PN-ABW-014
ISN 94914

ANALYSIS OF NHB REGULATORY AND SUPERVISORY ACTIVITIES

and

ASSOCIATED MIS MONITORING REQUIREMENTS

prepared by

D. James Croft, PhD
Executive Director
Mortgage Asset Research Institute, Inc.

and

Consultant to Abt Associates, Inc.

November 1993

Report Contents

Analysis of NHB Regulatory and Supervisory Activities

and

Associated MIS Monitoring Requirements

Executive Summary

The issues and recommendations discussed in this report were developed in two related work assignments issued by Abt Associates, Inc. The first asked for recommended policies, measurements, procedures and organizational structures to effect the National Housing Bank's (NHB) sound regulation and supervision of India's housing finance system. The second asked for recommendations on immediate, short-run and long-term information reporting needs for the NHB's regulation and supervision of Housing Finance Companies (HFCs).

The first assignment is a follow-on to the author's earlier study of the options for licensing, regulation, supervision and closure of India's HFCs. The second assignment is a necessary input to the two other ongoing studies being conducted at the NHB. These two assignments are closely related; therefore, this report covers both topics under one cover.

The movement toward liberalization of the financial services industry has prompted several studies of the many issues which face India's financial policy makers. The author's 1990 study discussed "Options for Licensing, Regulation, Supervision and Closure of Housing Finance Companies in India." This report contained several general recommendations to be considered by the NHB in its role as the regulator and supervisor of the emerging housing finance sector of the economy.

The Narasimham Committee on the Financial System, November 1991, developed 48 recommendations, many of which affect HFCs. In order to investigate certain Narasimham recommendations further, the Reserve Bank of India constituted a Working Group under the chairmanship of Mr. A. C. Shah. The recommendations of the Shah Working Group were published in September 1992. The Shah Working Group's overall approach is both thorough and sound. The report and recommendations demonstrate a great deal of thought and an understanding of the financial institution regulatory process.

One of the most profound recommendations from the Narasimham Committee, as these recommendations affect the housing finance industry, is the one that deals with phasing out the directed credit programs. Douglas B. Diamond, Jr. addressed the financing options facing the NHB as it enters

this period of uncertain sources of directed credits. Diamond noted that the NHB can plan many non-financing roles in the Indian economy, such as increased involvement in regulation and supervision.

From the studies cited above, we can draw a number of overall conclusions. Some of the most important from the standpoint of the NHB are as follows:

- There will be less directed/subsidized credit available to HFCs, in general, and through the NHB, in particular, in the liberalized economy.
- HFCs and the NHB will need to compete for funds in the open market. They will need to develop market-based deposit gathering and lending schemes.
- Slower growth of the HFC industry will likely ensue until a new equilibrium is established in the financial markets. (This period can be used by the NHB to restructure and strengthen its regulatory and supervisory position in the industry.)
- The impact of the market changes and the NHB's role as a source of directed credit will not be uniformly felt in the HFC industry.
- There is a blurring of the boundaries between the different types of financial institutions co-existing in the Indian economy.
- More uniform regulation and supervision of these evolving institutions is justified and needed.
- Stronger monitoring and supervision is required.
- There should be an increased focus on the importance of safe and sound operations of financial institutions and how they deploy the deposits they have garnered from savers.
- The current situation is very fluid regarding which oversight groups will be doing what. This provides both threats and opportunities.

One of the many recommendations of the Shah Working Group is that a special High Powered Board be established to regulate the activities of Non-Banking Financial Institutions. Since HFCs fit into this category, there is a need to clarify the role of the NHB in the regulation of this one class of Non-Banking Financial Companies (NBFCs). This situation will likely lead to both regulation and supervision staying with the NHB. This outcome may be contingent upon the NHB's showing that it is a more powerful or aggressive agent for supervision of HFCs than it has been in the past.

The current challenge and opportunity facing the NHB is to assure that this volatile situation results in the most favorable outcome for the NHB and the housing finance industry it serves. That is, actions are needed to increase the probability that the NHB's regulatory and supervisory responsibilities are enhanced under the next round of legislative changes.

The actions the NHB should consider taking can be classified into the following four areas: Organization of the NHB, Staffing the Regulatory and Supervisory Functions of the NHB, Policies and Procedures at the NHB, and Monitoring of HFCs.

Strong leadership in the top two positions at the NHB is essential. All recommendations in this report are meaningless without the presence of knowledgeable, respected and action-oriented people filling the positions of Chairman and Managing Director. Filling those two slots with strong leaders is the single most important step which can be taken to preserve and strengthen the regulatory and supervisory functions (as well as others) at the NHB.

In addition, there should be a separation of the promotional/technical, the refinancing and the regulatory/supervisory functions at the NHB.

Currently, the regulatory and supervisory functions at the NHB are <u>seriously</u> short of staff. The supervisory staff consists of three people. One part-time officer doubles as the NHB accountant and data input clerk. In addition, there are only two inspectors (formerly there were four), and they have commercial banking experience, not HFC-related backgrounds. The NHB's supervisory function needs a significant infusion of personnel. Approximately 16 people are needed in the function that now has three.

The entire regulatory function could be handled by one knowledgeable person to perform the administrative functions. The same person could act as Chair of a three-person regulatory board which revises the Directions as needed. Other candidate members of this three-person board would be the head of the supervisory function and the NHB's Managing Director.

The Shah Working Group recommended that supervisory authorities for NBFCs begin giving more attention to oversight of the asset side of balance sheets. This recommendation is applicable to the NHB since HFCs qualify as NBFCs.

Three critical efforts should be undertaken in order to set the stage for the NHB's expanded regulation and supervision of HFC asset investment policies.

1. The NHB, its board of directors, and others with an interest in the NHB's viability and strength should press for an early resolution to the top management void at the NHB.
2. All concerned parties should continue to press for passage of legislation granting the NHB clear authority to regulate asset investment policies.

3. The NHB should expand its investment monitoring function with the installation of a new Supervisory MIS System. (See specific monitoring recommendations below.)

The role of inspectors should be redefined and expanded. This redefinition should focus in two areas. The first area involves giving more attention to safety and soundness. The second area in which inspectors can direct their efforts is that of providing technical consultation and advice to the HFCs they inspect. Supervisory agents should be empowered to act in cases where noncompliance with Guidelines, Directions and prudent practice is found.

One of the most clearly recognized roles for supervisory personnel in all financial settings is that of a monitoring agent. The underlying purpose for requiring regulated institutions to submit periodic reports on their condition is to give regulators and supervisory personnel information about the condition of the institution and its compliance with regulations.

The following three criteria were used in determining what items should be included in a supervisory management information system:

- Relatively few measures should be monitored. This should focus the attention of both management and regulators on the critical few items which need to be tracked. When these few critical measures indicate a problem, the supervisory staff can request additional information. The NHB supervisory function is already short of staff and should not be overwhelmed with mind-numbing schedules of information whose meaning is difficult to interpret.

- The definitions of the items to be monitored should be clear. Alternatively, they should be clarified prior to their introduction to the supervisory MIS system. The information monitored should also be clear as to its importance for supervisory oversight. Such clarity will mitigate the resistance of the supervised institutions to supplying reports.

- To the extent possible, the system should use information currently being generated by the supervised HFCs. The best immediate monitoring information is that which is already being submitted to the NHB.

General Approach. Overall, this report recommends more frequent collection of information for the Supervisory MIS. Currently, approved HFCs submit information half-yearly. Classified institutions submit information only annually. All classified institutions should be required to submit information on a quarterly basis. This change should be implemented as quickly as possible.

The overall foundation of a supervisory management information system should consist of a set of Flags and Triggers to be monitored by the supervisory staff of the NHB. That is, a relatively small number of measures should be calculated on a regular basis. When one or more of those measures is "out of line" at a particular HFC, the supervisory staff member assigned to monitoring that institution (hereinafter called the "supervisory agent") will see on his/her MIS that a "Red Flag" exists in the HFC's report. The presence of a Red Flag indicates that the HFC with this condition bears close monitoring of the factor showing the Red Flag.

When a measure being monitored is "significantly out of line," the MIS should note that a "Trigger" has been pulled (or actuated). Triggers may involve a performance measure which deviates markedly from past performance or from an established norm. However, it may also be pulled when a condition or performance factor has been showing a Red Flag for an extended period of time.

NHB supervisory personnel will want to examine the sensitivity of the chosen measure to determine the appropriate levels at which Red Flag and Trigger hurdles should be set. These should be reviewed with an advisory group comprised of representatives from chartered public accounting firms and from the HFC industry. These hurdle values should also be reviewed on an annual basis to determine if they should be adjusted on the basis of changing conditions in the HFC industry.

Suggested measures in each of five risk categories (credit, interest rate, liquidity, management and capital adequacy risks) are presented in the following sections of this report. They are summarized in tabular form at the end of this report.

Section I: Introduction

The issues and recommendations discussed in this report were developed in two related work assignments issued by Abt Associates, Inc. The first asked for recommended policies, measurements, procedures and organizational structures to effect the National Housing Bank's (NHB) sound regulation and supervision of India's housing finance system. The second asked for recommendations on immediate, short-run and long-term information reporting needs for the NHB's regulation and supervision of Housing Finance Companies (HFCs).

Analysis of NHB Regulatory and Supervisory Activities

The first study is a follow-on to the author's earlier study of the options for licensing, regulation, supervision and closure of India's HFCs. Five tasks were requested in the Statement of Work for the current report. They included:

1. Review actions taken on recommendations made in the 1990 Croft report.
2. Review the affects of liberalization in the business environment of HFCs and its affects on levels of risk in the housing finance system.
3. Comment on the recommendations of recent studies of the Narasimham Committee and the Shah Working Group on Financial Companies, giving special attention to the recommendations regarding a new regulatory body to oversee all non-banking finance companies.
4. Coordinate with and provide input to an ongoing organizational study at the NHB, with emphasis on organizational issues associated with regulation and supervision. A. F. Ferguson & Company is currently performing a review of the organization and function of the NHB. This study was commissioned by the NHB board of directors.
5. Recommend contents and frequency of measurement of HFC activities required in a management information system (MIS) to support effective regulation and supervision of HFCs.

HFC Reporting to the NHB: Management Information Systems

The second assignment is a necessary input to the two other ongoing studies being conducted at the NHB. In addition to the Ferguson Company, Price Waterhouse is also involved in a study at the NHB. This international accounting and consulting firm is developing recommendations to be used in a new corporate-wide (MIS). One piece of this system must necessarily address the needs of the regulatory and supervisory personnel in the Bank.

The Abt consultant's tasks involved in this MIS assignment consist of working with the local Price Waterhouse consultants to provide input regarding elements of the NHB's management information system addressing regulatory and supervisory responsibilities. Emphasis in this assignment is on defining measurements and standards which NHB supervisory personnel must track to assess the risk profiles of HFCs for which they are responsible.

Combination Study

The two assignments described above (sound regulation and supervision of HFCs and recommendations for a management information system) are closely related. Therefore, this report covers both topics under one cover. While many issues discussed in this report have implications for MIS at the Bank, the second topic is emphasized in Section III.D, Major Recommendations: Monitoring HFCs.

Sources of Information

The analyses and recommendations in this report are based on information from several sources. The author's visit to New Delhi and Bombay during the last two weeks in April 1993 was very helpful in providing information and insight to the review process. A list of the organizations visited and people with whom discussions were held is presented in Appendix I of the Report.

In addition, several source documents were helpful. The bibliography covering major reports and studies which provided background information for the current work is presented in Appendix II.

Section II: Background

There is a clearly recognized shortage of housing in India. It is estimated that the shortfall of housing is in excess of 30 million housing units.

One of the primary factors leading to this shortage is the difficulty with which the financial sector of the economy mobilizes, pools and directs the savings of private households and corporations into loans for private homes. Only a small portion of home loan financing is conducted through formal lending carried out by financial institutions.

That is not to say that depository institutions are non-existent in India. A broad array of companies is permitted to gather deposits from households. The breadth of this deposit-taking sector is much greater than is found in the United States and most other western countries. Many of these depository and lending activities have been relatively unregulated. Several highly visible companies have engaged in inappropriate deposit gathering activities and have subsequently failed.

Creation and Role of the National Housing Bank

These failures, in part, prompted the enactment of the National Housing Bank Act of 1987. This act called for creation of a National Housing Bank. The purposes of this institution were set out as promoting, regulating and financing the housing finance system.

Subsequently, the NHB was established. It took over the HFC regulatory function formerly carried out by the Reserve Bank of India (RBI). In addition, the NHB developed a set of attractive programs for lending funds to HFCs (refinancing programs) to facilitate their mobilization of savings into housing loans.

The focus of the regulatory powers granted to the NHB by the National Housing Bank Act of 1987 is on oversight of deposit-taking activities. The powers of the NHB to regulate these activities fall into five broad categories:

- Establishing restrictions on deposit rates and maturities.
- Limiting the deposit solicitation activities of HFCs to assure the full and fair representation of information to depositors.
- Monitoring compliance of HFCs with the Act and with NHB Directions through periodic reports and on-site inspections.

- Conducting a broad range of business with HFCs, including provision of financial services or direct investments in the institutions.
- Imposing conditions to protect the business interests of the NHB in its dealings with HFCs.

These authorities are primarily aimed at regulating deposit solicitation activities and at empowering the NHB in its capacity as a creditor to these institutions.

The National Housing Bank Act does not directly recognize the NHB's regulatory and supervisory role in the list entitled "Business of the National Housing Bank," which is presented in Chapter IV of the Act. These functions are outlined elsewhere in the Act (and concentrate on oversight of deposit taking.) The "business" of the NHB emphasized in Chapter IV of the Act is primarily the activity which facilitates the establishment and lending of HFC's. Thus it is understandable that the NHB has devoted a considerable amount of its time and effort to the promotion and lending functions it has been assigned.

Recent Industry Growth and Trends

The formal HFC sector has grown in both number of companies and assets controlled. To appreciate the distribution of this growth, one must understand the various categories of HFCs.

All HFCs have always been licensed by the Registrar of Companies under the 1956 Companies Act. (The terms "licensed" and "registered" are used synonymously in this report, although "licensed" is used most often.)

A licensed HFC will be inspected by NHB personnel. If it appears that the HFC is engaged in the housing finance business as a substantial part of its operations, the company is subsequently formally classified as an HFC. HFCs operate under the NHB's general Directions concerning deposit rate caps, deposit maturities, advertising reviews, leverage ratios for capital and reporting requirements. As mentioned previously, these Directions focus primarily on the deposit-taking activities of the classified HFCs. If inspection reveals that an institution is not significantly engaged in housing finance, NHB will forego overseeing it.

Finally, an institution can be qualified (or "approved") to do financial transactions with the NHB. In order to achieve this distinction, an HFC must be licensed and classified and, in addition, must be inspected by the NHB and found to comply with a set of "Guidelines for Housing Finance Companies," the most recent version of which was issued in December 1992. To be a qualified HFC, a company is typically larger, more sophisticated and very active in making housing loans.

In mid-1990, there were approximately 70 companies licensed under India's Companies Act as HFCs. Of those, approximately 20 had been classified formally as HFCs, and only five of those were qualified to refinance under NHB programs.

Today there are approximately 270 registered HFCs, 72 of which have been classified as HFCs, and 18 of which are qualified for the NHB refinance programs.

The 18 qualified HFCs do not all borrow under NHB programs with the same level of involvement. One of the larger players, LIC Housing Finance Limited, makes very little use of the NHB programs. On the other hand, the rapidly growing Dewan Housing Development Limited has financed a substantial portion of its activities under the NHB programs. Overall, the NHB refinance programs are now approximately Rs. 600 crores per year [Diamond, page 1].

Recent Studies of Related Issues

The winds of change are strong in India's financial services sector. The movement toward liberalization of the financial services industry has prompted several studies of the many issues which face India's financial policy makers.

The Croft Study, August 1990. The author's 1990 study discussed "Options for Licensing, Regulation, Supervision and Closure of Housing Finance Companies in India." This report contained several general recommendations to be considered by the NHB in its role as the regulator and supervisor of the emerging housing finance sector of the economy. The recommendations from that report are summarized below.

Summary of Croft Recommendations

Recommended Changes	Type of Action	Timing
Require one or two years of operating history before an institution becomes NHB-qualified.	G	Imm
Allow HFCs to advertise their NHB-qualified status (with a disclaimer about any NHB guarantee of repayment).	G	Imm
Seek authority to issue both general and specific directions	L	Imm

concerning loan and investment activities for HFCs.

Establish guidelines for investment in non-housing loans for 25% of portfolio.	G	Imm

Summary of Croft Recommendations (continued)

Recommended Changes	Type of Action	Timing
Develop portfolio diversification rules.	D	Int
Establish limits for the amount of refinancing an HFC can have outstanding.	G	Int
Allow HFCs to leverage capital more highly if their loans comply with the most conservative underwriting and documentation standards.	D	L-T
Propose legislation to establish a secondary mortgage market.	L	L-T
Study feasibility of offering better loan refinancing terms on the most conservatively underwritten loans with standard documents.	G	Int
Develop underwriting criteria to use as equity trade-offs (only after Parliament approves legislation allowing rapid foreclosure and sale and after these new provisions have been tested).	D	L-T
Modify reports to the NHB to allow measurement of interest rate risk exposure.	D	Imm
Develop rules for limiting interest rate risk exposure.	D	Int
Seek authority to apply remedies against institutions engaged in unsafe and unsound practices--up to and including conservatorship.	L	Int
Obtain authority to prohibit deposit-taking for unsafe and unsound operations at an HFC.	L	Int
Seek authority for the NHB to:		
■ Encourage mergers of weak with strong institutions.	L	Int
■ Establish receivership at an HFCs insolvency.	L	Int
■ Establish receivership prior to insolvency.	L	L-T
Develop a position on the feasibility of deposit insurance for HFCs and present it to Parliament.	L	Int

Legend: G = Guidelines; D = Directives; L = Legislative; Imm = Immediate (next year); Int = Intermediate (1 to 3 years); L-T = Long-term (3 to 5 years)

The NHB has had little opportunity to implement these recommendations. Other pressing issues appear to have diverted attention and resources from making the type of progress in regulation and supervision which was envisioned almost three years ago.

Some progress have been made, however, especially in the first three recommendations listed above. The responsibility for classifying an institution as an RFC has now been transferred completely from the RBI to the NHB. When an institutions registration notice is received, the NHB will write the company to determine if housing finance is its primary business. If it is, NHB inspectors will visit it during the first year to complete the classification process. (Inspectors may, however, visit earlier if the NHB receives a complaint about the company's practices.) If an inspe n or annual report from a company shows that less than 50% of its business is in housing finance, oversight responsibility will be transferred to the RBI.

Institutions have now been allowed to advertise their association with the NHB, as previously recommended. NHB officials have discussed and considered legislative actions to authorize explicit regulation of the asset side of each HFC's balances sheet, i.e., limitations and regulations regarding how depositor funds can be invested, but no legislation has been put forward.

Most of the other recommendations are not currently being pursued and await installation of new leadership at the NHB and/or commitment of the necessary resources to carry out such recommendations.

The Narasimham Committee on the Financial System, November 1991. This Committee addressed several reforms in the financial sectors "needed to improve the financial health of banks and the development financial institutions (DFIs) to make them viable and efficient so as to better serve the emerging needs of the real economy in which the spirit of competitive efficiency is being ignited" [Narasimham, page 4]. To that end, the Committee developed 48 recommendations. The recommendations having greatest relevance to regulatory and supervisory responsibilities at financial institutions, in general, and HFCs in particular, are summarized below.

Summary of Selected Narasimham Recommendations

- Banks and financial institutions to reach minimum of 4% capital adequacy ratio based on "risk-weighted" assets in 1993 and to achieve Basle International Standards in 1996.

- Adoption of uniform accounting standards for the recognition of income and establishing loss reserves.

- Institution of a uniform asset classification system (into categories of: Substandard, Doubtful and Loss) with defined loss provision percentages assigned to each category. A four-year phase-in period should be used.

- Establishment of special tribunals to speed the process of recovery on defaulted loans.

- Increased emphasis on financial institutions' internal audit function. Focus supervisory attention on inspections which assure that internal audit departments are functioning properly and have appropriate policies and procedures in place.

- The supervisory function in the Reserve Bank should be set out in a quasi-autonomous organization (under the RBI) separated from the central banking functions of the RBI.

- Extend supervisory oversight to new financial institutions which are appearing on India's financial scene: merchant banks, mutual funds, leasing companies, venture capital companies and factoring companies. Guidelines should be established for capital adequacy, debt equity ratios, income recognition, loss reserves, disclosure and asset valuations.

- Phase out directed credit programs.

These recommendations are, for the most part, sound and consistent with overall liberalized directions in which the economy is heading. Some of the time frames may be overly optimistic, however.

The last two recommendations of the Narasimham Committee generated two additional studies relevant to the current study's issues. The first was the A. C. Shah Working Group's report on regulatory issues associated with Non-Banking Financial Companies (NBFCs). Since HFCs are NBFCs, this recommendation has a significant potential impact on HFCs.

The second was a report by Dr. Douglas Diamond addressing options faced by the NHB if the Narasimham recommendations concerning phasing out directed credits is adopted. Since the NHB's refinance program is a clear example of directed credit, it is very important for the NHB to consider its options in a free-market environment for deposits and loans. Both the Shah and Diamond studies are discussed below.

<u>The A. C. Shah Working Group on Finance Companies, September 1992.</u> The Narasimham committee examined a broad range of issues in the Indian financial services field. It recommended that the Non-Banking Finance Companies be brought into a regulatory structure. In order to investigate this Narasimham recommendation further, the RBI constituted a Working Group under the chairmanship of Mr. A. C. Shah.

The Working Group studied several important issues surrounding the regulation of NBFCs. These included:

- Appropriate agency for regulation of NBFCs

- Licensing, registration and eligibility criteria
- Prudent norms of operation
- Reporting requirements
- Accounting systems
- Inspection needs
- Norms for acceptance of deposits
- Deposit insurance
- Credit rating systems
- Public awareness campaigns

The recommendations of the Shah Working Group were published in September 1992. The recommendations were "based on the need for putting in place a cohesive regulatory system which will be uniform in its application to all categories of NBFCs" [A. C. Shah Working Group Report, page 7]. The recommendations most clearly related to HFCs are summarized below.

<u>Summary of Shah Working Group Recommendations</u>

- Registration and regulation of all NBFCs should be the responsibility of a newly established High Powered Board reporting to the Reserve Bank.

- Begin regulation of the asset side of NBFCs' [HFCs'] balance sheets.

  - Establish capital adequacy standards based on risk-weighted assets in the same fashion as commercial banks.

  - Develop the risk-weighting factors in conjunction with trade group and accounting industry experts by March 31, 1994.

  - Introduce a capital requirement of 8% of risk-weighted assets by March 31, 1995.

  - The debt to equity ratio should remain at 15 to 1 until the capital adequacy framework suggested above takes effect.

- Institute several measurable regulatory standards for NBFCs:

  - Minimum liquidity should be 10 of total deposit liabilities.

  - Loans to one borrower, or to a related group of borrowers, should be restricted to 15% and 25% of Net Owned Funds (NOF), respectively.

  - NBFCs should transfer 20% of annual profits to reserves until the reserve level equals paid in capital.

  - Prohibitions on investments in certain undesirable assets should be established by regulatory authorities.

- Eliminate the distinction between "exempted" and "regulated" deposits for the purposes of computing gearing ratios.

- Development of norms for income recognition, disclosure or transparency of accounts, and provision for bad and doubtful debts should be undertaken by a Standing Committee made up of representatives from the new High Powered Board, the Institute of Chartered Accountants, Self-Regulatory Organizations and the NBFCs.

- Independent auditors should be assigned a greater role in the regulatory process. Each regulated institution should be required to submit periodic reports to its regulator with a "satisfaction certificate" from its auditors certifying that it complies with certain prudential norms.

The Shah Working Group's overall approach is both thorough and sound. The report and recommendations demonstrate a great deal of thought and an understanding of the financial institution regulatory process.

However, two of the recommendations cited above deserve comment. The first is relatively minor. The recommendation that independent auditors be assigned greater responsibilities in the regulatory process needs to be supplemented with certain incentive for the auditors. By taking on a function in which the auditors certify that institutions are meeting certain prudential norms, they also take on potential liability. Institution managers may, from time to time, be able to hide financial problems even from their auditors. Alternatively, there may be times when auditing firm personnel fail to do their jobs completely. Thus it will be natural for audit firms to resist taking on significant liability for incorrect certifications, unless they are provided an incentive.

The regulatory authority should develop a program in which it can bar and prohibit an audit firm from the performance of audits at regulated NBFCs should the audit firm fail to perform its certification function adequately. The regulator will also need to specify very carefully the type of certifications required and define the meaning of certifications with care to assure that auditing firms do not qualify their opinions so thoroughly as to make any certification meaningless.

The second comment about the Shah Working Group recommendations concerns the formation of the High Powered Board. HFCs already have an assigned regulator--the NHB. The role of the recommended new Board must be defined relative to the NHB's role. This is an extremely important issue and is addressed in a separate section of this report titled "Focus on the High Powered Board."

<u>Diamond's Report on the NHB's Refinance Programs in a Deregulating Financial Sector, March 1993.</u> One of the most profound recommendations from the Narasimham Committee, as these

recommendations affect the housing finance industry, is the one that deals with phasing out the directed credit programs. One of the central functions of the NHB is squarely centered on the notion that housing finance is to receive special consideration in the allocation of India's scarce financial resources.

Douglas B. Diamond, Jr. addressed the financing options facing the NHB as it enters this period of uncertain sources of directed credits. He prefaced his recommendations by asserting three "propositions":

1. The supply of advantaged funds will shrink relative to demands and could even disappear entirely.

2. The NHB can develop some alternative sources of market rate funds.

3. Dramatic changes in eligibility for NHB funds are not desirable since certain HFCs are highly dependent upon the NHB's refinance window.

Given these three propositions, Diamond recommended that the NHB initiate a three-stage program in response to the changing financial environment. His recommendations are summarized below.

<u>Summary of Diamond Recommendations</u>

- Immediately truncate some portions of the current NHB refinance programs.

    - Reduce HUDCOs access to refinance for a period.
    - Defer any further sanctions under the Land Development Shelter Projects.
    - Discontinue refinance of all loans over Rs. 100,000.

- Begin the process of evolving the refinance window away from subsidized housing for moderate income households toward financing market-rate loans for institution liquidity and, perhaps, financing for certain lenders with poor access to financial resources.

- Take full advantage of USAID assistance to complete a review of the option the NHB has to facilitate the financing of housing in an environment with no access to directed credit.

Diamond also noted that the NHB can plan many non-financing roles in the Indian economy, even in the absence of below-market refinance programs. He mentioned such roles as: lender of last resort, policy advocate for HFCs in Delhi, provider of training for HFC professionals, promoter of a trade association, facilitator of services to under-served, and increased involvement in regulation and supervision.

The options and recommendations all appear reasonable and clearly rational. Two points should be made, however:

1. NHB executives should avoid the temptation to try all of these options at once. In fact, selection and pursuit of a limited number of options on which all management and NHB planning and political efforts can be focused is a critical element for success in redefining the role of the NHB in an economy phasing out directed credit.
2. The NHB should select its strategic option and begin mobilizing its efforts and resources to redefine its mission at the earliest possible date.

While the winds of change are blowing and the pace of change is rapid, those organizations which set their sights on a goal early and trim their sails best will be the clear leaders in the new environment.

Overall Conclusions

From the studies cited above, we can draw a number of overall conclusions. Some of the most important from the standpoint of the NHB are as follows:

- There will be less directed/subsidized credit available to HFCs, in general, and through the NHB, in particular, in the liberalized economy.
- HFCs and the NHB will need to compete for funds in the open market. They will need to develop market-based deposit gathering and lending schemes.
- Slower growth of the HFC industry will likely ensue until a new equilibrium is established in the financial markets. (This period can be used by the NHB to restructure and strengthen its regulatory and supervisory position in the industry.)
- The impact of the market changes and the NHB's role as a source of directed credit will not be uniformly felt in the HFC industry.
- There is a blurring of the boundaries between the different types of financial institutions co-existing in the Indian economy.
- More uniform regulation and supervision of these evolving institutions is justified and needed.
- Stronger monitoring and supervision is required.
- There should be an increased focus on the importance of safe and sound operations of financial institutions and how they deploy the deposits they have garnered from savers.

- The current situation is very fluid regarding which oversight groups will be doing what. This provides both threats and opportunities.

Focus on the "High Powered Board" or the Board of Supervisory Control (BSC)

One of the many recommendations of the Shah Working Group is that a special High Powered Board be established to regulate and supervise the activities of Non-Banking Financial Institutions. Since HFCs fit into this category, there is a need to clarify the role of the NHB in the regulation of this one class of NBFCs.

The role of the High Powered Board, which is now being called "the Board of Supervisory Control," or BSC, is still being defined by RBI. This means the official future role of the NHB regarding supervision is not yet defined and currently lies in hands outside the NHB.

This situation will likely lead to one of several possible outcomes.

- Most likely: Both regulation and supervision will stay with the NHB. This outcome may be contingent upon the NHB's showing that it is a more powerful or aggressive agent for supervision of HFCs than it has been in the past.

- Moderately likely: Regulation and enforcement activities reside at the NHB with the supervisory role for monitoring and inspecting HFCs transferred to the BSC. That is, the making and enforcing of regulations may be the responsibility of the NHB. However, the monitoring, inspection and reporting on compliance with those regulations could be transferred to the BSC. The efficiencies of scale associated with a large BSC inspection staff, computer systems and support personnel may lead the RBI to opt for this division of responsibilities between the NHB and BSC.

- Least likely, but still a threat: Regulation and supervision are both transferred out of the NHB. Regulation could go to the RBI, and supervision could be sent to the BSC. Under this option, the NHB would lose both its supervisory function and its regulatory function.

  Those who might argue for this arrangement would cite the following as support for their position.

  - The agency has no strong, full-time leader or advocate at this time.

  - Its reputation has been damaged by involvement of a few employees in the stock market scam.

  - Some observers view the NHB as "drifting."

  - Its constituents realize that the reduction of directed credit programs will lessen the NHB's ability to be a credit facility to HFCs, and some doubt its ability to adjust to the new challenges under the current circumstances.

- The NHB is viewed in its supervisory role as overwhelmed and seriously challenged in dealing with difficult supervisory cases presented by HFCs (such as the Topiban (sp) case).

In an extreme scenario, the perceptions cited above, left uncorrected, could lead to undesirable outcomes. These could include the NHB's seriously diminished ability to perform a meaningful regulatory and supervisory function or legislation which transfers away the NHB's regulatory and supervisory authority. Legislative bodies sometimes amend legislation they are given to transfer power from organizations viewed as lacking leadership or advocates. As a creature of legislation, the NHB could be strengthened, weakened, or dismantled in the upcoming legislative review growing out of the Shah report.

The current challenge and opportunity facing the NHB is to assure that this volatile situation results in the most favorable outcome for the NHB and the housing finance industry it serves. That is, actions are needed to increase the probability that the NHB's regulatory and supervisory responsibilities are enhanced under the next round of legislative changes.

Section III: Recommended Actions to Strengthen the NHB

The actions the NHB should consider taking can be classified into the following four areas: Organization of the NHB, Staffing the Regulatory and Supervisory Functions of the NHB, Policies and Procedures at the NHB, and Monitoring of HFCs. Each of these areas is discussed below.

Organization of the NHB

Strong leadership in the top two positions at the NHB is essential. **All recommendations in this report are meaningless without the presence of knowledgeable, respected and action-oriented people filling the positions of Chairman and Managing Director.** Filling those two slots with strong leaders is the single most important step which can be taken to preserve and strengthen the regulatory and supervisory functions (as well as others) at the NHB.

In addition, there should be a separation of the promotional/technical, the refinancing and the regulatory/supervisory functions at the NHB. Balancing the promotional and the regulatory/supervisory roles of an institution like the NHB is a delicate job under the best of circumstances. But the NHB is not currently operating in the best of circumstances. In the earlier phases of the NHB's development, its greater emphasis on promotional activities was appropriate, and it has performed that function rather well.

However, the new winds are blowing rather briskly, as indicated in the previously cited reports calling for more uniform and stronger regulation and supervision of NBFCs.

Regulation and supervision of all classified HFCs should be assigned to a separate organizational unit. At a minimum, this should be a separate division within the NHB with clearly established lines of responsibility for establishment of Directions to HFCs and oversight of compliance with those Directions.

Alternatively, establishing this function in an NHB subsidiary (an idea suggested by Ferguson & Company) has several distinct advantages over having a separate division within the NHB.

Regardless of the form of organization selected, two principles should be used:

1. There must be clear assignment of both authority and responsibility to the various functional units within the NHB.
2. There must be a clear separation and assignment of industry promotional activities to a group distinct from the regulatory/supervisory group.

Within the new organizational structure, regulatory and supervisory functions should be kept distinct and separate from one another. Establishment of refinancing Guidelines should remain within the NHB's refinancing group. Such Guidelines should concentrate on credit worthiness issues.

Establishment of Directions should be a responsibility of the regulatory group and should continue to apply to all classified HFCs. Such Directions should focus on issues which make institutions eligible to take deposits from the public and on general safety and soundness questions.

Supervision and compliance with both Directions and Guidelines should be assigned to the supervisory function within (or in the subsidiary to) the NHB. Such an assignment for the oversight of compliance with Guidelines (established by the refinance group) will provide a check and balance mechanism which is appropriate at the NHB.

Staffing Recommendations

Currently, the regulatory and supervisory functions at the NHB are seriously short of staff. The supervisory staff consists of three people. One part-time officer doubles as the NHB accountant and data input clerk. In addition, there are only two inspectors (formerly there were four), and they have commercial banking experience, not HFC-related backgrounds.

The regulatory role has the appearance of being scattered among several groups within the NHB. That is, more than one group deals with "policy" within the organization. But policy in an organization like NHB often translates or evolves into regulatory requirements. Thus there may be a need to establish tighter controls over policy positions taken by NHB personnel so it is clear to the regulated institutions what is, in fact, regulation. Ferguson & Co. seems to have a good grasp of this issue and is moving in directions consistent with the author's sentiments.

The NHB should consider adding significantly to its staffing in the regulatory and supervisory areas, regardless of where they are eventually located. However, the staff needs in supervision far exceed those in regulation.

The staffing requirements in the regulatory area are not heavy. Only periodic reviews of Directions are required. But a process to review supervisory/inspection findings is needed, and a process to obtain formal input from the HFC industry on regulatory issues should be re-initiated.

The entire regulatory function could be handled by one knowledgeable person to perform the administrative functions. The same person could act as Chair of a three-person regulatory board which revises the Directions as needed. Other candidate members of this three-person board would be the head of the supervisory function and the NHB's Managing Director.

The NHB's supervisory function, however, needs a significant infusion of personnel. Approximately 16 people are needed in the function that now has three. The calculations and estimates used in obtaining the figures discussed below are based on estimates of times used in examination and supervision of U.S. thrifts which are similar in complexity to HFCs.

- There should be approximately nine inspectors in this function. These people are needed to perform annual inspections for classified HFCs, special inspections of problem HFCs and initial inspections of new HFCs.
- There should be approximately five supervisory agents. The agents are people who review inspection reports, review periodic reports submitted by regulated institutions, correspond with HFC managers and boards of directors, hold meetings with managements of institutions and serve as agents for enforcing compliance with Directions and safe and sound practices. These people also make recommendations for changes in the Directions to the regulatory board.
- There is a need for one "policy" person within this function to serve as a resource to the HFC industry and the inspectors and supervisory agents. This person should be an expert in the interpretation and application of the Directions and supply clarification and "position statements" to NHB personnel and the industry regarding these interpretations.
- One overall manager is required to supervise this function and handle administrative chores such as personnel and training matters.

Policies and Procedures Recommendations

The Shah Working Group recommended that supervisory authorities for NBFCs begin giving more attention to oversight of the asset side of balance sheets. This recommendation is applicable to the NHB since HFCs qualify as NBFCs.

However, there is an issue of the NHB's current and future authority (and perhaps even its desire) to take actions under Directions or Guidelines regarding the investment of depositors' funds. There seem to be several views on this subject.

HFCs' Views. Managers interviewed at HFCs for input to this report were cautious and respectful of their regulator, as might be expected. However, there was an overall sense that the NHB could benefit from more direct, explicit authority to regulate HFC investment policies, i.e., how they invest depositor funds. Most interviewed HFC managers believe that the NHB's power in this area may be somewhat vague but that there is more authority than is currently being exercised.

These managers quote the authority provided in Chapter IV of the National Housing Bank Act of 1987, which gives the NHB the authority to issue "guidelines to the housing finance institutions to ensure their growth on sound lines." This language sounds like the language cited by many financial institution regulators in other countries to justify their regulation of investment policies of their charges. That is, regulators traditionally have authority to demand that financial institutions operate in "a safe and sound manner."

The HFCs granting interviews for this study realize that viewing the NHB's regulatory authority as extending to asset investments expands the regulators' potential role in oversight of their operations. However, they seem to accept that additional potential oversight in return for the possibility that such oversight will curtail the irresponsible actions of their HFC competitors.

Restricting other HFCs' irresponsible investment activities is more than just a competitive concern, however. To the extent that HFCs in general are viewed by the public as responsible members of the financial institutions community, this boosts the public confidence in all HFCs.

The NHB's View. The NHB, however, appears to have taken a rather narrow view of its ability to regulate the asset side of an HFC's balance sheet. The regulators interviewed for this report expressed a belief that they are limited primarily to oversight of deposit taking activities of HFCs. They have taken the position that their only powers over investment issues can be issued in Guidelines, which apply to those institutions involved in the NHB refinance programs. Such Guidelines are issued in large measure with a view of protecting the NHB's position as a lender. NHB financial and supervisory personnel do not view themselves as having power to issue Directions regarding asset issues to all NHB-regulated HFCs.

These officials cite both tradition and the legislative history of the National Housing Bank Act (1987) for their views. In fact, it is alleged that during the drafting of the Act, a stronger regulatory and supervisory role was considered for the NHB and was rejected.

Officials at the Reserve Bank of India confirm the notion that the NHB has vague powers to regulate investment functions, at best, and perhaps has no power, at worst. New legislation has been introduced through the appropriate lines of authority to obtain asset regulatory powers. However, there appears to be a current reluctance to invoke asset regulatory actions without a clear legislative mandate.

In more favorable circumstances, regulatory authorities might take the initiative and assert themselves more firmly, as the interviewed HFCs suggested they might. That is, the NHB could take the position that its role is to protect depositors' from loss of their savings. Such a function would involve assuring that depositors' funds are safely invested and would justify issuing Directions covering safe and sound investment policies.

Such assertions are not likely to be made under the current circumstances. Plunging into uncharted regulatory waters would more likely succeed if:

1. The authority of the regulatory were not quite so vague.
2. There were not the uncertainty as to the potential new role of the Board of Supervisory Control.
3. The NHB had a highly respected, full-time leader in place.

Recommended approach. Three critical efforts should be undertaken in order to set the stage for the NHB's expanded regulation and supervision of HFC asset investment policies. Each of these initiatives, of course, has advantages beyond just expansion of asset oversight.

1. The NHB, its board of directors and others with an interest in the NHB's viability and strength should press for an early resolution to the top management void at the NHB.
2. All concerned parties should continue to press for passage of legislation granting the NHB clear authority to regulate asset investment policies.
3. The NHB should expand its investment monitoring function with the installation of a new Supervisory MIS System. (See specific monitoring recommendations below.)

Additional policy changes should be made with respect to the role of NHB inspectors. Current policies regarding inspectors tend to focus their activities on the verification-of-reports functions. That is, inspectors may spend significant time making sure that the information reported to the NHB periodically was correct in terms of definitions of the items reported and computations made by management. This "are-the-numbers-right?" function is similar to that of an auditor. Auditors typically determine whether an institution's books and records accurately reflect its operations--within the constraints of accepted accounting rules.

However, the role of inspectors should be redefined and expanded. This redefinition should focus in two areas.

The first area involves giving more attention to safety and soundness. This will require that inspectors do more than verify the validity of information reported. Inspections should be comparing that information with standards for the prudent operation of HFCs. That is, they should be looking at asset concentrations and quality. They should be inspecting an institution's policies and procedures to determine their applicability to the institution's chosen strategy. In short, inspections should focus on the assessment of overall safety and soundness of the institutions visited.

Inspectors often bifurcate their approach to safety and soundness examinations. First, they determine if an institution has prudent policies and procedures. Second, they examine files and documents to determine if the institution is following its own policies and procedures.

The Narasimham Commission recommended that more responsibility for oversight be placed in the hands of internal audit departments. These audit departments typically address the issue of whether an institution is following its own policies and procedures.

Thus, for those institutions with internal audit departments, NHB inspectors could examine the institutions' policies and procedures along prudent norms. They could then leverage their efforts by next looking at the policies, procedures and reports of the internal audit departments to determine their capability of keeping boards of directors adequately informed of compliance with the institutions' own policies and procedures.

The second area in which inspectors can direct their efforts is that of providing technical consultation and advice to the HFCs they inspect. That is, they can address improved efficiency as well as safe and sound operation.

One of the advantages financial institution inspectors have is that they see the operations of many institutions. This perspective gives them the ability to advise some of the less sophisticated institutions in how to operate more safely and effectively. However, care must be taken when inspectors provide advice. It must always be clear to institution management that <u>they</u> have the responsibility for the operation of their institutions. When they implement recommendations or ideas given to them by inspectors, they are still responsible for the results.

If inspectors are to expand their responsibilities to more fully involve safety and soundness issues and to provide more technical advice to HFC managers, they will need additional training and experience. While former RBI inspectors have familiarity with banking issues, they may need additional training to acquaint them with the operations of HFCs. In addition, they may need to spend time in the actual operations of these institutions, performing the work they are called on to evaluate and report.

There is a final major policy change that would improve the supervision of HFCs by the NHB. Supervisory agents should be empowered to act in cases where noncompliance with Guidelines, Directions and prudent practice is found. Agents of the NHB currently have power to issue "show cause" orders which are threats to withdraw an institution's ability to gather deposits.

However, the 1990 Croft report recommended that a number of intermediate enforcement actions be adopted. The actions discussed included:

- Issuance of reprimands. Cumulative numbers of reprimands could lead to change in an institution's management or removal of individuals from specific areas of responsibility.
- Entering into Supervisory Agreements between the NHB and an institution whereby the HFC agrees to make certain changes in its practices in order to forestall more serious supervisory action. Future failure to comply with the Agreement, verified by NHB inspectors, then serves as grounds for accelerated imposition of more serious enforcement actions.
- Formal cease and desist orders.
- Removal of officers and directors and prohibition from industry participation.
- Conservatorships designed to preserve an HFC's assets for maximum recovery of asset values to pay off depositors.
- Receivership at, or prior to, insolvency.

The need for these enforcement tools still exists and should be sought in connection with legislative changes which give the NHB explicit authority to regulate investments/assets of HFCs.

Monitoring Recommendations: Supervisory Management Information Systems

One of the most clearly recognized roles for supervisory personnel in all financial settings is that of a monitoring agent. The underlying purpose for requiring regulated institutions to submit periodic reports on their condition is to give regulators and supervisory personnel information about the condition of the institution and its compliance with regulations.

The second assignment to Abt Associate, Inc. as part of the current study asked for recommendations on immediate, short-run and long-term information reporting needs for the NHB's regulation and supervision of HFCs.

The following three criteria were used in determining what items should be included in a supervisory management information system:

- Relatively few measures should be monitored. This should focus the attention of both management and regulators on the critical few items which need to be tracked. When these few critical measures indicate a problem, the supervisory staff can request additional information. The NHB supervisory function is already short of staff and should not be overwhelmed with mind-numbing schedules of information whose meaning is difficult to interpret.

- The definitions of the items to be monitored should be clear. Alternatively, they should be clarified prior to their introduction to the supervisory MIS system. The information monitored should also be clear as to its importance for supervisory oversight. Such clarity will mitigate the resistance of the supervised institutions to supplying reports.

- To the extent possible, the system should use information currently being generated by the supervised HFCs. The best immediate monitoring information is that which is already being submitted to the NHB.

<u>General Approach</u>. Overall, this report recommends more frequent collection of information for the Supervisory MIS. Currently, approved HFCs submit information half-yearly. Classified institutions submit information only annually. All classified institutions should be required to submit information on a quarterly basis. This change should be implemented as quickly as possible.

HFCs have a nearly unquenchable demand for their product, home and related loans. Thus they can grow extremely rapidly, if funds to lend are available. Problems can arise swiftly at rapidly growing institutions. Early on, reports should contain information that management collects on a regular basis to rule their institutions.

More frequent reporting will be facilitated by the recent introduction of a system wherein supervised HFCs are submitting their reports via computer disk. By the time the outline and detailed design of the Supervisory MIS for the NHB is in place, the supervisory staff should have some experience with the submission or periodic reports using this new methodology. In addition, computer storage and analysis of the collected information will facilitate the monitoring of the ratios and information outlined below.

A "Flags and Triggers" System. The overall foundation of a supervisory management information system should consist of a set of Flags and Triggers to be monitored by the supervisory staff of the NHB. That is, a relatively small number of measures should be calculated on a regular basis. When one or more of those measures is "out of line" at a particular HFC, the supervisory staff member assigned to monitoring that institution (hereinafter called the "supervisory agent") will see on his/her MIS that a "Red Flag" exists in the HFC's report. The presence of a Red Flag indicates that the HFC with this condition bears close monitoring of the factor showing the Red Flag.

When a measure being monitored is "significantly out of line," the MIS should note that a "Trigger" has been pulled (or actuated). Triggers may involve a performance measure which deviates markedly from past performance or from an established norm. However, it may also be pulled when a condition or performance factor has been showing a Red Flag for an extended period of time.

For instance, a rise of 50% in an institution's loan default rate from its normal levels might be considered as a Red Flag. The maintenance of that new, higher level for a period of three consecutive quarters might be considered a Trigger event. Alternatively, the doubling of the institution's default rate might be considered a Trigger event.

The existence of a Red Flag waving in the MIS of an HFC indicates that the supervisory agent should monitor the condition of that company on a close basis. The agent should carefully follow the subsequent reports of the HFCs with Red Flags and set as a first priority the review of those flagged conditions as soon as new reports are received each quarter.

The existence of a Trigger in an HFC's supervisory MIS report indicates that supervisory action is required. The triggered event may involve merely calling or writing the HFC to obtain an explanation of the reason for the reported figure(s). The explanation may be as simple as a data entry error or some unusual transaction which will not be repeated in the future. However, the explanation may indicate serious trouble is brewing; the supervisory agent may require an inspection to verify the condition; or he/she may require that the HFC management submit to the NHB a plan for correcting the condition which caused the Trigger to show up.

In any event, the supervisory agent should follow up with the HFC having a Trigger present in its MIS report until he/she is satisfied that the HFC management has the situation under remedial control. Also, it may be possible that the agent determines the presence of this Trigger at a particular institution is not a cause for concern. It may be that a unique feature of an institution allows it to operate in a safe and sound manner with the presence of Triggers which would indicate problems at other institutions.

Recommended Flags and Triggers. In what follows, factors to be monitored by NHB supervisory agents are identified. In addition, recommended levels for defining the existence of Red Flags and Triggers are given. In many cases reliable data are not available for analysis at present to help determine the appropriate Red Flag and Trigger levels. In those cases, the suggested levels to cause a Red Flag to wave or a Trigger to be pulled are only tentative and are noted as such. Also, some measures are indicated as to be determined (TBD).

NHB supervisory personnel will want to examine the sensitivity of the chosen measure to determine the appropriate levels at which Red Flag and Trigger hurdles should be set. These should be reviewed with an advisory group comprised of representatives from chartered public accounting firms and from the HFC industry. These hurdle values should also be reviewed on an annual basis to determine if they should be adjusted on the basis of changing conditions in the HFC industry.

Suggested measures in each of five risk categories (credit, interest rate, liquidity, management and capital adequacy risks) are presented in the following sections of this report. They are summarized in tabular form at the end of this report.

Credit Risk Measures. There are several ways to measure an institution's credit risk. The most common method is to track delinquent loans. However, this measure is usually a lagging indicator of problems. That is, by the time delinquency rates rise, the problem of poor credits in the portfolio has usually been present for a long time.

Some of the measures proposed in this report are designed to identify problem credits at an early stage.

First, there is an indication of the amount of credit risk being taken into a portfolio at the time loans are underwritten. A measure of that risk is a portfolio's loan-to-cost ratio. Every study of indicators which predict the likelihood of a loan's eventual default has shown that the loan-to-cost ratio is the dominant predictive factor.

This makes economic sense. A borrower which has been able to save a large down payment on a home has usually demonstrated the discipline and/or ability to make the periodic additions to savings, which are similar to mortgage loan payments. In addition, a borrower with a significant amount of his/her own funds tied up in the equity of a property will work harder to keep a loan current than will one which has little or no equity at risk.

Therefore, an indicator of credit risk being added to an HFC's books is the average loan-to-cost ratio of loans sanctioned during the past quarter. It is recommended that when this ratio rises above 60% for the past quarter, this be called a Red Flag condition. A Trigger for this measure would be a ratio of 70% or higher or a ratio above 60% for three or more consecutive quarters. The tracking and monitoring of loan-to-cost ratios should begin immediately.

A second measure of impending credit risk involves the types of loans an institution makes. Traditionally, land acquisition, development and builder loans have a higher level of risk than loans on completed and occupied properties. An institution which includes a high percentage of such loans in its portfolio is taking on greater credit risk than one which has a low level of such lending.

It is recommended that the percentage of sanctioned loans in these categories be tracked each quarter. Tentatively, a level of these higher-risk loans in excess of 25% of the value of sanctioned loans in any quarter should be a Red Flag. A one-quarter rate in excess of 40% should be a clear Trigger. Alternatively, two consecutive quarters with values of land acquisition, development and builder loans over 25% should also be considered a Trigger. This type monitoring should begin in the intermediate term.

A third credit risk measure is the traditional measure of late payments. While such measures do not track credit risk as it goes into a portfolio, they sometimes measure how credit risk is being managed. That is, some institutions may take on loans that most organizations would find risky. Some institutions, however, are more skilled at underwriting or servicing these types of loans and can therefore achieve a lower-than-expected delinquency ratio. There are also cases where institutions can take on loans that are traditionally conservative, but through changes in economic factors or poor loan servicing, such loans may perform poorly or become seriously delinquent.

Many indicators which track such delinquencies are available. In many Western economies, financial institutions begin to worry about late payments once they are 60 days past due. Managers interviewed for this study report that Indian standards allow for slow collection mechanisms and recordation. Therefore, it is recommended that institutions report delinquencies in the 90- to 180-day range and also those that exceed 180 days. Tentatively, any institutions with residential loan delinquencies in the 90- to 180-day range over 1.5% should have a Red Flag. When this measure exceeds 2.5%, that should be a Trigger event.

Exceeding .8% of the portfolio in the 180 + days delinquent range should be considered a Red Flag. More than 1% in this category should be considered a Trigger.

An alternative method for measuring timeliness of loan payments is to track expected monthly installments (EMIs). If an institution receives all funds due it each month, its EMI is 100%. An alternative pair of targets for this measure of timely payments would be: under 97% should be considered as a Red Flag; under 94% should be a Trigger. Both of these targets should be considered tentative pending examination by the regulator/accountant/lender advisory review group recommended earlier. This type of monitoring should be possible beginning almost immediately.

The three previous measures of credit risk are relatively clear-cut. A fourth measure of credit risk should be considered; however, it is more difficult to measure. This credit risk involves those problems associated with institutions that make rapid changes in the "nature" of their business. That is, institutions that make radical shifts in the geographic concentration of their lending or in the types of loans they sanction are exposed to greater risks than those that make subtle and carefully phased changes. At a very minimum, major shifts away from any particular geographical area or type of lending may signal a shift in underwriting standards, business focus or philosophy that warrants supervisory attention.

At times institutions launch new initiatives or new lending programs without installing the necessary systems and infrastructure to support a new type of business. (It may be argued that this type of risk is better called a "Management Risk," but it will be categorized as a Credit Risk for purposes of this report.) At other times, managers of institutions that have had past problems or that are headed for problems try to recoup losses by making rapid and, at times, ill-planned shifts in the nature of their business. Major shifts in business are not necessarily risky, but such shifts should alert supervisory personnel to assure that appropriate planning and implementation of such changes have been carried out.

To measure shifts in institutions' "nature" of business requires that data be collected on the current lines of business in which they are engaged. Thus this monitoring measure must be classified as one to be implemented over a long-term time frame. The process of establishing baseline measures should proceed as follows:

1. Establish the two or three categories which should be tracked to indicate the type of business conducted by HFCs. These may include:
   a. Geographical regions such as branch offices or territories.

   b. Loan types such as owner-occupied residences, land acquisition, development or builder.
   c. Loan size groupings.

2. Break each category into logical groupings to which sanctioned loans can be assigned, i.e., office/territory of origination; loan types; or loan sizes.
3. Develop an annual moving average (two periods if semi-annual reports are used and four periods if quarterly reports are used).
4. Compute the percentage change of loans sanctioned in each of the classified groupings.
   a. Consider a change in any grouping in excess of 25% from the annual moving average to be a Red Flag condition.
   b. Trigger conditions are those where changes exceed 50% of the annual moving average.

The following example may illustrate how this type of system should work. Let us assume that NHB supervisory agents determine that they wish to track the percentage of loans an institution makes in each of the following categories: residential owner-occupied, land development loans, second mortgages and builder loans. Further assume that an institution's four-quarter moving average distributions in each of these categories and the current quarter's distribution are as presented below:

Category	Moving Average	Last Quarter
Residential Owner-Occupied	60%	55%
Land Development	15%	20%
Second Mortgages	15%	11%
Builder Loans	10%	14%

The current quarter's figures for this institution show Red Flags in the Land Development and Builder Loan categories since those two figures have changed 33% and 40%, respectively. (The 25% Red Flag level and the 50% Trigger level are suggested, but other figures could be used, depending on the sensitivity supervisors desire and experience with the seasonal changes found in the chosen categories.)

Interest Rate Risk Measures. Interest rate risk is the potential for loss associated with nonparallel movements of interest rates and repricing schedules between interest-earning assets and interest-bearing liabilities. This risk can be measured using a number of different approaches. The two most widely discussed and reported are gap analysis and duration analysis. Gap analysis is relatively simple to perform, but duration analysis provides more information and a better theoretical justification. Since duration analysis requires significant computation and a relatively high level of financial sophistication to understand, gap analysis is the recommended approach for measuring interest rate risk at HFCs.

Gap analysis measures the monetary value difference of assets and liabilities with similar remaining term to repricing and is usually expressed as a percentage of total assets. It involves selecting various time intervals (or buckets) and determining the value of assets which reprice during that period. The value of liabilities repricing during the same time intervals are also computed. The value difference is the "gap" value for that period.

The traditional measures of interest rate risk exposure are the cumulative percentage gap at one year and at three years. It is recommended that NHB supervisory personnel use these two traditional measures for tracking the level in each HFC's interest rate risk exposure.

It is difficult, however, to determine what levels of cumulative one-year and three-year gaps should be used as the Red Flag and Trigger levels. These values should be determined on the basis of substantial knowledge about how far and how fast HFC costs of funds and portfolio earning levels are likely to move in any period. The author lacks this knowledge and suggests that the appropriate Red Flag and Trigger levels could be established with the help of economists or financial experts more intimately familiar with rate changes in the Indian economy. Development of such information is likely to delay the implementation of gap analysis to at least an intermediate-term implementation.

Liquidity Risk. The third type of risk that concerns supervisory personnel is liquidity risk. This risk deals with an institution's ability to honor depositor requests for withdrawals, to make payment of normal bills and to fund loans to which the HFC is committed. Liquidity risk is a matter of maintaining sufficient liquid funds on hand to meet daily needs.

Thus quarterly reporting of liquidity positions to a regulator has little meaning. HFCs have a daily liquidity requirement, but it would be extremely cumbersome to report and monitor those positions on a daily basis.

The more reasonable approach is to forego periodic reporting requirements similar to those for the other measures of risk. Instead, inspectors should develop procedures to trace the daily liquidity positions of inspected institutions during their periodic visits. Those institutions which are found to be in regular violation of liquidity requirements should be required to correct their procedures to eliminate the violations. But quarterly reporting measures like those used for measuring other risks do not appear appropriate.

The question of where to set the liquidity requirement appears open to change. In the past few years, the requirement has been set at the 10% level. Some discussions have centered on the advisability of using a 5% standard. The prudence of such a standard depends to a large extent on the back-up systems in place to handle liquidity crises. To the extent that an HFC is approved to borrow from the NHB and has its paperwork and other collateral in order to effectuate speedy borrowing, there appears to be little risk in lowering the standard to 5%.

Management Risks. The decisions made by management of a financial institution have the capacity to produce both positive and negative results. The potential for incorrect or harmful management decisions is management risk.

This report will discuss three types of management risks and recommend three ways to measure them. These risks have been identified from areas where managers of U.S. thrift institutions have made mistakes that have lead to detrimental financial results. These three areas cover: interest rate coverage/spread, asset growth and planning.

Any financial intermediary strives to operate with a positive spread between what it pays for the funds it borrows and what it earns on the funds it invests. Prudent and skilled managers borrow at rates as low as possible and invest at higher rates, commensurate with safe investment practices. The difference between the higher investment yield and the lower borrowing yield can be used to pay administrative costs and overhead at the institution and to yield a profit. Skilled managers operate with these interest spreads wide enough and administrative costs low enough that there is sufficient left over to produce a profit.

The adequacy of the difference between interest-earning assets and interest-bearing liabilities can be measured in several ways. Two of the most common are interest "coverage" and interest rate "spread." Interest coverage is the ratio of interest earned to interest paid/credited. That is, a small hypothetical institution which earns Rs. 150 on its invested assets and pays out Rs. 100 on funds borrowed from depositors and all other sources, has a healthy interest coverage ratio of 1.5. The interest coverage ratio is already being reported to the NHB by regulated HFCs. Data already submitted to the NHB over the last three reporting periods indicate a wide variation in the reported figure for interest coverage ratio. The reported figures contain so much variation and obvious errors that it is clear the reporting companies need instructions on how to compute this figure. For instance, one approved company reported a phenomenal ratio of 9.9, while another profitable HFC reported a ratio of less than 1.0. It is only after clear data are obtained that the appropriate Red Flags and Triggers can be determined.

The appropriate level for Red Flags and Triggers should be addressed by the advisory group mentioned earlier. However, it is recommended that this group consider the merits of the following: under 1.2 for the Red Flag level and under 1.1 for the Trigger level. Since this information is already reported, short-term implementation of these Red Flags and Triggers should be possible.

An alternative method of measuring interest coverage is to measure the "spread" or percentage difference between rates being paid on interest-earning assets and interest-bearing liabilities. If an institution is earning a weighted average rate of 15% on its loaned funds and is paying an average of 12.5%, it has an interest spread of 2.5%.

This measure is straightforward and simple to understand. However, it can produce a misleading impression of an institution's operating health. An institution may have a rather high average rate of interest on its invested funds and a low rate of interest on its borrowed money. This would result in a healthy measure of simple spread. But if the institution has a high level of non-earning fixed assets such as office buildings, equipment or repossessed assets, a simple measure of spread computed on the basis of yields on financial assets would produce an overly optimistic measure of management's performance. If a measure of interest spread were to be used by regulatory and supervisory authorities to monitor management risk at HFCs, it would be necessary for them to establish procedures to adjust for potential biases. For instance, it is possible to include an additional measure of performance which compares the level of interest-earning assets to interest-bearing liabilities. It is also possible to set rules for inclusion of fixed assets or non-performing assets at a zero interest yield when computing interest rate spread.

If supervisory authorities chose to measure management risk by using a form of interest spread, they will need to develop these procedures. Then, depending upon the procedures adopted and the asset and liability structure of the typical HFC, the NHB and the advisory group mentioned earlier could set standards for Red Flags and Triggers.

A second measure of management risk which should be monitored involves asset growth. In most businesses growth is viewed as healthy. However, institutions that are charged with the management of others' savings have serious responsibilities to assure that their growth is well-managed and under control.

Growth itself is not risky. Unmanaged growth can produce serious problems. Appropriate policies and procedures need to be adopted to assure that the growth is properly funded, that new funds are prudently invested and that all transactions are clearly documented and recorded.

A rapidly growing financial institution should be inspected more regularly than one that experiences slow growth. Properly trained inspectors can assess the adequacy of systems and procedures management has installed and can review sample transactions to determine if prudent policies and procedures are being followed.

It is recommended that the Red Flag level on asset growth be set at 25% on a quarterly basis. The trigger level should be set at 30% for a single quarter or two consecutive quarters over 25%.

Institutions identified under these targets would be those growing at rates in excess of 100% annually. Such institutions deserve special attention. (It may be necessary to provide exemptions in the monitoring system for new, small institutions which have very high-percentage growth rates in their formative stages.) Monitoring of growth can be implemented in the very short term.

A final measure of management risk centers on business planning. One of the essential measures of management success is the extent to which it can establish a business plan and then implement it.

Business plans can be limited or expansive in their scope. Some business plans are little more than annual budgets. However, the basics of an HFC business plan should include some of the measures of risk that have been discussed in this report. For instance, management should plan the mix of lending it will sanction. It should plan its growth. It should estimate the rates it will receive on its loans (net of delinquencies) and the interest it will be paying on deposits.

All of these estimated performance levels must be balanced and put into an overall projection of bottom-line results. The most difficult part of planning, however, is to develop and carry out the actions that must be performed to achieve the projected results.

Finally, performance must be monitored and compared to the plan. At times, variations may indicate that new actions are required to achieve management's planned level of performance. At other times, it may be necessary to revise the plan.

It is recommended that supervisory personnel at the NHB develop a limited number of measures, beyond those already described, for planned results at the HFCs they monitor. (One clear candidate for inclusion is the HFC's projected quarterly profits.) Each HFC should be required to submit to the NHB this limited set of projected operating results from its business plan. NHB supervisory staff should then monitor quarterly reports from the HFCs using a simple computerized exception reporting system which identifies "large" variances from business plans.

This system should report a Red Flag condition on any tracked measure for which there is a reported variance of plus or minus 25% on a quarterly basis. A Trigger should be reported on any variance in excess of plus or minus 50%, or when two or more consecutive quarters show a specific measure with a variance in a Red Flag condition. The monitoring of these variances will likely take a long term to implement.

Capital adequacy. The final dimension on which supervisory agents should focus is capital adequacy. Capital serves as the ultimate cushion against risk. Significant levels of poor-quality assets, substantial losses from unprotected interest rate movements, or the results of management mistakes can be absorbed by owners' capital. When capital levels at a deposit-taking financial institution are low, however, loss can eat through capital and leave the institution with a capital deficit. Such a condition means that the institution has insufficient resources to pay off its depositors. All of the risk measures discussed to this point in this report are aimed at monitoring the risk position of the institution and its likelihood of incurring losses that will dissipate capital.

Thus it is highly important that supervisory personnel monitor the capital levels of HFCs and assess the adequacy of capital, in general, and each HFC's capital in view of its particular risk profile. That is, an HFC which has virtually all of its assets in residential loans that are performing well may need a lower level of capital than a similarly-sized institution with a significant portion of its portfolio invested in builder loans.

Therefore, a risk-weighted capital requirement should be developed for implementation with all HFCs in the long run. In the longer term, NHB supervisory agents need to be monitoring changes in the overall asset classifications of HFCs. That is, they must be able to track the levels of Substandard loans, those classified as Doubtful, and Losses. This international classification system is likely to be implemented for all NBFCs if the Shah Committee recommendations are adopted. Thus the NHB will need to develop definitions for these classifications along the Shah/Narasimham recommendations and should be prepared, from an MIS point of view, to track the value of loans in each of those classes and to provide weights to those loans in the eventual computation of loss reserves. More immediately, however, NHB supervisory staff should establish Red Flag and Trigger levels for capital.

It is recommended that newer, smaller HFCs have their Flag and Trigger levels set higher than those that are better established and larger. This is due to the fact that newer management is typically untried, and small institutions have a lower margin for error due to their smaller capital bases.

The specific definitions for "small" up to "large" HFCs have been worked out in the past. "Small" has been those HFCs with NOF below 10 crores. "Medium" has been institutions with NOF between 10 and 20 crores. "Large" institutions are those with NOF exceeding 20 crores. However, these definitions should be reviewed and/or worked out with the NHB group providing advice on supervisory matters. The suggested Red Flags and Triggers presented below are all tentative in nature and should be discussed with the advisory group prior to adoption.

The capital adequacy of an institution should be measured by the ratio of its capital to its liabilities. Consistent with the Shah Committee's recommendations, the measure of liabilities should include all deposits and not allow an exemption for inter-corporate deposits. In addition, such a measure circumvents the problem of classifying some deposits as "exempted" and others as "nonexempt." The suggested capital adequacy Red Flag levels, segregated by institution size, are as follows:

Small HFCs	Below 12.5%
Moderately-Sized HFCs	Below 10.0%
Large HFCs	Below 8.3%

The tentative capital adequacy Trigger levels, segregated by the same asset size categories and again expressed in terms of capital as a percentage of total liabilities, are listed below.

Small HFCs	Below 11.0%
Moderately-sized HFCs	Below 8.75%
Large HFCs	Below 7.25%

Summary

The recommended elements of a supervisory monitoring system and the Red Flags and Triggers recommended in this report can be summarized in tabular form.

Flags and Triggers for the Supervisory Management Information System of the NHB

Risk Category	Measure	Flag/Trigger Event
Credit	Loan-to-Cost Ratio of Ind. Loans Sanctioned this Quarter	Flag: Over 60% Trigger: Over 70% or 3 Qtrs over 60%
Credit	Higher-Risk Loans Sanctioned this Qtr. (Begin with Land Acq., Development and Builder Loans.)	Flag: Over 25% (T) Trigger: Over 40% or 2 Qtrs over 25% (T)
Credit	Loan Collection I 90-180 past due.	Flag: Over 1.5% (T) Trigger: Over 2.5% (T)
	Over 180 past due.	Flag: Over .8% (T) Trigger: Over 1% (T)
	OR	
	Loan Collection II EMIs collect for Qtr. per Abt Survey	Flag: Under 97% (T) Trigger: Under 94% (T)
Credit Avg.	Shift in Business.	Flag: Over 25% variance from 4-Q
Avg.	See Explanation in Test of Report.	Trigger: Over 50% variance from 4-Q
Interest Rate	One-Year Cumulative Gap	Flag: Over +/- TBD% Trigger: Over +/- TBD%
Interest Rate	Three-Year Cumulative Gap	Flag: Over +/- TBD% Trigger: Over +/- TBD%
Liquidity	No Measure	Handle during Inspection
Management	Interest Coverage Ratio per NHB Current Reports.	Flag: Under 1.20 (T) Trigger: Under 1.10 (T)
	Interest Coverage Ratio which Measures Portfolio Spread.	Flag: Under TBD Trigger: Under TBD
Management 25%	Asset Growth (Other measures are possible)	Flag: Over 25%/Qtr. Trigger: Over 30%/Q or 2+ Qtrs over

Management	See Explanation in Test of Report Planning	Flag:	Variance of +/-25%. Trigger: Variance of +/- 50%

Flags and Triggers for the
Supervisory Management Information System of the NHB (continued)

Risk Category	Measure	Flag/Trigger Event
Capital Adequacy	Leverage of NOF	(All Percents Tentative)
	Small HFCs	Flag: Below 12.5%
	Moderately-sized HFCs	Below 10.0%
	Large HFCs	Below 8.3%
	Small HFCs	Trigger: Below 11.0%
	Moderately-sized HFCs	Below 8.75%
	Large HFCs	Below 7.25%

T = Tentative Measure
TBD = To Be Determined

Appendix I

Organizations Visited
and
Discussion Held

During the course of investigation for the enclosed report, the author met with the following persons.

National Housing Bank

P. K. Parthasarthy, former Executive Director (retired)
S. D. Hosangadi, Chief General Manager, Bombay
M. K. Rakshit, Deputy General Manager, Bombay
Alok Prasad, Deputy General Manager, New Delhi
P. R Singh, Legal Advisor, Bombay

Reserve Bank of India

W. S. Saraf, Executive Director, Bombay
S. Bandyopadhyay, Joint Chief Officer, Bombay

Dewan Housing Development Limited

Rajesh Kumar Wadhawan, Chairman and Managing Director, Bombay
B. K. Madhur, Manager of Corporate Planning

LIC Housing Finance Limited

T. Paul Diamond, Chief Executive, Bombay
S. Subramanyan, Chief General Manager
C. Martis, General Manager

Housing Development Finance Corporation Limited

Deepak M. Satwalekar, Deputy Managing Director

Price Waterhouse

Bharti Gupta Ramola, Senior Director
U. Srinivas, Senior Consultant

A. F. Ferguson & Co.

V. V. Sabbarao

U. S. Agency for International Development

Charles Billand

Nabaroon Bhatacharjee, Program Specialist

Abt Associates, Inc.

Richard Genz, Program Manager

M. R. Prabhakar, Senior Advisor

Appendix II

Bibliography

Several reports and studies were reviewed in the process of preparing the current report. The major references used are listed below.

A. C. Shah Working Group, Reserve Bank of India, "Report of the Working Group on Financial Companies," Bombay, September 1992.

A. F. Ferguson & Co., The Urban Institute, "Description of RBI Regulation of Commercial Banks," Bombay, December 1987.

Croft, D. James, Abt Associates, Inc., "Options for Licensing, Regulation, Supervision and closure of Housing Finance Companies in India," Cambridge, Massachusetts, August 1990.

Diamond, Douglas B. Jr., Abt Associates, Inc., "NHB's Refinance Programs in a Deregulating Financial Sector," San Diego, March 20, 1993.

Narasimham, Shri M., Committee on the Financial System, "Reforms in the Financial Sector," Hyderabad, November 16, 1991.

Planning Commission, "Report of the Working Group on Finance for Housing Sector for Eigth Plan (1992-97)," New Delhi, June 1992.

Ramola, H. G., Price Waterhouse Associates, "Development of Model MIS Framework for Housing Finance Companies," New Delhi, May 4, 1992.

Wilson, Karen J., The Urban Institute, "The National Housing Bank: Regulatory Options and Assessment Factors," Washington, DC, January 1988.

Appendix III

List of Abbreviations

BSC	Board of Supervisory Control
DHFL	Dewan Housing Finance Limited
HDFC	Housing Development Finance Corporation
HFC	Housing Finance Company
HFC Directions	Housing Finance Companies (NHB) Directions 1989
HFI	Housing Finance Institution
LIC	Life Insurance Corporation of India
LICHFL	LIC Housing Finance Limited
NBFI	Non-Banking Financial Institution
NHB	National Housing Bank
NHB Act	National Housing Bank Act, 1989
NOF	Net Owned Fund
RBI	Reserve Bank of India
SRO	Self Regulating Organization
USAID	U.S. Agency for International Development