Bank Reserve Requirements and Their Enforcement: A Comparison Across States

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THE proportion of commercial banks that are Federal Reserve members has been declining steadily in recent years, continuing a trend of over three decades. By the end of 1976, the percentage of commercial banks belonging to the Federal Reserve System had declined to 39 percent, compared to 45 percent at the end of 1966.

The reason banks mention most frequently for withdrawing from Federal Reserve membership is the cost of reserve requirements imposed on members relative to reserve requirements of the various states for nonmember banks.[1] Thus, an examination of the nature of state reserve requirements forms an important part of any analysis of declining Federal Reserve membership.

Of the previous studies dealing with state reserve requirements, the most comprehensive is that by Robert E. Knight.[2] Knight listed the reserves required by each state on various classes of deposit liabilities and the bank assets which qualify as reserves. In the four intervening years since the Knight study was published, reserve requirements have been changed in several states. The description of reserve requirements in this paper expands upon those in previous studies by including information on how states monitor the reserve positions of nonmember banks and enforce reserve requirements.

RESERVES REQUIRED OF FEDERAL RESERVE MEMBERS

Member bank reserve requirements are discussed before considering state reserve requirements to facilitate comparison between them. Reserve requirements of Federal Reserve members on net demand deposits are graduated, marginal requirements being higher for larger banks (see Table I). Reserve requirements on time deposits also tend to be higher for larger banks because of the higher requirement on that portion of time deposits with initial maturities between 30 and 179 days in excess of $5 million.

[1]Peter Rose, "Exodus: Why Banks are Leaving the Fed," *The Bankers Magazine* (Winter 1976), pp. 43-49.

[2]Robert E. Knight, "Reserve Requirements: Part 1: Comparative Reserve Requirements at Member and Nonmember Banks," Federal Reserve Bank of Kansas City *Monthly Review* (April 1974), pp. 3-20.

Table I

MEMBER BANK RESERVE REQUIREMENTS

Type of Deposit (Amounts in Millions of Dollars)	Percent
Net Demand:[1]	
first $2	7 %
$2 - $10	9.5
$10 - $100	11.75
$100 - $400	12.75
over $400	16.25
Savings	3
Time:	
Initial maturity of 30-179 days:	
first $5	3
over $5	6
Initial maturity of 180 days to 4 years	2.5
Initial maturity of over 4 years	1

[1]Net demand deposits equal gross demand deposits less demand balances due from other domestic banks and cash items in the process of collection.

Member banks must hold their reserves as either vault cash or reserve balances with their Federal Reserve Banks. They must meet their required reserves on a weekly average basis. The average reserve balance a member bank must hold at its Reserve Bank during each settlement week (seven-day period ending each Wednesday) is based upon its average deposit liabilities two weeks earlier less the bank's average vault cash two weeks earlier.

At the end of each reserve settlement week, member banks must file reports on daily deposit liabilities and reserve balances. These reports are used to determine whether member banks are meeting their reserve requirements. If the banks are not meeting their reserve requirements, penalties are assessed in amounts equal to the average reserve deficiencies times an interest rate two percentage points per annum above the prevailing Reserve Bank discount rate.[3]

[3]The penalty is waived if a reserve deficiency is two percent or less of required reserves for a settlement week and offset by excess reserves of equal dollar value in the following settlement week. Also, a member bank with excess reserves in one settlement week equal to two percent or less of required reserves can have a reserve deficiency of equal dollar amount in the following settlement week without a penalty. For a more detailed discussion of Fed reserve requirements, see Robert E. Knight, "Guidelines for Efficient Reserve Management," Federal Reserve Bank of Kansas City *Monthly Review* (November 1977), pp. 11-23.

NATURE OF STATE RESERVE REQUIREMENTS

Specification of Required Reserves and Reserve Assets

Information on reserve requirements of individual states for various classes of deposit liabilities and on the types of assets that are counted as reserves is presented in Table II. This information was obtained from the bank supervisors of each state.[4]

Reserve requirements differ greatly among states, with Illinois being the only state with no statutory requirements. Most states have higher reserve requirements on demand deposits than on time and savings deposits, and in three states the reserve requirement ratios apply to total deposits. Two states, Massachusetts and Rhode Island, do not require any reserves on time and savings deposits. In 19 states various types of deposit liabilities, primarily government deposits, are not subject to reserve requirements.

All states with reserve requirements count vault cash and demand deposits at correspondent banks as reserves.[5] In 27 states the banking authorities must approve correspondent banks as depositories if demand balances due from those banks are to be counted as reserves by nonmember banks. In 18 states cash items in the process of collection (CIPC) are also counted as reserves. Nonmember banks may meet various proportions of their required reserves with earning assets in 22 states, with remaining shares of required reserves to be met with cash assets. In six states nonmember banks may meet all of their reserve requirements with interest-earning assets, generally unpledged U.S. Treasury securities or state and local government securities; therefore, they have no *cash* reserve requirements.

Comparison of Federal Reserve and State Reserve Requirements

Reserve requirement ratios are higher in some states than those for Federal Reserve member banks, as indicated by comparing Tables I and II. However, reserve burdens of member banks relative to those of nonmembers cannot be determined just by comparing reserve requirements of the Federal Reserve to those of the various states because of several differences in the types of assets that are counted as reserves for members and nonmembers.

Nonmember banks may hold their cash reserves in the form of vault cash and demand balances at correspondents. Eighteen states allow nonmember banks to count cash items in the process of collection as reserves, and in other states many nonmember banks effectively count CIPC as reserves by classifying their uncollected funds as demand balances due from correspondents. Member banks, on the other hand, may hold their cash reserves only as vault cash and reserve balances at their Reserve Banks. Member bank reserve

[4]Most of the state bank supervisors provided this information in October or November of 1977.

[5]Correspondent banks hold deposit balances of other banks and provide services to those banks.

Table II

STATE RESERVE REQUIREMENTS

State	Deposits Subject to Reserve Requirements	Current Reserve Requirement Ratios	Reserve Assets Eligible to Meet Requirements: Vault Cash	Demand Balances Due From Banks	Securities	Other
Alabama	T Dem	10%	X	X		
	TS	3%	X	X		
Alaska[1]	T Dem-US_d-SL_d	20%	X	X		
	TS-US_t-SL_t	8%	X	X		
Arizona[1]	T Dem-US_d-SL_d-R_d	10%	X	X[2]	X[3]	CIPC
	TS-US_t-SL_t-R_t	4%	X	X[2]	X[3]	
Arkansas	T Dem	FR	X	X[2]		CIPC[4]
	S	3%	X	X[2]		
	T	3% first $5 million, plus 5% over $5 million	X	X[2]		

STATE RESERVE REQUIREMENTS (Continued)

State	Deposits Subject to Reserve Requirements	Current Reserve Requirement Ratios	Reserve Assets Eligible to Meet Requirements: Vault Cash	Demand Balances Due From Banks	Securities	Other
California[1]	T Dem-US_d-SL_d-R_d -CIPC-Due From[5]	FR	X	X[2]		
	TS-US_t-SL_t	5%	(at least 20%)		(up to 80%)[6]	
Colorado[1]	T Dep-US_d-SL_d -US_t-SL_t	15%	X	X[2]	X[6]	
Connecticut	T Dem-Due From -CIPC	12% first $5 million, plus 12.5% over $5 million	at least one-sixth	X[2]	up to one-sixth[7]	
	T	3%				
Delaware[1]	T Dem-US_d-SL_d	7% first $100 million, plus 9% over $100 million	at least 50%[2, 8]		up to 50%[9]	
	TS-$US_t$$SL_t$	3%				
Florida[1]	T Dep-US_d-SL_d -US_t-SL_t	20%	X	X	X[6]	
Georgia[1]	T Dem-US_d-SL_d-R_d	15%	(at least 50%)[2 10 11]		(up to 50%)[12]	CDs[14]
	TS-US_t-SL_t-R_t	5%	X	X	X[13]	
Hawaii	T Dem-US_d-SL_d	12%	at least 25%	up to 75%[2]		
	TS-US_t-SL_t	5%				
Idaho	T Dem	15%	X	X[2]		
	TS	5%	X	X[2]		
Illinois	(No statutory reserve requirements)					
Indiana	T Dem	10%	X	X		CIPC
	TS	3%	X	X		CIPC
Iowa	T Dem	7%	X	X[2]		
	TS	3%	X	X[2]		
Kansas[1]	T Dem-US_d-SL_d	FR	X	X		
	TS-US_t-SL_t	FR	X	X		
Kentucky	T Dem	7%	(at least 75%)[15]		(up to 25%)[16]	CDs[17]
	TS	3%	X	X	X	
Louisiana	T Dem-CIPC	7.5% first $2 million, plus 10% $2-$10 million, plus 12% $10-$100 million, plus 13% $100-$400 million, plus 14% over $400 million	at least 50%		up to 50%[18]	
	TS	3%				
Maine	T Dem-TTL	10%	X	X[2 11]	X[19]	Fed funds sold
	S	2%	X			
	T	4%	X			
	NOW	8%	X			
Maryland	T Dem-US_d-SL_d	15%	(at least two-thirds)		(up to one-third)[20]	
	TS-US_t-SL_t	3%	X	X	X[21]	
Massachusetts	T Dem plus time deposits subject to withdrawal within 30 days	Boston - 20% Others - 15%	at least 15%	up to 80%	up to 80%[9]	
Michigan	T Dem	11%	X	X[2]		
	TS	6%	(at least 10%)[2]		(up to 90%)[13]	

STATE RESERVE REQUIREMENTS (Continued)

State	Deposits Subject to Reserve Requirements	Current Reserve Requirement Ratios	Reserve Assets Eligible to Meet Requirements: Vault Cash	Demand Balances Due From Banks	Securities	Other
Minnesota	T Dem	The following percentages are not marginal requirements but apply to total demand deposits: 7% \$0-\$2 million; 9.5% \$2-\$10 million; 11.75% \$10-\$100 million; 12.75% \$100-\$400 million; 16.25% over \$400 million	at least 70%[15]		up to 30%[19]	
	S	3%				
	T	3% maturing in 30-179 days; 2.5% maturing in 180 days to 4 years; 2% maturing in 4 or more years				
Mississippi	T Dem	FR	at least 70%		up to 30%[22]	
	TS	FR				
Missouri	T Dem	FR	at least 50%, including CIPC[2]		up to 50%[23]	
	TS	3%				
Montana	T Dem	7.5% first 2 million, plus 10% over \$2 million	X	X[2]		
	TS	3%	X	X[2]		
	Due to Banks[24]	10%	X	X[2]		
Nebraska	T Dem	15%	at least 50%		up to 50%[25]	
	TS	5%				
Nevada[1]	T Dem-US_d-SL_d	FR	X	X[2]		
	TS-US_t-SL_t	FR	X	X[2]		
New Hampshire	T Dem	12%	at least 60%		up to 40%[26]	
	TS	5%				
New Jersey	T Dem	FR	X	X[2]		CIPC
	TS	FR	X	X[2]		CIPC
New Mexico	T Dem	12%	at least 50%, including local CIPC[2]		up to 50%[27]	
	TS	4%				
New York	T Dem-CIPC -Due From[5]	Same as FR except one percentage point lower on all deposit size categories	X	X[2]		
	TS	FR	X	X[2]		
North Carolina[1]	T Dem-US_d-SL_d	8% first \$2 million, plus 10% \$2-\$10 million, plus 12% \$10-\$100 million, plus 13% \$100-\$400 million, plus 15% over \$400 million	X	X[2]		CIPC
	S	3%	X	X[2]		CIPC
	T-US_t-SL_t	Maturing within 180 days: 3% first \$5 million; 6% over \$5 million. Maturing in 180 days or more: 3%	X	X[2]		CIPC
North Dakota	T Dem	8%	X	X[2]		
	TS	2%	X	X[2]		

STATE RESERVE REQUIREMENTS (Continued)

State	Deposits Subject to Reserve Requirements	Current Reserve Requirement Ratios	Reserve Assets Eligible to Meet Requirements: Vault Cash	Demand Balances Due From Banks	Securities	Other
Ohio	T Dem	7%	X	X		
	S	3%	at least 40%[28]		up to 60%[29]	
	T	Time deposits of $100,000 and over maturing in less than 6 months: 3% first $5 million 6% over $5 million Other time deposits: 3%				
Oklahoma	T Dem	FR	X	X[2]		CIPC
	TS	FR	X	X[2]		CIPC
Oregon	T Dem-US_d	12%	X	X[2]		CIPC
	TS-US_t	4%	X	X[2]	X[21]	CIPC
Pennsylvania	T Dem	12%	at least 50%[2]		up to 50%[30]	
	S	3%				
	T	3% first $5 million, plus 5% over $5 million				
Rhode Island[1]	T Dem-US_d	15%	X	(up to 60%)[2]	X[31]	
	(no reserve requirements on time and savings deposits)					
South Carolina	T Dem	7%	X	X		CIPC[32]
	TS	3%	X	X		CIPC[32]
South Dakota[1]	T Dep-US_d-SL_d -US_t-SL_t	17.5%	(at least 40%)[2 15]		(up to 60%)[13]	
Tennessee	T Dem	10%	X	X		Local CIPC
	TS	3%	X	X		
Texas	T Dem	15%	X	X[2]		CIPC
	TS	5%	X	X[2]		Time Deposits and CIPC[33]
Utah	T Dem	FR	X	X		
	TS	FR	X	X		
Vermont[1]	T Dem-US_d-SL_d	27%	X	X	X[34]	
	TS-US_t-SL_t	6.5%	X	X		
Virginia	T Dem-R_d	10%	X	X[11]		CIPC
	TS-R_t	3%	(at least 75%)[11 15]		(up to 25%)[35]	
Washington	T Dem	7% first $2 million, plus 9.5% $2-$10 million, plus 11.75% $10-$100 million, plus 12.75% $100-$400 million, plus 15% over $400 million	X	X		CIPC
	TS	Maturing in 30-179 days: first $5 million - 3% over $5 million - 6% Maturing in over 4 years: 1% Other maturities: 3%	X	X		CIPC
West Virginia	T Dem	7%	at least 20%	X		CIPC
	TS	3%		X		CIPC
Wisconsin	T Dem					
	Reserve Banks[36]	20%	at least two-thirds		up to one-third[37]	
	Other	12%				

STATE RESERVE REQUIREMENTS (Continued)

State	Deposits Subject to Reserve Requirements	Current Reserve Requirement Ratios	Reserve Assets Eligible to Meet Requirements: Vault Cash	Demand Balances Due From Banks	Securities	Other
Wisconsin	TS					
	Reserve Banks[36]	20%	at least five-twelfths		up to seven-twelfths[37]	
	Other	12%				
Wyoming[1]	T Dem-US_d-SL_d	20%	at least 50%[2 15]		up to 50%[38]	
	TS-US_t-SL_t	10%				

[1]Exemption applies only to public deposits which are secured by pledged securities.
[2]Demand balances at approved depository banks.
[3]Unpledged U.S. Government securities maturing within six months.
[4]Cash items in the process of collection on insured local banks, where local banks are those domiciled in the same or immediately adjoining municipalities.
[5]Demand balances at banks other than approved depository banks.
[6]Unpledged negotiable direct U.S. Government obligations.
[7]U.S. Government bonds.
[8]Unsecured trust funds held as demand deposits due from other banks may not be counted as part of reserves.
[9]Unpledged debt obligations of the State, its political subdivisions, or the United States.
[10]If amount of deposit is in excess of 10 percent of depositing bank's capital and surplus, state must approve depository.
[11]Net of reciprocal deposits.
[12]Unpledged U.S. Government or agency obligations maturing within one year, or certificates of deposit maturing within one year. The maximum amount deposited with any one bank shall not exceed $100,000 or 10 percent of the depositing bank's reserve requirement, whichever is greater.
[13]Unpledged U.S. Government or agency obligations.
[14]Unpledged certificates of deposit not used to meet reserve requirements against demand deposits.
[15]Includes CIPC.
[16]Up to 25 percent of reserve requirements against demand deposits may be met with U.S. Government or agency obligations maturing within one year or certificates of deposit of any Kentucky bank.
[17]Certificates of deposit of any Kentucky bank.
[18]Up to one-half of required reserves may be met with unpledged direct U.S. Government obligations maturing within one year or obligations of the State of Louisiana maturing within two years, except that state obligations may account for no more than one-fourth of total required reserves.
[19]Unpledged U.S. Government or agency obligations maturing within one year.
[20]Debt obligations of the State, its political subdivisions, or the United States.
[21]Debt obligations of the State or the United States.
[22]Up to 30 percent of required reserves may be invested in direct obligations of the U.S. Treasury or other obligations fully guaranteed by the U.S. Government which mature within one year; a portion of the 30 percent maximum, not to exceed one-half, may be met with negotiable certificates of deposit issued by Mississippi banks which mature within one year.
[23]Up to 50 percent of required reserves may be invested in unpledged U.S. Government obligations maturing within five years and unpledged Federal funds sold to approved depositories.
[24]Nonmember banks designated as reserve depositories must maintain, in addition to the reserve requirements on all demand deposits, reserves of 10 percent on demand deposits due to other banks.
[25]Up to one-half of required reserves many be met with unpledged U.S. Government securities, at market value, or obligations of the Commodity Credit Corporation, at face value.
[26]U.S. Government obligations maturing within two years.
[27]Direct unpledged U.S. Government obligations maturing within 100 days.
[28]Of required reserves on time and savings deposits, 5 percent may consist of unassigned values of life insurance policies owned by the bank, covering the lives of directors, officers, or employees of the bank, under which the bank is sole beneficiary of the cash surrender value of the policy.
[29]Debt obligations issued, insured, or guaranteed by the United States.
[30]Debt obligations of the Commonwealth, its political subdivisions, the United States, or other marketable obligations approved by the state banking authorities.
[31]U.S. Government or agency obligations maturing not more than 91 days from computation of reserves.
[32]Cash items collectible within 10 days.
[33]The reserve requirement on time and savings deposits may be met with time deposits at approved depositories.
[34]Of total required reserves, 40 percent must be in the form of vault cash, demand balances due from other commercial banks, and direct U.S. Government obligations maturing within one year. The remaining 60 percent may be held in U.S. Government or agency obligations of any maturity, and one-third of this 60 percent may be obligations of the State of Vermont.
[35]Unpledged U.S. Treasury obligations maturing within one year.
[36]Approved by state banking authorities as reserve bank.
[37]U.S. Government securities and general obligation bonds and notes of the State of Wisconsin maturing within 18 months.
[38]Unpledged U.S. Treasury bills.

KEY TO CODING

FR	Same as reserve requirements of Federal Reserve	SL_t	State and local government time deposits
T Dep	Total deposits	Due From	Demand deposits due from domestic commercial banks
T Dem	Total demand deposits	R_d	Reciprocal demand deposits
T	Time deposits	R_t	Reciprocal time deposits
S	Savings deposits	CIPC	Cash items in process of collection
US_d	U.S. Government demand deposits	TTL	Treasury tax and loan accounts
US_t	U.S. Government time deposits	NOW	Negotiable Orders of Withdrawal
SL_d	State and local government demand deposits	CD	Certificate of Deposit

balances are only *collected* reserves since members receive credit to their reserve accounts for checks deposited with their Reserve Banks on a time schedule which approximates the time required for collection of the checks.

Most member banks with total deposits up to about $50 million hold demand balances at correspondents almost as large as the demand balances held by nonmember banks of similar size.[6] An important explanation of this behavior by member banks is that most of them in that size range make little use of Reserve Bank services, using those of correspondent banks instead.[7] As a result, member banks tend to hold substantially higher ratios of cash to total deposits than nonmembers of comparable size.

Monitoring and Enforcing Reserve Requirements

State reserve requirements have little relevance for banks unless states establish methods of monitoring the reserve positions of nonmember banks and forcing them to keep their reserves up to required levels. In the survey, state bank supervisors were asked to describe their methods of monitoring and enforcing reserve requirements. Their responses are presented in Table III. This information does not indicate whether state reserve requirements actually influence behavior of nonmember banks, but is presented to fill a void in information available on state reserve requirements.

One aspect of reserve requirements presented in Column (1) is reserve settlement periods, that is, the periods over which reserves and deposit liabilities are averaged in determining whether banks are meeting their reserve requirements. Half of the states have either two week or semimonthly reserve settlement periods, while 15 states have weekly reserve settlement periods. Eight supervisors indicated that either reserves of nonmember banks in their states are not averaged or no reserve settlement period is specified. In such states examiners determine a bank's reserve assets and required reserves as of the examination date. If a bank's reserves are not adequate as of that day, some states then average reserves held and required reserves over longer periods of time. Other states give the bank a specified period of time to bring their reserves up to required levels.

Monitoring procedures are described in Column (2) of Table III. In 11 states nonmember banks are required to file reports with their supervisors on daily reserves and deposit liabilities at the end of each reserve settlement period. In 28 other states banks are required to keep such records for inspection by state bank examiners, but do not send reports on reserve positions to their supervisors. Eight states require banks to send notice of reserve deficiencies to their supervisors within a few days after reserve settlement periods in which such deficiencies occur. States generally impose fines on banks which do not send such notices.

One of the ways states enforce reserve requirements is to impose dollar penalties for reserve deficiencies; 19 states have dollar penalties for reserve deficiencies. Information on those penalties is presented in Column (3) of Table III. Some supervisors indicated that in their states dollar penalties are seldom imposed, either because their banks seldom have reserve deficiencies or because penalties are often waived. However, other supervisors indicated that penalties are imposed often in their states, giving specific frequencies and total dollar amounts.

States that do not have dollar penalties for reserve deficiencies generally have other enforcement powers. The most common non-dollar penalties are prohibitions on making loans or paying dividends while banks have reserve deficiencies. Also, in 14 states bank supervisors have authority to declare banks with reserve deficiencies unsound and to close them. The supervisors indicated that these non-dollar penalties are seldom imposed.

SUMMARY

The reasons most commonly given for declining Federal Reserve membership deal with the level and form of reserve requirements on Federal Reserve member banks relative to those imposed by states on nonmember banks. Upon examination, however, comparisons of reserve requirements of member and nonmember banks are difficult. Deposits subject to reserve requirements differ between the Federal Reserve and state banking agencies, and among states. The periods over which reserve accounts must be settled also vary among states, from weekly periods (as with the Federal Reserve) to monthly periods (as in one state).

[6]Knight, "Reserve Requirements: Part 1," p. 11.

[7]R. Alton Gilbert, "Utilization of Federal Reserve Bank Services by Member Banks: Implications for the Costs and Benefits of Membership," this *Review* (August 1977), pp. 2-15.

Table III

ENFORCEMENT OF STATE RESERVE REQUIREMENTS

State	(1) Reserve Settlement Period	(2) Periodic Reports	(3) Penalty for Deficiencies	(4) Comments
Alabama	Weekly	None[1 2]	Federal Reserve discount rate plus 2 percent per annum on each $1,000 of average deficiency	Penalties on reserve deficiencies became effective in December 1975. From then to April 1977, $6,000 in penalties were collected. The high deficiency rate was due to elimination of local clearings as reserve assets in December 1975.
Alaska	Reserves not averaged	None[1]	No dollar penalty.[5] Possible penalty for failure to keep records of reserve positions — $5,000.	
Arizona	Biweekly	Biweekly	No dollar penalty	
Arkansas	15 days	None[1]	8 percent per annum	Numerous reserve deficiencies were discovered during examinations prior to 8 percent penalty, but such occurrences have decreased since instituting the penalty.
California	Biweekly	Biweekly	Penalty rate ranges from 6 percent to 12 percent per annum depending upon size of deficiency relative to total deposits.[7]	
Colorado	Weekly	None[1]	No dollar penalty	
Connecticut	*Semimonthly*	*None*[3]	*No dollar penalty*[4 5 7]	
Delaware	Semimonthly	Semimonthly	No dollar penalty[7]	
Florida	30 days	None	No dollar penalty[5 7]	Reserve assets are compared to required reserves as of the examination date. If reserves are deficient that day, a 30 day average is calculated.
Georgia	Biweekly	None[1 2]	$50 per day for failure to notify state of deficiency[4 5 7]	Violations of reserve requirements occur rarely.
Hawaii	Weekly	None[1]	No dollar penalty [4 7]	
Idaho	Biweekly	Biweekly	No dollar penalty[4 5]	A bank may not make additional loans while its reserves are deficient. This penalty would be imposed only after two warnings.
Indiana	Biweekly	None[1]	No dollar penalty[4 5]	
Iowa	5 days	None	$100 per day of reserve deficiencies	Compliance with reserve requirements is checked as of examination period. Reserve deficiencies are infrequent and penalties are applied only as a last resort.
Kansas	None	None[1]	No dollar penalty[6 7]	
Kentucky	Biweekly	None[1]	No dollar penalty	
Louisiana	Semimonthly	None[1 2]	If reported deficiency in reserves is not restored within period satisfactory to state, or if state banking authorities discover unreported deficiency, penalty of *6 percent per annum may* be imposed.	Reserve deficiencies do not occur frequently.
Maine	Weekly	Weekly	Penalty at variable rate not to exceed 10 percent per annum; imposed when deficiency is greater than 2 percent of required reserves[4]	

ENFORCEMENT OF STATE RESERVE REQUIREMENTS (Continued)

State	(1) Reserve Settlement Period	(2) Periodic Reports	(3) Penalty for Deficiencies	(4) Comments
Maryland	Reserves not averaged	None. Reserve requirements are calculated on a day-to-day basis at the time of examination.	No dollar penalty. Continued violations can lead to removal of directors and officers of a bank.	
Massachusetts	Weekly	Weekly	No dollar penalty assessed for reserve deficiency. Penalty for not reporting deficiency is $1,000 per week or imprisonment for not more than one year.	
Michigan	Biweekly	Biweekly	No dollar penalty	Repeated reserve deficiencies could bring about a cease and desist order from the state. A penalty of $50 is assessed for not filing reports on reserve positions.
Minnesota	Biweekly	None[1]	For each biweekly period of reserve deficiency, penalty of $50 or 12 percent per annum on reserve deficiency, whichever is greater	Penalties for reserve deficiencies assessed on 54 out of 547 nonmember banks in 1976
Mississippi	Biweekly	None[1]	$50 for each day a bank's reserves are deficient, unless covered by excess reserves in the previous or following biweekly period	In recent history all reserve deficiencies have been covered by excess reserves in the previous or following biweekly periods.
Missouri	Weekly	None[1]	No dollar penalty[4, 6]	
Montana	Weekly	None[1]	No dollar penalty[4]	Examinations disclose few reserve deficiencies, and most of those are of one week duration.
Nebraska	Weekly	None[1]	8 percent per annum on reserve deficiencies plus $5 per day of reserve deficiencies[4, 5, 7]	
Nevada	15 days	None[1]	No dollar penalty	Excessive or continued deficiencies discovered during examinations are reported to bank management and Board of Directors. Banks have 60 days after examination to rectify reserve deficiencies.
New Hampshire	Reserves not averaged	None	No dollar penalty[4, 5]	
New Jersey	Semimonthly	None[1]	No dollar penalty[5]	Violations of reserve requirements are infrequent.
New Mexico	Reserves not averaged	None.[2] Reserves are checked as of examination date.	If reserve deficiency is discovered as of examination date, the penalty is $100 per day while deficiency continues.	
New York	Weekly, with lagged reserve requirements and carry-over provision identical to that of the Federal Reserve	Weekly	Penalties range from 6 percent to 12 percent per annum, depending upon size of deficiency relative to deposit size of bank.	Penalties are not mandatory, but imposed only if a bank is deficient for two consecutive weeks.
North Carolina	Biweekly	None[2]	No dollar penalty[4, 5]	Penalties are not imposed with significant frequency.
North Dakota	Weekly	None[1]	If a bank is deficient in reserves as of examination date, it has 30 days to rectify, or the state may impose a penalty of $100 or 7 percent per annum on deficiency, whichever is greater.	

ENFORCEMENT OF STATE RESERVE REQUIREMENTS (Continued)

State	(1) Reserve Settlement Period	(2) Periodic Reports	(3) Penalty for Deficiencies	(4) Comments
Ohio	Biweekly	None[2]	No dollar penalty[6 7]	
Oklahoma	Semimonthly	Semimonthly	After two consecutive periods of deficiency, penalty at rate of 2 percentage points per annum above the Federal Reserve discount rate is assessed.	In 1976, 13 penalties were assessed on 7 banks. Penalties may be waived, but this is rarely done, except for penalties under $25.
Oregon	Reserves not averaged	None[1]	If bank has a reserve deficiency on any day, it has three days to eliminate the deficiency, or a penalty is assessed. The penalty rate is 2 percentage points per annum above the Federal Reserve discount rate.	
Pennsylvania	Biweekly	None[1 2]	No penalty for reserve deficiency, but a $50 fine assessed per day for not reporting a deficiency within three days	
Rhode Island	Weekly	Semiannually	No dollar penalty[4 5 7]	
South Carolina	Reserves not averaged	None[1]	No dollar penalty	Very few reserve deficiencies found by examiners
South Dakota	Weekly	None[1]	$50 per day of reserve deficiency	Very few penalties each year
Tennessee	Weekly	None[1]	No dollar penalty[4 5 7]	
Texas	Weekly	None[1]	Three grace periods per year, fine of $50 for fourth weekly period of reserve deficiency, with fines increasing up to $500 per period for 10 or more periods of reserve deficiency	
Utah	Biweekly	None[1 3]	No dollar penalty[4 7]	No record of penalties for reserve deficiencies ever having been imposed
Vermont	Reserves not averaged	None[3]	No dollar penalty	Only occasionally are banks found to have reserve deficiencies.
Virginia	Biweekly	None[1]	No dollar penalty	Violations of reserve requirements could be punishable as a misdemeanor. State banking authority is not aware of the penalty ever having been imposed.
Washington	Semimonthly	None[1 2]	Penalty is $100 per reserve settlement period of deficiency or prime rate plus 2 percentage points times average deficiency, whichever is smaller.	In 1976, 11 fines were imposed.
West Virginia	Biweekly	Biweekly	Penalty rate is 2 percentage points per annum above Federal Reserve discount rate.[4]	In 1975, 19 penalties imposed for reserve deficiencies, in 1976, 38 penalties imposed
Wisconsin	Biweekly	None[1]	If bank does not make up deficiency within 30 days after notice from state, a fine of $100 for each biweekly period of reserve deficiency may be imposed.[4 7]	Violations occur infrequently, and no penalties have been imposed during the past 15 years.
Wyoming	Biweekly	Biweekly	No dollar penalty[4 5 7]	

[1]Records of reserve positions must be kept by banks for inspection by examiners.
[2]Banks must report reserve deficiencies to state shortly after deficiencies occur.
[3]Reserves are checked at time of examination. Spot checks are made for periods between examinations.
[4]Making loans is restricted during periods of reserve deficiency.
[5]Declaring dividends is restricted during periods of reserve deficiency.
[6]Banks with reserve deficiencies may be forced to comply with reserve requirements through cease and desist orders.
[7]Continued failure to comply with reserve requirements can lead to liquidation of the bank by the state.

More importantly, the form in which reserves may be held differs crucially between requirements of the Federal Reserve and those of the states. While member banks must hold their reserves in cash or as deposits in their Federal Reserve Banks, nonmember banks in a majority of states may invest their reserves in interest-earning assets. Nonmember banks in seven states have no cash reserve requirements; in six of those states they may meet all of their reserve requirements with interest-bearing assets, and in Illinois, nonmember banks have no statutory reserve requirements.

It is also important to note that enforcement of reserve requirements by most states is not as strict as that by the Federal Reserve. Thirty-seven states do not require nonmember banks to file frequent reports detailing reserve positions. Moreover, 30 states have no dollar penalties assessed on banks with reserve deficiencies.