

ISSUE OF THE FEDERAL RESERVE'S PROPOSED
UNIFORM RESERVE REQUIREMENT PLAN

REMARKS BY

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AT THE ANNUAL CONVENTION

OF THE OHIO BANKERS ASSOCIATION

THURSDAY, MAY 16, 1974

AT

THE CLEVELAND PLAZA HOTEL

CLEVELAND, OHIO

Issue of the Federal Reserve's Proposed
Uniform Reserve Requirement Plan

I welcome this opportunity to share with you my perspective on one of the many controversial issues currently identified with the Federal Reserve System. And as you well know there are others -- capital adequacy, appropriate activities of holding companies, the level of interest rates, the role of the System in electronic funds transfer, the reduction of float, yes, even the general economic environment. And if that's not enough to assure a cold reception, we get charged with the responsibility for the several issues which we have no control over, such as the penny problem, the disintermediation of funds resulting from recurring Treasury offerings, and I could go on.

All of these have rather low emotional boiling points which when reached shed far more heat than light on the issue. With the prospect that our energy problem may be a continuing one, I'm hopeful that as problems arise we can find ways to address them which will contribute to bringing about more enlightened understanding and much less heat than have marked some of the issues in the past. Difference of opinion and perspective I respect. My humbleness increases as I tackle each new issue, and the System is increasing its solicitation of opinions on its various proposals as it attempts to grapple with more and more complex issues. The solutions we seek are those that will be conducive to the general welfare as we understand it. These terms "general welfare" and "public benefit" pose problems because the precise definitions have shifted and will probably continue to shift over time. Moreover, our judgments are not infallible and benefit greatly from the comments and criticisms of others.

Even so, I'm the first to recognize that changes in our system, which are designed to improve the general welfare, are not without costs, particularly in the short run, and these possible costs must be weighed against the prospective benefits. It's with this approach that I address the topic you've asked me to discuss with you this morning.

Proposals to extend Federal Reserve reserve requirements to all commercial banks have been around for many years. As you well know, the current proposal, embodied in Senate Bill 2898 introduced on January 28 by Senators Sparkman and Tower, reflects the criticisms we have received on previous proposals in that it embodies significant changes from prior proposals. There is growing evidence that this is an idea whose time may be near. Briefly, the provisions of this Bill are:

- (a) to permit the Federal Reserve to set reserve requirements at non-member banks on net demand deposit liabilities in excess of \$2 million. The actual requirement could be varied within the range of 5% to 22%, and could be met by holding vault cash or deposits with a Federal Reserve Bank.
- (b) similarly, to permit the Federal Reserve to set reserve requirements on all Negotiable Order of Withdrawal accounts whether issued by banks or other institutions within the range of 3 to 20%, again, only on NOW account liabilities aggregating more than \$2 million.
- (c) to "phase in" these requirements over four years by exempting 80% of initial required reserves the first year, 60% the second, 40% the third, and 20% the fourth, so that only in the fifth year after enactment would the full requirement be effective.

- (d) to provide access to the Federal Reserve Banks' Discount lending facility for all institutions subject to Federal Reserve reserve requirements.
- (e) to require reporting of deposits and reserve levels to the Federal Reserve by non-member banks and NOW account issuers.

Let me deal first with the part of the proposal that would require all issuing institutions to report their demand and NOW balances and reserve holdings to the Fed. After that, I will turn to the question of reserve requirements.

Reporting

The Federal Reserve has the responsibility for managing money and credit in our economy. Especially in recent years, the Fed has borne the brunt of criticism for inflation in the United States, because its critics argue, it has failed to restrain the growth of money and credit to non-inflationary rates. During these same years Federal Reserve policy decisions have shifted more towards controlling growth rates of money and credit and away from the more traditional technique of setting interest rates and money market conditions. This shift in emphasis has taken place largely because inflation and inflationary expectations have seriously weakened the reliability of interest rates as indicators of tightness or ease of monetary policy. But this shift has now put the Fed in what I can only describe as the awkward position of trying to manage the growth of something that it cannot measure. At the moment, we guess that about 25% of the nation's money stock escapes adequate measurement because it is in the form of demand deposits at non-member banks. The only data we now regularly receive by which to measure the growth of this large and growing non-member bank portion of the money stock comes from call reports to the FDIC on June 30 and December 31 of

each year. This scant semi-annual information which comes to us with a time lag is most unsatisfactory even as a basis for measuring the quantity of money, let alone for careful Federal Reserve management of money and credit consistent with non-inflationary growth. What's more, looking to the future with the strong possibility that NOW accounts will become a widespread reality, the Fed's situation will become even more awkward unless it can get continuous, timely reports from both non-member banks and NOW account issuers. It seems clear to me that no matter how one comes out on other aspects of the legislation, the proposal for reporting deposit information merits the wholehearted support of everyone. The problem this lack of information poses for the market participants is almost as great as that faced by the regulators.

Reserve Requirements

Now let me turn to the reserve requirement proposal. I will spell-out in some detail my assessment of the pro's and con's of the proposal because I know that many bankers have serious misgivings about the ultimate effect of this action on the long-run viability of the traditional organization of American banking.

In summary, my position is this:

--Reserve requirements are an important tool for a central bank.

--The public interest would be better served if reserve requirements were extended to all banks and NOW account issuers for two reasons:

First, it would result in some increase in precision of Fed control of the money stock. Second, and more important, it would distribute the cost burden of central bank control more equitably among competing deposit institutions.

--I am fully aware that there are several reasons to be cautious about extending reserve requirements. In particular, I am not unmindful of the charge that the proposal constitutes a threat to the dual banking system and to private correspondent banking relations.

--My analysis of the situation, however, particularly in Ohio, leads me to conclude that there are adequate safeguards in the proposed legislation to prevent both of these effects from occurring.

Reserve requirements serve three important functions for the central bank. They impart a modicum of extra liquidity to the banking system on a day-to-day basis; they enable the central bank to be more resolute in its open market operations by promoting a broader, more competitive market in cash reserves of the banking system; they improve the precision of monetary control by providing an alternative to open market operations, and by more closely limiting the ability of reserve holding institutions to expand the quantity of money and credit.

As a general principle one could argue that extending the coverage of reserve requirements to a wider group of deposit institutions assures fuller realization of each of these benefits. However, all national banks, and some state banks are of course already subject to Federal Reserve reserve requirements. The question then is whether the additional benefits expected from extending reserve requirements to non-member banks and NOW account issuers will exceed any disadvantages arising from the wider coverage. It is this judgment that is at the heart of public debate

Precision of Monetary Control

One of the stated objectives of the proposed legislation is to improve monetary control. It is impossible to estimate very accurately how much improvement should be expected because, as I have said, we have rather poor data on which to base a judgment. On the basis of the information available, however, it appears that demand deposits have been growing more rapidly at non-member banks than at comparable member banks for a number of years, and that demand deposits at non-member banks grow relatively even more rapidly during periods of restrictive Federal Reserve policy than otherwise.

Of course our information would be much better if all demand deposit and NOW account issuers were supplying continuous timely reports of their deposits and reserves. However, measuring the quantity of money or credit accurately is not the same as controlling the stock of money or credit precisely. To control the money stock requires some knowledge of the effect of policy actions on the money stock, and that kind of knowledge, however imperfect, can only be gained from long experience. Until enough years have passed for us to gain and analyze experience with non-member banks and NOW accounts, reserve requirements can serve a useful purpose in two ways. First, they impose an ultimate limit on expansion of non-member bank deposits and NOW accounts. For example, if the reserve requirement were 10%, it would be impossible for non-member deposits to be larger than 10 times the volume of eligible reserve assets held by non-member banks. Second, and more importantly, extending reserve requirements would reduce unpredictable shifts in the relation between the quantity of bank supplied money and the quantity of Federal Reserve supplied eligible reserve assets. This is so because

uniform national reserve requirements would replace 50 States' diverse requirements, thereby narrowing the range of possible deposit levels consistent with a given volume of Federal Reserve supplied reserve assets and reducing unpredictable changes in money market conditions in the short-run. For these reasons, extending reserve requirements to non-members and NOW accounts will make a contribution, marginal though it may be, to more precise control of money and credit by the Federal Reserve.

It's been a bit diversionary that most of the attention has focused on this point about improving monetary control since there is really a much more important issue involved here than any potential contribution to better management of money and credit. This is simply the fundamental matter of equity. Stating the question plainly, is it equitable to assess one group of banks in the form of compulsory non-interest bearing reserve requirements while another group of banks is subject to less stringent reserve requirements of state banking codes? The benefits of reserve requirements in the form of banking system liquidity, competition, and monetary control are enjoyed by all banks and their customers. Why should some banks get a free ride? Or, perhaps it would be more diplomatic to ask, why should some banks be denied the privilege of sharing the burden of central bank control? Or, to put the matter in a more neutral perspective, are the benefits of more assured monetary control and a clearly more equitable distribution of the burden of central banking outweighed by any costs of imposing reserve requirements uniformly across all money issuing institutions? Finally, to strip the issue of all its trappings, should banks of similar size operate under the same competitive rules? In answering this question or these questions, I would like to do three things. First, I'll report on the

apparent costs to Ohio non-member banks of complying with the proposed reserve requirement legislation. Second, I'll make some judgments about the resiliency of the dual banking system. Third, I'll consider the matter of private correspondent relations.

Impact on Ohio Non-Member Banks

There were 169 non-member commercial banks chartered by the State of Ohio doing business as of June 30, 1973, for which call report information is now available. My best estimate is that only 38 of those 169 banks would have been affected in any significant way if the proposed legislation had been completely phased in last June. This estimate is based on a bank-by-bank analysis, taking into account the following factors:

- Reserve requirements would only be effective for those banks whose net demand deposit liabilities were in excess of \$2 million. Net demand deposits on which reserves would be calculated are equal to gross demand deposit liabilities net of cash items in process of collection and demand balances with other U. S. banks.
- The level of reserve requirements for non-members is not specified in the proposed legislation except for the permissible range of 5 to 22%. I have assumed for the sake of argument that the actual level of requirements would be identical to that of member banks except for the \$2 million reserve-free provision.
- Reserve assets for Federal Reserve purposes are restricted to vault cash and collected balances on deposit at a Federal Reserve Bank or Branch. Thus, for my purpose, only vault cash of non-members would have been an eligible reserve asset on June 30.
- The proposed legislation does not permit the Federal Reserve to set reserve requirements on time and savings account liabilities of non-members. However, the State of Ohio already requires a 3% reserve on these liabilities of which no less than 40% must be non-interest bearing assets.

Taking all these factors into account, and assuming that State reserve requirements on time and savings accounts were met by holding correspondent balances and interest bearing eligible securities, the following facts emerge:

- 63 non-member banks, out of 169, had net demand deposits smaller than \$2 million, and would have been exempt from meeting any requirements.
- An additional 68 non-member banks were already holding enough vault cash on June 30 to have met prevailing Federal Reserve reserve requirements on deposits in excess of \$2 million.
- For both of these groups of Ohio non-member banks, totaling 131 out of 169, or 72% of Ohio non-members, the proposed legislation would have had no effect on their operations whatever except to require periodic reporting of deposit and reserve balances.
- The remaining 38 banks, representing only 28% of all Ohio non-member banks, would have had to rearrange their assets a bit in order to have met reserve requirements. On average, these 38 banks were lacking only about \$1/2 million in eligible reserves, but were holding about \$2 1/2 million apiece in balances with other banks. Thus, by shifting only 20% of their balances (assuming that a sufficient portion were in collected funds) from other banks to vault cash or deposits at the Fed, these non-members on average could have met a reserve requirement without serious difficulty.

My point in reciting the details of this analysis of Ohio non-member banks is quite plain. The legislation currently under consideration

goes a long way toward minimizing the costs of reserve requirements to non-members as compared with earlier proposals. All non-members would have to make reports to the Fed, and this is absolutely essential for central bank policy decisions. But less than 30% of Ohio non-members (and less than 40% of non-members nationwide) would find it necessary to rearrange their portfolios in order to meet the reserve requirement level I have assumed. Moreover, the adjustments would be phased in over a period of years.

It may seem curious at first glance that extending reserve requirements is expected to contribute to more precise monetary control, but will leave most non-member banks unaffected. A closer inspection of the 38 Ohio banks that might be affected reveals that they account for over half of non-member bank net demand deposits in Ohio. In addition, the increase in precision is on a national basis, and the proposal will create uniform reserve requirements in all 50 states. Interstate movements of deposits will take place in the context of uniform minimum reserve needs, reducing some of the unpredictable variability in money market conditions that now can cloud policy operations.

Reserve Requirements and The Dual Banking System

One of the fears expressed about extending reserve requirements to non-member banks seems to be that, without the attraction of freedom from Federal Reserve reserve requirements, non-members would flock to become members of the Federal Reserve, or even convert in large numbers to national charters, causing the demise of the dual banking system. I wonder if this fear may not be a bit exaggerated.

The dual system of national and state chartering, and of member and non-member banks, has undoubtedly had a healthy influence in American banking regulation. Changing tides of state relative to national bank

chartering activity are a reasonable indicator of changing supervisory and regulatory practices. In a visible way, these shifts have kept supervisory authorities in both supervisory camps more alert to changing needs in the banking business, preventing ossification of banking regulation in the form of outmoded rules for chartering and examination.

There is little reason to fear that adopting the current proposal would eliminate the dual banking system. Let me illustrate why I think this is so:

- first, the proposal would in no way change reserve requirements on time and savings deposits at non-member banks. The present difference between Ohio non-member and member time and saving deposit reserve requirements is worth about \$17,000 per year in earnings to the average non-member bank, on the assumption that liquid assets could earn 8% on the difference between the Ohio minimum cash requirement of 1.2% and the Federal Reserve's current 3% requirement.
- The \$2 million of reserve free demand deposits is worth about \$12,800 in earnings to each non-member bank that has net demand deposits larger than \$2 million, either as straight earnings at an assumed 8%, or as an equivalent value of correspondent services.
- these combined advantages under the present proposal suggest that, simply from an unvarnished look at bank earnings, at least 15% of the aggregate earnings of non-member banks in Ohio (based on 1972 income statements) might be attributed to the difference in reserve requirements that would remain if the current proposal were adopted.

This is just another way of saying that I said earlier, that the present proposal will not affect the vast majority of Ohio non-member banks

except for the essential provision that they report deposit and reserve balances periodically. It is true that after four years of phase-in something like 28% of Ohio non-members will have to hold somewhat larger non-interest bearing collected balances than they have held in the past. But even after this shift to a more equitable distribution of reserve requirements among banks, there will remain a measurable difference between the requirements of members and non-members, consistent with a flourishing dual banking system.

Reserve Requirements and Correspondent Banking

The Federal Reserve is often referred to as a "banker's bank." It is true that since their inception the Federal Reserve Banks have played an important role not only as the repository for member banks' reserve deposits, but also as a provider of services such as check collection, coin and currency warehousing and shipping, securities' custodial care, and lender of last resort. At the same time private correspondent banks have performed some of these plus many additional services for their respondents. This has been a healthy arrangement for American banking. The Fed, with its public interest responsibility for maintaining an efficient, uniform payments system, is able to provide services embodying the standards necessary to fulfill its responsibility. Private correspondent banks and clearing house associations must then provide services that are at least competitive with Fed standards. The implied competition between the Federal Reserve Banks and private institutions, especially in clearing operations, seems a happy compromise between the alternatives of a Federal Reserve monopoly, with the consequent possibility of bureaucratic inertia and inefficiency, and free-

wheeling private provision of services without uniform standards and rules of access.

The fear has been expressed that extending reserve requirements to non-member banks will cause these banks to forsake their correspondents. After all, if non-members hold balances with the Fed, why not use the Fed's collection services and other services? Again, I find this fear to be somewhat exaggerated.

First, as my analysis of Ohio non-member banks suggests, only a minority of Ohio non-members would even face the need to hold balances at the Federal Reserve Bank: on June 30 vault cash holdings were already sufficient to meet the assumed reserve requirements at 131 out of 169 banks. Second, without in any way meaning to belittle the collection service my institution offers, still it is a fact that entrance to our clearing house is not completely attractive to many banks because of encoding and pre-sorting requirements. Also, for non-member banks, we do not accept out-of-District items. These differences should they continue would still make the automated collection services offered by correspondents the practical point of entry to the clearing network for many banks. Finally, while the Federal Reserve Banks are "banker's banks," they are not, and are not intended to be, "full service banker's banks." That is, we do not compete with private correspondents in offering the wide and changing array of strategic planning, management information systems, loan participation, international, and trust services that respondents demand. The areas in which we provide similar services are limited to those in which we have a responsibility,

either to the Treasury as its fiscal agent, or to the Congress as the guarantor of an efficient uniform payments system. For example, development of RCPCs, and any future role in an electronic funds transfer system may impinge on payments system services of private correspondent banks because we have a responsibility to operate in that area. But the correspondent banking business rests on a much broader base than payments system services and reserve and clearing balances held to meet reserve requirements and clearing needs.

Perhaps some of the 38 Ohio non-member banks that held too little vault cash to meet my assumed reserve requirement would wish to rethink their correspondent relations if they build-up a balance at the Fed. On average those 38 banks held about 20% of their net demand deposit liabilities as balances with other banks, with individual bank percentages ranging from as low as 2% to as high as 67%. Many of these banks with low levels of correspondent balances would not be in a position to switch them to the Fed (even assuming that they were in collected funds). Others, with larger balances might well be able to switch balances to the Fed and would rethink their correspondent needs at the same time. But clearly it is a small minority of Ohio non-member banks that might fall into this category. The vast majority of Ohio non-members would probably not change their correspondent relations in any way as a result of these reserve requirements.

Extending reserve requirements to non-members and NOW accounts is a serious proposal that deserves your serious consideration. I would urge non-member banks in particular to study the potential impact of the proposal on their own operations. If call report information is correct,

most non-members will find that effectively they are already meeting my assumed level of the reserve requirements. The benefit of the legislation lies in its guarantee that all institutions--not only member banks and the majority of non-members, but all institutions that issue liabilities that are used as money--will more equitably share the burden of maintaining effective central bank management of money and credit.

One other point I should mention. Most of the discussion on this issue has been based on present reserve requirements. Neither the Federal Reserve nor the state requirements, or their differences, are molded in concrete. Changes in each and in the differences can occur and alter one's assessment of the relative profitability of the alternatives.

In closing, let me take a broader perspective on this issue. I can understand the concern of non-member banks for protecting their earnings; I can understand the concern of many people for preservation of the dual banking system and the private correspondent banking business; I can even understand the suspicion of some people that this Federal Reserve proposal is something more than what it claims to be--an attempt to achieve better monetary control and a more equitable distribution of the cost of that control. However, what I hope all of us can understand is that this particular proposal, aimed at tidying up some of the loose ends of the present organization of banking and the payments system, should be dealt with dispassionately and soon so that we can all spend our energies in addressing the really significant issues facing us.

American banking has undergone radical transformations in the past. You recall that state bank notes rivaled national bank notes as the means of payment after the Civil War, but what settled that issue was

not the tax on state bank notes but the evolution of deposit banking, making all bank notes more or less obsolete. Similarly today, what will determine the future of member and non-member banks alike is not any slight cost advantage of one over the other, but the impact of such major events as the radical transformation of the payments system that is inevitably approaching on electronic hooves. Small cost advantages arising from demand deposit reserve requirements will be meaningless if, for example, bank cards replace bank deposits as the dominant form of making payments in this country. If we want to survive as vital institutions we must plan for the long haul, harnessing new technologies and new organizational forms, turning change into our advantage.

Bibliography - Willis J. Winn

1. *Durand, David and Winn, Willis J. Basic Yields of Bonds 1926-1947: Their Measurement and Pattern. Technical Paper 6. New York: National Bureau of Economic Research, 1947. 40 p.
2. ***Friend, Irwin and others (Hoffman, G. Wright; Winn, Willis J.; Hamburg, Morris; Schor, Stanley) Over-the-Counter Securities Markets. New York: McGraw-Hill Book Company, 1958.
3. ***Hamburg, Morris; Schor, Stanley; and Winn, Willis J. Characteristics of Transactions on Over-the-Counter Markets. Philadelphia: University of Pennsylvania Press, 1953.
4. *National Bureau of Economic Research, Financial Research Program. Research in the Capital and Securities Markets, Part I: An Inventory of Recent Research on the Capital and Securities Markets, Willis J. Winn on special assignment. New York: National Bureau of Economic Research, 1954.
5. *Winn, Willis J. Business Education in the United States; A Historical Perspective. New York: The Newcomen Society in North America, 1964. 24 p.
6. *Winn, Willis J. and Hess, Arleigh, Jr. "The Value of the Call Privilege." Foundations for Financial Management: A Book of Readings. Edited by James Van Horne. Homewood, Illinois: Richard D. Irwin, Inc., 1966, pp. 234-246.
7. **Winn, Willis J. Positioning of Securities on Over-the-Counter Market. 1951. 70 p. (One of a monograph series based on data assembled by the Securities Unit of Wharton.)
8. *Winn, Willis J. and Hess, Arleigh, Jr. "The Value of the Call Privilege." Readings in Financial Management. Edited by Edward J. Mock. Scranton, Pennsylvania: International Text-book Company, 1964, pp. 380-392.
9. ***Winn, Willis J. Value of the Call Privilege. Philadelphia: University of Pennsylvania, 1962. 162 p.
10. *Beale, W. T. M. Jr.; Kennedy, M. T.; and Winn, W. J. "Commodity Reserve Currency: A Critique." The Journal of Political Economy, L (August, 1942), pp. 579-94.

Bibliography - Willis J. Winn

11. *Winn, Willis J. "Commodity-Reserve Currency: A Rejoinder." The Journal of Political Economy, LI (April, 1943), pp. 175-177.
12. *Winn, Willis J. "Factors Influencing Life Insurance Company Investments." Journal of the American Society of Chartered Life Underwriters, XII (Spring, 1958), pp. 103-121.
13. *Winn, Willis J. "More Self-Criticism." Saturday Review, XLI (January 18, 1958), p. 46.
14. *Winn, Willis J. and Hess, Arleigh, Jr. "The Value of the Call Privilege." The Journal of Finance, XIV (May, 1959), pp. 182-195.
15. *Winn, Willis J. "The Role of the Director: The Ideal and the Real." Men, Money & Policy; Essays in Honor of Karl R. Bopp. Edited by David P. Eastburn. Philadelphia: Federal Reserve Bank of Philadelphia, 1970, pp. 241-251.

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June 18, 1971

BIBLIOPHY OF THE FEDERAL RESERVE

Bibliography - Willis J. Winn

1. *Durand, David and Winn, Willis J. Basic Yields of Bonds 1926-1947: Their Measurement and Pattern. Technical Paper 6. New York: National Bureau of Economic Research, 1947. 40 p.
2. ***Friend, Irwin and others (Hoffman, G. Wright; Winn, Willis J.; Hamburg, Morris; Schor, Stanley) Over-the-Counter Securities Markets. New York: McGraw-Hill Book Company, 1958.
3. ***Hamburg, Morris; Schor, Stanley; and Winn, Willis J. Characteristics of Transactions on Over-the-Counter Markets. Philadelphia: University of Pennsylvania Press, 1953.
4. *National Bureau of Economic Research, Financial Research Program. Research in the Capital and Securities Markets, Part I: An Inventory of Recent Research on the Capital and Securities Markets, Willis J. Winn on special assignment. New York: National Bureau of Economic Research, 1954.
5. *Winn, Willis J. Business Education in the United States; A Historical Perspective. New York: The Newcomen Society in North America, 1964. 24 p.
6. *Winn, Willis J. and Hess, Arleigh, Jr. "The Value of the Call Privilege." Foundations for Financial Management: A Book of Readings. Edited by James Van Horne. Homewood, Illinois: Richard D. Irwin, Inc., 1966, pp. 234-246.
7. **Winn, Willis J. Positioning of Securities on Over-the-Counter Market. 1951. 70 p. (One of a monograph series based on data assembled by the Securities Unit of Wharton.)
8. *Winn, Willis J. and Hess, Arleigh, Jr. "The Value of the Call Privilege." Readings in Financial Management. Edited by Edward J. Mock. Scranton, Pennsylvania: International Textbook Company, 1964, pp. 380-392.
9. ***Winn, Willis J. Value of the Call Privilege. Philadelphia: University of Pennsylvania, 1962. 162 p.
10. *Beale, W. T. M. Jr.; Kennedy, M. T.; and Winn, W. J. "Commodity Reserve Currency: A Critique." The Journal of Political Economy, L (August, 1942), pp. 579-94.

Bibliography - Willis J. Winn

11. *Winn, Willis J. "Commodity-Reserve Currency: A Rejoinder." The Journal of Political Economy, LI (April, 1943), pp. 175-177.
12. *Winn, Willis J. "Factors Influencing Life Insurance Company Investments." Journal of the American Society of Chartered Life Underwriters, XII (Spring, 1958), pp. 103-121.
13. *Winn, Willis J. "More Self-Criticism." Saturday Review, XLI (January 18, 1958), p. 46.
14. *Winn, Willis J. and Hess, Arleigh, Jr. "The Value of the Call Privilege." The Journal of Finance, XIV (May, 1959), pp. 182-195.
15. *Winn, Willis J. "The Role of the Director: The Ideal and the Real." Men, Money & Policy; Essays in Honor of Karl R. Bopp. Edited by David P. Eastburn. Philadelphia: Federal Reserve Bank of Philadelphia, 1970, pp. 241-251.

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