THE CREDIT CRUNCH AND PENSION FUND INVESTMENT IN HOME BUILDING

by

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Submitted to the Department of Urban Studies and Planning
in partial fulfillment of the requirements of the degree
of Masters of Science in Real Estate Development.

Abstract

Over the past several years the residential home building industry has experienced a worsening liquidity crisis for acquisition, development and construction capital. This thesis examines the current state of capital availability, and the prospects for new sources of capital, namely in the form of pension fund investment.

The first part of this thesis evaluates the current availability of capital. This is accomplished by examining the current lending practices of the traditional sources of capital. The reduction in funds available for acquisition, development and construction lending will be quantified and the causes of the decline in capital will be examined.

Next it is established that while capital funding to the industry has declined, demand for housing has remained stable. The logical conclusion to be drawn is that there is a need for new sources of capital for the housing industry in order to meet the demand for new homes.

While several alternative sources of capital are currently being explored by the industry, the source that appears closest to being tapped is the vast pool of capital held by pension funds. This thesis will demonstrate how investments in single family housing can be structured to meet the pension fund's needs while minimizing risk through an analysis of the CalPERS investment currently being developed in California.

Thesis Supervisor: Thomas Steele
Chairman
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SECTION I

THE NEED FOR CAPITAL
CHAPTER I

THE CREDIT CRUNCH

Over the past several years a disturbing trend has been developing in the single family housing construction and development industry. Acquisition, development and construction (AD&C) financing has become increasingly difficult for many builders to obtain. The result of this trend could be the reshaping of the building industry as we know it today. The medium sized builder (25 to 250 homes a year) is slowly getting squeezed out of existence. This could adversely impact the ability of the industry to play its traditional role of leading the economy out of a recession, since it is these builders who construct the bulk of the one million plus homes completed each year. At the peak of single family construction activity in 86-87, $55 billion was outstanding in construction loans by eleven major lender groups. Another $55 billion was outstanding in land loans (see exhibit 1). By the third quarter of 1991 these figures were reduced to $33 billion and $31 billion respectively, for a total reduction in AD&C capital of $33.5 billion.

1Survey of Mortgage Lender Activity, 1970 - 1991, Department of Housing and Urban Development
The difficulty in obtaining AD&C financing in today's environment is a little disputed fact. Numerous articles and interviews have been published on this subject. In some instances the illiquidity in the market is rightfully deserved. Some regions have experienced lack of demand due to overbuilding and/or regional economic considerations such as unemployment. In some areas land speculation has driven lot prices too high to warrant development. Yet in other situations builders are finding that they cannot finance pre-sold homes. Institutions that have been serving these builders for a dozen years are turning them away. The reasons for this are several. The most apparent cause of illiquidity is the recent downturn in the real estate market. Overbuilt office and retail space has driven commercial real estate values down. Those bankers and institutional lenders that have so far survived have become deservedly reluctant to make any kind of real estate loan. Residential real estate has not been immune. Of the eleven major lender groups tracked by
H.U.D., all, with the exception of state and local credit agencies, have shown a decline in lending for single family AD&C loans (see table 1).

AD&C Lending for Eleven Major Lending Groups

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<td>36</td>
</tr>
<tr>
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<td>1433</td>
<td>16</td>
<td>4395</td>
<td>0</td>
<td>10</td>
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<td>0</td>
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</tr>
<tr>
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Table 1

SOURCE: DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Beyond the psychological and economic impact that falling real estate values and foreclosed loans have had, stepped up regulation has made real estate loans increasingly difficult to make. Together with commercial banks, savings and loan associations have accounted for 90% to 95% of all AD&C lending activity for single family residential development.\(^2\) From a 1986 peak of $27 billion, outstanding construction loans from S & L's have fallen to $8.7 billion in the 3rd quarter of 1991 (see exhibit 2). Likewise, outstanding land loans from S & L's have fallen from a 1987 peak of $27.8 billion to $9 billion in the 3rd quarter of 1991. According to NAHB chief economist David Seiders, S & L's, which once made up nearly 50% of total AD&C lending, are now expected to contribute only 20% when the dust settles in the lending arena. Much of this is due to the

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\(^2\)Ibid

Exhibit 2
SOURCE: DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

FIRREA has had a significant impact on the S & L's ability to remain active in AD&C lending because it requires that thrifts hold no more than 65% of their lending portfolio in real estate. Many S & L's, in order to meet this objective, have little choice but to stop making real estate loans, period. Regulators are forcing these institutions to reevaluate the performing loans that they have on their books. In many instances reappraised property values have resulted in a current loan falling below certain specified loan to value ratios, thus creating the non-performing performing loan. These loans are either called or paid down, further draining the industry of scarce capital.

In addition, FIRREA mandates that S & L's achieve and maintain a certain level of capitalization. From a historical level of about 5%, S & L's are required to achieve an 8%
capitalization rate for 1992. This again has resulted in the curtailment of lending at many institutions as they scramble to raise capital. In determining the capitalization rate FIRREA has also set risk-weightings for the various types of assets. Residential AD&C loans carry one of the highest risk-weightings, along with commercial real estate loans, versus treasury bills which carry zero risk. With the current construction lending rate of 200 basis points over prime, institutions should be able to make more money investing in government securities - which require zero capital reserves - than in housing production - which is perceived as the most risky investment and requires the biggest reserves under current rules.3

FIRREA has also limited the ability of an S & L to lend to any one borrower with its loans to one borrower limits. No borrower may account for more than 15% of an institution's unimpaired capital. Fewer than forty thrifts in the United States have the necessary capital to make a $20 million loan to a single borrower.4 A $12 million AD&C loan would entail an institution to have $1 billion in risk-adjusted assets. This has forced many of the smaller and medium sized S & L's to withdraw funding from builders as well as to walk away from economically sound projects. In a survey of over 1100 builders completed by NAHB, the reason cited by 56% of the respondents for the change in thrift lending practices was the limit on loans to one borrower rule.5 Builders are being forced to line up multiple lenders for single projects, further raising the odds that a project will not get built.

Savings and Loans are not the only institutions that have curtailed their lending activities. Commercial banks, which traditionally made up 45% of AD & C lending, are also limiting

5AD&C Financing Survey, NAHB, May 1990
the amount of funds they have available. Total loans outstanding for single family home construction has fallen from a 1990 peak of $29.8 billion to $21.5 billion in the 3rd quarter of 1991. Total land loans from commercial banks decreased from a 1988 peak of $28.7 billion to a 3rd quarter of 1991 total of $19.8 billion (see exhibit 3). While this decrease is not as pronounced as what is happening to S & L's, it is significant because commercial banks are expected to fill the void left by the S & L's.

Exhibit 3
SOURCE: DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

Banks are feeling the same pressures that have been working against the S & L's. The collapse of the real estate market, especially in the office and retail sectors, has made bankers wary of any kind of real estate lending. Regulators are also applying pressure on the banks to reduce their real estate portfolios and increase their capitalization rates. In 1990 the Office of Comptroller of the Currency issued an advisory for banks to reduce their real estate portfolios. Rather than risk the disfavor of regulators, many banks took
the initiative to follow the advice. In December of 1990 new capital requirements were issued for commercial banks, further reducing banks' willingness to lend. To compound the problem the regulatory environment has yet to stabilize. Banking reform is a continuing topic on Capital Hill. To date much of the regulatory guidelines are voluntary. Statutory loan to value ratios and stricter capitalization rates are not inconceivable.

While AD&C loans from commercial banks, as well as S & L's, are still available, the standards being applied to the loans are much stricter. Builders are being required to adhere to a much tougher approval process. Banks are requiring extensive documentation and financial reporting on not only the project in question, but on all of the builder's portfolio. Banks want to see more equity in the deal on behalf of the builder. Debt financing has fallen from an average of 95% of a project's cost to 70% of the cost.6 It is not uncommon for this figure to go as low as 60%.7 The institutions want the builder to demonstrate a solid source of liquidity should overruns be encountered. And the days of non-recourse financing are long gone. Collateral is the key word today.

While there is no dispute that the flow of capital has significantly slowed to the housing industry and that the capital that is available is harder to come by, there is some dispute as to whether or not this constitutes a credit crunch. Edward McKelvey of Goldman Sachs & Co. has pointed out that the two symptoms of a credit crunch - an increase in prices and a shortage of new homes for sale - cannot be found.8 One of NAHB's economists Dean Crist has stated that what is working against new home sales is not lack of credit but rather a weakness in demand.9 As the economy struggles to come out of the recession,

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7Comments from the Builders Financing Forum, San Francisco, CA, May 1992
8"Washington Still Debates Whether There Really is a Credit Crunch", Professional Builder & Remodeler, February 1992
9Ibid
demand is destined to pick up. This will be examined in the next chapter. If a surge in
demand is met by a lack of supply and swiftly rising home prices, the momentum of such a
recovery could be severely thwarted. New sources of capital must be ready to step into
the void left by S & L's and commercial banks to assure that the funds will be available to
maintain the momentum. Now is the time for these sources to be developed.
CHAPTER II

HOUSING DEMAND

The traditional financial institutions that have been serving the home building industry have dramatically tightened up their lending practices. 60% of the respondents to NAHB's builder survey reported that their development or construction plans were altered because of changes in institutional lending practices.10 The majority of those polled attributed this to tougher regulators and loans to one borrower rules. Many of the builders commented that they experienced lost sales, not to mention foregone projects, because of the restrictions and delays encountered.

In terms of opportunities for new sources of financing to enter the market, importance is placed not so much on the degree of difficulty in obtaining credit but rather on whether or not the demand on the building industry to produce more units is unsatisfied. Stable pricing would indicate that there is no excessive demand. This approach for evaluating the need for capital can be misleading. First, the country is experiencing a sharp drop in the value of land, thanks in part to the widespread speculation that drove prices artificially high the last few years. Demand is holding new home prices stable as the value of the underlying land is depreciating. Second, to produce a home can take two years or more

10 Acquisition, Development & Construction Financing Survey, NAHB, May 1990
from initial development financing. Stable home prices today reflect the availability of capital two years ago. Restricted capital today can result in inflated prices tomorrow. To gauge the need for capital today by the price levels today would not take into account future demand.

A closer examination of recent trends reveals that the housing industry is starting to turn around. The first sign has been the stabilization and improvement of the sales rate for new single family homes (see exhibit 4). The latest upward turn in sales reflects strong performance at the end of 1991 and during the first months of 1992. It is safe to assume that sales for 1992 will only slightly exceed those of 1991. The latest seasonally adjusted numbers put out by the Bureau of Census support this conclusion. The outlook for the

![New Home Sales (000's)](chart)

**Exhibit 4**

SOURCE: HOME SALES, NATIONAL ASSOCIATION OF REALTORS

housing industry is further strengthened by the continual contraction of inventory (see exhibit 5). A recent survey of senior examiners and liquidators at federal banking agencies
corroborates this trend. The percentage of respondents reporting excess supply in the housing markets has shrunk to 54% from an April, 1991 high of 69% when the survey was started. Stabilized sales and continually declining inventories will eventually require an increase in production.

Exhibit 5
SOURCE: HOME SALES, NATIONAL ASSOCIATION OF REALTORS

An additional indication that the housing industry is trying to gear up its production is the recent increase in permit activity. The number of permits authorized for the construction of single family homes has slowly been rising throughout the latter half of 1991 and into the first months of 1992. Permits have declined slightly through March and have stabilized at a seasonally adjusted 875,000 units from April through June of 1992 (see exhibit 6 and Table 2). Accompanying this trend is a prediction by NAHB that housing

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11 Survey of Real Estate Trends, FDIC, May, 1992
12 Federal Reserve Bulletin, Federal Reserve Bank, Table 2.14
starts should increase by 12% in 1992 and 14% in 1993. This prediction may prove overly optimistic, as other economists such as Wheaton and DiPasquale are predicting housing construction to remain flat through the turn of the century, rising in 1992 and then falling slightly through 2000. As of June 1992, seasonally adjusted new starts are showing a 20% increase over 1991 (see exhibit 7). These trends in starts, permits and anticipated construction are occurring in the face of a 33% drop in AD&C lending documented in the previous chapter. If builders are having problems financing new projects as they claim, then it appears that they are supporting this construction activity through inventoried supplies of raw land and lots. Again, the FDIC survey of bank examiners supports this trend through the observation of declining supplies.

Exhibit 6

SOURCE: BUREAU OF CENSUS

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14 "Housing Market Dynamics and the Future of Housing Prices", Joint Center for Housing Studies; Dennis DiPasquale, William Wheaton; Harvard University June 1992
SINGLE FAMILY HOME STATISTICS
*Seasonally adjusted (000's)

<table>
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<tr>
<th></th>
<th>1991</th>
<th>JAN 92*</th>
<th>FEB 92*</th>
<th>MAR 92*</th>
<th>APR 92*</th>
<th>MAY 92*</th>
<th>JUN 92*</th>
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<td>913</td>
<td>946</td>
<td>907</td>
<td>873</td>
<td>879</td>
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<tr>
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<td>1109</td>
<td>1068</td>
<td>933</td>
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<td>1010</td>
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<tr>
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<td>281</td>
<td>269</td>
<td>276</td>
<td>275</td>
<td>274</td>
<td>N/A</td>
</tr>
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Table 2

SOURCE: BUREAU OF CENSUS

Single Family Starts (000's)

Exhibit 7

SOURCE: BUREAU OF CENSUS

If the typical buildout on a single family project of 60 to 100 units is two to four years from initial land acquisition, and even as long as 10 - 15 years on master planned communities, then the industry has just started to feel the impact of the regulatory changes initiated by FIRREA in 1989. It is conceivable that the affects of the credit crunch today
will not be felt for several more years (other than the fact that the building industry is experiencing sharp reductions in employment). Should demand continue to grow as described in the next paragraph, two years from now depleted inventories and otherwise insufficient supply may sharply drive up the price of housing. This may have the unwanted affect of killing off demand and thwarting the recovery. Likewise, additional investment today will not result in excessive supplies today, but rather adequate supplies for next year and beyond.

Whether or not demand is going to continue to grow is a key question. While the starter home product is expected to lose market share to move up homes, largely due to the shifting of the baby boom into the 35 - 45 age group and by the aging of the baby bust generation, there will still remain a pent up demand for starter housing.\textsuperscript{15} This will be attributable to several trends. Households are forming later in life. There are an increasing number of single person and divorced households. The flattening of housing prices has given income levels a chance to catch up; homes are finally becoming affordable, especially as a greater number of dual income families are forming. As William Apgar and George Masnick point out, as incomes rise, housing appreciation slows, and mortgage rates decline, the affordability gap slowly begins to close. This will also give rise to an increased demand for second homes. Households that have been putting off the decision to purchase second homes are now seeing these homes become more affordable.

If demand continues to grow there will be increasing pressure on the industry to replace the dwindling stock of units and lots in the next few years. This will create an opportunity and need for additional capital in the market place. It is doubtful that thrifts will have recovered in time to satisfy this need. It is also doubtful that commercial banks will be

able or willing to provide all of the needed capital, especially as it is likely that the commercial real estate problems will not have fully abated. Alternative sources of capital are needed to fill in. By entering the market now, when there is a growing demand for funds and little competition to provide them, these alternative sources will be able to establish for themselves a long term position in funding the home building industry.
SECTION II

ALTERNATIVE CAPITAL SOURCES
In the last few years builders and industry finance experts have been looking beyond commercial banks and savings and loans to finance merchant home building activities. This search has centered on equity gap financing. This gap is made up of the difference in the 95% of a project’s cost that was traditionally funded and the 50% to 60% of a project’s cost still available from financial institutions today. The equity requirement for a project has grown from 5% to 40% or 50%. In other words, banks and S & L’s are asking builders to increase the level of equity in a project by upwards of 800% to 1000%.

The search for equity has involved wealthy individuals, corporations, syndications, institutions, venture capitalists, and Wall Street, amongst others. This chapter will explore some of these sources and touch briefly on their ability to impact the industry.

The Traditional Approach

Some builders have taken the traditional approach to raising capital by forming partnerships with high net worth individuals or corporations. This has proved suitable mainly to small builders and large builders. Smaller builders, who build around 25 units per year or less, have successfully been able to link up with high net worth individuals to
finance their operations. There are two main characteristics to such an arrangement; the dollar volume is not substantial, usually less than a million, and the builder's operation is small enough so that the financial partner can easily monitor the deal and understand the operation. There are also greater opportunities for the smaller builders to involve a land owner or client in the deal. Such arrangements are usually on a deal by deal basis.

The larger builder, on the other hand, can use its size to pursue capital directly from corporations or institutions, or even the public market. These builders can operate from direct debt placements in the public market or line of credits from consortiums of banks or firms such as GE Capital. They also have the ability to issue stock because of their size. Such builders are able to obtain capital through the strength of their operations as opposed to the characteristics of a particular deal.

The medium size builder has a limited ability to directly pursue capital from these sources. Usually their operations are too large for any one particular investor to finance. Rarely will a medium size builder try to directly approach several investors for a deal; more often than not there is some sort of middleman involved in such an effort. The public market and large corporate investors are also difficult for mid-sized builders to approach directly. The builders usually do not have the size to interest the corporate investor or the public placement investment bankers.

Venture capitalists have been active in the development industry for some time. Investors such as Jackson Street Partners of San Francisco tend to target the sector of the housing industry that offers returns in the neighborhood of 35 to 50%, namely land development and the entitlement process. Because of the higher risk involved in this sector of the industry, venture capital carries with it a higher cost. These funds also require the developer partner to have 20 to 25% equity in the deal. While these funds are available,
they generally are not attractive to most builders because of the cost and equity requirements.

Similar to venture capital are syndications. After a steep decline in popularity due to loss of tax-incentives from the Tax Reform Act of 1986, syndications are starting to make a comeback. The difference now is that these deals are economically driven. In order to make these deals attractive to investors, the returns must be in the 35 to 50% range. Again, this involves investing in the land development process. Syndicators like Alda Properties of San Francisco will sell off their position, retaining a syndication and management fee.

One other source that has been mentioned from time to time are foreign investors. Unfortunately, these investors were burned badly from the recent devaluation of commercial real estate. Rockefeller Center and Pebble Beach are two of the more notorious examples. Japanese investment in U.S. real estate is off 25% between 1988 and 1990. The recent decline of off-shore stock markets has also tightened the availability of foreign capital. If investment is to come from abroad, the most likely sources will be Hong Kong and Germany. So far, the capital flight out of Hong Kong has mainly headed towards other former British colonies (besides the U.S.) such as Canada and Australia and industrializing Asian nations. Some of this capital is finding its way to the West Coast. To attract this capital will require the development of relations with individual investors. This will serve to greatly limit the impact of such investment. Germany is also a potential source. The dollar has recently approached its post-WW II low against the mark. This

19 U.S., Europe Join to Boost Weak Dollar, Wall Street Journal, July 21, 1992 pg. c1
should serve to attract German investment to the U.S. The problem with German, and European capital, is that much of it is headed towards opportunities in Eastern Europe and opportunities created by the relaxed trade barriers throughout Western Europe.

*The Alternative Approach*

The most likely sources of new capital for mid-sized builders are going to be through various kinds of equity funds that raise capital through individual and corporate investors. Some firms are raising money internally to take advantage of the opportunities available in housing. In the case of Westcor in Arizona, Westcor has raised capital internally to perpetuate their own land development activities. Westcor is investing in large tracts of land, obtaining entitlements, and installing the backbone infrastructure. Large parcels, or "superpads" are then sold to builders. Recognizing the shortage of capital in the market, Westcor is structuring a lot of the deals so that the builders do not have to buy the land outright. Westcor will go as far as completing the on-site infrastructure, if the deal is secure enough. The builder's search for capital is then limited to the construction financing. The builder is thus able to build a project otherwise unobtainable from lack of acquisition financing, while Westcor is able to continue to develop land. Deals like these present some excellent opportunities for builders, but because of the scarcity of firms like Westcor, the volume of such deals will have a minimal impact on the credit problem.

Recently, Wall Street has been trying to take advantage of the credit crunch as well. A prime example is the creation of Pacific Greystone Homes, Inc. 20 This venture firm was created through the acquisition of eight existing projects in California with a $65 million investment by E.M. Warburg, Pinkus & Co., Inc. The management hopes to take the new firm public when the annual output reaches 1500 units. The impact of such deals will be

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20*Real Estate Week*, A Crittenden Publication, June 1992
very limited. Another example of Wall Street stepping up to the plate is a program being developed by Goldman Sachs & Company. Goldman is targeting those metropolitan areas that have demonstrated significant demand but are lacking in credit facilities. They are investing equity for their own account in a program that targets the land development and entitlement side of the building process. They intend to invest 30 to 40% of the equity in a deal, attracting lenders for the remainder. Lots would then be sold off to builders with construction loans coming from Goldman Mortgage Corporation. The construction loans would in effect be serving as a take out facility for the development lender.

While these and similar efforts on Wall Street can only help to ease the credit crunch, many builders are waiting and hoping for a program to be developed that can tap the retail investor market. According to one source on Wall Street who requested anonymity, several problems need to be resolved first. Namely, investors are skeptical of real estate and funds. Such a program would be management intensive, involving deals of relatively small magnitude - $4 to $5 million - and unattractive returns, "The margins on home-building are too small given the alternative uses of capital." Establishing the credibility of those tapping into such a program was also noted as a problem that would have to be overcome. These problems are more symptoms of unfamiliarity with home building as an investment than structural flaws in the Wall Street apparatus. Once returns and risks from home building are better understood, possibly through the experience of pension fund investment, Wall Street should become more active. Wall Street appears to have recognized the opportunities that are becoming available in the home building industry. It is only a matter of time before a suitable instrument is created to take advantage of the opportunities opening up from the contraction of the traditional lending sources. If there is money to be made, and there is, Wall Street will be a player.
Much of the problems with venture capitalists, syndicators, and Wall Street lay with the need for high returns that can only be obtained in the home building industry through the development and entitlement process. Pension funds on the other hand are a fundamentally different animal. They seek low risk investments and are willing to accept lower returns in exchange. Their willingness to accept lower returns, 8% real rate of return annually, longer payback durations, four to thirty years, and the amount of their discretionary capital available for investment makes pension funds an attractive target for investment advisors and the building industry. Stephen Roulac has estimated that pension funds, as of the end of 1991, have $118.9 billion, or 5% of their $2.3 trillion in assets, in real estate. As Michael Herzeberg noted in a recent issue of National Real Estate Investor, pension funds will need to place more dollars into real estate as they grow because of diversification requirements. In addition, if the much talked about allocation of funds target of 10% of assets into real estate is to be achieved, another $110 billion will have to be invested in real estate, growth of funds aside. As evidenced by these facts, pension funds could be a prime source for capital for the building industry. The question as to whether or not home building is a suitable investment for pension funds will be addressed in subsequent chapters.

Government and The Public Sector

One last source of capital that should be mentioned is the public sector. In the area of affordable housing several agencies have been developed to help builders finance their activities. One of the most prevalent is State Housing Finance Agencies. These agencies are designed to provide below market financing for builders constructing affordable housing mostly in in-fill sites. Ben Golvin of Bridge Housing in San Francisco has recently

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stated that upwards of $700 million is available in the State of California for affordable housing.\textsuperscript{22} While many states have developed similar finance agencies, these programs are often subject to the fiscal health of the state itself. In an era of tightening budgets, often these programs suffer.

Another example of public sector financing comes from California in the form of the Mello-Roos Community Facilities Act. This piece of legislation has been enacted to try and shift the burden of infrastructure construction from the developer to the end-user in the form of a tax assessment.\textsuperscript{23} Other programs along this line are tax increment financing, which targets incremental tax revenues generated by improved property with higher assessments for financing improvements, the creation of special assessment districts, and the issuance of general obligation bonds. While these programs may offer some relief to tight credit problems, their impact on the home building industry will be limited.

Unfortunately, with the possible exception of Mello-Roos financing, public sector programs do not hold a lot of promise for relieving the credit crunch facing mid-sized builders of market rate homes. A program worth mentioning, not because of the amount of capital it has brought into home building, but because of its potential to securitize construction loans, is one created recently by the Federal National Mortgage Association. This program is a direct attempt to provide relief to borrowers and lenders from the loans-to-one-borrower rule. Small institutional lenders have become attracted to the program as a means to extend their lending capacities. In the first deal consummated, Fannie Mae bought a 50% participation in a financing package for a 78 unit single family project.\textsuperscript{24}

\textsuperscript{22} Comments at The Pacific Coast Builders Conference, San Francisco, CA., May 1992
\textsuperscript{24} "Fannie Participates in Its First AD&C Loan", Brad German, Builder, Feb 1992
Without Fannie Mae's participation the lender would not have been able to make the entire loan. To date, six loan participations have been approved, representing a $20 million investment by Fannie Mae. So far, the program has targeted only construction loans, secured by the full value of the underlying property and improvements. Given this focus, the impact of the program on the equity gap will be slight. The success of this $50 million pilot program with a $6 million loan cap is being challenged by the difficulties in understanding the complexities of AD&C lending, standardizing documentation, and bringing builders and lenders together. Though this program is very promising, it may be some time before the volume is such to really make an impact on the credit crunch.

There has also been some speculation that the RTC may be able to use its resources to provide acquisition financing. In selling residential land from its portfolio, the RTC may use seller financing to facilitate the liquidation process. At the time of this writing the RTC had just started to deal with its land portfolio, so the extent of this practice for the types of properties home builders would be interested in is unknown. Two assumptions can safely be made at this time; one, that only the most financially secure builders would be attributed this feature in buying land, and two, it may prove politically difficult to subordinate this seller financing to senior construction loans. For the immediate future then, the most promising source of relief appears to be the pension funds and the investment programs being set up by their advisors.

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25 Tom Wilson, Federal National Mortgage Agency
SECTION III

PENSION FUNDS
Before making an argument for the investment of pension funds in the home building industry, a review of investment goals is in order. Pension funds have a very defined purpose - to provide a secure source of income for their members upon retirement. Pension funds are not in the business of making high risk ventures to earn high returns. They can be seen as having two primary goals; 1) preserve capital, and 2) hedge inflation. In essence, this entails earning a real rate of return that covers the cost of operating the fund, assuming that contributions are sufficient to fully fund the fund. Any additional return serves only to benefit the sponsor by reducing its level of contributions. (While one can argue that in the real world the beneficiaries have a stake in the strength and financial health of the sponsor, theoretically the pension fund serves only the beneficiaries, and not the sponsoring entity. Any further argument is not within the scope of this paper.)

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moderate rates of return. It should also be pointed out that it is possible that tax-exempt income earned by pension funds that is deemed excessive by the IRS can be reclassified as UBTI and taxed accordingly. Over the course of several phone interviews with fund managers, it is apparent that funds target real rates of return in the range of 5% to 8%. A recent survey of 52 funds with $36 billion in equity real estate investments, or roughly 33% of the total pension fund allocation to real estate equity, found that fund managers on average target 6% real returns. According to Rodger Smith of Greenwich Associates, funds can expect real estate to return an average annual rate of 6.6% between 1991 and 1996.

Traditional Investment

Traditional pension fund investment in real estate has been driven by the desire to minimize portfolio risk through diversification while hedging inflation. In the PREA survey the respondents reported that the most important object of making real estate investments was to take advantage of the negative correlation to stock market returns. Inflation hedging and superior returns were also given as reasons. Surprisingly, the long duration of real estate investments was not ranked as highly in importance.

Funds have made use of several investment vehicles; commingled funds account for approximately 57% of real estate assets; separate direct investment accounts constitute 43% of real estate assets. In the PREA survey, total real estate assets included 70% in equities, 10% in hybrid debt, and 14% in mortgages. Outside managers are used for approximately 70% of the investments, 56% of which are on a non-discretionary basis.

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27 "1991 Survey of Pension Sponsors", Mark Louargand, Pension Real Estate Association (PREA)
28 "Real Estate May Drop 15% More", Steve Hemmerick, Pension & Investments, APRIL 27, 1992
29 "On-Line Pension Network, Report No. 13"
30 "1991 Survey of Pension Sponsors", Mark Louargand, Pension Real Estate Association
Recently a trend has started to develop in how sponsors are allocating funds for investments. The downturn in the real estate market, and thus the poor performance of commingled funds, have caused sponsors to become wary of giving up control of their investments. Commingled funds have experienced a steady decline in returns over the last four years (see exhibit 8). Much of this is due to the decline in value of the properties held by the funds. A property may return 6% in income but depreciate in value 20% for a net loss of 14%.

![Exhibit 8](image)

SOURCE: ROGERS, CASEY / PIPER

Sponsors are starting to turn away from commingled funds in favor of separate accounts. Should a sponsor need to liquidate a position in a commingled account, and it entails selling a property in a down market, other participants may not be amenable. Managers of the funds may resist a participant's withdrawal so as to avoid having to realize a loss. A case in point is when Tacoma Employees Retirement System tried to withdraw $15 million from an open-ended fund run by Sentinel Real Estate Corporation. Eighteen months later,
Tacoma got its money.\textsuperscript{31} If a sponsor is not pleased with the management of the fund it may be difficult to get enough of the participants together to make a change. This desire to tighten control over funds is evident from the PREA survey. 96% of the dollars targeted for investment this year are intended for separate accounts.

\textit{Characteristics of Housing Investment}

Investment in residential home building offers pension funds an opportunity to further diversify their real estate portfolios. The form that such an investment necessarily has to take offers sponsors a very flexible device. Home building is a fractionalized business. Of the 836,000 single family homes completed in 1991, the \textit{Builder} Top 100 were responsible for only 10%. The bulk of the industry is made up of builders completing from 25 to 250 units per year. Such investments then are going to be in relatively small increments, on a project by project basis. While funds may balk at trying to pursue these management intensive investments in-house, a specialized industry is starting to spring up to manage these investments for the sponsors. The fractionalized nature of the industry and the growth of specialty advisors allows sponsors to allocate sizable amounts of funds while at the same time being able to increase or decrease their investments without having to liquidate the account, whether it is a separate account or a commingled account. Equally important, housing investments of $5 to $10 million allow smaller pension funds to invest in equity real estate without having to go through a commingled fund. Given the recent move away from commingled accounts, many funds should find these attractive features.

Real estate investments have been socked for losses over the last several years. Pension fund real estate equity portfolios have been estimated to have lost 10% to 15% of initial

investments. These losses are due to the depreciation in value of the underlying properties stemming mainly from oversupply. Housing investment can avoid this sort of loss. Potential losses are minimized immediately by spreading an investment allocation amongst projects and builders. In addition, project phasing allows for investment to coincide with the market. If the market turns down, subsequent phases can be delayed or reevaluated for their investment potential, thus limiting the downside. If markets grow, investors are in a position to take advantage of the demand. A relatively brief building period and better approaches to controlling land for development have led to this flexibility. Purchase options and lot take-downs are becoming more prevalent as land owners are having trouble finding builders with the capital to purchase land outright. The builder and the investor are thus able to limit their exposure to devaluation and oversupply. The pre-selling of homes further allows the investor to limit its risk to depreciation. And once the property is sold the investment is not subject to a lease market or capitalized values based on a declining income stream. A good indicator of the relative riskiness of housing construction and commercial construction is the default rate on construction loans reported by the Office of Thrift Supervision; commercial construction loans experienced a 7% default rate versus 1% for residential.

Diversification is also a key characteristic of housing investment that serves to mitigate risk. The relatively small nature of investments allows sponsors to diversify within a particular account. This can be accomplished by spreading funds to several different builders. Losses suffered by one will not impact another. Funds can also be dispersed geographically. They can be channeled into one market if it is hot or out of a market if it is cold or they can be spread out to minimize a sudden downturn in any one particular

33 "Single Family Housing: An Institutional Investment Opportunity", Rapoport, Alice; Barbato, Jean; Middlemarch Advisors, Inc./Continental Bank, N.A., 1992
market. With housing, investors can take advantage of the regional nature of the real estate industry. Another way for sponsors to diversify is by product type. They can invest in a product with higher margins but lower turnover rates such as luxury homes, or they can invest in the lower margins and quicker turnovers of the first time buyer market. Allocation between types can be adjusted to market demand. A fourth method of diversification is through the vertical nature of the building process. Investment can be made at the riskier end in the entitlement and zoning process of tracts of land, in the moderately risky infrastructure development phase, or in the least risky subdivision development and build out phase.

There are also a variety of investment vehicles available to pension funds. Several commingled funds specializing in residential AD&C financing exist and more are being created. The California Public Employees Retirement System (CalPERS) has just created the first separate account investment program utilizing five separate advisors. The form that an investment takes can vary depending on the level of risk and expected returns. At the lower end of the risk-return scale is straight senior debt. Because the investment is secured by the value of the project and liability is limited because of a lender status, returns are only comparable to traditional AD&C lending rates of prime plus 200 basis points. At the other end of the scale is the traditional joint venture partnership where the pension fund takes the direct position of financial partner. Such an investment can earn returns in the neighborhood of 50% to 60% with all of the accompanying liability. The most attractive investment forms are going to be participatory debt and joint venture gap equity financing. These forms serve to mitigate the most risk while at the same time provide an acceptable rate of return for pension funds. A closer examination of these vehicles will be made in the following chapter.
Investment Returns

Returns from an investment in home building are derived from the amount for which a house is sold less the cost to build the house. Simple, yet no other pension fund real estate investment is similar. Housing is a manufactured durable good. The ability to earn a return is dependent on a builder's ability to build a house for less than it can be sold for. Once a unit is sold, a gain (or loss) is realized. Returns to home building are not dependent on the gain or loss in value of the property over time, at least not to the extent of a commercial real estate investment. The time involved can be as short as the six months it takes to build a house. Because of this fact, the volatility of returns is significantly less than that of other types of real estate investments, and other types of asset classes, including stocks and bonds. In addition actual rates of return appear to be higher than the 6.6% expected on real estate assets over the next four years.

Very little data exists that actually quantifies volatility and the return on investments in home building, due in large part to the fractionalization of the industry and the relatively few public companies from which to derive information. Two recent studies, though, have attempted to determine rates of return and volatility of returns for investments in the least risky, or subdivision build-out phase, of the home building process. The first was completed by Hearthstone Advisors of San Francisco in 1992. By looking at data from four publicly owned builders representing 344,000 homes built over 21 years, they found that the weighted average mean annual rate of return on an unleveraged basis was 21.2% with a standard deviation of 7.7%. A similar study was made by Alice Rapoport and Jean Barbato of Middlemarch Advisors, Inc./Continental Bank, N.A. Their study involved five publicly traded builders representing 200,000 homes built over the ten years ending December 31, 1991. They found a nominal annual rate of return on an unleveraged basis of 15.9%, a real rate of return of 12% and a standard deviation of 3.7%. This volatility
compared favorably with the Russell-NCREIF index (12.6%), the S&P 500 (11.5%), and corporate bonds (12.3%). A study completed by Kenneth Leventhal & Company of thirty private builders in California reported that the builders targeted on average an internal rate of return of 29.5% over the period 1985 to 1990.

A study completed by Rogers, Casey found that of 14 open-end real estate funds, the median annual rate of return was 8% over the last ten years. For 25 closed-end funds the median annual rate of return was 6.2% over the last seven years. According to the Russell-NCREIF Total Property Index annualized returns on real estate have averaged 6.19% over the last ten years. Retail property, which is the best performing property type in this index has annualized returns of only 9.74% during the same time period. Since the returns on home building compare favorably to other real estate investments, the real question is whether or not investing in home building can be structured and managed well enough to make it worthwhile. The next chapter looks at issues that need to be taken into account when structuring an investment, followed by an examination of the CalPERS investment program.

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34 ibid
35 The Rate of Return on Investment in Single Family Homebuilding, James Pugash, ©1992 Hearthstone Advisors
36 Survey of Commingled fund advisors and managers. Provided courtesy of Rogers, Casey PIPER.
37 ©1992 by NCREIF and the Frank Russell Company, Tacoma, Wa. All rights reserved.
CHAPTER V

STRUCTURING AN INVESTMENT

It is not sufficient to just look at potential returns and risk characteristics of pension investment in home building in order to make a determination as to the merits of such an investment. There are specific issues that must be addressed before an informed decision can be made. Three important issues are, 1) how can an investment be structured to insulate a pension fund from management risk, 2) since home building is a self-liquidating process, how can the investment be managed to minimize reinvestment problems, and 3) how can the investment be structured to avoid having the income classified as unrelated business taxable income.\textsuperscript{38}

The management issue is an important question because this type of investment is management intensive. An investment of $100 million can easily be split into twenty separate projects, if not more. A quick back of the envelope calculation shown below illustrates how an investment in a 200 unit subdivision can only entail a $4 million equity

\textsuperscript{38}Issues raised during interview with Ron Myhro, Capital Advisors, San Diego, CA
infusion. Each project necessarily has to be treated as a separate investment, evaluated, and managed as such. The logical method to approach this sort of investment is through an investment advisor. Because of the unique nature of housing development and the degree of discretion that is required, it is important that the manager have a well developed knowledge of how to build houses and otherwise run a manufacturing operation. This is not a question of managing cash flows from an income producing office building. In order for the sponsor to stay abreast of the investment, a uniform set of documentation can be developed and applied to each project. Because of the phased nature of development, performance evaluations can be performed before subsequent funds are risked. The phasing of projects and the incremental nature of the investment also give the sponsor an ability to withdraw funds from the advisor if performance is not satisfactory. This last point also raises another issue; that of liquidity. Funds typically are interested in real estate as a long term investment. The self-liquidating nature of for-sale housing is anything but long term.

| Assumptions: | 200 lot subdivision |
|             | Up front land acquisition |
|             | 20 homes under construction at a given time |
| Land Price  | $50,000 per unit $ 200 = $10 m |
| Const. cost | $150,000 per unit $ 20 = $3 m |
| Maximum outstanding | $13 m |
| 30% gap equity | $3.9 m |

While the home-building process is a short term endeavor, in fact delays can greatly reduce the profitability of a project, investment in home building can be a long-term undertaking. Some investments, such as in the infrastructure of a master planned community, can still be generating returns twenty or thirty years later. If pension funds
wanted to invest in a long-term master planned community, it would be much simpler and less risky for them to invest in a Mello-Roos bond or similar instrument. The concern here is their ability to manage the short-term nature of the housing construction process. This can be accomplished by structuring an investment program that rolls over. When returns of capital are realized, they can be reinvested in the next project. At the same time, interest on that capital can be paid to the sponsor to provide yearly cash flows. Since investments are most likely going to provide for the equity gap capital that lenders are requiring, the first year or two of an investment program may not generate returns as the senior construction debt is paid down. Liquidity becomes an issue as the first projects mature. Because of the use of advisors to manage these investments, sponsors can structure the deal to act like a closed-end fund. After three, five, or ten years the fund can be liquidated and the initial capital investment paid back. The self-liquidating nature of the individual projects can then act as security for the sponsor, allowing for the withdrawal of dollars from the account if performance is not as anticipated.

A third issue involves the questions of unrelated business taxable income (UBTI) and the re-characterization of an investment in home building as a dealer in real estate.

UBTI arises if the tax-exempt organization is an owner of an interest in real estate which is subject to a mortgage placed on the real estate in order to finance all or part of the owner's acquisition cost....(A mortgage fitting this description is referred to as "acquisition indebtedness"...)

If a tax exempt entity tries to increase its yield by leveraging its position through providing a subordinate participating mortgage, it runs the risk of UBTI, if that mortgage is characterized as equity.39

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A pension fund can avoid UBTI, even if it is investing equity capital, provided that the mortgage meets the conditions stated in I.R.C. § 514 (c) (9).\footnote{Ibid, § 5.83 pg. 92}

According to I.R.C. § 514 (c) (9),

acquisition indebtedness [which can include debt for improvements] does not include...indebtedness incurred by a qualified organization [such as a tax-exempt pension fund] in acquiring or improving any real property.

It thus appears that pension funds are not subject to UBTI through the use of leverage to finance home building. There is a separate characteristic of an investment in home building that is a bit more cloudy. An entity that is involved in the construction of for-sale housing, and derives profits from the sale of inventory, is considered a dealer in real estate, and as such generates active income which is taxable as ordinary income.\footnote{Ibid, § 4.41 pg. 75} This problem becomes more acute for private pension funds that are not tax-exempt and a) want to minimize tax liabilities, and b) have passive losses that could not be used to shelter active income. The approach that appears suitable for addressing this issue is for the investment to be characterized as straight debt or channeled through a limited partnership. Both of these questions are ones that may have to be answered by the tax courts. CalPERS and the advisor industry represented by those interviewed, feel confident that these issues have been addressed adequately to allow for a successful investment. As will be shown, complex partnership and investment vehicles have been devised to further insulate funds from UBTI as well as other risks and liabilities.
The CalPERS Program

This past January the first investment program of its type has been created by The California Public Employees Retirement System. CalPERS has decided to allocate $375 million to invest in the construction and development of homes throughout California. The impetus for this investment is two-fold. First, CalPERS realized that there was an opportunity to invest in home building left by the contraction of traditional lending sources, and that the expected level of returns were commensurate with the given level of risk. Second, there was some political pressure placed on the fund to use its vast resources to help California pull itself out of the recession it was falling into. It was estimated that these funds might eventually lead to the construction of 7500 homes throughout the state. While politics may have been a motivating factor, the fiduciary responsibility of the fund sponsor is assurance that the investment is being undertaken on its economic merits.

Because of the fractionalized nature of home building, as previously discussed, advisors are being utilized to invest the funds on a discretionary basis subject to some basic guidelines set down by CalPERS. Trying to manage each investment individually would be an overwhelming task for CalPERS. The substantial home building and financing expertise represented by the advisors is a welcomed and desired attribute for the plan sponsors. The advisor groups also act to insulate CalPERS from liability and litigation which may arise from being involved in a consumer product investment. In general, CalPERS' investment is structured through a limited partnership and takes a passive role in the management of the investment.

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42 Information in the following section has been compiled from a series of interviews with the five advisors mentioned and CalPERS. Individual interviewees are noted in the appendix.
43 Comments from an interview with Doug Neff, AMB/O'Donnell Group
The investment has been split up between five advisors, each being allocated $75 million. CalPERS has required that each advisor invest an additional 10%, or $7.5 million (otherwise known as pay-attention money). CalPERS has allowed these advisors to raise a portion of their shares from outside sources, but generally this is done only when the principles of the advisor group have invested out of their own personal resources. This personal involvement can be considered better collateral than if the funds came 100% from corporate coffers.

The first step that CalPERS has taken to minimize its risk through diversification is to make use of five separate advisors. The second level of diversification is through the use of different investment vehicles. Two of the advisors, Wells Fargo Realty Advisors and Alex Brown Kleinworth Benson / Bankers Trust (ABKB/BT), are using a participating second mortgage. Prudential Home Building Investors (PHBI), AMB / O'Donnell Group’s Institutional Housing Partners (IHP), and California Housing Advisors (CHA) are using various forms of joint venture equity partnerships. The main thrust of the investment program is to target the equity gap. As such, the investments will be subordinated to senior construction financing. CalPERS has allowed for senior construction debt, though only CHA plans on utilizing this feature on a regular basis.

Projects will consist mainly of affordable, entry-level and first-time move-up housing, though second time move-up will be considered. Project size will range in the 60 to 250 unit range, with the majority falling around 100 to 150 units. Land development will be considered, but all entitlements must be in place and the cost of land development cannot exceed 20% of the overall cost of the project. The time frame to complete the project must be between one and four years. The initial investment period is scheduled to run 54
months with placement of funds in the first three years. No one particular builder will be allowed to account for more than 20% of the investment.

Builders are being chosen for a long-term relationship. As Al Fernandez pointed out, there are economies of scale in maintaining relationships with builders. Therefor the selection process is very focused. Builders being considered are those deemed first and second tier builders. What this means is that builders must a) have a seasoned management, b) be financially sound enough to attract third party construction financing, with CalPERS designated only as a limited partner, c) be financially liquid to the extent that they can cover any cost overruns in the budget, even if they have other projects under way, d) have 5 to 10 years experience building that particular product type they are being considered for, and e) be able to demonstrate the capacity to build the number of units being proposed. An emphasis is being placed on the abilities of a builder to run a manufacturing operation. Only when an advisor is confident in a builder's ability will a project be considered on its economic merits. This point cannot be stressed enough. Pension fund sponsors who have been involved only in commercial real estate should take this point to heart.

The builders are required to invest a minimum 10% of a project's largest amount outstanding at any one time with CalPERS/advisor investing 30% (split 90% CalPERS and 10% advisor) and the balance in third party financing. The builder's contribution must be made at initial funding and may take the form, in some instances, of letter of credit, land, or even subordination of the builder's fee. The builder is to earn a management fee of 3% of gross revenues and the advisor is to earn a commitment fee of 110 basis points on the commitment, an annual asset management fee of 85 basis points of funds

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44 Comments from an interview with Al Fernandez, CalPERS
outstanding, and a share of the profits which increases as the internal rate of return increases to CalPERS. The builder's fee is payable partially during the construction period, with the balance coming as homes are settled. The CalPERS/advisor investment is to earn a preferred return of prime plus 3%, capped at 13%, payable at the end of each phase. The builder will then receive a similar return on its equity, with the balance of the pro-forma profits split 50/50 (CalPERS receives its 50% percent on a priority basis, subjecting the builder's 50% to cost overruns first). The actual degree to which the profits are split varies with the quality of the builder's equity. A 10% cash infusion generally would result in a 50/50 split. Any additional profits over pro-forma are usually split at the same rate, with the advisor sharing in CalPERS' percentage as mentioned above. CalPERS is expecting to earn returns in the 15% to 20% range. Their target is to earn real returns of 8%, well above the 6.6% expected on overall real estate investments.

Senior construction financing, if it is provided, will run at prime plus 200 basis points.

CalPERS has set up an account for each advisor from which they draw down their $75 million allocations as projects are brought on-line. The intent of the program is to place the funds within the first three years. Any returns of equity, interest or profit are put back into the accounts for reallocation. CalPERS has the option of pulling cash returns out of the program. After three years, no new projects are funded and the balance is paid down as each project is completed.

The investment vehicles that are being utilized vary in complexity. For Prudential, the investment is structured as a limited partnership. Prudential forms a limited partnership with Prudential Insurance Company of America as the general partner and CalPERS as a limited partner. This L.P. then enters a second L.P. with the builder where the builder is the general partner and the Prudential L.P. is an L.P. Prudential also has commitments from other pension investors, where these funds invest in an insurance company separate
account. The separate account then invests as an L.P. with Prudential as the G.P. As with the CalPERS program, this L.P. then forms a second L.P. with the builder, the builder acting as the G.P. One of the benefits of such a vehicle is that the insurance company separate account can be commingled, thus allowing for other investors, or it can be a single investor account. The insurance company separate account also serves to further insure the pension fund investors from UBTI, consumer product litigation, and other liabilities. Institutional Housing Partners is also utilizing a limited partnership approach, whereby IHP and CalPERS are limited partners and the builder is the general partner.

California Housing Advisors have taken a little bit different approach. They have created a limited partnership in which CHA is the general partner, CalPERS is a limited partner, and the builder is a limited partner. This partnership then enters into a development agreement with the builder to manage the project. The general partner reserves the right to unilaterally terminate the development agreement (i.e. replace the builder), but the builder still retains its interest in the partnership. CHA has taken the added precaution of staffing itself with people highly qualified in the construction / development field in case they find themselves building out a project. Their approach is to maintain complete control of the project. As a means to this end they finance the entire project, including non-recourse construction financing and bonding requirements. CHA also maintains control over project accounting and bill paying. In return for submitting to such control, the builder is only required to put up 4% of the project cost as equity. As is common with the other advisors, the builder is required to submit a project pro-forma, schedule, project plan, budget and market study. As Richard Werner, president of CHA put it, the builder must submit to the "Hearthstone Proctology Exam" (Hearthstone is the managing partner of CHA).45

45 Comments from the Builders Financing Forum, San Francisco, Ca., May 22, 1992
An alternative investment structure to an equity joint venture is a participating secondary mortgage. This structure may present a more conservative approach. ABKB/BT is utilizing this structure for their investments. They have formed a limited partnership named Residential Real Estate Partners (RREP) with CalPERS as an L.P. and Alex Brown and Bankers Trust as co-general partners. RREP then invests in projects through a participatory mortgage, usually earning a coupon of prime plus 3% with contingent interest of 50% of the project's profits. This mortgage instrument is subordinated to the senior construction financing. Winston Hickox feels that this structure provides protections and features not available from equity joint ventures. Because this investment is structured as debt and not equity it is felt that the pension fund will be further insulated from UBTI. While this may not seem as important to a public fund such as CalPERS, it should be of comfort to private and non-tax-exempt funds. Hickox also feels that it is better to be in a lender's position if the project goes into default. The builder's equity will be put at risk first, and it may be simpler for the partnership to extricate itself from any legal proceedings. Wells Fargo Realty Advisors is also utilizing a participatory mortgage structure very similar to this one.

The CalPERS program has gone a long way to show how an investment in home building can be structured. It has been shaped to address the issues of management, liquidity, and income tax. It presents an investment opportunity that can be structured either as a separate account or a commingled fund that could potentially be open-ended. Cash flows are flexible, permitting either reinvestment or taking of returns. The investment is diversified in a multitude of directions and is well monitored and controlled. Participation can be increased or decreased with market conditions. Though such an investment moves

46 Comments from an interview with Winston Hickox, ABKB/BT
away from real estate as an inflation hedge towards real estate as a manufacturing process, it is still an investment in real estate and as such retains the negative correlation with the stock market.
CHAPTER VI

CONCLUSION

The decline in real estate values, the failure of the nation's savings and loan industry and institutional regulatory reforms initiated by FIRREA have teamed up to drastically reduce capital availability to the home building industry. All of the traditional sources of capital have been affected by these conditions. Commercial banks, which are widely expected to fill the void left by the savings and loans, have so far refused or have been unable to do so. What capital is available from banks is becoming increasingly difficult to obtain.

In the meantime, demand for housing has stabilized after falling from its peak in 1989. Building activity is also on the rebound, as excess inventories are being reduced to satisfy demand. Land values are declining, thus heightening potential for new demand. As excess supply is depleted there will be increasing need for new sources of capital to step into the market to replace the savings and loans. Even if commercial banks do return to pick up the slack, regulatory requirements and bruised egos are going to create opportunities for equity gap financing. By entering the market now, alternative sources of capital can carve out their niche and develop their programs so they are ready when the competition returns.
The greatest opportunities are going to be available in providing financing for the mid-sized builders. This group of builders is slowly being driven out of business or into the arms of the larger, well capitalized builders. The two main sources that appear able to channel capital into the industry are Wall Street and the pension funds. Wall Street is still enamored over higher risk, higher return deals and do not see home building as that tantalizing, though they do recognize that opportunities exist. Sooner or later a retail instrument will be created whereby Wall Street's resources can be tapped. Sooner or later will not ease the credit crunch today. The opportunity is now and the pension fund is the most likely player to fill in the gap.

Pension funds have the capital, they need to place it, and they are still looking at real estate. Commercial real estate opportunities are opening up, but unless acquisitions can be made well under current market values, returns are predicted to be below those available with housing. Now that investors have realized that commercial real estate can indeed depreciate in value, they should be insiting on even higher returns than before as the realized risk has grown substantially. Housing is a serious alternative investment and one that be structured to mitigate much of the risk associated with real estate.

Housing offers diversification; both within a real estate portfolio and within itself. Investment can be spread out geographically amongst regional markets. Investment can be diversified by product type, builder, and investment vehicle. Housing investment can also span a range of risk and return. Such an investment is flexible; it can be enlarged or contracted; it can reinvest cash flows or disperse them. Investment can also be shifted with the market, whether the market expands or contracts, or shifts from the West Coast to the Mid-west.
Housing investment is also highly manageable. It can be structured, and is well suited, as a hands-off investment for pension sponsors. Reinvestment and self-liquidation is no more a problem for housing investment than it is for stocks and bonds. Housing also generates a respectable return, with a relatively low volatility. And, being an investment in real estate, housing still provides a negative correlation of returns with traditional pension fund assets of stocks and bonds.

The CalPERS program has demonstrated that pension fund investment in housing is a manageable, legitimate investment that can be structured to meet a sponsor's fiduciary responsibilities to the plan's beneficiaries. The returns that CalPERS is expecting are respectable and the risks are controllable. CalPERS has broken the ice by creating a program that responds to the many issues raised regarding pension fund investment in housing construction. The opportunities for investing in housing are abundant enough for investors to get in and establish their own program, thus ensuring a long-term relationship with industry players for when, and if, the traditional sources return. The biggest obstacle for pension funds, or any other potential investor, is lack of familiarity with the housing industry as an investment opportunity. As housing becomes a better understood animal, pension fund activity should continue to pick up.
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APPENDIX

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