2	265.0[4]	325.9	315.2	219.0	199.1	257.7	256.8	250.7	254.5	234.5	258.3	307.0	265.9	201.1	155.3	151.2
4 Net difference in inventories, first approximation		+60.9	-10.7	-96.2	-19.9	+58.6	-.9	-6.1	+3.8	-20.0	+23.8	+48.7	-41.1	-64.8	-45.8	-4.1
5 Net difference expressed in terms of sales value (i.e. multiplied by mark-up shown in line 2, Table V-3)		+70.9	-12.2	-110.8	-23.2	+68.3	-1.0	-7.1	+4.4	-23.3	+27.8	+56.9	-48.1	-75.9	-53.8	-4.9
6 Volume of sales, second approximation, line 1 - line 5		2,712.2	2,727.3	1,695.4	1,589.3	2,257.6	2,144.7	2,305.2	2,497.6	2,380.1	2,542.2	3,032.0	2,420.4	1,512.2	810.6	829.6
7 Inventories, second approximation, line 6 x line 2	258.2[4]	317.6	316.6	234.3	202.0	250.1	256.9	251.5	254.0	236.8	255.5	301.4	271.3	211.7	166.3	152.1
8 Net difference in inventories, second approximation		+59.4	-1.0	-82.3	-32.3	+48.1	+6.8	-5.4	+2.5	-17.2	+18.7	+45.9	-30.1	-59.6	-45.4	-14.2
9 Net difference expressed in terms of sales value		+69.1	-1.1	-94.8	-37.6	+56.1	+7.9	-6.3	+2.9	-20.1	+21.8	+53.6	-35.2	-69.9	-53.3	-16.9
10 Volume of sales, third approximation, line 1 - line 9		2,714.0	2,716.2	1,679.4	1,603.7	2,269.8	2,135.8	2,304.4	2,499.1	2,376.9	2,548.2	3,035.3	2,407.5	1,506.2	810.1	841.6
11 Final (third) approximation of net difference expressed in terms of sales value		+69.1	-2.7	-96.0	-32.9	+55.6	+5.1	-5.2	+3.3	-20.7	+22.9	+53.3	-37.2	-69.1	-52.5	-14.2
II Retail																
A Perishable																
1 Volume of sales, first approximation		24,168.6	25,078.1	19,023.0	19,464.8	20,816.1	21,621.8	23,103.1	24,454.4	23,856.7	24,870.2	25,987.7	23,544.9	19,282.9	15,956.4	16,554.2
2 Inventory-sales ratio, per cent		13.12	12.24	11.97	12.21	12.07	11.98	11.74	10.67	10.09	9.91	9.70	9.14	10.29	10.02	10.26
3 Inventories, first approximation, line 1 x line 2	2,597.0[5]	3,170.9	3,069.6	2,277.1	2,376.6	2,512.5	2,590.3	2,712.3	2,609.3	2,407.1	2,464.6	2,520.8	2,152.0	1,984.2	1,598.8	1,698.5
4 Net difference in inventories, first approximation		+573.9	-101.3	-792.5	+99.6	+135.8	+77.8	+122.0	-103.0	-202.2	+57.5	+56.2	-368.8	-167.8	-385.4	+99.7
5 Net difference expressed in terms of sales value (i.e. multiplied by mark-up shown in line 2, Table V-3)		+743.2	-126.6	-1008.1	+129.0	+176.1	+101.1	+158.5	-133.9	-263.3	+75.0	+73.3	-482.0	-220.2	-507.2	+134.9
6 Volume of sales, second approximation, line 1 - line 5		23,425.4	25,204.7	20,031.1	19,335.8	20,640.0	21,520.7	22,944.6	24,588.3	24,120.0	24,795.2	25,914.4	24,026.9	19,503.1	16,463.6	16,419.3
7 Inventories, second approximation, line 6 x line 2	2,517.1[5]	3,073.4	3,085.1	2,397.7	2,360.9	2,491.2	2,578.2	2,693.7	2,623.6	2,433.7	2,457.2	2,513.7	2,196.1	2,006.9	1,649.7	1,684.6
8 Net difference in inventories, second approximation		+556.3	+11.7	-687.4	-36.8	+130.3	+87.0	+115.5	-70.1	-189.9	+23.5	+56.5	-317.6	-189.2	-357.2	+34.9

Table V-3 (continued)

	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
9 Net difference expressed in terms of sales value		+720.4	+14.6	-874.4	-47.7	+169.0	+113.0	+150.0	-91.1	-247.2	+30.6	+73.7	-415.1	-248.2	-470.1	+47.2
10 Volume of sales, third approximation, line 1 - line 9		23,448.2	25,063.5	19,897.4	19,512.5	20,647.1	21,508.8	22,953.1	24,545.5	24,103.9	24,839.6	25,914.0	23,960.0	19,531.1	16,426.5	16,507.0
11 Final (third) approximation of net difference expressed in terms of sales value		+721.1	-10.8	-872.7	+1.0	+142.2	+110.0	+153.2	-98.4	-243.3	+38.5	+67.9	-423.2	-236.3	-478.9	+64.5
B Semidurable																
1 Volume of sales, first approximation		11,224.8	11,712.2	8,592.3	9,899.1	11,357.0	10,067.6	11,250.4	11,501.8	11,687.2	11,699.9	11,844.0	9,679.3	7,940.4	5,776.4	6,513.1
2 Inventory-sales ratio, per cent		28.32	24.32	24.23	24.53	24.36	24.10	23.93	23.03	22.79	22.10	21.52	20.83	19.76	19.71	22.08
3 Inventories, first approximation, line 1 x line 2	2,393.7[6]	3,178.9	2,848.4	2,081.9	2,428.2	2,766.6	2,426.3	2,692.2	2,648.9	2,663.5	2,585.7	2,548.8	2,016.2	1,569.0	1,138.5	1,438.1
4 Net difference in inventories, first approximation		+785.2	-330.5	-766.5	+346.3	+338.4	-340.3	+265.9	-43.3	+14.6	-77.8	-36.9	-532.6	-447.2	-430.5	+299.6
5 Net difference expressed in terms of sales value (i.e. multiplied by mark-up shown in line 2, Table V-3)		+1136.2	-453.4	-1079.2	+501.1	+490.3	-493.8	+386.4	-62.9	+21.3	-113.4	-53.8	-780.8	-658.7	-636.7	+463.2
6 Volume of sales, second approximation, line 1 - line 5		10,088.6	12,165.6	9,671.5	9,398,0	10,866.7	10,561.4	10,864.0	11,564.7	11,665.9	11,813.3	11,897.8	10,460.1	8,599.1	6,413.1	6,049.9
7 Inventories, second approximation, line 6 x line 2	2,151.4[6]	2,857.1	2,958.7	2,343.4	2,305.3	2,647.1	2,545.3	2,599.8	2,663.4	2,658.7	2,610.7	2,560.4	2,178.8	1,699.2	1,264.0	1,335.8
8 Net difference in inventories, second approximation		+705.7	+101.6	-615.3	-38.1	+341.8	-101.8	+54.5	+63.6	-4.7	-48.0	-50.3	-381.6	-479.6	-435.2	+71.8
9 Net difference expressed in terms of sales value		+1021.1	+139.4	-866.3	-55.1	+495.3	-147.7	+79.2	+92.4	-6.8	-70.0	-73.4	-559.4	-706.5	-643.7	+111.0
10 Volume of sales, third approximation, line 1 - line 9		10,203.7	11,572.8	9,458.6	9,954.2	10,861.7	10,215.3	11,171.2	11,409.4	11,694.0	11,769.9	11,917.4	10,238.7	8,646.9	6,420.1	6,402.1
11 Final (sixth) approximation of net difference expressed in terms of sales value		+1031.7	-37.0	-825.4	+174.4	+403.7	-278.2	+231.2	+19.8	-2:2	-65.0	-68.7	-609.3	-659.3	-636.9	+194.0
C Consumers' Durable																
1 Volume of sales, first approximation		5,667.4	6,479.7	4,476.7	5,759.7	7,688.8	7,236.6	8,390.3	8,870.3	7,947.3	8,722.6	9,230.3	6,239.7	4,753.6	3,009.1	3,581.4
2 Inventory-sales ratio, per cent		20.24	18.80	17.07	17.30	17.17	17.62	15.45	16.53	16.32	17.30	16.70	16.66	16.28	16.73	19.32
3 Inventories, first approximation, line 1 x line 2	932.6[7]	1,147.1	1,218.2	764.2	996.4	1,320.2	1,275.1	1,296.3	1,466.3	1,297.0	1,509.0	1,541.5	1,039.5	773.9	503.4	691.9
4 Net difference in inventories, first approximation		+214.5	+71.1	-454.0	+232.2	+323.8	-45.1	+21.2	+170.0	-169.3	+212.0	+32.5	-502.0	-265.6	-270.5	+188.5

Table V-5 (Continued)

	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
5 Net difference expressed in terms of sales value (i.e. multiplied by mark-up shown in line 2, Table V-3)		+313.6	+98.3	-644.7	+339.5	+474.0	-66.0	+31.1	+249.6	-249.0	+312.3	+37.9	-743.5	-395.2	-404.9	+295.0
6 Volume of sales, second approximation, line 1 - line 5		5,353.8	6,381.4	5,121.4	5,420.2	7,214.8	7,302.6	8,359.2	8,620.7	8,196.3	8,410.3	9,182.4	6,983.2	5,148.8	3,414.0	3,286.4
7 Inventories, second approximation, line 6 x line 2	881.0[7]	1,083.6	1,199.7	874.2	937.7	1,238.8	1,286.7	1,291.5	1,425.0	1,337.6	1,455.0	1,533.5	1,163.4	838.2	571.2	634.9
8 Net difference in inventories, second approximation		+202.6	+116.1	-325.5	+63.5	+301.1	+47.9	+4.8	+133.5	-87.4	+117.4	+78.5	-370.1	-325.2	-267.0	+63.7
9 Net difference expressed in terms of sales value		+296.2	+160.6	-462.2	+92.8	+440.8	+70.1	+7.0	+196.0	-128.6	+172.9	+115.8	-548.1	-483.9	-399.7	+99.7
10 Volume of sales, third approximation, line 1 - line 9		5,371.2	6,319.1	4,938.9	5,666.9	7,248.0	7,166.5	8,383.3	8,674.3	8,075.9	8,549.7	9,114.5	6,787.8	5,237.5	3,408.8	3,481.7
11 Final (fourth) approximation of net difference, expressed in terms of sales value		+297.2	+145.4	-488.8	+166.5	+427.6	+24.3	+27.1	+211.0	-158.6	+210.9	+92.8	-584.7	-438.7	-399.8	+135.8
D Producers' Durable																
1 Volume of sales, first approximation		1,579.2	1,490.0	879.6	897.1	1,334.3	1,227.7	1,311.6	1,428.8	1,336.1	1,453.3	1,748.8	1,346.6	818.4	437.2	487.9
2 Inventory-sales ratio, per cent		36.39	36.12	42.18	39.15	34.67	37.13	34.53	32.49	30.90	28.01	27.30	32.56	36.91	48.59	40.81
3 Inventories, first approximation, line 1 x line 2	467.2[8]	574.7	538.2	371.0	351.2	462.6	455.8	452.9	464.2	412.9	407.1	477.4	438.5	302.1	212.4	199.1
4 Net difference in inventories, first approximation		+107.5	-36.5	-167.2	-19.8	+111.4	-6.8	-2.9	+11.3	-51.3	-5.8	+70.3	-38.9	-136.4	-89.7	-13.3
5 Net difference expressed in terms of sales value (i.e. multiplied by mark-up shown in line 2, Table V-3)		+140.5	-46.0	-214.7	-25.9	+145.8	-8.9	-3.8	+14.8	-67.4	-7.6	+92.4	-51.3	-180.7	-119.1	-18.2
6 Volume of sales, second approximation, line 1 - line 5		1,438.7	1,536.0	1,094.3	923.0	1,188.5	1,236.6	1,315.4	1,414.0	1,403.5	1,460.9	1,656.4	1,397.9	999.1	556.3	506.1
7 Inventories, second approximation, line 6 x line 2	425.6[8]	523.5	554.8	461.6	361.4	412.1	459.1	454.2	459.4	433.7	409.2	452.2	455.2	368.8	270.3	206.5
8 Net difference in inventories, second approximation		+97.9	+31.3	-93.2	-100.2	+50.7	+47.0	-4.9	+5.2	-25.7	-24.5	+43.0	+3.0	-86.4	-98.5	-63.8
9 Net difference expressed in terms of sales value		+128.0	+39.4	-119.7	-131.0	+66.4	+61.6	-6.4	+6.8	-33.8	-32.2	+56.5	+4.0	-114.5	-130.8	-87.3
10 Volume of sales, third approximation, line 1 - line 9		1,451.2	1,450.6	999.3	1,028.1	1,267.9	1,166.1	1,318.0	1,422.0	1,369.9	1,485.5	1,692.3	1,342.6	932.9	568.0	575.2
11 Final (sixth) approximation of net difference expressed in terms of sales value		+129.0	+10.3	-142.1	-64.7	+90.5	-1.7	+5.9	+23.4	-53.3	-18.0	+65.5	-21.4	-130.1	-109.4	-49.1

[1]1918 inventory approximated at 77.5% of 1919 figure, as derived from Table VII-5, wholesale total perishable, line 9.

[2]1918 inventory approximated at 83.1% of 1919 figure, as derived from Table VII-5, wholesale total semidurable, line 11.

[3]1918 inventory approximated at 81.3% of 1919 figure, as derived from Table VII-5, wholesale total durable, line 11.

[4]1918 inventory approximated at 81.3% of 1919 figure, as derived from Table VII-5, wholesale total durable, line 11.

[5]1918 inventory approximated at 81.9% of 1919 figure, as derived from Table VII-5, retail total perisbable, line 11.

[6]1918 inventory approximated at 75.3% of 1919 figure, as derived from ratio of January 1919 to January 1920 Federal Reserve Board department store index of stocks, Federal Reserve Bulletin, November 1930, p. 86.

[7]1918 inventory approximated at 81.3% of 1919 figure, as derived from Table VII-5, retail total durable, line 11.

[8]1918 inventory approximated at 81.3% of 1919 figure, as derived from Table VII-5, retail total durable, line 11.

Note A to Table V–5

DERIVATION OF THE FIRST APPROXIMATIONS OF SALES

The first approximations of sales for 1929 were taken directly or derived from data in Tables III–3 and III–4. The wholesale and retail perishable totals given therein were adjusted to include estimates of coal sales; the semidurable totals were used as given; while the consumers' and producers' durable totals were adjusted so as to remove the approximate value of office and store furniture sales from consumers' durable and place in producers' durable.

For the years other than 1929, the indexes of preliminary sal estimates calculated in Table V–3 were applied to the respe tive 1929 figures.

Note B to Table V–5

DERIVATION OF INVENTORY-SALES RATIOS FOR 1929 [1]

(dollar figures in thousands)

This note shows the allocation of the lines of trade as reported in the *Census of Distribution* for 1929 and the results obtained by summating the different groups.

I Wholesale Trade [2]

A Perishable

Lines of trade included: Insecticides; toilet preparations; food products (n.e.s.); firewood; sheet music; groceries and food specialties; coal, anthracite; fuel; stationery and stationery supplies; gasoline and oil; tobacco and tobacco products (except leaf); newspapers and magazines; ice; smokers' supplies; art supplies; drugs and drug sundries (general line); drugs and drug sundries (specialty) except rubber goods (druggists').

Total sales	22,257,896
Total inventories	1,261,077
Inventory-sales ratio	5.67%

B Semidurable

Lines of trade included: Amusement and sporting goods (general line); amusement equipment and supplies; sporting goods (general line); toys, novelties and fireworks; other amusement and sporting goods; tires and tubes; rubber goods (druggists'); toilet articles; clothing and furnishings (other than millinery and footwear) excluding clothing, secondhand; dry goods (general line); dry goods (specialty other than specified); millinery and millinery supplies; notions (except buttons and tailors' trimmings and supplies); shoes and other footwear; brooms and brushes; household supplies; house furnishings (general line); rubber goods (general line); artificial flowers, plants, etc; novelties; billiards, bowling equipment and supplies; cameras and photographic supplies; art goods, curtains and draperies, lamps and lamp shades, pictures and picture frames; saddlery and harness; tents and awnings; leather goods (n.e.s.).

Total sales	4,299,911
Total inventories	528,884
Inventory-sales ratio	12.30%

C Consumers' Durable

Lines of trade included: Bicycles and supplies; automobiles and other motor vehicles (general line); automobiles, new and used; automobile accessories; automobile parts (new); electrical appliances; batteries; radios and radio equipment; refrigerators (electric); furniture (except office and secondhand); musical instruments, accessories and parts; pianos; phonographs and phonograph supplies; shelf hardware, jewelry and optical goods; luggage; stoves and ranges; books and periodicals; boats; china, glassware, and crockery; floor coverings.

Total sales	3,654,094
Total inventories	461,739
Inventory-sales ratio	12.64%

D Producers' Durable

Lines of trade included: Trucks and tractors; electrical m chandise (general line); electrical equipment and supplies (ge eral line); motors and generators; tools and cutlery; commerc equipment and supplies (except florists' supplies); constru tion equipment and supplies (except builders' supplies); fa machinery and equipment; manufacturing, mining and drilli equipment and supplies (except mill and mine supplies a printers' and lithographers' supplies); church equipment a supplies; school equipment and supplies; scientific and lab atory equipment and supplies; surgical, medical and hospi equipment and supplies; other professional equipment a supplies; service equipment and supplies (except dry cleane supplies and allied products, undertakers' supplies and u holsterers' supplies); transportation equipment and suppli moving-picture apparatus; talking-picture apparatus; fur ture, office.

Total sales	4,617,213
Total inventories	458,984
Inventory-sales ratio	9.94%

II Retail Trade [3]

A Perishable

Lines of trade included: food group; general stores; filling s tions; cigar stores and cigar stands; coal and wood yards; i dealers; drug stores; florists; news dealers; paper and pap products stores; stationers and engravers; general merchand stores with food departments; feed stores with groceries; m cellaneous classifications (combined).

Total sales	19,567,905
Total inventories	1,898,615
Inventory-sales ratio	9.70%

B Semidurable

Lines of trade included: Department stores; dry goods stor general merchandise stores (except those with food depa ments); variety, 5-and-10 cent and to-a-dollar stores; tire sho

[1] The sales and inventory data here shown (in thousands of dolla were used only to derive inventory-sales ratios. The first approxi tions of sales in 1929 were derived as indicated in Note A to Table V Inventories were calculated by applying the computed inventory-sa ratios to those figures.

[2] Data from Table 3 of the *U. S. Summary of Wholesale Distributi*

[3] Data from Table IA of the *U. S. Summary of Retail Distribution.*

ıcluding tire repairs); apparel group; gifts—novelties and ys—cameras; sporting goods stores (including athletic and ayground equipment); harness shops; drapery, curtain and ɔholstery stores; brushes and brooms; picture and framing ɔres; awning, flag, banner, window shade and tent shops; mp and shade shops.

Total sales	11,032,816
Total inventories	2,374,420
Inventory-sales ratio	21.52%

C Consumers' Durable

ines of trade included: Automobile salesrooms; motor cycles, cycles, and supplies; boats (motor boats, yachts, canoes); ırniture stores; floor coverings stores; household appliances ɔres; aluminumware, china, glassware, crockery, tinware, ıamelware dealers; stove and range dealers; interior decotors; radio and music stores; book stores; jewelry stores; lugıge and leather goods stores; music stores (without radio); ɔticians and optometrists; monument and tombstone works; accessory stores with tires and batteries; battery and ignition shops, etc; glass and mirror shops.

Total sales	10,030,765
Total inventories	1,677,946
Inventory-sales ratio	16.73%

D Producers' Durable

Lines of trade included: Hardware stores; hardware and farm implement stores; farm implement, machinery and equipment dealers; irrigation and drainage equipment and supplies (retail); office and store mechanical appliance dealers (retail); office and store furniture and equipment dealers; store fixture dealers; typewriter dealers; scientific and medical instrument and supply dealers (retail); automobile dealers with farm implements and machinery; aircraft and accessories.

Total sales	1,294,858
Total inventories	353,445
Inventory-sales ratio	27.30%

Note C to Table V–5

DERIVATION OF INVENTORY-SALES RATIOS FOR YEARS OTHER THAN 1929

ı 1933 the Census of American Business provided sales and ıventory data similar in scope to those reported in the 1929 ensus of Distribution, but in considerably less detail. Since it as not possible to allocate the lines of trade among the difrent wholesale and retail groups as accurately as in 1929, a ıugh apportionment was carried through and compared with ıe of similar crudity for the earlier year. The percentage ıanges from 1929 to 1933 in the crude inventory-sales ratios ıus derived were then applied to the actual 1929 ratios (based ı the detailed data in Note B to Table V–5).

The movements of inventory-sales ratios in the years other ıan 1929 and 1933 were estimated on the basis of scattered ımples and ratios derived from corresponding groups of manfacturing and trading corporations. Data were obtained from ıe following sources:

Statistics of Income. Annual data from 1918 to 1933 are availble on the gross income and inventories at end of year of ıanufacturing corporations. The different industrial groups ere allocated among perishable, semidurable and durable and ıe ratios of inventory to gross income computed.

Ralph C. Epstein in collaboration with Florence Clark: *A ɔurce-Book for the Study of Industrial Profits*. Data on sales nd inventories for 664 wholesale and retail trading corporaons are presented for 1924 to 1928. The subdivisions of wholeıle and retail trade listed in the *Source-Book* were allocated ccording to the durability of the principal commodities sold; ıles and inventories totaled; and the inventory-sales ratios ɔmputed.

Federal Trade Commission: *Sales, Costs, and Profits of Reıil Chains*, Senate Document No. 40, 73d Cong., 1st Sess. Data on sales of and stocks held by the different types of chain are given for 1919, 1922, 1925, 1927, 1928, 1929 and 1930. The chains were grouped according to the durability of the principal commodities handled.

4 Federal Reserve Board Indexes of Department Store Sales and Stocks. These are shown in the *Federal Reserve Bulletin* and in the Annual Reports of the Federal Reserve Board. The ratios of the December index of stocks to the index of sales, average for the year, were calculated.

5 Federal Reserve Board Indexes of Sales and Stocks of Wholesale Firms. The indexes of sales, averages for the year, were taken from the *Commerce Yearbook, 1930;* those for stocks as of the end of December were obtained from confidential data supplied by the Federal Reserve Board. The different types of firm were grouped according to the durability of the principal commodities handled. Data were available from 1923 to 1929.

Utilization of the above sources made it possible to compute indexes of inventory-sales ratios for the eight major commodity divisions. First the inventory-sales ratios derived from the different sources were put in index form, 1929=100. Comparisons were then made among the respective indexes, and various adjustments made on the basis of these comparisons. By means of such adjustments the final indexes were obtained. The following table reveals the data used in obtaining the final index for each of the eight groups. For convenience the analysis is given by periods roughly indicative of variations in the procedure. The indexes thus derived were applied to the 1929 inventory-sales ratios in Note B. Those obtained for 1930–33 were also linked to the 1933 ratios previously determined.

Note C to Table V–5 (continued)

DERIVATION OF INDEXES OF INVENTORY RATIOS

All final indexes were applied to the 1929 Census ratios shown in Note B. In addition, those obtained for 1930–33 were linke to the 1933 ratios based on the Census of that year.

COMMODITY GROUP	PERIODS (1) 1919–1923	(2) 1924–1928	(3) 1930–1933
I Wholesale Trade A Perishable	a For 1919–22 an index derived from Statistics of Income data was adjusted by the average difference (1923–27) between it and an index calculated from Federal Reserve Board data (see per. (2), IA–a, for derivation of F. R. B. index).	a For 1923–28 a weighted average of indexes derived from Federal Reserve Board data for grocery wholesalers (weight 2) and drug wholesalers (weight 1) was computed.	An index derived from Statistics of Income data was adjusted in the same way as shown for per. (1), IA–a, and c.
	b For 1919–23 the Statistics of Income index was adjusted by the average difference (1924–28) between it and an index calculated from the Epstein sample (see per. (2), IA–b, for derivation of Epstein index).	b For 1924–28 an index was computed from the Epstein sample of drug, grocery and paper, stationery, etc. wholesale trading corporations.	
	c The final index for 1919–22 was computed by averaging (with equal weights) the two indexes obtained under (a) and (b).	c The final index for 1924–28 was calculated by averaging (with equal weights) the indexes secured in (a) and (b).	
	d A final index for 1923 was obtained by averaging (with equal weights) the 1923 index from (b) and the 1923 Federal Reserve Board index (see per. (2), IA–a).		
B Semidurable	For 1919–24 an index derived from Statistics of Income was adjusted by the average difference (1925–28) between it and the final index derived for those years (see per. (2), IB–c).	a For 1925–28 a weighted average of indexes derived from Federal Reserve Board data for dry goods wholesalers (weight 2) and shoe wholesalers (weight 1) was computed.	An index based on Statistic of Income data was adjuste by the average differenc (1925–28) between it and th Final index derived for thos years (see per (2), IB–c).
		b For 1925–28 an index was computed from the Epstein sample of dry goods and ladies' ready-to-wear wholesale trading corporations.	
		c The final index for 1925–28 was calculated by averaging (with equal weights) the indexes obtained under (a) and (b).	
C Consumers' Durable	For 1919–24 an index derived from Statistics of Income data was adjusted by the average difference (1925–27) between it and the final index derived for those years (see per. (2) IC–c).	a For 1925–28 an index was computed from Federal Reserve Board data on the wholesale furniture trade.	An index based on Statistic of Income data was adjuste by the average differenc (1925–27) between it and th final index derived for thos years (see per. (2), IC–c).

DERIVATION OF INDEXES OF INVENTORY RATIOS (continued)

COMMODITY GROUP	(1) 1919–1923	(2) 1924–1928	(3) 1930–1933
C Consumers' Durable (continued)		b For 1925–28 an index was computed from the Epstein sample of hardware and lumber and building material wholesale trading corporations. c For the final index a weighted average of the F. R. B. index (weight 1) and the Epstein index (weight 4) was calculated.	
D Producers' Durable	The index calculated for consumers' durable was used.		
I Retail Trade A Perishable	a For 1919 and 1922 an index derived from Federal Trade Commission data on grocery, grocery and meat, meat, confectionery, drug, and tobacco chain stores was used.	a For 1925, 1927 and 1928 an index was computed from the F. T. C. chain store data.	a For 1930 an index was computed from the F. T. C. chain store data.
	b For 1920 and 1921 an index derived from Statistics of Income data was adjusted by the difference in 1919 and 1922 (interpolated on a straight line basis for 1920 and 1921) between it and the index computed under (a).	b For 1925–28 an index was computed from the Epstein sample of grocery, fruit and produce retailers.	b For 1931–33 the index based on Statistics of Income data was adjusted by the difference in 1930 between it and the index obtained under (a).
	c For 1923 the Statistics of Income index was adjusted by the average difference (1922, 1924 and 1925) between it and the final index obtained for those years (see par. (2), IIA–c and IIA–d).	c The final index for 1925, 1927 and 1929 was secured by averaging (with equal weights) the indexes obtained under (a) and (b). d For 1924 a final index was secured by straight line interpolation between the 1922 final index (see par. (1), IIA-a) and the 1925 final index. e For the 1926 final index the average difference in 1925 and 1927 between the Epstein index and the final index for those years was added to the 1926 Epstein index.	
B Semidurable	The index derived from the Federal Reserve Board department store data was used for all years.		
C Consumers' Durable	The index based on the Federal Reserve Board department store data was adjusted by the average difference (1924–27) between it and index derived from the Epstein data (see par. (2), IIC).	An index derived from the Epstein sample of automobile, furniture and jewelry retailers was used.	The index based on the Federal Reserve Board department store data was used.
D Producers' Durable	An index based on Statistics of Income data was used for all years.		

Table V—6

FLOW OF FINISHED COMMODITIES TO ULTIMATE CONSUMERS, AT COST TO THEM, CURRENT PRICES, 1919–1933

The flow of finished commodities to ultimate consumers is measured here by major commodity classes, at current prices only. The estimates are obtained by adding the values of commodities destined for domestic consumption and flowing to ultimate consumers through various channels.

This table is discussed in the Preface to Part V, Section 3.

Table V-6

FLOW OF FINISHED COMMODITIES TO ULTIMATE CONSUMERS, AT COST TO THEM, CURRENT PRICES

(thousands of dollars)

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
A Perishable															
1 Direct sales by manufacturers (incl. transportation charges); 1929 figure from Table III-1; for other years 1929 percentage applied to line A-6, Table V-1	911,036	978,205	723,613	721,084	769,266	797,310	850,813	898,864	875,568	910,941	956,157	858,703	699,781	575,384	575,096
2 Direct sales by wholesalers															
a At producers' prices; 1929 figure from Table III-3, reduced to cost; for other years 1929 percentage applied to line A-11, Table V-1	117,612	132,916	99,305	99,420	106,445	110,584	118,281	125,465	122,417	127,386	142,269	120,427	98,378	81,096	81,279
b At wholesale prices (ultimate cost), line 2a x mark-up given in Table 3	113,842	148,733	111,917	113,140	121,134	125,845	134,722	142,905	139,433	145,220	162,187	137,528	112,446	92,855	94,284
3 Sales by retailers															
a At producers' prices, incl. transportation charges; line A-11, Table V-1, minus lines 1 and 2a above	15,773,082	17,876,881	13,363,525	13,382,303	14,330,670	14,889,867	15,928,232	16,899,185	16,490,182	17,159,667	17,892,583	16,224,742	13,255,771	10,928,675	10,954,925
b Amount at producers' prices, incl. transportation charges, going directly to retailers; 1929 figure from Table III-1; 1929 percentage applied to line A-11, Table V-1 for all other years	4,418,855	4,993,845	3,731,035	3,735,338	3,999,278	4,154,811	4,443,997	4,713,884	4,599,388	4,786,072	4,996,091	4,524,618	3,696,184	3,046,896	3,053,772
c Amount going through wholesalers, line 3a - line 3b	11,354,227	12,883,036	9,632,490	9,646,965	10,331,392	10,735,056	11,484,235	12,185,301	11,890,794	12,373,595	12,896,492	11,700,124	9,559,587	7,881,779	7,901,153
d Sales by retailers at retail prices; line 3b x retail mark-up from Table V-3, plus line 3c multiplied first by wholesale mark-up from Table V-3 and then by retail mark-up from Table V-3	22,455,255	24,262,452	18,554,474	19,054,091	20,436,053	21,266,325	22,764,379	24,170,825	23,622,189	24,635,129	25,907,704	23,377,211	19,185,103	15,886,137	16,532,454

TABLE V-6 (Continued)

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
4 Total cost to consumers, line 1 + line 2b + line 3d (1929 total taken from Table III-5)	23,500,133	25,389,390	19,390,004	19,888,315	21,326,453	22,189,480	23,749,914	25,212,594	24,637,190	25,691,290	27,106,048	24,373,442	19,997,330	16,554,376	17,201,834
5 Net changes in distributive inventories, final approximation, wholesale and retail expressed in terms of wholesale and retail prices	+959,500	+40,900	-1,104,200	+59,600	+80,200	+136,500	+227,800	-72,700	-291,300	+85,400	+79,500	-597,200	-316,900	-632,300	+66,100
6 Final estimate of flow to ultimate consumers, at cost to them, line 4 - line 5	22,540,633	25,348,490	20,494,204	19,828,715	21,246,253	22,052,980	23,522,114	25,285,294	24,928,490	25,605,890	27,026,548	24,970,642	20,314,230	17,186,676	17,135,734
B Semidurable															
1 Direct sales by manufacturers (incl. transporation charges); 1929 figure from Table III-1; for other years 1929 percentage applied to line B-6, Table V-1	314,620	349,694	248,334	276,943	317,270	280,776	313,647	320,369	324,741	324,320	327,860	266,357	217,168	157,306	168,399
2 Direct sales by wholesalers															
a At producers' prices; 1929 figure from Table III-3, reduced to cost; for other years 1929 percentage applied to line B-11, Table V-1	60,661	67,407	48,007	53,587	61,402	54,309	60,570	61,849	62,758	62,731	65,024	51,667	42,129	30,497	32,635
b At wholesale prices (ultimate cost), line 2a x mark-up given in Table V-3	71,034	77,316	55,640	62,750	71,902	63,650	70,988	72,611	73,678	73,709	76,403	60,760	49,670	36,017	39,162
3 Sales by retailers															
a At producers' prices, incl. transportation charges; line B-11, Table V-1, minus lines 1 and 2a above	7,207,319	8,008,714	5,704,547	6,367,895	7,296,601	6,453,563	7,197,040	7,348,901	7,457,205	7,454,350	7,544,075	6,140,377	5,006,777	3,624,382	3,878,335
b Amount at producers' prices, incl. transportation charges, going directly to retailers; 1929 figure from Table III-1; 1929 percentage applied to line B-11, Table V-1, for all other years	4,056,691	4,507,811	3,210,475	3,583,657	4,106,271	3,631,927	4,050,622	4,136,149	4,196,917	4,195,150	4,249,227	3,455,245	2,817,350	2,039,519	2,182,462
c Amount going through wholesalers, line 3a - line 3b	3,150,628	3,500,903	2,494,072	2,784,238	3,190,330	2,821,636	3,146,418	3,212,752	3,260,288	3,259,200	3,294,848	2,685,132	2,189,427	1,584,863	1,695,873

TABLE V-6 (Continued)

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
d Sales by retailers at retail prices; line 3b x retail mark-up from Table V-3, plus line 3c multiplied first by wholesale mark-up from Table V-3 and then by retail mark-up from Table V-3	11,208,572	11,694,032	8,590,354	9,903,268	11,363,271	10,068,321	11,243,639	11,490,208	11,683,665	11,700,027	11,843,969	9,694,599	7,952,262	5,784,727	6,520,270
4 Total cost to consumers, line 1 + line 2b + line 3d	11,594,226	12,121,042	8,894,328	10,242,961	11,752,443	10,412,747	11,628,274	11,883,188	12,082,084	12,098,056	12,248,232	10,021,716	8,219,100	5,978,050	6,727,831
5 Net changes in distributive inventories, final approximation, wholesale and retail expressed in terms of wholesale and retail prices	+1,143,600	-35,100	-841,600	+220,300	+428,300	-321,900	+267,500	-33,500	+50,400	-95,000	-133,700	-708,900	-804,400	-743,500	+215,000
6 Final estimate of flow to ultimate consumers, at cost to them, line 4 - line 5	10,450,626	12,156,142	9,735,928	10,022,661	11,324,143	10,734,647	11,360,774	11,916,688	12,031,684	12,193,056	12,381,932	10,730,616	9,023,500	6,721,550	6,512,831
C Consumers' Durable															
1 Direct sales by manufacturers (incl. transportation charges); 1929 figure from Table III-1; for other years 1929 percentage applied to line C-6, Table V-1	200,739	247,544	164,042	203,924	271,983	256,975	299,085	315,234	282,707	310,694	327,285	219,532	165,802	104,031	117,806
2 Direct sales by wholesalers															
a At producers' prices; 1929 figure from Table III-3, reduced to cost; for other years 1929 percentage applied to line C-11, Table V-1	264,045	316,881	214,811	267,927	354,913	332,692	382,963	405,120	359,990	393,106	417,470	281,115	213,971	134,876	152,381
b At wholesale prices (ultimate cost), line 2a x mark-up given in Table V-3	301,011	355,224	242,951	305,437	405,311	379,934	437,727	463,052	411,469	449,713	477,586	321,877	245,639	154,973	177,371
3 Sales by retailers															
a At producers' prices, incl. transportation charges; line C-11, Table V-1, minus lines 1 and 2a above	3,660,913	4,386,842	2,977,574	3,714,515	4,918,627	4,608,647	5,301,748	5,609,644	4,982,140	5,438,477	5,770,373	3,891,781	2,963,520	1,868,528	2,110,761
b Amount at producers' prices, incl. transportation charges, going directly to retailers; 1929 figure from Table III-1; 1929 percentage applied to line C-11, Table V-1 for all other years	1,679,159	2,015,166	1,366,066	1,703,851	2,257,028	2,115,714	2,435,405	2,576,309	2,289,309	2,499,907	2,651,300	1,787,718	1,360,720	857,726	969,046

TABLE V-6 (Continued)

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
c Amount going through wholesalers, line 3a - line 3b	1,981,754	2,371,676	1,611,508	2,010,664	2,661,599	2,492,933	2,866,343	3,033,335	2,692,831	2,938,570	3,119,073	2,104,063	1,602,800	1,010,802	1,141,715
d Sales by retailers at retail prices; line 3b x retail mark-up from Table V-3, plus line 3c, multiplied first by wholesale mark-up from Table V-3 and then by retail mark-up from Table V-3	5,757,881	6,463,886	4,527,928	5,842,164	7,754,184	7,265,309	8,373,257	8,871,727	7,895,173	8,634,182	9,228,670	6,215,564	4,762,692	3,022,648	3,596,373
4 Total cost to consumers, line 1 + line 2b + line 3d	6,259,271	7,066,654	4,934,921	6,351,525	8,431,478	7,902,218	9,110,069	9,650,013	8,589,349	9,394,589	10,033,541	6,756,973	5,174,133	3,281,652	3,891,550
5 Value of commodities destined for domestic consumption in producers' current prices from Table II-5	3,998,676	4,815,059	3,230,802	4,012,732	5,326,932	4,985,833	5,733,956	6,056,286	5,382,374	5,877,636	6,252,522	4,229,414	3,215,992	2,025,448	2,288,133
6 Total spread, line 4 - line 5	2,260,595	2,251,595	1,704,119	2,338,793	3,104,546	2,916,385	3,376,113	3,593,727	3,206,975	3,516,953	3,781,019	2,527,559	1,958,141	1,256,204	1,603,417
7 Index of variations in spread due to shifting weights	104.8	104.0	103.8	101.8	100.5	101.5	100.3	100.0	102.3	101.0	100.0	101.8	103.5	105.3	106.3
8 Total spread, adjusted, line 6 x line 7	2,369,104	2,341,659	1,768,876	2,380,891	3,120,069	2,960,131	3,386,241	3,593,727	3,280,735	3,552,123	3,781,019	2,573,055	2,026,676	1,322,783	1,704,432
9 Adjusted estimate of flow to ultimate consumers at cost to them, line 5 + line 8	6,367,780	7,156,718	4,999,678	6,393,623	8,447,001	7,945,964	9,120,197	9,650,013	8,663,109	9,429,759	10,033,541	6,802,469	5,242,668	3,348,231	3,992,565
10 Net changes in distributive inventories, final approximation, wholesale and retail expressed in terms of wholesale and retail prices	+380,400	+235,500	-570,200	+212,700	+503,900	+45,800	+63,700	+205,100	-226,400	+255,900	+120,100	-747,600	-504,800	-457,600	+111,000
11 Final estimate of flow to ultimate consumers at cost to them, line 9 - line 10	5,987,380	6,921,218	5,569,878	6,180,923	7,943,101	7,900,164	9,056,497	9,444,913	8,889,509	9,173,859	9,913,441	7,550,069	5,747,468	3,805,831	3,881,565
D Producers' Durable															
1 Direct sales by manufacturers (incl. transportation charges); 1929 figure from Table III-1; for other years 1929 percentage applied to line D-6, Table V-1	2,854,907	2,840,639	1,642,581	1,607,710	2,379,645	2,194,972	2,354,092	2,562,593	2,411,740	2,627,477	3,157,854	2,422,509	1,462,975	769,311	827,875
2 Direct sales by wholesalers															
a At producers' prices; 1929 figure from Table III-3, reduced to cost; for other years 1929 percentage applied to line D-11, Table V-1	1,341,350	1,315,206	756,553	766,928	1,140,811	1,043,108	1,111,349	1,210,034	1,121,975	1,213,356	1,461,958	1,123,199	680,683	365,110	392,589

TABLE V-6 (Continued)

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
b At wholesale prices (ultimate cost), line 2a x mark-up given in Table V-3)	1,561,331	1,501,965	871,549	892,704	1,330,186	1,216,264	1,295,833	1,412,110	1,309,345	1,417,200	1,707,567	1,314,143	797,760	428,639	467,966
3 Sales by retailers															
a At producers' prices incl. transportation charges; line D-11, Table V-1, minus lines 1 and 2a above	1,147,768	1,084,021	615,020	680,851	1,024,608	917,729	962,244	1,048,225	936,306	993,253	1,195,712	929,189	568,228	320,201	343,634
b Amount at producers' prices, incl. transportation charges, going directly to retailers; 1929 figure from Table III-1; 1929 percentage applied to line D-11, Table V-1, for all other years	577,155	565,906	325,529	329,993	490,867	448,827	478,190	520,652	482,762	522,081	627,574	483,289	292,884	157,099	168,923
c Amount going through wholesalers, line 3a - line 3b	570,613	518,115	289,491	350,858	533,741	468,902	484,054	527,573	453,544	471,172	568,138	445,900	275,344	163,102	174,711
d Sales by retailers at retail prices; line 3b x retail mark-up from Table V-3, plus line 3c multiplied first by wholesale mark-up from Table V-3 and then by retail mark-up from Table V-3	1,622,443	1,457,410	846,186	965,078	1,457,191	1,305,188	1,366,845	1,490,865	1,329,831	1,410,219	1,740,122	1,325,584	815,653	462,916	515,981
4 Total cost to consumers, line 1 + line 2b + line 3d	6,038,681	5,800,014	3,360,316	3,465,492	5,167,022	4,716,424	5,016,770	5,465,568	5,050,916	5,454,896	6,605,543	5,062,236	3,076,388	1,660,866	1,811,822
5 Value of commodities destined for domestic consumption in producers' current prices from Table II-5	5,231,003	5,128,158	2,929,562	2,962,796	4,430,011	4,051,261	4,318,170	4,706,449	4,367,025	4,724,907	5,684,774	4,371,347	2,643,576	1,413,651	1,518,918
6 Total spread, line 4 - line 5	807,678	671,856	430,754	502,696	737,011	665,163	698,600	759,119	683,891	729,989	920,769	690,889	432,812	247,215	292,904
7 Index of variations in spread due to shifting weights	85.0	88.4	93.2	97.3	95.2	97.3	100.7	99.3	102.0	102.0	100.0	99.3	100.0	101.4	104.8
8 Total spread, adjusted, line 6 x line 7	686,526	593,921	401,463	489,123	701,634	647,204	703,490	753,805	697,569	744,589	920,769	686,053	432,812	250,676	306,963
9 Adjusted estimate of flow to ultimate consumers at cost to them, line 5 + line 8	5,917,529	5,722,079	3,331,025	3,451,919	5,131,645	4,698,465	5,021,660	5,460,254	5,064,594	5,469,496	6,605,543	5,057,400	3,076,388	1,664,327	1,825,881
10 Net changes in distributive inventories, final approximation, wholesale and retail expressed in terms of wholesale and retail prices	+198,100	+7,600	-238,100	-97,600	+146,100	+3,400	+700	+26,700	-74,000	+4,900	+118,800	-58,600	-199,200	-161,900	--63,300

TABLE V-6 (Concluded)

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928					
11 Final estimate of flow to ultimate consumers at cost to them, line 9 – line 10	5,719,429	5,714,479	3,569,125	3,549,519	4,985,545	4,695,065	5,020,960	5,433,554	5,138,594	5,464,596	6,486,743	5,116,000	3,275,588	1,826,227	1,889,181

Table V—7

FLOW OF FINISHED COMMODITIES TO ULTIMATE CONSUMERS, AT COST TO THEM IN 1929 PRICES, 1919–1933

These estimates parallel those in Table V—6, except that they measure the flow of commodities at constant rather than current prices. In order to obtain these estimates, the net changes in inventories have to be expressed in terms of a constant price level. The price indexes utilized for this purpose and the method are set forth in Note A following this table and in the Preface to Part V, Section 3.

Table V-7

FLOW OF FINISHED COMMODITIES TO ULTIMATE CONSUMERS, AT COST TO THEM IN 1929 PRICES

(dollar values in millions)

	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
A Perishable																
1 Index of value of commodities destined for domestic consumption, 1929 prices, derived from Table II-7		70.4	73.5	76.0	78.2	81.7	87.1	86.7	91.6	93.3	94.5	100.0	98.3	93.6	88.8	91.9
2 First estimate of flow to consumers at ultimate cost, 1929 figure from Table III-5, multiplied by line 1		19,082.6	19,922.9	20,600.6	21,196.9	22,145.6	23,609.3	23,500.9	24,829.1	25,289.9	25,615.2	27,106.0	26,645.2	25,371.2	24,070.1	24,910.4
3 Wholesale inventories at cost, in current prices	721.4	930.9	977.1	771.7	823.2	768.7	792.0	857.5	880.1	838.0	879.1	889.3	736.9	666.4	532.4	533.8
4 Wholesale inventories at cost in 1929 prices	520.5	656.0	752.8	787.4	826.5	812.6	786.5	789.6	837.4	840.5	884.4	907.4	912.0	991.7	891.8	802.7
5 Net changes at cost, in 1929 prices		+135.5	+96.8	+34.6	+39.1	-13.9	-26.1	+3.1	+47.8	+3.1	+43.9	+23.0	+4.6	+79.7	-99.9	-89.1
6 Net changes in 1929 prices expressed in terms of wholesale sales value, line 5 x wholesale mark-up for 1929		+154.5	+110.4	+39.4	+44.6	-15.8	-29.8	+3.5	+54.5	+3.5	+50.0	+26.2	+5.2	+90.9	-113.9	-101.6
7 Retail inventories at cost, in current prices	2,519.6	3,076.4	3,067.8	2,381.7	2,382.5	2,492.1	2,576.8	2,694.7	2,619.0	2,432.1	2,461.6	2,513.7	2,189.9	2,009.8	1,645.9	1,693.6
8 Retail inventories at cost, in 1929 prices	1,817.9	2,248.8	2,363.5	2,430.3	2,392.1	2,615.0	2,595.0	2,481.3	2,491.9	2,439.4	2,476.5	2,565.0	2,710.3	2,990.8	2,757.0	2,546.8
9 Net changes at cost, in 1929 prices		+430.9	+114.7	+66.8	-38.2	+222.9	-20.0	-113.7	+10.6	-52.5	+37.1	+88.5	+145.3	+280.5	-233.8	-210.2
10 Net changes in 1929 prices expressed in terms of retail sales value, line 9 x retail mark-up for 1929		+561.9	+149.6	+87.1	-49.8	+290.7	-26.1	-148.3	+13.8	-68.5	+48.4	+115.4	+189.5	+365.8	-304.9	-274.1
11 Total net changes in inventories, line 6 + line 10		+716.4	+260.0	+126.5	-5.2	+274.9	-55.9	-144.8	+68.3	-65.0	+98.4	+141.6	+194.7	+456.7	-418.8	-375.7
12 Final estimate of flow to consumers at final cost, line 2 - line 11		18,366.2	19,662.9	20,474.1	21,202.1	21,870.7	23,665.2	23,645.7	24,760.8	25,354.9	25,516.8	26,964.4	26,450.5	24,914.5	24,488.9	25,286.1
B Semidurable																
1 Index of value of commodities destined for domestic consumption, 1929 prices, derived from Table II-7		66.1	58.5	64.9	74.5	81.9	74.3	83.2	87.8	94.1	94.8	100.0	88.1	84.6	73.3	68.8

	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
2 First estimate of flow to consumers at ultimate cost, 1929 figure from Table III-5, multiplied by line 1		8,096.1	7,165.2	7,949.1	9,124.9	10,031.3	9,100.4	10,190.4	10,753.9	11,525.6	11,611.3	12,248.2	10,790.7	10,362.0	8,977.9	8,426.8
3 Wholesale inventories at cost, in current prices	470.1	565.7	567.4	553.4	592.6	613.6	576.3	607.3	561.9	606.7	581.2	525.9	441.2	318.1	227.8	245.3
4 Wholesale inventories at cost, in 1929 prices	289.1	312.4	391.3	471.4	498.0	494.4	489.6	491.3	525.1	563.8	564.3	539.9	528.4	448.0	349.9	286.9
5 Net changes at cost, in 1929 prices		+23.3	+78.9	+80.1	+26.6	-3.6	-4.8	+1.7	+33.8	+38.7	+.5	-24.4	-11.5	-80.4	-98.1	-63.0
6 Net changes in 1929 prices expressed in terms of wholesale sales value, line 5 x wholesale mark-up for 1929		+27.4	+92.7	+94.1	+31.3	-4.2	-5.6	+2.0	+39.7	+45.5	+.6	-28.7	-13.5	-94.5	-115.3	-74.0
7 Retail inventories at cost, in current prices	2,173.7	2,886.7	2,859.7	2,273.5	2,394.0	2,672.6	2,480.9	2,640.0	2,653.6	2,652.1	2,607.5	2,560.4	2,144.8	1,697.2	1,266.6	1,392.1
8 Retail inventories at cost, in 1929 prices	1,336.8	1,659.0	1,972.2	1,936.5	2,032.3	2,151.9	2,106.0	2,135.9	2,480.0	2,464.8	2,531.6	2,628.7	2,568.6	2,390.4	1,945.6	1,691.5
9 Net changes at cost, in 1929 prices		+322.2	+313.2	-35.7	+95.8	+119.6	-45.9	+29.9	+344.1	-15.2	+66.8	+97.1	-60.1	-178.2	-444.8	-254.1
10 Net changes in 1929 prices expressed in terms of retail sales value, line 9 x retail mark-up for 1929		+470.1	+457.0	-52.1	+139.8	+174.5	-67.0	+43.6	+502.0	-22.2	+97.5	+141.7	-87.7	-260.0	-649.0	-370.7
11 Total net changes in inventories, line 6 + line 10		+497.5	+549.7	+42.0	+171.1	+170.3	-72.6	+45.6	+541.7	+23.3	+98.1	+113.0	-101.2	-354.5	-764.3	-444.7
12 Final estimate of flow to consumers at final cost, line 2 - line 11		7,598.6	6,615.5	7,907.1	8,953.8	9,861.0	9,173.0	10,144.9	10,212.2	11,502.3	11,513.2	12,135.2	10,891.9	10,716.5	9,742.2	8,871.5
Consumers' Durable																
1 Index of value of commodities destined for domestic consumption, 1929 prices, derived from Table II-7		53.3	53.6	40.9	60.3	81.8	78.2	91.7	101.4	88.9	95.8	100.0	70.7	57.3	38.3	43.3
2 Index of shifting weights, 1929=100, expressed as an index of mark-up		110.8	107.8	107.6	102.7	98.3	100.8	98.6	97.6	102.4	101.4	100.0	102.6	105.8	110.7	109.7
3 Adjusted index, line 1 x line 2		59.1	57.8	44.0	61.9	80.4	78.8	90.4	99.0	91.0	97.1	100.0	72.5	60.6	42.4	47.5
4 First estimate of flow to consumers at ultimate cost, 1929 figure from Table III-5, multiplied by line 3		5,929.8	5,799.4	4,414.7	6,210.7	8,066.9	7,906.4	9,070.3	9,933.2	9,130.5	9,742.5	10,033.5	7,274.3	6,080.3	4,254.2	4,765.9
5 Wholesale inventories at cost, in current prices	317.3	390.3	470.7	398.7	439.2	506.0	524.8	556.8	551.6	492.3	531.6	555.5	413.2	355.6	305.3	284.0

Table V-7 (Continued)

	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
6 *Wholesale inventories* at cost, in 1929 prices	265.3	285.7	333.6	341.6	425.2	500.0	516.0	589.2	576.4	515.5	539.1	568.6	454.1	402.3	360.9	334.5
7 Net changes at cost, in 1929 prices		+20.4	+47.9	+8.0	+83.6	+74.8	+16.0	+73.2	-12.8	-60.9	+23.6	+29.5	-114.5	-51.8	-41.4	-26.4
8 Net changes in 1929 prices expressed in terms of wholesale sales value, line 7 x wholesale mark-up for 1929		+23.3	+54.8	+9.2	+95.6	+85.6	+18.3	+83.7	-14.6	-69.7	+27.0	+33.7	-131.0	-59.3	-47.4	-30.2
9 Retail inventories at cost, in current prices	883.6	1,086.9	1,192.0	847.8	961.7	1,253.8	1,270.4	1,288.9	1,432.6	1,324.8	1,468.0	1,530.9	1,136.1	841.3	574.2	661.0
10 Retail inventories at cost, in 1929 prices	761.1	819.1	844.8	726.5	927.4	1,238.9	1,249.2	1,363.9	1,497.0	1,385.8	1,494.9	1,566.9	1,248.5	951.7	678.7	781.3
11 Net changes at cost, in 1929 prices		+58.0	+25.7	-118.3	+200.9	+311.5	+10.3	+114.7	+133.1	-111.2	+109.1	+72.0	-318.4	-296.8	-273.0	+102.6
12 Net changes in 1929 prices expressed in terms of retail sales value, line 11 x retail mark-up for 1929		+85.6	+37.9	-174.5	+296.3	+459.5	+15.2	+169.2	+196.3	-164.0	+160.9	+106.2	-469.6	-437.8	-402.7	+151.3
13 Total net changes in inventories, line 8 + line 12		+108.9	+92.7	-165.3	+391.9	+545.1	+33.5	+252.9	+181.7	-233.7	+187.9	+139.9	-600.6	-497.1	-450.1	+121.1
14 Final estimate of flow to consumers at final cost, line 4 - line 13		5,820.9	6,706.7	4,580.0	5,818.8	7,521.8	7,872.9	8,817.4	9,751.5	9,364.2	9,554.6	9,893.6	7,874.9	6,577.4	4,704.3	4,644.8
D Producers' Durable																
1 Index of value of commodities destined for domestic consumption, 1929 prices, derived from Table II-7		81.4	75.5	47.3	55.3	76.5	70.6	76.5	83.6	77.4	84.1	100.0	81.2	52.8	30.1	33.0
2 Index of shifting weights, 1929=100, expressed as an index of mark-up		80.8	86.0	87,2	93.6	93.0	94.2	98.8	97.7	108.1	102.3	100.0	99.4	98.8	100.0	105.2
3 Adjusted index, line 1 x line 2		65.8	64.9	41.2	51.8	71.1	66.5	75.6	81.7	83.7	86.0	100.0	80.7	52.2	30.1	34.7
4 First estimate of flow to consumers at ultimate cost, 1929 figure from Table III-5, multiplied by line 3		4,346.4	4,287.0	2,721.5	3,421.6	4,696.5	4,392.7	4,993.8	5,396.7	5,528.8	5,680.7	6,605.5	5,330.6	3,448.1	1,988.3	2,292.1
5 Wholesale inventories at cost, in current prices	258.4	317.8	315.4	232.1	203.8	251.5	255.9	251.4	254.2	236.5	256.1	301.7	269.9	210.9	166.2	154.3
6 Wholesale inventories at cost, in 1929 prices	223.1	277.8	277.2	228.9	227.5	250.5	244.4	247.0	250.9	235.1	254.8	306.0	282.3	243.5	184.2	182.0
7 Net changes at cost, in 1929 prices		+54.7	-.6	-48.3	-1.4	+23.0	-6.1	+2.6	+3.9	-15.8	+19.7	+51.2	-23.7	-38.8	-49.3	-12.2
8 Net changes in 1929 prices expressed in terms of wholesale sales value, line 7 x wholesale mark-up																

Table V-7 (Concluded)

	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
9 Retail inventories at cost, in current prices	429.0	527.7	535.9	425.2	375.7	444.8	443.5	448.0	465.8	425.2	411.5	461.3	445.1	346.9	264.5	228.6
10 Retail inventories at cost, in 1929 prices	371.4	461.3	472.6	419.3	420.2	444.4	423.6	440.1	459.8	422.7	409.5	467.8	465.6	400.6	309.0	270.2
11 Net changes at cost, in 1929 prices		+89.9	+11.3	-53.3	+.9	+24.2	-20.8	+16.5	+19.7	-37.1	-13.2	+58.3	-2.2	-65.0	-91.6	-38.8
12 Net changes in 1929 prices expressed in terms of retail sales value, line 11 x retail mark-up for 1929		+118.2	+14.9	-70.1	+1.2	+31.8	-27.4	+21.7	+25.9	-48.8	-17.4	+76.7	-2.9	-85.5	-120.5	-51.0
13 Total net changes in inventories, line 8 + line 12		+182.1	+14.2	-126.5	-.4	+58.7	-34.5	+24.7	+30.5	-67.3	+5.6	+136.5	-30.6	-130.8	-178.1	-65.2
14 Final estimate of flow to consumers at ultimate cost, line 4 - line 13		4,164.3	4,272.8	2,848.0	3,422.0	4,637.8	4,427.2	4,969.1	5,366.2	5,596.1	5,675.1	6,469.0	5,361.2	3,578.9	2,166.4	2,357.3

Note A to Table V-7

PRICE INDEXES USED FOR ADJUSTING FINISHED DISTRIBUTIVE INVENTORIES

	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Perishable																
Av. Dec. and following Jan.	138.6	150.9	129.8	98.0	99.6	95.5	102.7	108.6	105.1	99.7	99.4	98.0	80.8	67.2	59.7	66.5
Av. Nov. and Dec.	139.9	141.9	138.9	101.6	99.9	94.6	100.7	109.5	106.5	100.1	100.2	99.0	83.3	70.0	62.8	66.5
Av. Nov.	139.2	136.8	145.1	103.2	100.0	95.3	99.3	110.6	106.5	100.4	101.2	99.1	85.0	71.0	64.0	67.3
Annual av. from Table II-7		128.6	139.5	96.4	94.2	97.6	94.7	102.6	103.2	98.4	101.3	100.0	91.5	77.1	65.7	64.1
Semidurable																
Av. Dec. and following Jan.	162.6	199.4	145.0	117.4	122.4	124.2	118.2	123.6	107.0	107.6	103.0	97.4	83.5	71.0	65.1	85.5
Av. Oct. and Nov.	171.4	181.1	164.0	122.4	119.0	124.1	117.7	124.9	110.7	108.4	104.3	98.7	86.3	74.6	66.7	85.8
Av. annual (wt.1) plus Oct. (wt.2)	169.4	174.0	179.8	126.1	117.8	124.7	117.8	123.7	113.0	108.5	104.8	99.4	88.0	75.8	67.0	82.3
Annual av. from Table II-7		140.0	175.9	113.2	111.5	117.0	113.9	112.1	107.8	103.4	103.5	100.0	92.1	77.5	64.0	73.8
Consumers' Durable																
Av. Dec. and following Jan.	119.6	139.1	141.1	116.7	103.7	101.2	101.7	94.5	95.7	96.6	100.3	97.7	91.0	88.4	84.6	87.2
Av. Oct. and Nov.	120.4	136.6	146.1	119.5	103.3	101.9	103.5	96.4	97.3	95.5	98.6	98.9	91.7	88.9	85.0	84.9
Av. annual (wt.1) plus Oct. (wt.2)	116.1	132.7	147.6	123.5	105.1	103.3	103.2	97.8	96.8	95.6	98.2	99.7	92.8	89.2	85.5	84.6
Annual av. from Table II-7		120.2	143.6	126.5	106.6	104.3	102.1	100.0	95.5	96.8	98.1	100.0	95.7	89.8	84.6	84.5
Producers' Durable																
Av. Dec. and following Jan.	115.8	114.4	113.8	101.4	94.9	104.1	104.7	101.8	101.3	100.6	100.5	98.6	95.6	86.6	85.6	86.3
Av. Nov.	116.1	115.4	113.8	112.8	89.6	100.4	107.4	101.9	101.5	100.7	100.5	98.9	95.7	86.6	85.7	84.8
Annual average [1]	115.5	115.3	113.4	112.9	89.4	100.1	107.2	101.8	101.3	101.0	100.6	100.0	96.3	93.3	86.0	84.6
Annual av. from Table II-7		113.1	119.7	109.3	94.3	102.1	100.9	99.2	99.1	99.3	98.8	100.0	94.7	88.0	82.5	80.9

[1] This annual average based on Bureau of Labor Statistics indexes was used to represent the cost of retail producers' durable inventories. It is comparable with the av. Dec. and following Jan. index, which represents market value.

Note A to Table V—7 (continued)

PRICE INDEXES USED FOR ADJUSTING FINISHED DISTRIBUTIVE INVENTORIES

Most of the price indexes used for adjusting finished distributive inventories were derived from the wholesale price indexes published by the U. S. Bureau of Labor Statistics. The technique utilized in combining the Bureau of Labor Statistics indexes and in adjusting the levels prior to 1926 has already been discussed in Note A to Table II—6. It will therefore suffice to describe only the composition of the indexes applied to the different inventory groups.

In accord with general business practice, it was assumed that the values of inventories were reported at cost or market, whichever lower. Thus in order to deflate the inventory values as estimated in current prices, it was necessary to compute two price indexes, one representing market value (assumed to be the average of the December and January monthly indexes since the inventory estimates are as of December 31) and one representing cost. In order to compute the latter, it was necessary to know the approximate age of the inventories on hand, i.e., when they were purchased. Such approximations were determined by inspecting the rates of turnover for the different industrial groups derived from the corporate data reported in *Statistics of Income*. With these as a guide, the price indexes for inventories at cost were constructed, and then compared with the respective price indexes of inventories at market. Both sets of indexes are given for each inventory group in the table below, although for the purposes of adjusting current values, only the lower index of the two was used in each year. For converting net changes in 1929 prices to changes in current prices the annual average price indexes derived in Table II—7 were used.

The derivation and composition of all the price indexes utilized are given below, group by group. Unless otherwise specified the weights used for combining the different Bureau of Labor Statistics wholesale price indexes were also taken from the Bureau of Labor Statistics price bulletins.

Inventory group	*Source of price index*
Perishable	Bureau of Labor Statistics wholesale price indexes for foods, anthracite coal and petroleum products. The annual average price index is that derived for perishable in Table II—7.
Semidurable	Bureau of Labor Statistics wholesale price indexes for boots and shoes, textiles, furnishings, and tires and tubes. Also annual average derived for semidurable in Table II—7.
Consumers' durable	Bureau of Labor Statistics wholesale price indexes for furniture and motor vehicles, and in 1918–26 for other metal products. Also annual average derived for consumers' durable in Table II—7.
Producers' durable	Bureau of Labor Statistics wholesale price index for agricultural implements. Also annual average derived for producers' durable in Table II—7.

Table V—8

FARM VALUE OF PRODUCTS RETAINED BY FARMERS FOR CONSUMPTION, 1919–1933

The estimates in this table and in Table V—9 refer to the measurable volume of commodities outside the market system. This volume is to be added to those measured in Tables V—6 and V—7 to yield a more comprehensive estimate of the flow of movable finished commodities to their ultimate recipients.

Comments on this table will be found in the Preface to Part V, Section 5.

Table V—9

GROSS INCREASE OF CAPITAL LIVESTOCK ON FARMS, 1918–1933

The term capital livestock refers to animals that are used by their owners as productive capital of durable character (e.g. horses on farms). Of the various animals classifiable as capital livestock, continuous data are available only for horses, mules and milk cows on farms. The table shows the *gross* increase in this livestock as part of *gross* capital formation.

Notes A, B and C, following this table, present in detail the derivation of the estimates for each of the three types of livestock covered. For further discussion see the Preface to Part V, Section 5.

Table V-8

FARM VALUE OF PRODUCTS RETAINED BY FARMERS FOR CONSUMPTION

(millions of dollars)

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
1 Farm value of products retained for consumption (current prices)[1]	2,105	1,929	1,553	1,581	1,721	1,697	1,882	1,822	1,744	1,742	1,524	1,424	1,167	960	997
2 Index of farm prices, 1929 = 100[2]	126.5	130.3	98.5	97.3	92.5	88.8	105.0	97.2	96.4	106.3	100.0	93.7	65.7	51.8	48.9
3 Farm value of products retained for consumption (1929 prices)	1,664	1,480	1,577	1,625	1,861	1,911	1,792	1,874	1,809	1,639	1,524	1,520	1,776	1,853	2,039

[1] For 1924-33 the figures in current prices were taken from Crops and Markets, September 1936. Prior to 1934 estimates were made on the basis of the movement of an old series shown in Crops and Markets, July 1929. The 1924 relationship between the old and the new series was calculated and used to estimate the earlier years.

[2] This is a combination of five indexes of such prices shown in the Yearbook of Agriculture, 1935 Table 471, p. 681. These indexes - for grains, fruits, dairy products, chickens and eggs, and meat animals - were weighted 2, 33, 30, 20 and 15 respectively, the weights representing an approximation of the proportions of the different commodity groups to the total of all commodities retained by farmers for their own use.

Table V-9

GROSS INCREASE OF CAPITAL LIVESTOCK ON FARMS[1]

(millions of dollars)

	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
Current Prices																
Horses	142.4	131.9	113.1	88.2	67.9	53.4	43.5	38.3	35.2	34.3	34.7	35.4	31.9	27.2	25.0	26.7
Mules	54.0	58.8	54.7	39.8	30.2	24.9	20.7	16.5	13.4	11.6	10.0	8.6	6.9	5.3	4.8	5.6
Milk cows	287.8	323.5	295.0	228.9	200.1	202.9	202.9	211.2	233.9	276.9	342.3	377.8	325.2	227.9	163.0	129.8
Total	484.2	514.2	462.8	356.9	298.2	281.2	267.1	266.0	282.5	322.8	387.0	421.3	364.0	260.4	192.8	162.1
1929 Prices																
Horses	93.0	90.7	84.8	76.9	65.5	54.0	46.6	41.2	38.0	36.6	35.3	35.4	34.2	33.4	32.5	31.0
Mules	31.9	32.4	32.5	30.7	27.4	22.9	19.6	16.4	14.0	12.4	10.2	8.6	7.6	6.9	6.7	6.6
Milk cows	338.0	345.4	344.8	347.5	343.0	343.1	344.2	341.7	342.4	348.1	362.6	377.8	387.7	393.1	395.2	384.4
Total	462.9	468.5	462.1	455.1	435.9	420.0	410.4	399.3	394.4	397.1	408.1	421.8	429.5	433.4	434.4	422.0

[1]Since the compilation of these estimates the Department of Agriculture has revised many of the basic data used in their derivation. The revisions have not been incorporated because of the disproportionate amount of labor required in comparison with the almost negligible effect on the final estimates.

Note A to Table V-9

DERIVATION OF GROSS INCREASE IN HORSES ON FARMS, CURRENT AND 1929 PRICES, 1918-1933

	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
1 Number of horses on farms as of Jan. 1 (thousands)[1]	21,195	21,159	21,210	21,555	21,482	20,092	19,366	18,760	18,123	17,365	16,640	16,067	15,368	14,768	14,203	13,684	13,169	12,621	12,203
2 Horses born (thousands)[2]				1,333	1,198				1,088					463	495				
3 Birth rate, per cent, line 2 divided by line 1				6.18	5.58				3.07					3.14	3.49				
4 Estimated number of horses born (thousands) line 1 x line 3[3]	1,246	1,244	1,247	1,333	1,198	995	837	694	556	533	514	498	479	463	495	454	437	419	405
5 Average value of horses under 1 year, middle of year (dollars)[4]				43.91	39.92	34.40	29.04	26.50	25.60	24.24	24.31	24.28	24.44	25.89	26.36	24.00	20.67	19.46	22.60
6 Average value 1 year and under two, middle of year (dollars)[4]				68.08	62.38	54.24	45.36	40.78	38.92	37.22	37.42	37.56	38.10	39.74	40.82	37.71	32.22	30.18	34.76
7 Line 6 - line 5 (dollars)				24.17	22.46	19.84	16.32	14.28	13.32	12.98	13.11	13.28	13.66	13.85	14.46	13.71	11.55	10.72	12.16
8 Average value 2 years and older, middle of year (dollars)[4]				111.24	105.84	96.94	82.98	75.07	71.58	67.74	67.50	67.46	68.32	71.41	72.80	67.76	59.21	55.79	62.74
9 Line 8 - line 6 (dollars)				43.16	43.46	42.70	37.62	34.29	32.66	30.52	30.08	29.90	30.22	31.67	31.98	30.05	26.99	25.61	27.98
10 Line 9 divided by 2 (dollars)				21.58	21.73	21.35	18.81	17.14	16.33	15.26	15.04	14.95	15.11	15.84	15.99	15.02	13.50	12.80	13.99
11 Value of gross increase in horses on farms (line 4 x line 5) + (line 4 one year earlier x line 7) + (line 4 two years earlier x line 10) + (line 4, three years earlier x line 10)																			
Current prices (millions of dollars)				142.4	131.9	113.1	88.2	67.9	53.4	43.5	38.3	35.2	34.3	34.7	35.4	31.9	27.2	25.0	26.7
1929 prices (millions of dollars)				93.0	90.7	84.8	76.9	65.5	54.0	46.6	41.2	38.0	36.6	35.3	35.4	34.2	33.4	32.5	31.0

[1] Yearbook of Agriculture, 1935, p. 595.

[2] Census of Agriculture, 1920, p. 534; 1925, Part I, p. 28; 1930, Part I, Vol. 2, p. 58.

[3] For 1915-17 an average of 1918-19 birth rates was used; for 1920-22 and 1925-27 straight line interpolation; for 1930-33 an average of the 1928-29 birth rates.

[4] Crops and Markets, February, 1935. Average values derived from figures given as of January 1.

Note B to Table V-9

DERIVATION OF GROSS INCREASE IN MULES ON FARMS, CURRENT AND 1929 PRICES, 1918-1933

	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
1 Number of mules on farms, Jan. 1 (thousands)[1]	4,479	4,593	4,723	4,873	4,954	5,656	5,772	5,827	5,895	5,908	5,918	5,903	5,801	5,647	5,496	5,366	5,226	5,120	5,036
2 Mules born (thousands)[2]				391	389				375					87	81				
3 Birth rate, per cent, line 2 divided by line 1				8.02	7.85				3.18					1.54	1.47				
4 Estimated number of mules born (thousands), line 1 x line 3[3]	356	365	375	391	389	378	319	253	187	188	164	139	113	87	81	80	78	77	76
5 Average value of mules under 1 year, middle of year (dollars)[4]				58.38	59.65	53.86	41.55	34.95	33.09	31.24	30.98	30.36	30.30	31.88	32.18	29.14	24.78	22.83	27.41
6 Average value 1 year and under 2 years, middle of year (dollars)[4]				87.73	89.64	80.96	62.30	51.88	49.00	46.84	47.26	45.90	45.20	47.48	48.43	44.39	37.84	35.12	41.11
7 Line 6 - line 5 (dollars)				29.35	29.99	27.10	20.75	16.93	15.91	15.60	16.28	15.54	14.90	15.60	16.25	15.25	13.06	12.29	13.70
8 Average value two years old and older, middle of year (dollars)[4]				143.76	154.10	143.20	110.33	93.48	91.28	88.31	85.48	81.06	80.00	83.80	85.12	77.83	65.98	61.40	72.13
9 Line 8 - line 6 (dollars)				56.03	64.46	62.24	48.03	41.60	42.28	41.47	38.22	35.16	34.80	36.32	36.69	33.44	28.14	26.28	31.02
10 Line 9 divided by 2 (dollars)				28.02	32.23	31.12	24.02	20.80	21.14	20.74	19.11	17.58	17.40	18.16	18.34	16.72	14.07	13.14	15.51
11 Value of gross increase in mules on farms (line 4 x line 5) (line 4 one year earlier x line 7) (line 4 two years earlier x line 10) (line 4 three years earlier x line 10)																			
Current prices (millions of dollars)				54.0	58.8	54.7	39.8	30.2	24.9	20.7	16.5	13.4	11.6	10.0	8.6	6.9	5.3	4.8	5.6
1929 prices (millions of dollars)				31.9	32.4	32.5	30.7	27.4	22.9	19.6	16.4	14.0	12.4	10.2	8.6	7.6	6.9	6.7	6.6

[1] Yearbook of Agriculture, 1935, p. 595.

[2] Census of Agriculture, 1920, 1925 and 1930.

[3] For 1915-17 an average of the 1918-19 birth rates was used; for 1920-22 and 1925-27 straight line interpolation; for 1930-33 an average of the 1928-29 birth rates.

[4] Crops and Markets, February 1935. Average value derived from figures given as of January 1.

Note C to Table V-9

DERIVATION OF GROSS INCREASE IN MILK COWS ON FARMS, CURRENT AND 1929 PRICES, 1918-1933

	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
1 Milk cows on farms Jan. 1 (thousands)[1]	19,526	20,064	20,541	21,021	21,219	21,455	21,440	21,822	22,099	22,288	22,505	22,311	22,159	22,129	22,330	22,910	23,576	24,475	25,285
2 Cows born and destined for use as milk cows (thousands)[2]	3,810[3]	3,914[3]	4,008[3]	4,420	4,164	3,972	4,155	4,143	4,171	4,045	4,048	4,158	4,404	4,700	4,775	4,685	4,703	4,788	4,286
3 Value per head, middle of year, milk cows two years old and over (dollars)[4]				71.02	78.10	71.36	54.94	48.68	49.31	49.16	51.56	56.98	66.36	78.73	83.40	69.95	48.34	34.42	28.18
4 Average value of calves (dollars)[5]				19.22	21.13	19.31	14.87	13.17	13.34	13.30	13.95	15.42	17.96	21.30	22.57	18.93	13.08	9.31	7.63
5 Average value of milk cows between one and two years (dollars)[5]				38.73	42.59	38.91	29.96	26.55	26.89	26.81	28.12	31.07	36.19	42.93	45.48	38.14	26.36	18.77	15.37
6 Line 5 - line 4 (dollars)				19.51	21.46	19.60	15.09	13.38	13.55	13.51	14.17	15.65	18.23	21.63	22.91	19.21	13.28	9.46	7.74
7 Line 3 - line 5 (dollars)				32.29	35.51	32.45	24.98	22.13	22.42	22.35	23.44	25.91	30.17	35.80	37.92	31.81	21.98	15.65	12.81
8 Line 7 divided by 2 (dollars)				16.14	17.76	16.22	12.49	11.06	11.21	11.18	11.72	12.96	15.08	17.90	18.96	15.90	10.99	7.82	6.40
9 Value of gross increase in milk cows on farms (line 2 x line 4) + (line 2 one year earlier x line 6) + (line 2 two years earlier x line 8) + (line 2 three years earlier x line 8)																			
Current prices (millions of dollars)				287.8	323.5	295.0	228.9	200.1	202.9	202.9	211.2	233.9	276.9	342.3	377.8	325.2	227.9	163.0	129.8
1929 prices (millions of dollars)				338.0	345.4	344.8	347.5	343.0	343.1	344.2	341.7	342.4	348.1	362.6	377.8	387.7	393.1	395.2	384.4

[1] Yearbook of Agriculture, 1935, p. 597.

[2] Yearbook of Agriculture, 1935, p. 599.

[3] Average relationship between lines 1 and 2 for 1918-22 used to estimate these figures.

[4] Yearbook of Agriculture, 1935, p. 59. Data derived from figures given as of January 1.

[5] Ratios derived from the Census of Agriculture, 1920, p. 551, Table 26, were applied to line 3 in all the years. These ratios showed that the average value of a calf was 27.06% of the average value of a cow or heifer, two years old and over, and that the value of a heifer one year old and under two was 54.53% of that of a full grown cow.

Table V—10

FLOW OF FINISHED PRODUCTS AND SERVICING TO ULTIMATE CONSUMERS AT COST TO THEM, CURRENT AND 1929 PRICES, 1919–1933

This table presents a comprehensive summary of the flow of movable finished commodities to their ultimate recipients, as well as a percentage distribution of the total among the major constituent parts.

Comments on this table will be found in the Preface to Part V, Section 6.

Table V-10

FLOW OF FINISHED PRODUCTS AND SERVICING TO ULTIMATE CONSUMERS AT COST TO THEM

(millions of dollars)

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
A Current Prices															
1 Perishable (incl. commodities consumed on farms)	24,645.6	27,277.5	22,047.2	21,409.7	22,967.3	23,750.0	25,404.1	27,107.3	26,672.5	27,347.9	28,550.5	26,394.6	21,481.2	18,146.7	18,132.7
a Perishable appearing on the market	22,540.6	25,348.5	20,494.2	19,828.7	21,246.3	22,053.0	23,522.1	25,285.3	24,928.5	25,605.9	27,026.5	24,970.6	20,314.2	17,186.7	17,135.7
b Commodities consumed on farms	2,105.0	1,929.0	1,553.0	1,581.0	1,721.0	1,697.0	1,882.0	1,822.0	1,744.0	1,742.0	1,524.0	1,424.0	1,167.0	960.0	997.0
2 Semidurable	10,450.6	12,156.1	9,735.9	10,022.7	11,324.1	10,734.6	11,360.8	11,916.7	12,031.7	12,193.1	12,381.9	10,730.6	9,023.5	6,721.6	6,512.8
3 Consumers' durable (incl. servicing)	6,348.4	7,407.0	6,040.0	6,635.9	8,471.4	8,494.7	9,716.6	10,149.1	9,648.9	10,005.8	10,834.9	8,409.2	6,535.7	4,525.2	4,583.8
a Consumers' durable	5,987.4	6,921.2	5,569.9	6,180.9	7,943.1	7,900.2	9,056.5	9,444.9	8,889.5	9,173.9	9,913.4	7,550.1	5,747.5	3,805.8	3,881.6
b Servicing of consumers' durable	361.0	485.8	470.1	455.0	528.3	594.5	660.1	704.2	759.4	831.9	921.5	859.1	788.2	719.4	702.2
4 Producers' durable (incl. servicing)	8,090.7	8,332.4	5,506.8	5,403.1	7,194.9	6,624.6	6,933.3	7,435.0	7,094.0	7,436.4	8,562.7	6,811.9	4,479.1	2,667.2	2,695.1
a Producers' durable commodities	5,719.4	5,714.5	3,569.1	3,549.5	4,985.5	4,695.1	5,021.0	5,433.6	5,138.6	5,464.6	6,486.7	5,116.0	3,275.6	1,826.2	1,889.2
b Gross increase in capital livestock on farms	514.2	462.8	356.9	298.2	281.2	267.1	266.0	282.5	322.8	387.0	421.8	364.0	260.4	192.8	162.1
c Servicing of producers' durable	1,857.1	2,155.1	1,580.8	1,555.4	1,928.2	1,662.4	1,646.3	1,718.9	1,632.6	1,584.8	1,654.2	1,331.9	943.1	648.2	643.8
5 Total (excl. servicing)	47,317.2	52,532.1	41,279.0	41,461.0	47,501.2	47,347.0	51,108.4	54,185.0	53,055.1	54,566.5	57,754.3	50,155.3	39,788.2	30,693.1	30,578.4
6 Grand total	49,535.3	55,173.0	43,329.9	43,471.4	49,957.7	49,603.9	53,414.8	56,608.1	55,447.1	56,983.2	60,330.0	52,346.3	41,519.5	32,060.7	31,924.4
Percentage Apportionment of Grand Total															
1 Perishable (incl. commodities consumed on farms)	49.8	49.4	50.9	49.3	46.0	47.9	47.6	47.9	48.1	48.0	47.3	50.4	51.7	56.6	56.8
a Perishable appearing on the market	45.5	45.9	47.3	45.6	42.5	44.5	44.0	44.7	45.0	44.9	44.8	47.7	48.9	53.6	53.7
b Commodities consumed on farms	4.2	3.5	3.6	3.6	3.4	3.4	3.5	3.2	3.1	3.1	2.5	2.7	2.8	3.0	3.1
2 Semidurable	21.1	22.0	22.5	23.1	22.7	21.6	21.3	21.1	21.7	21.4	20.5	20.5	21.7	21.0	20.4
3 Consumers' durable (incl. servicing)	12.8	13.4	13.9	15.3	17.0	17.1	18.2	17.9	17.4	17.6	18.0	16.1	15.7	14.1	14.4
a Consumers' durable	12.1	12.5	12.9	14.2	15.9	15.9	17.0	16.7	16.0	16.1	16.4	14.4	13.8	11.9	12.2
b Servicing of consumers' durable	0.7	0.9	1.1	1.0	1.1	1.2	1.2	1.2	1.4	1.5	1.5	1.6	1.9	2.2	2.2
4 Producers' durable (incl. servicing)	16.3	15.1	12.7	12.4	14.4	13.4	13.0	13.1	12.8	13.1	14.2	13.0	10.8	8.3	8.4
a Producers' durable commodities	11.5	10.4	8.2	8.2	10.0	9.5	9.4	9.6	9.3	9.6	10.8	9.8	7.9	5.7	5.9
b Gross increase in capital livestock on farms	1.0	0.8	0.8	0.7	0.6	0.5	0.5	0.6	0.7	0.7	0.7	0.7	0.6	0.6	0.5
c Servicing of producers' durable	3.7	3.9	3.6	3.6	3.9	3.4	3.1	3.0	2.9	2.8	2.7	2.5	2.3	2.0	2.0
Grand total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Percentage Apportionment of Total Consumers' Goods															
Perishable	59.5	58.2	58.3	56.2	53.7	55.3	54.7	55.1	55.2	55.2	55.2	57.9	57.9	61.7	62.0
Semidurable	25.2	26.0	25.7	26.3	26.5	25.0	24.4	24.2	24.9	24.6	23.9	23.5	24.3	22.9	22.2
Durable	15.3	15.8	16.0	17.4	19.8	19.8	20.9	20.6	20.0	20.2	20.9	18.6	17.7	15.4	15.8
Percentage Apportionment of Durable Commodities															
Consumers' durable	44.0	47.1	52.3	55.1	54.1	56.2	58.4	57.7	57.6	57.4	55.9	55.3	59.4	62.9	63.1

TABLE V-10 (Concluded)

	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933
B 1929 Prices															
1 Perishable (incl. commodities consumed on farms)	20,030.2	21,142.9	22,051.1	22,827.1	23,731.7	25,576.2	25,437.7	26,634.8	27,163.9	27,155.8	28,488.4	27,970.5	26,690.5	26,341.9	27,325.1
a Perishable appearing on the market	18,366.2	19,662.9	20,474.1	21,202.1	21,870.7	23,665.2	23,645.7	24,760.8	25,354.9	25,516.8	26,964.4	26,450.5	24,914.5	24,488.9	25,286.1
b Commodities consumed on farms	1,664.0	1,480.0	1,577.0	1,625.0	1,861.0	1,911.0	1,792.0	1,874.0	1,809.0	1,639.0	1,524.0	1,520.0	1,776.0	1,853.0	2,039.0
2 Semidurable	7,598.6	6,615.5	7,907.1	8,953.8	9,861.0	9,173.0	10,144.9	10,212.2	11,502.3	11,513.2	12,135.2	10,891.9	10,716.5	9,742.2	8,871.5
3 Consumers' durable (incl. servicing)	6,101.8	6,041.9	4,943.6	6,251.8	8,060.8	8,486.4	9,512.2	10,532.2	10,186.0	10,417.6	10,815.1	8,786.8	7,461.0	5,513.5	5,443.6
a Consumers' durable	5,820.9	5,706.7	4,580.0	5,818.8	7,521.8	7,872.9	8,817.4	9,751.5	9,364.2	9,554.6	9,893.6	7,874.9	6,577.4	4,704.3	4,644.8
b Servicing of consumers' durable	280.9	335.2	363.6	433.0	539.0	613.5	694.8	780.7	821.8	863.0	921.5	911.9	883.6	809.2	798.8
4 Producers' durable (incl. servicing)	6,128.5	6,313.3	4,862.0	5,609.7	6,885.9	6,526.8	7,116.8	7,576.0	7,648.9	7,756.5	8,545.0	7,146.2	5,053.1	3,388.0	3,564.6
a Producers' durable commodities	4,164.3	4,272.8	2,848.0	3,422.0	4,637.8	4,427.2	4,969.1	5,366.2	5,596.1	5,675.1	6,469.0	5,361.2	3,578.9	2,166.4	2,357.3
b Gross increase in capital livestock on farms	468.5	462.1	455.1	435.9	420.0	410.4	399.3	394.4	397.1	408.1	421.8	429.5	433.4	434.4	422.0
c Servicing of producers' durable	1,495.7	1,578.4	1,558.9	1,751.8	1,828.1	1,689.2	1,748.4	1,815.4	1,655.7	1,673.3	1,654.2	1,355.5	1,040.8	787.2	785.3
5 Total (excl. servicing)	38,082.5	38,200.0	37,841.3	41,457.6	46,172.3	47,459.7	49,768.4	52,359.1	54,023.6	54,306.8	57,408.0	52,528.0	47,996.7	43,389.2	43,620.7
6 Grand total	39,859.1	40,113.6	39,763.8	43,642.4	48,539.4	49,762.4	52,211.6	54,955.2	56,501.1	56,843.1	59,983.7	54,795.4	49,921.1	44,985.6	45,204.8
Percentage Apportionment of Grand Total															
1 Perishable (incl. commodities consumed on farms)	50.3	52.7	55.5	52.3	48.9	51.4	48.7	48.5	48.1	47.8	47.5	51.0	53.5	58.6	60.4
a Perishable appearing on the market	46.1	49.0	51.5	48.6	45.1	47.6	45.3	45.1	44.9	44.9	45.0	48.3	49.9	54.4	55.9
b Commodities consumed on farms	4.2	3.7	4.0	3.7	3.8	3.8	3.4	3.4	3.2	2.9	2.5	2.8	3.6	4.1	4.5
2 Semidurable	19.1	16.5	19.9	20.5	20.3	18.4	19.4	18.6	20.4	20.3	20.2	19.9	21.5	21.7	19.6
3 Consumers' durable (incl. servicing)	15.3	15.1	12.4	14.3	16.6	17.1	18.2	19.2	18.0	18.3	18.0	16.0	15.0	12.3	12.0
a Consumers' durable	14.6	14.2	11.5	13.3	15.5	15.8	16.9	17.7	16.6	16.8	16.5	14.4	13.2	10.5	10.3
b Servicing of consumers' durable	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.5	1.5	1.7	1.8	1.8	1.8
4 Producers' durable (incl. servicing)	15.4	15.7	12.2	12.9	14.2	13.1	13.6	13.8	13.5	13.6	14.2	13.0	10.1	7.5	7.9
a Producers' durable commodities	10.4	10.7	7.2	7.8	9.6	8.9	9.5	9.8	9.9	10.0	10.8	9.8	7.2	4.8	5.2
b Gross increase in capital livestock on farms	1.2	1.2	1.1	1.0	0.9	0.8	0.8	0.7	0.7	0.7	0.7	0.8	0.9	1.0	0.9
c Servicing of producers' durable	3.8	3.9	3.9	4.0	3.8	3.4	3.3	3.3	2.9	2.9	2.8	2.5	2.1	1.7	1.7
Grand total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Percentage Apportionment of Total Consumers' Goods															
Perishable	59.4	62.6	63.2	60.0	57.0	59.2	56.4	56.2	55.6	55.3	55.4	58.6	59.4	63.2	65.5
Semidurable	22.5	19.6	22.7	23.5	23.7	21.2	22.5	21.6	23.5	23.5	23.6	22.8	23.9	23.4	21.3
Durable	18.1	17.9	14.2	16.4	19.4	19.6	21.1	22.2	20.9	21.2	21.0	18.5	16.7	13.3	13.1
Percentage Apportionment of Durable Commodities															
Consumers' durable	49.9	48.9	50.4	52.7	53.9	56.5	57.2	58.2	57.1	57.3	55.9	55.2	59.6	61.9	60.5
Producers' durable	50.1	51.1	49.6	47.3	46.1	43.5	42.8	41.8	42.9	42.7	44.1	44.8	40.4	38.1	39.5