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FEDERAL RESERVE BANK OF CLEVELAND

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MANAGEMENT OF CASH ASSETS AT RESERVE CITY AND COUNTRY MEMBER BANKS

A previous article in the *Review* discussed bank management of cash assets.¹ That study considered the management of cash assets at all member banks of the Federal Reserve System for the period 1954 through the middle of 1963. The present article "deepens" the earlier study by contrasting cash management at Reserve City banks² to that of Country member banks.³ The first section of this study briefly reviews the highlights of the earlier article.

¹ See "Bank Management of Cash Assets," *Economic Review*, Federal Reserve Bank of Cleveland, Cleveland, Ohio, April 1965.

² Reserve City banks located in New York City and Chicago have been excluded from this study. Prior to 1962, such banks were classified as Central Reserve City banks and prior to December 1960 were subject to a higher reserve requirement on demand deposits than were Reserve City banks. Moreover, because of their very large size and closer association with the central money market, researchers often prefer to exclude such banks from studies of the present type.

³ It should be noted that Country banks do not include only those institutions located in small or rural areas; the category often includes banks located in fair-sized cities and occasionally relatively small banks located in the largest cities.

RESTATEMENT OF EARLIER CONCLUSIONS

For both operational and legal purposes, banks maintain a portion of their assets in various forms of cash.⁴ Because cash assets yield no income and, in fact, cause banks to forego income, bank management generally attempts to keep cash assets to a minimum — though, as pointed out in the present discussion, at the minimum consistent with the maximization of bank profits.

Cash assets can be divided into two components — managed cash⁵ and nonmanaged

⁴ In both this and the earlier article, "cash assets" are defined as the sum of vault cash (sometimes referred to as currency and coin), reserves maintained with regional Federal Reserve banks, balances with other commercial banks in the U.S., and cash items in process of collection.

⁵ For reasons discussed in the April article, the definition of "managed cash assets" for the subperiod 1954 through mid-1960 differs from that for the subperiod from mid-1960 through mid-1963. For the first subperiod, managed cash assets are defined as vault cash plus correspondent balances with commercial banks in the U. S. plus the difference between balances maintained at the regional Federal Reserve banks and the volume of required reserves (that is, excess reserves). For the second subperiod, managed cash assets include correspondent balances and excess reserves, which are redefined as the difference between the total of balances maintained at Reserve banks plus vault cash and the volume of required reserves.

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cash assets. Bankers can exercise little or no discretion over the latter. Thus, managerial efforts to reduce the share of bank assets allocated to various forms of cash center upon the managed cash element.

For the long-term period covered by the earlier study (1954 through mid-1963), bankers were successful in efforts to further reduce the proportion of managed cash to total assets. Declines in the managed cash ratio in large part reflected management's response to increases in short-term interest rates, increases in the proportion of time to demand deposits, and increases in the ratio of total expenses to total revenues⁶—all of which are factors that bankers see as tending to reduce profit margins in an economic sense.⁷

It was further observed that the managed cash ratio declined at an increased rate following the second quarter of 1960. The marked increase in the rate of decline resulted largely from a new regulation affecting reserve requirements that took effect between December 1959 and November 1960. The new regulation permitted member banks to count vault cash as part of their legally required reserves. Formerly, all required reserves had to be kept in the form of deposits

⁶ Under certain conditions, assuming management is already maximizing profits, increases in the ratio of total expenses to total revenues may not occasion any additional contraction in the managed cash ratio. Suppose for example, that the wage bill at banks increases as a result of higher wage rates. Assuming an optimum allocation of funds before the change, nothing is to be gained by a reallocation in favor of earning assets.

⁷ In an economic sense, profits refer to the difference between dollar revenues and the opportunity costs incurred in producing these revenues.

at the regional Federal Reserve banks. Because vault cash now served both operational and legal functions, bankers were able to achieve a further net reduction in managed cash assets.

The provision regarding vault cash came at a time when the managed cash ratio had already been reduced to relatively low levels and additional declines would have been difficult to bring about. Moreover, it allowed additional flexibility to cash management, giving bankers a new set of opportunities to further curtail the volume of unprofitable and, indeed, costly managed cash assets.

CASH MANAGEMENT AT RESERVE CITY AND COUNTRY MEMBER BANKS

It may be best to begin the present analysis by examining the data plotted in an accompanying chart. In panel A, it can be seen that the ratio of cash assets to total assets declined for both Reserve City and Country member banks over the long-term period 1954 through mid-1963, at an average annual rate of 2.00 percent and 3.278 percent, respectively. Furthermore, for both classes of banks, the ratio declined at an increased rate beginning in 1960.

It is interesting to note that values of the cash asset-total asset ratio are consistently greater for Reserve City banks than for Country banks, indicating that, as a group, Reserve City bankers committed a larger proportion of assets to various forms of cash. This does not necessarily reflect differences in managerial efficiency. On the contrary, management at Reserve City banks has probably been more alert to the opportunities of

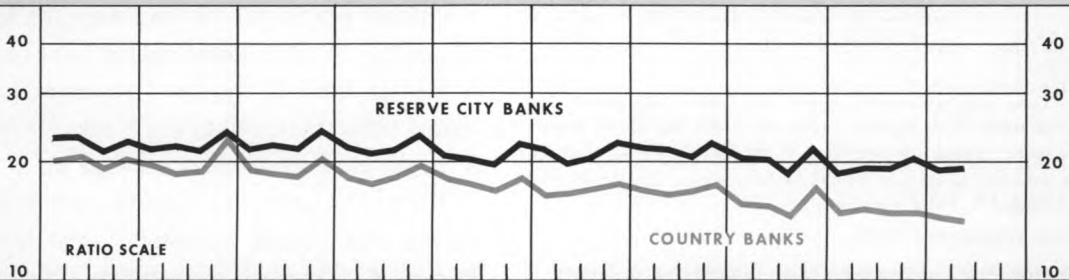
BEHAVIOR OF SELECTED BANK ASSET RATIOS

RESERVE CITY¹ and COUNTRY MEMBER BANKS - U.S.

Panel A

CASH ASSETS
TOTAL ASSETS

Percent

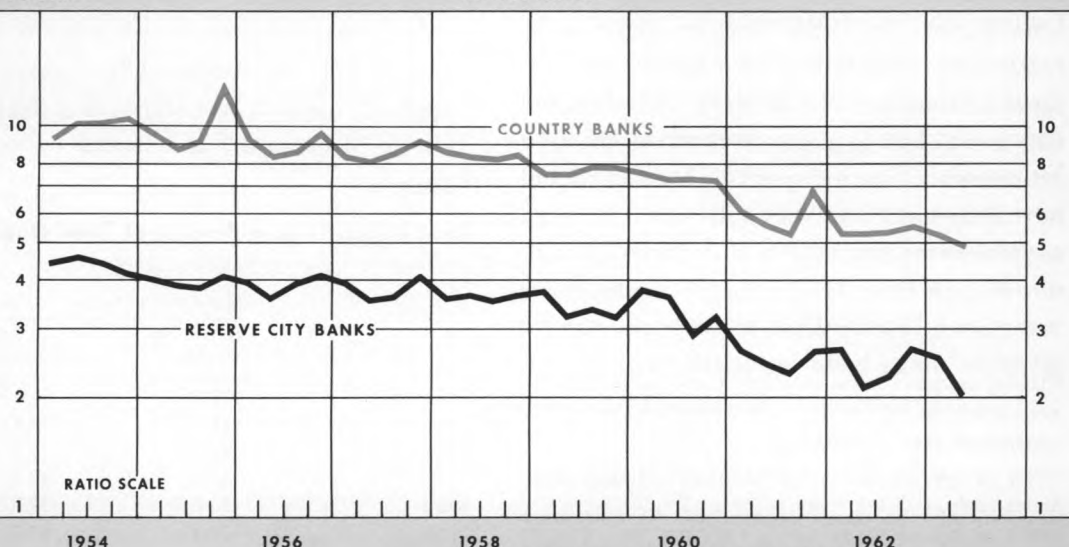


	AVERAGE ANNUAL RATE OF DECLINE		
	1954-1963	1954-1960	1960-1963
RESERVE CITY BANKS ²	2.000%	1.028%	4.203%
COUNTRY BANKS ³	3.278%	2.475%	6.392%

Panel B

MANAGED CASH ASSETS
TOTAL ASSETS

Percent



	AVERAGE ANNUAL RATE OF DECLINE		
	1954-1963	1954-1960	1960-1963
RESERVE CITY BANKS ²	5.519%	2.918%	13.000%
COUNTRY BANKS ³	5.326%	3.880%	12.152%

¹ Reserve City Banks in New York City & Chicago have been excluded

² 1954, first half; 1960, first half; 1963, first half

³ 1954, first half; 1960, second half; 1963, first half

Source of data: Board of Governors of the Federal Reserve System

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TABLE I

Reserve Requirements of Member Banks^a
(Percent of Deposits)

	Net Demand Deposits		Time Deposits	
	Reserve City Banks	Country Banks	Reserve City Banks	Country Banks
1954 ^b	18.0%	12.0%	5.0%	5.0%
1965 ^c	16.5	12.0	4.0	4.0

^a Only requirements for benchmark periods are shown. For a schedule of reserve requirements for the entire period under review, see any issue of the *Federal Reserve Bulletin*.

^b Effective as of July 29, 1954 for Reserve City banks and August 1, 1954 for Country banks.

^c In effect April 1, 1965.

Source: Board of Governors of the Federal Reserve System

economizing on cash holdings. Thus, the ratio would appear to be greater for Reserve City banks because of factors beyond managerial control.

First, Reserve City banks have been subject to higher reserve requirements on demand liabilities than Country banks. This is evident from Table I. In 1954, Country banks were required to maintain a 12 percent cash reserve against demand deposits while Reserve City banks had to maintain reserves equal to 18 percent of such deposits. This differential has since narrowed, but still exists. Reserve requirements against the time deposit liabilities of both Reserve City and Country banks have been identical for some years and, at all times, have been lower than the proportion of cash reserves required against demand liabilities (see Table I).

Thus, given the total volume of deposits, the amount of cash committed to required reserves depends upon the deposit mix. The smaller the proportion of time deposits to total deposits, the larger will be the volume of required reserves. As Table II illustrates, time deposits have consistently represented

a smaller proportion of total deposits at Reserve City banks than at Country banks—though over time the differential has been sharply reduced. Both factors—higher reserve requirements against demand deposits and a smaller proportion of time deposits to total deposits—result in Reserve City banks having a higher ratio of required reserves to total assets than that for Country banks—and thus a larger proportion of assets tied up in cash.

An additional factor contributing to higher values of the cash asset-total asset ratio for Reserve City banks is the relatively large share of assets committed to cash items in the process of collection—another nonmanaged cash asset (see Table III). This results in part from Reserve City banks having a larger proportion of demand to total deposit liabilities. Since checks are written only against demand deposits, cash items in the process of collection would be expected to absorb a larger share of assets held by Reserve City banks. Also, empirical research has shown that the velocity (rate of turnover) of demand deposits in

TABLE II

Time Deposits as a Percent of Total Deposits
(Subject to Reserve Requirements)

	Based on December Figures	
	Reserve City Banks	Country Banks
1954	28.4%	35.3%
1955	29.4	35.2
1956	29.9	35.6
1957	32.3	38.0
1958	33.9	39.7
1959	34.4	40.3
1960	35.5	42.8
1961	38.3	43.9
1962	42.4	46.4
1963	45.9	48.2
1964	47.7	49.3

Source: Board of Governors of the Federal Reserve System

TABLE III
Cash Items in Process of Collection as a Percent
of Total Assets*

	Reserve City Banks	Country Banks
1954	6.51%	2.34%
1955	6.34	2.25
1956	6.58	2.08
1957	7.12	2.19
1958	6.79	2.22
1959	7.15	2.05
1960	8.61	2.49
1961	8.18	2.31
1962	6.92	2.29
1963	7.98	2.57

* First call date in each year.

Source: Board of Governors of the Federal Reserve System
 Reserve Cities is higher, on average, than in other places. That is, a more active use is made of demand balances in the former than in the latter. It thus follows that cash items in the process of collection will be a greater proportion of the assets of Reserve City banks.⁸

That higher values of the ratio of cash assets to total assets for Reserve City banks do not necessarily reflect less efficient cash management is evident from panel B of the chart. There it is clearly shown that Reserve City banks maintain a consistently lower ratio of managed cash assets to total assets than that maintained by Country banks. Thus, where management is able to exercise discretion over the volume of cash, Reserve City bankers have historically evidenced a greater interest and ability in economizing on this type of asset.

In contrast, Country banks have found it *necessary*, for operating purposes, to maintain a larger proportion of "discretionary cash

⁸ A number of technical factors that partially account for the relatively large share of assets committed to cash items in the process of collection at Reserve City banks have been excluded from the discussion.

assets" to total assets. It was pointed out in the earlier article⁹ that a part of what is here termed managed or discretionary cash is actually not subject to managerial control. And there is strong reason for believing that the proportion of managed cash assets not subject to such control is greater at Country banks than at Reserve City banks.

First, it has been found that deposit instability is greatest among small banks.¹⁰ That is to say, there tends to be more short-run variation in the level of deposits at small banks than at large banks. In part, this is because small banks lack a diversification of deposit ownership. Also, the volume of deposits at many Country banks often depends upon the varying economic fortunes of the surrounding agricultural community. Because of relatively wide fluctuations in deposit levels (particularly in the case of deposit declines) small banks may have a relatively greater need for immediate liquidity. In other words, to meet net deposit withdrawals banks must pay out legal tender (currency and coin), thus necessitating the maintenance of monetary balances or other assets almost immediately convertible into money. To the extent instability in deposits manifests itself at the teller's window, relatively large amounts of vault cash will be required. This, in part, explains the higher ratio of vault cash to total assets at Country banks (see Table IV).

Second, because most Country banks are located some distance from financial centers

⁹ See *Economic Review*, Federal Reserve Bank of Cleveland, Cleveland, Ohio, April 1965, footnote 6, p. 5.

¹⁰ See Gramley, Lyle E., "Deposit Instability at Individual Banks," *Essays on Commercial Banks*, Federal Reserve Bank of Kansas City, Kansas City, Missouri, 1962, pp. 41-53.

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TABLE IV

Vault Cash as a Percent of Total Assets*

	Reserve City Banks	Country Banks
1954	0.93%	1.82%
1955	0.99	1.95
1956	0.98	1.95
1957	1.00	1.94
1958	0.87	1.74
1959	0.93	1.81
1960	0.92	1.82
1961	1.04	1.95
1962	1.03	1.94
1963	1.01	1.84

* First call date in each year.

Source: Board of Governors of the Federal Reserve System

and because their size limits the functions they can economically provide on their own, their managements often find it desirable to make considerable use of Reserve City correspondents. Since correspondents must be compensated for services provided, it is not surprising that the ratio of balances with other banks to total assets is also considerably greater at Country banks (see Table V).

It is also likely, however, that larger values of the managed cash ratio at Country banks

TABLE V

Balances with Banks in U. S. as a Percent of Total Assets*

	Reserve City Banks	Country Banks
1954	3.24%	6.94%
1955	3.11	7.05
1956	3.04	6.72
1957	2.91	6.01
1958	2.83	6.36
1959	2.67	5.54
1960	2.92	5.58
1961	2.51	5.77
1962	2.41	5.11
1963	2.38	5.16

* First call date in each year.

Source: Board of Governors of the Federal Reserve System

TABLE VI

Net Current Earnings Before Income Taxes as a Percent of Total Assets

	Reserve City Banks	Country Banks
1954	1.14%	1.10%
1955	1.23	1.19
1956	1.40	1.26
1957	1.42	1.26
1958	1.35	1.16
1959	1.49	1.32
1960	1.65	1.39
1961	1.51	1.29
1962	1.37	1.24
1963	1.32	1.21

Source: Board of Governors of the Federal Reserve System simply reflect the lesser emphasis placed upon cash management at these institutions. This is not meant to imply that Reserve City bankers are more aggressive in attempting to maximize aggregate profits. It is true that profits, as measured by the ratio of net current earnings to total assets, are somewhat higher for Reserve City banks than for Country banks (see Table VI). This follows in large part from the fact that, especially in the case of larger institutions, rates of profit tend to vary directly with bank size (see Table VII). There are, then, differences in efficiency between large and small banks, at least as measured by rates of profit. But, as one observer has concluded:

There is no evidence that these efficiency differences reflect greater efforts expended at large banks to achieve more economical methods of operation. Rather, the differences in efficiency that register their imprint in bank costs and earnings appear to stem from the opportunities that are made possible by larger scale operations to adopt modes of organization that make better

TABLE VII
Profits* and Size of Bank

	Size of Group (Total Deposits in Millions of Dollars)								
	All	Less than 2	2-5	5-10	10-25	25-50	50-100	100-500	Over 500
1956	1.29%	1.17%	1.16%	1.16%	1.15%	1.15%	1.19%	1.26%	1.41%
1957	1.34	1.16	1.13	1.15	1.14	1.13	1.20	1.31	1.50
1958	1.23	1.06	1.03	1.04	1.03	1.03	1.10	1.21	1.39
1959	1.42	1.22	1.21	1.21	1.20	1.23	1.29	1.36	1.59
1960	1.51	1.29	1.25	1.24	1.25	1.29	1.33	1.46	1.69
1961	1.33	1.16	1.13	1.13	1.13	1.16	1.19	1.32	1.45
1962	1.25	1.14	1.13	1.12	1.11	1.10	1.14	1.27	1.31
1963	1.24	1.05	1.09	1.12	1.11	1.10	1.14	1.27	1.29

* Profits are measured by the ratio of net current earnings before income taxes to total assets.

Source: Board of Governors of the Federal Reserve System

use of labor resources.¹¹

Put otherwise, there are various economies that can only be realized by relatively large institutions. And to a great extent, it is these that are responsible for the behavior reflected in Tables VI and VII.

Although Country banks hold a relatively large proportion of assets as idle discretionary cash, this may not be inconsistent with profit maximization. Overall profit maximization—to the extent that it is a prime goal of management—does not necessarily imply the maximization (minimization) of each profit (cost) component.

To be sure, the maintenance of excessive idle balances—earning no income—may, and in a number of cases undoubtedly does, reflect inertia and irrationality on management's part, but it is doubtful whether these traits are unique to any type or group of banks. For a number of reasons—limited managerial personnel, insufficient amounts of idle cash to justify employment of a specialized money

manager, and the high opportunity cost of diverting present management to further minimization of idle cash—Country banks in general probably take a more casual attitude towards cash management than do Reserve City banks. Moreover, it is likely that the competitive environment within which Country banks operate make the opportunity cost of efficient cash management higher than for Reserve City banks.

In connection with this last point, consider, for example, the cost of diverting management from a bank's loan operations. As shown in Table VIII, the rate of interest on business loans steadily declines as the size of bank granting the loan increases. According to the study from which the figures were taken, on October 16, 1957, the average interest rate on business loans at banks having less than ten million dollars in total deposits was 5.9 percent against an average rate of 4.6 percent at banks having a billion dollars or more in deposits. It is also evident from the data that smaller firms pay higher interest rates on business loans than do larger enterprises, irrespective of bank size. Moreover,

¹¹ See Gramley, Lyle E., *A Study of Scale Economies in Banking*, Federal Reserve Bank of Kansas City, Kansas City, Missouri, 1962, p. 59.

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TABLE VIII

Size-of-Bank Variations in Interest Rates on Business Loans by Size of Borrower, October 16, 1957

(Percent per Annum)

Size of Borrower (Total Assets in Thousands of Dollars)	Size of Bank (Total Deposits in Millions of Dollars)				
	All Banks	Under 10	10- 100	100- 1,000	1,000 and over
All borrowers ^a . . .	4.9%	5.9%	5.4%	5.0%	4.6%
Less than 50 . . .	6.5	6.5	6.4	6.6	6.9
50-250	5.7	5.8	5.6	5.7	5.9
250-1,000	5.4	5.4	5.3	5.3	5.5
1,000-5,000 . . .	5.1	4.8	5.1	5.1	5.0
5,000-25,000 . .	4.7	4.8	4.8	4.7	4.6
25,000-100,000 .	4.3	4.8	4.5	4.4	4.3
100,000 or more .	4.1	4.2	4.3	4.2	4.0

^a Includes a small amount of loans for borrowers whose size was not ascertained.

Source: Board of Governors of the Federal Reserve System

small banks tend to make most of their business loans to small- and medium-sized firms (see Table IX). Because of the sizable loans they often require, large firms usually find it necessary to borrow from big banks located in major cities.

Thus, not only do Country banks tend to receive, on average, higher interest rates than those received by Reserve City banks, but they make a larger proportion of their loans to relatively small firms, which pay higher interest charges. Furthermore, interest rates on farm loans are usually higher than those on business loans.¹² And as would be expected, farm loans account for a considerably larger

¹² As of June 30, 1956, insured commercial banks charged an average interest rate of 6.1 percent on farm loans. This substantially exceeded the 5.2 percent charged in 1956 by banks in 19 large cities on short-term business loans of less than \$10,000. (This size class of loan has been chosen for purposes of comparison since a sizable proportion of all farm loans amount to less than \$10,000.)

TABLE IX

Percent Distribution of Business Loans Granted to Different Size Borrowers by Size of Bank, October 16, 1957

Size of Borrower	Size of Bank (Total Deposits in Millions of Dollars)			
	Under 10	10-100	100-1,000	1,000 and over
Small	47.0%	32.3%	18.4%	8.3%
Medium	48.3	53.5	47.1	36.9
Large	2.3	11.1	31.8	51.5
Total*	97.6%	96.9%	97.3%	96.7%

* Not all loans were allocated to "size of borrower" categories.

Sources: Board of Governors of the Federal Reserve System; Federal Reserve Bank of Cleveland

proportion of Country banks' loan portfolios. As of June 30, 1964, agricultural loans comprised 6.8 percent of the total loan portfolios of Country banks against 2.1 percent of Reserve City banks other than those in Chicago and New York.

If higher rates charged by smaller banks only reflected higher lending costs and a greater degree of risk, lending operations would not be any more lucrative than at large banks. But, as already mentioned, there is reason to believe that, over the long run, rates charged by Country banks on small business and agricultural loans reflect at least in part the less competitive environment within which such loans are made. That is to say, as has been stated elsewhere, "small business borrowers are limited largely to local *bank* sources of credit."¹³ Hence, about 50 percent of all local banking markets contain only one commercial bank, while about

¹³ See Kreps, Clifton H., Jr., "Characteristics of Local Banking Competition," *Banking and Monetary Studies*, Deane Carson ed., Richard D. Irwin, Inc., Homewood, Illinois, 1963, p. 328.

95 percent of all such markets offer the borrower a choice between four or fewer banks.¹⁴ It can be inferred from the figures in the table that it is primarily in the largest cities where five or more commercial banks exist — offering the business sector (small firms included) a considerable range of borrowing alternatives.

Class of Market Area	Percentage of	Percentage
	All Local Banking Markets	of Total U. S. Population Residing In
No-bank towns	—	5%
One-bank towns	50	20
Two-to-four bank towns	45	45
Five-or-more bank towns	5	30
	100%	100%

Source: Kreps, Clifton H., Jr., "Characteristics of Local Banking Competition," *Banking and Monetary Studies*, Richard D. Irwin, Inc., Homewood, Illinois, 1963, p. 330

Because the cost of making a business loan is probably higher at small banks than at large ones — partly because of a lesser degree of specialization and partly because lending costs and credit risks are relatively high on small loans — part of the existing differential on interest rates between large and small loans to business borrowers can be explained. But, *everything else the same*, one would expect bankers operating in a less competitive environment — at least as measured by the number of banks — to charge somewhat higher

¹⁴ In his study, Professor Kreps geographically defined a banking market as any community (e.g., town or city) having one or more commercial banks. This concept of a banking market could easily be taken issue with. Professor Kreps, himself, views it as only "the simplest concept of local banking market areas." Despite numerous conceptual inadequacies, the definition is useful because it enables illustration of the fact that small business and farm borrowers in many parts of the country often find only one banking institution with which to do business.

rates of interest.¹⁵

If this analysis is correct, it follows that to maximize profits, management at Country banks should, perhaps, direct more attention to business and farm lending than would be the case at typical Reserve City banks. The cost of efficient cash management is best measured by the monetary cost of diverting scarce resources (e.g., management) from their most profitable alternative use (perhaps the making of loans). And in the case of Country banks, this cost is probably somewhat higher than at Reserve City banks.

The above discussion may appear to conflict with certain inferences that might be drawn from data presented in panel B of the earlier chart. It is evident that Reserve City bankers have effected a comparatively greater economization of managed cash assets than that achieved by their Country counterparts, that is, the ratio of managed cash to total assets is consistently lower for the former than for the latter. But, for both classes of banks, the table insert reveals a marked similarity in the rates at which the managed cash-total asset ratio declined over the long-term period considered. In sharper contrast to the preceding discussion is the fact that during

¹⁵ The validity of this last point might be questioned inasmuch as the data in Table VIII show the largest banks (one billion dollars or more in deposits) charging higher rates of interest on business loans to relatively small borrowers (firms with less than five million dollars in assets) than rates charged by the smallest banks (less than ten million dollars in deposits). On the basis of other studies and other data, there is reason to believe that the data in Table VIII do not invalidate the thesis set forth in the discussion. For a complete statement see, for example, Laudadio, L., "Size of Bank, Size of Borrower, and the Rate of Interest," *Journal of Finance*, March 1963, pp. 20-28.

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the 1954-1960 subperiod, Country banks evidenced a relatively greater decline in the ratio than that achieved by Reserve City banks. It would seem at first glance, therefore, that, at the margin, cash management at Country banks has been about as efficient as cash management at Reserve City banks.

From what is known of cash management at both Reserve City and Country member banks for the period examined, it seems doubtful that this inference is justified. A more likely explanation would be that management at Reserve City banks had already succeeded in reducing the managed cash ratio to such low levels that further reductions became difficult to bring about. At Country banks, on the other hand, where the ratio was considerably higher, it was far less difficult for management to effect proportional declines. Put otherwise, though Country bankers may have been less motivated by factors encouraging the additional economization of idle cash, they had the leeway to achieve superior results—at least during the 1954-1960 interval (see Table X).

Some support for this position is found in an examination of managerial responses at both

classes of banks to the previously mentioned regulation affecting vault cash. As elaborated on in the April issue of the *Review*, the essence of that regulatory change was to permit member banks to count vault cash as part of required reserves. Previously, reserve requirements could only be satisfied by the maintenance of deposits at the regional Reserve bank. The provision thus meant that vault cash could now serve both an operational and a legal function. That is, vault cash formerly held only for operating needs could now also satisfy some portion of required reserves. Hence, management was given the opportunity to reduce idle balances kept at the regional Reserve bank and to use part of the funds drawn down in the acquisition of earning assets.

Using a methodology identical to that set out in the earlier article, it was found that Reserve City bankers responded to the vault cash provision sometime between the second and third quarters of 1960, the response of Country bankers came somewhat later (in conformity with the thesis of this article)—at the end of 1960.

Using these dates to divide the overall period for purposes of observing the reaction of bankers to the regulation, Table XI illustrates the more aggressive response of management at Reserve City banks to the vault cash change. Both Reserve City and Country bankers reduced reserves maintained at the regional Reserve banks below the levels dictated by reserve requirements. The difference was obviously made up by vault cash. But, while Reserve City bankers shifted (on average for the period from mid-1960 through mid-1963) 74 percent of the decline in main-

TABLE X
Percent Decline in the Ratio of Managed Cash to Total Assets Associated With a One Percent Increase in:

		Reserve City Banks	Country Banks
(a) Short-term interest rates .	1954-60	0.135%	0.162%
	1960-63	0.674	0.569
(b) Demand-time deposit ratio	1954-60	0.667	0.875
	1960-63	0.726	1.248
(c) Expense-revenue ratio . .	1954-60	2.419	2.547
	1960-63	1.501	3.201

Source: Estimated by the Federal Reserve Bank of Cleveland

TABLE XI

Managed Cash Assets—Reserve City Banks
(Average Quarterly Dollar Volume)

	(1) Managed Cash Assets	=	(2) Vault Cash	+	(3) Balances with Other Commercial Banks	+	(4) Maintained Reserves —Required Reserves
First Quarter 1954 through Second Quarter 1960	\$2,804	=	\$667	+	\$2,071	+	\$ 65
Third Quarter 1960 through Second Quarter 1963	2,192	=	839	+	2,113	—	760
Net Change	—612	=	+172	+	42	—	825
(1) as a % of (4)	(74.2%)						

Managed Cash Assets—Country Banks
(Average Quarterly Dollar Volume)

	(1) Managed Cash Assets	=	(2) Vault Cash	+	(3) Balances with Other Commercial Banks	+	(4) Maintained Reserves —Required Reserves
First Quarter 1954 through Fourth Quarter 1960	\$5,999	=	\$1,310	+	\$4,296	+	\$ 393
First Quarter 1961 through Second Quarter 1963	5,384	=	1,652	+	4,929	—	1,197
Net Change	—615	=	+342	+	633	—	1,590
(1) as a % of (4)	(38.7%)						

Source: Board of Governors of the Federal Reserve System

tained reserves out of managed cash (presumably into earning assets), Country bankers effected (on average for the period from 1961 through mid-1963) a shift of only 39 percent. Put otherwise, while management at Reserve City banks reallocated to vault cash and balances with other commercial banks only 26 percent of the average reduction in maintained reserves, Country bankers reallocated over 60 percent to these non-earning assets.

CONCLUDING COMMENTS

This study has considered only the period 1954 through the middle of 1963. Considerable evidence has become available which suggests that Country banks—even very small institutions—have markedly improved their cash management within the last few years.

For example, a recent study has shown that "Before 1960, less than five out of every 100 Third District country member banks had any experience in the federal funds market." (The latter is a market for the short-term investment of excess reserves maintained with the regional Reserve banks.) "In 1964," on the other hand, "one out of every three country banks participated in the market. . . ."¹⁶

The recent sharp improvement in the sophistication with which Country banks have managed their discretionary cash assets undoubtedly reflects a number of forces that have acted to reduce profit margins in an

¹⁶ See "Federal Funds and the Profit Squeeze—A New Awareness at Country Banks," *Business Review*, Federal Reserve Bank of Philadelphia, Philadelphia, Pennsylvania, March 1965, p. 4.

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accounting sense and to increase the opportunity costs of idle cash in an economic sense. Part of the improvement probably reflects the success of Reserve City banks in helping to promote better cash management at Country banks. This is another service received by Country banks from their City correspondents.¹⁷ Reserve City banks eagerly seek to attract additional correspondent balances because these funds usually can be profitably

employed. In essence, Reserve City banks have encouraged better cash management at Country banks by playing a more active role in the management of the latter's idle cash assets. As long as improved cash management does not absorb too much time of the bank's management, Country bankers may be quite willing to realize the additional income that can be made available by this means.

¹⁷ It may appear inconsistent for Reserve City banks to encourage better cash management at Country banks since the former derive a part of their profits from correspondent balances maintained by the latter, and are not likely to want these balances reduced. Their behavior is probably explained by two major factors. First, Reserve City banks hope to encourage better cash management at Country banks by effecting both an absolute decline in managed cash assets and a partial substitution of correspondent balances for other cash

elements. Second, unless Reserve City banks can offer their correspondents services leading to greater profits there is little reason—other than to compensate for check clearing services—for Country banks to maintain correspondent balances. On the other hand, all-out attempts to minimize managed cash would only cause a contraction in correspondent deposits. Thus the maximization of income at Reserve City banks from Country bank balances requires that some help be given in effecting economies in managed cash assets held by Country banks.



ACCELERATION IN EMPLOYMENT GAINS

The favorable employment situation that prevailed in the U. S. during 1964 has carried over into 1965. During the 12-month period that ended with the first quarter of this year, total employment advanced at a faster rate than during the like period of earlier years in the current recovery that began in 1961.¹ The net gain in employment—most of it in full-time employment—exceeded the growth in the civilian labor force by almost 400,000 persons and thereby caused an equivalent decline in unemployment. Despite intervening ups and downs, the seasonally adjusted unemployment rate dropped from an average of 5.4 percent in the first quarter of 1964 to 4.8 percent in the corresponding quarter of this year. The decline in the level of unutilized labor has served to intensify selective manpower shortages.

MANUFACTURING SPARKS EMPLOYMENT GAIN

The net gain in total employment amounted to 1.6 million persons for the four-quarter interval. In the nonagricultural sector alone, the gain was 1.8 million—offsetting a continued loss in farm employment—and the number of nonagricultural wage and salary

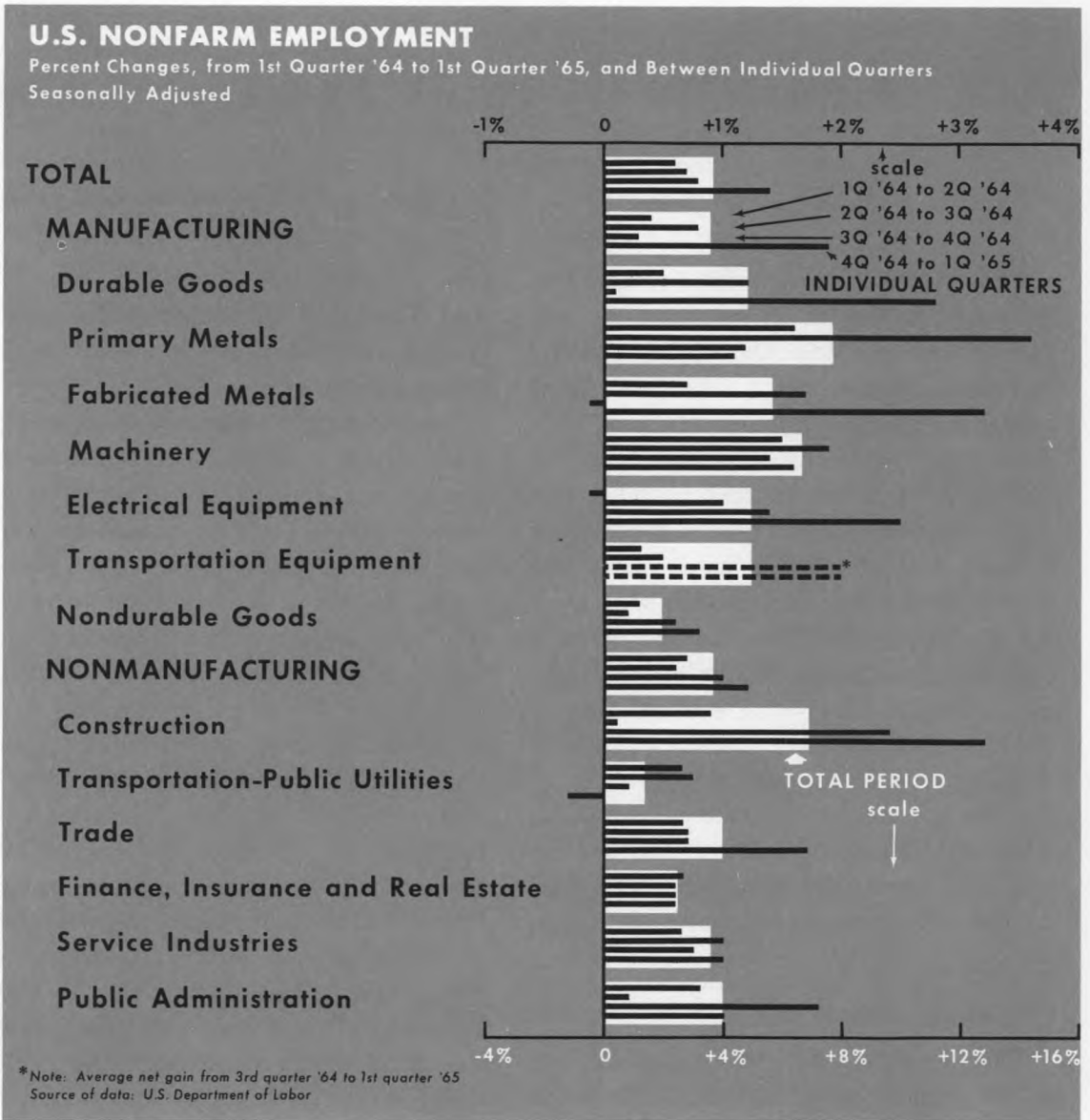
jobs rose still more, by 1.9 million—absorbing a small decline in the number of self-employed persons and unpaid family helpers in non-farm employment.

The increase in wage and salary employment in nonagricultural establishments over the year was equal to 3.6 percent.² This gain is noteworthy not only for its size—compared with the average annual gain of 2.5 percent for the preceding three calendar years—but even more for its distribution between manufacturing and nonmanufacturing industries. For the past few years, employment in the manufacturing sector had grown at not much more than half the rate in nonmanufacturing. As the chart shows, the rate of gain from the first quarter 1964 to the first quarter 1965 was virtually the same for manufacturing as for nonmanufacturing. Also, the rate of employment increase in trade, services, and public administration—three industry divisions which in past years had offset a declining rate of growth in manufacturing employment—was in each case close to the 3.6 percent overall average. It is too early to tell whether this might mark the beginning of a new pattern.

Within the manufacturing sector—where employment in the first quarter of this year

¹ In fact, the only larger increase in any four-quarter period since 1961 occurred in the period from the second quarter 1963 to the second quarter 1964.

² This figure, and subsequent data on employment, are based upon the establishment series.



came close to reaching the postwar record employment level attained in the second quarter 1953—the employment gain for durable goods industries, accounting for three out of every four of the almost 600,000 additional factory jobs, was proportionately twice as large as that for nondurables. The employ-

ment gain in durables received its major thrust from the five metal and metal-using industries, each of which gained relatively more than the durable goods group as a whole. Primary metals led the other four industries in the rate of increase, sparked by rising employment in the steel industry which

supplied 67,000 of the 90,000 additional jobs in primary metals. About 90 percent of the new factory employees were production workers. As a result, the steady postwar decline in the proportion of production workers to total employment in manufacturing was halted at least temporarily, as the share of production workers rose from 73.7 percent to 74.2 percent during the interval.³

The rise in total nonfarm employment, as the chart shows, gained momentum from quarter to quarter, apparently in response to the tax cut and rising economic activity. The manufacturing sector as a unit, however, and even more so its major industrial components, followed different patterns, showing the effects of one actual and one threatened major industrial strike. In the primary metals industry, the largest gain came during the third quarter of 1964; in transportation equipment and in metal fabrication the quarter-to-quarter changes showed the effects of strikes in the automobile industry that depressed employment levels during the fourth quarter of last year.

MODERATE DECLINE IN UNEMPLOYMENT

Most of the large gain in employment during the four-quarter interval, as previously stated, was used up in absorbing the expansion of the labor force. The remaining portion served to improve the overall rate of unemployment by 0.6 percentage points, on a

³ Data from the household series show that all blue-collar occupations, including those outside the manufacturing sector, contributed over 60 percent of the total nonagricultural employment gain during the interval although their share of total nonfarm employment is only 40 percent.

seasonally adjusted basis. This moderate improvement in the overall rate does not tell the entire story, however, as it fails to reveal changes in composition, that is, in unemployment among specific age groups, occupations, or industries. From Table I, which compares unemployment rates in major industries and occupations for the first quarter of this year with those for the same period last year, it is apparent that, while none of the rates has changed dramatically, some have declined noticeably more than others. For example, the drop in the rate of workers last employed in durable goods industries — where a larger-than-average employment gain had been noted — is proportionately twice as large as the decline in the total unemployment rate. In a similar way the employment gain among production workers in manufacturing industries shows up as an improvement in the unemployment rates for blue-collar occupations, particularly operatives and laborers. It is also reflected in the reduced unemployment level among adult men, which is not shown separately in the table.

From Table II it appears that in most occupations unemployment today is at a lower level than it was five years ago, just prior to the downturn in the business cycle. Low unemployment rates such as the one for professional and technical workers, and the high volume of job vacancies reflected in the level of the Index of Help-Wanted Advertising, published by the National Industrial Conference Board, are indications of a diminishing supply of at least certain types of trained labor. The question has been raised by some observers as to how close we are to a point where unemployment is mostly frictional,

TABLE I

**U. S. Unemployment Rates
for Major Industries and Occupations**

	1965 1st Quarter	1964 1st Quarter
TOTAL—Experienced wage and salary workers	5.4%	6.2%
Nonagricultural industries	5.2	6.0
Manufacturing	4.7	6.1
Durable goods	4.3	5.9
Primary metals	2.4	3.3
Fabricated metals	5.4	6.2
Machinery	2.8	3.3
Electrical equipment	4.4	6.3
Automobiles	2.4	3.3
Other transportation equipment	4.8	5.9
Nondurable goods	5.2	6.4
Transportation and utilities	3.6	4.5
Trade	6.2	7.1
Finance, insurance, real estate	2.6	3.1
Service industries	4.2	4.2
Public administration	2.1	2.9
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Professional and technical workers	1.6	1.7
Clerical workers	3.7	4.2
Sales workers	4.1	3.9
Craftsmen and foremen	5.5	6.1
Operatives	6.6	8.4
Nonfarm laborers	12.7	15.5
Service workers (excluding domestic)	6.6	7.1

Note: Not adjusted for seasonal variation.

Source: U. S. Department of Labor

short spell of idleness between jobs but lacking any reserves of unutilized labor available for expansion of production.

In the absence of a recognized specific figure pinpointing frictional unemployment, the rates prevailing in 1953—a year of high employment levels—are sometimes used as the closest approximation to frictional unemployment. As the data in Table II indicate, the unemployment rates for major occupational groups in the first quarter of 1965 were still much higher than comparable rates shown for 1953.

A further distinction between the two years can be found in the fact that in 1953, on average, almost two-thirds of total unemployment was short term (less than five weeks)

TABLE II

**U. S. Unemployment Rates
for Major Occupations**

	1965 1st Quarter	1960 1st Quarter	1953 Jan.-April (avg.)*
Professional and technical workers	1.6%	1.5%	0.9%
Clerical workers	3.7	3.9	1.7
Sales workers	4.1	4.3	2.3
Craftsmen and foremen	5.5	6.8	3.1
Operatives	6.6	8.3	3.5
Nonfarm laborers	12.7	16.1	7.0
Service workers (excluding domestic)	6.6	5.9	3.5

*Data for 1953 are available only for the first month of each quarter. As the spread between the rates for January and April for some of the occupations suggested that the average rate for the first quarter would have differed considerably from the single rate for January, the midpoint between the rates for January and April is used in this table.

Note: Not adjusted for seasonal variation.

Source: U. S. Department of Labor

and only 11 percent was long term (15 weeks or longer). By contrast, short-term unemployment during the first quarter of this year represented only 42 percent of the total number, and long-term unemployment—although down a little from a year earlier—was still 24 percent of the total.

FURTHER IMPROVEMENT NOT ASSURED

The level of unemployment during the remainder of the year will depend upon whether the increase in employment continues to be larger than the growth in the labor force. Several factors will combine to determine the amount and direction of change that may occur either in the size of the labor supply or in the volume of employment opportunities during coming months.

The labor force will receive a strong boost during the summer with the arrival of a record number of young jobseekers, who will be looking either for temporary or for permanent employment. The effect of the expected flood of teenage entrants upon the entire labor force, however, may be partially offset by a less-than-anticipated expansion of its adult components. From the data thus far released for the second quarter of 1965, it appears that the number of adult men and adult women in the work force has grown less in recent months this year than in the same months last year. The reduction in

growth is more pronounced among women than among men and has its counterpart in similar changes in total employment.⁴ In point of fact, reduced employment opportunities for marginal women workers—some of whom may be losing jobs to teenagers—may have been the cause for some of them to withdraw from the work force or refrain from entering it.

On the employment side, maintenance of a favorable balance between additional employment and additional labor supply during the summer months will, of course, depend upon the pace of economic activity. But it also will depend upon the degree of success of the Administration's crash program to develop additional summer jobs for young people. The employment-labor force balance will be influenced by the timing of the inventory adjustment in the steel industry later this year. It will be further affected by the number of new jobs that may last beyond the summer and thus help to accommodate the record number of young people who have graduated from school and will remain in the labor force at the end of the summer.

⁴ Reduction in growth is even more noticeable when only the nonagricultural portion of total employment (as reported in the household series) is considered. By contrast, nonagricultural wage and salary employment (as reported in the establishment series) continued to show undiminished month-to-month gains through May of this year, although the average March-May rise was less than earlier.

