Study in residential income property management

Chiu-Joe Yeh

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A STUDY IN
RESIDENTIAL INCOME PROPERTY MANAGEMENT

by
Chiu-Joe Yeh

An Applied Management
Decision Report
Submitted in partial fulfilment
of the requirements for the degree of
Master of Business Administration
Cardinal Strich College
August 1989
This committee has approved the Applied Management Decision Project of Chiu-Joe Yeh.

Dr. Edward M. Elofson, Case Study Advisor 3/15/89

Second reader 8/14/89
ABSTRACT

A STUDY IN

RESIDENTIAL INCOME PROPERTY MANAGEMENT

by

Chiu-Joe Yeh

This case study focuses on the management of residential income properties in the Milwaukee Metropolitan Area. Milwaukee Metropolitan Area has a rather diffuse land available for residential use and excess rental housing. Since the 1982 recession, the population of Milwaukee County has been declining, mainly because of loss of manufacturing jobs, resulting in decreased demand for apartments. In addition, the Federal income tax changes in 1988 eliminated most of the tax incentives for the residential income property investment. Therefore, in Milwaukee Metropolitan Area appreciation of the rental property value is low or even negative. These factors compelled the owners to seek a higher return on their investments by attempting to raise their rental incomes. However, in a market where supply exceeds shrinking demand, the attempt to enhance revenue was not very successful.

The basic problem in management of rental properties in Milwaukee Metropolitan Area is low return on investment. The low return on investment is in turn due to operational loss which can not be compensated by tax incentive or potential appreciation of the properties.
There are 3 solutions to the problem, namely, revenue enhancement, cost containment and liquidation of undesirable properties. Revenue enhancement may be achieved by rent increase, accepting tenants with government rental assistance and reducing vacancy rate by better caretaker's effort and rent incentives. The cost containment can be achieved by reducing the mortgage principal and rate, reducing property tax through petition, reducing insurance cost with package deal, reducing utility cost with energy conservation measures and computerization of paper work. Liquidation of some properties in rapidly deteriorating areas may be the only way to cut the loss. The most important solution is revenue enhancement.
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CHAPTER 1

INTRODUCTION

Main Street Management Co. was established in 1983 to manage a cluster of residential properties throughout the Milwaukee Metropolitan Area. This area includes Milwaukee, Waukesha, and Ozaukee Counties.

Unlike other metropolitan areas, such as Boston or Los Angeles where local zoning legislation limits the availability of residential lands, the Milwaukee Metropolitan Area has a rather diffuse land availability for residential use. For example, 55 percent of residential land remains unused. As long as new residential construction continues in the region, and household formation remains relatively low, there will be an excess supply of housing. In Milwaukee County nearly 50 percent of all housing units are renter occupied.

Economic factors have caused the Main Street Management Co. to experience an unprecedented number of difficulties in the management of its properties. These factors include (but are not limited to): a relative abundance in the supply of unused residential land, the sharp decline in the population of the Milwaukee metropolitan area and Federal Income Tax changes in 1988.

From 1970 to 1980 the population of Milwaukee County declined by 8 percent and has continued to decline throughout the 1980s. This decline is due primarily to an
increased level of unemployment that has resulted from the sharp decline in the manufacturing sector in early 1980s. The reduction in high paying manufacturing jobs was somewhat compensated by the increase in the low paying service jobs. In the recent months, the manufacturing sector was gradually recovering from the recession, mainly due to the export boom because of the drastic devaluation of U.S. dollar. However, the government initiated devaluation of U.S. dollar appears to have ceased for the moment. Although the unemployment rate in Milwaukee area is currently low, the employment in manufacturing sector is still below the peak before last recession.

The reduction in Milwaukee population and decrease in income due to shifting from high paying manufacturing jobs to low paying service jobs resulted in weak demand for rental housing. This situation has limited Main Street from raising rents and, in conjunction with increasing operational costs, has compounded management difficulties.

In addition to the aforementioned, 1988 Federal Income Tax changes have eliminated a majority of the tax incentives previously designed to induce residential income property investment. These changes include: a reduction in allowable depreciation, an increase in capital gains tax, and near elimination of the tax deduction from operational loss.

These changes have forced management to face several basic problems associated with, on the one hand, income
loss and, on the other hand, increased operational expenses. The basic problem is low return on the investment.

In analyzing the problem facing the Main Street Management Co., this paper sets forth 3 probable resolutions. These include revenue enhancement, cost containment, and liquidation of unprofitable properties. Revenue enhancement may be achieved through an increase in rents, accepting tenants with government rental assistance, reducing vacancy rates through enhanced service and by offering rental incentives. Cost containment efforts may be directed to reducing the mortgage principal as well as a reduction in effective mortgage interest rates, reducing property taxes through petition, reducing insurance expenses by arranging "package" deals with insurance companies, reducing utility costs through the use of energy conservation measures, and reduction of administrative expense by computerization of paper work. Finally, liquidation of certain properties in rapidly deteriorating areas may be the only way to effectively reduce losses. The revenue enhancement is the most important solution of all.
CHAPTER 2

Description of the Organization

As previously stated, the Main Street Management Co. was organized in 1983 to manage a group of residential properties. The street name of one of the apartment buildings was chosen as the company name. A post office box was used as the address.

The properties

The residential properties, composed of several apartment and townhouse buildings, are scattered throughout the Milwaukee Metropolitan area. The location, number of units, initial purchase prices and the rents per unit as of 1987 for each building are listed in the appendix. There are 68 units in 10 buildings in total.

Location and historical background

Milwaukee County is located in Southeastern Wisconsin along the western shore of Lake Michigan. It encompasses a total area of 242 square miles, and is the population center of Wisconsin. It has all of the facilities and services of a large urban area. In addition, many of the most important industrial areas and heavy population concentrations in the Midwest are located within 350 miles of the region.

The first permanent European settlement in Milwaukee was a trading post established in 1795 on the east side of the Milwaukee River. The movement of a large number of
European settlers into Milwaukee, however, did not get underway until 1930. Initially, the growth was toward the contiguous suburban communities. However, after 1950 urban development became discontinuous and diffused into the outlying rural areas. By 1980 it moved into Ozaukee, Racine, Washington and Waukesha Counties. In 1980, urban land uses in Milwaukee County comprised a total of 164 square miles, or about 68 percent of the total area.

**Milwaukee housing market**

In the Milwaukee metropolitan area, rental housing must meet the shelter needs for approximately 30-40 percent of the population. In the City of Milwaukee, that proportion is almost 50 percent of all of the households. In 1985, the vacancy rate is 6 percent, indicating that most Milwaukee area residents have been adequately housed (Frank & Horton, 1983). However, the poor have always faced a shortage of quality housing. In the past, Federal public housing and subsidy programs have attempted to address these needs. Such programs have had varying successes, but the current trend is to limit the government expenditures in order to cut the huge federal budget deficit.

The strategy of the management (the researcher) has been designed to limit investment in middle income tenant housing. The lower income housing market offers a higher rate of return because of relatively low capital investments for the low cost properties. However, the higher crime rate in inner city resulting in a higher
incidence of property damages makes management feel inadequate to maintain its investment in these areas. Consequently, the investment properties of Main Street Co. are located away from the inner city and from federal housing projects. The properties are all located within 30 minutes' drive from downtown Milwaukee. Moreover, since availability of public transportation is important to many tenants, the majority of buildings are near sources of public transportation.

Personnel

Main Street Co. employs a full time manager (the researcher), a full time repairman, a part time secretary and five part time on-site caretakers. The caretakers are paid according to the number of units of the building and the amount of work involved. For example, caretakers for townhouse units are paid less on per unit basis because there is no common hallways or basements to clean. These units have have private outside entrances and their own basements. Most internal maintenance work is performed by the caretakers. However, independent contractors are employed to repair major appliances, furnaces, water heaters, and so on. External work, aside from lawn care, is generally performed by independent contractors. Thus, snow plowing, for example, is performed by a single contractor through a package deal which has resulted in a substantial reduction in expenses. Roof replacement and painting of outside sidings are other major expense categories that are
also negotiated through package deals.

**Financing**

A business checking account was established so that the manager could deposit rents and pay expenses. In the event the account balance drops below $10,000, a private loan is obtained to avoid overdrawing. The original mortgage loans were 70 to 80 percent of the purchase prices. The mortgage interest payments are paid automatically from the checking account through special arrangements with the loan companies.

Company incomes and expenses from 1983 to 1987 are shown in Table 1. As can be seen, heavy losses were sustained throughout the early years of operation. However, the financial position has gradually improved as both moderate rent increases and cost reduction measures were implemented.
CHAPTER 3

Identification of the Problems

Operational Losses

As listed in Table 1, substantial losses occurred from 1983 to 1987. However, these losses were not unexpected. The management (researcher) could tolerate a negative cash flow during the early stages of initial investment because of the old tax incentives. Federal and state income tax laws allowed full deduction of losses from the ordinary incomes by the owners. Therefore, this investment constituted a deferment of federal and state income tax to later years when the ordinary income is decreased. Ignoring depreciation, there remained negative cash flows of $52,920, $34,776 and $15,086 for 1983, 1984 and 1985 respectively. If mortgage interest costs are included, these losses would be much higher.

Expenses

Mortgage interest payments are the largest expense, comprising more than 50 percent of total expenses. This can be seen in Tables 2 and 3. Since much of the financing is through variable rate mortgage loans, market interest rate movements directly impact company expenses. During the initial investment period, market interest rates were at historical highs, oftentimes reaching 15 to 16 percent. The rate dropped substantially thereafter. Recently, interest rates have been fluctuating thereby causing management
Property taxes are the second highest expense category rising throughout the period. However, the tax increase was not as steep as generally anticipated. From 1984 to 1987, the property tax increases for buildings A, B, C, D, E, F, G and H are 7, 8, 3, 7, 6, 6, -7, and 0 % respectively.

Utility costs are the third highest expense on the list. The Management pays all electric bills for the parking lots and also the water bills and sewage fees. In addition, the management pays for the lighting and heating of the common hallways and basements for the apartments. There is a significant difference between gas and electric heating; cost is much higher for the electric heating system. For example, building C is electrically heated, and the utility bills are higher than those of the other buildings on per unit basis. For the townhouses, buildings A and B, the tenants pay their own electric bills and thus utility costs to the company are relatively low. Insurance costs have also increased dramatically in recent years as the general population have become more aware of the liability laws affecting property owners. This is reflected in the sharp increase in the number of litigation cases. In turn, this has forced insurance companies to raise premiums or, in many high risk cases, to simply cancels the coverages.

Caretakers

Efficient property management relies heavily on the
caretakers. On one hand, an indifferent caretaker may leave a vacant unit unoccupied for a prolonged period of time and may neglect the necessary repairs. On the other hand, an over-enthusiastic caretaker may not restrain spending. He may replace appliances which may still be repaired or carpets which need only cleaning. A good caretaker should be tactical in dealing with the tenants so that the maintenance works could be optimized to maximize the profit for the management. The general manager relies on the caretakers to get much of the informations concerning the conditions of the buildings or the tenancies. When the management took over those buildings, most of the old caretakers chose to stay. While some were are not suitable for the job, they were retained because of difficulty in finding good caretakers to replace them.

Vacancy and Rent

In spite of the fact that Main Street Management faces a vacancy rate of just under 5 percent, it is very difficult to raise rents for many of the properties. Between 1982 and 1987, the average rent increase has been 2 to 4 percent per year, which has been lower than the rate of inflation. For example, for a 2 bedroom unit (building B) the rent in 1982 was $360. By 1987 the rent increased only 5.5 percent, to $380. With any increase in rent, Main Street has experienced an exodus of tenants.

In addition to the loss of rental income, the expenses incurred to secure new tenants, such as advertisements,
cleaning, and painting are quite substantial. In general, research has shown that the expenses resulting from a vacancy average nearly one to two months rental income. To compound problems even further, less desirable properties take much longer to secure tenants thereby forcing expenses upward.

Negative Impact of Federal Income Tax Reform

The Federal Income Tax reform of 1988 eliminated nearly all tax advantages given to owners of residential income generating properties. Depreciation allowance is greatly reduced. The owners who actively participate in the management of the property may offset $25,000 of net rental loss against income from any other source each year. The $25,000 is phased out for adjusted gross income between $100,000 and $150,000. If the property was acquired before Oct. 23, 1986, unused losses may also offset other income. However, this offset is being phased out between 1988 and 1990. In addition, special treatment of capital gains has also been eliminated. In the past capital gain tax was discounted by as much as 60 percent it is now taxed as ordinary income. As a result of these tax changes, Main Street has been compelled to avoid absorption of any and all operational losses.

Administrative Expense

Despite the federal government's attempts to minimize paper work through simplification of tax rules, the fact is that both paper work and local government regulations are
becoming more complex. For example, after a tenant moves out, even though the tenant still owes the rent, management is required to write to the tenant within 21 days concerning the conclusion of the tenancy. In the event a management fails to do so, that management may be reprimanded by the government. The landlord is obligated to do so even though the tenant may fail to leave a forwarding address. It is therefore imperative to maintain accurate records so as to prevent unwarranted difficulties.

**Crimes and Drug-Related Problems**

In the recent years, crime has become an increasing concern for management. With increasing frequency, burglaries have been reported to management. Tenants complain about the noises made by those dealing with drugs. Many tenants have left because of drug-related problems. Fortunately, the problems seem to be confined to only a limited number of units. The townhouses occupied by the families with children appear to be free from the drug problems.
CHAPTER 4

Problem Analysis

Rental Market

Main Street experienced negative cash flows from 1983 to 1985. Whereas this situation could have improved through a raising of rents or a cutting of expenses, attempts to do so were not successful because of the excess supply of rental properties in the Milwaukee Metropolitan Area. Except for the eastside, which is limited by Lake Michigan, residential lands are rather diffuse and relatively unused. Residential land use in 1980 in Milwaukee was 74 square miles, or about 45 percent of the urban land use. This represents an increase of only 3 percent over 1975 figure. In total, 55 percent of residential property remains unused (Frank & Horton, 1983).

Residential development in Milwaukee was comprised primarily of single-family dwellings. They occupy about 81 percent of the total residential land use in Milwaukee. Two-family and multiple-family residential dwellings comprise only 11 and 7 percent, respectively, of the total residential land use in Milwaukee County.

In 1980, there were a total of 377,894 year-round housing units in Milwaukee County. Of these housing units, 46.3 percent were rental units. When compared with the state of Wisconsin (31.8 percent) and the United States (35.6 percent), the renter occupied units were relatively
more numerous in Milwaukee County. However, the high percentage of rental units may be common for most urban population centers (Frank & Horton, 1983).

**Excess Supply of Rental Housing**

Many apartments were built in the Milwaukee Metropolitan Area during the 1960s in conjunction with the maturation of World War II "baby boom" children and their needs for housing. As a consequence, the proportion of housing starts in the multi-family category reached nearly 70 percent during this period. This was in sharp contrast to the situation a decade earlier as 70 percent of all housing starts were for single-family homes.

Any rental housing stocks can be increased by new construction, by rehabilitation of existing structures or by conversion of other suitable structures. There are over 700 abandoned structures throughout Milwaukee Metropolitan area. The loss of usefulness of these structures has occurred for several reasons: the vacancy rate has risen; the number of households has declined; and the supply of useful housing exceeds the demand for it (Milwaukee Department of City Development, 1988). The relatively high number of vacant houses have caused many residential property owners to provide only minimal amounts of maintenance and, in turn, this leads to relatively high tenant turnover rates, thereby creating a vicious circle.

With the reduction in birth rates, the absolute need for new multi-family dwelling has diminished and will
continue to decline in the future. The population in the Milwaukee Metropolitan Area is listed in Table 4. More than 89,000 or 8.5 percent of Milwaukee County residents moved away from 1970 to 1980. In spite of the relative decline of inner-metropolitan relocation, the population of the Milwaukee Metropolitan Area still declined by nearly 7,000 residents. In the mean time, the number of the housing units in the Milwaukee Metropolitan Area has increased as shown in Table 5.

**Softening of the Milwaukee Rental Market**

In the last recession, the Milwaukee Metropolitan Area suffered a severe loss of employment in the manufacturing sector. In 1975, there were 100,000 manufacturing jobs. This number declined to 97,700 in 1980 and to 72,900 in 1985. This is a decrease of 27,000 jobs, the majority of which were lost during the past 5 years. Between 1975 and 1985, service employment increased from 66,700 to 90,400 jobs, an increase of almost 24,000 jobs. Many more service sector jobs have been added since 1985. Whereas the absolute employment loss has been minimal, the differential in wages between the manufacturing and service sectors is significant. For example, in the manufacturing sector employment is relatively high paying, averaging $23,600 plus benefits in 1984, while the average pay for the new service sector jobs was $13,000. As a result, the number of rental households in financial need has increased. From 1978 to 1985, while rents increased only moderately, median
income level declined, which has resulted in an increase in the median percent of household's income spent on rent, from 25.8 percent to 32 percent. Moreover, there was a large increase in the percentage of households spending 50 percent or more of their income on rent, 32 percent of all renters in 1985 compared to 15 percent in 1978. Many single adults have been forced to share apartments. Other young, single adults have returned to their parents' homes. These trends indicate that many renters simply cannot afford apartments any more (Milwaukee Department of City Development, 1980).

In short, the relative supply of apartments has increased while the relative demand for apartments has decreased. In the meantime, the affordability of the tenants to pay the rent is decreased. The vacancy rate in Milwaukee increased from 4.6 percent to 6 percent between 1980 and 1985; and it increased throughout the city. In the oldest and poorest areas the vacancy rate is 13.7 percent. Therefore, the potential of revenue enhancement is quite limited.

Mortgages

Mortgage interest is the single largest expense. During the initial operational period, commercial mortgage rates were relatively high. For example, Building E carried a mortgage rate of 16 percent, the going market rate at that time. In contrast, Building A, which was purchased through a land contract, carried an interest rate of only
10 percent. However, its term lasted for only 3 years, with a balloon payment at the end of the term. The mortgages rates for the other buildings lie between the mortgages rates for those two buildings.

The standard mortgage for the non-owner occupied residential properties is usually for a term of no more than 15 years. Additionally, these mortgage rates are usually one percent or higher than rates for owner-occupied properties. Few mortgage policies came without an escalation clause. Rapid inflation and high interest rates during the 1970's resulted in many lending institutions in the 1980's becoming reluctant to commit long term mortgage funds to fixed rate loans. These escalation clauses usually carry a ceiling limit of up to 3 percent a year on most mortgages. There were also adjustable mortgages with the rates indexed to the prime rate, usually 3 percent over the prime rate or other similar criteria.

Since interest costs are the most important factor in the cost reduction, management has been compelled to tailor the mortgage to the particular needs of the company. Since the company intended to hold these properties between 5 to 10 years, and possibly to prepay those mortgages, effort was made to obtain those mortgages without a prepayment penalty. Oftentimes this meant a slightly higher mortgage rate. To reduce/eliminate closing costs and to obtain lower rates, some mortgages were assumed from former owners.
Another major factor in the housing cost equation is the ever-increasing property tax. Property tax rates, as a percentage of gross rents, are 2 to 3 times higher in this region than in comparable regions throughout the United States. In some cases, for an 4 to 8 unit building, these taxes could approach 50 percent of the gross rents.

Presently, property taxes supports more than those services directly related to housing use. For example, in the Milwaukee area, education, health and welfare are paid by local property tax levies. Property tax collections do not cross municipal lines and property assessment varies from municipality to municipality. As a result, property taxes may vary greatly from one municipality to another. Thus, buyers often choose homes based on tax rate rather than housing quality. Consequently, sound existing houses in the city are permitted to deteriorate while unwise new development in the low tax area is artificially stimulated.

The property taxes in the outlying counties are generally lower than taxes in Milwaukee County. For example, the property tax for building A is $692 per unit for a 3 bed room townhouse in Waukesha County whereas the tax for a similar townhouse, building B, in Milwaukee is $879. Since the rent for a city of Milwaukee income property is generally lower, the property tax rate on a percent of income basis is even higher. Property taxes for single family dwellings are generally greater than the
multi-family buildings on both a per unit and a per rental income basis. The original plan for buying the single family dwelling was to secure higher quality tenants and, hopefully, to incur minimal maintenance expenses.

Insurance expense

The insurance expense is a significant part of total expenses. All buildings were bought separately, and the existing insurance coverages were continued based on the misconception that, in order to remain competitive, most insurance companies offer similar coverages at similar costs. However, in 1984 and 1985, when insurance premiums rose significantly (some by as much as 50 percent), an effort was made to find more cost-effective coverages. Market research efforts indicated that premiums differ greatly among companies, sometimes by 50 percent or more for similar coverage. Many insurance companies also tend to encourage excess-insurance for the properties. In some cases, coverages were recommended for the total price which not only included value of the land but also complete building replacement costs. However, even in the worst fire, part of the building, especially the basement structure, would stay intact, and of course the land would not be affected at all.

Caretakers

Except for single family dwellings, each building has its own caretaker, who are paid approximately $12 per unit per month. Experience has shown that this amount is not the
payment enough to secure a caretaker's loyalty.

Consequently, problems arise between the caretakers and the needs of management. For example, quite often caretakers have failed to show the vacant units to interested parties. The result of this has been management showing these units. In other instances, even though a caretaker knew about a pending breach of a lease by a tenant planning to vacate the premise before the end of lease term without notifying management, the caretaker did not inform management. As a result there occurred a slowing of the process of finding a new tenant. This, in turn, resulted in a loss of rents and quite possibly a negative cash flow. Under these circumstances, it has become difficult to pass on to the caretakers an increase in compensation thereby widening management-caretakers differences.

**New Federal Tax Laws**

The impact of 1988 Federal Income Tax revisions with respect to the residential income property market is quite pronounced. According to the previous tax law, the maximum tax rate on earned ordinary income was 50 percent while the maximum rate for the long term capital gain tax was 20 percent. If ordinary income can be shifted to capital gain, a tax benefit of 30 percent can be realized. However, according to the new law, the maximum flat rate is 28 percent for ordinary income and for any long term capital gain. Thus, there is no longer an advantage in shifting ordinary income to a capital gain, except for postponement
in paying the tax.

Table 6 displays the return on investment based on the old tax rules. As shown in Table 6, there were significant losses, including negative cash flows plus depreciation, ranging from $138,330 to $31,426 during 1983 to 1987. During this period, management was allowed to deduct the entire amount of losses from the ordinary income for tax purpose, resulting in a reduction of taxes by 50 percent of the amount of those losses. If the tax law had not been changed, then in the event the properties were sold, management would have to pay 20 percent of the losses as capital gain tax, realizing a tax benefit of 30 percent of the amount of the losses. Assuming that there was no significant appreciation of the market values for those buildings during the period under consideration, the net returns, which are the cash flows plus the tax benefits, were negative, $11,421 and $793 for 1983 and 1984. In contrast, the net returns were positive, $11,176, $23,312 and $41,346 for 1985, 1986 and 1987 respectively.

The initial total capital investments, the downpayment of $445,250, was 25 percent of the purchase price of $1,781,000. To reduce mortgage interest payments, an additional 5 percent of the principal was paid in 1986, thereby making the total investment $534,300. In 1987, another 10 percent of the principal was paid lifting the total capital investment to $712,400, or 40 percent of the initial purchase price.
Rates of return as a percentage of the capital investment in 1983, 1984, 1985, 1986 and 1987 were -2.5, -0.1, 2.5, 4.4, and 5.8 percent, respectively. Table 7 illustrates these returns based on the new tax law. Computations indicate that if management deducted an equal amount of tax for the period between 1983 and 1987, then the company would have to pay 28 percent of the previous losses as capital gain tax as the properties are sold. Therefore, the tax benefits are only 22 percent instead of 30 percent. The net returns are consequently shifted in a negative direction: -$22,488, -$9,856, $4,173, $18,292, and $38,832 for 1983, 1984, 1985, 1986 and 1987 respectively. The returns as a percentage of capital investment would then be -5.0, -2.2, 0.9, 3.4, and 5.4 percent for 1983, 1984, 1985, 1986 and 1987 respectively. These results, therefore, indicate that residential property investment is certainly an undesirable investment in relation to other forms investment.

The adverse effect of the new tax law on residential income property is felt by those who already own the properties and who have deducted the operational losses from ordinary income. The effect is even more pronounced for new investors. The new federal tax change, which resulted in (a) the loss of tax advantages from shifting income from ordinary income to capital gain, (b) the marked reduction of allowable depreciation and, (c) the limitation on deduction of the operational loss from ordinary income,
makes any income property investment unfavorable. While the
negative effect may be compensated by rapid appreciation of
property values, the Milwaukee Metropolitan Area,
unfortunately, did not offer such a favorable environment
for high appreciation in real estate during the period of
this study. This is poignantly illustrated by the fact that
two buildings were listed in 1988 with a real estate broker
to sell at their original purchase prices, but there was no
buyer. Unless the tax law is revised and/or rents are
increased greatly, it is unlikely that the Main Street
investments will experience any significant appreciation.

Computerization

Documentation is essential in any business. Indeed,
the mileage in use of a company automobile has to be
documented; correspondence with tenants must be documented;
incomes, expenses and other accounting matters must also be
documented. These needs can be greatly facilitated through
computerization. There are a number of commercially
available computer hardware/software systems for income
property management.

The first step in the process of computerization is to
evaluate the software systems. Then a hardware system has
to be chosen. The choice of a software application program
may prove to be more time consuming and also more critical
than the hardware selection. Training of the staff is the
next step. Once the computer system is setup and operating,
attention should be paid to the maintenance of the system.
Main Street management has found that a personal computer is adequate for the task. There are two popular personal computers to choose from, namely IBM compatibles and Apple computers. The latter appears to be more user friendly but does not offer as many business application software packages. Consequently, an IBM compatible computer was chosen. As mentioned above, there are many software packages available for income property management. It was decided, however, to produce the application program internally using a sophisticated data base compiler. The finished application program generates rent and expense entries, reviews, reports, and tenant notices. The notices include a late payment notice, a five day notice for the tenant to pay or move, a thirty day notice to request the tenant to vacate the unit, a rent increase notice, a letter with return of the security deposit after the tenant vacates the unit, etc. The reports include a vacant unit list, a over-due tenant list, a bank deposit list, an expense general journal, and so on.

Milwaukee Housing Distribution

The City Development Department in Milwaukee divides the city into 7 survey areas, as shown in Figure 1, based on the 1980 Relative Residential Status map. The development programs identified for each area are:

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</tr>
</thead>
<tbody>
<tr>
<td>Area 1</td>
<td>No special programs needed.</td>
</tr>
<tr>
<td>Area 2</td>
<td>North side reinvestment areas.</td>
</tr>
</tbody>
</table>
Area 3 .................. South side reinvestment areas.
Area 4 .................. North side transition area.
Area 5 .................. South side transition area.
Area 6 .................. Basic maintenance area.
Area 7 ................. High density rental area.

All Main Street Co. properties are located in Area 1 or in the suburban communities. In these areas, a robust economic picture is indicated given the following statistics; the lowest vacancy rate, the highest owner occupancy rate, the smallest percentage of households receiving public assistance, the lowest median percent of income spent for rent, the lowest percentage of female headed households with children, the lowest percentage of very low income households, and the highest median household income. Management, however, is keeping a watchful eye on this area as the problems generally associated with inner city areas are spreading to this area (Milwaukee Department of City Development, 1987).

To understand the changes taken place in Milwaukee today, it is necessary to understand the urban development process. Generally, the urban development process consists of two factors: filtering and push (Milwaukee Department of City Development, 1987). In Milwaukee, as elsewhere, new residential construction occurred in a series of concentric rings, outward from the downtown area. Each successive ring of housing was built by the area's affluent families. The vacated old homes were purchased by the less affluent
households who, in turn, sold their homes. This is the process of filtering. This process concentrated the poorest people in the oldest and least expensive housing in the central metropolitan area. When there are more housing units constructed than households forming, the oldest and poorest neighborhoods are disrupted. This is also occurring in Milwaukee.

The second process of change is more recent, beginning in the 1960's. It involves people moving out of neighborhoods, rather than units, they perceive as undesirable. The neighborhoods are thought of as unsatisfactory regardless of the condition of housing units. The desire to leave a neighborhood often begins in the oldest and poorest neighborhoods, but it affects the adjacent neighborhoods. In these neighborhoods, many households feel that they are in the path of change and consequently their property values will decline. They become anxious to leave and their homes then become available for poorer households. This is the process of push.

Deteriorating Neighborhoods

An indication that the push process is at work along with the filtering process, is that some of vacant and boarded up housing units are not in the oldest and poorest areas but in adjacent areas. Some of Main Street Co.'s properties are located in these adjacent areas and are experiencing the effects of the push process. These
neighborhoods are deteriorating rapidly. A barometer which measures the deterioration process is the crime rate. Management frequently suffered losses or damages from these properties. The washers and driers with coin collectors were easy prey for burglars; fire extinguishers in the hall ways are stolen regularly; and drug-related problems have made some buildings intolerable. A number of tenants have vacated as result of these problems. Authorities appear to be helpless. The combination of the aforementioned problems not only increases operating loss but also decreases property values. This phenomenon is one of the most serious adversities facing Main Street Co. today.

The Basic Problem

Clearly, management faces many problems. However, these problems are inter-related. The basic problem is low return on the investment which is due to low income, high expense, low capital appreciation and lack of tax incentives. The low income is in turn due to declining population, reduction in tenant's income and deteriorating neighborhoods. The low appreciation is in turn due to low net income, lack of tax incentives and deteriorating neighborhoods. In short, the single basic problem Main Street Co. faces today is low return on the investment.
CHAPTER 5

Potential Solutions

The basic problem management faces is low return on the investment. While there are many potential solutions to this problem, some causes of the problem, such as declining population, deteriorating neighborhoods and unfavorable tax change are socio-economic in nature and therefore are beyond management's control. The following details 3 solutions management feels are controllable: revenue enhancement, cost containment and liquidation.

Solution 1: Revenue Enhancement

Rent Increase

The median monthly rent for Main Street apartments is approximately $380, nearly the same as the median rent of $384 in Milwaukee as of 1985. The median rent for Survey Area 1, where the majority of buildings are located, is $420, which is significantly higher than the rents charged by Main Street. This indicates a potential for rent increase. Rent in the Milwaukee Metropolitan area are generally lower than that rents in other metropolitan areas. This phenomenon can be partially attributed to the Milwaukee area's extraordinarily high percentage of private individual ownership of a limited number of income generating units. Since these "Ma and Pa" operations often-times do their own maintenance and management work, the rents they charge fail to reflect their total
operational costs. With almost 50 percent of available apartment units controlled by these landlords, renters are often sheltered from the true market cost of rental housing.

The median gross rent rose only 5 percent from 1978 to 1985, as median incomes fell. The rent increase has been below the inflation rate in the Milwaukee Metropolitan Area during the same period. Since the region's economic condition has considerably improved since 1985, a five percent rent increase may be justifiable. In order to avoid a massive exodus of tenants, management has decided that the rent increase should be carried out through a number of stages.

Accepting Rental Assistance Tenant

A significant shift in the rental housing market in Milwaukee Metropolitan Area between 1980 and 1985 has been the decline in housing affordability. The 1985 housing survey showed that the number of low income renters increased and the amount of income spent on the shelter need increased as well. There was a 38 percent increase in the number of renter households in financial need. About 15,000 low income households live in public or other subsidized housing.

There are two forms of federal rent assistance, namely Certificates and Vouchers (Milwaukee Department of City Development, 1988). (1) Certificate program; low income households who are in the certificate program cannot spend
more than 30 percent of their income on housing. This gives
them an incentive to find the nicest units in the best
neighborhood since, in spite of higher rents, their share
of shelter cost does not increase. Besides making housing
affordable, rent assistance maintains the housing stock by
negotiating rents and annually inspecting all units that
have a rent assistance tenant, thus enforcing landlord and
tenant responsibilities. (2) Voucher program; the family
is responsible for up to 30 percent of the rent plus the
amount that exceed the subsidy levels which are set by
federal government. In this program, the rent is negotiated
by the family and landlord. The voucher program produces
affordable housing but has drawbacks for the housing market
because rents are not negotiated through the program, and
the landlord may get higher than comparable rents.

In joining these programs, the pool of potential
tenants can be greatly expanded. Moreover, it will be
easier to increase the rents, though extra expenses may be
incurred to satisfy the regular inspections. It is
management's hope that renters with assistance will pay
their rents with more reliability since they are
responsible for only part of the rents.

Reducing Vacancy

To lease apartments as rapidly as possible, a monetary
incentive program for caretakers may be helpful, such as a
handsome bonus if the apartment is rented within a given
amount of time. Another measure is to discount the initial
rent for vacant units in the winter months. With respect to advertisements, a lesser known street address may be made easier to identify in newspaper advertisements through association with a shopping center. For example, instead of '9000 N. Granville Rd.' in the advertisement, as is customarily done, it is more effective for the tenant to locate the apartment by saying 'Northridge area'. Management actually received more inquiries about the apartments after switching to such advertisements.

Solution 2: Cost Containment

Reducing Mortgages

There are two ways to reduce mortgage payments; cut the mortgage rate or reduce the principal. Researching lending institutions for cost effective rates and/or going to private sources can cut rates considerably. As discussed in another part of the paper, management reduced principal considerably in 1986 and 1987. As a result, the total capital investment was increased from 25 percent of the original purchase price to 30 percent and then finally to 40 percent. Consequently, the mortgage payment was proportionally reduced.

Property Tax Reduction

Property taxes in Milwaukee Metropolitan Area are among the the highest in the nation. The owner can petition city government for a reduction in the tax. Petitions were attempted and were successful on 4 properties. For example, the property tax on building C was reduced from $13,000 to
$9,000 in the first year after the Company bought the foreclosed property from a savings and loan association. While done only rarely, the city assessor may reduce the assessed values of some properties in the changing neighborhoods without owner's request, and hence lowers taxes.

**Lower Insurance Cost**

The insurance cost can be reduced through market research identifying low cost carriers. Another effective way to reduce the premium is to negotiate with an insurance company for a package deal covering all properties under one single policy. These package deals may lead to a premium reduction of as much as 50 percent.

**Lower Utility Cost**

After acquiring a property, it is essential to request an energy audit by an expert. In fact, the electric power company provides free inspection for energy efficiency. After their recommendations are followed and the proper insulations completed, the utility company will issue a seal of energy efficiency for the owner to post at the apartment lobby. Energy efficiency saves energy cost for not only management but also tenants, making the apartments more desirable for the tenants.

Lighting in public areas should be evaluated. An electrical consultant suggested a decrease in the number of light fixtures in buildings built before the middle 1970's. This reduction in light fixtures would allow a reduction in
costs. Tenants tend to forget to turn off basement lights when not in use, thus reminders have proved helpful.

Water, sewage and rubbish collection fees can be cut too. Installation of water-saving shower heads and/or individual water meters could reduce water and sewage bills. In building A, the rubbish collection company over-charged the owners for a few years before the overcharge was found and refunded.

**Computerization of Paper Work**

Computerization of the paper work not only maintains efficient documentation but it also results in a significant reduction in labor costs.

**Solution 3: Partial Liquidation**

The adverse impact of the new tax, the declining economy in the Milwaukee Metropolitan Area in early 1980s, and the deterioration of neighborhoods are beyond the Company's control. Persistent deterioration of the neighborhood will lead to liquidation for the properties in these areas, relocating investment capital to more desirable communities.

All of the 3 solutions described above, if carried out successfully, could contribute to increase in the return on investment, and thereby eliminate the problem facing Main Street Co.
CHAPTER 6

The Solution

There are 3 potential solutions of the problem facing the Main Street Management Company, namely, revenue enhancement, cost containment and liquidation of undesirable properties. As these are successfully implemented, a competitive return on investment is projected. Of the 3 potential solutions, revenue enhancement is the most effective one. Revenue enhancement alone, if sufficient enough, could solve the problem of low return on investment. It could not only raise the return on investment in the future, but also recuperate the losses in the past. Cost containment may boost the net profit, but there is a limit in lowering the cost. Liquidation can not be accomplished without an unacceptable capital loss at this time. Moreover, liquidation could only stop future loss, but does not offer an opportunity to recuperate the previous operational losses.

Once the revenue is enhanced, the property value may be increased accordingly (Property value is generally appraised according to the revenue in a given locality). As the economic condition in Milwaukee Metropolitan Area improves, a competitive return on investment for Main Street Co. may be realized.

Future Outlook

Table 8 shows the projected balance sheet from 1988 to
1992. The annual rent increase was 2 to 4 percent from 1983 to 1987. The inflation rate is projected at 4 percent from 1988 to 1992. The annual rent increase is projected to match the inflation rate in that period. Nearly 50 percent of total expenses is expected to be interest payments. The mortgage rate is projected at about 10 percent. Given relatively little movement in mortgage rates, then total expense would increase by only half of the projected inflation rate, or 2 percent. The cash flow in 1988 is projected to be $41,008. If $30,000 from the cash flow is paid to the lending institution to reduce the principal every year, the expense would be cut by the mortgage interest saving of $3000 a year. The cash flow will be gradually increased, and in 1992 it will be $71,275. Depreciation on the properties will be gradually decreased. The balance will continue to be negative for 1988 and 1989, and will become positive thereafter.

However, there will be no tax advantage by reporting the loss on the federal income tax return by the new tax law. Unless the national and Milwaukee Metropolitan Area economies experience another recession, the single family house will continue to appreciate. A higher house cost makes it easier for management to raise rents. Eventually, when the rent is increased to a point that the return on the property investment is favorable without any tax benefit, then the market value of income residential property will begin to appreciate, probably at a rate below
inflation. The appreciation is projected to be half of the inflation rate or 2 percent from 1988 to 1992. The net return which is defined as the sum of cash flow, tax benefit and appreciation, will be increased from $75,208 to $105,475 in that period, resulting in a return rate on investment of 10.1 percent in 1988 and 12.2 percent in 1992.

An investment with a return of 12.2 percent will compete favorably with other modalities of investment, given an interest rate of 10 percent or less. Furthermore, if the appreciation is projected at 3 percent as shown in Table 9, the return rate would be 12.4 percent in 1988 and 15.4 percent on 1992. By a mere one percent increase in the market appreciation, the return on the investment could be greatly improved. It underscores the importance of 'location' in the real estate investment. If the projections in Tables 9 prove to be accurate, the return on investment would justify continuation of the business.
Table 1

Incomes and Expenses for Main Street Management Co.  
1983 - 1987

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rents</td>
<td>235,895</td>
<td>245,392</td>
<td>256,548</td>
<td>263,812</td>
<td>272,512</td>
</tr>
<tr>
<td>Expenses</td>
<td>288,815</td>
<td>280,168</td>
<td>271,634</td>
<td>259,323</td>
<td>240,593</td>
</tr>
<tr>
<td>Cash flow</td>
<td>-52,920</td>
<td>-34,776</td>
<td>-15,086</td>
<td>4,489</td>
<td>31,919</td>
</tr>
<tr>
<td>Depreciation</td>
<td>85,410</td>
<td>78,500</td>
<td>72,456</td>
<td>67,234</td>
<td>63,345</td>
</tr>
</tbody>
</table>

Note
Cash flow = Rent - Expense
Profit = Cash flow - Depreciation
Table 2

Income and Expenses for Different Apartment Buildings
1987

<table>
<thead>
<tr>
<th>Buildings</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rents</td>
<td>103,937.00</td>
<td>26,417.00</td>
<td>50,117.50</td>
<td>33,881.39</td>
</tr>
<tr>
<td>Advertising</td>
<td>0.00</td>
<td>0.00</td>
<td>674.60</td>
<td>0.00</td>
</tr>
<tr>
<td>Auto</td>
<td>145.60</td>
<td>145.60</td>
<td>145.60</td>
<td>145.60</td>
</tr>
<tr>
<td>Maintenance</td>
<td>0.00</td>
<td>35.00</td>
<td>1,948.56</td>
<td>588.86</td>
</tr>
<tr>
<td>Insurance</td>
<td>1,630.00</td>
<td>260.00</td>
<td>574.00</td>
<td>320.00</td>
</tr>
<tr>
<td>Legal</td>
<td>1,024.00</td>
<td>0.00</td>
<td>202.00</td>
<td>50.00</td>
</tr>
<tr>
<td>Interest</td>
<td>49,752.29</td>
<td>14,009.60</td>
<td>28,940.00</td>
<td>19,793.24</td>
</tr>
<tr>
<td>Repair</td>
<td>61.67</td>
<td>376.81</td>
<td>4,556.10</td>
<td>254.34</td>
</tr>
<tr>
<td>Supplies</td>
<td>2,291.96</td>
<td>0.00</td>
<td>2,281.87</td>
<td>1,157.85</td>
</tr>
<tr>
<td>Taxes</td>
<td>16,619.09</td>
<td>5275.66</td>
<td>9,263.80</td>
<td>7,822.87</td>
</tr>
<tr>
<td>Utilities</td>
<td>4,829.08</td>
<td>690.87</td>
<td>3,857.59</td>
<td>1,790.94</td>
</tr>
<tr>
<td>Amortization</td>
<td>1,165.83</td>
<td>236.00</td>
<td>128.00</td>
<td>707.00</td>
</tr>
<tr>
<td><strong>Total expense</strong></td>
<td><strong>77,519.52</strong></td>
<td><strong>21,029.54</strong></td>
<td><strong>52,572.12</strong></td>
<td><strong>32,630.70</strong></td>
</tr>
</tbody>
</table>

Table 3

Income and Expenses for Different Apartment Buildings
1987

<table>
<thead>
<tr>
<th>Buildings</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rents</td>
<td>22,351.00</td>
<td>21,229.85</td>
<td>9,300.00</td>
<td>5,278.76</td>
</tr>
<tr>
<td>Advertising</td>
<td>161.45</td>
<td>14.70</td>
<td>0.00</td>
<td>192.38</td>
</tr>
<tr>
<td>Auto</td>
<td>145.60</td>
<td>145.60</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Maintenance</td>
<td>81.66</td>
<td>27.13</td>
<td>0.00</td>
<td>324.00</td>
</tr>
<tr>
<td>Insurance</td>
<td>260.00</td>
<td>260.00</td>
<td>260.00</td>
<td>190.00</td>
</tr>
<tr>
<td>Legal</td>
<td>0.00</td>
<td>24.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Interest</td>
<td>15,869.49</td>
<td>11,758.62</td>
<td>1,100.66</td>
<td>5,250.18</td>
</tr>
<tr>
<td>Repair</td>
<td>56.55</td>
<td>845.68</td>
<td>588.72</td>
<td>0.00</td>
</tr>
<tr>
<td>Supplies</td>
<td>318.85</td>
<td>496.80</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Taxes</td>
<td>4,838.73</td>
<td>4,838.73</td>
<td>2,777.90</td>
<td>1,965.96</td>
</tr>
<tr>
<td>Utilities</td>
<td>1,227.67</td>
<td>1,255.39</td>
<td>285.85</td>
<td>0.00</td>
</tr>
<tr>
<td>Amortization</td>
<td>440.00</td>
<td>839.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Total expense</strong></td>
<td><strong>23,400.00</strong></td>
<td><strong>20,505.65</strong></td>
<td><strong>5,013.13</strong></td>
<td><strong>7,922.52</strong></td>
</tr>
</tbody>
</table>
Table 4

Population in the Milwaukee Metropolitan Area

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>Milwaukee</td>
<td>1,054,249</td>
<td>964,988</td>
<td>-89,261</td>
</tr>
<tr>
<td>Ozaukee</td>
<td>54,461</td>
<td>66,981</td>
<td>12,520</td>
</tr>
<tr>
<td>Washington</td>
<td>63,839</td>
<td>84,848</td>
<td>21,009</td>
</tr>
<tr>
<td>Waukesha</td>
<td>231,335</td>
<td>280,326</td>
<td>48,991</td>
</tr>
<tr>
<td>Total</td>
<td>1,403,884</td>
<td>1,397,143</td>
<td>-6,741</td>
</tr>
</tbody>
</table>


Table 5

Total Housing Units in the Milwaukee Metropolitan Area

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Number</td>
</tr>
<tr>
<td>Milwaukee</td>
<td>349,762</td>
<td>378,000</td>
<td>28,238</td>
</tr>
<tr>
<td>Ozaukee</td>
<td>15,351</td>
<td>22,520</td>
<td>7,169</td>
</tr>
<tr>
<td>Washington</td>
<td>18,692</td>
<td>28,363</td>
<td>9,671</td>
</tr>
<tr>
<td>Waukesha</td>
<td>65,241</td>
<td>92,622</td>
<td>27,381</td>
</tr>
<tr>
<td>Total</td>
<td>449,046</td>
<td>521,505</td>
<td>72,459</td>
</tr>
</tbody>
</table>

Table 6

**Returns on Investment Based on Old Tax Rules. 1983-1987**

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash flow</td>
<td>-52,920</td>
<td>-34,776</td>
<td>-15,086</td>
<td>4,489</td>
<td>31,919</td>
</tr>
<tr>
<td>Tax benefit</td>
<td>41,499</td>
<td>33,982</td>
<td>26,262</td>
<td>18,823</td>
<td>9,427</td>
</tr>
<tr>
<td>Appreciation</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Net return</td>
<td>-11,421</td>
<td>-793</td>
<td>11,176</td>
<td>23,312</td>
<td>41,346</td>
</tr>
<tr>
<td>Investment</td>
<td>445,250</td>
<td>445,250</td>
<td>445,250</td>
<td>534,300</td>
<td>712,400</td>
</tr>
<tr>
<td>Return rate</td>
<td>-2.5 %</td>
<td>-0.1 %</td>
<td>2.5 %</td>
<td>4.4 %</td>
<td>5.8 %</td>
</tr>
</tbody>
</table>

**note.** The maximum old tax rate for earned income was 50% and the capital gain tax rate was 20%. The tax benefit is 30%. The investment was 25% of total purchase price initially and increased to 40% in 1987.

Tax benefit = Loss * 0.3
Net return = Cash flow + Tax benefit + Appreciation.
Return rate = Net return / Investment.

Table 7


<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash flow</td>
<td>-52,920</td>
<td>-34,776</td>
<td>-15,086</td>
<td>4,489</td>
<td>31,919</td>
</tr>
<tr>
<td>Tax benefit</td>
<td>30,432</td>
<td>24,920</td>
<td>19,259</td>
<td>13,803</td>
<td>6,913</td>
</tr>
<tr>
<td>Appreciation</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Net return</td>
<td>-22,488</td>
<td>-9,856</td>
<td>4,173</td>
<td>18,292</td>
<td>38,832</td>
</tr>
<tr>
<td>Investment</td>
<td>445,250</td>
<td>445,250</td>
<td>445,250</td>
<td>534,300</td>
<td>712,400</td>
</tr>
<tr>
<td>Return rate</td>
<td>-5.0 %</td>
<td>-2.2 %</td>
<td>0.9 %</td>
<td>3.4 %</td>
<td>5.4 %</td>
</tr>
</tbody>
</table>

**note.** The maximum old tax rate for earned income was 50% and the new capital gain tax rate was 28%. The tax benefit is only 22%.

Tax benefit = Loss * 0.22
Net return = Cash flow + Tax benefit + Appreciation.
Return rate = Net return / Investment.
Table 8
Projected Balance Sheet, Assuming Appreciation of 2%
1988 - 1992

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rents</td>
<td>283,412</td>
<td>294,749</td>
<td>306,539</td>
<td>318,800</td>
<td>331,553</td>
</tr>
<tr>
<td>Expenses</td>
<td>242,405</td>
<td>244,253</td>
<td>246,138</td>
<td>248,061</td>
<td>250,022</td>
</tr>
<tr>
<td>Cash flow</td>
<td>41,008</td>
<td>48,072</td>
<td>55,462</td>
<td>63,191</td>
<td>71,275</td>
</tr>
<tr>
<td>Depreciation</td>
<td>60,178</td>
<td>57,169</td>
<td>54,310</td>
<td>51,595</td>
<td>49,015</td>
</tr>
<tr>
<td>Profit/Loss</td>
<td>-19,170</td>
<td>-9,097</td>
<td>1,151</td>
<td>11,596</td>
<td>22,259</td>
</tr>
<tr>
<td>Tax benefit</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Appreciation</td>
<td>34,200</td>
<td>34,200</td>
<td>34,200</td>
<td>34,200</td>
<td>34,200</td>
</tr>
<tr>
<td>Net return</td>
<td>75,208</td>
<td>82,272</td>
<td>89,662</td>
<td>97,391</td>
<td>105,475</td>
</tr>
<tr>
<td>Investment</td>
<td>742,400</td>
<td>772,400</td>
<td>802,400</td>
<td>832,400</td>
<td>862,400</td>
</tr>
<tr>
<td>Return rate</td>
<td>10.1 %</td>
<td>10.7 %</td>
<td>11.2 %</td>
<td>11.7 %</td>
<td>12.2 %</td>
</tr>
</tbody>
</table>

Note. Assuming:
Rent increase = 4% / year.
Expense increase = 2%, minus $ 3000
Principal payment of $ 30,000 / year.
Appreciation = 2% / year.

Table 9
Projected Balance Sheet, Assuming Appreciation of 3%
1988 - 1992

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
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</tr>
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<tbody>
<tr>
<td>Rents</td>
<td>283,412</td>
<td>294,749</td>
<td>306,539</td>
<td>318,800</td>
<td>331,553</td>
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<tr>
<td>Expenses</td>
<td>242,405</td>
<td>244,253</td>
<td>246,138</td>
<td>248,061</td>
<td>250,022</td>
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<tr>
<td>Cash flow</td>
<td>41,008</td>
<td>48,072</td>
<td>55,462</td>
<td>63,191</td>
<td>71,275</td>
</tr>
<tr>
<td>Depreciation</td>
<td>60,178</td>
<td>57,169</td>
<td>54,310</td>
<td>51,595</td>
<td>49,015</td>
</tr>
<tr>
<td>Profit/Loss</td>
<td>-19,170</td>
<td>-9,097</td>
<td>1,151</td>
<td>11,596</td>
<td>22,259</td>
</tr>
<tr>
<td>Tax benefit</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Appreciation</td>
<td>51,300</td>
<td>51,300</td>
<td>51,300</td>
<td>51,300</td>
<td>51,300</td>
</tr>
<tr>
<td>Net return</td>
<td>92,308</td>
<td>101,796</td>
<td>111,701</td>
<td>122,040</td>
<td>132,831</td>
</tr>
<tr>
<td>Investment</td>
<td>742,400</td>
<td>772,400</td>
<td>802,400</td>
<td>832,400</td>
<td>862,400</td>
</tr>
<tr>
<td>Return rate</td>
<td>12.4 %</td>
<td>13.2 %</td>
<td>13.9 %</td>
<td>14.7 %</td>
<td>15.4 %</td>
</tr>
</tbody>
</table>

Note. Assuming:
Rent increase = 4% / year.
Expense increase = 2%, minus $ 3000
Principal payment of $ 30,000 / year.
Appreciation = 3% / year.
Fig. 1
1985 HOUSING SURVEY AREAS

1980
CITY OF MILWAUKEE
CENSUS TRACT
MAP

LAKE
MICHIGAN
REFERENCES


APPENDIX

List of Properties

1) Building A: 24 unit townhouses;
   19000 W. Main Street, Menomonee Falls, Waukesha County.
   3 bed room units.
   Price: $ 600,000
   Rent : $ 420

2) Building B: 6 unit townhouses;
   6534 N. 85th St., Milwaukee City, Milwaukee County.
   3 bed room units.
   Price: $ 158,000
   Rent : $ 385

3) Building C: 14 unit apartments;
   9234 N. Granville Rd., Milwaukee City, Milwaukee County.
   2 and 1 bed room units.
   Price: $ 283,000
   Rent : $ 380

4) Building D: 8 unit apartments;
   5678 N. 97th St., Milwaukee City, Milwaukee County.
   2 bed room units.
   Price: $ 220,000
   Rent : $ 380

5) Building E: 7 unit apartments;
   7123 N. Teutonia Ave., Milwaukee City, Milwaukee County.
   1 and 3 bed room units.
   Price: $ 162,000
   Rent : $ 280

6) Building F: 7 unit apartments;
   6771 N. Teutonia Ave., Milwaukee City, Milwaukee County.
   1 and 3 bed room units.
   Price: $ 158,000
   Rent : $ 280

7) Building G: Single family house;
   2111 W. Beach La., Glendale, Milwaukee County.
   Price: $ 120,000
   Rent : $ 800

8) Building H: Single family house;
   11112 N. Port Rd., Mequon, Ozaukee County.
   Price: $ 80,000
   Rent : $ 600