REAL ESTATE AUCTIONS AS A MARKET-CLEARING MECHANISM FOR REPOSSESSED REAL ESTATE

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ABSTRACT

This thesis examines the efficacy of various types of auction formats in dealing with the current glut of foreclosed, repossessed real estate held by financial institutions and government in the United States. The background of the current real estate crisis is traced with particular attention paid to the plight of American lenders. Precedents for dealing with repossessed real estate are examined, and lessons from past crises of 1973-74 and 1981-82 are cited.

A brief look at various auction formats, especially in other capital markets in the United States, is used to illustrate the shortcomings of marketing real estate through judicial sales such as foreclosure auctions. An analysis of successful auctioning techniques in financial markets gives important clues to successful marketing of real estate, and especially REO (repossessed "Real Estate Owned" by financial institutions). This thesis posits that real estate auction performance always reflects an "informationdiscount" when product information is withheld, and only when product information is as fully disseminated as in a conventional sales arrangement does the market value real property correctly, regardless of auction format.

A major condominium auction using the new approach of saturation of product information and liberal financing is used as a case study. Auction results are compared to the results of conventional brokered selling. The success demonstrated in the case implies that real estate auctions are a viable technique for selling a large volume of real estate quickly.

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Dedicated to the Roman sage who observed that,
in the final analysis,

"Res tantum valet quantum vendi potest."

("A thing is worth how much someone will pay for it.")

REAL ESTATE AUCTIONS AS A MARKET CLEARING MECHANISM
FOR REPOSSESSED REAL ESTATE

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"REAL ESTATE AUCTIONS AS A MARKET CLEARING MECHANISM FOR REPOSSESSED REAL ESTATE"

OVERVIEW

The decade of the 1980s was one of tremendous growth in real estate development in the United States. The excesses of the decade, of poorly-planned and speculative development and the concomitant explosion of real estate financing has led to a well-documented avalanche of problem and distressed properties in the early 1990s. Real estate which is repossessed by the lending community is not a new phenomenon. The Great Depression was marked by waves of foreclosures, as were the last major postwar recessions of 1973-74 and 1981-82. The current crisis is distinguished by both its enormous scope as well as by the unprecedented role of government as owner of repossessed properties, which commercial banks commonly refer to as REO (Real Estate Owned, or ORE - Other Real Estate - by Savings and Loans).

The evolution of the problems of the Savings and Loan industry as well as the difficulties of many commercial banks was met by a reactive, rather than proactive, regulatory response from the federal government.[1] The best efforts of the Resolution Trust Corporation (RTC) and the Federal Deposit Insurance Corporation (FDIC) to reconcile the respective problems of the thrift and banking industries have resulted in a still-growing stockpile of properties held by the

government. In addition, there is a large and growing backlog of foreclosed properties held by institutions in varying degrees of financial health. The possible REO represented by the amount of delinquent and nonperforming loans collateralized by real property is far greater than REO properties currently in inventory. Banks currently have more than $22 billion in REO nationally, and $77.6 billion in non-performing loans at year-end 1990.[2] Federal regulators estimate that over half of the nonperfoming loans, collateralized by real estate, could become REO in the next few years.[3] The RTC currently has between $17 and $23 billion in REO and approximately the same amount of non-performing loans. Some regulators estimate the amount of REO could double in twelve to eighteen months.[4]

In the face of this huge and mounting inventory of REO, there have been few successful efforts at liquidation. Indeed the rate of disposition has been far outstripped by the rate of growth of REO inventory. The logical conclusion is that both the private sector as well as the federal government are putting off an inevitable day of reckoning. The time will come when the REO overhang must be put to market. The sheer volume of product to be liquidated will necessitate using marketing methods which can effectively move large blocks of product in a short period of time.

Chapter II traces the growth of repossessed real estate in the United States in the 1980s. The history and evolution

of the problem is well-documented in the popular press. The issue can be seen in light of several different macroeconomic factors which have received less popular attention than the celebrated Savings and Loan and regulatory debacle.

Chapter II also examines some important historical precedents for REO disposition, first following the oil embargo recession and REIT crisis of the mid-1970s and later following the recession of 1981-82. The current crisis in REO is different, however, and best explained by the scientific concept of critical mass: when the rate of quantitative growth in a substance (in this case, REO) makes for a qualitative change in it. This chapter shows why the problem of REO inventory is still building and why current rates of disposition are leading to a massive overhang of REO above the real estate market. It is a problem of unprecedented size and character that will require innovative and thoughtful approaches to resolution.

Chapter III offers background on the various types of auctions formats in general. At first observation, auctions seem to permeate nearly all economic life in free economies. Auctions in one form or another are used as a marketing mechanism for all types of assets. Whether assets are unique (or ubiquitous!!) and rare, as in the case of art and antiques, or uniform and identical, as in the case of most commodities, auctioning is a widely accepted and successful method of sale. Assets that are perishable, such as tobacco

or freshly cut flowers, are auctioned as readily as durable goods, such as used automobiles and farm equipment. Real assets are auctioned as freely as securitized paper assets; cattle and other livestock come under the hammer while livestock futures are traded through a somewhat different, if nevertheless identifiable, auction process. Many times services are effectively auctioned off, as in the case of bids on construction or consulting contracts.

Chapter III also discusses auction techniques in American capital markets other than real estate. The various capital markets in the United States and abroad rely on varying styles of auctioning to insure a continuous, liquid marketplace for each type of asset. The equity markets are the most notable example. Importantly, the stock exchanges make a centralized, secondary market in equity securities, while the primary market for the new issues of those securities is made in an over-the-counter fashion, through networks of independent broker-dealers. In the government debt markets, the auction process assumes a reversed role. The primary market for securities is through a form of sealed bid auction, while the active secondary market is not centralized, but is a "telephone" market of dealers who inventory the securities and provide liquidity by brokering transactions as well as by making bids and offers for their own account and risk.

The study of auctioning in securities markets offers some useful insights into the pros and cons of auctioning real

property. An overview of the various permutations of auctioning capital assets in these markets highlights the similarities between auctioning of paper and real assets, and also reveals important differences between the two markets. Both similarities and differences point to important implications for the success of real estate auctions. Chapter III briefly examines the role auctioning plays in other capital markets, outlines the parallels with real estate auctioning as well as some critical distinctions, and shows some important implications for the process.

Currently there are abundant myths and misconceptions within the real estate and financial communities concerning the auctioning of real property. There is widespread popular feeling that auctions simply don't work in real estate, that they are somehow an inherently faulty marketing mechanism that don't achieve "true" market values for real property. The controversy over valuation is a clear sign of the economic times. The 1990s is an era when holders of REO will suffer painful losses even when they liquidate at an appraised value or other current "fair" market value. Nonetheless, if any form of auction is considered an intrinsically flawed methodology when applied to real assets, it opens the question as to why auction methods of marketing are accepted as the sine qua non for trading in other capital assets, such as government and private debt obligations, equity shares, derivative securites, and other paper assets.

Chapter IV outlines the prerequisites for a real estate auction format which satisfies all basic conditions for "making" a marketplace in a free market. First, it begins by examining the role of real estate auctions in other countries, where the concept has a history of more substantive accomplishments. In England and Scotland property auctions are commonplace. In some areas of Australia auctions are the preferred method of marketing for upscale residential properties. In other countries around the world, properties of unique character and appeal find their way to competitive auction.

Chapter V is a case study of a condominium auction in which the market-making requirements of Chapter IV are employed. Auction results are compared to the previous two years sales under conventional brokerage. Various scenarios for market recovery and improved sales through brokers are evaluated.

Chapter VI summarizes the paper and offers recommendations for users of real estate auctions in the future.

ENDNOTES TO CHAPTER I

1. See Lowell S. Bryan, "A Blueprint for Financial Reconstruction," Harvard Business Review, May-June 1991:73-86 for a more detailed discussion.

2. Ron Suskind, "Banks are resorting to Gimmicks to Sell Foreclosed Real Estate," The Wall Street Journal, 30 May 1991.

3. Ibid.

4. Karen M. Flynn, Liquidation Specialist, FDIC, Washington, D.C., telephone conversation with author, 24 July 1991.

CHAPTER II: THE GROWTH OF REPOSSESSED REAL ESTATE IN THE 1980s

A. ORIGINS AND DIMENSIONS OF THE CURRENT PROBLEM

The 1980s were a time of unprecedented real estate activity in the United States. A confluence of factors came together in the early years of the decade to make for an extraordinary boom in real estate, to be followed later by an equally extraordinary period of crisis.

The Savings and Loan story of the 1980s constitutes one of the most widely-followed financial debacles of all time, perhaps second only to the 1929 stock market crash which in part marked the beginning of the Great Depression. Nevertheless, the boom and bust of the Savings and Loan industry was part of a larger trend towards more aggressive real estate lending by the U.S. financial community as a whole in the 1980s. The end result of such aggressive financing is a huge amount of troubled loans and growing glut of repossessed real estate in the United States. This glut poses substantial dangers to the health of the U.S. financial system and could act as a drug on American economic expansion in the 1990s.

Other major factors which fueled the current crisis were the phenomenon of tax-driven real estate investing; the pent-up demand for real estate at the end of the 1981-82 recession;

and substantial speculative building and investing as the bull market in real estate played itself out. In the end, the bubble burst, and in its wake came the burgeoning problem of REO.

B. THE SAVINGS AND LOAN CRISIS

The first and most widely-recognized factor which fueled the real estate boom of the 1980s was the deregulation of the nation's Savings and Loan industry. Established by the legislation of the New Deal which compartmentalized financial institutions by function, the Savings and Loan industry had long enjoyed a privileged market position in lending to homeowners during the "baby boom"-induced housing construction of the post-World War II years. In essence the typical Savings and Loan held what amounted to a market sinecure decreed by law. A model Savings and Loan could compete for deposits at perhaps 5% annually (the allowable ceiling S&Ls could pay varied, but was set by law), and make first mortgage loans to homeowners at 7%. For four decades the Savings and Loan business made steady if unspectacular profits.

The inflation of the 1970s upset the stable economic environment under which American lenders in general, and the Savings and Loan industry in particular, had for so long prospered. The fiscal demands of the Vietnam War resulted in a series of ever-widening deficits in the American federal

budget and produced substantial inflationary pressures. The Arab oil embargo of 1973 was the first of the oil price shocks which continued throughout the decade. By 1980 the price of crude oil was up over 1000% from the levels of only seven years earlier. The oil crisis was matched by price explosions in other commodity markets. The opening of diplomatic ties to mainland China and detente with the Soviet Union helped fuel price bubbles in the grain markets: the 1980s saw soybeans go from under $2 per bushel to over $12 at the height of the speculative frenzy. The markets in precious metals also bore testimony to the inflationary pressures of the decade. Gold and silver gained in value steadily, and went through wild price gyrations as the 1970s drew to a close.

Nowhere was the high inflation of the 1970s more manifest, or more portentous for the Savings and Loan business, than in the money and capital markets. Investors demanded an inflation premium on their money in addition to a real return on their assets. The result was to raise the price of money. When Wall Street introduced vehicles to capture higher rates for investors such as money market funds, the Savings and Loans were constrained by law from competing at market rates for deposits. In the first five years, money market funds grew from nothing to over $80 billion in deposits.[1] In addition, the value of the S&L's asset base - billions of dollars in home mortgages made at the older, low rates, and contractually fixed for decades - depreciated

dramatically. It appeared it could be only a matter of time before the Savings and Loan industry as a whole would go bankrupt.

The government's response to the crisis was a move towards laissez-faire deregulation. The Garn-St. Germain Depository Institutions Act of 1982 allowed Savings and Loans to compete for deposits at the prevailing rate of interest in the open market. In addition, thrifts were no longer constrained in the types of loans they could make. They could compete with commercial banks, REITs, insurance companies, pension funds, etc. for all types of lending business, and in particular, for lending to commercial real estate and development.[2]

Much attention has been paid to the Achilles Heel of federal deposit insurance. Federal deposit insurance was expanded to cover larger amounts of depositors money by the 1982 Act. Had deposit insurance been privatized at that time, one can only speculate about the implications. If the S&Ls had pursued the same ruinous underwriting policies while privately insured, it seems logical that market forces and therefore market disciplines would have materialized sooner. Rather than an abundance of delinquent loans and REO in the early 1990s, the day of reckoning might have come much sooner for the worst offenders and possibly with less drastic consequences for the industry as a whole.

By the late 1980s, the Savings and Loan industry was

insolvent. The federal government created the Resolution Trust Corporation (RTC) in 1989 under the Financial Institutions Reform, Recovery and Enforcement Act to take ailing thrifts into receivership, pay off depositors, sell the Savings and Loans and dispose of unwanted thrift assets. Estimates of the total cost of the federal bailout have reached half a trillion dollars.[3] By mid-1991, the RTC had taken over 617 thrifts and closed nearly 400, but still held over $160,000,000,000 in thrift assets it had been unable to sell. The real asset inventory included 1,300 office buildings, 765 shopping centers, 183 hotels, and 28 golf courses.[4] By May of 1991, the RTC had sold only $17.3 billion in REO.[5]

C. OTHER FINANCIAL INSTITUTIONS AND REAL ESTATE LENDING

Under an enormous pressure to compete for loans, commercial banks greatly increased their exposure to real estate throughout the 1980s. By 1987, real estate lending had surpassed commercial and consumer lending as the commercial banks leading source of business.[6] Nearly three-quarters of the growth of commercial bank lending from 1984 to 1989 came from real estate lending.[7] From well under $100 billion dollars in 1979,[8] commercial bank exposure to commercial real estate alone was estimated at $385 billion by 1991.[9]

By the end of 1990, commercial banks carried $77.6

billion in non-performing loans on their books. Federal regulators estimate that over half that amount were direct real estate loans, or commercial and consumer loans tied to real estate. They also estimated that approximately $40 billion of these loans currently on nonperforming status would become REO.[10]

The situation of the nation's insurance companies is somewhat more ambiguous. Since regulation occurs on the state level, and since mutual insurance companies are not subject to the reporting requirements of publicly traded corporations, data is more difficult to obtain. According to the American Council of Life Insurance, however, American insurance companies have underwritten approximately $255 billion in real estate loans as of year-end 1989.[11] The industry ratio for non-performing real estate loans is nearly identical to that of commercial banks, at 3.4%.[12] Direct ownership of real estate tripled from about $13 billion in 1979 to over $39 billion in 1989. Nevertheless, real estate business as a percentage of total assets dropped markedly over the same period, from 30.4% to 22.6%.[13] In essence, it appears that insurers have less direct exposure to real estate lending than do the nation's commercial banks, but assessing the quality of their real estate loan portfolio and other assets is both anecdotal and problematical. For example, in 1990 the Equitable Life Assurance Society sold REO valued on its books at $59.1 million for a $6.7 million dollar loss, despite

insisting that those assets far more than covered any exposure on the mortgages which these properties had previously secured.[14]

D. IMPACT OF FEDERAL TAX POLICY ON REAL ESTATE INVESTMENT IN THE 1980s

The 1980s boom in real estate was in large measure precipitated by the generous tax treatment accorded real property by the Economic Recovery Tax Act of 1981. This Act assigned an Accelerated Cost Recovery System of 15 years to all categories of real estate. In other words, a taxpayer's investment in a property could be recovered through depreciation deductions over this arbitrarily determined recovery period. As first enacted, this ACRS schedule allowed an investor to write off a full 12% of the depreciable cost of an investment during the first year.

The overall effect of the 1981 Act was to reward real estate investment for gross inefficiency. Accelerated depreciation meant that new development projects could still hold economic value as tax shelters even if they were devoid of economic justification as real estate. As a result projects were often supplied to the real estate market without disciplined attention to the market's real underlying demand. Riding the wave of the lending boom fostered by the Savings and Loans, real estate development exploded.

To compensate for a tax policy which some felt was overly favorable to the real estate community, Congress enacted the Tax Reform Act of 1986. This Act nearly doubled the effective depreciable life of most property, and in so doing, abolished the heavy tax incentives of real estate investing. For example, the annual deductions available to a $1 million depreciable investment over the first fifteen years of its life went from $1,000,000 under the 1981 Act to only $476,190 under the 1986 Act.[15]

Many observers of the real estate market felt that such a drastic reduction in tax benefits was an overreaction on the part of Congress to a previous inequity in the tax code. The timing of such a radical change could arguably have been better, or a more gradual phasing in of new standards might have been adopted. In any event, the marked diminution of tax advantages for real estate clearly had the effect of driving investors from the market. Coinciding with the decline and fall of the S&L industry, as well as the long economic expansion of the 1980s, the whipsaw changes in tax policies further aggravated an already imbalanced real estate market, and led to the specter of REO in the 1990s.

E. HISTORICAL PRECEDENTS FOR HANDLING REO: THE RECESSIONS OF 1973-74 AND 1981-82

The past two postwar recessions brought REO problems which in some respects offer lessons for handling the current crisis. According to the Mortgage Bankers Association, the last two economic downturns in the U.S. produced substantial real estate problems for lenders, although not on the current scale. A twenty-year record for percentage of residential mortgages in foreclosure was set in the third quarter of 1973, at 0.52% (commercial data was unavailable). This record was eclipsed in the fourth quarter of 1982, when 0.67% of home loans went to foreclosure nationally.[16]

In relative terms, the past two crises exhibited similarities with today's troubles. Bank of Boston officials have been quick to point out that approximately the same proportion of its loans were in the problem category in the mid-1970s as there are today, while regulators insist on loan-loss reserves which are 400% greater.[17]

In absolute terms, however, the explosion in real estate lending has meant that the scope of today's problem poses far greater dangers both to individual institutions and to the economy as a whole than do the difficulties of past recessions. Lenders owned foreclosed properties on a much smaller scale in the past two recessions. Real estate loans simply comprised a much smaller percentage of total lending.

REO was typically considered either an embarassment, a nuisance, or both. In the current environment, how well or poorly an institution resolves its troubled loans and REO may determine its financial destiny.

A review of past REO practices is revealing for what it shows as well as for that which it does not. There are heavy psychological burdens associated with handling REO, and strong non-economic considerations often impact what is otherwise a strict business decision. The unwillingness of organizations to face unpleasant realities, and the inability to draw on past experiences are two of the major impediments towards handling repossessed real estate.

First and foremost, lenders typically seem to work in a strictly reactive (rather than proactive) mode in dealing with foreclosures and the concomitant REO. In a 1983 study of foreclosure and REO practices in California, for example, 55% of the institutional lenders surveyed "admitted that they did not keep accurate records of foreclosures in the three major categories of filing the notice, entering the auction period, and completing the foreclosure."[18] The author of the study interpreted this as evidence of the suddenness and severity of the REO phenomenon, catching lenders off-guard and ill-prepared for a major crisis.[19] If lenders were overwhelmed by the last two times of troubles, one can imagine the chaos attending the current situation.

The author of the California study garnered two major

impressions from the extensive interviews with institutional lenders. First, despite the experience of the previous recession which had ended only six years before, "it was clear that in almost every company [out of 44 interviewed] questions and issues were being raised for the first time. . ."[20] While this would indicate a disquieting lack of confidence in the willingness of lenders to call upon past experience, the second observation is one that is repeatedly corroborated by other REO experts. "The general impression was that most respondents were ill at ease in quantifying their experiences, and much preferred the anecdotal process."[21] This observation could equally apply to calculating the costs of carrying repossessed real estate (see Chapter V).

The observations of auctioneers who were centrally involved in the real estate collapse in Texas in the mid-1980s strongly reinforces the above statements. According to one, "the biggest problem in dealing with a foreclosure or REO is getting the bank to admit that there is a problem in the first place. The denial is tremendous."[22] Another said, "In Texas we saw banks go through the whole cycle again and again. First they would drag their feet in foreclosing; then they would buy the property back at the foreclosure sale; then they would fool around with it for six months or a year, trying to market it and throwing good money after bad - all the while the market's going down and they're waiting for it to come back - finally they'd call us for an REO auction, and they'd

take a lot less than they'd have gotten if they'd gone to a serious sale in the first place. They would only go to auction after they'd been bled white and were sick of fooling around with it."[23]

Over the past several years in New England, a similar pattern of denial has been obvious. The author repeatedly encountered banks who adopted the posture of "we don't have much in the way of foreclosures or REO, unlike the other banks in the area;" many times these were the same institutions later placed under federal receivership. While denying the existence of problems in a loan portfolio may be explained by individual or corporate ego, the denial of market conditions in general seems dangerous. In moments of candor, several Boston area bank loan officers have indicated that their bank would be concerned that an auction would call public attention to the fact that the bank had made a mistake in its underwriting. Concerns over corporate image simply outweighed economics. In sum, there are strong non-economic reasons which historically have precluded more expiditious disposal of bank REO.

These actions reflect a pattern of bear market behavoir which may be familiar to students of the stock market and social psychology. Many market participants hold their depreciating assets through a declining market, clinging to hope and believing recovery and rescue are just around the corner. As prices decline further and pressure mounts, many

owners of assets can not or will not hold on, and panic selling may set in and lead to dumping at the bottom. Whether stock market behavoir is directly analogous to real estate markets in beyond the purview of this study, but the parallels are clear.

F. THE ROLE OF SELLER FINANCING IN PAST REO DISPOSITIONS

Auctioning of REO in the past two recessions played an occasional rather than central role. The typical REO marketing method was to simply list property with a local broker who had specialized knowledge of either the property, the local environment, or both. In other instances banks could discreetly pursue private transactions, perhaps by approaching privileged clients. According to the California study, when REO finally did reach the disposition stage, the consistent feature of transactions was attractive seller financing.[24]

Lenders consistently indicated that while they were not forced to take deep discounts on the REO holdings after the 1981-82 recession, in many cases they offered below-market financing as an inducement to buyers to take property off their books. A full two-thirds of the institutional lenders surveyed admitted offering mortgages at below-market interest rates to entice buyers, with almost half of all REO loans being granted at below-market rates.[25]

"The general range of concessions to move foreclosed properties was to offer the property at a definite 5 to 10 percent below market, as determined by an accurate competitive market analysis. . .and at a reduced loan rate [amount unspecified] with a 90% loan-to-value ratio. . ."[26] The mortgages on lender REO property were fixed-rate in an estimated 95% of the cases (at a time of record high interest rates, following the greatest increases of interest rates in American history). There were also substantial indications that many lenders would refinance a buyer's other properties in order to raise the down payment.[27] By taking a blanket mortgage on other real estate, lenders effectively granted 100% financing on their REO.

The contrast between the liberal financing of REO in the past, and the strangulation of credit on REO in the current environment, is striking. Lenders in New England have been instructed by regulators that unless REO is sold at market rates of interest, it effectively must remain on their books as REO.

G. THE CURRENT REO CRISIS: WHY THE PROBLEM IS SO SEVERE AND LIKELY TO GROW IN THE 1990s

One of the hallmarks of troubled loans is the great lag time between the first signs of trouble and the eventual foreclosure and designation as REO. Even when a lending institution has the foresight to confront unpleasant issues directly, the mechanics of loan workout and foreclosure can be quite time-consuming.

Once a loan becomes delinquent and is identified as a problem, the typical lender takes it from the original loan officer and puts it under the scrutiny of a special department for Controlled Loans or Workouts. The workout period can be of varying length. Either a refinance or other ameliorative plan is devised, or the loan continues delinquent and heads into foreclosure.

Depending upon the legal requirements for foreclosure in a given state, as well as the judicial backlog prevailing, a foreclosure can reach auction in as little as one month or as many as twelve. Typically this is a period when no payments are being made by the borrower; interest accrues and costs associated with loan collection multiply. Eventually the sale comes to public auction. As the foreclosure auction nears, many borrowers opt to file a petition for bankruptcy in federal court in an effort to forestall the auction. At this juncture the foreclosure may be delayed, or cancelled

altogether, as the borrower's assets come under the purview of the bankruptcy court. In either case interest and costs grow.

On the other hand, many times borrowers are not adversarial in temperament. In these cases, a lender may find its borrowers simply capitulate in the face of overwhelming economics, and tender the deed to their collateral over to the lender in lieu of foreclosure.

A property at foreclosure auction stands little chance of sale to a third party. Estimates of success at foreclosure sales nationwide vary wildly. Many industry observers estimate that no more than 10% of all foreclosure sales result in a sale to a party other than the borrower or the lender. In all other cases the lender "bids in" the amount of the note outstanding. The property becomes an asset of the bank and carried on its books as REO - Real Estate Owned (occasionally OREO, "Other" Real Estate Owned, to distinguish from bank facilities used to conduct business).

What passes to the casual observer as an attempt to bring a property to market is really nothing of the kind. In reality foreclosure auctions are no more than a legal or administrative mechanism which allows the lender to get control of a defaulted loan's collateral. The prospects for sale at foreclosure are limited by the legal constraints of the process. A foreclosing lienholder does not enjoy title to the property in question, and therefore generally cannot

offer an inspection to prospective buyers. The lender's file information on the property may be sparse, and data on property condition may be completely unavailable. No less debilitating is the lack of flexibility in the terms of sale which are often imposed by statute. Deposits are set arbitrarily by the foreclosing lienholder, and can be quite high, with no contingencies to protect potential buyers. Settlement date is imposed by law, and can be as quick as 21 days after the sale. Although a lender is not prohibited from offering financing to qualified bidders, many do not, either due to inertia or a fear of possible lender liability. In sum, foreclosure sales must adhere to strict legal guidelines which are often counter to the necessary elements of successful selling.

Lenders work under various accounting and bookkeeping conventions which basically discourage early treatment of problem loans. Banks and thrifts must maintain minimal capital requirements in the range of 3-6% of total assets. When a loan goes to foreclosure, it must be written down to a current "fair market" value, and the difference this value and the indebtedness must be booked as a loss, which is a dollar-for-dollar charge against capital. However, when a loan is restructured in an effort to avoid an eventual foreclosure, no loss is booked, and there is no diminution of capital.[28] There is a great incentive for lenders to delay in facing problems in a forthright manner, and thereby avoid an

economic judgment day.

The inevitable by-product of these processes is the passage of time. It is not unusual for a troubled loan to take two to three years to reach REO status from the time payments are at first delinquent. What is inconvenience or nuisance on the micro level can become economic disaster on the macro. When a region's economy heads into a tailspin, a lender can go from having a minimum of delinquent loans to having several hundred properties headed to foreclosure within a short period of time. When a region experiences sharp economic contraction, all lenders can feel the pressure. It is pressure that can be years in building and take years to resolve.

The response of individual lenders on the micro scale is demonstrably slow and reactionary. By the same token, the response of the regulatory authorities to the growing crisis of the 1980s was slow, reactive, and inadequate. Most importantly, the regulatory approach of both the RTC and the FDIC has resulted in a growing stockpile of government-owned REO.

The standard approach of the RTC has been to meld a failed institution with a healthy one. The "good" institution will typically take the performing loans and other assets of the failed S&L, and reject assets it does not want. The RTC becomes the owner of the unwanted assets at their previous book value.[29] The difference between proceeds realized from

sale of assets and liabilities to depositors is appropriated by Congress.

Determining the total dollar volume of repossessed real estate which must be resolved in the 1990s is at best guesswork. Adding the REO currently held in inventory by the healthy thrifts and commercial banks yields a number well in excess of $50 billion. Adding the repossessed asset inventory held by the Resolution Trust, and the number approaches $200 billion, with perhaps $60 billion in Texas alone.[30] Add the plight of the insurance companies, and the inevitable evolution of nonperforming loans into Real Estate Owned from thrifts and commercial banks, and the total could double. Finally, the growth in public and private REO could be tremendously increased by a prolonged recession, lackluster growth in an expanding economy, higher interest rates, or a "stagflationary" environment in the early 1990s. To guage the total magnitude of REO which overhangs the American real estate market involves a good deal of guesswork, but with some certainty the value of all REO reaches well over one hundred billion dollars. By comparison, the value of new homes built in an average year in the United States is a similar amount.

H. DRAWBACKS AND INADEQUACIES OF THE CURRENT APPROACHES TO REO RESOLUTION

The problems of REO disposition and ultimate resolution have been caused by at least three main factors: governmental agencies (and private financial institutions) overwhelmed by volume and unsophisticated at the requirements of successful selling and marketing; fear of "dumping" properties on the market and exacerbating the downward price spiral; and a credit crunch coming at a time when liquidity and confidence are most necessary to move troubled properties.

The suddenness and depth of the REO crisis of the 1990s have caught many institutions without adequate experienced staff to handle the incoming caseload of troubled loans and properties. Lack of trained REO personnel was nowhere more acute than in the federal government, which had expand the existing FDIC and create the RTC with great urgency.

I. THE CREDIT CRUNCH AND RELATIONSHIP TO AUCTIONING REO

The new regulatory climate for banks in 1989 brought sweeping changes, implemented with great speed, and coincided with the onset of national and global recessions.[31] Inevitably the government's actions exacerbated tight credit market conditions and had the opposite effect of increasing the lending community's REO. New capital requirements for

banks meant that higher reserves must be set aside for future loan losses. This new environment finds institutions with assets of some $70 billion already insolvent and under FDIC receivership, but "$700 billion in assets. . .controlled by banks that have insufficient capital to meet regulatory requirements."[32] There are basically two types approaches to a solution: those that raise capital to support today's level of assets in banks, and those that advocate shrinking the asset base to come more in line with available capital. The two approaches have been termed "liability-based" and "asset-based" solutions, respectively.[33]

REO is but one type of asset in the larger asset class which includes both nonperforming and healthy real estate loans. By definition, REO is an asset that has been written down, and a loss taken upon it: if the foreclosure had produced any bid which vaguely approached the total indebtedness, the property would have been sold and never reached bank inventory. Sale of REO is predicated upon the notion that assets can be sold into a liquid market for a price equal or greater than book value.

The approach of federal regulatory authorities which has resulted in a real estate credit crunch, especially for REO, makes for an ironic observation. The government's behavoir in a stock market crash (really that of the central monetary authorities, the Federal Reserve) is to provide all the liquidity necessary, even to step in and be the lender of last

resort, but in any event to make sure that business goes smoothly forward. In the Great Real Estate Crash of the 1990s, however, the government's actions (predominantly those of the regulatory agencies of the banking system) have served to choke off liquidity, through a host of tax, regulatory, and administrative requirements. The great irony is that the federal government itself holds the largest "long" position in the entire real estate market. Although interest rates have remained mercifully low over the past several years, current government policy has worked against providing financing for the real estate which the government itself owns. Instead of aggressively flooding the market with liquidity, or at least insuring that adequate financial lubrication is present in the system, the government is in reality working against itself.

The current scenario may be analogous to a stock market crash in which the government held the largest portfolio in the market: perhaps volatile, high beta stocks, or issues which once might have seemed high-flying but which now are of dubious quality. The normal response to a crash would be to prompt banks to make loans so stockholders could meet margin calls, but in our example the government would instead dictate that margin requirements be raised. This would work against the possibility of selling out of their position into a liquid environment. Holding real estate - or stocks - implies a speculation that prices will recover partially or totally, and

that losses will be cut. (The high cost of carry in real estate makes such a speculation risky. See Chapter V). In such a scenario, would holding a huge market position be considered prudent, or dangerous?

Congress has wisely mandated that property not be dumped pell-mell upon the market. But if the government's huge inventory is not steadily "fed" to the market, the overhang simply builds and pressure for "dumping" grows. Without liquidity, any substantial amount of federal property sales could turn into dumping, and potentially be ruinous.

ENDNOTES TO CHAPTER II

1. Bryan, "Blueprint for Financial Reconstruction," 76.

2. Ibid, p. 77.

3. Jay Taylor, Liquidation Specialist, FDIC, Washington, D.C., telephone interview with author, 19 July 1991.

4. Mindy Fetterman and Paul Wiseman, "S&L Crisis Overwhelming Regulators," USA Today, 13 June 1991.

5. Suskind, "Bankers Are Resorting to Gimmicks," 1.

6. David B. Hilder, "As Loans Sour, Banks and Regulators Argue How to Value Realty," The Wall Street Journal, 13 December 1990.

7. Ibid.

8. Ibid.

9. Bryan, "Blueprint for Financial Reconstruction," 8.

10. Suskind, "Bankers are Resorting to Gimmicks," 1.

11. American Institute for Life Insurers, 1990 Life Insurance Fact Book, 83.

12. Ibid.

13. Ibid.

14. Ibid.

15. Nathan A. Wolfstein, "Wringing the Most Value From REO Properties," Bottomline, October 1988:47.

16. Jim Carlton, "As Home-Price Slump Reaches California, Risk to Economy Rises," The Wall Street Journal, 28 November 1990.

17. Hilder, "As Loans Sour," 1.

18.Epley, 88.

19. Richard Paul Epley, "The Reluctant Landlords: The Role of Institutional Real Estate Lenders in Dealing With the Problem of Foreclosed Property, Ph.D. Dissertation, Golden Gate University, 1984:83.

20. Ibid, 88.

21. Ibid.

22. Jim Gall, conversation with author, 9 April 1989.

23. Ronald V. Maynard, interview with author, 11 July 1991.

24. Epley, 97.

25. Ibid, 87.

26. Ibid, 97.

27. Ibid.

28. Myers, Real Estate Problem Loans, 192.

29. Martin Mayer, "The Insatiable Demands of the RTC," The Wall Street Journal, 15 November 1990.

30. John S. Baen and Mark Bryant, "An Evaluation of FIRREA Disposition Policy and Market Effects," The Real Estate Finance Journal, Spring 1991:57-63.

31. Peter Aldrich and James Brenner, "The Credit Crunch, Pensions, and Real Estate," internal paper, Aldrich, Eastman, and Waltch, June 1991:3.

32. Ibid, 5.

33. Ibid, 6.

CHAPTER III. AUCTION MARKETING TECHNIQUES IN OTHER MARKETS

A. APPLICATIONS OF AUCTION THEORY TO REAL ESTATE

There exists a rich and diverse literature on auction theory. The first and most obvious drawback to the entire body of literature is that the focus is heavily oriented towards the micro level, which typically examines different bidding theories, and the issues of an optimal sale of one item through various auction structures and formats. In contrast, the challenges of the REO crisis of the 1990s are on the macro level. The present situation demands moving large amounts of inventory of a traditionally illiquid capital asset. Since it is an unprecedented situation there exists little data on auctions as a market-wide phenomenon which could serve as a guide.

The second major drawback to auction theory is its assumption of rational actors who make predetermined valuations and act according to their preordained strategy during the bidding process. One of the great advantages to the English system, at least, is its potential to introduce a plethora of emotional dimensions to the bidding. Little or no conventional auction theory accounts for this, although implications of social psychology on markets has long been studied in the stock market.

Despite the substantial limits to the insightfulness of

many important auction theories when applied to real estate, there are a number of worthwhile observations of "micro" auction theory that are useful. They also make intuitive sense, are supported by empirical research, and corroborated if only anecdotally by the best of the real world practitioners of auctioneering.

First, there is the notion that the prices achieved under any auction format will be favorably correlated to an increasing number of bidders. This was shown in a 1987 study of such diverse markets as tax-exempt bond underwriting, offshore oil leasing, and National Forest Service Timber Sales.[1] This is especially critical for auctions in certain real estate sub-markets, such as single-user industrial, where the market for a specific property may be thin even under normal circumstances. The number of potential bidders is related to the effectiveness of advertising an auction event. It is further strongly related to the out-of-pocket costs of placing a bid. In the case of required due diligence for institutional-grade investment property, the substantial costs to prepare a bid can be a major barrier to entry.

Secondly, certain auctions offer a strong and valuable price discovery function for real estate similar to that which is exchanges provide for traded securities. This can occur when an auction offers a sequence of identical or highly similar products, such as condominium units in the same development or buildable house lots in the same subdivision.

In these instances, sales are subject to a "declining price anomaly"[2] in which the first lots fetch the highest prices and tend to level off with subsequent sales. This can emphatically demonstrate at what lower price levels greater market acceptance and deep liquidity begins to occur, and can prove useful in projecting absorption.[3]

Auction theory will no doubt make great strides in the 1990s, as there is sure to be a vastly improved body of data for researchers to work on. Perhaps the richest area for auction theory is in the area of research on auctions of upscale residential homes in the United States. Established auctioneers offer compelling anecdotal evidence that luxury residences and estates often sell at auction for staggering premiums over appraised value, and as a result auctions should be the preferred means of selling high-end homes. Still, Sotheby's maintains a real estate brokerage division for high-end homes but doesn't regularly auction them. Perhaps Sotheby's adds value through excellence of service and not through innovation.

B. AUCTION FORMATS: ENGLISH, DUTCH, AND SEALED BID VARIATIONS

<u>English auctions</u> are the most common type and easily recognizable. A single auctioneer orally "calls" ascending bids offered by prospective buyers who publicly congregate for

the sale, and the highest called bid wins when the auctioneer bangs a hammer or gavel, or otherwise calls an end to the bidding.[4] The most common examples of English auctions are those for antiques and fine art. Conduct of English auctioneering is governed by differing state laws throughout the U.S., all which are remarkable for their brevity. It is the opinion of the author that English auctions are governed far more by local customs, mores, and traditions than by statute. What may be common practice in one locale, or for one type of good at sale, may be considered dirty pool in another. Far more than even many sophisticated veterans of auctions realize, the conduct of a given sale is open to the creativity and discretion of the auctioneer. The best examples concern issues of seller's bids, and reserve or minimum prices.

Seller's bids essentially mean fictitious bids placed by the auctioneer or a confederate on behalf of the seller. This technique is controversial for its ethics as well as its effectiveness. Laws addressing this practice vary from one country to another, and within the U.S. from one state to another. Although many auction-goers may feel such activity is somehow unfair, British law has sanctioned the technique since at least the "Sale of Land by Auction Act of 1867."[5] This law is unclear as to whether this method is acceptable below the reserve price, above it, or at all times. It only requires that the auctioneer apprise the public that the

technique may be applied at a particular sale. The practice is widespread in the art markets, where paintings or other goods are often "bid in" or bought by the auction house on behalf of the seller when third party bids fail to achieve the seller's reserve (minimum acceptable selling price).

The advantages of seller's bids are substantial in thin trading such as the current real estate market. A live English auction can be conducted, and if only one interested third party bids, then seller's bids can test whether the third party will pay a price acceptable to the seller. Knowledgeable implementation of reserve prices and seller bidding practices would make auctioning far more palatable for institutional holders of REO in the United States.

A seller's reserve, as mentioned above, is simply the minimum selling price acceptable to the seller. A reserve is never made public. Therefore, when known only to the seller and auctioneer, the reserve amounts to seller's right to refuse any and all third party bids.

A minimum price is simply a publicized reserve. This technique is widespread in contemporary real estate auctions. Any bid over the published minimum must legally be accepted by the seller.

<u>"Dutch" auctions</u> are conceptually an inversion of the English approach. This system starts with an unrealistically high bid, publicly posted by the auctioneer. Then at regular time intervals the bid is dropped incrementally, usually by

a special clock constructed to show the declining bids with the sweep of the "second" hand. The first bidder to signal acceptance, usually by yelling "Mine!", is the buyer.[6]

The wholesale tulip and flower markets in Aalsmeer, Holland, actually use the Dutch technique to sell millions of their perishable commodities daily. In a sense, the conventional brokerage of real estate in the U.S. is a type of slow-motion Dutch auction conducted by Realtors. Prices start high and are reduced monthly (or more, or less frequently) until the first bidder who "hits" the asking price becomes the buyer. The main disadvantage to this type of auction for the market as a whole is that it provides no consecutive price information. This may be available in terms of rejected offers, or how many parties viewed a property, but this is privately held data, and also tends to be much less sparse than price data from public auctions.

The sealed bid sale is a close theoretical cousin to the Dutch format. All bidders make a single bid, and submit it to the auctioneer. Bids are opened and the high bid wins (in the case of contract bidding the low bid wins). Variations on the theme include the high bidder winning but at the second bidder's price, or at some weighted average of the first two, or even three, bids. Bidding theory and strategies can get quite complex, as under the other formats. Like the other approaches the sealed bid technique can be used in conjunction with a reserve (minimum) price or undergo other permutations.

This system is popular with government sales because of its ease of implementation, because buyer collusion is difficult, or perhaps just because failed auctions are kept from the glare of public scrutiny.

C. AUCTION FORMATS IN CAPITAL MARKETS: SPECIAL CONSIDERATIONS ON PROVIDING LIQUIDITY

Auction formats or techniques are used in the marketing and secondary marketing trading of nearly every capital market in the United States. A brief look at these markets offers important clues for successful auctioning of the least liquid capital market, real property.

Auction-like rules are used to buy and sell all paper assets. In the primary (new issue) market for U.S. government debt, a variation of sealed bid approach is used. Once issued, a decentralized "over-the-counter" market is made by broker/dealers connected through electronic media. In the stock market, the reverse is true: only a new issue's underwriters offer it to clients by telephone or other means, and once issued it trades on its appropriate exchange under auction-like conditions. The actual permutations of auction principles devised by the exchanges make fascinating hybrids for the theorist: a "double" auction occurs, in which all the floor brokers can be both buyers and sellers. The specialist is both an auctioneer, as well as the buyer or seller, the

liquidity provider, of last resort.

The purest example of double auctions occurs on the futures exchanges, such as the Chicago Board of Trade or Chicago Mercantile Exchange. On these exchanges there are no specialists, but each floor broker acts as an auctioneer, as well as a buyer and seller - and over 700 have been in a single trading pit at one time.

The greatest lesson for the study of real estate auctions may oddly enough come from futures trading. Grain exchanges were able to succeed because they were able to specify just what they were trading; to identify and standardize the quality as well as quantity of grain deliverable under a given futures contract. In this way, a futures contract resembles any other financial instrument. It is intuitively obvious that 100 shares of IBM common stock is identical to any other 100 shares, and therefore, there is no economic preference for either hundred shares. The grain contracts work the same way. Grains are graded according to clear guidelines strictly specified in each exchange's contract. That contract is the source of complete product information for the buyers. At the moment they place their bids in the particular exchange's auction market, they know with absolute certainty exactly what they will be getting at delivery. Buying the Chicago contract calls for a certain grade and type of grain; the Kansas City calls for another, the Minneapolis and Canadian exchanges, still others. The various exchanges, in addition to providing

the physical facilities for trading, act as the financial guarantors for the integrity of their respective futures contracts. So like the IBM stock, there is no product uncertainty, no iota of product information lacking, at the moment of bidding. The only uncertainty is that of which price the buyer's order will be executed at.

It is just this characteristic of fungibility or substitutability of product that makes liquidity possible in the financial markets. It is made possible because the "product risk" is eliminated by complete product information, guaranteed by the exchanges. The market participants need only to establish price.

It is central to this thesis that only when a real estate marketplace satisfies the product information needs of the market participants, as the art auctions or financial exchanges do, can liquidity and successful trading of real property occur. An auction market can value any asset, even the most unique assets which have few or no direct comparable substitutes, as the art and antique auctions continually prove. The implications for real estate auctions are examined in depth in the next two chapters.

ENDNOTES TO CHAPTER III

1. Lance Brannan, J. Douglass Klein, and Leonard W. Weiss, "The Price Effects of Increased Competition in Auction Markets, Review of Economics and Statistics, February 1987:24-32.

2. Orley Ashenfelter, "How Auctions Work For Wine and Art," Journal of Economic Perspectives (Summer 1989):23-36.

3. See Ashenfelter for a more detailed discussion.

4. Ashenfelter, 24.

5. Clive Carpenter and Susan Harris (eds.), Property Auctions (The Estates Gazette Limited: London, 1988), 92.

6.The annual celebration of the French wine harvest at Beaune in the heart of Burgundy is crowned by a unique auction of wines "by candle." In this variation buyers call out ascending bids for one of the great vintages until a small lit candle goes out. Like a game of musical chairs, bidders are never quite sure when the "music" will end.

CHAPTER IV. REAL ESTATE AUCTIONS: THE CHALLENGE OF BRINGING LIQUIDITY TO THE LEAST LIQUID CAPITAL MARKET

A. HISTORICAL & FOREIGN PERSPECTIVES ON REAL ESTATE AUCTIONS

Real estate auctions have a long and colorful history. The concept goes back to at least Genesis 23, when Abraham bought the fields of Machpela from Ephron.[1] In the second century A.D. the entire Roman Empire was auctioned off by the Praetorian Guard to settle a question of imperial succession.[2] In more recent times, the practice of auctioning real estate has largely been confined to distress situations, but even this has long historical precedent.[3]

In some areas of the world, auctioning of real estate plays a market-making role of importance. In late 1989, for example, a large and coveted block of office space in central Paris was auctioned off by Citicorp with spectacular results. The eventual high bidder was a son-in-law of Francois Mitterand, President of France.[4]

The methods and successes of other country's auction systems offer some insights for application of auctions to the American REO overhang in the near future, as well as the longer term viability of auctions in real estate over multiple market cycles. First there is the U.K.: auctions have long been on the British property scene, and sealed bids have long played a major role in Scotland.[5] In addition, Australia

relies on auctioneering to market nearly all commercial properties and much of the residential real estate as well.[6]

In the British market auctions have a more limited market share, but British law provides for important buyer protections. Concerning "Property Inspection and Preparation of Particulars" for inclusion into the auction catalogue, "in the last twenty years, the weight of the law generally has shifted from favouring the seller to protecting the buyer. In the property field. . .the auctioneer who publishes incorrect information in his catalogue can. . .be sued for negligence. The auctioneer cannot rely on printing a disclaimer in the catalogue."[7] It is this stringent reliance on information dissemination which makes British auctions successful.

In some parts of Australia, auctions play a leading if not dominant role in marketing real estate. Approximately half of the higher quality residential properties are sold by English style auction, in which an auctioneer works closely with the listing real estate broker (estate agent).[8] Real estate listings are customarily for 60 days only, and the auction takes place within that time frame.[9] Seller reserves are almost always used but the amount is rarely divulged in advance. This effectively gives the seller the right to reject any and all bids.[10] Seller bids are not only legal, but regularly used to raise prices.[11]

Interestingly, Australian auctions are rarely held with

contingencies of any kind, including financing. Auctions are successful not in spite of an apparent lack of financing, but rather because the homes auctioned are in the upper-middle income echelon, and bidders go forward with "an informal understanding with a lender that a certain percentage of the purchase price will be provided."[12] Auctions are heavily skewed towards upper-income people, and loan commitments "may be associated as much with the borrower's financial capacity as with the collateral's value."[13] This phenomenon would substantiate rather than refute the notion that availability of financing is a prerequisite to conducting a successful auction.

From 1959 until the late 1980s, auctions greatly gained in popularity in Australia. One of the most important factors was the participation and advocacy of the real estate community itself.[14] Unlike the resistance to auctioning concepts which has marked the American real estate industry, the Australian industry actively promoted the concept.

Real estate auctions have evolved for selling high quality and unique properties,[15]and in sharp contrast to the distressed mentality of the United States, "auctions tend to be used most during periods of high demand and rapidly rising prices."[16] In one of the few studies performed on auctions versus conventional negotiated transactions, Kenneth Lusht of Pennsylvania State University sampled over 300 transactions in Melbourne from January 1988 to March 1989.[17] "Houses listed

for sale by auction and sold either before or at auction brought a statistically significant price premuium over houses listed and sold privately. . ."[18] Given these results, it is unclear why there is such resistance to further exploration of the concept in the United States, or why auctions are constantly dismissed with tautological explanations on the order of "auctions don't work in this country because the market won't accept them."

In the relatively short history of United States business, most auctions of real property have traditionally been foreclosures. As such they grew from the demands of legal necessities, and not for their economic advantages. Basically, an auction follows the legal acts of loan acceleration and foreclosure in order to prevent the borrower from exercising a legal right of redemption. In addition to the foreclosures of the Great Depression and in each of the post-World War II recessions, property commonly finds its way to auction during sales ordered by federal bankruptcy courts, income tax authorities, municipalities for delinquent property taxes, and via other judicial or administrative mandates. As a result, the vast experience of both the general public as well as the real estate and financial communities has been with those auctions conducted under legal and bureaucratic constraints and guidelines, and not for strictly economic reasons.

B. TOWARDS A NEW AND COMPREHENSIVE APPROACH TO AUCTIONEERING OF REAL ESTATE

At the simplest level, a real estate auction is an attempt to bring the concept of a centralized, liquid marketplace to an asset or assets which historically have been both illiquid and sold by an interacting network of decentralized broker/dealers.

"Since real estate assets are by nature heterogeneous, real estate auctions can be recognized as a particular form of a classical market where the number of goods for sale. . .is equal to one. Hence, the seller enjoys a monopolistic position in terms of offering a unique asset, but, unlike true monopolistic goods, close substitutes typically exist with real estate assets so that the seller is often thought of as ineffectual at influencing the ultimate sales price."[19] The authors go on to say that by micro-manipulating the auction format "through reserve price setting, changing the number of bidders, choosing an information release policy or transferring risk. . .the seller can marginally and sometimes significantly impact the ultimate selling price in sophisticated ways. . ."[20]

The seller does enjoy one unique monopolistic position in regard to his or her property: the seller has a unique access to product information for a product that is inherently unique. Only when all market participants can share this access to product information will the market, as embodied in

the auction, have a chance of establishing value, of setting an optimal or correct price through any auction mechanism.

One of the assumptions gleaned from interviews with auctioneers is that the particular format for an auction (English, Dutch, sealed bid, absolute, reserve, minimum bid) is of secondary importance once the preconditions of information dissemination and financing for bidders have been established. This seems in agreement with one of the cornerstones of academic work on auctions, the "revenue equivalence theorem"[21] which states that all methods yield equal results. An auction firm with a real estate background, knowledge of a local market (or access to such knowledge through local correspondents), and adequate competence in marketing and presentation methods should be able to produce a satisfactory number of qualified bidders on auction day. The micro-management of marketing is best left to savvy marketing professionals, but sellers must take care to establish the preconditions for the market to evaluate a property.

Auctions conjure up the specter of "dumping" because most American sellers treat their real estate as a commodity to be sold by the pound when it heads for the auction block, and it becomes a self-fulfilling prophecy. This thesis posits that real estate auction performance always reflects an "information discount" when product information is withheld, and when product information is as fully disseminated as in

a conventional sales arrangement does the market value real property correctly under any auction format. Without clear establishment of quality of the product upon delivery, as there is in the futures and equity markets, real estate auctions will not function.

Real estate auctioning of non-distress property is relatively new in the United States, and there are but a handful of firms versed in the field. It might be said that in general the real estate people don't understand auctions, and that precious few auctioneers understand real estate.

So to establish a new, comprehensive approach to real estate auctioning means that all information necessary to perform due diligence must be made available by the seller. Most American auctions are conducted under "AS-IS, WHERE-IS" conditions, under which prospective buyers must gather their own information about the property, the vast majority of which is held in the near-monopoly position by the seller. The consistent exception to this seller's information monopoly is the guarantee of clear and marketable title, which by custon and tradition is a precondition of non-distress sales in the United States. Such a guaranteee does not preclude a prospective buyer's counsel from legal investigation of the chain of title. Interestingly, in the U.K., auctions are regularly conducted on properties with all sorts of title imperfections, but information upon those are rigorously disseminated. It is left for the market to establish the

value of such properties with titles with liens or easements.

Product information goes beyond clear title, and must reflect everything that is known about a property. The process of dissemination is incumbent on the seller, but buyers must be given every opportunity to conduct due diligence at their own time and expense. Such due diligence may include, but not be limited to, data on structural, infrastructure (electricity, water, sewer), metes and bounds, building condition, maintainence records, engineering and environmental matters, and so forth. The data which is non-monopolistic but which the seller is also in a unique position to provide is that on local, neighborhood, and civic conditions and politics. What does the fiscal health record of a state or municipality look like? What is the record of property tax increases, and special municipal assessments? What is the character of the community? What is the character of the local school system (for residential) or labor force (for commercial/industrial)?

In addition to providing such comprehensive information to prospective purchasers, the seller must make the properties available for buyers to inspect and research on their own. Most auctions have minimal inspection periods; some are for one hour on the morning of the sale only, and there is no opportunity for professional inspection by buyer's agents.

A comprehensive approach to auctioneering of real property is basically to include all that which allows the

conventional format of brokered selling to succeed, but to invert the process of events. Although not commonly thought of as such, in a conventional real estate negotiation the bargain is basically struck at the beginning of the process. The price-setting comes first, but it is only a tentative price, and is strictly based upon the prima facie evidence which the seller makes available about the property. The seller establishes an asking price, and the first bidder to meet it, or whose offer satisfactorily approaches it, puts the property "under agreement." Most agreements customarily include contingencies, which may allow the seller to procure satisfactory financing, but nearly always provide for a period of due diligence, in which the seller or the seller's expert agents may investigate the property to establish product information, or to corroborate that information which the seller had provided. If the facts unveiled by due diligence differ substantially from those assumptions upon which the price had been set, then the final price is arrived at through more negotiations, or the transaction is cancelled, and typically deposits are returned. There is no exchange of economic value.

In a comprehensive approach to auctioneering, the same events must take place, but in reverse order, and the price-setting is the very last act embodied in the auction process itself.

The first and most critical requirement for successful

auctioning in America is for sellers to adopt a policy of total release of available information. Further, there must be liberal provision for prospective buyers to conduct general or specific property inspections. For price to be established, all due diligence must be performed first, so all information must be openly disseminated long enough before price-setting for the auction to take place. The current practice for inspection at foreclosure and other judicial sales, if there is one, is for a one or two hour open house immediately preceding the sale.

The terms of sale must be standardized, so that all bidders may bid on the same product. Closing dates must be far enough in advance to allow enough time for those bidders who choose not to accept the auction-sponsored financing to arrange funding from other sources. Information and terms must be clearly addressed to the bidding public before bidding can take place.

Because the vast majority of sales in American real estate are predicated upon 75% to 100% financing of the purchase price, mortgage availability is the second imperative of a comprehensive auction. To make prospective buyers rely on cash to close transactions is to limit the number of bidders at auction. While financing packages sanctioned or arranged by the auctioneer do not exclude buyers from arranging their own funding, there is always the possibility of offering a below-market interest rate or other attractive

terms. Some auctions in the Southwest or Texas even offered portfolio financing at condominium auctions in which the down payment - usually no more than 5 to 10 percent of the winning bid - qualified the bidder for a low fixed-rate mortgage! Unfortunately precise data is unavailable for the results, but anecdotal wisdom is that such financing at auction brings results far superior to any method of marketing. As for the necessity of offering financing to bidders, at least one prominent auctioneer believes it adds an average of 10% to 20% to the final sales price.[22]

To sum up the comprehensive requirements of auctioneering, there are two overwhelming factors for success:

- PRODUCT INFORMATION, both positive and that which may detract from value, must be fully and widely disseminated in time for prospective buyers or their expert agents to do general or specialized inspections and investigations on the property. When the property is put up at the auction block, the prospective buyers must ideally have as much property-specific information as they wish. American auctions work traditionally on an "AS-IS, WHERE-IS" basis, and the seller provision is for clear and marketable title.

- FINANCING available on the property. Ideally an attractive financing package should be aggressively offered, with the easiest credit consistent with good underwriting. When the broadest possible number of interested bidders have access to financing, it increases auction participation. When

more bidders compete at an auction, prices tend to be higher. The proposition is intuitively obvious, and well supported by research,[23] but the utility of increasing bidder participation is often lost on novice sellers in practice. They tend to think only in terms of one bidder making the winning (high) bid, yet to achieve the upward dynamic of an English auction "the back bidders [the pool of competing but failed bidders] are as important as the high bidder."[24]

In addition to the two major mandates for product information and financing, there are other considerations relevant to conducting a successful auction event, but not exclusive to auctioneering of real estate. The micro-management of order of sale, format of auction, seller's bid strategies, clear and coherent terms of sale, smooth and professional execution of the event, are all matters to be left to the property's sellers or professional auctioneers and marketers versed in the nuances of their trades. Such requirements would not change, however, were the sale for a commodity other than real property, such as art or wine. At all times the dictates of good marketing apply, so that a multiple number of potential interested buyers can be brought to a central location at an appointed time.

ENDNOTES TO CHAPTER IV

1. Carpenter and Harris, viii.

2. Stephen J. Martin & Thomas E. Battle III, Sold! The Professional's Guide to Real Estate Auctions, (Dearborn Financial Publishing, 1991), 16.

3. The term "fire sale" refers to the practice of the Roman Senator Crassus, whose operatives would set fires in the tenements of Rome while their employer negotiated for adjacent properties. Upon closing the transaction, the fire companies - also owned by Crassus - would douse the flames.

4. Esther Sandrof, "Transtech Headquarters," case study, Citicorp Real Estate and Columbia University Graduate School of Architecture, Planning, and Preservation, June 1990.

5. Kenneth M. Lusht, "Auctions versus Private Sale of Houses: A Description and Empirical Analysis of the Melbourne, Australia Market," unpublished paper (Pennsylvania State University, College of Business Administration, May 1990):1.

6. Ibid, 32.

7. Carpenter and Harris, 21.

8. Lusht, 1.

9. Ibid, 4.

10. Ibid, 7.

11. Ibid, 6.

12. Ibid.

13. Ibid.

14. Chris Maher, "Information, Intermediaries, and Sales Strategy in an Urban Housing Market: The Implications of Real Estate Auctions in Melbourne" Urban Studies, 1989:500.

15. Lusht, 32.

16. Ibid.

17. Lusht, 33.

18. Ibid, 42.

19. Kerry D. Vandell and Timothy Riddough, "Disposition Prices and Auction Strategies: Learning from the RTC," University of Wiscosin - Madison, Presented at the ASSA Annual Meetings, Washington, D.C., December 1990, 6.

20. Ibid.

21. William Vickrey, "Counterspeculation, Auctions, and Competitive Sealed Tenders," The Journal of Finance (March 1961): 8. The revenue equivalence theorem is based upon a number of limiting assumptions which in practice vitiate the theorem's usefulness.

22. Jerome J. Manning, personal conversation with author, February 1990.

23. Paul Milgrom, "Auctions and Bidding: A Primer," Journal of Economic Perspectives, (Summer 1989):3-22.

24. Martin J. Higgenbotham, converation with author, June 1990.

CHAPTER V. CONVENTIONAL SALES vs. COMPREHENSIVE AUCTION RESULTS: CASE STUDY OF MARINA POINT CONDOMINIUMS, QUINCY, MASSACHUSETTS

A. COSTS OF HOLDING REO

For many institutional holders of repossessed real estate, asset disposition issues are among the most troublesome business decisions which real estate executives must face. Many projects, if liquidated at current fair market prices, will result in a loss to the institution and ultimately nothing can reverse the unpleasantness of losing money. Many asset disposition decisions are made for properties which have a history of failed loan workout policies, and a project may easily develop a stigma within a portfolio.

There is understandably great reluctance for institutions to quantify the total costs associated with owning foreclosed real estate projects. In essence, REO represents a mistake which an institution has made, and there is little reason to think that adding up losses will make for welcome news. The non-economic costs, as well as the quantifiable costs, of holding repossessed real estate are always substantial.

The objective of this study is to determine whether auctions offer an institutional holder of REO a higher net present value than continuation of conventional sales at their current pace, or conventional sales at a slightly or substantially improved pace.

The methodology is to compare actual auction results to the hypothetical cash flow which would have been obtained from a linear continuation of the conventional sales pace preceding the auction until all inventory is sold. To compensate for the time necessary to complete the conventional sales campaign, a reliable cost of carry for real estate owned must be constructed. Once obtained, the cost of carry can be used to discount the cash flow obtained from the conventional sales campaign to arrive at a net present value. This calculated net present value (NPV) can then be directly compared to the expected value from an auction.

Auction results can also be tested against conventional sales projections other than those achieved in the most recent period. To create a "band" of present values, the implications of a 30% increase in the conventional sales pace as well as a more optimistic case of a 100% increase in the conventional sales pace was considered.

Condominium developments as a specific product type were studied because there is a well-defined pace of brokered sales which can be extrapolated into the future. The total sales during the one or two years preceding a liquidation auction (one which adheres to the precepts of product information and financing) is averaged by either 12 or 24 months to yield the number of square feet sold per month, and the average revenues collected per month. This current absorption pace can then be extrapolated to yield both the expected cash flow and the

time to sell-out, assuming a steady state.

B. DATA ON BOSTON AREA CONDOMINIUM AUCTIONS

The author examined sales records for seven major condominium auctions held in the Greater Boston area from late 1989 unitl early 1991. All sales conformed to the product information and financing requirements for a comprehensive approach to auctioning real estate. All sales were conducted by major national real estate auction houses. Data was examined for the following projects: River Court Condominiums and The Esplanade Condominiums in Cambridge; 75 Clarendon Street Condominiums and Fulton Court Condominiums, both in Boston; Oak Terrace Condominiums in Framingham, Massachusetts; Emerson Gardens in Lexington, Massachusetts; and Marina Point Condominiums in Quincy, Massachusetts.

The primary source of available data was the recordings of deed transfers filed at the various Registries of Deeds in Suffolk, Middlesex South, and Norfolk Counties. However, county records of property transfers are arranged chronologically in the order the individual Registry receives them. Without knowing the date of transfer of a unit, and without the specific reference to the Registry book and page number of a deed, a researcher would need to review each deed filed in a county for one or two years prior to an auction in order to extract the record of conventional sales of a

development. Tracking sales from an auction is in practical terms equally difficult. The relative flurry of transfers resulting from an auction can be spread over four to eight weeks after the sale, and the sheer volume of all property transfers makes it difficult for a thorough search to be completed. This procedure would need to be completed for each development studied, and the time necessary for this type of research exceeded the time available to complete this thesis.

Lacking the time needed to meticulously search county records, the author turned to secondary sources. The most widely-used secondary source for property transaction data in New England is a private service called the Condominium Sales Report, published both monthly and annually by Banker and Tradesman.[1] Banker and Tradesman compiles sales records from the deed transfers filed at each Registry in Massachusetts.

It soon became apparent, however, that even the secondary data was full of inconsistent statistics, and often with a debilitating lack of detail. Between the monthly and annual data, there were gross discrepancies between the number of sales recorded. For instance, the 1990 Condominium Sales Annual showed 49 sales for the Esplanade, while the 12 monthly issues for 1990 failed to record a single transaction.

The same inconsistencies surfaced for all other projects. Fulton Court showed only four sales in the Banker and Tradesman sources for the twelve months preceding the auction. A fortuitous meeting with the sales manager of the project led

to the revelation that in fact seven units had changed hands during that time. In either case the pace of sales was dismal, but the discrepancies between the two were so great as to undermine the possibility of constructing projections of conventional sales into the future with which to compare auction results.

All sales data from the Banker and Tradesman publications acutely suffered from lack of necessary detail. Inevitably, the legal records from which the publishers obtain their information do not reflect property-specific data which may occasionally be subjective but is always relevant in marketing: location, access, views, and so forth. Nevertheless, the publishers were able to add quantifiable data to the record of the transfer, but only intermittently. This data, when it appeared, would include square footage of the unit sold, number of bedrooms and baths, etc. Had this data appeared throughout the record of sales, it might have been possible to compare the quality of auction sales to the preceding conventional sales.

The exception to this consistently inadequate data was the case of the Marina Point Condominiums. The justification for use of the Marina Point data is that the author personally visited the previews and open houses prior to the auction, obtained the marketing materials, interviewed the Realtors as well as the auction personnel, and attended the auction and kept detailed records of the proceedings. In all respects the

author's information has been corroborated by public data, and where unit-specific data was lacking it was supplied by the author's homework.

Had reliable sales data been available for the other projects, particularly the unit-specific data upon which analysis of the conventional sales effort depends, then a more viable study of auctions as a market-clearing mechanism might have been constructed. The confines of such a study would have been narrowed to auctions of condominiums throughout Greater Boston during 1989-91. Future auction studies may need to rely on data gathered through independent research.

C. MARINA POINT CONDOMINIUMS: CONVENTIONAL SALES

Marina Point is a luxury condominium project located adjacent to a 684-slip marina on the waterfront of North Quincy, Massachusetts, approximately six miles from downtown Boston. Opened in 1987, the project gained quick acceptance, and sales for the first two years of 1987-88 totalled approximately 170 units. Sales fell off dramatically in 1989 and 1990, the two years prior to the auction, when only 12 units representing 17,924 square feet were sold at an average price of $178.40 per square foot (see Appendix). At this sales pace, it would theoretically take 10.56 years to sell out. Gross, undiscounted cash flow collected over that time would total $16,882,527.20.

D. MARINA POINT CONDOMINIUMS: COST OF CARRY

The cash flow collected over time for projects experiencing long absorption periods must be discounted by the carrying costs of holding a property. Cost of carry will vary widely from one property to another. Consequently there is no one benchmark "cost-of-carry" figure for the industry as a whole. Nevertheless, the procedure which was used to develop a "cost-of-carry" for Marina Point offers useful insight into what carrying costs may approximate for other REO-type properties.

Under any scenario, a lender begins facing real and substantial opportunity costs once taking possession of a property. Currently (July 1991) first mortgages on FNMA-quality loans are being made on the order of 9 to 10 percent. For the purposes of the analysis, we will assume an "opportunity cost" of 10%. Next is the question of just what cash is tied up in the project. We will assume the net investment is equal to the current market value of the project. This value, based upon 1989 and 1990 brokered sales at Marina Point, would therefore approximate $16,882,527.40 ($178.40 sales price per square foot during 1989-90 x 94,633 square feet left in inventory).

In addition, there are other carrying costs which must be added to the opportunity cost. Those include:

<u>Property management</u> - can receive from 2-1/2% to 5% of

gross rental income. If an individual property does not hold economies of scale the figure tends to the upper end of the range. For an unoccupied condominium, the property management costs will reflect projected equivalent gross rent revenues. Market rents at Marina Point during 1990 hovered in a very narrow range between $11.80 and $12.20 annually.[2] Assuming $12.00 PSF, the total projected gross rents for a 94,633 SF inventory would be $1,135,596.00. A five percent fee would cost the lender $56,779.80 or .00336% of the "going in" asset value determined above.

Maintainence costs are reflected in condominium fees to the condominium association. Marina Point fees average $2.96 PSF annually.[3] The total fees for the entire inventory of units would amount to $208,113.68, or 1.659% of asset value.

Insurance costs for REO can be substantial. The Marina Point project would require higher-priced "dwelling" insurance policies, rather than homeowner's, and would be assembled in a commercial package at commercial rates. In addition, liability coverage for unoccupied units results in additional premiums over tenanted units. A local insurance agent familiar with the project estimates insurance premiums in a range of 1.25% to 1.75% of asset value.[4] Assume 1.5% of $16,882,527.40, or $253,237.91.

Local property taxes will vary widely by location. In Massachusetts, holders of REO face some of the highest taxes in the nation. Marina Point is subject to an assessment of

$24.02 per $1000, or 2.4% of assessed value. The City of Quincy has 100% valuation, and it is assumed that assessed valuation is equal to market value. Therefore, property taxes are 2.4% of the $16,882,527.40 asset value, or $405,180.66 annually.

Asset management includes the cost of administration of the bank's investment. The cost of maintaining an REO department will vary from one institution to another. A former Bank of New England executive has suggested that one REO officer would handle from five to ten accounts such as Marina Bay. The cost of the officer's salary and benefits, support staff, office space, telephone, legal costs associated with the officer's REO portfolio, are estimated at $250,000 annually.[5] Assuming that Marina Point was one of ten properties, the asset management cost would be $25,000, or .00148 percent of the asset value.

As stated, the total carrying cost for REO clearly depends on a wide variety of property-specific factors, and further varies from one region, or one institution, to another. In addition, a lender's out-of-pocket costs can be dramatically higher if the property needs capital improvements, which will also raise the net investment basis in the REO.

In the case of Marina Point, the total annual cost of holding this project as REO are estimated at 15.57% (see accompanying table):

TABLE 1

Foregone opportunity costs	10.00000%
Property management	.00336%
Maintainence	1.65900%
Insurance	1.50000%
Property taxes	2.40200%
Asset management	.00148%
Total annual cost of carry	15.56584%

If a borrower adopted an adversarial posture, it could be as much as one or two years (or more) before a lender could foreclose and take physical possession and title to the property. The carrying costs calculated above do not reflect deferred maintainence, legal costs, or any other extraordinary costs which could be incurred before the lender actually obtains possession. The overall effect of borrower intransigence would be to further increase indebtedness, perhaps markedly, and to subject the lender to greater financial exposure.

Asset disposition costs are assumed to be constant for either conventional brokerage or a comprehensive real estate auction approach. Auctioneers use marketing costs at 1-2% of sales price as a benchmark. Marketing costs are paid up front by the seller. Against this is the cost of running and staffing a sales office for what is an indefinite, but in all likelihood, protracted sales campaign. Sales commissions are considered to be equivalent for brokers or auctioneers.

E. MARINA POINT CONDOMINIUMS: THE AUCTION

Marina Point Condominiums went to auction on November 3, 1990 when the remaining 63 units totalling 94,633 square feet in aggregate living space were offered under the public minimum bid method. The auction was one of the most widely publicized sales of the year in the Greater Boston area. Bid packages were compiled for prospective buyers which included full information on the product: construction materials, floor plans, room dimensions, project amenities, and so on. An attractive financing package was offered by one of the major local banks. Minimum bids were established for each unit at approximately 50% of the most recent appraised value.

On auction day, all sixty-three units were sold at an average of $121.19 per square foot, a discount of 32.07% per square foot from the average rate of $178.40 achieved during conventional sales in the previous two years. Alternatively, $121.19 PSF at the auction is a 22.88% discount from 1990's average of $157.15 PSF. Total revenues collected from the auction were $11,598,000. A unit-by-unit breakdown appears in the appendix.

F. MARINA POINT: CONVENTIONAL SALES vs. AUCTION RESULTS

In order to compare the auction results to the results of continuing with the conventional sales campaign, the projected monthly sales revenues under conventional brokerage was projected to continue at the 1989 and 1990 pace of 746.84 SF/month until the entire inventory was liquidated, a period of 126.71 months. This cash flow stream was then discounted by the holding costs of 15.56584% annually as outlined in section D. The net present value calculated for the projected revenue stream under conventional brokerage was $8,723,360.83, a difference of $2,874,639.17, or - 24.79% (see Table 2 at end of Chapter V).

A common objection to this type of analysis is that the current sales pace reflects abnormal market conditions. A lender faced with a decision for an REO auction might consider holding, confident that more favorable markets would evolve in which sales pace might improve.

To test the impact of such an occurrence, a sensitivity analysis incorporating a wide range of possible outcomes was constructed. Two of the more probable upside conventional sales cases are discussed below. However, in actual practice a full range of probable outcomes would be analyzed in detail:

<u>Alternative 1:</u> In this scenario, the slow sales pace experienced in the 1989-90 market combines with the lack of new construction in waterfront condominiums to constrict supply.

This could result in an overall improvement in the conventional sales pace of 30%. At this rate, 970.89 SF per month would take 97.47 months to sellout. The net present value of this alternative is $9,689,453.06.

Alternative 2: An optimistic scenario that projects a sales pace at twice the rate of 1989-90. The diminished supply of luxury waterfront condominiums combines with lower interest rates and an increased pace of real economic growth and job creation to boost absorption dramatically. In this scenario, the sales pace at Marina Point would double to 1493.68 SF per month, resulting in 63.35 months to sellout. The net present value of the optimistic alternative is $11,612,270.29, or about equal to the auction alternative.

The most pertinent question at this point concerns the likelihood of each of these alternatives: assigning probabilities enables us to construct a probability weighted net present value. Our estimate is that the most optimistic scenario, calling for a sustained doubling of the sales pace until sellout, has a one in five probability of occurring.

A moderate upturn of 30% in increased sales from the depressed levels of 1989-90 is assigned a probability of four in ten, or .40.

The maintainence of the current rate of sales is also assigned a probability of .40. This probability may be somewhat understated by the fact that the most difficult units to sell in any development are typically left until the end of the sales

campaign.

The combined probability weighted net present value of these three alternatives is $9,687,579.61. This is $1,910,420,39.00 less than the net present value realized at auction of $11,598,000.00, a difference of - 16.47% (see table 2).

The sensitivity tables which appear in the appendix categorize scenarios of conventional selling ranging from optimistic to pessimistic. The weighted probabilities of each category are accumulated to arrive at a net present value for each of the three scenarios. The seven optimistic cases project a NPV of nearly $12.8 million, $1.2 above the auction results. While the pessimistic cases total $8.64 million, less than $1 million below the baseline NPV of $9.54 million. The consideration of a spectrum of scenarios indicates that the auction results placed near the higher end of expected results.

The final table in the appendix illustrates the combined probability-wieghted net present value of all three conventional sales scenarios. The optimistic cases are assigned an aggregate probability of .20, and the baseline and pessimistic cases, .40 each. The final NPV is $9,840,618.8, slightly higher than the simple baseline case but still substantially below the auction performance.

The determination of a probability-weighted NPV for various scenarios of conventional brokered selling, and its comparison to the NPV of an auction in a depressed market, ignores the

possibility that better market conditions might favor an auction event as well as it might traditional selling. It might be more appropriate to compare various conventional sales scenarios to a variety of auction scenarios. The assumptions that lead to improved conventional sales results, due to a more favorable environment, must also be applied to the auction alternative. This can also be done in the form of a sensitivity table. In other words, factors such as lower mortgage interest rates, a healthier local economy, constricted supply of product type, etc. would logically benefit results of a future auction just as it would on-site sales by broker. However, since the results of an actual auction were available, the author felt such a sensitivity table would be of limited use. A lender who chose to continue conventional sales over an auction could monitor auction results of comparable properties as time progressed. In this way, he or she could easily construct an auction vs. conventional sensitivity analysis for a specific property at any point in the market cycle.

TABLE 2

MARINA POINT CONDOMINIUMS

Comparison of Auction Results to Net Present Value of Conventional Sales

Sales[1] pace	$/PSF	Absorption SF/month	Months to sellout	$/month	NPV[2]	Prob.[3]	Weighted NPV
Baseline	178.40	746.84	126.71	133,237	8,372,552	.40	3,349,020
+30%	178.40	970.89	97.47	173,206	9,674,856	.40	3,869,942
+100%	178.40	1493.68	63.35	266,472	11,611,762	.20	2,322,352
TOTALS	n/a	n/a	n/a	n/a	n/a	1.00	9,541,315
Auction	121.19	94633	0	11,598,000	11,598,000	1.00	11,598,000

[1] 1989-90 sales pace is baseline of 746.84 SF/month; "+30%" reflects a 30% increase in sales, while "+100%" is the most optimistic scenario and reflects a doubling of the baseline sales pace.

[2] Discount rate is 15.56584%.

[3] Probability of absorption pace being achieved (see text).

ENDNOTES TO CHAPTER V

1. Banker and Tradesman, 210 South Street, Boston, Massachusetts.

2. Marina Point condominium sales office, conversation with author, July 29, 1991.

3. Ibid.

4. Mary Early, Flavin & Flavin Insurance, Quincy, Massachusetts, telephone interview with author, July 29, 1991.

5.William Reilly, conversation with author, 29 July 1991.

CHAPTER VI. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Real estate is often considered the least efficient, and certainly the least liquid, capital market in the modern world. Attempts to make real estate more easily tradeable, to reduce transaction costs, and in general to liquify the market are still in an early stage.

Auctioneering evolved centuries ago in a wide cross-section of ancient cultures as a natural response to the challenge of providing liquidity in all types of markets. The application of auctioneering techniques to real estate transactions, aside from satisfying the legal imperatives of judicial sales, is very new.

The novelty of real estate auctions has two immediate meanings. First, the American auctioneering industry in general is lacking in sophisticated real estate veterans. In some ways, however, the demands of the current marketplace are changing this. Secondly, there is a severe lack of quality data, both historical and contemporary, upon which needed academic work may proceed. In the real estate business in general, poor or incomplete data is unfortunately the rule rather than the exception.

The first recommendation is for both the real estate and financial community to reconsider old attitudes about auctioneering techniques. Auctions are often treated as a sales technique of last resort in the U.S., but indications are that in other capitalist countries real estate auctions work at least as successfully as

conventional brokerage through all types of markets. An auction cannot solve the problem of systematically poor real estate: when a shopping center site is forty miles from water with no curb cut, or when a vacant office building must compete with ten comparable buildings for one tenant, an auction cannot be a panacea. Auctions will only flourish in America when the professional real estate community loses its fear and prejudice of the technique. Indeed, the technique may become widespread when American real estate brokers recognize auctions as an alternative selling technique which can work in their financial interest. Auctions should begin to take place throughout the real estate cycle, not just at the trough.

The second recommendation is for the real estate community to view auctions as a technique of first, rather than last resort, during healthy markets when the competition for properties is spirited. Auction techniques regularly set records for high prices during bull markets in the art world (as in other markets).

The third recommendation is an admonition for more academic work concerning real estate auctions. If auctions were used during the speculative frenzy of the 1980s, perhaps prices might have gone much higher much sooner, and the frothy excesses of speculation might have been burned off earlier, in one or more smaller market corrections. Because of the public nature of auction sales, auctions may come to be viewed as a viable leading indicator of real estate sales. Veteran auctioneers contend that if a sales index of real estate auctions could be devised, it would far outperform

more conventional measures like housing starts in predictive ability.

The fourth recommendation to both the government and the banking community would be at act expeditiously with repossessed real estate. The cost of holding empty properties is tremendous. The liabilities of an equity position in real estate can be complex and substantial, and best left to those sectors of the economy which are geared for such risks. The time value of money is centrally, if not completely, what the banking business is built on. Yet, for organizational or political reasons, both the federal government as well as the banking community have reacted to, rather than acted upon, these issues.

The final recommendation offers the most chance for immediate benefits. The overhang of REO, both in government and private hands, is enormous. It poses special marketing problems under any program of management and disposition. Yet, as was demonstrated in Chapter V, the costs of holding repossessed real estate are debilitating. When owners of REO do go to auction, they should do their best to completely release all information to the buying public, and to offer the most attractive financing manageable at all times. Without these two cornerstones of marketing, there is no auction. What results is a gambling game in which those who are privy to property-specific information profit at the expense of the seller and the competition.

APPENDIX

The following appendix contains conventional sales data for Marina Point condominiums, unit-by-unit results from the auction, and two sensitivity tables comparing the values of various conventional sales scenarios.

APPENDIX: DATA ON MARINA POINT CONDOMINIUMS
Conventional Sales Results
1989-90

1989	UNIT	PRICE	SF	PRICE/SF
April	302	216200	1305	165.6704
April	701	600000	1976	303.6437
November	401	327500	1976	165.7388
December	610	208000	922	225.5965
AVG 1989		337925	1544.75	218.7571
1990				
April	711	137000	820	167.0731
April	217	136500	922	148.0477
May	512	167000	922	181.1279
May	108	235000	1770	132.7683
May	110	298000	1976	150.8097
July	310	222500	1305	170.4980
November	108	275000	1634	168.2986
November	802	375000	2396	156.5108
AVG 1990		230750	1468.13	157.1727
1989-90				
TOTALS		3197700	17924	N/A
AVERAGES		266475	1493.67	178.4029

APPENDIX continued
MARINA POINT CONDOMINIUMS AUCTION 11-3-90

UNIT	PRICE	SF	PRICE/SF
507	230000	1770	129.94
905	160000	1315	121.67
907	151000	1235	122.27
908	150000	1315	114.07
901	355000	2363	150.23
903	465000	2256	206.12
803	385000	2462	156.38
806	144000	1235	116.60
807	136000	1235	110.12
805	160000	1315	121.67
808	139000	1315	105.70
416	116000	922	125.81
704	125000	1100	113.64
706	126000	1100	114.55
604	141000	1100	128.18
903	380000	2256	168.44
607	222000	1770	125.42
604	139000	1100	126.36
610	155000	1290	120.16
611	152000	1235	123.08
612	151000	1235	122.27
608	196000	1634	119.95

MARINA POINT CONDOMINIUMS: AUCTION 11-3-90 continued

UNIT	PRICE	SF	PRICE/SF
603	205000	1726	118.77
509	159000	1305	121.84
409	166000	1305	127.20
209	164000	1305	125.67
514	157000	1290	121.71
513	147000	1315	111.79
512	146000	1235	118.22
511	156000	1290	120.93
501	239000	1910	125.13
401	237000	1910	124.08
406	127000	1100	115.45
304	128000	1100	116.36
204	124000	1100	112.73
909	110000	760	144.74
807	117000	1235	94.74
712	152000	1315	115.59
711	146000	1235	118.22
710	150000	1235	121.46
701	228000	1910	119.37
601	224000	1910	117.28
508	190000	1634	116.28
505	173000	1452	119.15
503	200000	1726	115.87

MARINA POINT CONDOMINIUMS: AUCTION 11-3-90 continued

UNIT	PRICE	SF	PRICE/SF
408	207000	1634	126.68
407	205000	1770	115.82
405	181000	1452	124.66
307	207000	1770	116.95
305	176000	1452	121.21
301	217000	1910	113.61
208	185000	1634	113.22
207	197000	1770	111.30
205	177000	1452	121.9
201	217000	1910	113.61
203	186000	1726	107.76
106	182000	1770	102.82
101	186000	1910	97.38
606	133000	1100	120.91
707	207000	1770	116.95
703	196000	1726	113.56
103	171000	1726	99.07
613	145000	1290	112.40
TOTALS	11598000	94633	N/A
MEAN	184095.2	1502.111	121.1909

SENSITIVITY ANALYSIS OF VARIOUS CONVENTIONAL SELLING SCENARIOS
MARINA POINT CONDOMINIUMS

	PRICE/SF	MONTHS	CASH/MO	NPV	PROB.	WEIGHTED NPVs	
OPTIMIST	230	56	388671.25	15404133.2	.05	770206.66	
OPTIMIST	220	48	433734.58	15425463.0	.07	1079782.41	
OPTIMIST	210	42	473165.00	15247967.3	.09	1372317.06	
OPTIMIST	200	36	525738.89	15045722.1	.10	1504572.22	12791244
OPTIMIST	190	48	374588.96	13321990.8	.15	1998298.62	
OPTIMIST	180	72	236582.50	11027863.7	.24	2646687.30	
OPTIMIST	180	66	258090.00	11397933.7	.30	3419380.09	
BASELINE	178.4	126.7	133237.50	8372552.0	.40	3349020.46	
BASELINE	178.4	97.5	173206.42	9674856.0	.40	3869942.66	9541315
BASELINE	178.4	63.4	266472.15	11611762.2	.28	2322352.34	
PESSIMIST	150	76	186775.66	8992262.2	.25	2517833.41	
PESSIMIST	140	66	200736.67	8865059.5	.18	2216264.87	
PESSIMIST	130	54	227820.19	8806311.8	.15	1585136.12	8664610
PESSIMIST	120	48	341730.28	9779719.4	.12	1173566.33	
PESSIMIST	120	36	473165.00	9704831.2	.09	873434.81	

SENSITIVITY TABLE

OPTIMISTIC, BASELINE, AND PESSIMISTIC CASES

CASES	NPV	PROB.	WEIGHTED NPVS	AGGREGATE NPV
OPTIMISTIC	12,791,244	.20	2,558,248.8	9,840,618.8
BASELINE	9,541,315	.40	3,816,526.0	
PESSIMISTIC	8,664,610	.40	3,465,844.0	

BIBLIOGRAPHY

BOOKS

Condominium Sales Annual, Suffolk, Middlesex, & Norfolk Counties, 1989. Banker and Tradesman, Boston, 1989.

Condominium Sales Annual, Suffolk, Middlesex, & Norfolk Counties, 1990. Banker and Tradesman, Boston, 1990.

Life Insurance Fact Book, American Institute of Life Insurers, Washington, D.C. 1991

Property Auctions, Clive Carpenter & Susan Harris (eds.), The Estates Gazette Limited, 151 Wardour Street, London W1V 4BN, 1988.

Sold! The Professional's Guide to Real Estate Auctions, Stephen J. Martin & Thomas E. Battle III, Dearborn Financial Publishing, 1991.

UNPUBLISHED PAPERS

"Auctions versus Private Sale of Houses: A Description and Empirical Analysis of the Melbourne, Australia Market," umpublished paper, Kenneth M. Lusht, Pennsylvania State University, College of Business Administration, May 1990.

"Disposition Prices and Auction Strategies: Learning From the RTC," Kerry D. Vandell & Timothy Riddough, University of Winconsin - Madison, Presented at the ASSA Annual Meetings, Washington, D.C., December 1990.

"The Credit Crunch, Pensions, and Real Estate," unpublished paper, Peter Aldrich & James Brenner, Aldrich, Eastman, & Waltch, unpublished paper June 1991.

UNPUBLISHED CASE STUDY

"Transtech Headquarters," Case Study, Esther Sandrof, Citicorp Real Estate and Columbia University Graduate School of Architecture, Planning and Preservation, June 1990.

DISSERTATION

"The Reluctant Landlords: The Role of Institutional Real Estate Lenders in Dealing With the Problem of Foreclosed Property," by Richard Paul Epley, May 1984 Dissertation for Ph.D. in Business Administration, University Microfilms International, Ann Arbor, MI.

PERIODICALS

"A Blueprint for Financial Reconstruction," Lowell S. Bryan, Harvard Business Review, May-June 1991, pp.73-86.

"An Evaluation of FIRREA Disposition Policy and Market Effects," John S. Baen and Mark Bryant, The Real Estate Finance Journal, Spring 1991, pp. 57-63.

"As Home-Price Slump Reaches California, Risk to Economy Rises," by Jim Carlton, Wall Street Journal, November 28, 1990, p.1.

"As Loans Sour, Banks and Regulators Argue How to Value Realty," by David B. Hilder, Wall Street Journal, December 13, 1990, p.1.

"At RTC's First Big Auction of Homes, Properties Go For 78% of Asking Price," by Jim Carlton, Wall Street Journal, November 19, 1990, p.8.

"Auction RTC Properties One At A Time," by David Shulman, Wall Street Journal, March 23, 1990, p.33.

"Auctions and Bidding," R. Preston McAfee and John McMillan, Journal of Economic Literature, Vol. XXV, June 1987, p. 699-738.

"Auctions and Bidding: A Primer," Paul Milgrom, Journal of Economic Perspectives, Vol. 3 No. 3, Summer 1989, p. 3-22.

"Auctions: Can They Be A Quick Fix?" by Matt Carroll, The Boston Globe, May 26, 1990, p. 41.

"Bankers Are Resorting to Gimmicks to Sell Foreclosed Real Estate," Ron Suskind, The Wall Street Journal, 30 May 1991, p.1.

"Counterspeculation, Auctions, and Competitive Sealed Tenders," William Vickrey, The Journal of Finance, March 1961, p.8-37.

"Expected Revenue from Open and Sealed Bid Auctions," John G. Riley, Journal of Economic Perspectives, Vol. 3 No. 3, Summer 1989, p. 41-50.

"FDIC Boosts Failure Forecast for U.S. Banks," by Kenneth H. Bacon, Wall Street Journal, May 30, 1991.

"General and Special Conditions of Sale," Auction Catalogue, June 19th 1991, Barnard Marcus Property Auctioneers, 64/66 Glenthorne Road, Hammersmith, London W6 0LR.

"Going, Going, Gone: Foreclosure Auctions are Soaring, but the Results Are Mixed," by Matt Carroll, Boston Sunday Globe, June 24, 1990, p. A22.

"How Auctions Work For Wine and Art," Orley Ashenfelter, Journal of Economic Perspectives, Vol. 3. No. 3, Summer 1989, pp. 23-36.

"Information, Intermediaries, and Sales Strategy in an Urban Housing Market: The Implications of Real Estate Auctions in Melbourne," Chris Maher, Urban Studies, 1989, p. 495-509.

"Inside the FDIC's Liquidation Operations," Steven A. Seelig, Bottomline, Sept 1989, pp.21-27.

"Public Auctions Can Maximize Real Estate Sales Prices," Sheldon F. Good, Steven L. Good and Gordon J. Greene, Real Estate Review, Spring 1987.

"Real Estate Industry Hisses At RTC Property Auction," by Todd Mason, Wall Street Journal, Sept. 12, 1990, p. B1.

"Real Estate Owned: The Unwanted Bank Asset," Richard L. Weiss, Real Estate Review, Fall 1989.

"Resolving the S&L Crisis: Better Keep the Money Taps Open, USA Today, November 29, 1990, p.1..

"RTC Plans to Unload 215 More S&Ls, Relax Rules to Sell $65 Billion of Assets," by Paulette Thomas, Wall Street Journal, Sept. 12, 1990, p.6.

"S&L Crisis Overwhelming Regulators," by Mindy Fetterman and Paul Wiseman, USA Today, June 13, 1991, p. 1.

"Sealed Bid Versus Open Auctions: The Evidence," Robert G. Hansen, Economic Inquiry, Vol. XXIV, January 1986, p. 125-136.

"Some S&L Properties Sold by the RTC Give Bidders Real Bargains," by Brett Pulley, Wall Street Journal, December 17, 1990, p.1.

"The Insatiable Demands of the RTC," Martin Mayer, The Wall Street Journal, 15 November 1990, p. 33.

"The Price Effects of Increased Competition in Auction Markets," Lance Brannman, J. Douglass Klein, and Leonard W. Weiss, Review of Economics and Statistics, February 1987, p. 24-32.

"The Winner's Curse and Bidder Competition in Acquisitions: Evidence From Failed Bank Auctions," S. Michael Giliberto and Nikhail P. Varaiya, The Journal of Finance, Vol. XLIV, No. 1, March 1989, p. 59-75.

"Trouble at the Finish Line: US Struggles to Find Way to Unload Properties, Boston Sunday Globe, June 30, 1991, p. 65.

"Wringing the Most Value From REO Properties," Nathan A. Wolfstein IV, Bottomline, October 1988, pp.43-48.

INTERVIEWS

Early, Mary. Telephone interview with author, 29 July 1991.

Flynn, Karen M. Telephone interview with author, 24 July 1991.

Gall, Jim. Personal conversation with author, 9 April 1989.

Higgenbotham, Martin. Personal conversation with author, June 1990.

Manning, Jerome J. Personal conversation with author, February 1990.

Maynard, Ronald V. Personal interview with author, 11 July 1991.

Reilly, William J. Personal conversation with author, 24 July 1991.

Taylor, Jay. Telephone interview with author, 19 July 1991.