

THE VIABILITY OF A PRIVATE CENTRAL FACILITY FOR MORTGAGE-RELATED SECURITIES*

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ABSTRACT

The concept of a mortgage exchange has emerged as a topic of current discussion and debate. This study presents the results of a national survey of fund managers and advisors which attempted to determine the feasibility of a privately sponsored central facility for the creation and marketing of mortgage-related securities. The study discusses the methodologies of the research and presents the conclusions. The survey results suggest that such a central facility would be viable if the sponsors possessed experience in real estate lending, have a willingness to maintain direct contact with funds, are able to reduce commissions on transactions, provide the role of master servicer on the underlying mortgages, and structure the securities according to certain specifications such as ratings in terms of risk class, call protection, insurance, liquidity in a secondary market, geographic diversification, and inflation indexation.

At the Eastern Secondary Mortgage Market Conference in Raleigh, N.C., Mr. David Maxwell, head of the Federal National Mortgage Association, urged the establishment of a national mortgage exchange to handle the trading of mortgages and mortgage-related securities. Annual trading activity in this market rose to approximately 700 billion dollars in 1984 and the number of Wall Street investment banking firms entering or expanding their trading activities in these markets was estimated by Gasparich to be at least twelve (Gasparich, 1984). In addition, one may acknowledge thousands of other organizations and wholesale firms, mortgage insurance companies, and brokers that play a facilitating role in the mortgage market. The reported responses to the idea of a central facility from investment bankers, representatives of savings institutions, trade groups, and others in attendance at the meeting ranged from cautionary to positive support (Gasparich, 1984).

Before discounting the idea as inappropriate or premature, the Federal National Mortgage Association (FNMA) intends to conduct a feasibility and technological study. The mortgage exchange to be considered would apparently provide a central source of information and control, monitor trades and prices, act as a clearinghouse for completed transactions, and guarantee prompt delivery of traded securities. In addition to these services, an anticipated advantage of the exchange would be an increase in liquidity which would make it easier for smaller firms to trade. However, according to conference reports, Mr. Jeffery Lebowitz, FNMA's Vice President for strategic planning, said that the plan would likely not be forced on the industry if little support existed among mortgage securities dealers.

The concept, therefore, of a mortgage exchange is a topic of current discussion and debate. While not pre-

cisely the same concept as a national mortgage exchange sponsored by a government entity, this paper discusses a national survey of fund managers and advisors that was recently completed under the auspices of the New Investment Subcommittee of the Mortgage Bankers Association of America and which attempted to determine the feasibility of a privately sponsored central facility for the creation and marketing of mortgage-backed securities. The survey presumed a growing role for fund investment in the marketplace while recognizing the present dominance of agency related securities and the relatively small role played by the securities of private conduits and other issues. This paper discusses the methodologies of the study and presents the conclusions. The survey results suggest that such a central facility might be viable if related securities could be marketed and structured according to the needs expressed by the respondents.

METHOD

The study utilized a field survey design, gathering data from fund asset managers by means of a questionnaire. The survey was national in scope; it surveyed a large number of funds in a statistically accurate framework; it included differentiated funds -- pension, endowment, and foundation; and it included both internally managed funds and externally managed funds.

Sample. The total survey was composed of 230 primarily in-house asset managed funds and 54 external advisors from life insurance companies. This sample of 284 was identified for use by the 1984 Directory of Pension Funds. Of the 284, 50 were not deliverable. From the remaining 234, 76 were returned for a 32% response rate. It is acknowledged by the authors that the response rate may produce problems of response bias in the sample. This limitation is not specific to this study, rather it is applicable to survey work in the finance area in general and is a

direct reflection of the hesitancy of private firms to reveal information concerning financial status. Hence, like many areas of applied research, a large sample was not attainable; we nevertheless, believe that this data is indicative of fund manager's perceptions and lends itself to the empirical study of mortgage-related securities.

The fund managers and advisors that responded were geographically distributed throughout the U.S. As a representative of a national sample, 31.6 percent were located in the Northeast, 10.5 percent in the Southeast, 18.4 percent in the Central U.S., 13.2 percent in the Southwest, 10.5 percent in the West, and 2.6 percent in the Northwest; and 10.5 percent were multi-location firms in the United States (2.6 percent were indeterminant from the reported data--Table 1). Furthermore, the sample of internally managed funds approximates the population of those funds in two respects: type of fund and dollar value of fund assets.

In terms of type of internally managed funds, 55.7 percent were corporate funds, 36.1 percent government funds, 4.9 percent were union funds, and 1.6 percent were endowment and foundation funds, respectively (Table 2). This stratification of the sample correlates to the national distribution, whereby 56 percent of all internally managed funds were corporate and approximately 30 percent were government funds (Pension Directory, 1984). Sample funds stratified by asset size also mirror the national distribution. The survey indicated that 12.3 percent of the funds contained assets of less than 10 million dollars, 28.8 percent had assets of 10 to 50 million, 19.2 percent had assets of 50 to 100 million, and 39.8 percent had assets of over 500 million dollars (Table 3). These distributions by type and asset size approximate the stratum's share of the total population of funds, and therefore, increase the sample's statistical efficiency and provide adequate data

TABLE 1
Geographic Distribution of Funds

<u>Area</u>	<u>Absolute Frequency</u>	<u>Relative Frequency (Percent)</u>
Northeast	24	31.6
Southeast	8	10.5
Central	14	18.4
Southwest	10	13.2
Northwest	2	2.6
West	8	10.5
U.S. (multilocation) (Indeterminant)	8 <u>2</u>	10.5 <u>2.6</u>
	76	100.0

TABLE 2
Type of Fund

<u>Type</u>	<u>Absolute Frequency Of Sample</u>	<u>Adjusted Frequency Of Sample (Percent)</u>	<u>Percent Distribution of Total Numbers of Funds by Asset Size¹</u>
Corporate	34	55.7	56.0
Government	22	36.1	30.0
Union	3	4.9	7.0
Foundation	1	1.6	4.0
Endowment	1	1.6	3.0
(Indeterminant)	<u>15</u>	<u>missing</u>	<u>---</u>
	76	100.0	100.0

¹Total numbers of funds includes all funds in the nation.

for continued analysis.

Questionnaire. The survey instrument that was developed solicited information on one main area of inquiry: the viability of a central facility and the characteristics of the facility's security issues. The questions were designed expressly for the purposes of this study and were pretested by local fund managers. The final questionnaire was seven pages in length and required approximately twenty minutes of the respondent's time.

Procedure. The survey was conducted in two parts. The first part was based upon a telephone interview conducted by members of the New Investment Opportunities Subcommittee of The Mortgage Bankers Association of America. The second part involved a subsequent mail survey administered by the University of Texas at San Antonio, Institute for Studies in Business. All information was voluntary and no identification of respondent was requested except title. Returned information was treated as confidential in order to protect the privacy of respondents and their companies.

Data Analysis. The survey examined the fund's perspectives on new mortgage related instruments produced by a central facility created within the private sector. Overwhelmingly, 74 percent of the fund managers and advisors believed that a central unit to develop and facilitate the placement of mortgage-related securities is needed. Respondents were also in a consensus (76 percent) that the central facility could be created by the private sector.

Characteristics of Sponsors of Central Facility

Given this general agreement, the respondents were asked to agree or disagree regarding the desired characteristics of the sponsors of the central facility. The characteristics with positive responses included the following:

Possessing extensive experience in real estate lending, having a willingness to maintain direct contact with the funds and provide information required for planning and analysis, being able to reduce commissions on transactions, having the flexibility and willingness to structure securities in accordance with the needs of its clients, and providing the role of master servicer of the underlying mortgages (see Table 4).

Characteristics of the Central Facility and its Issues

To further investigate the initial result regarding sponsor characteristics, regression analysis was utilized to investigate facility and issue characteristics. A multiple regression was performed between the perceptions of fund managers towards the development of a central facility as the dependent variable and characteristics of the central facility's security issue as the independent variables (see Table 5). The possible characteristics of the securities included: to have diversification of underlying mortgages by location; to have inclusion of call protection; to have a broad secondary market; to provide liquidity after a holding period; to be insured; to give specifications of real estate; to be based on a social investment criteria; to be backed by mortgage specialists; to have FNMA, FHLMC, or GNMA backing. Aggregate size of the funds and dummy variables representing types of funds--government and corporate with all others (union, endowment, and foundation) as the comparison group were included as covariates. A stepwise analysis was performed using SPSS New Regression. No cases used in the analysis had missing variables and no pairwise multicollinearity was detected from inspection of the correlation matrix. Table 5 displays the unstandardized regression coefficients and intercept, the standardized regression coefficients, and the R^2 . Multiple R for the regression was significantly different from zero with $F(2,54)=5.003$, $p>.01$. Two regression

TABLE 3
Asset Size of Funds

<u>Asset Size</u>	<u>Absolute Frequency Of Sample</u>	<u>Adjusted Frequency (Percent)</u>
Less than 10 million	9	12.3
10 to 50 million	21	28.8
50 to 100 million	14	19.2
100 to 500 million	18	24.7
Over 500 million	11	15.1
Indeterminant	<u>3</u>	<u>missing</u>
	76	100.0

Mean = 50 to 100 million dollars in assets

Table 4
Characteristics of The Sponsors of The Central Facility

<u>Characteristics of Sponsors</u>	<u>Mean Response¹</u>
Extensive experience in originating and servicing mortgages	Agree (5.27)
Expertise in real estate lending	Agree (4.97)
Willingness to maintain direct contact with funds	Agree (4.91)
Reductions of commissions on transactions	Agree (4.83)
Flexibility and willingness to structure securities in accordance with the needs of its clients	Agree (5.04)
Provide the role of master servicer of the underlying mortgages	Agree (4.85)

¹Category labels were coded as:

Strongly Disagree	1
Disagree	2
Mildly Disagree	3
Mildly Agree	4
Agree	5
Strongly Agree	6
(Missing Responses)	0

coefficients differed significantly from zero at the $p > .05$ and $p > .01$ level respectively: "estimated aggregate size of the "fund" and "securities be backed by mortgages originated and serviced by mortgage specialists."

"Estimated aggregate size of the fund" is shown in Table 5 as having an inverse relationship with the dependent variable. In other words, as asset size decreases the more favorable are the perceptions of the fund managers towards the development of a central facility. This result is quite reasonable since smaller funds have a higher proportion of completely in-house managed funds and will look more favorably towards the utilization of the central facility to expedite and guide their investments in mortgage-related securities. Furthermore, this result complements an earlier analysis (de la Vina and Betty, 1985) which demonstrated that at present it is mostly the large funds that tend to hold mortgage-related securities while smaller ones tend to be more inclined toward other securities in meeting their safety and diversification needs. A central facility, therefore, could prove critical to the increased participation of smaller funds in mortgage-related instruments. A further conclusion is the respondent's preference for securities backed by mortgages originated and serviced by mortgage specialists. Mortgage specialization in terms of origination, servicing, and sponsorship of the central facility are key considerations in the acceptance of the central facility.

By examining the mean responses certain other characteristics emerge as important but of lesser significance than mortgage specialization. According to the survey results, the securities offered by the central unit should also consider: indexation to inflation, diversification of geographic location, ratings in terms of risk class, call protection, a broad secondary market for liquidity, insurance, and specification of the real estate that is mortgag-

ed. The respondents only mildly agreed that the securities have FNMA, FHLMS, or GNMA backing and disagreed that the new instrument be based on social investment criteria such as stimulus to local housing (Table 6). Although these characteristics are quite diverse, they follow from the results of an earlier study that concluded that the demand for mortgage-related securities by fund managers were significantly related to two reasons: diversification and safety (de la Vina and Betty, 1985). These characteristics, therefore, fully address the two issues of diversification and safety.

FURTHER CONCLUSIONS AND RECOMMENDATIONS

In speculating as to how the central facility might be designed, an ability to look beyond the status quo is required. If this is done, the necessary expertise, technology, and role models exist for conceptualization of a multi-faceted central facility with the following capabilities:

- Maintaining close communications with funds, mortgage originators and mortgage wholesalers.
- Operating a conduit, using a REMIC like format with actively managed assets and several classes of securities.
- Having access to a depository for internalizing transactions in mortgage-related securities.
- Maintaining a computerized book-entry system of ownership for securities and a central paying agent.
- Affiliated with dealers committed to making and expanding the market in securities created.

The central facility could act as a contractual intermediary in the primary market for mortgage-backed securities by entering into commitments to deliver securities to ultimate buyers and matching these against delivery commitments of mortgage originators. As a contractual intermediary, the central facility could be obliged to deliver on

TABLE 5

Stepwise Multiple Regression
of Preference for Central Facility

<u>Variables</u>	<u>B</u>	<u>Beta</u>	<u>t</u>
Asset Size	-.23563	-.26433	-2.102*
Mortgage Specialists	.39080	.32390	2.576**

Multiple R = .39540

$R^2 = .15634$

$F(2,54) = 5.003^{**}$

Where: * = $p > .05$
 ** = $p > .01$

TABLE 6

Characteristics of Security Offered by Central Unit

<u>Characteristics</u>	<u>Mean Response¹</u>
Respond adequately to inflation	Agree (4.75)
Be diversified by location	Agree (4.99)
Be rated in terms of risk class	Agree (5.07)
Have call protection or reasonable predictability of cash flow	Agree (4.77)
Have a broad secondary market	Agree (5.14)
Provide liquidity at a point in time	Agree (4.93)
Be insured in order to minimize risk	Agree (4.75)
Give exact specifications of real estate that is mortgaged	Mildly Agree (4.10)
Be based on social investment criteria	Disagree (2.38)
Be backed by mortgages originated and serviced by mortgage specialists	Between Mildly Agree and Agree (4.52)
Have FNMA, FHLMC, GNMA backing	Mildly Agree (3.90)

¹See Table 3 for category codes.

all transactions and would necessarily have the power to impose delivery safeguards on originators and on the funds. Since the mortgage-backed securities would be obligations of the central facility, they could be uniformly rated as to risk class.

At delivery, the central facility could swap the securities under commitment for the mortgages provided by the originator, and in turn, the originator might deliver the securities to the fund it was matched against. No securities would be exchanged physically as transactions would be internalized using the custodial and computerized book entry capabilities of the depository.

Subsequent secondary market transactions may develop through affiliated dealers on a book entry basis. The possible role model for such transactions is the Depository Trust Company of New York (DTC, 1983). This company currently operates a depository

and book entry facility for commercial banks and institutional clients which at year end 1983 had 1.2 trillion dollars of securities in its custody. DTC facilitates a wide variety of trades in U.S. government, agency, municipal, and corporate securities. Another potential depository is the MBS Clearing Corporation and Chemical Bank. This facility, limited to issues of GNMA, FNMA, and FHLMC, provides a book entry form of ownership and serve as a central paying agent (Jensen, 1984). Using these approaches results in many efficiencies related to transaction costs, safekeeping, physical delivery and settlement, and registration.

The scenario outlined above is admittedly speculative and presumes wide latitude in design of the central facility. However, if the private sector is to become an effective competitor in the marketplace, substantial innovation will be required, and some future direction must be broadly outlined as a beginning point for discussion.

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*This research was conducted through a grant by the Mortgage Bankers of America (MBA) New Investment Opportunities Subcommittee. The conclusions of this research are solely those of the authors and are not necessarily the views of the MBA.