

Real Estate Investment Trusts: An Appraisal of Their Impact on Mortgage Credit

By LEON KOROBOW *and* RICHARD J. GELSON*

The rapid growth of Real Estate Investment Trusts (REITs) during 1968-70 provides another illustration of the ability of financial institutions and markets to make adaptive changes in the face of severe liquidity pressures and credit scarcities. These investment companies operate under the Real Estate Investment Act of 1960, which exempts the trusts from corporate income and capital gains taxation, provided they pay out nearly all their income. A fundamental objective of the legislation is to facilitate real estate investment by granting trusts the same tax advantages enjoyed by regulated investment companies, such as mutual funds, which invest mainly in corporate equities and bonds. The legislation also encourages REITs to seek wide ownership of their shares, thus promoting broad-based participation in the ownership of real estate assets.

Tax advantages alone, however, do not explain the recent flurry of activity in the formation of trusts or the blossoming interest in the sponsorship of new trusts by banks, life insurance companies, and mortgage companies. Why these trusts have met with such recent success in a market in which the major financial intermediaries have had long experience can be explained by a variety of institutional, regulatory, and economic factors.

RECENT MORTGAGE MARKET DEVELOPMENTS

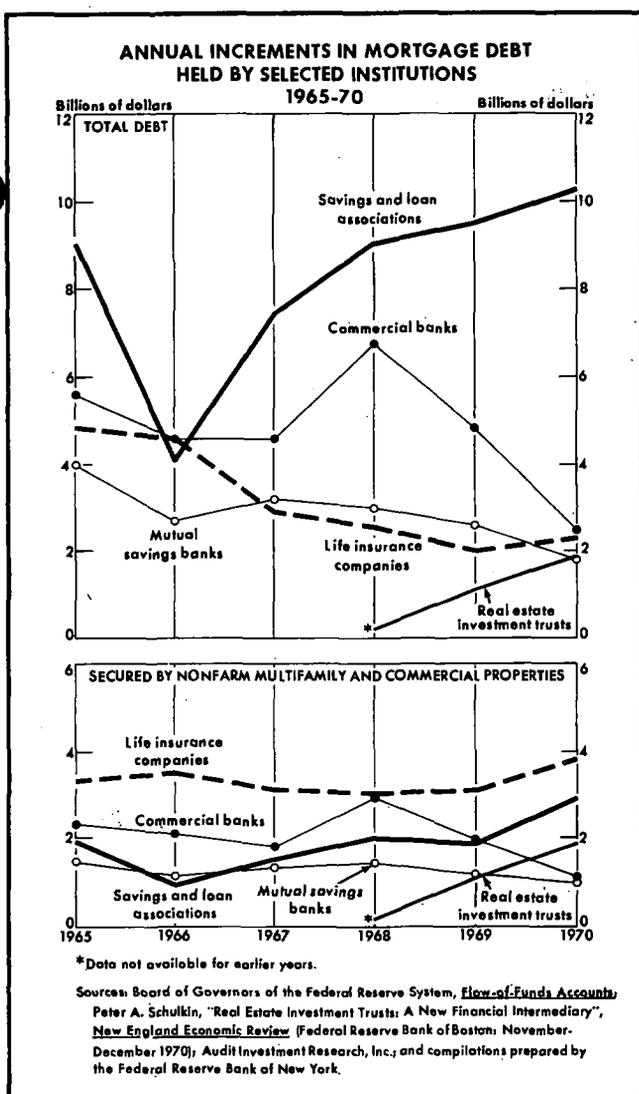
The increasing participation of REITs as specialized lenders and investors in the real estate industry can best be understood in the context of the particularly adverse impact that financial stringencies have had on mortgage

markets. The intense liquidity strains of 1969 and 1970 created new opportunities for profitable intermediation by these trusts, which face no restrictions on the interest rates they can pay on borrowings and, therefore, are able to compete more effectively for funds than other institutional lenders. Frequently, their funds have been obtained at high cost, but the trusts have been in a position to select the most promising investments while their favored tax status facilitates the payment of an attractive after-tax yield.

The REITs' improved opportunities arose in part because commercial banks curtailed sharply the dollar growth of their mortgage assets (see chart) in response to heavy demand for business loans. In view of the increased difficulties the banks faced in obtaining funds from both deposit and nondeposit sources, it was not surprising that many of them either shifted prospective mortgage customers to REITs with which they had working relationships or sold the trusts a part of their mortgage loans. The sales provided the banks with new funds and helped meet REIT needs for portfolio assets. Bank sponsorship of new trusts facilitated such timely transactions. In addition, attractive fees and service charges became available through the advisory relationship that often accompanied sponsorship. Such income at times may have reflected REIT profits on investments that could not have been made by the banks directly because of various regulations.

The portfolio preferences of life insurance companies, which typically hold long-term assets, also were changing during this period. Investment in home mortgages was handicapped, in part, by state-imposed interest rate ceilings and by the limits specified in Federal home-loan-guarantee programs, although "points" or fees and service charges helped boost effective rates. Consequently, life insurance companies restructured their total mortgage assets to meet the substantial demand for conventional

* Chief, Financial Statistics Division, and economist in that division, respectively.



amounts of existing mortgage debt from other lenders. Consequently, it is impossible to regard the entire increase in REIT holdings of mortgages as a net addition to the overall increase in such outstanding debt. Moreover, it is argued below that the trusts' use of market borrowings to finance the acquisition of debt on commercial and multifamily properties, on balance, probably contributed to a diversion of funds away from home mortgages.

LEGAL AND REGULATORY STATUS OF REITS

To qualify for special tax treatment, REITs must distribute at least 90 percent of their ordinary income to their shareholders, derive not less than 75 percent of their gross income from real estate transactions (e.g., rents, interest on mortgages, and sales of property) and hold at least 75 percent of their assets in the form of real estate loans and property, cash, and Government securities. The shares of a REIT must be issued to no fewer than one hundred persons, and the holdings of five or fewer individuals cannot exceed 50 percent of the total.¹ In addition, REITs must function as investors in, rather than managers of, real estate and they may not hold property primarily for resale.² When the trusts so qualify, the income and capital gains they distribute are taxed only when received by their shareholders. These provisions permit the trusts to offer returns that are attractive to investors in the low to moderate income-tax brackets.

REITs face relatively few restrictions by Federal regulatory authorities. In fact, the Board of Governors of the Federal Reserve System has included the advising of REITs among those activities which are appropriate for a bank holding company.³ Thus, commercial bank sponsorship of a REIT appears to be on firm ground.

The REITs have wide latitude in the issuance of equity

mortgages on multifamily and commercial properties. These types of mortgages generally represent borrowing by business firms, and in many states such borrowing is subject to less severe regulation of interest charges compared with regulation of rates on home mortgages. Moreover, life insurance companies, like the banks, were alert to the possibility of expanding profitable operations without financial strain through sponsorship of REITs. Thrift institutions have also evidenced some interest in trusts, regarding them as a potential device for improving their competitive position in the mortgage market.

During 1968-70, most of the growth in REIT assets reflected proliferation of new trusts that absorbed sizable

¹ See Public Law 86-779, Section 10, September 14, 1960, which added Sections 856-58 to Chapter 1, Subchapter M, of the Internal Revenue Code of 1954.

² For a detailed description of the operations of various types of trusts, see Peter A. Schulkin, "Real Estate Investment Trusts: A New Financial Intermediary", *New England Economic Review* (Federal Reserve Bank of Boston: November-December 1970).

³ Acting under the authority of the Bank Holding Company Act Amendments of 1970, the Board of Governors has amended Regulation Y (applicable to bank holding companies' interests in non-banking activities) and has determined that it is proper for a bank holding company to act as, or to retain or acquire an interest in a company which acts as, an investment or financial adviser to a REIT. See Board of Governors of the Federal Reserve System, *Bank Holding Companies, Amendments to Regulation Y*, Section 222.4 (Nonbanking Activities).

or debt instruments (except, of course, that they cannot accept deposits). Moreover, the existence of an advisory relationship between a commercial bank and a REIT has not constituted affiliation for purposes of Regulation D. Consequently, borrowing by REITs through the commercial paper market has not been subject to reserve requirements even when the proceeds are used to purchase an asset from the bank adviser (see appendix). The trusts must observe local usury laws, but they are not inhibited by regulations concerning the geographic areas in which they may operate, the size of the loan to a particular borrower, or its quality. However, some states have imposed very tight restrictions on the sale of shares by a REIT. These regulations appear to have discouraged the marketing of REIT shares in these areas, although it is not clear that they are an effective hindrance to REIT lending.

The conditional tax exemption granted REITs by the 1960 legislation has tended to inspire caution on the part of trust managers to avoid transactions that might lead to an adverse Treasury ruling on a trust's tax status. The proliferation of new trusts suggests, however, that the legal qualifications are not a significant roadblock. On the other hand, the rapid growth of REIT activity has led interested observers to express concern over the price a trust might pay should it fail to qualify for tax exemption in a particular year. The question has arisen, for example, whether a REIT's tax-exempt status might be jeopardized by sales of participations in mortgage loans originated by the trust or by sales of property received through foreclosure. Critics of the REIT industry cite potential conflicts of interest between trust and sponsor, especially where the latter is a bank, as the basis for more stringent official regulation. It seems likely, however, that the various doubts over the ability of REITs to serve their shareholders' interests and meet the requirements and objectives of the 1960 act will be resolved gradually without the need for further legislation.⁴

PROFILE OF THE INDUSTRY

The newer REITs, such as the trusts sponsored or advised by commercial banks, life insurance companies,

⁴ For example, the Comptroller of the Currency recently ruled that a national bank's trust department may not make investments in a REIT when the bank is the investment adviser or sponsor, or has other relationships that may possess elements of a conflict of interest.

Table I
ASSETS OF 114 REAL ESTATE INVESTMENT TRUSTS
December 31, 1970

Type of trust	Number	Assets	
		Dollar volume (in millions)	Share of total (in percent)
Independent trusts	59	1,780	41.3
Trusts sponsored or advised by:			
Commercial banks	22	847	19.7
Life insurance companies	8	596	13.8
Mortgage companies	13	415	9.6
Financial conglomerates	12	672	15.6
Total	114	4,310	100.0

Source: Peter A. Schulkin, "Real Estate Investment Trusts: A New Financial Intermediary", *New England Economic Review* (Federal Reserve Bank of Boston: November-December 1970), pages 4-5.

or mortgage companies, largely hold mortgage debt (both short and long term). However, many trusts have invested a sizable amount in direct ownership of real properties. The overwhelming preference of the newer trusts for mortgages partly reflects the financial orientation of the sponsors, who may wish to avoid the actual or potential risks and problems associated with direct ownership of real property.

The flurry of activity in REITs between 1968 and 1970 added more than one hundred new institutions to the sixty-one trusts already operating. At the end of 1970, the assets of a group of 114 trusts whose dollar volume is believed to account for over 90 percent of the industry total, amounted to \$4.3 billion (see Table I).⁵ Close to \$2.5 billion of this amount reflected the assets of institutions formed during 1969 or 1970. Commercial-bank-sponsored REITs bulked the largest among the newer trusts. Such institutions held nearly \$850 million of assets, or almost 20 percent of the \$4.3 billion total. Another \$600 million, or about 14 percent, was accounted for by trusts sponsored by life insurance companies, and

⁵ Information on the number of trusts in existence is obtained largely from announcements of new issues. Moreover, no time series is published for assets and liabilities of REITs. Data for a subset of 114 institutions have been compiled at the Federal Reserve Bank of Boston by Schulkin, *op. cit.*, pages 4-5.

a further \$400 million, or around 10 percent, by REITs that are advised by mortgage companies. The remaining 57 percent consisted of the assets of trusts which are not closely linked to banks, insurance companies, or mortgage companies.

REITs have resorted to public offerings of both debt and equity instruments for initial capital. They have attempted to appeal simultaneously to investors who may be attracted either by a high current yield or by the prospect of capital appreciation. Consequently, the offerings frequently have taken the form of units that consist of shares of beneficial interest coupled with either warrants or convertible debentures. Very often the price of the unit is low enough to attract investors holding relatively small amounts of funds.

The success with which REITs have been able to draw funds from the capital markets is suggested by the upsurge of their securities flotations during the years 1968-70 (see Table II). Only six issues, amounting to \$91 million, were offered in the three years 1961-63 and none in the next four years. The pace began to accelerate in 1968, however. In both the equity and longer term debt markets, REIT offerings absorbed increased shares of the new issues market. By 1970, REIT equity issues constituted almost 11 percent of the total offered, compared with 1 percent in 1961. Debt issues accounted for 2.4 percent in 1970, compared with none nine years earlier. This growth was remarkable in view of the keen competition for funds and very high borrowing costs in recent years.

Table II
CAPITAL ISSUES OF REAL ESTATE INVESTMENT TRUSTS*

Period	Equity			Debt		
	Number of issues	Dollar volume (in millions)	Share of public offerings of all new corporate issues (in percent)	Number of issues	Dollar volume (in millions)	Share of public offerings of all new corporate issues (in percent)
1961.....	3	39.3	1.0	0	0	0
1962.....	2	40.5	2.3	0	0	0
1963.....	1	11.4	0.8	0	0	0
1964-67..	†	†	†	†	†	†
1968.....	4	69.3	1.5	2	27.5	0.3
1969.....	30	899.9	10.7	2	70.0	0.5
1970.....	29	938.8	10.8	21	611.7	2.4

* Publicly underwritten issues of \$10 million or more.

† None issued.

Sources: William B. Smith and Benjamin R. Jacobson, "Real Estate Investment Trusts: In the Money and Here to Stay", *Real Estate Forum* (October 1970), page 27; Audit Investment Research, Inc., *Realty Trust Review* (February 1971), page 11; and *Federal Reserve Bulletin*.

Although capital issues remain a source of funds for expansion, REIT managers have been alert to the possibilities of short-term borrowing, particularly from banks. Bank lines of credit are perhaps equally important as a prerequisite for the issuance of commercial paper. Examination of the prospectuses of many newly formed REITs indicated that bank credit totaling several hundred million dollars was arranged, partly to provide coverage for prospective commercial paper issues. In some cases, sponsoring organizations agreed to guarantee a specific amount of commercial paper issued by a REIT, and it is clear that several bank holding companies have increased their issuance of commercial paper to finance the real estate operations of nonbank subsidiaries or affiliates. It is likely that the sales of such paper may well become a model for future REIT financing patterns.

IMPACT ON MORTGAGE DEBT

During the three years ended December 1970, when total mortgage debt increased by about \$83 billion, REITs added an estimated \$3.2 billion to their holdings of mortgage debt. This increase raised the level of the trusts' mortgage assets to an estimated \$3.8 billion (see Table III).⁶ By the end of 1970, commercial-bank-sponsored trusts held about \$900 million, those sponsored by life insurance companies about \$600 million, mortgage-company-sponsored trusts some \$400 million, and other REITs about \$1.9 billion. These estimates clearly indicate that aggregate REIT mortgage assets holdings are very small in relation to the total stock of mortgage debt. How-

⁶ The lack of comprehensive time series on REIT assets necessitated a considerable amount of estimating to obtain total REIT holdings of real estate mortgages and particularly the time pattern of the increments. For example, the trusts frequently extend construction and development loans which are secured by first mortgages. It is also possible that occasionally other types of construction financing may be provided by REITs. In the latter instance, the credit being supplied would be more closely akin to a business loan than to a mortgage obligation. However, based on information gained from many REIT prospectuses and from modest informal surveys, the trust assets estimated from data on new capital issues were assumed to be held in the form of mortgages on multifamily and commercial properties. A moderate upward adjustment then was incorporated to account for the growth of such assets obviously financed from sources other than new capital issues. This adjustment was necessary to integrate the information on new issues with various data covering outstanding levels of REITs' total assets and mortgage assets. Any upward bias introduced by these procedures may be partially offset by the above-noted incomplete coverage of REIT assets holdings. Thus, the estimated totals may not be very far from the actual amounts.

ever, the trusts added increasing amounts of mortgage debt to their portfolios during 1968-70, whereas commercial banks and mutual savings banks curtailed their mortgage lending and life insurance companies' acquisitions steadied.

By 1970, the annual growth of REITs' mortgage assets

increased to \$1.9 billion. In contrast, the absolute increase in commercial bank holdings of mortgage debt slowed markedly to \$2.5 billion, the growth at mutual savings banks slipped to \$1.8 billion, and life insurance companies added a relatively stable \$2.3 billion. Only savings and loan associations increased the pace of the mortgage investments, adding \$10.3 billion. Inasmuch as the available information strongly indicates that the REITs' mortgage assets are virtually all secured by multifamily and commercial properties (nonhome), it is obvious that their impact was greatest in that sector. In 1970, the trusts' estimated total acquisition of nonhome mortgage debt far exceeded the increments in such assets reported by commercial banks (\$1.1 billion) and mutual savings banks (\$1.0 billion). However, it was well below the amounts added by life insurance companies (\$3.8 billion) and by savings and loan associations (\$2.9 billion).

Although REITs' mortgage lending obviously was becoming increasingly important relative to other mortgage lenders during the last few years, the trusts' loans probably, at least in part, simply reallocated the existing supply of mortgage credit. A study of the behavior of private financial institutions' shares of mortgage obligations during the recent period of heightened REIT activity sheds some light on this matter. The market share of aggregate mortgage debt and of debt on multifamily and commercial properties held by various types of financial institutions is shown in Table IV for the years 1968-70.

It is significant that the portion of aggregate mortgage debt held by private financial institutions declined from 84.4 percent at the end of 1968 to 83.3 percent two years later, despite the increasing pace of REIT activity. In contrast, the share of debt on commercial and multifamily properties rose from 86.9 percent to 87.8 percent.⁷ REITs increased their share of lending in this latter sector even more, from 0.7 percent at the end of 1968 to 2.7 percent by the end of last year. The failure of private financial institutions' share of total debt to rise suggests that the growth of REIT assets did not entirely represent a net contribution to the growth of aggregate mortgage debt.

Although a REIT may engage in portfolio transactions with an institution other than its adviser, a rough approximation of the impact of trust operations on each of the major types of mortgage lenders may be obtained by

Table III
ANNUAL INCREMENTS IN PRIVATE FINANCIAL INSTITUTIONS'
HOLDINGS OF TOTAL MORTGAGE DEBT AND OF MORTGAGE
DEBT SECURED BY NONFARM MULTIFAMILY AND
COMMERCIAL PROPERTIES

In billions of dollars

Holdings of mortgage debt	1968	1969	1970	Amount outstanding December 31, 1970
Total mortgage debt in the United States:				
All types	27.4	28.6	27.0	453.6
Multifamily and commercial	10.1	11.2	12.3	142.7
All private financial institutions' holdings:				
Total	22.4	21.5	20.5	377.9
Multifamily and commercial	9.9	9.7	12.0	125.3
Real estate investments trusts:				
Multifamily and commercial*	0.2	1.1	1.9	3.8
Trusts sponsored or advised by:				
Commercial banks†	0.0	0.1	0.8	0.9
Life insurance companies†	0.0	0.1	0.5	0.6
Mortgage companies†	0.0	0.2	0.2	0.4
Other	0.2	0.7	0.4	1.9
Commercial banks:				
Total	6.7	4.8	2.5	72.5
Multifamily and commercial	2.9	2.0	1.1	26.2
Life insurance companies:				
Total	2.5	2.0	2.3	74.3
Multifamily and commercial	3.0	3.1	3.8	42.1
Savings and loan associations:				
Total	9.0	9.5	10.3	150.6
Multifamily and commercial	2.0	1.9	2.9	25.3
Mutual savings banks:				
Total	3.0	2.6	1.8	57.9
Multifamily and commercial	1.4	1.2	1.0	20.5
Other private financial:‡				
Total	1.0	1.5	1.7	18.8
Multifamily and commercial	0.4	0.4	1.3	7.4

Note: Because of rounding, figures do not necessarily add to totals.

* The figures shown are those for total trust mortgage assets, but it is believed that virtually all trust mortgages are secured by multifamily and commercial properties.

† No such trusts were believed operating in 1968.

‡ Includes credit unions, private pension funds, state and local government retirement funds, nonlife insurance companies, mortgage companies, and banks in territories and possessions.

Sources: Flow-of-Funds Accounts data, adjusted to allow fully for the estimated mortgage holdings of real estate investment trusts. The latter figures were obtained from the Federal Reserve Bank of Boston's *New England Economic Review* (November-December 1970) and from unpublished estimates of Audit Investment Research, Inc. Where no asset data were available, the dollar values of capital issues were used as approximations. All data are as of the year-end.

⁷ The cited behavior of the share of mortgage debt held by private financial institutions fully reflects the upward adjustment made in the Flow-of-Funds data to include REIT mortgage lending in the debt totals held by private financial institutions.

Table IV

PRIVATE FINANCIAL INSTITUTIONS' SHARES OF TOTAL MORTGAGE DEBT AND OF MORTGAGE DEBT SECURED BY NONFARM MULTIFAMILY AND COMMERCIAL PROPERTIES

Holdings of mortgage debt	1968	1969	1970
	Amount outstanding (in billions of dollars)		
Total mortgage debt in the United States:			
All types	398.0	426.6	453.6
Multifamily and commercial	119.2	130.4	142.7
	Share of totals (in percent)		
All private financial institutions' holdings:			
Total	84.4	83.8	83.3
Multifamily and commercial	86.9	86.9	87.8
Real estate investment trusts:			
Multifamily and commercial §	0.7	1.5	2.7
Trusts sponsored or advised by:			
Commercial banks	0.0	0.1	0.6
Life insurance companies	0.0	0.1	0.4
Mortgage companies	0.0	0.2	0.3
Other	0.7	1.1	1.3
Commercial banks:			
Total	16.4	16.4	16.0
Multifamily and commercial	19.4	19.2	18.4
Life insurance companies:			
Total	17.6	16.9	16.4
Multifamily and commercial	29.5	29.4	29.5
Savings and loan associations:			
Total	32.9	32.9	33.2
Multifamily and commercial	17.2	17.2	17.7
Mutual savings banks:			
Total	13.4	13.2	12.8
Multifamily and commercial	15.4	15.0	14.4
Other private financial:			
Total	3.9	4.0	4.1
Multifamily and commercial	4.8	4.7	5.2

Note: See Table III for sources and other footnote references.

§ As a share of all types of mortgage debt in the United States, the REITs' holdings accounted for 0.2 percent in 1968, 0.4 percent in 1969, and 0.8 percent in 1970.

viewing jointly the mortgage debt held by the trust and its sponsor or adviser. For example, pooling the mortgage-lending activity of banks and bank-sponsored trusts in the nonhome sector indicates that the combined share declined from 19.4 percent at the end of 1968 to 19.0 percent by the end of 1970. Similarly, commercial banks' portion of total mortgage debt decreased from 16.4 percent to 16.2 percent if the lending by bank-sponsored trusts is included. It is clear that commercial banks used the funds obtained from REITs and other nondeposit sources primarily for purposes other than to finance mortgage loans.

Life insurance companies' share of nonhome debt was

little changed between 1969 and 1970. Moreover, the portion of such assets held by these companies and their sponsored trusts rose from 29.5 percent to 29.9 percent during that period. In contrast, the life insurance companies' share of total mortgage debt dropped from 17.6 percent to 16.4 percent, the decline resulting mainly from a reduction in home mortgage lending.

Insufficient data preclude a similar analysis of the effect of REIT activities on lending by mortgage companies, which function largely as mortgage brokers but also may invest in such assets. However, mortgage companies account for only a very small part of total mortgage debt and for that reason are included in the category "other private financial" institutions in Tables III and IV.

Not many thrift institutions have acted as sponsors to or advisers of REITs and, so far as is known, they have not engaged in any significant volume of portfolio transactions with REITs. The availability of funds from the Federal Home Loan Bank Board enabled savings and loan associations to increase their portion of nonhome debt from 17.2 percent at the end of 1968 to 17.7 percent two years later and to raise their share of total mortgage debt from 32.9 percent to 33.2 percent. Without recourse to such funds, mutual savings banks sustained a decline in their portion of nonhome mortgages from 15.4 percent to 14.4 percent and in total mortgage debt from 13.4 percent to 12.8 percent.⁸ These reduced shares were substantially the result of the adverse deposit flows the mutual savings banks experienced as rising market rates of interest placed thrift deposits at an increasing competitive disadvantage, although in part the decline also reflected a portfolio shift by these institutions in favor of higher yielding corporate securities.

The data on which these various shares are based leave much to be desired. They do suggest, however, that REITs probably helped to insulate the market for nonhome mortgages, to some extent, from the adverse impact of the recent monetary stringency. Principally, this insulation resulted from the REITs' use of funds obtained in the capital markets to acquire mortgages secured by multifamily and commercial properties. Interest on such instruments was subject, as noted earlier, to much less

⁸ Although mutual savings banks are eligible for membership in the Federal Home Loan Bank System, only a small number of such banks have chosen to be members and the amount of funds advanced to these institutions has not been large.

restriction, compared with the usury limits on conventional home mortgages in many states and on debt issued under Federal home-loan-guarantee programs. Moreover, the REITs' demand for mortgage assets enhanced the marketability of nonhome debt held in the portfolios of other mortgage lenders. To some degree, however, the REIT sales of debt and equity instruments probably contributed to the diversion of funds from thrift institutions and from mortgage markets.

FUTURE PROSPECTS

During the relatively short period of their activity, REITs have demonstrated their skill at intermediating profitably between mortgage borrowers and lenders of funds in a highly strained monetary environment that tended to discourage the participation of some of the major mortgage lenders. It is to be expected that the recent renewal of heavy deposit flows to thrift institutions and the greatly improved liquidity position of other mortgage lenders will increase the competitive pressures on REITs. However, the trusts, which generally tend to be high-cost operations, will concurrently benefit from the greatly improved availability of bank credit and market sources of funds.

The improved liquidity situation may well delay the implementation of any latent plans by thrift institutions to enter the field of sponsors of REITs. Recently, only one REIT of substantial size was sponsored by a savings institution. However, thrift industry spokesmen have recognized the possibilities for widening the base of their operations through sponsorship of REITs.

Despite changing monetary conditions, the trusts are likely to remain attractive vehicles for real estate and mortgage investments. Commercial banks, in particular, may well continue to regard a relationship with a REIT as potentially rewarding over the longer term. Not the least of the advantages afforded by sponsorship of a trust are the opportunities for bank portfolio adjustments to be financed indirectly by REIT borrowings through open market instruments. Other substantial advantages follow from the advisory fees a bank may earn, the possibility of providing a customer indirectly with a larger loan than the bank itself could extend because of regulatory limits on the size of any one loan, and the capacity to meet demands which the bank alone could not fill because of restrictions on acceptable collateral or other regulatory limitations. Bank sponsorship of trusts may be viewed, therefore, as a further and undoubtedly viable development in the trend toward increased activity by banking organizations over a widening range of financial services.

APPENDIX: A NOTE ON THE EFFECT OF REITS ON BANK CREDIT STATISTICS

The trusts' borrowing operations and portfolio transactions can present problems in the measurement of bank credit similar to those created by commercial banks. Banks resort to other nondeposit sources of funds in 1969-70. During that period, the effective impact of Regulation Q ceilings prevented banks from competing for funds through deposit instruments. Consequently, many banks initially turned to the Euro-dollar market and then to affiliated institutions or parent organizations that had access to market sources of funds without being subject to interest rate ceilings (or reserve requirements) on borrowed funds. A foreign branch of a United States bank thus was able to borrow in the Euro-dollar market and pass the money to the head office, or the bank's affiliate could issue commercial paper, without encountering any such restrictions. The proceeds of the commercial paper were used largely for acquiring loans from the bank; in this way, outstanding bank credit was shifted to the books of the affiliate while freeing bank resources to finance new loans.

Banks' incentives to make further use of such non-deposit sources of funds have been reduced, following the imposition of marginal reserve requirements on banks' Euro-dollar borrowings in October 1969 and the placing of reserve requirements in September 1970 on the proceeds to the bank from commercial paper issued by bank affiliates.⁹ As noted earlier, transactions by commercial-bank-sponsored REITs are not subject to these regulations, even though a REIT's purchase of a mortgage asset from a bank may be financed in much the same way (*i.e.*, through commercial paper sales) as a purchase of a bank loan by a bank affiliate, and has much the same effect on a bank's lending capacity as an affiliate's purchase. Of course, it may be argued that a commercial bank sale to a REIT with which the former has no explicit relationship is hardly different from any market sale of an asset by a bank. However, when the transaction involves a trust that the bank has sponsored, or with which the latter has an advisory relationship, the

⁹ Board of Governors of the Federal Reserve System, Amendment to Regulation M, Section 213.7 (*Reserves Against Foreign Branch Deposits*); Federal Reserve Bank of New York, Circular No. 6593, August 21, 1970 (*Regulation D: Amendment, Supplement, and Interpretation*, including Part 204 on commercial paper of bank affiliates).

sale may hold more significance within a broadened definition of the banking system.

Nonetheless, because bank-sponsored trusts are not considered affiliated institutions, few attempts have been made to gather data on their credit-creating activities. Such credit creation is not covered by the adjustments incorporated in member bank data to obtain accurate current estimates of bank credit growth. One measure used to obtain such estimates is the "adjusted bank credit proxy", which encompasses the credit extended by the bank as well as the credit generated by affiliated institutions.¹⁰

At present, the adjusted proxy estimates the total volume of loans extended by banks and their affiliates by adding to the original bank data the total amount of commercial paper issued by the parent organization or affiliate of a bank. These commercial paper issues have come to be known as bank-related paper. If the proceeds of such

paper are used by the affiliate to purchase a loan from the bank, and the issue of paper was for less than thirty days, the bank must meet demand deposit reserve requirements against these proceeds. The bank must meet time deposit requirements against funds obtained from longer term issues. (No reserve requirements are applicable to commercial paper proceeds which are not shifted to the bank but are used instead to finance the operations of a parent organization's nonbank subsidiaries.) Because the proxy includes both reservable and nonreservable bank-related paper, it reflects the associated outright loan sales concluded between parent organization and affiliated bank plus the credit-creating activities of the parent organization through its nonbank affiliates.

The failure of the indicators of bank credit to blanket those REITs that are sponsored by banks can have adverse short-term effects on these indicators inasmuch as bank sales to trusts can amount to several hundred million dollars. In fact, data on nondeposit sources of funds filed by weekly reporting banks with Federal Reserve Banks suggest the total outstanding volume of bank sales of real estate debt to REITs may amount to as much as \$1 billion.

¹⁰ For a definition of the adjusted bank credit proxy, see this Review, page 178, Chart I; see also Federal Reserve Bank of Cleveland, "Bank Credit Proxy", *Economic Review* (February 1971), pages 3-10.