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Chapter Title: The Movement of Corporate Cash Balances

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THE MOVEMENT OF CORPORATE CASH BALANCES

FROM 1914 TO 1929 THE TOTAL MEANS of payment in the United States rose almost without interruption; contraction then occurred until 1933; and this was followed by a fairly continuous rise, which has been accelerated sharply during the present war period. Against this background of the movement of the total volume of money will the development of corporate cash balances be studied in this chapter.

The most comprehensive figures on corporate cash balances are those compiled from corporation income tax returns by the Bureau of Internal Revenue and published annually in *Statistics of Income*; these data, however, are available only since 1926. Cash balances of all reporting¹ nonfinancial corporations (numbering from 260,000 to 320,000) and of all reporting manufacturing corporations (numbering from 80,000 to 85,000) are compared on Chart 1 with a series representing the total means of payment.² This last series includes demand and time deposits (with the exception of government deposits) of all banks (including savings banks) and currency in circulation outside the banks; it has been selected for the purpose of comparison since corporations hold their cash balances in the form of demand and time deposits as well as in the form of currency. The chart shows clearly that the

¹ That is, all corporations submitting balance sheets. Not all corporations subject to the corporation income tax submit balance sheets to the Treasury. Throughout the period between 1926 and 1941 the percentage of the number of returns with balance sheets to the total number of returns fluctuated between 86.7 and 89.1 percent, with the exception of 1926, when the percentage rate was 78.9, and of 1931, when it was 82.9. The ratio of the gross receipts of those corporations which did not submit balance sheets to the gross receipts of all reporting corporations fluctuated during the thirties between 1.7 percent (1937) and 4.9 percent (1936). Because of the discontinuance of the privilege of filing consolidated returns, the figures from 1935 onward are not strictly comparable with those for earlier years.

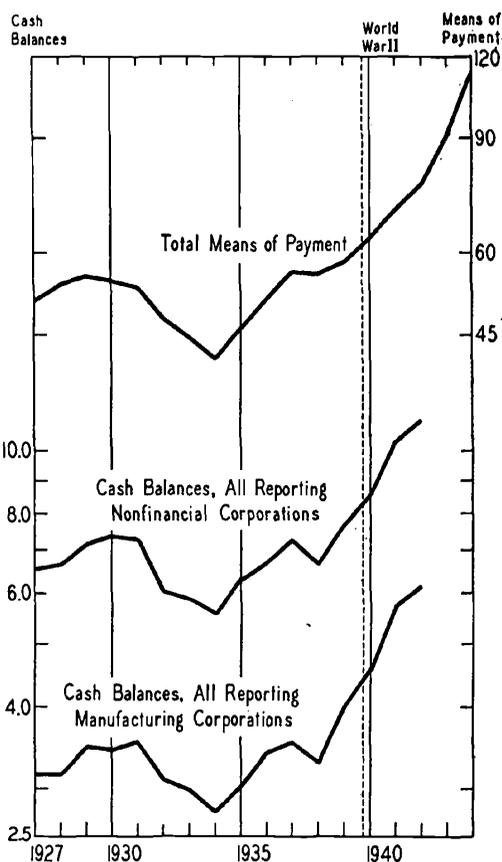
² The sources and description of the data used in all the charts in this study are given in Appendix E.

three curves have the same pattern; that is, their year-by-year direction of movement and also their broad swings are similar.³

Not only the direction of the movement of the three series but also the amplitude is similar, at least up to 1936. The similarity of amplitude is revealed by Chart 2, which presents the ratios of the cash balances of both nonfinancial and manufacturing corporations to the total means of payment. Between 1926 and 1936 the ratios are relatively stable, that of manufacturing corporations varying between 5.8 percent and 6.6 percent, and that of nonfinancial corporations fluctuating between 12.3 percent and 13.6 percent.

The fluctuations of the ratios seem to be entirely noncyclical; in other words, the movements of the cash balances of all nonfinancial and of all manufacturing corporations reflect surprisingly well the cyclical ups and downs of the total means of payment over the years from 1926 through 1936. Through the latter part of the boom of the twenties, through the great depres-

Chart 1—YEAR-END FIGURES FOR TOTAL MEANS OF PAYMENT AND CORPORATE CASH BALANCES



³ Exceptions to the similarity in year-to-year movements are 1929, when total means of payment and cash balances of manufacturing corporations fell whereas cash balances of nonfinancial corporations continued to rise, and 1930, when cash balances of manufacturing corporations rose whereas the two other curves declined. In 1937 the decrease in total means of payment was much less marked than that of cash balances.

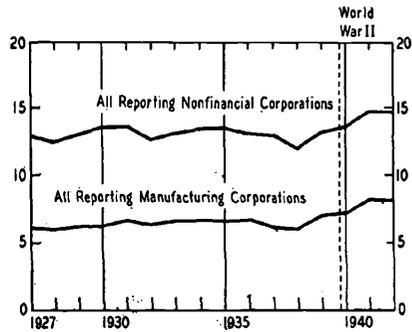
sion with its severe contraction of bank deposits, and through the following revival, the corporations neither gained cash at the expense of other cash holders nor lost cash to them to any marked degree.

Between 1937 and 1940 the ratios increased — from 11.9 to 14.7 percent in the case of all non-financial corporations, and from 5.9 to 8.2 percent in the case of manufacturing corporations. This period, however, is too short to be

used as a basis for drawing any far-reaching conclusions. It should be noticed that the greatest increase occurs in the year 1940 and probably reflects special circumstances due to the war.

For an analysis of the reasons for the relative stability of the ratio of cash balances of nonfinancial and manufacturing corporations to the total means of payment, a comparison of the cash balances of all business enterprises, grouped together, with the cash balances of consumers would be desirable. But since the published statistical material does not lend itself to such a comparison, the contrast made here is between the cash balances of nonfinancial corporations and the rest of the cash balances. The latter include cash balances of financial corporations, noncorporate enterprises, and consumers. Within this group, however, the cash balances of consumers undoubtedly dominate.⁴ If this is so, it seems at first glance reasonable to expect that the total cash balances of financial corporations, noncorporate enterprises, and consumers will behave differently from the cash balances of

Chart 2—RATIO OF YEAR-END CORPORATE CASH BALANCES TO TOTAL MEANS OF PAYMENT



⁴ The cash balances of nonfinancial corporations up to 1941 never amounted to more than 14.7 percent of the total means of payment. This leaves roughly 85 percent for noncorporate enterprises, financial corporations, and individuals. If the assumption is made that noncorporate enterprises held the same amount of cash balances as corporate enterprises (an estimate which is certainly too high), they would have had roughly one-sixth of this 85 percent. On the basis of figures for demand deposits held by financial corporations, published in the *Federal Reserve Bulletin* of May 1944 (p. 432), cash balances of such corporations can be estimated at slightly more than 6 percent of the total means of payment in the hands of noncorporate enterprises, financial corporations, and individuals. Thus the first two of these three groups did not hold more than one-quarter of all the balances in the hands of the three groups combined. The statement in the text therefore seems justified.

corporate enterprises (excluding financial corporations). The aggregate of business enterprises during business contractions liquidate part of their inventories to consumers and increase them during boom periods. On the other hand, they diminish their wage and dividend payments in recession years and increase them in periods of business expansion. On this account, therefore, they are likely to receive more cash from consumers than they pay out to them during recession and vice versa during revival. It follows that at first during recession they increase their cash holdings at the expense of consumers. But this additional cash is not likely to remain in the hands of business enterprises. As long as they have bank debts they will use the cash to pay back the debts either because they are pressed by the banks for repayment or because repayment is made voluntarily in order to save interest charges. The additional cash then disappears to the extent to which it is used to reduce bank debts. Part of the additional cash may also find its way back to consumers through the retirement of long-term security issues. Moreover, faced with a smaller volume of business, enterprises do not need the same amount of money to carry on transactions and are therefore able to use part of the cash which was formerly required for transaction purposes to reduce their debts still further.⁵ The reverse is true in business expansion. Such behavior tends to keep stable the ratio of business cash balances to the total means of payment.⁶

As long as deposits are either canceled or created through the reduction or the increase, respectively, in bank borrowing, the stability of the ratio of corporate cash balances to the total means of payment is explainable even though the aggregate of business enterprises tend to pay out more cash to consumers than they receive from them in an upswing and tend to receive more than they pay out in a recession. As will be indicated in Chapter 9, it is

⁵ Of course, it is possible that companies may choose to keep the same amount of money as before because of increased uncertainty concerning the future, which usually accompanies depressions.

⁶ Business in recession, may, of course, choose to have a higher ratio of cash to expenditures than in revival, just as consumers may increase the ratio of their cash balances to their expenditures during recession. If the assumption is made that the expenditures of consumers as a whole fall in recession in about the same proportion as the expenditures of business enterprise, then a relatively stable ratio of business cash balances to the total means of payment indicates that if business and consumers increase the ratio of cash to expenditures in recession (as is undoubtedly the case), they do so in roughly the same proportion.

possible that the picture will be different if bank deposits are backed mainly by securities.

GROUPS OF CORPORATIONS

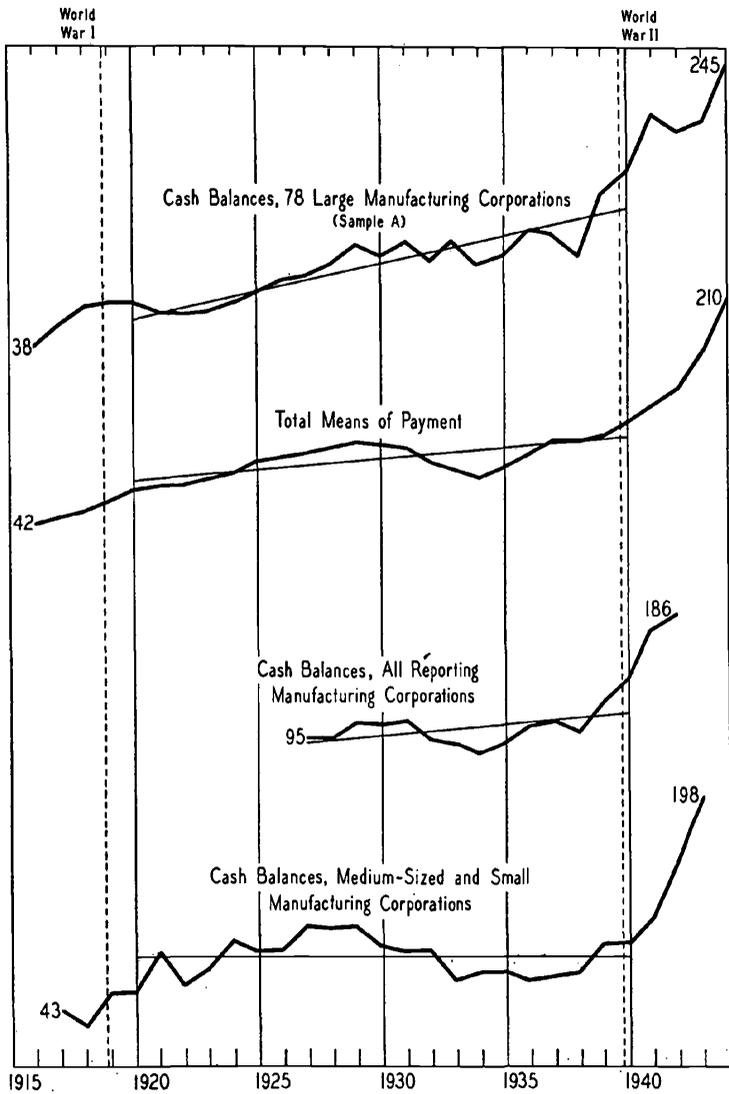
The relative movement of cash balances cannot be expected to be similar for all the subgroups into which corporations may be divided. For an analysis by subgroups, it is not possible to make use of *Statistics of Income* data for industries, since the figures are not comparable for successive years because of the frequent reclassification of companies.⁷ However, a comparison of our samples of large and of medium-sized and small manufacturing corporations with the total for all reporting manufacturing corporations as given in *Statistics of Income* indicates clearly the wide variation in the behavior of cash balances of different groups of corporations.

For such a comparison we have computed indexes (1926-29=100) for cash balances of large, of medium and small, and of all reporting manufacturing corporations, as shown on Chart 3. An index of the total means of payment also is presented on the chart. The straight lines for the three series excluding all manufacturing corporations are trend lines based on data for the period 1919-39; for the all manufacturing series, the trend is based on the years 1926-39. Four significant facts are revealed by the comparison.

(1) The trend line for cash balances of large corporations, based on the interwar period, is steeper than that for total means of payment and also that for all reporting manufacturing corporations. This can be accounted for in part by the growing importance in the economy of the large manufacturing corporations in the sample. Of the 78 companies which constitute our sample of large corporations shown in Chart 3, 45 publish sales figures. Since the cash balances of these 45 companies show, on the whole, the same movements as those of the 78 (see Chart 4), the smaller group can be considered representative of the larger sample. If the sales of the 45 companies are compared with the value of output of the entire manufacturing industry (as given by the biennial census of manufactures), the growing relative importance of the

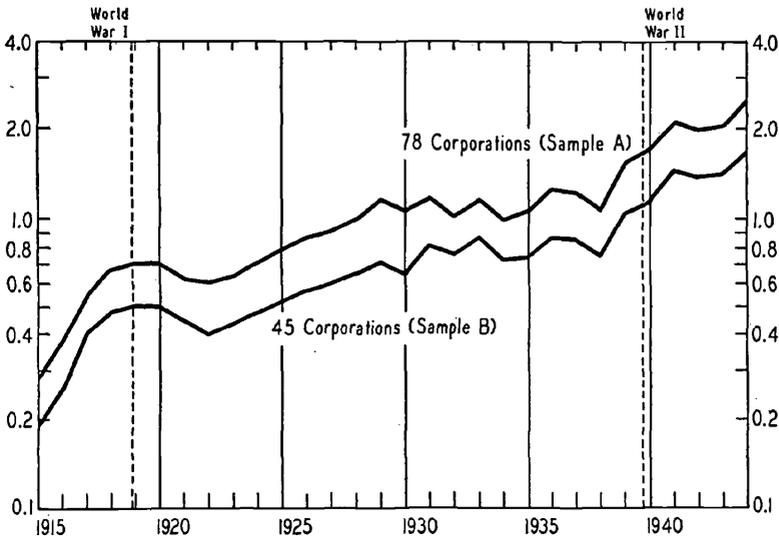
⁷ See *Statistics of Income for 1934*, Part 2, p. 4; and J. F. Ebersole, S. S. Burr, and G. M. Peterson, "Income Forecasting by the Use of Statistics of Income Data," *Review of Economic Statistics*, Vol. XI (1929) pp. 171-96.

Chart 3—INDEXES OF YEAR-END CASH BALANCES OF MANUFACTURING CORPORATIONS AND OF TOTAL MEANS OF PAYMENT



Cash balances of our sample of large manufacturing corporations show a cyclical influence in the early thirties only in so far as their increase is retarded; balances of other groups of corporations decline. Growing importance in the economy of the large corporations in our sample is indicated by the steeper trend of their cash balances.

Chart 4—YEAR-END CASH BALANCES OF SAMPLES OF LARGE MANUFACTURING CORPORATIONS



large corporations of the sample is reflected by the more rapid rise of their sales. The 1937-39 average of the value of output of manufacturing industry as a whole was only 15.5 percent higher than the 1919-21 average, whereas the corresponding increase for the sales of our sample of 45 large manufacturing corporations was more than 53 percent. It is worth pointing out here that at the end of the interwar period cash balances of large manufacturing corporations were higher in relation to sales than at the beginning, a fact which will be considered later.

(2) The trend of the cash balances of *all* reporting manufacturing corporations is not much different from that of the total means of payment. This is, of course, simply another way of saying that the ratio of the cash balances of these corporations to the total means of payment is very stable.

It should be emphasized that the trend of the cash balances of all reporting manufacturing corporations shows a greater rise than that of the value of product of manufacturing industry as given by the census. Although the latter includes noncorporate enterprise, the bulk of the total output is produced by corporations. Therefore, the conclusion that manufacturing enterprises as a whole in

the period 1926-39 show a tendency to increase their cash balances at a greater rate than their output seems justified.

(3) The horizontal trend of the cash balances of the sample of the medium and small corporations reflects the declining relative importance of these companies in the economy. For this group of corporations, also, the increase in cash balances during the period studied is greater than that for sales.

(4) The four curves show a marked dissimilarity, not only with respect to their trends but also with respect to their cyclical movements. The most striking difference is that the cash balances of our sample of large manufacturing corporations in the early thirties do not differ much from their predepression level, whereas the three other curves show a decline in the depression years, with the cash balances of medium and small corporations decreasing even more than those of all reporting companies.

SUMMARY

- (1) The cash balances of the corporate universe follow the general cyclical pattern shown by the total means of payment.
- (2) The ratio of cash balances of all corporations to the total means of payment is relatively stable through recession and upswing in the period from 1926 through 1936. No cyclical movement is discernible.
- (3) Cash balances of all groups show a tendency to increase more rapidly than output (sales).
- (4) Cash balances of different groups of corporations within the corporate universe show different movements. Their trends reflect the changing importance of the groups within the whole. Their cyclical movements vary widely. In particular, the large corporations of our sample in the early thirties show the influence of the recession only in so far as the increase in their cash balances is retarded. Cash balances of all reporting manufacturing and of medium and small corporations, on the other hand, show an absolute decline during the recession of the thirties.

Thus it is seen that the behavior of cash balances of different groups of corporations differs widely and it is necessary to keep in mind that the movement shown by the samples used in this study is not representative of the corporate universe; an explanation of this difference in behavior will be made in Chapter 5. The next three chapters, as well as Chapter 5, will be devoted to an analysis of the causes of the movements of cash balances of large and of medium and small corporations in the interwar period.