WILL THE EMERGENCE OF PUBLIC DEBT CAPITAL IN CONSTRUCTION FINANCING BE "SMART MONEY"?

by

Brent L. Carrier B.S. in Business Administration Central Michigan University 1985

Submitted to the Department of Urban Studies and Planning in Partial Fulfillment of the Requirements for the Degree of

MASTER OF SCIENCE IN REAL ESTATE DEVELOPMENT at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY
FEBRUARY 1998

© 1998 Brent L. Carrier All rights reserved

The author hereby grants to MIT permission to reproduce and to distribute publicly paper and electronic copies of this thesis document in whole or in part.

Signature of Author:	Dep	partment of	Urban Studies and Planning
_			October 2, 1997
Certified by:			
			Timothy J. Riddiough Assistant Professor
			Thesis Supervisor
Accepted by:	. S. Barre		
01 ' 1	1 15		William C. Wheaton in Real Estate Development

IAN 051998

LIDITARIES

WILL THE EMERGENCE OF PUBLIC DEBT CAPITAL IN CONSTRUCTION FIN ANCING BE "SMART MONEY"?

by Brent L. Carrier

Submitted to the Department of Urban Studies and Planning in Partial Fulfillment of the Requirements for the Degree of

MASTER OF SCIENCE IN REAL ESTATE DEVELOPMENT at the MASSACHUSETTS INSTITUTE OF TECHNOLOGY FEBRUARY 1998

ABSTRACT

Wall Street has begun to devise construction lending programs, thus providing public capital to a historically private market. At issue is the potentially dangerous prospect that these firms will ignore the lessons learned by their predecessors, creating a new risk of financing speculative overbuilding and increasing volatility in the commercial real estate markets.

Three prominent Wall Street firms provided details of their lending programs, and are the subject of the case studies performed to determine how those charged with funding development with public capital view their roles and the financial products they provide. The programs are compared and contrasted with one another, along with a comparison to "ideal" academic benchmarks. An analyses of the professional and academic literature is presented to highlight the intricacies of construction lending.

The results of this research are cause for potential concern. Only one of the three firms has established a program which addresses the possible repercussions of moral hazard and mis-alignment of incentives. The potential for the other two programs to provide developers with unrestrained access to capital could very well create an overbuilding situation similar to the 1980's debacle. This suggests that we may well see another round of development that oversteps the demand equilibrium, and exasperates the volatility of real estate values during the next inevitable economic recession.

Thesis Supervisor: Timothy J. Riddiough

Title: Assistant Professor

ACKNOWLEDGMENTS

The author wishes to thank Kristina for her patience and support.

TABLE OF CONTENTS

ABSTRACT	2
ACKNOWLEDGMENTS	3
TABLE OF CONTENTS	4
INTRODUCTION	5
Thesis Structure	7
Conclusions	
LITERATURE REVIEW - WHAT DOES THE LITERATURE SAY?	9
Reputation	11
Monitoring	
Moral Hazard	
Relationship Lending	19
Informed vs. Arm's-Length Lending	20
Liquidity and Leverage	
Competitive Screening	23
Article Summary	
CASE I - FIRM A	27
Construction Lending Program	27
Strategic Decisions	29
Source of Funds	30
Issues Relating to Literature Review	30
Summary of Firm A	31
CASE II - FİRM B	33
Construction Lending Program	
Strategic Decisions	36
Source of Funds	36
Issues Relating to Literature Review	36
Compare and Contrast with Firm A	38
CASE III - FIRM C	40
Construction Lending Program	40
Strategic Decisions	43
Source of Funds	44
Issues Relating to Literature Review	
Compare and Contrast with Firms A and B	45
FINANCING ALTERNATIVES WHEN DEBT GETS TOO RESTRICTIVE	48
Opportunity Funds	48
Internal Financing	49
Synthetic Leases	49
Implications	51
CONCLUSION	52
REFERENCES	

Chapter 1

INTRODUCTION

The cyclical nature of commercial real estate development is well-established. The process of turning a conceptual idea into tenanted bricks and mortar is a very involved and time consuming endeavor, where a typical large scale office project can take three years to progress through design, approval and construction. While demand forecasts are now generally reliable, supply has been the destabilizing force which has exasperated this volatile market. The market's lag in recognizing supply and demand equilibrium may be inevitable, but it is the severity of these cycles that most concerns real estate professionals. This thesis examines the role of public debt capital in construction financing to explore the question: Will Wall Street provide "Smart Money" to developers seeking construction financing, or will they fuel overdevelopment in the next cycle? Overbuilding caused severe repercussions in the 1980s, and while the circumstances are now different, the similarities are significant enough to warrant further investigation.

Risked based pricing is certainly nothing new to Wall Street; indeed, it has been one of their strategic advantages over other real estate market participants. However, the reliance on relationships, reputation and monitoring in traditional construction lending, as opposed to Wall Street's use of arm's-length financing of assets, is an area ripe for examination. The causes behind our last building cycle are well documented; deregulation, inappropriate tax incentives and mis-matched capital all contributed to reduce capitalization rates and inflated prices. While these same factors are not evident today, the market is again awash in capital and concerns persist that we could be faced with another stagnating round of speculative overdevelopment.

Many indicators suggest that this time around there is less to worry about, thanks to traditional lenders adhering to risk-based capital rules which do not allow for excessive amounts of

leverage or speculative building. However, public debt and equity capital have the potential to provide even greater access to capital for developers than those failed institutions of the past. The public equity provided by REITs, for example, while almost non-existent only a decade ago now accounts for 22% of the total equity invested in institutional real estate. Public debt, primarily in the form of commercial mortgage backed securities, has also seen a tremendous increase in volume; though it remains to be seen if the public markets venture into financing development will be as well received as their financing of existing properties has been.

Construction lending is vastly different in many regards to all other real estate financing. Since the project's viability depends on completion of the building, lenders have historically taken a very active role in building relationships, screening out poorly conceived ideas and monitoring developers through the development process. Adherence to the construction schedule is vital, with the collateral being unable to generate cash flow to support the end loan until such time as tenant leases provide a stable income. Due to the uncertainty of success and borrower's exposure to moral hazard, informed lenders have traditionally dominated arm's-length providers of construction finance. In addition to concerns over adverse selections impact on the quality of borrowers seeking public over private financing, Wall Street's motivation to monitor, and willingness to "pull the plug" on a project gone awry, must also be understood to examine how their objective of obtaining securitizable loans affects continuation decisions on risky projects.

Now that real estate and Wall Street have found each other, Wall Street is attempting to give real estate investors the ability to buy and sell real estate as easily as stocks and bonds. The three firms which are the subject of case studies in this thesis each began their lending programs with a similar focus: creating more product for securitization. The similarities end there, however. The individual programs range from utilizing construction financing simply as a tool to obtain additional CMBS product, to a full fledged relationship program designed to enhance existing business lines and bolster the firms perception in the market.

_

¹ Equitable Real Estate Investment Management, Inc., "Emerging Trends in Real Estate: 1997," as of 6/30/96

Thesis Structure

This thesis first addresses the above issues in Chapter 2 by examining relevant professional and academic literature relating to reputation, monitoring, moral hazard, relationships, informed verses arm's-length lending, liquidity, leverage and finally competitive screening. By applying these papers to the issues at hand, a clear picture emerges as to how the execution of construction financing differs between local players and Wall Street. The inherent perils are discussed as applies to the field of construction lending, and solutions to these issues are presented.

In chapters three through five, I present three case studies of prominent Wall Street investment banks to examine the current practice of providing public debt capital for construction financing. The individual firm's lending programs are compared and contrasted with each other and the available literature to seek out answers to our question of how appropriate is Wall Street's involvement in construction financing. In chapter six, I look at the alternatives available to developers. Internal equity financing, opportunistic funds and synthetic leases effectively provide development capital when debt becomes too restrictive, and also effects the pool of potential borrowers seeking public debt capital. Finally, in chapter seven, I draw conclusions on the ability of Wall Street to effectively compete in construction lending; reviewing the perils of informed verses arm's-length debt, moral hazard and reputation building in a traditionally informational intensive business.

Conclusions

The recovery in the real estate markets has stimulated investment activity across the investment spectrum. With continued economic growth and depreciation of the existing building stock, new development will continue to play an important role in meeting the needs of business. The questions addressed in this thesis are important because the severity and depth of our seemingly inevitable development cycles in commercial real estate greatly affect the US economy. By understanding Wall Street's involvement in construction, we can begin to understand whether our next wave of development will be a reenactment of the 1980's fiasco.

The three cases bring to light the very different approaches being advanced by Wall Street's leading firms. Firm A, a relative newcomer to the business, has developed what closely resembles a model lending program, complete with monitoring and informed lending; remaining very aware of the importance of relationships and reputation to successful lending. Firm B has created a variation of portfolio finance which provides construction lending to operators of franchise hotels, while retaining recourse against the franchiser. This provides Firm B with a strong credit enhancement to support the individual loans, but does little to match development with demand. Instead, they rely on the franchiser to provide due diligence prior to providing their guaranty. Firm C has simply created a vehicle to create additional end loans for securitization. Their reliance on diversification through numerous transactions, coupled with a CMBS exit strategy, raises serious concerns over how they can provide influence to keep developers from straying into riskier projects or continuing ill-fated projects.

It appears that Wall Street's presence can reduce the volatility of the real estate cycles, as some anecdotal evidence of this has already been found in the Southwest apartment sectors. There, the importance of public capital in the development of this product was clear, constraining a slight overbuilding boom and keeping it from becoming more severe. As the various methods of entrance into construction financing are proved out, I believe that Wall Street will adopt the best risk/return scenario and provide the real estate industry with a stabilizing force. However, until firms such as Firm B and C amend their programs to reflect the established benchmarks, accepting more responsibility for the projects being created by their issuance of capital, there exists a real danger that speculative construction will create another unnecessarily severe boom and bust cycle in the commercial real estate markets. It is inevitable that some level of over- or under-building will be present at a given time, however, lending programs which do not adhere to established and proved lending techniques will only accentuate these cycles, creating instability in the overall real estate market.

Chapter 2

LITERATURE REVIEW - WHAT DOES THE LITERATURE SAY?

The objective of this chapter is to examine the relevant literature from both industry professionals and academic leaders to apply the lessons learned from previous research to construction lending, particularly as to how it relates to Wall Street's incursion into the construction finance arena. The case studies illustrate Wall Street's attempt to create a construction lending program, and the diverse methods employed in obtaining that goal. The following literature provides perspective on the primary concerns and methods of avoiding known perils, relating to borrower/lender relationships. Since construction lending has historically been a relationship driven venture, with borrower reputation and informed lenders the critical ingredients for successful performance, understanding the literature is especially important. In addition, to truly succeed, Wall Street will ultimately need to create a financing vehicle which further provides restraint against overbuilding, and brings stabilization to the real estate market.

Arm's-length relationships, inherent moral hazard and borrower monitoring are issues which Wall Street will need to address in order to be an effective leader in construction lending. Arm's-length lending, where a lender and borrower are physically or contractually separated, has traditionally not provided the flexibility conducive to optimizing construction financing. While commercial banks have been able to make flexible financial decisions which prevent a project from going awry, arm's-length lending is typically much stricter in its interpretation of loan documents, and severely limited in its ability obtain information required to control an owner's actions to keep the project ongoing only if it remains profitable. Arm's-length lenders seldom have control over a developer's continuation decision as a project progresses. Regardless of changing risk and profitability profile, arm's-length lenders are removed from the development process and do not have access to the informed private information held by the borrower.

Construction lending has typically been a very localized activity, requiring constant monitoring by the lender of details not publicly available. Wall Street's incentive to act as an informed lender rather than an arm's-length lender is not clear, and will likely not be nearly as pronounced as a local bank. One of the case study firms actually utilizes massive volume to diversify risk and retains the exit strategy of removing the risk from their books by securitizing the completed project long before market cycles prove out the wisdom of the project. This approach does little to minimize potential overbuilding or provide incentive to developers to avoid high risk projects.

Moral hazards for developers abound in selecting real estate construction projects. Less established developers have a high incentive to choose risky projects with high returns over safe projects with lower returns. This hazard also increases in situations of financial distress, since in both situations the developer has much less to lose than they stand to gain in the event of a successful conclusion. By treating real estate debt as a commodity, will Wall Street provide the monitoring required to limit a developers ability to enter into riskier projects than would otherwise be allowed by local informed lenders? Without the regulatory constraints of commercial banks, the danger of speculative development being financed by Wall Street, without a full understanding of the true risk return profile of the particular project, increases substantially.

Adverse selection, or a "lemon's problem," also plagues lenders competing to underwrite the most development deals. While borrower reputation has been shown to be an effective gauge in the selection of optimal competing projects, bank relationships remain very important to developers. Therefore, a developers incentive to look outside their local area for financing, if not solely based on pricing or take out commitments, is suspect. Wall Street was once viewed as a lender for second tier borrowers, those with projects not quite attractive enough to entice their local banker. This perception is changing as yields fall and Wall Street is able to become more price competitive with banks on individual loan terms, no longer relegated to losing the best deals for lack of pricing competitiveness. To advertise themselves to developers, Wall Street

largely relies on local mortgage brokers, another fee oriented group, who are being asked to provide greater initial due-diligence work on the loans. This adds yet another layer between Wall Street and the borrower, magnifying exposure to arm's-length lending issues. Depending on the particular firm's strategy, local banks are either direct competitors or partners in obtaining new deals, apparently willing to share their best customers with Wall Street in order to maintain these new relationships and access the public market's capital. The sensibility of dependence on these inter-lender arrangements will be established in the next market downturn.

Reputation

In the field of real estate construction, the acquisition of a good reputation is essential for developers to differentiate themselves and thereby obtain favorable treatment from lenders. In Diamond (1989)², an analysis of incentive problems in debt markets shows that they will be most severe in early periods when new firms have short track records. New developers provided with easy access to capital are more likely to select risky projects than safe projects, basically rolling the dice for the higher returns when they have not yet acquired a good reputation to lose. With sufficiently widespread adverse selection, the initial pool of borrowers will be of low average quality and the interest rates for borrowers with short track records will be high. Therefore, while the capital will be properly priced to account for the risk, optimal usage of this capital is not obtained. As a result, the present value of future rents from establishing a good reputation will start out very low, causing borrowers with limited experience but with a choice of projects to choose the short-run optimum, a risky low-value project. A small portion of those who select the risky project will be successful, and able to continually repay their loans, achieving a good reputation. As a borrower achieves a good reputation, he can borrow at lower interest rates, and the present value of future income from a good reputation rises. Eventually, this projected future income becomes high enough for the borrower to switch to the long-run optimum, the safe high-value project, for an arbitrarily large number of periods until, in Diamond's experiment, the endgame occurs. In practical

² D Diamond, Journal of Political Economy "Reputation Acquisition in Debt Markets," 1989

experience, borrowers will initially tend to choose risky projects to receive higher profits, moving to lower risk projects when they acquire a reputation for success which allows them to borrow at advantageous rates. The immediate issue, however, is that only if there is little adverse selection, will reputation instead work to immediately provide incentives to new borrowers. Therefore, Wall Street will be well advised to create a program in which they are not the lender of last resort, instead competing with local lenders for the most desirable projects.

Diamond's model specifies reputation in terms of credit rating, which is public information. If project choices are directly observable, then unless there are incentives in the first period to take an action that is beneficial to one's reputation, there is never any incentive to take that action. It follows, then, that if borrowers are not required to maintain good reputations to obtain credit, they do not have proper incentive to avoid continuing to take on risky projects over safe projects, even when the safe project may provide adequate returns to continue in business. This is particularly relevant in situations where arm's-length lending is relied upon. Again, in Diamond's model, once observed selecting a risky project, a borrower can never credibly claim to be of the type which selects only one safe project each period. The existence of significant adverse selection is important because otherwise incentive effects of a reputation would be near its maximal value in the initial period. As it is, continued success in development leads to a firm choosing safer projects over time to maintain their long acquired reputation.

In Diamond's model, borrowing would begin at essentially the riskless rate of interest, while in a more general setting, for example a market for goods or services of unobservable quality, if there is significant adverse selection, the market will have low expectations of initial quality, and the market will not pay very high prices for the output of agents without a long record. This implies that borrowers with short track records will have a low initial present value of rents in the future, and those with a choice will supply low quality. Only with an acquired good record, will there be a large enough present value of rents in the future from maintaining a good reputation by providing high quality to avoid providing low quality. Developers who have established good reputations are then highly likely to continue to select high quality projects,

avoiding unnecessary risks of default which accompany projects associated with developers who have not acquired good reputations. Selecting developers with good reputations can lessen the likelihood of adverse selection.

Diamond's model has direct applications to examinations of new project acceptance decisions: firms with certain reputations will turn down a given profitable project that others would accept. This can be interpreted as a well-defined cost of capital that is firm specific rather than project specific, because of the private information firms have about project decisions lending to firms with good reputations becomes much safer. In addition, Diamond's model can be used to explain, on the basis of public information, some determinants of firms choosing to borrow through financial intermediaries to access their delegated monitoring services (Diamond 1988). If the intermediary can help control project decisions, then Diamond's model suggests that firms with short histories will do their reputation acquisition by borrowing from intermediaries. The cost of such monitoring is accepted by the developers to enable them to acquire the good reputation which will allow them to borrow directly in the open market once they have established long-standing high credit ratings. Wall Street can add value and increase competitiveness simply by acting as informed lenders, monitoring the developers.

A study performed by Neral and Ochs (1992)³ found that the hallmark of reputation building is the willingness of an individual to give up short term benefits in order to try to favorably influence the course of a long-term relationship. Their sequential equilibrium model of reputation building predicts that a "little bit" of uncertainty will induce rational players to develop a mutually profitable long-term, but finite, relationship even if one party would have a strong incentive to take advantage of the other in the end. They observed behavior consistent with the predictions of sequential equilibrium theory. The real power of sequential equilibrium as a model of reputation building is that it makes strong predictions about how the course of a relationship will be influenced by the parameters of the game, defining the circumstances under which the relationship is structured. Neral and Och's results did not support those predicted

³ J. Neral & J. Ochs, Econometrica "The Sequential Equilibrium Theory of Reputation Building: A Further Test," September 1992

from the model. While the theory predicts that a decrease in the payoff from defaulting will, in the mixed strategy phase, decrease the probability that the lender will extend the loan; it also predicts that such a change will have no systematic effect on borrower behavior. Their empirical results were just the opposite. Applied to construction lending, the selection of safe projects with moderate returns over risky projects with large returns becomes more likely with a narrowing of the expected spread between these two outcomes. Inversely, as borrowers encounter distress, they are much more likely to select risky projects. While private information available to informed lenders would mitigate this activity, arm's-length lenders are exposed to borrower selection of adverse project risk. Unless a lender stays privately informed about a borrower's project and overall financial health, in distress it is likely the borrower will attempt to either continue a project which may be best restructured, or attempt to obtain higher returns by engaging in riskier projects.

Monitoring

To review the benefits monitoring brings to credit relationships, Diamond (1996)⁴ provides an enlightening perspective. His paper clarifies the roles of debt and diversification in banking. Debt has several roles related to financial intermediation, here he considers the right to liquidate on default which provides any outside lender with power over the borrower, inducing the borrower to repay the debt. This power is limited by the borrower's right to repay the debt in full and remove the lender's liquidation rights. However, liquidation is potentially inefficient, and Diamond argues that if a lender cannot monitor the borrower's business, then the lender should liquidate whenever there is a default, no matter what the cause. In some of the reviewed loan programs, it was noticed that the Firm was very unlikely to liquidate, instead preferring to complete a project and deal with deficiencies after securitization of the end loan. This is potentially dangerous, as the borrowers likely are aware of the lenders hesitancy to liquidate and become more willing to engage in risky behavior.

-

⁴ D. Diamond, Federal Reserve Bank of Richmond Economic Quarterly, "Financial Intermediation as Delegated Monitoring: A Simple Example," Summer 1996

This also has serious implications in construction lending, where change orders can be imperative when conditions necessitate deviating from the original plans. In an arm's-length situation, without informed lenders who can quickly and efficiently monitor a projects progress, standardized contracts often do not provide lenders with the discretion to change with the projects needs. However, if the lender can closely monitor the situation, then the ability to selectively remove the threat to liquidate in return for a concession from the borrower can provide power over the borrower without using inefficient liquidation. Financial intermediaries such as banks can effectively centralize costly monitoring and avoid the duplication of effort of the monitoring of borrowers by small investors. But without monitoring, a borrower encounters situations which may not lead toward the safe alternative.

In attempting to understand how contractual monitoring of an arm's-length relationship can be applied to traditionally localized construction lending, Boyd and Smith (1994)⁵ examine the usefulness of standard verses custom contracts. They considered contracts in an idealized world where contracts can specify a complete set of contingencies, and where there are no difficulties in implementation or enforcement associated with contractual provisions. They found that standard debt contracts are not optimal in such a world, at least for any reasonable assumptions about foreseeable situations. Optimal contracts for lenders require the randomized initiation of bankruptcy proceedings. The borrower does better when bankruptcy proceedings are initiated, since optimal contracts specify after default contingencies calling for some degree of debt forgiveness.

In practice, these contractual features are not observed in actual loan documentation and therefore may seem odd. Boyd and Smith, to a substantial extent, do not disagree, rather, they believe that standard debt contracts are "nearly optimal" in an idealized world. Their results suggest that the gains due to stochastic monitoring are small, at least when reasonable exogenous parameter values are utilized. Therefore, if there are significant costs or incentive

J. Boyd and B. Smith, The Journal of Business "How Good Are Standard Debt Contracts? Stochastic verses Nonstochastic Monitoring in a Costly State Verification Environment," October 1994

problems associated with randomized monitoring, it is unlikely to be employed. By implication, Boyd and Smith find welfare gains associated with deviating from standard debt contracts small. Using standardized construction loan documentation therefore appears to optimize a lenders position while reducing expenses associated with costly monitoring. While construction lending may historically have required close scrutiny; with an arm's-length approach, standard contracts and the threat of immediate exercise of rights provided to lenders under the contracts appears most effective to deter default in instances of moral hazard situations. Again, Wall Street's CMBS exit strategy requires a completed project capable of creating a steady cash flow from rents. If borrowers are aware that their lender is unlikely to exercise their right to liquidate, negotiations in times of distress favor the borrower.

Moral Hazard

Another significant paper written by Diamond (1991)⁶ notes that when real rates increase relative to future profitability, the future becomes less important and moral hazard becomes more severe: more borrowers choose to take a chance on ruining their now less valuable reputation. This has serious implications for construction lenders in times of distress such as witnessed in the late 1980's. In this paper, Diamond's model predicts that in industries where moral hazard is sufficiently widespread, new borrowers will begin their reputation acquisition by being monitored and later switch to issuing directly placed debt. A favorable track record acquired while being monitored will be useful in predicting future actions without monitoring. Reputation alone can then eventually deal with the moral hazard because the better reputation achieved over time implies that adverse selection risk is then less severe. In situations where a choice between reputable and new borrower's without a reputation exist, the reputable developer has significantly less incentive to choose a risky project over a safe project, placing the lenders capital in an advantageous investment.

⁶ D. Diamond, Journal of Political Economy "Monitoring and Reputation: The Choice between Bank Loans and Directly Placed Debt," 1991

The borrowers who rely on monitored bank loans are middle-rated borrowers, whose rating is too low for reputation effects to eliminate moral hazard, but yet high enough for monitoring to eliminate moral hazard. It would appear that although arm's-length lending would not be optimal here, the use of local agents to monitor could significantly reduce the threat of a developer continuing a risky project without the knowledge of the lender. Unfortunately, monitoring that is effective and cheap may fail to provide incentives to eliminate moral hazard because it removes the stigma from being known to be subject to moral hazard: future monitoring can now deal with the moral hazard effectively. In these cases, monitoring can then destroy its own value because reputation effects work against its effectiveness. In periods of high or anticipated high future real interest rates or low present or future anticipated economywide profitability, a higher credit rating is required to borrow without monitoring, implying that the demand for bank loan monitoring is then again high and that the average new bank loan goes to a safer, higher-rated customer. While certain Wall Street firms may avoid closely monitoring borrowers due to the high cost of such activity, it is exactly this cost which makes monitoring most effective.

Looking at issues of moral hazard in credit markets, Calem (1993)⁷ found that borrowers may take risky actions that are not in the best interest of lenders. Moral hazard could entail higher financing costs, less flexible financing arrangements, or even credit rationing (Jensen and Meckling, 1976; Stiglitz and Weiss, 1981). One component working against moral hazard is reputation. In the long run, borrowers may be deterred from risky behavior that is contrary to the interests of lenders by the loss of reputation that would accompany their default. Calem's paper appraises the effectiveness of reputation as a deterrent to moral hazard in credit markets.

Following Diamond (1989), Calem modeled moral hazard as a repeated game between borrowers and lenders, where a representative borrower may opt to invest in a speculative project. He extends the Diamond model by incorporating down payments into loan contracts.

_

⁷ P. Calem, Working Paper, Federal Reserve Bank of Philadelphia: Economic Research Department "Borrower Reputation and Existence of Moral Hazard in Credit Markets," August 1993

This is significant since current lending regulations imposed on commercial banks have established new risked-based capital rules which make it much more expensive for banks to make high LTV loans. Calem shows that these new regulations provide strong incentives to avoid moral hazard in order to maintain reputation. He shows that moral hazard is effectively abolished if the borrower's percentage down payment each period exceeds the percent by which the borrower discounts future income. Since an actual firm's capital-to-asset ratios generally exceed 20 percent, his model suggests that moral hazard in commercial credit markets is tied to excessive discounting of future income by borrowing firms, that is borrowers would engage in speculative behavior only if they discount future income to a greater than ordinary degree. While discounting in excess of twenty percent may be unusual, it is certainly not inconceivable. For example, excessive discounting may be imposed on a firm by its manager, in cases where there is separation between ownership and control and where the manager's interests diverge from those of the owners. Further implications may be more pronounced in common development situations such as joint ventures, where the developer does not risk similar equity as the moneyed participants. However, introducing alternative assumptions into the model does not transform his conclusion that ordinarily, reputation is an effective deterrent against moral hazard. This leads one to believe that firms offering speculative development financing without significant equity requirements may be encouraging risky behavior on the part of borrowers. Current commercial banking risked-based capital regulations deter funding excessive portions of project costs, though Wall Street is not subject to these regulations and must self monitor their willingness to accept additional risk from highly leveraged transactions.

Two alternatives are examined. First, he assumes that internal financing is intermittent; i.e., borrowers do not post down payments each period. Second, he allows the price of credit to fluctuate from period to period, due to an adverse selection problem that varies in severity. In each case, speculative behavior remains tied to a greater-than-ordinary discounting of future income (this is further explored in the subchapter on liquidity and leverage.) On the other hand, if borrowers are discounting future income to a greater than ordinary degree, the moral hazard problem may be less unusual in credit markets where borrower's capital-to-asset ratios fluctuate

over time, or where there is some randomness with respect to the proportion of risky borrowers. Cyclical real estate markets and fluctuations in the availability of capital allow both these situations to have substantial effect on construction.

His study is subject to at least two important limitations; first, he considers only one form of moral hazard: the choice between speculative and safe investments. Moral hazard in credit markets may take other forms, as discussed in Myers (1977); for instance, firms may underinvest, not take on projects, because the benefits would accrue to creditors rather than owners. Second, in Calem's model, moral hazard is identified with investment in projects having negative expected present value. If lenders are more risk-averse than borrowers, then there may be risky projects with positive expected present values that are viewed as undesirable by lenders. The conflict of interest between the borrower and lender would intensify, and reputation may not be so effective a deterrent against moral hazard. Developers seeking safe projects, though deemed risky by lenders, could be incented to accept the project using private information to justify accepting the moral hazard, overcoming reputation effects.

Relationship Lending

Reviewing the advantages and disadvantages of relationship lending, Berlin (1996)⁸ uncovered some interesting lessons about the ways that lending relationships change as conditions facing a firm change. Where firms have limited financing choices, for example, small firms, relationship lending generates real benefits. Relationship lending is characterized by close monitoring of the firm by the bank and contractual flexibility. The possibility of long-term lending relationships may make it easier for small, risky firms to borrow outside funds, though firms inevitably seek more diversified funding sources when these become available. A firm's prior relationship with a bank makes it easier for the firm to gain access to public securities markets, and even when the firm can issue public securities, bank relationships continue to play a role. For all but the largest firms, banks still continue to have an informational advantage that markets recognize.

_

⁸ M. Berlin, Business Review, Federal Reserve Bank of Philadelphia "For Better and For Worse: Three Lending Relationships," November-December 1996"

Diversification of funding sources severely limits bank's willingness to be flexible when firms enter financial distress, even when firms have only small amounts of public debt. Nonetheless, a close relationship with a bank increases the likelihood of successful renegotiations when a firm enters financial distress.

In construction lending, relationships have been a primary determinant in obtaining funding for new projects. Lenders sought out by local developers could rely on established relationships and their informational advantages to avoid lemon's problems. Public market arm's-length providers of debt capital should remain cautious in providing capital to firms which have not established relationships with providers of informed capital. They should also obtain monitoring/informed private information and thoroughly research reputation prior to extending development funding.

Informed vs. Arm's-Length Lending

To compare borrower's choices between informed and arm's-length debt, I refer to Rajan (1992)⁹. The main point of his paper is that there is a fundamental trade-off between bank debt and arm's-length debt. The bank can monitor a firm and control its investment decisions. However, in the process of doing this, it alters the division of surplus between itself and the firm. This distorts the firm's incentives, the firm may then prefer credit from arm's-length sources, which provide neither the benefits of bank debt or the costs. The bank's ability to control and its ability to influence the division of surplus are linked because they are aspects of the bank's implicit property rights. He shows how the bank's informational advantage over outside lenders could confer on it these property rights; he then discusses how borrowing from multiple sources and appropriately setting priority are ways of circumscribing the bank's ability to extract surplus, without diminishing its control.

_

⁹ R. Rajan, Journal of Finance "Insiders and Outsiders: The Choice between Informed and Arm's-Length Debt," September 1992

Rajan's analysis is not restricted to commercial banks, many investment banks have the ability to acquire information and negotiate with the firms. As firms make repeated issues and some investment banks act as delegated monitors for a stable set of investors (Bruck, 1988), his analysis of "bank" finance would apply there too. Rajan discusses some debates (Meerschwam, 1991) about the relative efficiency of a relationship-based banking system (where a firm is locked into a relationship with one bank) compared to a transactions-based system (where many banks bid competitively for each transaction that a firm undertakes). The paper suggests that relationships and transactions reflect two extreme examples of the control-rent trade-off. Although there has been a movement away from relationships in the 1970s and 1980s in developed countries, Rajan's analysis suggests each system has its virtues and unidimensional comparisons are misleading. As a case in point, the deterioration in the credit rating of bank loan portfolios in the United States and Japan over this period may partly reflect the deterioration in control that accompanies the movement from a relationship-oriented system to a transaction-based competitive system.

Rajan's findings are relevant in examining Wall Street's foray into construction lending, since some Wall Street firms are also following the transition from relationship to transaction based activity. As commercial banks in the past followed this route, their loan portfolios suffered significant downgrading, an occurrence traceable to their move from informed to arm's-length lending.

Liquidity and Leverage

To provide further insight into the consequences of overlending, Shleifer and Vishny's (1992)¹⁰ work on liquidation values is examined. They explore what determines liquidation values of assets, particularly focusing on the potential buyers of assets. The implications of their paper relate to both reputation and moral hazard, since when there is a narrowing of spreads between safe and risky projects, as noted in times of general economic downturns, developers have

¹⁰ A. Shleifer & R. Vishny, The Journal of Finance "Liquidation Values and Debt Capacity: A Market Equilibrium Approach," September 1992

greater incentive to chose risky projects. It is shown that when a firm in financial distress needs to sell assets, its industry peers are likely to be experiencing problems themselves, leading to asset sales at prices below value in best use. This illiquidity makes assets cheap in bad times, and is a significant private cost of leverage. They use this focus on asset buyers to explain variations in debt capacity across industries and over the business cycle, as well as the rise in US corporate leverage in the 1980s. Particularly in real estate, asset liquidity is an important determinant of the costs of financial distress. Arm's-length construction lenders are particularly exposed to these risks. Their paper focuses on economy and industry wide determinants of asset liquidity, with their main conclusions as follows:

Asset liquidation - through an auction or other sale - does not necessarily allocate assets to the highest value users. As a result, assets with no alternative uses can fetch prices below value in best use when sold during an industry- or an economy-wide recession, or when industry buyers are prevented from bidding by regulation. Such fire sales can have substantial private and social costs, and often require intensive lender involvement.

Optimal debt levels are limited by asset liquidity. For example, even holding cash flow volatility constant, cyclical and growth assets have lower optimal level of debt finance. Similarly, conglomerates and multi-division firms have a higher optimal debt level at the same level of cash flow volatility. Real estate construction loans and permanent financing have very different optimal debt level, securitizers of debt should recognize these differences and extend credit rationally. The optimal leverage of a firm depends on the leverage of other firms in its industry. An industry might have an optimal debt capacity even when its individual firms do not.

Asset liquidity and therefore optimal debt levels change over time. High markets tend to be liquid markets. Beliefs in high liquidity of assets can be self-fulfilling, though high volatility in capital availability may affect short term valuations.

Well documented increases in leverage in the 1980s, both by firms involved in corporate control transactions and by other firms, were attributable at least in part to the liquid market. This

market was in turn the result of external factors such as relaxed antitrust enforcement and the influx of foreign buyers as well as of an important self-reinforcing component. The widespread expectation of future liquidity and debt capacity created current liquidity and debt capacity. Future variations in capital availability are inevitable, as investors chose between a wide variety of investment options, pricing assets on future assumptions of capitalization rates is risky.

Competitive Screening

Finally, a borrower's access to private information and their ability to recontract can have significant impact when construction lending is done as a loss leader for securitization purposes. Beaudry and Poitevin (1995)¹¹ examine the competitive screening which takes place in these situations. Their paper examines how the possibility of recontracting affects the financing of projects when an entrepreneur is privately informed about the projects profitability. The main finding in this paper is that the financing terms depend critically on the market's beliefs about the project's riskiness, in particular, the amount of equity required of a developer varies with the market's initial perceptions about the project. When the market is optimistic about a project, there is a unique equilibrium outcome, but the standard incentive-compatibility constraints are not binding. Even if the market is very pessimistic about a project's chances of success, there always exists an equilibrium in which a good project receives sufficient financing, that is, the market does not collapse due to a Lemons effect. Finally, they found that the developer's inability to commit not to recontract may be considered correcting in certain situations. A developer with private knowledge maintains certain advantages over arm's-length lenders, and will choose to optimize financing by refinancing with another lender should the project prove to be more successful than originally perceived.

Downs (1996)¹² believes that it is doubtful that a full fledged, nationwide commercial real estate development boom phase will occur within this general business cycle, as had occurred in past

¹¹ P. Beaudry & M. Poitevin, The Review of Economic Studies Limited "Competitive Screening in Financial Markets when Borrowers can Recontract," 1995

¹² A. Downs, National Real Estate Investor "Are we going to build too much space again?" April 1996

such cycles in the 1970s and 1980s. He is a proponent of new development, subject to a wide array of justifying indicators. Nonetheless, Downs believes that even speculative projects are justifiable with sufficient equity to weather the next inevitable cycle, though he prefers building projects for sizable tenants with more space than the tenant needs. He also believes that capital markets overall are well positioned to fund this expansion. Mr. Down's primary concern is that as long as investment officers get paid to make deals, and starve when they don't, the temptation to put money out in spite of evidence of increasing overbuilding will be irresistible. So the rate of commercial construction will expand ever-faster as long as this general expansion lasts. Implications of this are that competitive screening to select the best projects may not be selective enough to restrict overdevelopment. Factors outside traditionally accepted venues also effect the availability of capital and its subsequent production of new facilities.

Article Summary

The lessons exemplified in the preceding articles can easily be incorporated into a model lending program for a firm wishing to create a prudent loan production plan. Reputation is the foremost predictor of a developers willingness to avoid risky projects. Since reputation is acquired over time, developers have little incentive to avoid accepting undue risks prior to establishing a good reputation, since they have little to lose. Only after the benefits of a good reputation are realized (lower borrowing costs) do developers place more value on maintaining that reputation than they do to the possibility of obtaining higher returns through engaging in risky behavior. This is examined in depth in the Diamond (1989 & 1991), Neral & Ochs (1992) and Calem (1993) articles. It is apparent that a good developer reputation is vital to successful lending.

Monitoring of borrowers allows lenders to identify distress immediately, and further allows lenders to take preemptive actions which may avert costly liquidation. While monitoring is costly, without monitoring lenders would not be as effective in preventing risky behavior by developers. Monitoring also reduces the probability developers will be susceptible to moral hazards. By creating a successful track record, borrowers have more to lose and are again less

likely to engage in risky behavior. This reduction in perceived benefits of risky actions is further reduced with significant equity requirements. It is noted however, that moral hazard can persist even with reputation and significant capital at risk in situations such as where manager's interests diverge from owners or in cases of extraordinary discounting of future income. Diamond (1996 and 1991), Boyd & Smith (1994), and Calem (1993) all focus on the benefits of monitoring and perils of moral hazard. Lenders must perform monitoring to ensure developers are properly incented to avoid risky behavior and assist developers without premier reputations to avoid engaging in risky behavior.

Relationship lending is examined in Berlin (1996), and while it is shown that relationships benefit borrowers, relationships also provide lenders with an informational advantage which makes it easier to avoid developers who might engage in risky behavior and to work through financial distress. Informed verses arm's-length lending is examined in Rajan (1992), and this can be viewed in conjunction with relationship lending, since the lender's informational advantage over outside lenders in both circumstances provides significant advantages. Liquidity and leverage (Shleifer & Vishny 1992 and Downs 1996) and competitive screening Beaudry & Poitevin (1995) provide further insight on optimal lending practices. When lending in a market which is likely to suffer liquidity crunches throughout the industry, bad times result in increased illiquidity, thereby making distressed situations more pronounced. Finally, competitive screening provides a cautionary lesson to those who provide construction lending as a loss leader when offering a variety of product lines. Regardless of lock-out and yield maintenance provisions, developers will likely seek out the best financing situations throughout their ownership of specific assets.

The following table highlights the subjects addressed in each of the above articles, items in bold (*YES*) identify primary topics:

.Characteristics Addressed	Reputation	Monitoring	<u>Moral</u> <u>Hazard</u>	Relationship Lending	Informed vs. Arm's- Length	Liquidity & Leverage	Competitive Screening
Diamond 1989	YES	YES	YES	YES	YES	NO	NO
Neral & Ochs 1992	YES	YES	YES	NO	YES	YES	NO
Diamond 1996	NO	YES	YES	YES	YES	YES	NO
Boyd & Smith 1994	NO	YES	YES	NO	YES	YES	NO
Diamond 1991	YES	YES	YES	YES	YES	NO	NO
Calem 1993	YES	YES	YES	YES	NO	NO	NO
Berlin 1996	NO	YES	YES	YES	YES	NO	NO
Rajan 1992	NO	YES	YES	YES	YES	YES	NO
Shleifer & Vishny 1992	NO	NO	YES	NO	NO	YES	NO
Beaudry & Poitevin 1995	NO	YES	YES	YES	YES	NO	YES
Downs 1996	NO	YES	NO	YES	YES	YES	YES

Chapter 3

CASE I - FIRM A

These cases are designed to examine the construction lending programs of U.S. investment banks, in conjunction with the relevant literature and established prudent lending practices.

Firm A is a full service real estate finance provider, having closed over \$1.7 billion of real estate financing in 1996. They have recently begun to place more emphasis on their real estate lending lines, and are attempting to build the company's flexibility as a relationship lender. With their ability to provide construction, bridge and permanent financing, Firm A offers its real estate clients access to all their capital needs with one institution. This firm has committed the resources necessary to develop a construction lending program which closely models their commercial banking parent, and adheres to a substantial portion of the literature presented on how to create a sustainable, relatively low risk, construction lending department.

Construction Lending Program

Firm A provides a wide array of construction and interim loans for most commercial product types; including new construction, and interim/bridge loans for property repositioning. Their current focus under a construction conduit lending program is multi-tenanted office buildings, build to suit office buildings, apartment or multifamily and super-regional shopping malls.

OFFICE BUILDING	GS - Multi-Tenanted
Minimum Debt Service Coverage Ratio:	1.30x (Initial 1.10x may be considered during construction)
Maximum Loan to Value:	70%
Minimum Equity:	20%
Spreads (over comparable term LIBOR):	175 - 250

Loan Size:	\$5 - \$20 million, exceptions will be made on a case-by-case basis.
Loan Term:	1 - 2 years (construction completion plus stabilization, if necessary)
Fees:	1% - 1.5% up front to Firm A; Administrative fee during construction \$1,000 - %1,500 per month
Lien Status:	First mortgage only
Recourse:	Completion, Payment and Environmental guarantees during construction period; Completion guarantee may be released upon completion; Payment and Environmental guarantees remain in place until loan is repaid
Prepayment:	Allowed at any point, subject to breakage costs, if any
Escrow:	May be required at lender's determination for real estate taxes and insurance
Minimum Underwriting Vacancy:	Higher of market, actual or 5%
Minimum Management Fee:	5% of Effective Gross Income
Tenant Improvement and Leasing Commissions:	Adjustment to NOI based on loan budget and lease requirements. Escrow or loan holdback may be required at lender's determination
Developer Qualifications:	Experienced in product type and geographic area, good reputation verifiable by bank references
Guarantor Requirements:	Liquid Assets 20% of Net Worth; Net Worth at least 50% of loan amount

Two additional loan products, the Bridge/Interim and the Standby/Forward, are available to facilitate both acquisition of property for rehabilitation and to provide commitments for longer term needs. These products are designated for single purpose entities only, with a first mortgage required for security. Loan amounts range from \$1 to \$100 million, based upon minimum debt service coverage ratios of 1.25 and maximum loan to value constraints of 75%. Interest rates vary for the specific loans: Bridge loans are floating rate instruments based on a spread ranging from 200 bps to 300 bps over LIBOR, Interim loans are offered on a fixed rate basis ranging from 190 bps to 325 bps over the comparable US Treasury, Standby and Forward commitments are priced at a spread ranging from 225 bps to 300 bps over the commensurate

US Treasuries On all the loans, borrowers may lock in the interest rate at a fixed level as follows: (i) the borrower may purchase a hedge on the entire loan amount by entering into a rate lock agreement with Firm A, (ii) three days prior to the funding of the permanent, provided all conditions to the permanent loan funding have occurred, (iii) on the Bridge/Interim, Firm A can fully fund the permanent loan, but hold back an amount which will be disbursed during the Bridge loan period according to the DSCR and LTV parameters, or on the Standby/Forward, by fully funding the loan into a construction reserve account from which Firm A will disburse the proceeds for construction.

Loan terms vary from six to thirty-six months for the Bridge loan (typically interest only balloon), to seven to ten years for the other facilities (maximum thirty year amortization schedule.) Fees are 1% - 2%, no subordinate financing is allowed. Recourse for the Bridge loan is determined on a case-by-case basis, and is based on a percentage of the outstanding balance. The other three instruments are non-recourse except for fraud, environmental and material misrepresentations. Prepayment provisions vary between the products; Bridge loans allow prepayment in whole or in part at par plus accrued interest with thirty days written notice, Interim loan terms include lockout and defeasance provisions, Standby/Forward loans are locked-out for the first three years, followed by the option to defease for the remainder of the term, open to prepayment at par for the last 180 days of the loan term. In addition, the Standby/Forward commitment is assumable, subject to lender approval and a 1% fee.

Strategic Decisions

Firm A has made a strategic decision to attempt to meet all of the perceived real estate financing needs of their clients. Firm A attempts to capitalize on their clients desire for flexible loan structures in order to maximize the value of an owner's project. They believe that by providing the capital structure which reflects the assets needs, together with competitive pricing and term, they can create a competitive advantage over other commercial and investment banks. Without the regulatory restrictions of a commercial bank, Firm A is able to enhance its loan offerings and offer more desirable products to their customers than a typical commercial bank.

They are currently targeting those small and mid-sized firms which do not have efficient access to the capital markets, as they view this potential client base as most profitable. Developers with efficient access directly to the capital markets are able to obtain superior terms than Firm A is willing to provide at this time. The market for their product is large, and as they create greater name recognition, their hope is to increase market share as well.

The construction loans are funded through securitizable long term financing, placed in escrow for disbursement as approved by Firm A. After the completion of construction and an allotted time for lease-up, the loans are included in a CMBS issuance. Securitization allows Firm A to move the seasoned loans off its books and frees up cash for subsequent investments. Their desire is to be perceived in the market as offering the flexibility of a relationship lender with the pricing efficiency and execution of Wall Street.

Source of Funds

Firm A finances their construction lending activities through an arrangement with the parent company which funds Firm A's projects at the parent companies cost of funds.

Issues Relating to Literature Review

Firm A is very conscious of the value of relationships in construction lending. As reviewed in Diamond (1989) developers who have acquired good reputations are more likely to require less monitoring, since the internal value of their reputation then exceeds the value of taking in risky over to safe projects. Firm A focuses on relationship building to increase their market share. By insisting on close monitoring by Firm A's internal site inspection team, Firm A is assisting developers with favorable track records establish sufficient track records so that monitoring can be reduced in future transactions, both increasing borrower reputation and decreasing Firm A's expenses

Firm A chooses to allow its construction borrowers to obtain permanent financing elsewhere, though the construction pricing increases for such an arrangement. This allows competitive

screening on the part of developers, Beaudry (1995), though Firm A anticipates that because of their informed position, they hold an advantage over third party providers of permanent financing and expect to obtain a majority of the take-out commitments. They have structured their construction loan group to be profitable, and are unwilling to utilize the project as a loss leader for securitization.

As discussed in Rajan (1992), the benefits of informed over arm's-length lending are numerous. Firm A effectively locks the borrower into the relationship due their acquired information advantage. Recognizing the adage, a rising tide lifts all boats, and a receding tide lower s them just as quickly, Firm A has chosen to utilize the information acquired during construction to make informed permanent loan decisions. Therefore, while (Shleifer 1992) liquidation values tend to reflect general industry trends, Firm A relies on its internal underwriters to navigate their way through financial distress. This belief is founded in their opinion that they should know the asset as well as any other third party, so why should they give the profitable take-out financing to an arm's-length lender instead of internalizing the risks they know so well.

Summary of Firm A

Firm A has established a program to provide capital to reputable developers for new construction projects which could be utilized as a model for other Wall Street firms desirous of entering into this line of business. They have addressed issues of moral hazard and arm's-length lending by competing aggressively with regional commercial banks on their own terms, and created an in-house professional site inspection team with structural engineering, valuation and construction expertise. Relationships were part of the impetus which drove Firm A to create the ability to fund construction projects, they initially began funding construction projects for existing firm clients as a way of strengthening relationships. Monitoring reduces moral hazard, and Firm A stresses their ability to conduct site inspections to avert funding high risk developments and provide to expert development feasibility projections. Firm A has also chosen to invest the necessary resources to become an informed lender, avoiding the pitfalls of arm's-length lending. They remain closely tied to developing industry trends, changing lending

criteria as specific markets and product types demand. They avoid being subject to competitive screening by borrowers since they do not tie their pricing to the permanent end loan. By utilizing construction lending as a stand-alone product, they avoid the dangers of providing such funds as a loss leader to obtain securitizable permanent loans. While they actively solicit permanent financing opportunities from the developers, they avoid the inherent risks of a privately informed borrower questionably/technically defaulting and obtaining take-out financing from another source, once the project has been stabilized and the risks reduced.

Overall, Firm A has created a lending program which rivals the commercial banks, their primary competition. I expect that other Wall Street firms desirous of entering the lucrative construction lending business will duplicate the efforts of Firm A as the program gains more recognition from the development community.

Chapter 4

CASE II - FIRM B

Firm B has approached construction financing as an extended product line for their interim finance group, which typically seeks out \$20 - \$500 million portfolio financing transactions. They are currently focusing on providing construction financing in two areas of development, retail and hospitality. Fully leased "Big Box" and factory outlet centers owned and operated by established industry leaders area their preferred retail projects. In the hospitality industry, they are expecting to provide over \$300 million for new construction before the end of 1998. They entered the hospitality construction business just last year, as part of a competitive bidding contest, and are looking to increase their presence in this very competitive field. While Firm B sees some promise for FASITs as a vehicle for construction lending by the public capital players, they remain cautiously optimistic about this new products viability, instead choosing to grow their existing construction lending business to other product sectors. In addition, they are very concerned about rising prices for construction materials and shortages of labor, akin to the indicators of past overbuilding, and remain watchful for trends indicating overbuilding.

Construction Lending Program

A typical loan facility is as follows:

HOSPITALITY - Franchiser Sponsored		
Minimum Debt Service Coverage Ratio:	None	
Maximum Loan to Value:	75% of cost	
Minimum Equity on Cost Basis:	25%	
Spreads (over comparable term LIBOR):	355 bps (participating interest with Franchiser)	

Loan Size:	\$6 million maximum per property. Standardized lending program provides financing at 75% of costs.
Loan Term:	Three year mini-perm provides construction and stabilization period.
Fees:	1.5% up front to Firm B; Additional administrative fee during construction. Additional 2% fee charged if borrower does not accept Firm B's permanent financing offer.
Lien Status:	First mortgage only
Recourse:	Completion, repayment and environmental guarantees during construction period form business entity and individual. Franchiser provides credit enhancing guaranty of debt, and retains option to purchase loan if borrower goes into default.
Prepayment:	Allowed at any point, subject to breakage costs
Escrow:	Required for real estate taxes and insurance
Minimum Underwriting Vacancy:	Actual vacancy.
Minimum Management Fee:	5% of Effective Gross Income
Tenant Improvement and Leasing Commissions:	N/A
Developer Qualifications:	Experienced in product type and geographic area, good reputation verifiable by bank references
Guarantor Requirements:	Acceptability by Franchiser.

Firm B's hospitality construction program was created to obtain suitable individual loans for securitization, to bolster their CMBS program. The above program is designed to create homogeneous permanent financing facilities which can be securitized as sufficient product is written, they penalize the developers with a 2% fee should a developer choose to obtain permanent financing elsewhere. They won a competitive bidding process that took eight months to complete. This program is sponsored by a major U.S. public company for its franchisees. Firm B provides 75% of the construction costs, at a spread over LIBOR of +355

bps. Personal and entity guaranties are required, and Firm B further looks for credit support in the way of personal guarantors from the entity's limited partners if available.

Firm B has not dedicated sufficient resource to this program to run it in-house, therefore, they rely on a variety of agents to carry out the underwriting and servicing. By utilizing a third party to agent to underwrite the credit initially, with Firm B's commitment to assume the loan they eliminate the need for additional staff. Existing members of the firm monitor the agents activities. Once the loan has closed, another third party, this time a regional commercial bank, assumes the servicing responsibilities, including construction requisitions. A separate party, is contracted to perform monthly site inspections to closely monitor each borrower's progress.

Upon completion of construction, and stabilization of occupancy, a national hotel consulting firm is hired to perform a final valuation. This allows the developer/owner to lever up his property based upon the economics of the specific project. The non-recourse permanent loan is then offered to the developer based upon this appraisal. Should the borrower choose not to accept Firm B's offer (made under provisions agreed upon at inception of the construction financing), a 2% exit fee is charged to the borrower at the maturity of the three year mini-perm term.

Credit enhancement on all loans in this program is obtained through a corporate guarantee provided by franchiser. The franchiser, in compensation for providing the guaranty, receives a participating interest in the arbitrage between Firm B's borrowing rate and the developers pay rate. The franchiser also retains an option to purchase any borrowers defaulted loan at face value. After construction, Firm B's experience with the rating agencies has been their requirement of a minimum of twelve months to establish a suitable operating track record to obtain a sufficient level of comfort to place the loan in a CMBS issue.

This program has been well received by the hotel developer/owners due to industry lending restrictions which have made it difficult for developers to obtain leverage above 66% of costs.

Strategic Decisions

At the present time, Firm B does not feel there is sufficient volume to justify staffing an internal department with construction lending expertise. They are content to utilize third party, for fee, agents with established construction lending expertise to administer the loan process. However, they do recognize the higher returns provide by construction lending, and are prepared to expand their commitment beyond the present retail and hospitality when economic factors support. At the present, they look at their program as an addition to their conduit program for loan securitizations. CMBS is a product which Firm B intends to increase their involvement in.

The alliance with a major hotel franchiser provides Firm B with the first right of refusal on permanent financing, and their risk in substantially mitigated by the franchiser's guaranty of its franchisee's. Firm B also wants to position themselves to be prepared to take advantage of some promising opportunities under new FASIT opportunities, if they perceive adequate demand to support such activity. By offering their current program, they are "testing the waters" and determining their ability to conduct the business through select agents.

Source of Funds

Due to the strong credit enhancement provided by the franchiser, Firm B is able to borrow at LIBOR +80 bps, creating a spread of 275 bps on the construction facilities.

Issues Relating to Literature Review

Firm B's primary construction lending program seeks to avoid the inherent risks of arm's-length lending by utilizing third party agents and relying on a corporate guaranty in one instance to credit enhance a projected \$300 million in new construction. In another lending program, they require 100% pre-leasing. This approach to construction lending relies more on credit tenants and investment grade guarantors than fundamentally sound real estate loan programs, but nonetheless, they are facilitating the construction of numerous new properties across the nation.

By passing off the underwriting to agents of the corporate guarantor, Firm B is exposed to significant moral hazard, both with the agents whose fees are earned by getting loans funded, and with the hotel operators, not reputable developers, whose concern is more with creating a finished project than controlling costs. Serious concerns exist over whether the owner/developer is truly incented to avoid taking on excessive risk in the current up market, without regard to the ultimate project viability. This becomes especially evident when one examines the takeout financing, based upon the economics, not construction costs. Indeed, a developer may actually obtain financing for 100% of the project's costs after project stabilization and conversion of the debt into a non-recourse permanent loan. While this particular arrangement may prove profitable due to the guarantors strength, in looking to acquire new clients and grow the construction lending business to other product types Firm B would be wise to revisit fundamental lending standards prior to expanding into new ventures which may not provide the same investment grade guarantor.

Monitoring to avoid allowing developers to select risky projects, a classic moral hazard, is performed by third party agents for fee. This arrangement forces Firm B into even more of an arm's-length relationship with the entity spending their funds. Neral (1992) found the hallmark of reputation building, a key to avoiding a borrower's acceptance of risky projects, is the willingness of an individual to give up short term gains to try to favorably influence a long term relationship. Firm B's program does nothing to establish a relationship with the developer, instead, it gives incentive to the developer to take advantage of Firm B at the end of this rather short term relationship. Diamond (1996) does provide a solid justification of Firm B's program when viewed from the prospective of the inefficient nature of liquidation. By obtaining what amounts to a moneyed partner, the investment grade guarantor who commits to purchasing the loan if it goes into default, Firm B forestalls liquidation and its problematic enforcement. Instead of being forced to monitor, Firm B is allowed to utilize arm's-length lending and minimal information gathering. They also employ non-optimal standard debt contracts, Boyd (1994) which allows minimal monitoring. This program is clearly dependent on the credit strength of the franchiser, and as such, represents Wall Streets adaptation of traditional

construction financing to the public markets demand for liquidity in a transaction oriented environment.

Compare and Contrast with Firm A

	Firm A	Firm A Firm B	
Reputation	Very Important	Borrower reputation incidental, Rely on Franchiser/Guarantor Third Party Agents Hazard exists with both agents and borrowers Ignored, except with Franchiser/Guarantor Arm's-Length Relies on third-party agents with possible mis-aligned incentives Relies upon Franchiser Guarantor to avoid market downturns Firm charges 2% fee to utilize third party permanent financing	
Monitoring	Internal Staff, Very Important		
Moral Hazard	Minimized		
Relationship	Very Important		
Informed vs. Arm's-Length	Informed Lender, demands private information		
Liquidity & Leverage	Follows market conditions closely, prices loans to account for risk		
Competitive Screening	Firm prices loans to fully support stand alone product		

Firm A has developed a lending program targeted to attract a much wider audience than Firm B's program. Firm A is seeking stronger growth than Firm B, which is still testing the apparatus they engineered to facilitate construction while limiting their exposure to the risks of construction lending. While Firm A is very reliant on a borrower's reputation and perceived ability to properly manage the completed project as a long term holder of the asset, Firm B seeks to fill the demand for construction financing by obtaining a corporate guaranty which provides them with investment grade security and construction loan pricing.

Firm A attempts to price the risk in accordance with their borrower's reputation and abilities, Firm B prices their debt over 100 bps above Firm A, though the product types differ and Firm B does price their loans more aggressively than other providers of hospitality construction loans, yet incurs only the risk of default associated with an investment grade corporate entity. The loan sizes involved in the two programs also varies substantially. Firm A rejects most proposals below \$5 million, while Firm B limits their facilities to a maximum of \$6 million. Firm A's approach has been to establish the necessary internal expertise to administer their loans, Firm B relies upon third party agents to perform the majority of the underwriting, lending an servicing functions.

A side observation relates to the two firms view of their role in the process. Firm A is aggressively pursuing new opportunities to meet the needs of their existing clients, while creating additional permanent loans to take advantage of the publics voracious appetite for real estate securities. Firm B has identified a relatively low risk opportunity to provide high yielding construction financing. While both firms are looking to increase the amount of product available for their individual mortgage securitization programs, they are looking in very different places.

Chapter 5

CASE III - FIRM C

Firm C's entrance into construction lending was motivated by their desire to procure commitments for permanent financing which could be used for future CMBS issuance. After establishing an in-house permanent loan department, Firm C expanded their roles to allow for construction lending also. They are limiting the product to established developers, who for various reasons are not able to obtain commercial bank financing on a particular project. They do not attempt to compete directly with banks for construction loan placement, preferring instead to provide take-out financing by working in conjunction with banks. Firm C does construction lending primarily for well established developers who have large, special needs, projects. They also offer the ability to obtain large (>\$100 million) facilities without the typical delay of syndications or participations.

Construction Lending Program

Firm C's loan product is targeted toward ventures likely to culminate in stable cash flow properties which can be quickly securitized. Hospitality, retail and office are their preferred product choices, and the construction loan is closely tied to the take-out facility. Construction financing is not provided to borrowers who are unwilling to commit to utilizing Firm C's permanent financing facilities. A typical loan facility is structured as follows:

OFFICE BUILDINGS - Multi Tenanted

Minimum Debt Service Coverage Ratio: No Minimum, though LTV determines ratio

Maximum Loan to Value: 80% of cost

Minimum Equity on Cost Basis: 20%

Spreads (over comparable term LIBOR): 250 bps

Loan Size:	\$15 - \$100 million, exceptions over \$100 million are made on a case-by-case basis.	
Loan Term:	Automatically rolls into stabilization and then permanent facility upon completion and adequate seasoning for rating agencies.	
Fees:	1.5% - 2.0% up front to Firm C; Additional administrative fee during construction varies with project complexity	
Lien Status:	First mortgage only	
Recourse:	Completion and Environmental guarantees during construction period; Completion guarantee may be released upon completion; Environmental guarantees remain in place throughout the term of the loan.	
Prepayment:	Not allowed during construction. Fee required for lower use of permanent loan funds than originally requested. Yield maintenance fees imposed on prepayment of permanent loan financing.	
Escrow:	May be required at Firm A's determination for real estate taxes, tenant improvement and insurance	
Minimum Underwriting Vacancy:	Actual vacancy, if any	
Minimum Management Fee:	Developer's fees are earned ("Success Fee") at predetermined benchmarks, significant hold-back paid on successful completion	
Tenant Improvement and Leasing Commissions:	Included in loan budget per lease requirements. Escrow or loan holdback may be required at lender's determination	
Developer Qualifications:	Experienced in product type and geographic area, good reputation verifiable by bank references. Past digressions preclude borrowers from obtaining funds from Firm A	
Guarantor Requirements:	Borrower, principal and limited partner guarantees required, reduction of liability earned with C of O, and further reduced as DSC increases to required permanent financing level. Guarantors required to maintain minimum level of Net Worth and prohibited from transferring assets.	

Firm C's typical office and retail construction loans are made at a 75% loan to cost ratio. Hospitality loans are considered at 65 - 75% loan to cost. Credit enhancement is required to receive the higher debt level commitments. Speculative development is considered only on very conservative terms, such as 50% of shell costs. It is possible, however, for developers to

provide additional collateral to obtain higher loan to cost funding commitments for the financing of speculative projects.

Firm C's loan facilities differ from their competitors in that all documentation is completed at closing; including construction, stabilization and permanent financing. The loan converts through each stage upon meeting prescribed hurdles. The construction loan floats over LIBOR by approximately 250 bps. This is a relatively low spread considering the loans were likely turned down initially by a commercial bank and represent greater credit risk than Firms A and B. The stabilization period allows the loan to season to meet rating agency requirements, and floats over LIBOR at approximately 200 bps (term required for seasoning to satisfy rating agencies are typically 6-12 months for office and retail projects, and up to 24 months for hotels), permanent financing converts to fixed rates at the time of conversion. Interest rate locks may be purchased to lock the rates in advance. Firm C will also consider resizing their permanent loan to 90% of the construction costs after stabilization.

Closing fees are 1.5 to 2 points, payable at closing and additional expenses incurred by Firm C in monitoring the requisition process are paid directly by the borrower. These loans are initially full recourse, though the guarantors are allowed to earn off $\pm 50\%$ with Certificate of Occupancy, more at 1.0x DSC and at 1.125x - 1.2x DSC the permanent loan becomes non-recourse.

Firm C also provides forward commitment take-outs for developers who obtain construction financing through other sources. Their pricing is dependent on the construction lenders terms. Firm C is able to offer a better priced commitment for one stop shopping at Firm C, since all tri-party agreements are avoided in these situations. Otherwise, permanent loan pricing is dependent on the terms of tale-out, a higher rate is required if the construction lender requires a take-out at Certificate of Occupancy, and a much lower rate is locked in with commitment for take-out at 1.25x DSC.

As an alternative to traditional debt relationships, Firm C also provides participating equity investments with a preferred return of LIBOR+500 bps, on a 60 month amortization schedule. All cash flow is directed into a lock-box arrangement and the borrower is removed from accessing cash flow until the equity portion of Firm C's investment has been repaid. Their preferred deal size is \$50 million, though loans above \$100 million are considered on a case by case basis. Loans below \$15-20 million are not desired unless they done in combination with other projects which are anticipated to aggregate over their \$50 million target.

Other covenants include full recourse across all construction loan product types, standard carveouts, prepayment not allowed, and a substantial fee is charged to developers who use a lower amount of permanent financing than originally requested. A majority of the typical development fees are deemed "success fees," and as such are paid at the conclusion of the project.

Strategic Decisions

Firm C states that they are not attempting to compete with commercial banks for construction loans. Rather, they offer construction facilities to reputable borrowers who are unable to borrower from such traditional lenders, usually due to the specific projects dynamics. Their ultimate goal is to obtain suitable mortgages for inclusion in CMBS issuance's, this pipeline is merely a minor supplement for their conduit program and is not intended to become a major product line.

Firm C doesn't lend to merchant builders, as they generally want borrowers who intend to hold properties in their portfolio. However, they will consider allowing merchant builders to sell the completed property to another entity and assume the permanent mortgage in pre-approved circumstances. This most often happens when a REIT wants a building built by a third party, but doesn't want to carry enough permanent debt after purchase to support Firm A's CMBS desires.

Source of Funds

Firm C chooses to lend off its balance sheet, and feels that pricing slightly above commercial bank rates provides sufficient spreads to justify continued activity in this market sector.

Issues Relating to Literature Review

The construction lending program Firm C has established deviates from the traditional commercial bank model. As noted in the Chapter 2 literature review, relationships and reputation have long provided lenders protection from adverse selection and incented borrowers to avoid moral hazard issues. By providing what is effectively arm's-length construction financing, Firm C has circumvented established practices. They believe that this is compensated for through their stringent equity and guarantor requirements, along with a careful borrower selection process. Reputation is verified with established commercial banks which have provided credit to the borrower in the past. Monitoring is minimized, as Firm C relies on the value of reputation to mitigate a developers willingness to engage in risky projects.

In contrast to the literature, Firm C attempts to account for the inherent risks associated with lending to borrowers unable to garner conventional bank financing by retaining developer fees, and paying them out later in the process as "success fees." This invites borrowers to select higher risk projects when reputation is not sufficient to restrain such activities. As noted in Diamond (1991), in periods of high anticipated future interest rates or low present or future anticipated economywide profitability, reputation factors becomes less able to predict a developers selection of safe projects over risky ones. In Calem (1993) the risks of this argument during construction is mitigated when sufficient equity is at stake, though Firm C's 90% LTV permanent takeout loans fall short of providing the stability suggested by Calem, and equity in additional pledged collateral may not provide adequate coverage in times of distress.

The arm's-length nature of Firm C's lending relationships also reduces the effectiveness of relationship lending, Berlin (1996). Information held by an informed lender, who monitors closely, becomes a valuable tool in decisions about continuing a project as conditions change.

With securitization of permanent loans Firm C's preferred exit strategy, the value of relationship lending is weakened when previous facilities lack the flexibility a lend and hold lender would have to work with a firm in financial distress. Moral hazards for the borrowers are also prevalent, as they are well aware that Firm C is most interested in completing the project, not in monitoring costs. Without a finished product, Firm C loses its exit strategy. Shleifer & Vishny (1992) highlight the concerns of plummeting property values when general market conditions deteriorate, Firm C does not retain an ability to be flexible their previous facilities are dictated by REMIC after securitization. Firm C does, however, prevent a borrower with private information from recontracting, Beaudry (1995). This allows Firm C to enjoy a competitive advantage over those lenders who have not tied up the permanent loan facility.

Compare and Contrast with Firms A and B

	Firm A	Firm B	Firm C
Reputation	Very Important	Borrower reputation incidental, Rely on Franchiser/Guarantor	Important
Monitoring	Very Important, Dedicated Internal Staff	Third Party Agents	Moderately Important, Utilize Loan Officers
Moral Hazard	Minimized	Hazard with both agents and borrowers	Hazard exists with borrowers
Relationship	Very Important	Ignored, except with Franchiser/Guarantor	Largely Ignored
Informed vs. Arm's- Length	Informed Lender, demands private information	Arm's-Length Relies on third-party agents with possible mis-aligned incentives	Arm's-Length
Liquidity &	Follows market conditions closely, prices loans to account for risk	Relies upon Franchiser Guarantor to avoid market downturns	Rely on Completion and Securitization to Avoid Exposure
Competitive Screening	Firm prices loans to fully support stand alone product	Firm charges 2% fee to utilize third party permanent financing	Require Borrower to Sign Permanent Loan at Initial Funding of Construction

There exists significant differences among the three firms in both their approach to and execution of construction lending. Firm A is attempting to build highly competitive program, while remaining cognizant of the relevant lessons to be garnered from those institutions which have been involved in the industry its since inception. They have created a model program, complete with all the necessary checks and balances to ensure success. Firm B has found an arbitrage opportunity, trading construction loan pricing against investment grade guarantor risk, their exposure to risk is primarily the use of third party agents and a inordinate reliance on the contractual security of a guaranty. Firm C simply designed a vehicle to create permanent end loans to feed a growing CMBS machine. They are taking on substantial risks without adequate pricing, ignoring almost all of the established conventions of prudent lending. Firm C is currently relying on slightly above market pricing (but not fully compensating for the increased risk), retention of developers fees and substantial volume to compensate for their arm's-length approach to construction lending. Firm C has positioned itself to become a potentially indiscriminate provider of construction financing to developers building major projects, a very risky prospect.

In summary, reputation is viewed as extremely important by Firm A, desirable by Firm C, and Firm B ignores developer reputation, instead relying upon a third party guarantor's reputation and creditworthiness.

Monitoring by Firm C is minimal. Firm B has contracted monitoring to third party agents with apparent conflicts of interest (between Firm B and its guarantor). Firm A has staffed a team of site inspectors with seasoned construction professionals.

Moral hazard for the developers is highest in Firm B's program, where the operators have the least at stake in the event of failure and much to gain from a successful risky project. Firm A avoids developers engaging in risky actions by strict monitoring. Firm C relies more on reputation of the developers, who are selected on a basis of having established reputations high enough to incite them to avoid engaging in risky behavior over safe projects, though their projects are inherently risky given that they are first rejected by local informed lenders prior to receiving consideration by Firm C.

Relationship lending is practiced by Firm A, as they are attempting to increase both construction and CMBS business lines through enhanced services for their current customers. Firm C does not seek to establish relationships, rather they encourage commercial banks to work with them to provide end loans. When a project does not receive commercial bank construction financing, Firm C reviews the project to determine if the end product will fit into their program. Firm B has established a relationship with a franchiser who provides strong credit support; however, this does not resolve the individual developers enticement to enter into risky projects and raises concern over the possibility of overbuilding as developers seek to create rooms for projected demand instead of meeting current demand.

Firm A acts much like a typical informed commercial bank in carrying out the construction lending process, they have staffed up internally to address the operational issues confronting an informed lender. Firm B chooses to utilize established construction lending firms as agents, though this raises an additional aspect of moral hazard, that is, the agents fee is contingent on Firm B continuing to fund additional projects, not on the individual projects economic prospects. Firm C acts as an arm's-length lender; though they do perform a nominal amount of due diligence on a project by project basis. They rely more on diversification through large numbers of loans than carefully selecting individual projects which warranted funding, a very disconcerting practice.

Firms B and C are extremely insistent that take out financing be tied to any advance of construction funds. Firm A provides construction financing as a profit center. All three firms have entered into construction lending as a vehicle to obtain additional product for their loan securitization departments, indeed, CMBS appears to be the driving force behind all their real estate debt activities. This allows competitive screening only for developers of Firm A, as prohibitive fees are established to obtain funds from either Firm B or C.

Firm A has clearly established a premium loan program. Firm B has entered into a specialized situation, and must be careful to not expand their program without investment grade guarantors. Firm C has established a very risky venture, and one that will likely create significant financial distress in the next real estate downturn if they continue along their present course.

Chapter 6

FINANCING ALTERNATIVES WHEN DEBT GETS TOO RESTRICTIVE

Just three years ago, the cost to utilize traditional construction financing was prohibitively expensive. Lenders were requiring onerous covenants and providing little incentive to developers to construct new product, despite demand by corporate clients which justified development, nevertheless, new properties continued to emerge in select markets. When traditional debt is too expensive, developers who have good projects find alternative means to produce them. Corporations may borrow against their corporate credit worthiness (synthetic leasing) and merchant builders may utilize internal financing to fill perceived opportunities that traditional financing sources will not yet support. Opportunity funds have been created to enable builders to engage in construction without traditional debt financing, though this entails a significant equity sharing arrangement with the provider of the funds. The following three financing alternatives all affect Wall Street by removing the most desirable clients from their prospective list of borrowers, thus resulting in a riskier pool from which to start their ventures into construction financing.

Opportunity Funds

Firms like Starwood Mezzanine Investors, Goldman Sachs' Whitehall and the Tiger funds continually seek out opportunities within the real estate world. Recently found purchasing properties at discounted rates due to an overall lack of capital in the market, these market leaders are now segueing into being hedge funds, finding arbitrages in the market and taking advantage of continued market inefficiencies. They are also providing capital for development in exchange for the right to take on securitizable debt, preferred returns on investment and equity sharing in the completed project. This has enabled select developers

without private access to capital to develop speculative facilities before general market conditions have rebounded, putting them first in line to offer new space as markets eventually absorb the existing supply. This should be watched closely as Wall Street provides debt capital to developers who may be behind the development curve, supplying product the meet needs which are more quickly met by the opportunity funds equity plays.

Internal Financing

Some major regional and national developers still see no reason to utilize borrowed proceeds for construction or redevelopment projects. They find debt funding constraints unnecessarily inflate the costs of development, and pre-leasing requirements further limit their potential to capitalize on perceived future rent increases. As an example, a Boston area developer's three projects, a pure speculative 125,000 square foot suburban office building and two hotel expansion projects are being funded entirely through the companies internal cash reserves. While he does anticipate utilizing long term non-recourse debt upon completion, his leverage projections are well below established industry standards. He remains concerned over the local banks recent aggressive attempts to lend funds to his firm for new development, feeling that they may have too quickly forgotten the repercussions of their past flurry. Access to sufficient internal financing can provide a developer with an opportunity to engage in market timing, completing speculative space to meet anticipated demand rather than building in competition with other developers to meet pre-existing needs which may or may not exist upon building completion. This also raises concern of adverse selection further reducing borrower quality.

Synthetic Leases

Synthetic leases allow credit worthy corporations to finance construction of corporate facilities at rates based on their company credit rating rather than the specific projects feasibility. The leases, in which a capital source provides the funding for the construction or acquisition of real estate to be utilized by, and leased to, a corporate user, have grown in popularity due to their ability to qualify as an operating lease for financial accounting purposes while being treated as a

financing transaction for federal tax purposes. A special purpose entity (SPE) is created to book a loan, the proceeds of which are used to finance the construction of the subject real estate. A short term lease is then entered into between the lessee and the SPE, at the end of which the lessee must make a balloon payment to essentially repay nearly al of the project cost. The synthetic lease achieves off balance sheet treatment for the tenant on the asset being financed, together with the retention of tax benefits associated with ownership. The IRS, as well as the bankruptcy courts, look at the substance over form when reviewing these transactions to conclude that the lessee is actually the beneficial owner through a conditional sale. The IRS has deemed that all the risks, rewards and responsibilities reside with the lessee. The opposite is true for GAAP purposes as the form over substance argument prevails and the financing is treated as an operating lease. The SPE owner of record must make a 3% equity investment that is deemed at risk throughout the lease term, the balance of the project cost is financed with debt, typically comprised of two tranches: the A tranche, equal to 85% of project cost, and the B tranche, equal to 12% of project cost. The interest only can float over LIBOR or can be fixed using an interest rate swap. The lease is completely triple net, with the tenant fully responsible for operating and managing the asset. The lease appears more like a medium term revolving credit arrangement than a typical lease, with protections in place similar to a normal commercial loan to a high credit company. If the lessee does not maintain as investment grade credit, collateral is provided to give the lender comfort that the loan s will be repaid. The compelling benefits of a synthetic lease are that, the tenant receives the same tax benefits from depreciation as would an owner, the tenant obtains 100% of the properties appreciation, the loan can be priced approximately 200-300 basis points below a conventional financing since risk-based real estate costs are avoided, the lessee avoids depreciation for financial accounting purposes thereby improving reported earnings and improving debt equity ratios, profit potential for the developer is limited and all project costs can be financed (real property, personal property and soft costs.) The risks for the lessee in this transaction occur upon lease termination, at which time the lessee can purchase the property for an amount equaling the original cost, or if the firm wishes to abandon the facility, they can leave with a minimum rental payment which makes the payments required under the lease equal 89.9% of original project costs.

These three alternatives allow corporate users to construct new facilities regardless of the state of the existing real estate market. This tax driven advantage will likely continue to be utilized as the industry becomes more familiar wit the intricate tax issues, until either the IRS or accountants, for GAAP purposes, redefine their view of the financial engineering instruments.

Implications

Financing commercial real estate is a highly competitive business. The above alternatives to traditional construction financing allow builders and users of commercial space to avoid the traditional debt markets when debt is deemed to restrictive. It should be recognized that these financing sources will likely satisfy the financing needs of the upper tier of developers, further reducing the average quality of borrowers seeking financing from traditional sources. Together, these three financing vehicles make up only a small fraction of ongoing development, but they create significant changes in the overall characteristics of those demanding financing by reducing the availability of premier borrowers. This adverse selection problem makes the process of screening and monitoring that much more critical.

Chapter 7

CONCLUSION

Each of the three subject public market firms has made the strategic decision to enter into financing construction for the primary purpose of obtaining a larger share of the debt securitization market. Despite this similarity in motivation, they are offering markedly different products, targeted at different sectors of the development community. The cases identify current practices which do not suggest we are progressing headlong into another construction boom, although the aversion of some Wall Street Firms to utilize the proven safety nets provided through relationship lending, monitoring and removal of moral hazards concerns me greatly. This, coupled with the sheer volume of capital the public markets make available, suggests that we must carefully watch how Wall Street structures its lending programs. Though as these new lending initiatives mature, there remains great promise that the public scrutiny provided by Wall Street in both construction and permanent lending can lower the volatility of real estate supply and pricing.

The primary distinction between the current commercial bank construction lending programs and Wall Streets comes down to commercial bank's risk based capital constraints. Banks simply cannot compete on spreads for construction loans if Wall Street relaxes their lending requirements and begins to offer higher leverage ratios. While Wall Street has not taken advantage of this "opportunity," there remains a clear danger that underwriting standards could deteriorate as the fee income becomes more attractive to Wall Street. At the present time there is little indication that Wall Street is prepared to fuel a speculative building boom along the lines of the 1980s debacle. However, their reluctance to implement programs which require strict adherence to the lessons of the 1980s, namely, reputation, monitoring and relationship lending raises serious concerns over their willingness to provide restraint in feeding the increasing

demand for construction financing. Wall Street itself must be monitored to understand how it responds in an effort feed it's :securitization machine."

	Product Strategy	Adverse Selection	Monitoring
Firm A	Polotionship anhanging	Compete directly with	In house staff performs
FIIII A	Relationship enhancing	Compete directly with	in nouse stair perionns
	service, build firm's	commercial banks,	nationwide monitoring
	perception as for full service	reputation and monitoring	through site inspections
	while increasing market	utilized to reduce exposure.	and requisition
	presence in CMBS.		holdbacks.
		•	
Firm B	Opportunistic venture which	Acknowledge risk on	Utilize 3rd party Agents
	is hoped to produce model	individual deals, mitigated by	with extensive expertise,
	for future source of short	Franchiser Guaranty and	additional moral hazard
	term, high yield instruments;	small individual loan limits.	incurred in process.
	and feed CMBS.		
Firm C	Obtain increased share of	Mitigate risk with higher	Limited monitoring
	future commercial loans	pricing, this exacerbates	utilized, rely on
	available for securitization.	problem and worsens the	reputation to mitigate.
		"lemon's problem" it was	
		designed to correct	

Overall, I believe that it is feasible to provide public capital to construction lending if the firm is willing to invest the resources necessary to establish a satisfactory means to monitor, and adheres to established reputation recommendations. As we currently see several firms utilizing different methods as they enter this field, I would look for the most profitable (highest return for least risk) venture to be quickly copied by the other Wall Street firms. I expect Wall Street to

continue their construction lending activities, and after a shakeout brought about by the next down cycle, new Wall Street firms entering into construction finance will likely adapt and utilize proven lending techniques, much as Firm A has done already.

REFERENCES

Adler, Jane, 1997, "Real Estate 97: On an Even Keel at Last?" Journal of Property Management, Volume 62 number 1, pp. 19-25, January/February.

Ambrose, Brent W., John Benjamin, and Peter Chinloy, 1996, "Credit Restrictions and the Market for Commercial Real Estate Loans," <u>Real Estate Economics</u>, Volume 24 number 1, pp. 1-22.

Anonymous, 1997, "Emerging Trends in Real Estate: 1997," <u>Equitable Real Estate</u> <u>Investment Management, Inc.</u>

Anonymous, 1997, "What Are Lenders Looking For?" <u>Commercial Investment Real Estate Journal</u>, Volume 16 number 3, pp. 26-31, May/June.

Anonymous, 1996, "Emerging Trends in Real Estate 1997," <u>National Real Estate Investor</u>, Volume 38 number 12, pp.74-78, November.

Bach, Robert, 1997, "Spring or Indian Summer?," 1997 Corporate Real Estate Yearbook.

Beaudry, P. & Poitevin, M., 1995, "Competitive Screening in Financial Markets when Borrowers can Recontract," The Review of Economic Studies Limited.

Berlin, M., 1996, "For Better and For Worse: Three Lending Relationships," <u>Business</u> Review, Federal Reserve Bank of Philadelphia, November-December.

Bergsman, Steve, 1996, "What Does 1996 Hold in Store for the Real Estate Industry?" National Real Estate Investor, Volume 38 number 2, pp. 36-55, February.

Boyd, J. and Smith, B., 1994, "How Good Are Standard Debt Contracts? Stochastic verses Nonstochastic Monitoring in a Costly State Verification Environment," <u>The Journal of Business</u>, October.

Bruck, C., 1988, "The Predator's Ball: The Inside Story of Drexel Burnham and the Rise of the Junk Bond Raiders," Simon and Schuster, New York, NY.

Brueggeman, William B. and Jeffrey D. Fisher, 1993, <u>Real Estate Finance and Investments</u>, Boston, MA: Richard D. Irwin Inc.., chapters 1, 17, 19, 20.

Brunswick, Robert S, 1996, "The Dawn of the Financial Architect," <u>Real Estate Finance</u> <u>Journal</u>, Volume 12 number 1, pp. 84-88, Summer.

Calem, P. 1993, "Borrower Reputation and Existence of Moral Hazard in Credit Markets," Working Paper, Federal Reserve Bank of Philadelphia: Economic Research Department, August.

Corgel, John B., 1996, 'Capital Flow to Lodging Real Estate," <u>Real Estate Finance</u>, Volume 13 number 4, pp. 13-19, Winter.

Diamond, D., 1989, "Reputation Acquisition in Debt Markets," <u>Journal of Political Economy.</u>

Diamond, D., .1991, "Monitoring and Reputation: The Choice between Bank Loans and Directly Placed Debt," <u>Journal of Political Economy.</u>

Diamond, D., 1996, "Financial Intermediation as Delegated Monitoring: A Simple Example," Federal Reserve Bank of Richmond Economic Quarterly, Summer

Downs, Anthony, 1997, "Is Construction Comeback Becoming a Building Boomlet?" National Real Estate Investor, Volume 39 number 2, p. 32, 133, February.

Downs, Anthony, 1996, "Are we going to build too much space again?," National Real Estate Investor, April.

Downs, Anthony, 1996, "Is it Time to Start Speculative Building?" <u>National Real Estate Investor</u>, Volume 38 number 8, pp. 26-28, August.

Duobinis, Stanley F, 1996, "Nonresidential Construction Activity," <u>Housing Economics</u>, Volume 44 number 11, pp. 16-18, November.

Edelstein, Mark, 1997, "Drafting Effective Completion Guaranties," <u>The Real Estate Finance Journal</u>, pp. 85-88

Grenadier, Steven R, 1996, "The Strategic Exercise of Options: Development Cascades and Overbuilding in Real Estate Markets," <u>Journal of Finance</u>, Volume 51 number 5, pp. 1653-1679, December.

Gorman, James J, 1997, "The Cyclical Road to Recovery," <u>Real Estate Finance Journal</u>, Volume 12 number 3, pp. 78-80, Winter.

Han, Jun, 1996, "To Securitize or Not to Securitize? The Future of Commercial Real Estate Debt Markets," Real Estate Finance, Volume 13 number 2, pp. 71-80, Summer.

Jensen, Michael, and Meckling, William, 1976, "Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure," <u>Journal of Financial Economics</u> 305-60

Johnson, Ben, 1997, "Changing Roles, Competition Heats Up U.S. Capital Markets," National Real Estate Investor, Volume 39 number 4, pp. 90-92, April.

Johnson, Ben, 1996, "It's Wall Street vs. Main Street and Peaceful Coexistence Rules," National Real Estate Investor, Volume 38 number 1, pp. 54-62, January.

Johnson, Shane, 1997, "The Effect of Bank Reputation on the Value of Bank Loan Agreements," <u>Journal of Accounting</u>, <u>Auditing & Finance</u>, pp. 83-100

Kirkpatrick, David D., 1997, "REIT Interest; CarrAmerica Says it Will Build its Future," Wall Street Journal, p. B10, July 16.

Landauer Real Estate Counselors, 1997, Landauer Real Estate Market Forecast.

Lummer, S. and McConnell, J., "Further Evidence on the Bank Lending Process and the Reaction of the Capital Market to Bank Loan Agreements," <u>Journal of Financial Economics</u> 25, 99-122

Luskin, Martin, 1996, "Real Estate Construction Financing: The Pitfalls of the Tri-Party Agreement," Real Estate Finance Journal, Volume 11 number 3, pp. 30-33, Winter.

McCadden and Peter McNally, 1997, "U.S. Pension Fund Investments in Real Estate: Current and Future Investment Strategy," <u>Real Estate Finance</u>, Volume 13 number 4, pp. 46-58, Winter.

McMahan, John, CRE, 1997, "The Changing Real Estate Environment," <u>Real Estate Issues</u>, pp. 1-7.

Meerschwam, D., 1991, "Breaking Financial Boundaries: Global Capital, National Deregulation and Financial Services Firms," <u>Harvard Business School Press</u>, Cambridge, MA.

Miles, Mike, 1996, "What's All This Talk About Overbuilding?" Real Estate Finance, Volume 13 number 3, p. 1-2, Fall.

Mowatt, Gregory, 1996, "New Project Capitalization: A Developer's Game For Tackling the Capital Markets," Real Estate Finance Journal, Volume 12 number 1, pp. 45-53, Summer.

Myers, Stewart C., 1977, "Determinants of Corporate Borrowing," <u>Journal of Financial Economics</u> 5, 147-175.

Neral, J. & Ochs, J., 1992, "The Sequential Equilibrium Theory of Reputation Building: A Further Test," <u>Econometrica</u> September.

Peek, Joe and Eric Rosengren, 1996, "Bank Regulatory Agreements and Real Estate Lending, Real Estate Economics, Volume 24 number 1, pp. 55-73.

Rajan, R., 1992, "Insiders and Outsiders: The Choice between Informed and Arm's-Length Debt," <u>Journal of Finance</u>, September.

Rosenbaum, David B, 1996, "Excess Funds Chase Real Estate," <u>ENR</u>, Volume 236 number 8, p. 8, February 26.

Rutgers, John A; Haley, H Dean, 1996, "....Project Risks and Risk Allocation," <u>Cost Engineering</u>, Volume 38 number 9, pp. 27-30, September.

Shleifer, A. & Vishny, R., 1992, "Liquidation Values and Debt Capacity: A Market Equilibrium Approach," The Journal of Finance, September.

Slatin, Peter, 1997, "The Ground Floor: Commercial Banks and Wall Street Team Up to Design a New Style of Syndicated Construction Loan," <u>Barron's</u>.

Stiglitz, Joseph, and Weiss, Andrew, 1981, "Credit Rationing in Markets with Imperfect Information," <u>American Economic Review</u>, 71, 393-410.

Urban Land Institute, 1996, The ULI 1996 Real Estate Forecast, pp. 6-9, 42-48.

White, Gregory, 1996, "Someone Else's Money: Commercial Mortgage Finance in the 1990's," Real Estate Finance Journal, Volume 12 number 2, pp. 60-67, Fall.