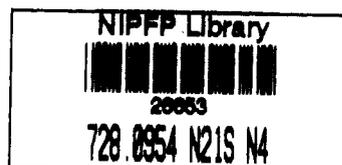
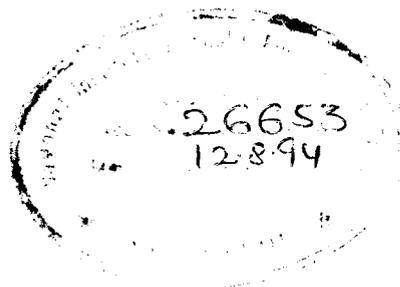




STUDIES OF HUDCO AND HUDCO'S BORROWERS



July 1994



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Foreword

In April 1993, the Ministry of Urban Development entrusted to NIPFP two studies:

- * A Study of Housing and Urban Development Corporation (HUDCO) in the Changing Financial Environment
- * A Study of HUDCO's Borrowers.

The terms of reference required the NIPFP to undertake a detailed investigation into the functioning of HUDCO and HUDCO's Borrowers, identify weaknesses, and suggest changes in their functioning so that, first, they could sustain themselves in the changing financial environment, second, they could maintain a social orientation in their activities, and third, step up investments in housing and urban infrastructure in order to meet their fast increasing demand.

This report presents the results of the two studies. It contains a set of suggestions on the changes that should be effected in order that HUDCO and HUDCO's Borrowers can face the challenge of the changing financial environment without, in any way, affecting the social focus in their activities and operations.

The two studies have been conducted by a team consisting of Om Prakash Mathur, Rita Pandey, Padmesh Raghupathi, S Gopalakrishnan and Sandeep Thakur.

The team presented the interim and final results of the studies of HUDCO and HUDCO's Borrowers in two seminars held at HUDCO. The seminars, attended among others by the Chairman, HUDCO and his colleagues, Dr. D. N. Basu, Economic Adviser, Planning Commission, Dr Dinesh Mehta, Director, National Institute of Urban Affairs, both members of the Advisory Committee set up by the Ministry of Urban Development for this project, were extremely useful in providing a sharper focus to the studies.

The Institute is especially grateful to Shri K. K. Bhatnagar, Chairman, HUDCO and his esteemed colleagues for giving the team members, access to information on the functioning of HUDCO. We are also grateful to the Chairman and chiefs of agencies, covered in this study, for their cooperation in conducting the studies.

Finally, we would like to place on record our appreciation to the Ministry of Urban Development for funding the studies.

For us at NIPFP, the studies of HUDCO and HUDCO's Borrowers have been very rewarding and have helped us to appreciate the larger questions of housing finance reforms and integration of housing finance with the financial markets. We hope the Ministry of Urban Development will find the studies useful.

The Institute or its Governing Body does not take any responsibility for the views expressed in these studies. That responsibility belongs primarily to the authors and the Director of the Institute.

A. Bagchi
Director

July 1994.

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Part I

INTRODUCTION : CONCERNS, ISSUES AND OBJECTIVES

Can HUDCO and HUDCO's Borrowers meet the challenge of the changing financial environment, and still maintain a social focus in their operations? It is this question that is central to the studies of HUDCO and HUDCO's Borrowers.

The process of economic and financial reforms that has been set in motion in the country is likely to be accompanied by a cutback in public expenditure, elimination of tax-exempt savings instruments, and reduction in subsidies, special circuits and directed credit. HUDCO and HUDCO's Borrowers have made extensive use of subsidies and access to directed and other forms of low cost credit to promote housing and several other activities for the economically weaker and low income groups of households. Their withdrawal or reduction, it is alleged, will seriously affect the activities and operations of HUDCO and HUDCO's Borrowers, particularly as these relate to the economically weaker groups. This report consisting of the studies of HUDCO and HUDCO's Borrowers is designed to examine this major concern, and suggest options as to what might be done to equip them to deal with the challenge of reforms and further strengthen the focus on the economically weaker groups.

1. The Macro-Context

What should be done to increase the flow of investment into housing and infrastructure services? Where in the existing system are the impediments to such investment flows and what can be done to eliminate them? Stemming from considerations that are of relevance to the overall economy and to agencies such as the Housing and Urban Development Corporation (HUDCO) and several others who have stakes in housing and infrastructure development, such questions have, in recent years, assumed considerable importance in the country. Among considerations of macro significance, large and growing housing and infrastructure deficits and a widening imbalance between the demand for and supply of housing and infrastructure are of foremost importance. While the precise estimates of the extent of shortages are tentative owing to the highly contentious methodological problems in arriving at such estimates, it is held that at least 18.5 million households or 12.2 per cent of the total number of households are either

houseless or are living in non-serviceable kutcha houses, 38 per cent of households do not have access to safe drinking water, and 76 per cent have no access to toilet facilities (Table 1).¹ The severity of the demand-supply imbalance is greater in the urban areas if account is taken of the number of slums and slum population, overcrowding and congestion. In the urban areas, according to the 1991 Census, apart from nearly 12 per cent of urban households who have no access to proper shelter, 18.6 per cent of households are without access to safe drinking water, and 36.2 per cent households are without toilet facilities. Approximately 15 per cent of the total urban population live in slums where service deprivations are even higher.² Slum population is reported to be 30-40 per cent in the larger metropolitan cities.

Table 1
Housing and Amenities, 1991

Category	Percentage of Households		
	Without housing*	Without safe drinking water	Without sanitation
Urban	12.08	18.62	36.15
Rural	12.30	44.46	90.52
Total	12.22	37.70	76.30

Source: Paper 2 of 1993, Census of India, 1991.

Note: * Includes of non-serviceable kutcha houses.

1. See, Office of the Registrar General and Census Commissioner (1993), Census of India 1991, Paper 2 of 1993, *Housing and Amenities*, New Delhi. It should be noted that the Census data on housing deficit vary sharply with that given in the Eighth Five Year Plan. According to the Eight Plan, there is a shortage of 31.1 million housing units in the country. The shortage in the urban areas is placed at 10.4 million units.
2. See, National Sample Survey Organisation, 44th Round Survey, New Delhi.

Overall poverty incidence too is extremely high in the urban areas and has risen over the past few years. An Expert Group of the Planning Commission recently estimated that during the period 1973-74 to 1987-88, the number of the urban poor in the country rose from 60.3 million to 83.3 million, with the result that the urban poverty incidence in the country is for the first time, in excess of the poverty incidence in the rural areas (Table 2).³ Many studies have shown the level of deprivation to be systematically higher in poor households. This secular deterioration in urban conditions suggests that many of the more visible aspects of urban poverty are related to lack of basic housing and infrastructure services and the inability of existing institutions to make appropriate service provisions rather than to just low incomes. What should be done to bridge the imbalance between the demand for and supply of housing and infrastructure services? What changes should be made in the functioning of the existing institutions such that the new incremental housing and infrastructure demands can be effectively met? Given the fact that these services are crucially linked with employment generation, poverty reduction, and economic growth, such questions have assumed considerable importance in the country.

Table 2
Number and Percentage of the Poor

Category	Number of the poor (million)		Percentage of the poor to total population	
	1973-74	1987-88	1973-74	1987-88
Urban	60.31	83.35	49.23	40.12
Rural	261.29	229.39	56.44	39.06
Total	321.60	312.74	54.93	39.34

Source: Report of the Expert Group, 1993.

3. Planning Commission (1993), *Report of the Expert Group on Estimation of Proportion and Number of Poor*, New Delhi.

The second macro consideration relates to the persistently low level of investment in housing and infrastructure services. It needs to be noted here that the importance of housing and infrastructure sectors in the country's order of development priorities, when measured in terms of investments has consistently diminished over the successive plan periods. For instance, as may be seen from Table 3, public investment in housing which accounted for 16 per cent of the total public investment in the First Five Year Plan and about 8 per cent in the Second Plan, today stands at a bare 1.5 per cent. Private investment in housing which forms over 90 per cent of the total investment in this sector appears to have also declined vis-a-vis other sectors.⁴

Table 3
Public and Private Sector Investment in Housing

Five Year Plan	Housing Investment			
	Public (Rs. million)	% of total public investment	Private (Rs. million)	% of total private investment
First	2,500	16.0	9,000	50.0
Second	3,000	8.2	10,000	32.2
Third	4,250	7.0	11,250	33.1
Fourth	6,250	4.6	21,750	31.2
Fifth	7,960	2.5	36,400	27.5
Sixth	14,910	1.7	180,000	27.3
Seventh	24,580	1.5	290,000	16.1

Source: *Prominent Facts of Housing in India*, NBO and UN Regional Housing Centre for ESCAP, 1990, New Delhi as quoted in National Housing Bank's Report on Trends and Progress of Housing in India, June 1992, New Delhi.

4. Housing investment forms roughly 1.8 per cent of the gross domestic product and 6.7 per cent of the gross domestic capital formation. Capital formation in housing was estimated at Rs.99,920 million or 10.7 per cent of the gross domestic capital formation. See, National Buildings Organisation (1991), *Handbook of Housing Statistics*, New Delhi (Figures relate to 1988-89).

Public investment in water supply and sanitation, a crucial sector for maintaining a minimum quality of life and sustenance of economic activities, has increased marginally over the years. The rate of investment growth has, however, been low and sluggish, bypassing as we showed above, significant proportion of population without being able to secure access to water supply and sanitation. Public investment on urban water supply and sanitation has risen at an even slower rate, and may possibly explain much of the decline that has taken place in the per capita availability of water (Table 4).⁵

Table 4
Outlay on Water Supply and Sanitation

Sector	Seventh Plan Outlay	
	(Rs. million)	% of total Plan outlay
Water supply and sanitation	66,224	3.62
Urban water supply and sanitation	29,657	1.65

Source: Ministry of Urban Development, *Background Note for the Conference on Urban Water Supply and Sanitation*, 11-13 March, 1993.

Why have the investments in housing and infrastructure services been shy? Where are the constraints? Are these endogenous to the institutions who are engaged in directing investments into these sectors? Or, are the constraints exogenous in nature? What should be done to increase the investment flows into housing and infrastructure sectors?

5. For levels of services, see, National Institute of Urban Affairs (1989), *Upgrading Municipal Services : Norms and Financial Implications*, Research Study Series, No. 38, New Delhi.

The third macro consideration is related to the changing economic and financial scene in the country. As the Indian economy expands and opens up, and as the demand for resources from industry and similar other sectors rise, housing and infrastructure which are characterized by longer gestation periods may find it difficult to compete and gain access to the capital market. These sectors could further suffer if the governmental support which accrue to them in the form of direct equity participation, access to low cost credit, priority sector lending, and governmental guarantees is withdrawn or reduced.

What should be done to enhance the competitiveness of housing and infrastructure sectors vis-a-vis others, particularly under conditions of no or little support from the government? What adjustments should be made in the working of HUDCO and other housing and infrastructure finance institutions, to enable them to enhance their efficiency and competitiveness?

2. The Specific Concerns and Objectives

In addition to the broader, macro-level considerations, there are many concerns that are specific to agencies such as HUDCO, and development authorities, housing boards, water supply and sewerage boards, municipal corporations, and slum clearance and improvement boards. The agencies are the torch-bearers and play crucial roles in housing and infrastructure development. The concerns elaborated in this section provide the main *raison d'être* for the studies of HUDCO and HUDCO's Borrowers.⁶

6. The term "HUDCO's Borrowers" is used in a generic sense to include field-level State agencies that are engaged in housing and infrastructure finance and development.

HUDCO which is the central focus of one of the two studies is today a premier housing and infrastructure finance agency in the country. Incorporated as a fully-owned Government company, HUDCO is the largest apex techno-financial agency for providing loans and technical support to the State and city level agencies for various types of housing activities and infrastructure development. Since its establishment, HUDCO has been able to mobilise in gross terms resources amounting to Rs.63,893 million, and commit Rs.56,306 million for housing - infrastructure, land acquisition and other activities (see Annex tables). In outstanding terms as on 31st March 1993, HUDCO's total resources stood at Rs.36,492 million, and loans advanced for various activities at Rs.29,510 million (Table 5). The primary thrust of HUDCO, however, is towards housing for the economically weaker sections (EWS) and low income groups (LIG) of population. Financing of housing for the middle income groups (MIG) and high income groups (HIG) and infrastructure are also an important part of HUDCO's activities which generates surpluses for being ploughed in housing for the poorer and disadvantaged groups.

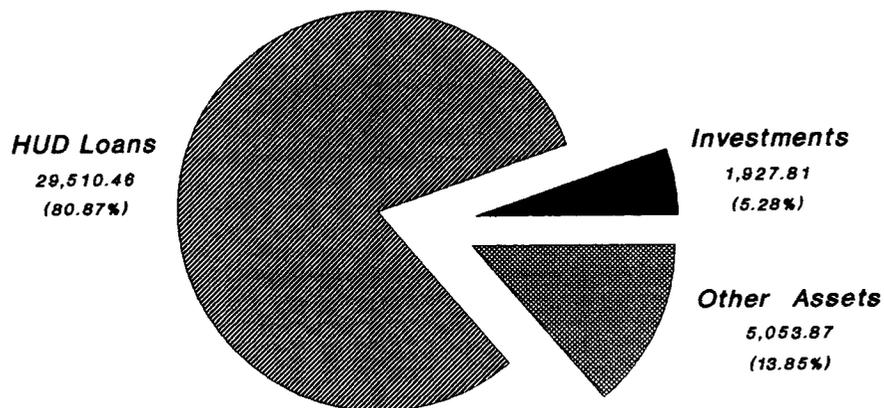
Table 5
Size of HUDCO's Financial Operations
(Outstanding as on 31st March, 1993)

Item	Amount (Rs. million)	% of total resources mobilised
Resources mobilised	36,492.14	100.00
Loans advanced for housing, infrastructure and other principal activities	29,510.46	80.87
Investments	1,927.81	5.28
Fixed assets	177.83	0.49
Net current assets (including other loans and advances)	4,876.04	13.36

Source: *23rd Annual Report of HUDCO, 1992-93.*

Figure 1

**Size of HUDCO's Financial Operations
Outstandings (Rs. Million)
as on March 31, 1993**



HUDCO is a part of a larger institutional network where it is linked, on the resources side, with institutions such as the Life Insurance Corporation of India (LIC), General Insurance Corporation of India (GIC), the National Housing Bank (NHB), and Unit Trust of India (UTI), and on the lending side, with State-level housing boards, development authorities, slum clearance boards, and water supply and sewerage boards etc. LIC, GIC, NHB and UTI are important sources of funds for HUDCO. As a part of HUDCO's funds accrues from the issue of bonds and debentures, it is also linked with other PSUs and the overall market. HUDCO is able to mobilise resources from these agencies partly on account of provisions which require many of them to set aside a part of their funds for housing and housing finance institutions. LIC, for instance, is statutorily required to invest 25 per cent of its incremental resources in socially

oriented sectors like housing, water supply, sewerage etc.; similarly, GIC and its subsidiaries are required to also earmark 35 per cent of their annual accretions for social schemes including housing for the poor. GIC also subscribes to bonds and debentures floated by HUDCO and State-level housing boards. In addition, HUDCO has access to equity support from the Government, government-guaranteed bonds and debentures, and other sources as determined by the government from time to time.

HUDCO is a wholesaler of funds, and lends to a very large number of agencies. These include the State housing boards who claim nearly 40 per cent of HUDCO's total resources, State-level development authorities, municipal corporations and municipal bodies, cooperative societies, slum clearance boards, water supply and sewerage boards, and public sector organisations. In turn, these agencies are engaged in housing construction activities, giving financial assistance, and undertaking infrastructure projects of various kinds. They are the main implementing agencies at the field level, and are central to the housing and infrastructure development in the country.

The entire network of institutions is thus interdependent, with the efficiency of the network being a function of the way in which, on the one hand, HUDCO raises resources, makes investments, and extends loans to various agencies, and on the other hand, the various agencies formulate projects, contract loans for the implementation of projects, and recover project costs from the ultimate beneficiaries and users.

A number of concerns have arisen in recent years about the efficiency of the entire institutional network and the methods that they employ in meeting the financial needs of the housing and infrastructure sectors. It is alleged that HUDCO and other institutions are heavily dependent for resources on different forms of governmental support, subsidies, directed credit,

and other low cost funds. The entire functioning of the institutions, it is said, is protected and guaranteed. Doubts have been expressed about HUDCO's capacity to be able to raise enough resources in the event such support is withdrawn or reduced. Questions have been asked whether HUDCO has the capacity to efficiently carry forward its tasks without the umbrella of governmental protection and guarantees. The guarantees are said to have also eroded the rigor that is normally expected in project formulation and appraisal exercises.⁷

HUDCO's distinctiveness, as pointed out above, lies in its focus on social housing. In accordance with the existing guidelines, 55 per cent of HUDCO's housing loans are to be set aside for economically weaker sections (EWS, 30%) and low-income groups (LIG, 25%) of households. It is increasingly felt that in actual practice these norms stand ignored and violated in different ways, with the result that a significant proportion of the eligible groups remain outside of the formal housing finance system. The cost and loan ceilings which set the parameters for financing of the different categories of housing are also stated to have imparted a high degree of inflexibility into the system, raising in turn concerns about their relevance and effectiveness.

At the field level, there is a lack of clarity on the degree of commitment of housing boards, development authorities, slum clearance boards, etc. to social housing programmes, and how these programmes are administered and implemented by them. Concerns have been expressed about the selection process of beneficiaries, the mode of transference of subsidies, and loan recovery mechanisms. It is alleged that HUDCO's borrowers are able to neither effectively target the loans on the economically weaker and low income households, nor effect loan recoveries. The tying up of loans with governmental guarantees too has introduced an element

7. See for details, Ministry of Urban Development and HUDCO (undated), *Terms of Reference for Studies of HUDCO and Borrowers for Urban Infrastructure and Social Housing*.

of complacency among institutions in respect of the overall operations, particularly as these relate to recoveries from the beneficiaries.

Mention should be made of two related developments that have an important bearing on the future functioning of institutions such as HUDCO. The first relates to the establishment in recent years of the National Housing Bank and a number of housing finance institutions (HFIs) in the country. These are significant developments in the area of housing finance, affecting, in a sense, the oligopolistic position that HUDCO has enjoyed in this field. What changes would this bring about in the functioning of HUDCO and other housing finance institutions? Would it entail competition among them? Or, would these institutions supplement and complement the activities of each other.

A second development relates to the new National Housing Policy (1992) which has pointed out that the crucial role of the government is "not to seek to build houses itself but to make appropriate investment and create conditions where all women and men, especially the poor may gain and secure adequate housing, and to remove impediments to housing activity."⁸ The policy lays special emphasis on steps for improving the housing situation of the poorest sections and vulnerable groups by direct initiative and financial support of the State. What implications do such policy pronouncements have for the working of HUDCO and field-level agencies such as the housing boards, development authorities, and slum clearance and improvement boards?

8. Government of India, National Housing Policy, May 1992, New Delhi.

The recent economic reforms and adjustment programmes in the country have reinforced the importance and urgency of many of these concerns. Reforms are expected to reduce the component of subsidies, mandated credit and access to low cost funds, which could directly affect institutions such as HUDCO and field level agencies. Can these institutions absorb the "reforms" without hurting the level of their activities, particularly as these relate to the economically weaker and low income groups? Can these groups be protected and assisted directly and transparently?

The studies of HUDCO and HUDCO's Borrowers are driven by these concerns.

This report consists of two separate but interrelated studies. The first study is of HUDCO. It focuses on how to, in the new financial environment, most effectively fulfill the objectives of providing financial support for social housing and infrastructure. In particular, the objectives of the study as embodied in the terms of reference are:⁹

- i. to achieve a clear delineation of how to effectively and transparently provide finance and subsidies for low income households;
- ii. to compare HUDCO's performance against this objective;
- iii. to examine how changes in policies may affect HUDCO's mode of operations, and consequently what changes in HUDCO's practices should be brought about; and
- iv. to examine what options are available for mobilising resources in national capital and credit markets for urban infrastructure and social housing.

9. See, Ministry of Urban Development and HUDCO (1993), Ibid.

The second study deals with HUDCO's Borrowers. It analyses the performance of a sample of eight agencies engaged in housing and infrastructure finance and development. The objectives of the second study are to evaluate borrowers in terms of -

- i. financial and credit performance, and
- ii. social focus and effectiveness of subsidy targeting.

The following agencies constitute the sample for the study:

*	Tamil Nadu Housing Board	Housing Board
*	Rajasthan Housing Board	Housing Board
*	Lucknow Development Authority	Development Authority
*	Andhra Pradesh Urban Development and Housing Corporation	Development Authority
*	Andhra Pradesh State Housing Corporation	Development Authority
*	Maharashtra Water Supply and Sewerage Board	Sector-specific Board
*	Madras Metropolitan Water Supply and Sewerage Board	Sector-specific Board
*	Baroda Municipal Corporation	Municipal Body.

3. Assumptions and Approach

The studies of HUDCO and HUDCO's Borrowers are based on two basic assumptions:

- i. HUDCO will continue to be a refinancing agency.

- ii. HUDCO and consequently the agencies to whom it advances loans will continue to maintain focus on social housing in their operations, and direct a part of credit towards the economically weaker and low-income category of households.¹⁰

The objectives of the two studies are responded to in this report by undertaking a series of interrelated exercises. These comprise, in the main, the following:

- i. Analysis of HUDCO's finances, and appraisal of its financial performance, first, by using a set of financial ratios, and later, by comparing it with the financial performance of other housing finance institutions.
- ii. A separate analysis of the social focus in HUDCO's operations. Emphasis is placed here on identifying the extent to which social focus is central to HUDCO's operations and the efficiency with which it is directed. Issues relating to the relevance of various kinds of limits and ceilings have been especially examined as a part of the analysis.
- iii. Examination of project appraisal guidelines and procedures, with a view to locating stages where HUDCO and other agencies have encountered problems. For this exercise, data from a sample of seventeen project files have been used to analyse the entire process of examining the project proposals. Attempt is also made here to examine the extent to which appraisal of projects has followed the established guidelines and procedures.

10. This assumption is justified on the ground that, firstly, formal sector credit is, by and large, denied to such groups; and secondly, middle and higher income groups have, under various schemes, access to low cost credit. The extent to which such a focus should be maintained and the alternative mechanisms for directing credit towards such groups are examined in the relevant sections of the report.

- iv. Analysis of the financial performance of agencies which are engaged in housing and infrastructure finance and development. It needs to be noted that these agencies are a heterogeneous lot, consisting of housing boards, development authorities, housing and urban development corporations, municipal bodies and specialised sector-specific agencies. These agencies owe themselves to different State-level legislations, and consequently follow different financial accounting systems. For this reason, different sets of indicators have been used in analysing their financial performance.

- v. Estimation of subsidies and their targeting on the economically weaker and low-income households. Attempt is made here to review the effectiveness of subsidy targeting on the target groups.

- vi. Construction of simulations with a view to see the effect of changes in (a) the average cost of loan funds, (b) dividend rate on share capital, and (c) tax rates etc. on HUDCO's operations, particularly as these relate to housing for the economically weaker and low income households. The simulation exercises have been constructed on the basis of the financial ratios obtaining in 1992-93, and "average" financial ratios for the entire period of 1985-86 to 1992-93.

These exercises have helped to address the main questions that underlie the study.

4. Data Base and Sample

The Annual Reports and Information Sheets of HUDCO for the period 1985-86 to 1992-93 constitute the core of the data for the study of HUDCO. In addition, use has been made of data provided in the Report of the Eswaran Committee and studies conducted by the Human Settlements Management Institute of HUDCO. Use has been made of special compilations made by HUDCO in respect of the following:

- i. Data on loan "releases" for different categories of housing for fifteen States and Union Territories, namely, Mizoram, Arunachal Pradesh, Manipur, Sikkim, Nagaland, Tripura, Meghalaya, Assam, Goa, Pondicherry, Andaman and Nicobar, Himachal Pradesh, Jammu and Kashmir, Bihar, and Delhi. It needs to be pointed out that HUDCO does not maintain, as a part of its Management Information System, data on releases for the different categories of housing and other activities. The non-availability of data on releases is a major deficiency in HUDCO's information system which, as this report will point out later, has seriously constrained a systematic analysis of particularly the extent to which HUDCO is able to maintain a social focus in its operations.
- ii. Aggregate data on defaults on repayments by HUDCO's borrowers.
- iii. Data on resource mobilisation during the years 1985-86 to 1992-93.
- iv. Data on project appraisal from a sample of Loan Files of HUDCO.

For the study of HUDCO's Borrowers, the following reports and data are used:

- i. Annual Reports in the case of Tamil Nadu Housing Board, Andhra Pradesh Urban Development and Housing Corporation, Maharashtra Water Supply and Sewerage Board, and Madras Metropolitan Water Supply and Sewerage Board.
- ii. Annual Budgets in the case of Rajasthan Housing Board, Lucknow Development Authority, and Baroda Municipal Corporation.
- iii. Data on loan recoveries and other financial aspects as obtained in questionnaires from these agencies.

The overall data base of agencies that have constituted the sample is extremely poor, and has proved to be a major handicap in conducting many exercises that were important to the study.

5. Organisation

This report has five parts. The first part introduces the main concerns of both the studies, and outlines their objectives as embodied in the terms of reference. It also provides a list of the main data sources used in conducting the studies.

HUDCO in a changing financial environment is the subject matter of the second part of the report. Divided into four chapters, it begins with an overview of HUDCO's finances giving the composition of resources and investments, and a profile of loans and repayments and

defaults. This chapter also analyses the changes that have taken place in the borrowing and lending rates over the period 1985-86 to 1992-93.

Chapter two consists of a detailed analysis of the financial performance of HUDCO. This has been attempted by examining the balance sheets and income and expenditure statements of HUDCO. Comparisons have been made of the performance of HUDCO with other housing finance institutions. This chapter also estimates the volume of subsidies that HUDCO receives from the Government via access to low cost credit, low dividend rate on share capital, and government guarantees. The effects of the withdrawal of subsidies on HUDCO's profitability have also been analysed in the Chapter with the help of a few simulation exercises.

Chapter three examines the social focus in HUDCO's housing activities. Apart from examining the extent to which this focus is dominant, this chapter has attempted to identify the problems encountered in social housing programmes. The relevance of the various norms and ceilings is also examined in this chapter. Using various simulations, an attempt is made here to estimate the impact of subsidy withdrawal on social housing component in HUDCO's operations.

Project formulation and appraisal systems are analysed in chapter four of this part.

A study of HUDCO's Borrowers is presented in part three of the report. Following the broad structure of the report on HUDCO, this study too introduces in chapter one, the finances of the eight agencies that constitute the sample. Chapter two analyses the financial performance of the agencies. Note needs to be made here of the fact that owing to the different accounting systems of these agencies and the different ways in which they prepare their Annual Reports and Budgets, different ratios are used for assessing their financial performance. Issues relating to

social housing and methods employed by agencies for reaching out to the economically weaker and low income households are analysed in chapter three of the study.

Part four of the report presents the main conclusions and recommendations of the studies of HUDCO and HUDCO's Borrowers.

Background tables are annexed in part five of the report.

The two studies of HUDCO and HUDCO's Borrowers are closely interconnected. Both are a part of the larger system where the efficiency of one is dependent on how the other part functions. They can not be seen in isolation of each other. It is thus important that the report consisting of four parts and Annex tables is studied and examined in its entirety.

Part II

HUDCO IN A CHANGING FINANCIAL ENVIRONMENT

Chapter 1 : State of HUDCO's Finances - An Overview

The finances of any institution are a complex entity. These include, on the one hand, resources that the institution raises from different sources on varying terms and conditions, and, on the other hand, resources that the institution lends out for, or invests in, various activities. The overall financial balance of the institution, however, is invariably more complex in that it repays, at appropriate intervals, loans that it contracts from different sources and receives payments, again at intervals, on loans that it advances and investments that it makes. There is a continuous inflow and outflow of resources, with the rate of flow determining the institution's overall financial balance and viability.

HUDCO is no exception to this general process of financial flows. It receives resources from the government, mobilises resources from the financing institutions, public sector enterprises, market, and external sources and lends funds to different agencies for housing, infrastructure, land acquisition and other shelter related activities. It also invests and "parks" for shorter periods a part of its resources in treasury bills, shares and bonds of other public sector enterprises. It repays loans that it contracts, recovers loans, receives interest payments, and bears the usual risk of defaults and delays.

Over the past two decades or so, HUDCO's financial operations have grown severalfold in tandem with its activities. From an extremely low resource base of Rs.91 million in 1971-72, HUDCO's cumulative resources currently stand at Rs.63,893 million (Annex Table A.1), and outstanding resources at Rs.36,492 million. The same period has seen a corresponding increase

in its lending transactions which too have expanded, in terms of commitments, from Rs.348 million in 1971-72 to Rs.84,931 million in 1992-93, and actual disbursements from about Rs.55 million to over Rs.56,306 million (Annex tables). Other financial operations of HUDCO have also grown enormously during this period. This Chapter provides an overview of the state of HUDCO's finances with particular reference to the shifts that have taken place in the pattern and composition of financial operations.

1. Resource Mobilisation : Size, Composition and Costs

It is useful to begin by pointing out that the size and composition of HUDCO's resources are determined by a complex set of factors which include (i) the statutory requirements placed on institutions such as the Life Insurance Corporation of India (LIC) and the General Insurance Corporation of India (GIC) in respect of social sector investments, (ii) the extent to which HUDCO is permitted to issue government-guaranteed debentures and tax-free and tax-laden bonds, and (iii) the access to funds set aside for priority sectors.¹¹ These are also dependent on the degree of government's equity participation, and on what resources out of external credit and grants the government may, from time to time, assign to HUDCO.

HUDCO's resources consist of three major components, namely, shareholders' funds, internal loan funds, and external funds, with each of these components having several important sub-components. Shareholders' funds, for instance, consist of share capital or equity and reserves and surplus. Internal loan funds comprise of loans from financing institutions as also

11. The Life Insurance Corporation of India (LIC) is statutorily required to invest 25 per cent of annual increments in socially oriented sectors which include housing, water supply, sewerage, and road transportation. The General Insurance Corporation of India (GIC) earmarks 35 per cent of annual increments for rural housing and for support to other agencies engaged in housing development. The commercial banks too are required to allocate 1.5 per cent of incremental deposits for lending towards the housing sector.

resource mobilisation via the issue of debentures and bonds. External funds consist of funds from Kreditanstalt Fur Wiederaufbau (KfW), Germany, Royal Technical Assistance (RTA) and the World Bank. These resources (outstanding at the end of the 1992-93 financial year) were placed at Rs.36,492 million, having risen at about 28-29 per cent annually during the period 1985-86 to 1992-93.

Figure 2

**Growth of HUDCO's Resources
Outstandings as on March 31**

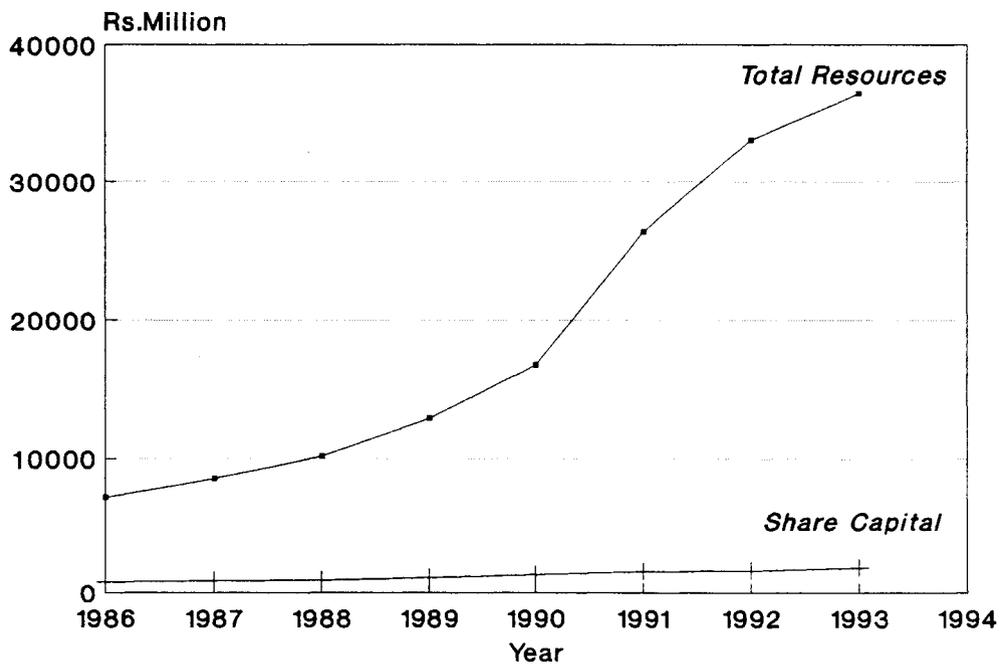


Table 6 gives the share of the different components in HUDCO's resource profile as it stood in 1992-93.

Table 6
Composition of HUDCO's Resources
(Outstanding as on 31st March, 1993)

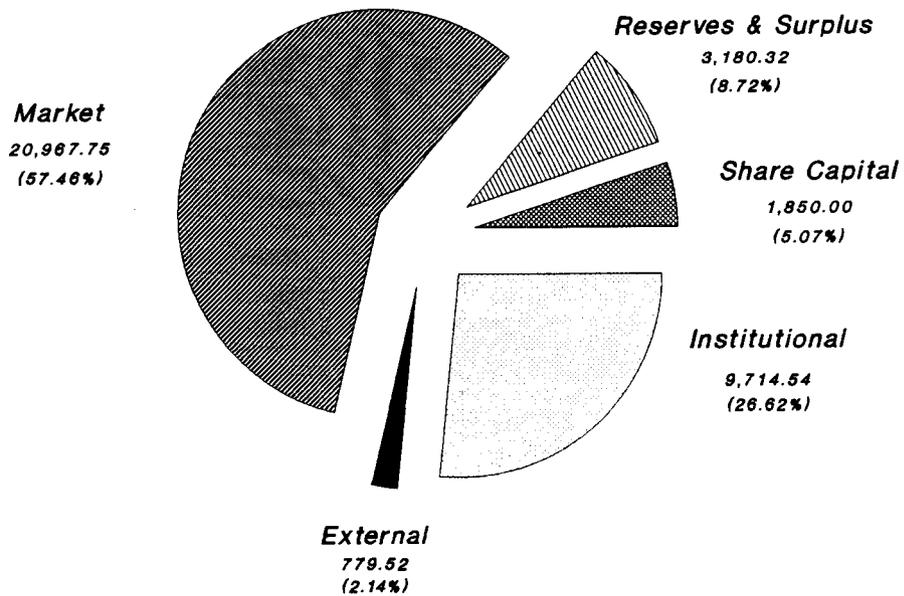
Source	Amount (Rs. million)	% share in total resources	Annual average growth rate % from 1985-86 to 1992-93§
Shareholders' funds	5,030.32	13.78	16.85
(a) Share capital	1,850.00	5.07	13.44
(b) Reserves and surplus, etc.	3,180.32	8.72	19.48
Loan funds	31,461.82	86.22	31.48
Internal			
(a) Institutional	9,714.54	26.62	23.06
* LIC	620.00	1.70	-
* GIC	2,837.00	7.77	10.56
* NHB	3,148.90	8.63	47.69
* UTI	1,757.50	4.82	90.21
(b) Market or quasi- market (Bonds and Debentures)	20,967.75	57.46	37.02
External			
RTA, World Bank & KFW	779.52	2.14	17.27
Total:	36,492.14	100.00	28.82

Source: Annual Reports of HUDCO.

Note: * Major sources only.
§ Average growth rates in all tables included in this report are calculated by using regression.

Figure 3

**Composition of HUDCO's Resources
Outstandings (Rs. Million)
as on March 31, 1993**



As this Table shows, with a share of 57.5 per cent, bonds and debentures constitute the single largest source of funds for HUDCO, followed by institutional sources such as the National Housing Bank (8.6%) the General Insurance Corporation of India (7.8%), the Unit Trust of India (4.8%), the Life Insurance Corporation of India (1.7%), etc. The shareholders' funds account for 13.8 per cent, and the external funds account for a bare 2.1 per cent in the resource profile of HUDCO.

Market or quasi-market loan funds as a single component in HUDCO's resources have registered, over the period 1985-86 to 1992-93, an extremely rapid growth -- 37.0 per cent per annum, followed by institutional loans which grew at 23.1 per cent per annum, and external loans registering an annual growth rate of 17.3 per cent. Shareholders' funds consisting of share capital and reserves and surplus, etc. have grown at a comparatively slower pace. However, the share capital grew at an even slower pace, the annual rate being only 13.4 per cent.

HUDCO has diversified its resource base in a major way during the period 1985-86 to 1992-93, as a result of which the relative weights of shareholders' funds, institutional loans, and external resources have changed noticeably. The share of shareholders' funds has declined from 23.3 per cent to 13.8 per cent; of institutional funds, from 30.5 per cent to 26.6 per cent; and of external resources, from 3.2 per cent to 2.1 per cent. Market resources consisting of government guaranteed debentures, capgain debentures and tax-free and tax-laden bonds have risen from 42.97 per cent to 57.46 per cent, pointing to the recent initiatives of HUDCO for augmenting its resource base (Table 7).¹²

Three points with respect to the shifts in resource composition need to be stressed. *Firstly, the direct stake of government which accrues to HUDCO in the form of equity support has weakened over the years.* Apart from the relatively slower pace of growth in the volume of government equity, its share in total resources, as shown in Table 7 has plummeted, indicating that equity is no longer the *forte* in HUDCO's overall resource profile.

12. The term 'market' is being used here to include capgain debentures, and other government guaranteed debentures and bonds even though these have primarily been sold to public sector enterprises.

Secondly, the role of the traditionally important institutions such as LIC and GIC in the resource base of HUDCO is on the decline, and that of the National Housing Bank (NHB) and the Unit Trust of India (UTI) on the rise. Within a short period of 1985-86 to 1992-93, HUDCO has been able to raise over Rs.3,148 million from the National Housing Bank and Rs.1,757 million from the Unit Trust of India, giving them an important place in HUDCO's structure of resources.

Table 7
Shifts in the Composition of HUDCO's Resources (Outstanding)

Source	Composition of Resources in			
	1985-86		1992-93	
	Amount (Rs. million)	% share in total resources	Amount (Rs. million)	% share in total resources
Shareholders' funds	1,666.98	23.31	5,030.32	13.78
(a) Share capital	810.00	11.33	1,850.00	5.07
(b) Reserves and surplus, etc.	856.98	11.98	3,180.32	8.72
Loan funds	5,485.33	76.69	31,461.82	86.22
Internal				
(a) Institutional	2,180.13	30.48	9,714.54	26.62
* LIC	727.33	10.17	620.00	1.70
* GIC	1,402.80	19.61	2,837.00	7.77
* NHB	-	-	3,148.90	8.63
* UTI	-	-	1,757.50	4.82
(b) Market or quasi- market (bonds & debentures)	3,073.20	42.97	20,967.75	57.46
External				
RTA, World Bank & KFW	232.00	3.24	779.52	2.14
Total	7,152.31	100.00	36,492.14	100.00

Source: Annual Reports of HUDCO.

Note: * Major sources only.

Thirdly, bonds and debentures have stayed as the single largest source of funds for HUDCO. It should, however, be noted that these are government-guaranteed, and could not be taken as indicative of HUDCO's own capacity to be able to directly tap the market. Yet, these are important initial steps on the part of HUDCO to enter the market, and should thus be underscored.

Like any institution, HUDCO raises resources at varying terms and conditions, although as pointed out earlier, a greater part of the resources are raised within the parameters set by the government. The terms and conditions relate primarily to interest rates and the maturity period, though these might include other provisions as well, e.g., placing limits on the debt-equity ratios. Despite the prevalence of a regulated interest regime, the structure of interest rates in India, it should be noted, is extremely heterogeneous. For instance, in 1991-92, term lending rates ranged between 9 per cent for public sector tax free bonds to 18-20 per cent in the case of term lending institutions.¹³ In addition, many institutions pursued differential interest rates in 1991-92, apparently to meet the special needs of the priority sectors.

HUDCO has mobilised, over the years, resources at rates varying between 0 per cent, i.e., resources consisting of 0-percent share capital,¹⁴ and 19 per cent. In 1985-86, loan funds (over 80 per cent of total resources) were raised at rates ranging between 9-11 per cent. During the period of the study, the interest rate structure underwent a major shift, with the result that in 1992-93, over 65 per cent of resources were raised at rates in excess of 11 per cent, with nearly 19 per cent of these at interest rates of over 13.5 per cent. The marginal rate of interest at which

13. See, Reserve Bank of India, *Report on Currency and Finance 1991-92*, Statement 56 : Structure of Interest Rates in India.

14. Excepting in 1992-93 when dividend was paid on share capital, in all other years, the cost to HUDCO on account of share capital was zero.

HUDCO raised resources has risen from 11 per cent in 1985-86 to 19 per cent in 1992-93, indicating a sharp increase in interest rates over these years (Table 8).

Table 8
Percentage Break-up of Resources According to Interest and Dividend Rates
(Individual Years)

Year	Range of interest and dividend rates (%)						
	0*	0.1 to 4 %	4.1 to 9 %	9.1 to 11 %	11.1 to 12.5 %	12.6 to 13.5 %	Over 13.5 %
1985-86	6.02	0.00	0.00	81.80	0.00	0.00	0.00
1986-87	4.66	13.31	0.16	58.64	9.68	5.82	0.00
1987-88	3.28	1.68	20.20	51.03	5.21	10.09	0.00
1988-89	5.78	10.65	27.85	15.16	28.91	6.65	0.00
1989-90	5.03	0.52	56.35	9.98	18.07	4.32	0.00
1990-91	2.34	0.03	57.52	0.00	27.25	10.36	0.00
1991-92	0.69	0.00	47.65	1.99	22.68	6.85	13.71
1992-93	0.00	2.15	10.98	1.07	14.35	34.37	18.26

Source: Calculated from data supplied by HUDCO.

Note: * These exclude the reserves and surplus, and therefore, the total of these columns will not add up to 100.

As a result of the periodic changes in the interest rate structure, the average borrowing rate or the cost of loan funds has registered, during the period 1985-86 to 1992-93, an increase of 2.73 percentage points, rising from 10.37 per cent to 13.10. The cost to HUDCO of loan funds and share capital, but excluding the administrative overheads of the organisation, has risen from 9.66 per cent in 1985-86 to 12.70 per cent in 1992-93 (Table 9). Addition of administrative overheads to the cost of resources would push the average cost by anywhere between 1.23 per cent and 1.88 per cent. Administrative overheads in this study are the actual staff expenditure incurred by HUDCO in different years.¹⁵

15. For staff expenditure, see Table 33.

Table 9
Average cost to HUDCO of Resources Raised
(Individual Years)

Year	Borrowing rate % (Average cost of loan funds) ¹⁶	Average cost to HUDCO of resources	
		Cost of loan funds and share capital	Including overheads*
1985-86	10.37	9.66	11.35
1986-87	10.13	9.62	11.48
1987-88	10.75	10.37	12.14
1988-89	9.88	9.28	11.16
1989-90	9.92	9.39	11.14
1990-91	10.35	10.10	11.73
1991-92	10.90	10.82	12.03
1992-93	13.10	12.70	14.21

Source: Calculated from data supplied by HUDCO.

Note: * Overheads represent the actual staff expenditure as given in Table 33.

Note should be made of the fact that during the reference period of the study, the average cost of institutional funds has increased perceptibly, although there is a noticeable variation in the cost of funds of the different institutions. Loans from the Unit Trust of India which in 1986-87 carried an interest rate of 13.5 per cent were the costliest in 1992-93 - the average rate being 18.00 per cent - followed by the National Housing Bank in whose case the average cost

16. HUDCO's own calculations of the average borrowing rates are at variance with those made in this study. Their estimates which include a standard 1 per cent charge for overhead and government guarantee fee are shown here:

HUDCO's Average Borrowing Rates as Calculated by HUDCO

1987-88	1988-89	1989-90	1990-91	1991-92	1992-93
11.90	10.88	10.92	11.29*	12.52*	13.90*

Source: HUDCO: A Corporate Profile.

Note: * inclusive of 1 per cent for HUDCO's overheads and government guarantee fees.

has risen from 12.5 per cent to 13.19 per cent. The average cost of bonds and debentures too has risen from 9.75 per cent to 12.58 per cent during this period.

In sum, it may be stated that there has been a significant step-up in HUDCO's resource base over the years. The composition of resources has changed in favour of loan funds. Within loan funds, reliance on bonds and debentures has risen, although this can not be termed as entry by HUDCO into the capital market; the real test of HUDCO in this respect will be when it begins to raise resources through credit-rated bonds and debentures without the back-up of government guarantees. The step-up has been accompanied by higher costs which, in turn, as we shall discuss later, has affected the lending profile of HUDCO.

2. HUDCO's Investments

It is commonly observed that the demand for and supply of funds at any given point of time do not balance out, leaving with the institution either a deficit or a surplus of funds. In the case of a deficit, the institution withholds or slows down the pace of its activities. On the other hand, wherever there is a surplus, the institution "parks" its surplus funds for shorter periods in various kinds of securities. It is in this manner that the institution strives to deal with the problem created by short-term excess liquidity, i.e., the excess of supply over the demand for resources. For an organisation whose mandate is housing and infrastructure development, particularly, social housing, the existence of a large volume of surplus funds can be interpreted to mean a number of things - excess resource mobilisation without taking into account the volume of demand, inability of the institution to speedily generate (or help generate) enough fundable projects, time lag between the submission and approval of project proposals, absence of effective demand, or simply the decision of the management to make such investments in high-yielding securities to make the best use of the prevailing market conditions.

Surplus funds at any given point of time are a normal characteristic of HUDCO's operations. With the expansion in HUDCO's operations, however, surplus funds have grown in volume, and as the following table will show, large sums of funds have been involved in transactions related to investments (Table 10).

Table 10
Investments (Individual Years)

Year	Investments (excluding encashments) (Rs. million)
1985-86	1,637.60
1986-87	1,599.10
1987-88	1,521.50
1988-89	2,455.30
1989-90	6,873.75
1990-91	1,678.20
1991-92	5,205.70
1992-93	1,613.30

Source: Annual Reports of HUDCO.

In view of the large scale fluctuations in respect of investments, it is instructive to use data on outstanding investments which provide a more realistic assessment of the role that they play in HUDCO's operations. Table 11 provides data on outstanding investments for the years 1985-86 to 1992-93. It shows that such investments amounted to Rs.217.6 million or 3.04 per cent of the total outstanding resources in 1985-86. These peaked to Rs.7,275.10 million or 22 per cent of the total resources in 1991-92, and then declined to Rs.1,927.81 million or 5.28 per cent in 1992-93. The annual average growth rate of these investments was 63.99 per cent - phenomenal by any standards.

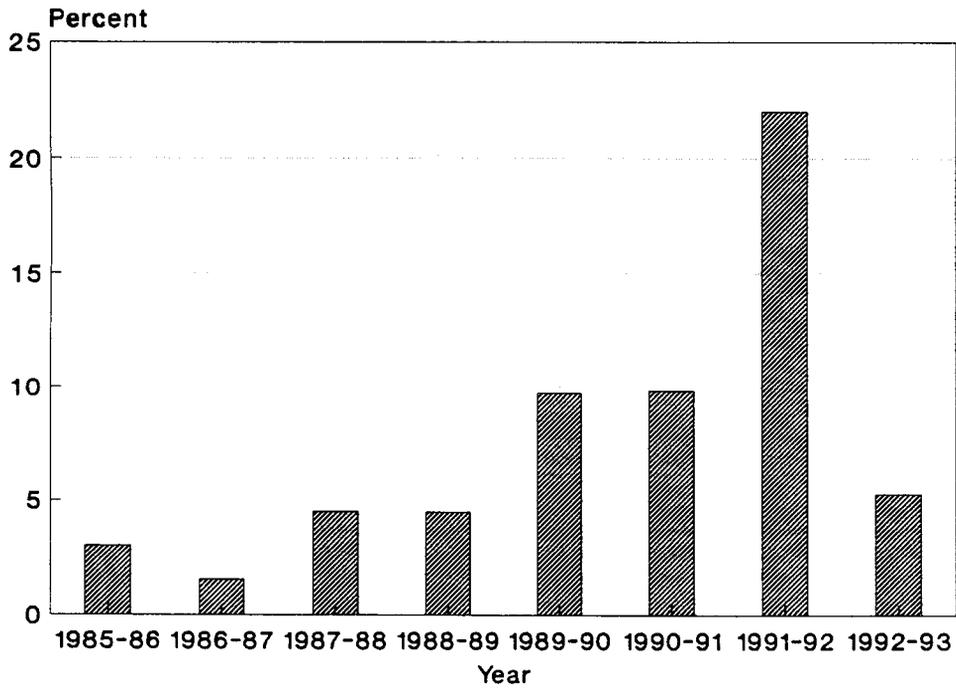
Table 11
Investments (Outstanding as on 31st March)

Year	Outstanding investments (Rs. million)	% of total outstanding assets
1985-86	217.60	3.04
1986-87	131.90	1.54
1987-88	458.00	4.49
1988-89	578.60	4.47
1989-90	1,626.25	9.70
1990-91	2,589.40	9.83
1991-92	7,275.10	22.00
1992-93	1,927.81	5.28
Annual average growth rate (%) 1985-86 to 1992-93	63.99	

Source: Annual Reports of HUDCO.

Figure 4

HUDCO's Investments/Total Assets



The composition of investments is shown in Table 12. A perusal of this table shows that in 1992-93, nearly 40 per cent of the funds were placed with banks, and over 57 per cent were invested in "other investments". In 1991-92, however, 96 per cent of total investments were

Table 12
Composition of Investments, Volumes and Growth Rates

	Amounts Outstanding as on March 31 (Rs. Million)								Average growth rate(%)
	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	
Long Term Investments									
Government:									
(UTI Securities)									
Amount	-	-	93.50	88.60	90.40	65.40	65.40	-	-9.68
% change				-5.24	2.03	-27.65	0.00		
Equity Shares:									
Amount	-	-	-	-	0.85	6.50	39.50	40.50	281.75
% Change						664.71	507.69	2.53	
Total LTI:									
Amount	-	-	93.50	88.60	91.25	71.90	104.90	40.50	-10.58*
% Change				-5.24	2.99	-21.21	45.90	-61.39	
Short Term Investments									
Public Sector Bonds:									
Amount	217.60	-	154.50	150.00	150.00	150.00	150.00	-	-5.34
% Change				-2.91	0.00	0.00	0.00		
Treasury Bills:									
Amount	-	79.10	-	-	-	-	-	-	(-)
% Change									
Placement of Funds with Banks:									
Amount	-	52.80	-	250.00	685.00	-	-	769.81	(-)
% Change					174.00				
Other Investments:									
Amount	-	-	210.00	90.00	700.00	2367.50	7020.20	1117.50	90.99
% Change				-57.14	677.78	238.21	196.52	-84.08	
Total STI:									
Amount	217.60	131.90	364.50	490.00	1535.00	2517.50	7170.20	1887.31	64.95
% Change		-39.38	176.35	34.43	213.27	64.01	184.81	-73.68	
Total Investments:									
Amount	217.60	131.90	458.00	578.60	1626.25	2589.40	7275.10	1927.81	63.99
% Change		-39.38	247.23	26.33	181.07	59.23	180.96	-73.50	

Source: Annual Reports of HUDCO.

Notes: STI = Short Term Investment. LTI = Long Term Investment. (-) denotes that regression is not applicable. * denotes that value is statistically insignificant at 1% level of significance.

made in "other investments". *The important point to note is that "other investments" have come to play an extremely important role in HUDCO's financial operations, replacing other investment avenues such as the public sector bonds or even placement of funds with the banks.* Investments are an important source of income to HUDCO. The return¹⁷ on these investments (outstanding) has ranged between 9.19 per cent in 1987-88 to 41.35 per cent in 1992-93 (Table 13). Primarily on account of interest and dividend on such investments, profits and therefore the reserves and surplus of HUDCO have risen in recent years, which have helped to augment the resource base of HUDCO. The importance of such investments can be judged by the impact of the exclusion of income on such investments on HUDCO's profits. This point will be discussed in Chapter 2 of the study.

Table 13
Rate of Dividend and Interest on Investments
(Outstanding)

	(Per cent)							
Year	1985	1986	1987	1988	1989	1990	1991	1992
	-86	-87	-88	-89	-90	-91	-92	-93
Rate of dividend & interest	13.74	18.19	9.19	14.35	9.23	13.29	10.68	41.35

Source: Calculated from Annual Reports of HUDCO.

3. HUDCO's Lending Profile

As in the case of resource mobilisation, HUDCO's lending operations too are defined and regulated by several crucial considerations. At least three of these are important to cite here :

¹⁷. Does not include capital gains/losses on investments.

i. **Inter-regional balance:** In order to ensure that HUDCO's resource allocations do not create or exacerbate any regional/spatial imbalance in the country, HUDCO allocates resources to States on the basis of a set of criteria that combines population and area of States, giving each of the two criteria equal weights. The allocations made this way are, however, indicative, as the actual sanctions and disbursements which are tied to specific project proposals may vary from the allocated amounts.

ii. **Social focus in housing activities:** It was noted earlier that HUDCO's distinctiveness as a housing finance agency lies in its social focus and direct emphasis on housing for the economically weaker and low income households. For maintaining and pursuing this focus, HUDCO is mandated to set aside 55 per cent of its total resources for the economically weaker and low income households, and 45 per cent for the middle and high income groups. This mandate relates to "sanctions" and not to releases or disbursements. A further break-up of these ceilings contained in the financing pattern of HUDCO is as follows¹⁸ -

*	Economically weaker section	(EWS)	30 per cent
*	Low income groups	(LIG)	25 per cent
*	Middle income groups	(MIG)	45 per cent
*	High income groups	(HIG)	

In addition to maintaining these norms, HUDCO uses other methods for enhancing its focus on the economically weaker sections in its operations, of which the following are important to emphasise here :

18. See, HUDCO's Financing Pattern, amended upto 31 March, 1992.

* Differential interest rates, with lower rates for the low income groups and higher rates for the high income groups of households. The differential interest rates are also aimed at cross-subsidizing the various activities. It needs to be noted that between 1985-86 to 1990-91, there was no change in the structure of interest rates used by HUDCO for its multiple activities despite the prevalence in the country of the usual inflationary pressures and rising cost of construction materials, land and other inputs. The following table may be seen in this regard.

Table 14
HUDCO's Interest Rates
1985-86 to 1992-93

Year	Interest rates for urban housing and infrastructure schemes (%)			
	EWS	LIG	MIG	HIG
1985-86	7.0	8.75	11.75	13.50
1986-87	7.0	8.75	11.75	13.50
1987-88	7.0	8.75	11.75	13.50
1988-89	7.0	8.75	11.75	13.50
1989-90	7.0	8.75	11.75	13.50
1990-91	7.0	8.75	11.75	13.50
1991-92	7.75	11.50	13.00	15.00
1992-93	8.0	11.50	13.00	15.00

Source: HUDCO's Financing Pattern.

* Higher percentage of loan ceilings for the economically weaker and low income groups of households, and lower for the middle and high income household groups. According to the pattern of financing, loan ceilings are 90 per cent of the

housing costs for the economically weaker and 85 per cent for the low income sections, and 75 per cent and 60 per cent for the middle income and high income sections of population. These proportions have remained unchanged over the period of the study.

Cost ceilings have been laid down for different categories of dwelling units in the pattern of financing. The rationale for setting the cost ceilings is that the cost of dwelling units should be within the affordable limits, which are reckoned at 15-16 per cent of the household incomes.¹⁹ These ceilings also remained unchanged from 1985-86 to 1990-91 (Table 15). As we shall see later, the non-adjustment of cost ceilings to inflation rate has led to a fall in demand for loan and consequently releases particularly for the economically weaker section of households.

Table 15
Cost Ceilings for Different Categories of Housing

Year	Cost Ceilings (Rs.)			
	EWS	LIG	MIG	HIG
1985-86	15,000	20-30,000	60-100,000	250,000
1986-87	15,000	20-30,000	60-100,000	250,000
1987-88	15,000	20-30,000	60-100,000	250,000
1988-89	15,000	20-30,000	60-100,000	250,000
1989-90	15,000	20-30,000	60-100,000	250,000
1990-91	15,000	20-30,000	60-100,000	250,000
1991-92	22,000	50,000	175,000	--
1992-93	22,000	50,000	175,000	--

Source: HUDCO's Financing Pattern.

19. HUDCO's Note on Cost Ceilings.

iii. **Government Guarantees:** In order to safeguard its own capital against risks of defaults, HUDCO's lending operations are made on guarantees from State governments and commercial banks, or on submission of mortgages. Most loans have, however, been advanced on government guarantees. On account of this system, HUDCO does not have what may be called "bad debts". As the subsequent analysis will show, the system of guarantees while ensuring a near 100 per cent loan recovery for HUDCO, has proved to be a major impediment in bringing about efficiency in project appraisal exercises and other operations.

It was stated earlier that HUDCO's activities have grown phenomenally over the years. Apart from extending loans for housing which account for a significant proportion of its activities, HUDCO has begun to extend loans for infrastructure development and land acquisition. HUDCO's activities also include implementation of several centrally sponsored programmes. Between 1971-72 and 1992-93, HUDCO has sanctioned loans amounting to Rs.84,931.80 million, with a quantum jump in sanctions, in fact, taking place during 1985-86 and 1992-93. The disbursements although considerably lower than the sanctions, have correspondingly expanded over this period.

Being a refinancing agency, HUDCO lends to housing boards, development authorities, public sector bodies, municipalities, municipal corporations, slum clearance boards, and cooperative societies. These agencies are the principal implementing agencies at the field level. Housing boards and development authorities are HUDCO's principal borrowers, and account for approximately 60 per cent of total loans, followed by other public sector bodies (approximately 16 per cent), and municipal corporations and municipal bodies (approximately 6 per cent). In terms of the State-wise share, Uttar Pradesh accounts for 18.7 per cent, Tamil Nadu 11.67 per cent, and Maharashtra 10.9 per cent. In relation to their population and area, the shares of Bihar, Madhya Pradesh and West Bengal in HUDCO's disbursements are very low. Details in respect

of State-wise and agency-wise lending profile are annexed with this study report.

HUDCO's lending operations are best understood by first analysing the composition of its loans for various activities, and later examining the changes within each of them. Data in this respect are contained in Tables 16 to 18.

Table 16 below shows that cumulatively, HUDCO has sanctioned loans amounting to Rs.52,233 million, or 64.4 per cent of total loan sanctions, for housing, and Rs.13,327.2 million or 16.4 per cent for infrastructure development. Land acquisition accounts for 7.6 per cent of the total loan sanctions.

Table 16
Composition of HUDCO's Loan Sanctions
(Cumulative as on 31st March, 1993)#

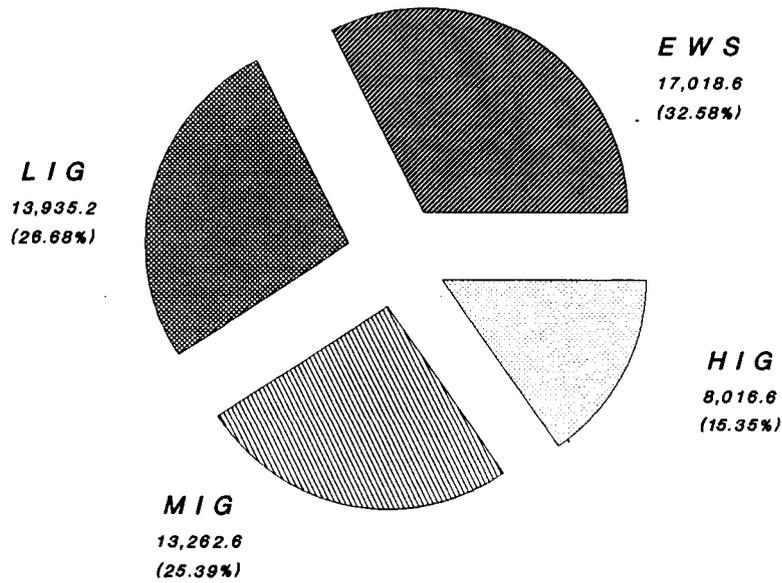
Category	Cumulative amount (Rs.million)	Sanctions % to the total
Housing	52,233.0	64.39
EWS	17,018.6	20.98
LIG	13,935.2	17.18
MIG	13,262.6	16.35
HIG	8,016.6	9.88
Infrastructure	13,327.2	16.43
Land acquisition	6,134.2	7.56
Others	9,422.3	11.62
Total	81,116.7	100.00

Source: *Report of the Expert Group on HUDCO*, December 1991, and Information Sheets of HUDCO.

Note: # The total of these figures are at slight variance with those given in Part 1 of the report and Annex tables.

Figure 5

**HUDCO's Housing Loan Sanctions
Cumulative (Rs. Million)
as on March 31, 1993**



This loan profile, however, is the outcome of the numerous changes that have taken place over the past few years in HUDCO's activities. For instance, in 1985-86 as also in 1986-87, housing formed perhaps the principal, if not the only activity of HUDCO, accounting for nearly 80 per cent of the total loan sanctions. Loans for other activities were, at best, marginal. With the addition in 1988 of an "infrastructure window" and enlargement of HUDCO's loan portfolio to include land acquisition, the loan composition of HUDCO has changed noticeably. As would be seen from the following table which gives the year-wise trends, the share of housing loan in total sanctions has declined from 79.3 per cent to 54.8 per cent during the reference period of the study. On the other hand, the share of infrastructure

ans has risen from 20.32 to 28.4 per cent. Also, during the same period, loan sanctions for land acquisition and infrastructure activities have risen at a much higher rate as compared to the rate of growth for housing activities. Table 17 may be seen in respect of how HUDCO's lending composition has changed over time.

Table 17
Percentage Share of Different Activities in HUDCO's Loan Sanctions
(Individual Years)

Year	Major Activities (%)				Total
	Housing	Infra-structure	Land acquisition	Others	
1985-86	79.28	-	-	20.72	100.00
1986-87	82.35	-	-	17.65	100.00
1987-88	70.25	-	10.86	18.89	100.00
1988-89	71.38	-	5.18	23.44	100.00
1989-90	56.91	20.32	12.68	10.09	100.00
1990-91	50.75	30.67	11.68	6.90	100.00
1991-92	42.96	30.29	11.75	14.99	100.00
1992-93	54.84	28.37	8.14	8.64	100.00
Annual average					
Growth rate (%)	12.54	16.99*	24.13*	7.6*	22.37

Source: Information sheets of HUDCO.

Note: * Values are statistically insignificant at 1 % level of significance.

Loans to the housing sector, however, continue to constitute the central activity of HUDCO. Further, the guidelines require the loan sanctions for the economically weaker section and low income group housing to be at least 55 per cent of the total sanctions for housing. According to the estimates, these have, in fact, been uniformly higher than 55 per cent of the total housing loan sanctions. As Table 18 shows, the share of this group in housing loan sanctions has ranged between 57.99 per cent to 63.74 per cent over the period 1985-86 to 1992-93. The EWS category alone has commanded over 30 per cent of the total housing loan sanctions in all years, excepting in 1992-93, when it was recorded just below the norm of 30 per cent.

Table 18
Percentage Composition of Loan Sanctions for Housing
(Individual Years)

Category	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93
EWS	31.09	32.04	31.05	32.25	33.82	36.32	32.01	29.75
LIG	28.39	27.86	28.90	27.29	29.92	24.47	26.40	28.24
EWS & LIG	59.48	59.89	59.94	59.54	63.74	60.79	58.41	57.99
MIG	22.64	27.32	25.25	26.39	21.28	22.42	23.99	26.74
HIG	17.88	12.78	14.80	14.07	14.98	16.78	17.60	15.27
MIG & HIG	40.52	40.11	40.06	40.46	36.26	39.21	41.59	42.01
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Information Sheets of HUDCO.

Total loan sanction for housing have risen over the years at an annual average rate of 12.54 per cent. It is noteworthy that HIG loan sanctions have registered the highest annual growth rate followed by loan sanctions for MIG (Table 19).

At this stage, it is important to point out that there is a large gap between the sanctions and actual loan disbursements made by HUDCO. In the aggregate, cumulative releases account for only 61 per cent of the cumulative sanctions (Table 20), suggesting that the actual physical achievements must be significantly lower than what are generally claimed.

HUDCO does not compile activity-specific data on loan releases/disbursements. Thus, from the given data sets, it is not possible to ascertain the loan amounts which have been released for housing, infrastructure, land acquisition, and other activities. Similarly, no assessment in respect of actual disbursement of loan for the EWS, LIG, MIG and HIG households is possible. *The non-availability of data on actual loan releases for various activities constitutes a major gap in HUDCO's information system, and as will be pointed out later, has significantly constrained this study.*

Table 19
Trends in Category-wise Sanctions for Housing
(Individual Years)

(Rs. million)

Category	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	Annual average growth rate (%)
EWS									
Amount	954.90	1034.30	1083.40	1499.20	1745.50	2554.60	1853.80	1811.63	12.80
% change		8.32	4.75	38.38	16.43	46.35	-27.43	-2.27	
LIG									
Amount	871.90	899.30	1008.30	1268.90	1544.00	1721.20	1529.10	1720.00	11.59
% change		3.14	12.12	25.85	21.68	11.48	-11.16	12.48	
EWS & LIG									
Amount	1826.80	1933.60	2091.70	2768.10	3289.50	4275.80	3382.90	3531.64	12.28
% Change		5.85	8.18	32.34	18.84	29.98	-20.88	4.40	
MIG									
Amount	695.50	882.10	881.20	1227.00	1098.50	1577.00	1389.60	1628.55	12.46
% change		26.83	-0.10	39.24	-10.47	43.56	-11.88	17.20	
HIG									
Amount	549.10	412.70	516.50	653.90	773.10	1180.40	1019.40	929.66	13.79
% change		-24.84	25.15	26.60	18.23	52.68	-13.64	-8.80	
MIG & HIG									
Amount	1244.60	1294.80	1397.70	1880.90	1871.60	2757.40	2409.00	2558.21	12.89
% change		4.03	7.95	34.57	-0.49	47.33	-12.64	6.19	
Total									
Amount	3071.40	3228.40	3489.40	4649.00	5161.10	7033.20	5791.90	6089.85	12.54
% change		5.11	8.08	33.23	11.02	36.27	-17.65	5.14	

Source: Information Sheets of HUDCO.

HUDCO made a partial compilation of loan releases for EWS, LIG, MIG, and HIG in respect of thirteen relatively smaller States, and the State of Bihar and the Union Territory of Delhi for use in this study. This compilation, shown in Table 21 gives data on the total loan releases made upto 31st March 1993 for the different categories of housing. According to this table, EWS housing in the aggregate accounted for 18.56 per cent of the total housing loan disbursements, LIG housing accounted for 31.51 per cent, MIG accounted for 24.86 per cent and HIG accounted for 25.08 per cent of the 15 States' total loan disbursement. While, admittedly, these States may not adequately represent the overall position, the fact that major slippages have occurred on account of EWS housing can not fail to be noticed.

Table 20
Loan Sanctions and Loan Releases
(Individual Years)

(Rs. million)

Year	Loan sanctions		Loan releases		Release/ Sanction (%)	Annual % change
	Amount	Annual % change	Amount	Annual % change		
1985-86	3874.20	9.79	2225.10	11.36	57.43	1.43
1986-87	3920.20	1.19	2701.50	21.41	68.91	19.99
1987-88	4967.30	26.71	3146.00	16.45	63.33	-8.09
1988-89	6512.80	31.11	4380.50	39.24	67.26	6.20
1989-90	9068.40	39.24	5410.00	23.50	59.66	-11.30
1990-91	13858.90	52.83	7350.00	35.86	53.03	-11.10
1991-92	13480.90	-2.73	8340.00	13.47	61.87	16.65
1992-93	11100.00	-17.66	8590.00	3.00	77.39	25.09
1972-93	84931.80		52065.60		61.30	8.83
Growth Rates (%)						
1971-72 to 1992-93	20.91		25.15			
1971-72 to 1980-81	21.70		37.02			
1981-82 to 1992-93	20.39		22.50			

Source: 1. 22nd Annual Report of HUDCO.
2. Information sheets of HUDCO (1992-93).

Figure 6

**HUDCO's Release/Sanction Percentage
(Individual Years)**

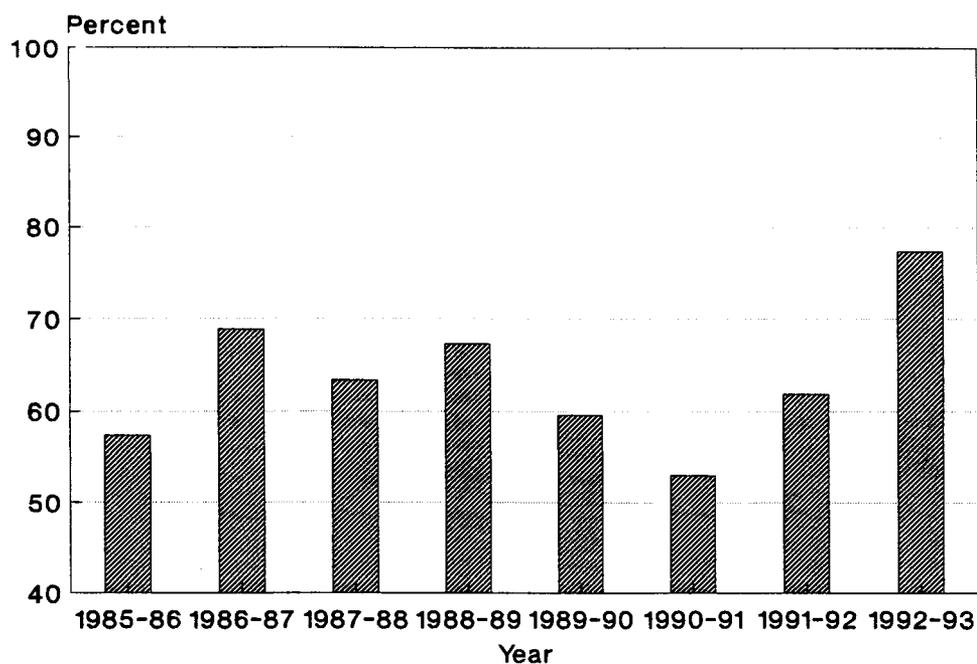


Table 21

**Cumulative Loan Amount Released for Different Categories
of Housing (15 States and Union Territories)
(As on 31st March, 1993)**

Categories	Amount released (Rs. million)	Per cent of total amount released
EWS	3,146.45	18.56
LIG	5,342.27	31.51
MIG	4,214.86	24.86
HIG	4,251.60	25.08
Total	16,955.18	100.00

Source: Data supplied by HUDCO.

HUDCO lays down a pattern of financing for various activities such as housing, infrastructure, and land acquisition. It includes the interest rates, maturity period, and other conditions. The effective lending rate, however, is a function of *actual amounts* disbursed for different activities and the corresponding interest rates. This set of data, as pointed out above, is not maintained by HUDCO. The non-availability of data on amounts lent and the interest rates at which these are lent, does not make it possible to compute the effective average lending rate. This study remains severely handicapped on this account.²⁰

In the absence of data on actual loan disbursements, this study has used the data on "sanctions" for computing the lending rates. These rates are shown in the following table. As will be seen, these rates have risen over the years; the rate of increase was moderate between 1985-86 to 1989-90 but it accelerated during the years 1990-91 to 1992-93, with the lending rate going up to 12.79 per cent in 1992-93.

Table 22
Average Lending Rate Based on Sanctions
(Individual Years)

Year	Average lending rate %
1985-86	10.05
1986-87	10.06
1987-88	10.46
1988-89	10.89
1989-90	11.46
1990-91	11.25
1991-92	12.23
1992-93	12.79

Source: 1. Financing Pattern of HUDCO.
2. Information sheets of HUDCO.

²⁰. The method employed by HUDCO for calculating the lending rate is not known.

A crucial aspect of HUDCO's financial operations is the relationship between the average cost of raising resources and average rate at which resources are lent out. The financial viability of any organisation depends vitally on these rates. In the case of HUDCO, this issue is surprisingly contentious on account of the difference in the concept and methodology. The Eswaran Committee Report (1991), for instance, has stated that interest paid by HUDCO on its borrowings during the period 1987-88 to 1990-91 was in excess of the interest earned on its lendings²¹; the report adds that the profits of HUDCO during this period were due to "efficient cash management of funds". For the future, the Eswaran Committee, however, noted that continuation of such a situation could present serious problems for the financial viability of HUDCO.

In a recent publication, HUDCO has provided fresh estimates of the average borrowing and lending rates which are shown in Table 23. According to this table, the average borrowing rate has been consistently higher than the average lending rate.²² The methodology for HUDCO's computations is not known, and it is not clear from the estimates whether the borrowing rate is the "cost of loan funds" or the cost of resources. Similarly, the methodology for computing lending rates is not known.

In this study, the average cost of funds has been worked out by applying the interest rates to the amounts mobilised and the average lending rate by applying the interest rates to the amounts sanctioned. The amounts mobilised include the share capital, irrespective of whether a dividend has been paid on share capital. No other adjustments have been made in the calculation of these rates.

21. See, pp. 34 of the *Report of the Eswaran Committee*.

22. Such a comparison by HUDCO is unfair as the lending rates should be compared not with the borrowing rates but with the cost of resources.

Table 23
Average Borrowing and Lending Rates (HUDCO's Estimates)

Year	Average borrowing rate %	Average lending rate %
1987-88	10.90	9.48
1988-89	10.88	9.33
1989-90	10.92	10.19
1990-91	11.29*	10.94
1991-92	12.52*	11.39
1992-93	13.90*	12.72

Source: HUDCO : *A Corporate Profile*, A HUDCO Publication (1993).

Note: * Includes 1% for HUDCO overheads and government guarantee fees.

The results (Table 24) show that the average lending rates (column c) are consistently higher than the overall cost of raising resources (column a), suggesting that the lending rates fixed for MIG, HIG, infrastructure and land acquisition are sufficiently high to keep the overall average lending rates higher than the cost of mobilising resources (col. a above). The cost of loan funds (col. b), however, is higher than the average lending rate in 1992-93 when as stated earlier, HUDCO resorted to high-cost borrowing. In the aggregate, however, the consistently higher lending rates combined with earnings on short term investments explain the profits that HUDCO has been able to post in recent years.

The category-wise average lending rates on HUDCO loans are given in Table 25.

Table 24
Average Borrowing and Lending Rates
(Individual Years)

Years	Cost of loan funds and share capital (a)	Average cost of loan funds (b)	Average lending rate (%) (c)	Difference between	
				(c-a)	(c-b)
1985-86	9.66	10.37	10.05	0.39	-0.32
1986-87	9.62	10.13	10.06	0.44	-0.07
1987-88	10.37	10.75	10.46	0.09	-0.29
1988-89	9.28	9.88	10.89	1.61	1.01
1989-90	9.39	9.92	11.46	2.07	1.54
1990-91	10.10	10.35	11.25	1.15	0.90
1991-92	10.82	10.90	12.23	1.41	1.33
1992-93	12.70	13.10	12.79	0.09	-0.31

- Source:**
1. Details on resource mobilisation of HUDCO as supplied by HUDCO (Annex tables).
 2. Information sheets of HUDCO.
 3. Financing Pattern for HUDCO Schemes.

Figure 7

HUDCO's Borrowing and Lending Rate
(Individual Years)

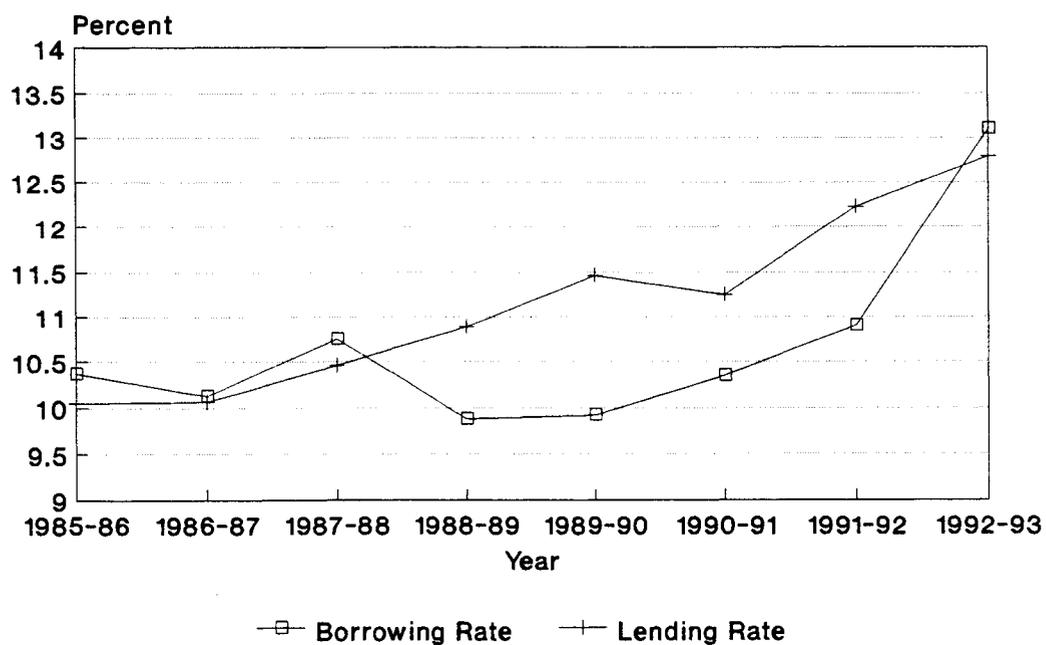


Table 25
Category-wise Average Lending Rate on
HUDCO Loans (Based on Sanctions)

Year	Average lending rates (%)			
	Housing (1)	Infrastructure (2)	Land acquisition (3)	Others (4)
1985-86	9.73	-	-	11.28
1986-87	9.62	-	13.50	11.41
1987-88	9.67	10.00	13.50	11.77
1988-89	9.65	-	13.50	14.10
1989-90	9.55	15.00	13.50	12.33
1990-91	9.59	14.97*	13.50	9.27
1991-92	11.27	14.99*	15.00	10.13
1992-93	11.35	15.00	15.00	12.86

Source: Calculated from Information Sheets of HUDCO.

Note: * Includes low cost sanitation which carries a lower rate of interest.

4. Defaults and Delays

An outstanding feature of HUDCO's financial operations is its extremely low level of defaults and delayed repayments. The Eswaran Committee estimated these to be about one per cent; the more recent data, however, places the total cumulative defaults at a little over Rs.1,000 million, or approximately 1.92-1.93 per cent of the total loan releases. Low level of default is said to be due to the guarantee-based loan system, where all loans advanced by HUDCO are guaranteed by State governments.

In respect of defaults too, there are no schematic data, making it difficult to identify the types of activities which are more prone to defaults. What is important is that HUDCO has on its list seven cases where government guarantee clause is to be invoked, and eleven cases where loans have either been recalled or deferred.

Table 26
Defaults and Delays (Cumulative as on 31st March, 1992)

Item	Amount (Rs million)	Per cent to total
Repayment	562.080	55.84
Interest	203.099	20.18
Short Interest	227.864	22.64
Additional interest	13.575	1.34
Total:	1006.618	100.00

Source: Calculated from data supplied by HUDCO.

5. Conclusion

The analysis of HUDCO's financial state provides the following main conclusions:-

- i. HUDCO's financial operations have grown over the past two decades at a high rate. At the same time, it needs to be pointed out that whether it is the resource mobilisation or the lending activities, both are governed by different kinds of mandates, guidelines, and regulations.
- ii. During the past few years, HUDCO's resource base has expanded enormously. This has been possible with the issue of bonds and debentures by HUDCO which account for about 60 per cent of HUDCO's resource base. Share capital (equity) is small, and its share in total resources is on the decline. Similarly, the share of loans from institutions such as the LIC and GIC in HUDCO's resource profile has also declined in recent years. On the other hand, new institutions such as the

National Housing Bank and the Unit Trust of India have come to play an important role in HUDCO's resource portfolio. An important feature of HUDCO's resource mobilisation is the highly varied structure of interest rates at which resources are mobilised.

- iii. The cost of loan funds has registered an increase in recent years. In 1992-93, the average cost had peaked to 13.10 per cent, and for the first time, over two-thirds of resources were raised at rates in excess of 11 per cent.
- iv. HUDCO's investment in short term securities has registered a dramatic increase in recent years. While such investments may offer a partial explanation for HUDCO's profits, these also reflect the inability on the part of HUDCO to systematically assess its resource needs.
- v. HUDCO's loan portfolio has expanded and diversified over the past few years. A more detailed analysis of the lending profile and HUDCO's role is hampered by the fact that there are no data on loan releases and disbursements; thus, it is not possible to ascertain as to what amounts have actually been spent on what activities, and where the slippages are. Nor is it possible to know whether the slippages are due to the low level of demand, institutional rigidities, or other factors.
- vi. The average lending rates have risen in tandem with the average cost of resources and have, throughout the period of the study, been marginally higher than the cost of capital.

- vii. Defaults are consistently low and form less than 2 per cent of the total loan release. However, in recent years, HUDCO has invoked government guarantee clause in several cases, and reduced or deferred the volume of loans in others.

Chapter 2 : The Financial Viability of HUDCO

1. Introduction

The financial strength and viability of any institution is a function of how it mobilises resources and how it deploys them for the attainment of its objectives. It shows itself in the balance of income and expenditure, and is represented by various financial ratios such as the ratio of profit to shareholders' funds (return on equity), profit to total assets, profit to total income, and debt to equity. These indicate in different ways the financial standing of the institution, and the capacity of the institution to enter the capital market, float different kinds of debt instruments, and use them to expand the network of activities.

For institutions such as HUDCO whose mandate lies in promoting and expanding housing and urban development activities, in particular social housing, other measures also assume importance. The Ministry of Urban Development, for instance, uses in the case of HUDCO, a large number of indicators to assess its performance which include, besides the established criterion of profits, value added per employee, the percentage of EWS/LIG units to total number of dwelling units sanctioned, loan recovery rates, designing of demonstration projects, and the training programmes run by HUDCO.²³

Using the income-expenditure data and a set of financial ratios, this Chapter focuses on analysing the financial performance of HUDCO. In addition, this Chapter compares HUDCO's financial performance with that of other institutions engaged in housing and urban development

23. See, Memorandum of Understanding between Housing and Urban Development Corporation Ltd and Ministry of Urban Development, 1992-93.

finance activities, recognizing that while they do not strictly operate on a "level playing field", HUDCO's financial performance can no longer be seen in isolation of the performance of other institutions.²⁴ This Chapter also simulates the effect of the withdrawal of governmental support embodied in low cost funds, etc. on HUDCO's financial ratios. This aspect is particularly important in determining the long term viability of HUDCO in the context of the changing financial environment.

2. Income and Expenditure

The income of HUDCO is derived from several sources which include interest on housing and urban development (HUD) loans, interest and dividend on investments, and various kinds of charges, front-end fees, and miscellaneous income. The expenditure of HUDCO is composed of interest paid on borrowings, expenditure on staff, and miscellaneous expenditure. The income and expenditure of HUDCO are shown in the table below (Table 27).

It is to be noted from the above table that the income and expenditure of HUDCO have registered an impressive growth over the period 1985-86 to 1992-93. Income, as may be seen, rose during this period at an annual average rate of 35.3 per cent, while expenditure posted an annual growth of 36 per cent. Note should also be made of the fact that the total income of HUDCO has all along been higher than the total expenditure, and in this sense, *HUDCO is a profit-making agency.*

24. HUDCO has access to low cost funds, and as a *quid pro quo*, obliged to invest a part of its funds into social housing. On the other hand, the housing finance institutions have neither any access to low cost funds nor are they obliged to focus on social housing. It can thus be argued that a comparison of financial ratios of HUDCO with those of other housing finance institutions is not an odd exercise.

Table 27

Income and Expenditure of HUDCO
(for the years ending 31st March)

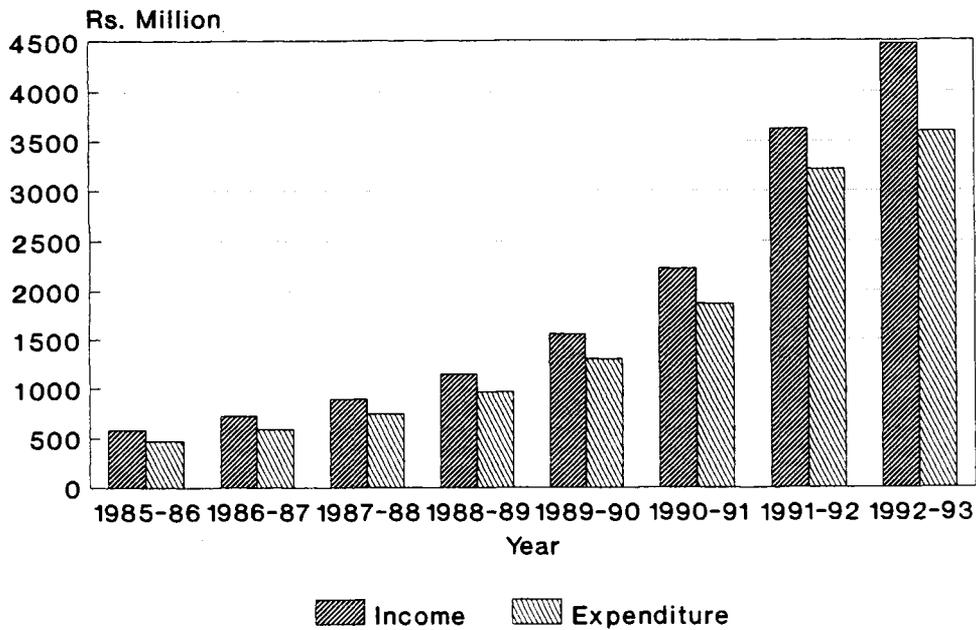
(Rs. million)

Year	Income	Expenditure	Income - Expenditure
1985-86	582.07	468.65	113.42
1986-87	722.99	589.05	133.94
1987-88	893.44	739.25	154.19
1988-89	1,146.22	965.29	180.93
1989-90	1,560.25	1,302.65	257.60
1990-91	2,225.08	1,872.12	352.96
1991-92	3,622.55	3,211.99	410.55
1992-93	4,470.10	3,594.38	875.72
Average annual growth rate %	(35.27)	(36.00)	(31.10)

Source: Annual Reports of HUDCO.

Figure 8

**HUDCO's Income and Expenditure
During the Year**



Interest on housing and urban development (HUD) loans is the principal source of income for HUDCO. In 1985-86, over 92 per cent of income accrued from this source. Although it is still the principal source, its contribution is no longer overwhelming; in fact, as the table shows (Table 28) it has plummeted to 67.8 per cent in 1992-93. What is particularly striking is the slow rate of growth of such income in comparison with other income sources.

A second important source of income for HUDCO is the interest and dividend on investments. From a modest sum of Rs.29.9 million or 5.14 per cent of the total income, interest on investments has risen to Rs.797 million, accounting for in 1992-93, over 17 per cent of the total income. On an average, this source of income has risen annually by over 75 per cent. Apparently, financial investments have vastly risen in importance in the total operations of HUDCO. The contribution of other sources excepting miscellaneous sources is small (Table 28).

The net effect of income-expenditure balance is represented by profit which, as pointed out earlier, has risen in absolute terms over the period 1985-86 to 1992-93. As a percentage of total income, profit before tax accounted for 19.48 per cent in 1985-86, then registered a continuous decline up to 1991-92, only to recover and reach a peak of 19.59 per cent in 1992-93. In the aggregate, however, profit has been maintained at moderate levels, registering, during the period of the study, an annual growth rate of 31 per cent and profit after tax of 22.7 per cent per annum (Table 30). Further analysis of the income-expenditure statement shows that profit of HUDCO springs not only from the income on HUD loans, but also from the interest and dividend earned on investments. Interest and dividend on HUDCO's investments, in fact, carry a large weight in HUDCO's income profile, and as may be noted from Table 31, their exclusion from total incomes can significantly affect the level of profit. In 1991-92, the contribution of interest and dividend on investment was particularly high and was singularly responsible for HUDCO's profit.

Table 28
Composition of Income

(Rs. million)

Item	1985	1986	1987	1988	1989	1990	1991	1992	Annual average growth rate (%)
	-86	-87	-88	-89	-90	-91	-92	-93	
Interest (HUD loans)	537.70 (92.39)	679.56 (93.99)	828.48 (92.73)	1000.73 (87.31)	1327.98 (85.11)	1789.62 (80.43)	2407.67 (66.46)	3031.06 (67.81)	28.44
Interest and dividend (investments)	29.90 (5.14)	23.98 (3.32)	42.11 (4.71)	83.03 (7.24)	150.07 (9.62)	344.03 (15.46)	776.82 (21.44)	797.12 (17.83)	75.5
Charges (documentation, commitment, service)	7.80 (1.34)	9.00 (1.24)	12.43 (1.39)	22.12 (1.93)	15.42 (0.99)	20.29 (0.91)	17.65 (0.49)	14.97 (0.33)	11.36
Front-end fees	0.00	0.00	0.00	0.00	0.00	0.00	99.43 (2.74)	110.65 (2.48)	(-)
Interest (net current assets, etc.)	5.95 (1.02)	9.37 (1.30)	9.34 (1.05)	21.62 (1.89)	33.18 (2.13)	16.26 (0.73)	120.82 (3.34)	106.79 (2.39)	51.84
Others	0.72 (0.12)	1.07 (0.15)	1.08 (0.12)	18.72 (1.63)	33.59 (2.15)	54.87 (2.47)	200.17 (5.53)	409.51 (9.16)	168.48
Total	582.07 (100.00)	722.99 (100.00)	893.44 (100.00)	1146.22 (100.00)	1560.25 (100.00)	2225.08 (100.00)	3622.55 (100.00)	4470.10 (100.00)	35.27

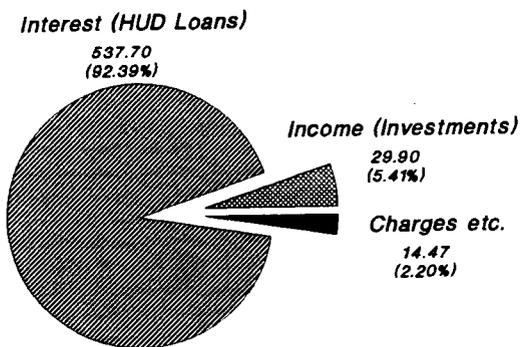
Source: Annual Reports of HUDCO.

Note: Figures in parentheses relate to the share of each item in total income.

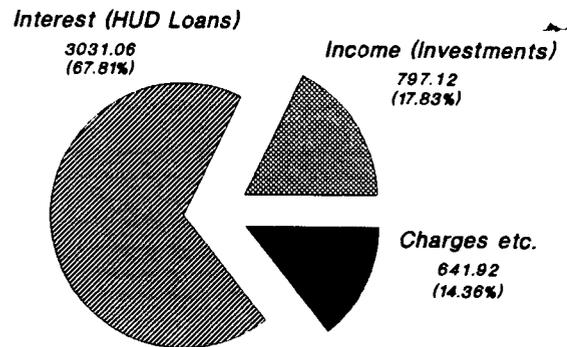
(-) denotes that regression is not applicable.

Figure 9

Composition of HUDCO's Income (1985-86)
(Rs.Million)



Composition of HUDCO's Income (1992-93)
(Rs.Million)



Interest paid on borrowings is the most important component of HUDCO's expenditure. It has risen at an annual average rate of 32.7 per cent over the study period. The comparable figure for staff expenditure is 31.0 per cent during the same period. "Other expenditures" have grown at an alarming rate of over 87 per cent per annum (Table 29).

The net effect of income-expenditure balance is represented by profit which, as pointed out earlier, has risen in absolute terms over the period 1985-86 to 1992-93. As a percentage of total income, profit before tax accounted for 19.48 per cent in 1985-86, then registered a continuous decline up to 1991-92, only to recover and reach a peak of 19.59 per cent in 1992-93.

Table 29
Composition of Expenditure

(Rs. million)

Item	1985	1986	1987	1988	1989	1990	1991	1992	Annual Average growth rate (%)
	-86	-87	-88	-89	-90	-91	-92	-93	
Interest paid (borrowings)	449.41 (95.89)	565.57 (96.01)	705.87 (95.48)	901.66 (93.41)	1215.02 (93.27)	1666.75 (89.03)	2476.77 (77.11)	3093.25 (86.06)	32.70
Staff expenditure	7.94 (1.69)	10.93 (1.16)	13.07 (1.77)	18.18 (1.88)	22.76 (1.75)	30.75 (1.64)	39.59 (1.23)	54.25 (1.51)	31.00
Others	11.31 (2.41)	12.55 (2.13)	20.32 (2.75)	45.45 (4.71)	64.87 (4.98)	174.62 (9.33)	695.64 (21.66)	446.88 (12.43)	87.10
Total	468.65 (100.00)	589.05 (100.00)	739.25 (100.00)	965.29 (100.00)	1302.65 (100.00)	1872.12 (100.00)	3211.99 (100.00)	3594.38 (100.00)	36.00

Source: Annual Reports of HUDCO.

Note: Figures in parentheses relate to the share of each item in total expenditure.

In the aggregate, however, profit has been maintained at moderate levels, registering, during the period of the study, an annual growth rate of 31 per cent and profit after tax of 22.7 per cent per annum (Table 30). Further analysis of the income-expenditure statement shows that profit of HUDCO springs not only from the income on HUD loans, but also from the interest and dividend earned on investments. Interest and dividend on HUDCO's investments, in fact, carry a large weight in HUDCO's income profile, and as may be noted from Table 31, their exclusion from total income can significantly affect the level of profit. In 1991-92, the contribution of interest and dividend on investment was particularly high and was singularly responsible for

HUDCO's profit.

Table 30
Level of Profit

(Rs. million)

Item	1985 -86	1986 -87	1987 -88	1988 -89	1989 -90	1990 -91	1991 -92	1992 -93	Annual average growth rate (%)
Profit before tax (PBT)	113.42	133.94	154.19	180.93	257.60	352.96	410.55	875.72	31.10
PBT as % of total income	19.48	18.53	17.26	15.78	16.51	15.86	11.33	19.59	
Profit after tax (PAT)	113.42	133.94	154.19	180.93	257.60	251.65	278.01	604.87	22.71
PAT as % of total income	19.48	18.53	17.26	15.78	16.51	11.31	7.67	13.53	

Source: Annual Reports of HUDCO.

Figure 10

HUDCO's PBT/Total Income

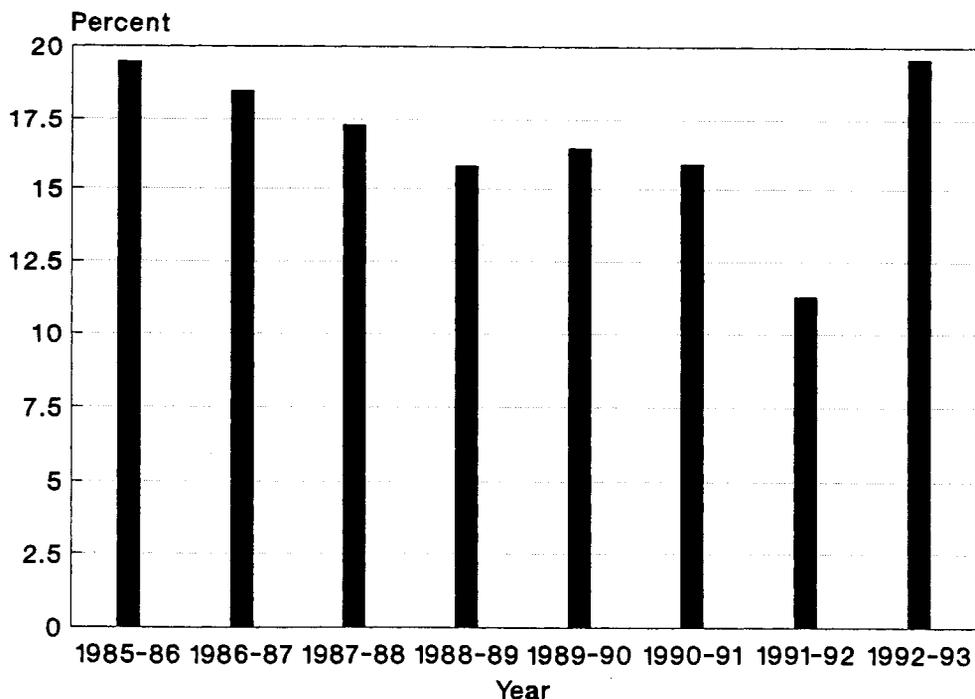


Table 31

**Profit Before Tax as a Proportion of Total Income
(Excluding the Income Earned from Investments)**

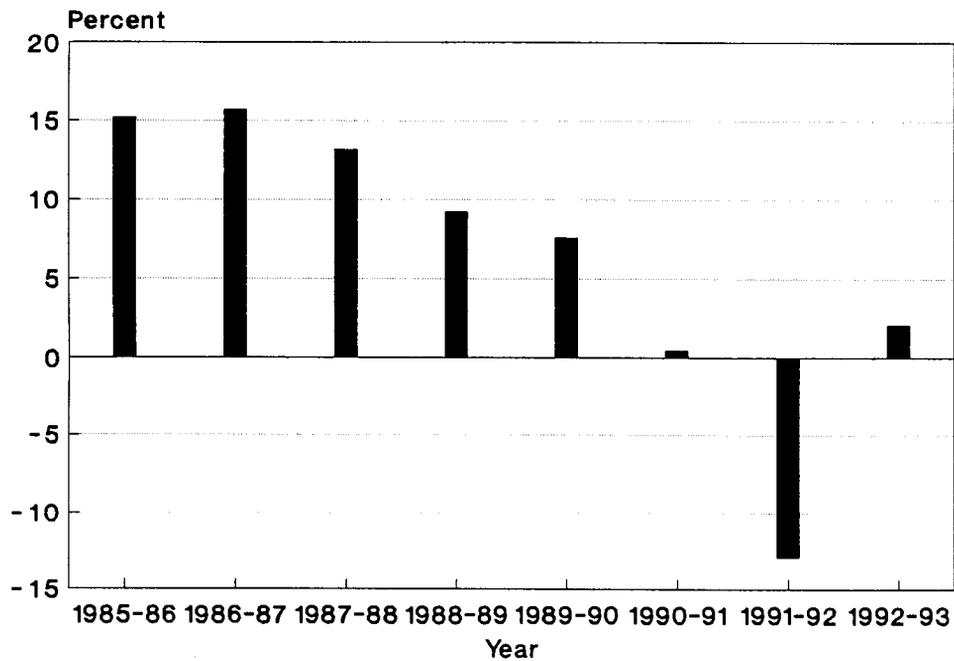
(Per cent)

Year	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93
PBT as % of total income	15.2	15.7	13.2	9.2	7.6	0.47	-12.9	2.1

Source: Calculated from the Annual Reports of HUDCO.

Figures 11

**HUDCO's PBT/Total Income
(Excluding Income from Investments)**



2. Financial Ratios

Greater insights into the financial performance of HUDCO are obtained from the various financial ratios. Table 32 gives these ratios, and shows on the positive side the following important features:

- i. The ratio of profit to shareholders' funds, both before and after tax, steadily improved over the period 1985-86 to 1992-93, rising from 0.0680 to 0.1741 (PBT) and from 0.0680 to 0.1202 (PAT).²⁵ This is partly explained by the slow pace of growth of shareholders' funds in comparison with other components of resources.
- ii. The ratio of loan funds to total resources has risen consistently over the period of the study. This is reflected in rising debt-equity ratio which, as will be shown later, is reaching closer to ratios similarly achieved by many housing finance institutions. The overall debt burden on this account is not high enough to cause concern; rather, it is a reflection of HUDCO's increasing confidence in its capacity to tap funds from other sources for augmenting its financial base.
- iii. Staff expenditure as a ratio of total expenditure has stayed within limits.

The less promising, if not negative, aspects of HUDCO's financial operations are equally important and striking. These are :

25. Profits before and after tax were identical until 1989-90. No tax was paid by HUDCO on its profits until then.

Table 32
Financial Ratios
(For the Year Ended March 31)

	1986	1987	1988	1989	1990	1991	1992	1993
A. Resources:								
Debt/Equity = Loan funds/ Shareholders' funds	3.2906	3.5558	3.8031	4.2871	4.6921	6.6715	7.3612	6.2544
PBT/Shareholders' funds	0.0680	0.0712	0.0726	0.0739	0.0875	0.1028	0.1038	0.1741
PAT/Shareholders' funds	0.0680	0.0712	0.0726	0.0739	0.0875	0.0733	0.0703	0.1202
Dividend rate = Dividend/ Share capital	-	-	-	-	-	-	-	0.0550
Interest paid (borrowings) /Loan funds	0.0819	0.0846	0.0874	0.0860	0.0880	0.0727	0.0851	0.0983
Loan funds/Total resources	0.7669	0.7805	0.7918	0.8109	0.8243	0.8696	0.8804	0.8622
B. Assets:								
Interest (HUD loans)/ HUD loans	0.0781	0.0830	0.0854	0.0832	0.0865	0.0889	0.0974	0.1027
Interest & dividend (investments)/Investments	0.1374	0.1819	0.0919	0.1435	0.0923	0.1329	0.1068	0.4135
Interest (net current assets)/Net current assets	0.2473	0.0434	0.7089	0.0874	-0.0967	0.0046	0.1286	0.0219
HUD loans/Total assets	0.9628	0.9562	0.9520	0.9304	0.9162	0.7637	0.7474	0.8087
Investments/Total assets	0.0304	0.0154	0.0449	0.0447	0.0970	0.0983	0.2200	0.0528
Net current assets/Total assets	0.0034	0.0252	0.0013	0.0191	-0.0205	0.1328	0.0284	0.1336
Fixed assets/Total assets	0.0034	0.0032	0.0033	0.0048	0.0073	0.0052	0.0041	0.0049
PBT/Total assets	0.0159	0.0156	0.0151	0.0140	0.0154	0.0134	0.0124	0.0240
PAT/Total assets	0.0159	0.0156	0.0151	0.0140	0.0154	0.0095	0.0084	0.0166

(contd....)

Table 32 (contd.)

	1986	1987	1988	1989	1990	1991	1992	1993
C. Income:								
Interest (HUD loans)/ Total income	0.9238	0.9399	0.9273	0.8731	0.8511	0.8043	0.6646	0.6781
Interest & dividend (investments)/Total income	0.0514	0.0332	0.0471	0.0724	0.0962	0.1546	0.2144	0.1783
Interest (net current assets)/Total income	0.0102	0.0130	0.0105	0.0189	0.0213	0.0073	0.0334	0.0239
PBT/Total income	0.1948	0.1853	0.1726	0.1578	0.1651	0.1586	0.1133	0.1959
PAT/Total income	0.1948	0.1853	0.1726	0.1578	0.1651	0.1131	0.0767	0.1353
D. Expenditure:								
Interest paid (borrowings) /Total expenditure	0.9589	0.9601	0.9548	0.9341	0.9327	0.8903	0.7711	0.8606
Staff expenditure/ Total expenditure	0.0169	0.0186	0.0177	0.0188	0.0175	0.0164	0.0123	0.0151

Source: Calculated from Annual Reports of HUDCO.

Note: The terms 'capital employed' and 'total assets' are interchangeable and so are the terms 'gross earnings' and 'total income'.

- i. The ratio of profit to total income, both before and after tax, declined consistently from 1985-86 to 1991-92, and although the ratio bounced back in 1992-93, the fact that it consistently declined for seven years during a period when HUDCO made substantial investments, can not fail to strike a note of concern in HUDCO's financial operations. This pattern also holds true for the ratio of profit to total assets.

- ii. The ratio of housing and urban development loans to total assets has dropped from 0.9628 in 1985-86 to 0.8087 in 1992-93, suggesting a diversion of funds from housing and urban development for other purposes.
- iii. The ratio of net current assets to total assets has oscillated considerably during this period, signalling an element of uncertainty in the liquidity policy of HUDCO.
- iv. Interest earned from housing and urban development loans as a ratio of total income has fallen steeply from 0.9238 to 0.6781 during the period 1985-86 to 1992-93. The main reason for this is that HUD loans as a percentage of total assets fell during this period.

On the whole, an analysis of HUDCO's income and expenditure and the key financial ratios presents a mixed bag of positive and negative features. The positive features relate to improvements in debt to equity ratios and keeping the staff expenditure within limits. The negative aspects are shown in the declining ratio of investment in housing and infrastructure activities, and declining level of income from HUD loans.

4. HUDCO and Other Housing Finance Institutions (HFIs)

HUDCO, as pointed out earlier, is a part of a larger network of housing finance institutions in the country. These network institutions have supplemented and complemented each other in the sphere of housing finance. Competition between them in respect of either resource mobilisation or loan advancing has so far been minimal, if not virtually non-existent. As the network of housing finance institutions expands, the situation where they can pursue their

operations in a non-competitive manner will change, and willy-nilly necessitate a change in the methods of operation. Evidently, the efficiency with which the HFIs will conduct their activities and manage their finances will be an important factor both for accessing capital resources and capturing the market. The question is about the performance of HUDCO relative to that of other HFIs. How does HUDCO's financial performance compare with that of other HFIs? It is this perspective that makes a comparison of HUDCO's financial performance with that of other HFIs relevant for this study.

In a strict sense, HUDCO and other HFIs are not on a level playing field. HUDCO has access to low cost funds and has a social mandate, and is consequently required to advance loans at subsidized rates for economically weaker and low income households. Other HFIs do not have such a mandate. Nor do they carry any obligations, although they can claim deductions under separate provisions of the Income Tax Act. Yet, the nature of the differences is such that comparison between them provide extremely useful insights into the efficiency of the overall housing finance system in the country.

Note should be made of the fact that outside of HUDCO, the National Housing Bank (NHB), and the Housing Development Finance Corporation (HDFC), other housing finance institutions are small and of recent origin. Many of them have not even begun housing finance operations in any noticeable manner, notwithstanding their entitlement to housing refinance facility from the National Housing Bank. In order that comparisons are seen in a proper light, we give below the size of financial operations of five housing finance institutions covered in this study. HUDCO's data are also shown in Table 33.

Table 33
Income and Expenditure of HFIs and HUDCO
(As at the end of the year, 1992-93)

(Rs. million)

HFI	Income		Expenditure	
	Amount	Annual average growth rate (%)	Amount	Annual average growth rate (%)
HDFC	4,734.96	36.52	4,004.46	36.72
Can Fin Homes Ltd.	534.47	124.58	480.24	132.93
SBI Home Finance Ltd.	186.09	169.71	150.06	200.80
LIC Housing Finance Ltd.	1,098.67	-	910.93	-
GIC Griha Vitta Ltd.	84.41	-	63.24	-
HUDCO	4,470.10	165.58	3,594.38	171.68

Source: Annual Reports of HDFC, SBI Home Finance Ltd., Can Fin Homes Ltd., LIC Housing Finance Ltd., and GIC Griha Vitta Ltd.

Apart from the size, there are other differences too in the character of these institutions. For instance, HDFC, Can Fin Homes and SBI Home Finance have secured direct access to market loans by tapping household savings, while other HFIs have relied on shareholders' funds and institutional sources. Furthermore, HDFC is the only institution which has over 22 per cent of its funds from external sources. The following table (Table 34) gives the composition of resources of the sampled HFIs.

For a comparative analysis of financial performance, three ratios are used here, namely : (a) debt-equity or loan funds to shareholders' funds, (b) profit before tax as a proportion of total income²⁶, and (c) income earned on housing and urban development loans as a proportion of

²⁶. Profit before tax are used here as HUDCO paid no taxes until 1990-91.

Table 34

**Composition of Resources of HFIs
(As at the end of the year 1992-93)**

(Per cent)

HFI	Shareholders' Funds		Loan Funds		
	Share capital	Reserves & surplus	Institutional	Market	External funds
HDFC	2.04	7.64	22.67	45.59	22.06
Can Fin Homes Ltd.	5.76	4.38	40.34	49.52	-
SBI Home Finance Ltd.	5.51	10.14	69.24	15.11	-
LIC Housing Finance Ltd.	3.70	2.27	94.03	-	-
GIC Griha Vitta Ltd.	7.79	3.63	88.58	-	-
HUDCO	5.07	8.72	26.62	57.46	2.14

Source: Annual Reports of HDFC, SBI Home Finance Ltd., Can Fin Homes Ltd., LIC Housing Finance Ltd. and GIC Griha Vitta Ltd.

Several points emerge from the above table. First : despite the improvement in the debt-equity ratio of HUDCO, it is still low compared with the other housing finance institutions excepting the SBI Home Finance Ltd. HDFC, for instance, has been able to maintain during the entire period beginning with 1985-86, a high debt-equity ratio;²⁷ other agencies which have entered into housing finance in recent years too have been able to achieve high debt-equity ratios.

27. See Part V of the report for trend data on HDFC's debt-equity ratio.

ratios.

Table 35
Key Financial Ratios of HFIs and HUDCO
(As at the end of the year 1992-93)

HFI	Debt-equity ratio	Profit as a % of total income	Income from HUD loans as a % of total income
HDFC	9.33	15.43	72.30
Can Fin Homes Ltd.	8.87	10.15	77.73
SBI Home Finance Ltd.	5.39	19.36	61.34
LIC Housing Finance Ltd.	15.75	17.09	81.76
GIC Griha Vitta Ltd.	7.75	25.08	45.55
HUDCO	6.25	19.59	67.81

Source: Annual Reports of HDFC, SBI Home Finance Ltd., Can Fin Homes Ltd., LIC Housing Finance Ltd. and GIC Griha Vitta Ltd.

Second : The performance of HUDCO compares well with that of other HFIs. Trend analysis, however, shows that while in the case of HUDCO, PBT as a ratio of total income declined consecutively from 1985-86 to 1991-92, HDFC was able to keep the fluctuations in PBT/total income ratio within a smaller range. Profitability ratios of other HFIs during the period of their operations were erratic, indicating that these were still in the process of settling down.²⁸

28. See Part V of the report for trend on the profitability ratios of sampled HFIs.

Third : interest on HUD loans constitutes the main source of income for all HFIs and HUDCO. In the case of HUDCO, income from housing and urban development loans accounted for 67.8 per cent in 1992-93; in the case of others, it ranged between 45.6 per cent (GIC Griha Vitta) to 81.8 per cent (LIC Housing Finance). The point to note is that income from housing and urban development in the case of HUDCO has shown a consistent decline over the period 1985-86 to 1992-93, while in the case of HDFC, it has been maintained between a narrow range of 70-75 per cent. Other HFIs who depended on other sources of income in the initial period of their establishment have begun to obtain larger shares of their income from housing and urban development activities.

In sum, the overall performance of HUDCO in financial terms compares well with that of other HFIs. If profits are a measure, then HUDCO does not stand at any disadvantage vis-a-vis other HFIs. HUDCO's debt-equity ratio is rising and reaching out close to that of HDFC, and is well within limits.

5. Effect of the withdrawal of government support on HUDCO's financial ratios : Simulations

The financial ratios of HUDCO as presented earlier in this Chapter are the outcome of the interaction between a large array of "rates" - rates at which resources are mobilised, rates at which investments are made, the rates at which loans are advanced for various activities, etc. It is evident that any change in the rates will trigger off changes in the financial ratios.

HUDCO, as pointed out earlier, receives support of various kinds from the Government, and is consequently required to advance loans for social housing at concessional interest rates. This support accrues in the form of equity on which it pays either no dividend or pays dividend at below the prevailing market rate; it accrues in the form of a share in the mandated credit, access to tax free bonds and debentures, and other low interest credit (e.g., KFW). It also accrues indirectly in the form of "government guarantees" which provide guards to those who invest in HUDCO's resource portfolio.

A number of questions arise: What does the support add up to in quantitative terms? What would be the effect of the withdrawal or reduction of such support on HUDCO's financial performance? Can HUDCO absorb the withdrawal or reduction of such support without hurting its activities? If the current profit levels have to be maintained then what changes will be required in the lending rates? Will those lending rates be affordable?

These questions are no longer theoretical in value or significance. As the process of macroeconomic reforms and adjustment settles down and extends horizontally to sectors such as housing and vertically to States and cities, it will inevitably involve significant reductions in special circuits and directed credits for financing investments in housing and related sectors. The process will demand a higher level of efficiency and transparency in operations. As the terms of reference of this study correctly note, "the cascading effects of less directed credit, fewer tax exempt savings instruments, and reduced transfers will be large, and could have significant implications for the way housing and urban development are currently financed".

In this section, we first estimate the quantum of support - or the total amount of subsidy that HUDCO has received in the years beginning with 1985-86, and later present the results of simulations showing the effects of subsidy withdrawal and subsidy reduction on HUDCO's

levels of profit and lending profile. Subsidy is reckoned here as the difference between the effective cost of capital and the benchmark cost of capital. Effective cost of capital is the cost to HUDCO of resources mobilised from various sources including the cost of share capital. Benchmark cost of capital is the interest rate at which resources can be obtained or mobilised in the market.

While interest rates in India are administered, there exists at any point of time in the market a large number of interest rates on long term lending. The prime lending rates of term lending institutions, for instance, ranged between 18-20 per cent in 1991-92, while the ceiling dividend/interest rate fixed by the Controller of Capital Issues was 14 per cent for non-convertible debentures and 13 per cent for bonds, company deposit rate was 14 per cent.²⁹ For purposes of this study, interest rates on assets which are not eligible for tax concessions are used as a proxy for the market, these being the non-convertible debentures, taxable bonds of public limited companies, and fixed deposits. Further, dividend rates of HDFC are taken as benchmark dividend rates, although for simulation purposes, other dividend rates have also been applied. Benchmark rates of interest on loan funds and dividend on share capital used in the computation of the subsidy are given in the Table 36. Also shown in the table are the cost of loan funds and dividend rate paid by HUDCO.

Denoting the effective cost of capital (per unit of capital) to HUDCO as i' and benchmark cost of capital as i , the rate of subsidy (per unit) to HUDCO can be expressed as -

$$SRH = i - i' \quad (1)$$

29. See, Reserve Bank of India, *Report on Currency and Finance, 1991-92*.

Table 36
Benchmark Rates of Interest and Dividend Rates

Year	Cost of mobilising resources %			Dividend rate %	
	Average cost of loan funds of HUDCO*	Ceiling rate on non-convertible debentures	Ceiling rate on taxable bonds [§]	HUDCO	HDFC
1985-86	10.37	15.00	14.00	0.00	15.00
1986-87	10.13	15.00	14.00	0.00	16.00
1987-88	10.75	14.00	13.00	0.00	17.00
1988-89	9.88	14.00	13.00	0.00	14.00
1989-90	9.92	14.00	13.00	0.00	20.00
1990-91	10.35	14.00	13.00	0.00	22.00
1991-92	10.90	14.00	13.00	0.00	24.00
1992-93	13.10	14.00	13.00	5.50	24.00

Source: * See Table 9 in Chapter 1.

§ *Report on Currency and Finance, 1991-92* (In the absence of data on 1992-93, the figures for 1991-92 have been taken to represent 1992-93).

SRH denotes the rate of subsidy received by HUDCO. It may be positive or negative depending on the values of i and i' . If total resources raised by HUDCO are D and SRH is positive, the volume of subsidy received can be represented as -

$$SH = SRH \cdot D \quad (2)$$

Using the above equations, subsidy rate and volume of subsidy are computed separately. Results are shown in Tables 37 to 39.

Table 37
Subsidy to HUDCO on Loan Funds
(Individual Years)

Year	Subsidy rates based on		Loan funds (Rs. million)\$	Volume of subsidy (Rs. million)	
	Non-conver- tible debentures (a)	Taxable bonds (b)		(a)	(b)
	1985-86	4.63	3.63	848.06	39.27
1986-87	4.87	3.87	1,199.60	58.42	46.42
1987-88	3.25	2.25	1,387.18	45.08	31.21
1988-89	4.12	3.12	2,416.97	99.58	75.41
1989-90	4.08	3.08	3,325.14	135.68	102.41
1990-91	3.65	2.65	9,115.24	332.71	241.55
1991-92	3.10	2.10	6,378.84	197.74	133.96
1992-93	0.90	-0.10	2,723.50	24.51	-2.72

Note: \$ Loan funds include advance against share capital, and are net of repayment.

Table 38
Subsidy to HUDCO on Share Capital
(Individual Years)

Year	Subsidy rate ^s (%)	Share capital (Rs. million)	Volume of subsidy (Rs. million)
1985-86	15.00	70.00	10.50
1986-87	16.00	80.00	12.80
1987-88	17.00	67.50	11.48
1988-89	14.00	172.50	24.15
1989-90	20.00	232.70	46.54
1990-91	22.00	237.30	52.21
1991-92	24.00	50.00	12.00
1992-93	18.51	200.00	37.02

Note: \$ HDFC's dividend rate is taken to represent the market rate of dividend.

Table 39
Volume of Total Subsidy to HUDCO
(Individual Years)

Year	Subsidy (Rs. million)					Average subsidy rate (%)\$	
	Loan funds*		Share capital	Total		(a)	(b)
	(a)	(b)		(a)	(b)		
1985-86	39.27	30.78	10.50	49.77	41.28	5.4	4.5
1986-87	58.42	46.42	12.80	71.22	59.22	5.6	4.6
1987-88	45.08	31.21	11.48	56.56	42.69	3.9	2.9
1988-89	99.58	75.41	24.15	123.73	99.56	4.8	3.8
1989-90	135.67	102.41	46.54	182.21	148.95	5.1	4.2
1990-91	332.71	241.55	52.21	384.91	293.76	4.1	3.1
1991-92	197.74	133.96	12.00	209.74	145.96	3.3	2.3
1992-93	24.51	-2.72	37.02	61.53	34.30	2.1	1.2

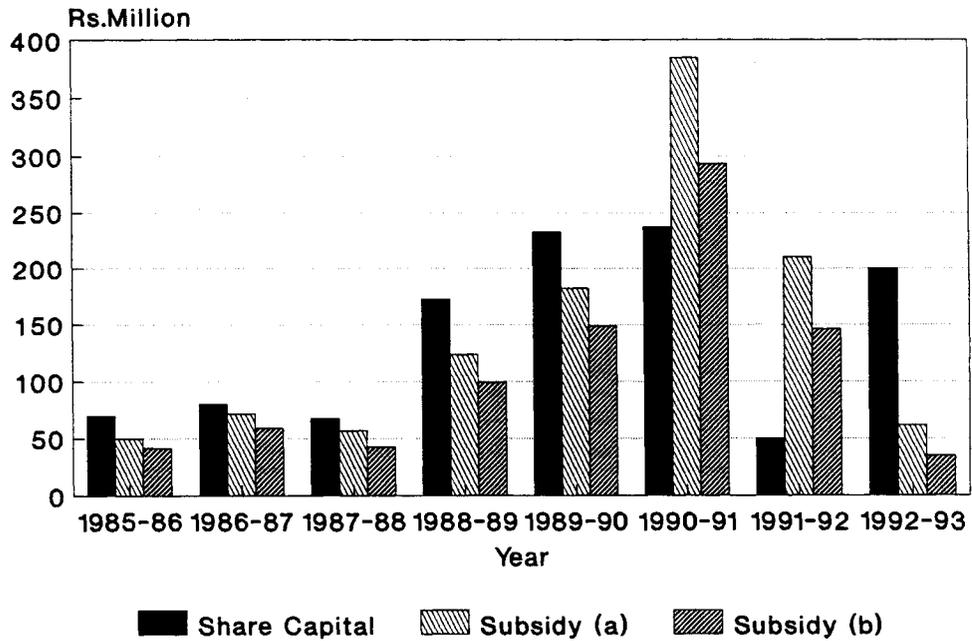
Notes: * Interest rate on non-convertible debentures (a) and taxable bonds (b) are used as benchmark rates of interest.

\$ Represents total subsidy divided by total loan funds and share capital.

Subsidy has been worked out for individual years, beginning with 1985-86, by applying (a) the subsidy rate to loan funds (Table 37), and (b) subsidy rate to share capital (Table 38), and the total volume of subsidy is shown in Table 39. For the period 1985-86 to 1992-93, the total volume of subsidy on both counts amount to between Rs.865.7 million and Rs.1,139.7 million, or between 3 and 4 per cent of the total loan funds and share capital mobilised during the period. It is important to note that *the subsidy amount is higher than the share capital subscribed to by the government, and in this sense, what the government has so far provided to HUDCO via indirect channels is as important as the direct equity support.*

Figure 12

**HUDCO's Share Capital & Subsidy
(Individual Years)**



It has also to be noted that the level and rate of subsidy in HUDCO's resource profile are on the decline. In 1985-86, for instance, the overall subsidy rate was 5.4 per cent. By 1992-93, with HUDCO seeking a part of its funds from market-based institutional sources, the subsidy rate had dropped to 1.2 - 2.1 per cent, depending on whether the subsidy rate was calculated on the benchmark of non-convertible debentures or taxable bonds. The trend is unmistakably towards reduction in the subsidy rate.

Having estimated the rate and volume of subsidy, the next step is to simulate the effect of subsidy withdrawal and subsidy reduction on HUDCO's profit and lending rates. Two simulation exercises are attempted here:

- (1) to find out the level of profit in the event the cost of loan funds and dividend rate on share capital are raised to market or near-market levels and the tax rate payable by HUDCO is also brought up to the prevailing rates of corporate taxes.

- (2) to find out the changes that will be necessary in HUDCO's pattern of financing (e.g., the interest rates on loans for various activities) in the event of changes in the cost of loan funds, dividend rate and tax rate.

The simulation exercises assume that all the financial ratios as given in Table 40 will remain unchanged excepting those which are varied as a part of the simulation exercises. Use has been made of financial ratios for the year 1992-93 and the averaged financial ratios for the period 1985-86 to 1992-93.

Table 40
Basic Ratios of the Model

(Per cent)

Basic ratios (variables)	Variable names	1992-93	Average for the period 1985-86 to 1992-93
Inputs			
HUD loans : total assets	a1	80.87	83.50
Investment : total assets	a2	5.28	9.77
Fixed assets : total assets	a3	0.49	0.48
Net current assets, etc. : total assets	a4	13.36	6.23
Share capital : total resources	b1	5.07	6.76
Reserves & surplus etc. : total resources	b2	8.72	8.73
Loan funds : total resources	b3	86.22	84.50
Average rate of fees & charges	Ifee	0.43	0.26
Average rate of interest and dividend on investments	Iinv	41.35	15.17
Average rate of return on fixed assets	Ifa	8.79	7.72
Average rate of return on net current assets, etc.	Inca	2.19	3.42
Rate of increment in reserves & surplus	Crs	15.91	20.07
Cost of establishment	Cest	0.29	0.40
Tax Rate	Ct	31.95	20.35
Cost of share capital	Csc	5.50	0.06
Average cost of loan funds	Clf	9.83	8.64
Output			
Average rate of interest on HUD loans	Ihud	10.33	9.53

The following three ratios have been varied and the effect of variations in these ratios is seen in HUDCO's profit and lending rates:

- i. the cost of loan funds (Clf)
- ii. the dividend rate (Csc)
- iii. the tax rate (Ct)

The basic model for these simulations rests on HUDCO's balance sheets and profit and loss account. The two equations in the model are as under :

$$\text{PAT} = [(\text{Ihud.a1.A} + \text{Ifee.a1.A} + \text{Iinv.a2.A} + \text{Ifa.a3.A} + \text{Inca.a4.A}) - [\text{Clf.b3.R} + \text{Cest.R}]]. (1-\text{ct}) \quad (1)$$

$$\text{Ihud} = \{[\text{Clf.b3.R} + \text{Cest.R} + (\text{Csc.b1.R} + \text{Crs.b2.R})/(1-\text{ct})] - [\text{Ifee.a1.A} + \text{Iinv.a2.A} + \text{Ifa.a3.A} + \text{Inca.a4.A}]\}/\text{a1.A} \quad (2)$$

Where (from the balance sheet)

- a1 = HUD Loans/Total Assets
- a2 = Investments/Total Assets
- a3 = Fixed Assets/Total Assets
- a4 = Net Current Assets, etc./Total Assets

- b1 = Share Capital/Total Resources
- b2 = Reserves & Surplus, etc./Total Resources
- b3 = Loan Funds/Total Resources

- A = Total Assets
- B = Total Resources.

Where (from the profit and loss account)

Ihud = Average Rate of Interest on HUD Loans
Ifee = Average Rate of Fees & Charges on HUD Loans
Iinv = Average Rate of Interest/Dividend on Investments
Ifa = Average Rate of Return on Fixed Assets
Inca = Average Rate of Interest on Net Current Assets, etc.

Clf = Average Cost of Loan Funds
Cest = Cost of Establishment
Csc = Cost of Share Capital
Crs = Rate of Increment to Reserves & Surplus, etc.
Ct = Tax Rate

I = Total Income
E = Total Expenditure
PBT = Profit Before Tax
PAT = Profit After Tax
T = Tax Provision
DIV = Dividend Proposed
APP = Appropriations

The results of the first simulation, contained in Table 41, show that HUDCO will not remain a profit-making agency if subsidy, as embodied in cost of loan funds and lower corporate tax rate, is withdrawn. Other ratios remaining the same, HUDCO would incur a loss

of Rs.251.03 million to Rs.263.98 million to Rs.263.98 million. Even with a reduced subsidy, e.g., the cost of loan funds being 13 per cent HUDCO would incur a loss of about Rs.62 million at the 1992-93 pattern of lending and investment. However, if the cost of loan funds were to drop to 12 per cent and if HUDCO was able to enforce a 1992-93 pattern of lending, then there is a possibility of HUDCO posting a profit of Rs.126 - Rs.146 million.

Table 41
Model PAT

Inputs (%)		Output (Profits after tax) (Rs.million) with	
Clf	Ct	1992-93 ratio as base	Average ratio as base
14	40	-251.035	-263.986
13	40	-62.264	-167.965
12	30	147.591	-71.944
12	40	126.506	-83.934

Notes: Clf = Average cost of loans funds.
Ct = Tax rate.

Table 42 gives the results of the second simulation exercise. It shows the extent of upward revision in the lending rates that would be necessary in the event of subsidy withdrawal and reduction, and if the current levels of profits are to be maintained. It shows that the average lending rates will have to rise to 17 per cent, for maintaining the current level of profits. Even at a reduced level of subsidy, lending rates will have to increase sharply, to 15.05 to 16.05 per cent, to enable HUDCO to operate at current profit levels.

Table 42
Model Ihud

Inputs (%)			Output (Ihud %) with	
Clf	Csc	Ct	1992-93 ratio as base	Average ratios as base
14	24	40	17.11	19.05
14	24	32	16.48	18.26
14	20	40	16.70	18.51
14	20	32	16.11	17.78
13	24	40	16.05	18.04
13	24	32	15.42	17.24
13	20	40	15.63	17.50
13	20	32	15.05	16.77
15	24	40	18.18	20.06
15	24	32	17.55	19.27
15	20	40	17.76	19.52
15	20	32	17.18	18.79
12	20	30	13.86	15.60

In sum, the following points emerge from an analysis of income and expenditure and the basic financial ratios:

- i. HUDCO is a profit-making agency. Its total income has all along been higher than the total expenditure. At the same time, the rate of profit, i.e., profit as a percentage of total income registered a decline from 1985-86 to 1991-92, to, however, bounce back, in 1992-93. The level of HUDCO's profit is comparable with that of other HFIs.

- ii. The debt-equity ratio of HUDCO has improved considerably over the years, signalling that HUDCO's capacity to mobilise resources in the market is on the upswing. Also, the improvement in the ratio is within limits and does not suggest any undue strain on debt obligations.
- iii. There has occurred, in recent years, a decline in the HUD loan component and a decline in income from HUD loans. This phenomenon coincides with an increase in short term investments and an increase in income from investments. Although such investments are a common feature with most housing finance institutions, whether HUDCO, which carries a strong social mandate should use this medium to prop up its profit or should at all be confronted with the problem of large surplus funds needs to be questioned. The existence of such large scale surplus funds also raises questions about the existence in HUDCO, of a well-conceived resource mobilisation strategy.
- iv. HUDCO's profit owes itself as much to income from its principal activities as to income from investments. The exclusion of such income reduces the level of profit considerably and turns HUDCO into a loss making agency in 1991-92.
- v. HUDCO is a highly subsidised housing finance agency. Estimates made in this Chapter suggest that the total subsidy that it received during the period 1985-86 to 1992-93 amounted to a total of Rs.865.72 to Rs.1,139 million or between 3-4 per cent of total loan funds and share capital mobilised by HUDCO. Significantly, the amount of subsidy exceeds the total share capital subscribed by government to HUDCO during this period. Thus, subsidy is an extremely important component in HUDCO's operations.

- vi. Elimination of subsidy would convert HUDCO into a loss making institution. Given the basic ratios, HUDCO does not seem to be in a position to absorb higher cost of loan funds and higher dividend rates, without a substantial increase in the lending rates, or a substantial reduction in the level of profits. This conclusion assumes a status quo in the pattern of lending and investment by HUDCO.

Chapter 3 : The Social Focus in HUDCO's Operations

1. Introduction

A notable and distinctive feature of HUDCO's operations lies in its social focus, or what is commonly understood as housing activities for the economically weaker sections (EWS) and low income groups (LIG) of households. EWS and LIG housing activities have, in recent years, been supplemented by several other programmes for the poorer groups. Low cost sanitation, Nehru Rozgar Yojana, night shelter for footpath dwellers, housing-cum-workshed schemes for weavers, and financing of environmental improvement of slums fall into this category.

In accordance with the existing norms and guidelines, 55 per cent of the total housing loans are required to be set aside by HUDCO for the economically weaker and low income households. Within the 55 per cent norm, 30 per cent of housing loans are meant for the economically weaker sections, and 25 per cent are for the low income households. Maintaining of these norms is made possible by (i) providing to HUDCO, access to low-cost funds, and (ii) by allowing HUDCO to use a differential interest rate policy under which loans for EWS/LIG housing carry a lower rate of interest in comparison with loans for MIG/HIG housing and other activities. Cross-subsidization among and between activities is an important instrument with HUDCO for charting its operations in favour of the economically weaker and low income households.

Another important aspect of social housing activities of HUDCO relates to the fixation of cost and loan ceilings. Cost ceilings are determined on the basis of an "assumed level of rent-paying capacity" or what is generally referred to as an "affordability level" for EWS/LIG households. Housing units whose costs exceed the affordability levels, it is hypothesised, are

unlikely to be retained by households. Loan ceilings indicate the maximum amount of loan that can be obtained from HUDCO for different categories of housing; expectedly, these are higher for the EWS and LIG groups and lower for the MIG and HIG housing. The cost ceilings are given in Chapter 1. Note should be made of the fact that no adjustments were made in cost/loan ceilings during the period 1985-86 and 1990-91, notwithstanding the increase in cost due to inflationary pressures. Adjustments in cost ceilings were, however, made in 1991-92 and 1992-93.

EWS/LIG housing are central to HUDCO's operations. HUDCO has approached housing for these groups with the help of a number of instruments. The principal issue here is about the adequacy, efficiency and transparency of HUDCO's approach and the various instruments that it uses in reaching out to such groups. Has the approach been "friendly" to the housing needs of the EWS/LIG households? Have the instruments such as the low interest rates and ceilings helped in sustaining the social focus? Any dilution or misdirection, it is possible to argue, could raise questions about the need to provide to HUDCO, access to low cost credit, share capital at little or no cost, and tax concessions. This Chapter attempts to address these questions. An important issue here relates to the likely effects of the withdrawal of subsidies and other forms of support that HUDCO receives on the EWS/LIG housing. Can HUDCO maintain its focus on social housing in such an event? This Chapter presents the results of simulation exercises aimed at this issue.

A number of complementary lines of analyses have been pursued in addressing issues relating to EWS/LIG housing. These include an analysis of -

- i. the flow of resources into EWS/LIG housing with reference to their adequacy, reach and transparency;

- ii. relevance of instruments such as the low interest rates and cost/loan ceilings for maintaining the social focus;
- iii. transfer of subsidies from HUDCO to the field-level agencies.

2. Flow of Resources

Note should be made, at the outset, of the overwhelming importance of EWS/LIG housing in HUDCO's activities. According to the report of the Eswaran Committee and HUDCO's information sheets, over Rs.30,000 million - 38 per cent of the total loans or 59 per cent of the total housing loans have so far been sanctioned for EWS/LIG housing. Recent years have, in particular, witnessed a dramatic rise in loan sanctions for this category of housing. From loan sanctions of Rs.1,826 million in 1985-86, the 1992-93 sanctions for this category stood at Rs.3,531 million, having risen at an annual average rate of 12.3 per cent (Table 43). EWS loan sanctions during this period increased annually at 12.8 per cent, while the growth rate for LIG loan sanctions was 11.6 per cent. Moreover, as the tables show, HUDCO's sanctions for EWS/LIG housing have all along been at least 55 per cent of the total housing loan sanctions, and, in this sense, HUDCO can be said to have maintained its obligations towards these groups.

A closer examination of Table 43 together with a comparison of EWS/LIG loans with loans for MIG/HIG housing (given in the preceding Chapter), however, shows some disturbing trends :

- i. EWS loan sanctions registered a decline in absolute terms consecutively for two years, i.e., 1991-92 and 1992-93;

Table 43
Loan Sanctions for EWS/LIG Housing
(Individual Years)

(Rs. million)

Year	EWS		LIG		Total (EWS + LIG)	
	Amount	% change	Amount	% change	Amount	% change
1985-86	954.9	-	871.9	-	1,826.8	-
1986-87	1,034.3	8.3	899.3	3.4	1,933.6	5.8
1987-88	1,083.4	4.7	1,008.3	12.1	2,091.7	8.2
1988-89	1,499.2	38.4	1,268.9	25.8	2,768.1	32.3
1989-90	1,745.5	16.4	1,544.0	21.7	3,289.5	18.8
1990-91	2,554.6	46.3	1,721.2	11.5	4,275.8	30.0
1991-92	1,853.8	-27.4	1,521.1	-11.2	3,382.9	-20.9
1992-93	1,811.6	-2.3	1,720.0	12.5	3,531.6	4.4
Average annual growth rate (%)		12.8		11.6		12.3

Source: Information Sheets of HUDCO.

- ii. EWS and LIG loan sanctions increased somewhat slowly as compared to sanctions for MIG and HIG housing;
- iii. While loan sanctions for all categories of housing, infrastructure and land acquisition declined in the 1991-92 financial year, the rate of decline in the case of EWS was higher than any other activity (See Table 17).

These trends are based on the data for the years 1985-86 to 1992-93, including the data for the year 1990-91 which is said to have witnessed vastly unusual developments in the country's financial markets. In order that the trends and consequently the conclusions are not affected by such developments, we have recalculated the average growth rates of loan sanctions by excluding the data for 1990-91. The results are shown in Table 44.

Table 44
Trends in Category-wise Sanctions for Housing
(Individual Years)

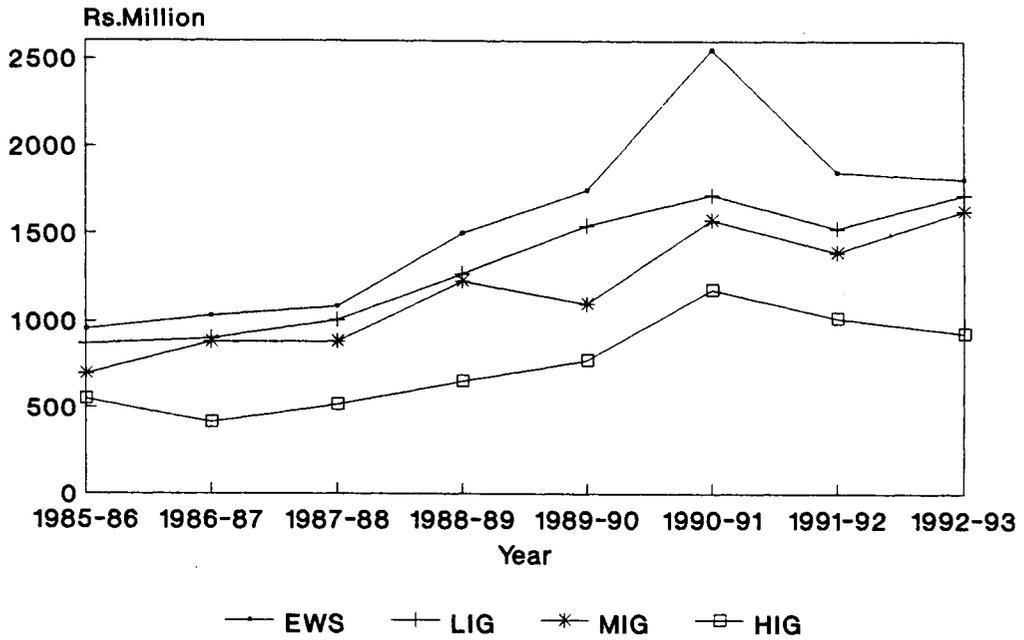
(Rs. Million)

Category	1985-86	1986-87	1987-88	1988-89	1989-90	1992-93	Average Growth Rate (%)
EWS	954.90	1034.30	1083.40	1499.20	1745.50	1811.63	13.58
LIG	871.90	899.30	1008.30	1268.90	1544.00	1720.00	13.42
EWS & LIG	1826.80	1933.60	2091.70	2768.10	3289.50	3531.64	13.51
MIG	695.50	882.10	881.20	1227.00	1098.50	1628.55	14.05
HIG	549.10	412.70	516.50	653.90	773.10	929.66	14.50
MIG & LIG	1244.60	1294.80	1397.70	1880.90	1871.60	2558.21	14.11
Total	3071.40	3228.40	3489.40	4649.00	5161.10	6089.85	13.78

Source : Information Sheets of HUDCO.

Figure 13

Trends in HUDCO's Sanctions for Housing
(Individual Years)



According to the table, EWS and LIG loan sanctions increased at annual average rates of 13.58 per cent and 13.42 per cent respectively. In comparison, the growth rates for MIG and HIG loan sanctions were 14.05 per cent and 14.50 per cent respectively. This too confirms the trends as observed from Table 43.

The extent to which HUDCO has been able to maintain a social focus in its operations can be better ascertained by analysing data on the actual loan disbursement for EWS/LIG housing. Such data, as pointed out earlier, are not compiled and maintained by HUDCO.

Thus, while HUDCO's data show that in the aggregate, loan sanctions for EWS and LIG housing form anywhere between 58 to 62 per cent of the total sanctions, the quantum of resources that has actually flowed for such groups is not known. Absence of understanding and transparency in respect of actual flows prevents any meaningful analysis of the extent of social focus in HUDCO's operations, constituting, and it needs to be reiterated, perhaps the most serious gap in HUDCO's accounting and financial system.

At this stage of analysis, it needs to be recalled that HUDCO is a refinance agency and is dependent, in crucial ways, on field-level agencies for the implementation of its programmes and activities. On its own, HUDCO cannot pursue or push through its goals and objectives without securing the participation of agencies. This position is nowhere brought out as well as by a partial compilation of data on loan disbursement for various types of housing. This data presented in Table 45 show that -

- i. Arunachal Pradesh, Manipur, Meghalaya and Mizoram have not taken any loans from HUDCO for EWS housing;
- ii. With the exception of Jammu & Kashmir and Tripura, no other State (out of those whose data are presented in the table), EWS loan disbursements have uniformly fallen behind the 30 per cent norm;
- iii. Housing for the low income groups accounted for, on an average, 31 per cent of the total housing investments which is 6 percentage points higher than the ceiling. Judging by the high percentage of resource flows into LIG housing (Manipur, 42%, Sikkim, 46%, Nagaland, 73%, and Meghalaya, 74%), it would seem that there exists a high level of demand for resources for this category of housing rather than for EWS housing.

Table 45

Loan Amount Released for Different Categories of Housing and Other Activities

(Rs. Million)

State/UT	Housing Category					UI	Others	Grand Total
	EWS	LIG	MIG	HIG	Total			
Andaman & Nikobar	9.31	1.32	16.40	138.27	165.30	-	15.60	180.90
% to Total	5.63	0.80	9.92	83.65	100.00			
Arunachal Pradesh	-	6.77	14.50	-	21.27	-	-	21.27
% to Total	0.00	31.83	68.17	0.00	100.00			
Assam	138.92	285.79	713.73	667.41	1805.85	1555.68	262.52	3624.05
% to Total	7.69	15.83	39.52	36.96	100.00			
Bihar	1172.91	1243.69	649.47	1024.19	4090.26	-	1302.22	5392.48
% to Total	28.68	30.41	15.88	25.04	100.00			
Delhi	448.22	307.05	65.48	843.75	1664.49	24.00	787.65	2476.14
% to Total	26.93	18.45	3.93	50.69	100.00			
Goa	15.63	0.95	27.71	56.16	100.45	46.74	-	147.19
% to Total	15.56	0.95	27.59	55.91	100.00			
Himachal Pradesh	131.65	213.70	441.69	344.62	1131.66	216.76	181.01	1529.43
% to Total	11.63	18.88	39.03	30.45	100.00			
Jammu & Kashmir	465.82	56.99	312.24	316.59	1151.64	-	722.87	1874.51
% to Total	40.45	4.95	27.11	27.49	100.00			
Manipur	-	501.91	374.78	315.00	1191.69	-	11.70	1203.39
% to Total	0.00	42.12	31.45	26.43	100.00			
Meghalya	-	420.74	147.41	-	568.15	-	-	568.15
% to Total	0.00	74.05	25.95	0.00	100.00			
Mizoram	-	254.23	222.28	342.57	819.08	-	-	819.08
% to Total	0.00	31.04	27.14	41.82	100.00			
Nagaland	166.50	1157.97	235.54	15.00	1575.01	-	-	1575.01
% to Total	10.57	73.52	14.95	0.95	100.00			
Pondichery	112.57	301.18	600.45	48.32	1062.52	-	45.66	1108.18
% to Total	10.59	28.35	56.51	4.55	100.00			
Sikkim	300.00	530.03	290.84	23.18	1144.05	-	23.74	1167.79
% to Total	26.22	46.33	25.42	2.03	100.00			
Tripura	184.92	59.95	102.34	116.54	463.75	-	1.97	465.72
% to Total	39.87	12.93	22.07	25.13	100.00			
Total of Sample States	3146.45	5342.27	4214.86	4251.60	16955.17	1843.18	3354.94	22153.29
% to Total	18.56	31.51	24.86	25.08	100.00			

Source: Date Supplied by HUDCO.

Note: UI represents Urban Infrastructure.

- iv. The flow of resources into **HIG** housing has been particularly high. As would be noted from the table, **HIG** housing has cumulatively accounted for, on an average, 25.08 per cent of total resources, and over 30 per cent of total housing investments in Delhi (50.7%), Mizoram (41.8%), Goa (55.9%), Andaman and Nicobar (83.7%), Himachal Pradesh (30.4%), and Assam (37%).

This table establishes the point that the social focus in HUDCO's programmes and activities is vitally dependent on the commitment of the State-level agencies such as the housing boards and development authorities. If the agencies do not take advantage of low cost funds of HUDCO, there is no way in which HUDCO can meet its objectives and adhere to quantitative norms.

In sum, the social focus in HUDCO's overall activities is nowhere as close to what is generally understood. Sanctions for EWS/LIG too are in recent years showing signs of tapering off, while loan disbursement data indicate that EWS housing in several States do not constitute a significant component in HUDCO's activities. Importantly, agency-level data on investments in EWS housing also suggest a weakening of the social focus in housing programmes. In 1992-93, the Rajasthan Housing Board, for instance, invested Rs.53 million or 7.05 per cent of total investments in EWS housing, and another 19.2 per cent on LIG housing. Investments in EWS and LIG housing in the case of the Lucknow Development Authority was noted to be 6.53 per cent and 19.9 per cent respectively. Agencies which are dedicated to EWS housing alone such as the Andhra Pradesh Urban Development and Housing Corporation and Andhra Pradesh State Housing Corporation have encountered serious problems of loan recoveries and raised doubts about the long run sustainability of such programmes. *Note should be made of the fact that the maintenance of a social focus is possible only when both HUDCO and its borrowers pursue the*

social housing objective. Any mismatch in the objectives of HUDCO and HUDCO's borrowers can frustrate this objective to the disadvantage of social housing programmes. These points are elaborated in Part V of the report.

3. Interest Rate in Social Housing

EWS and LIG housing loans carry a lower interest rate compared with other activities. Such a policy is founded on the premise that interest rates are crucial in housing programmes for the poorer groups; programmes which carry interest rates in excess of what such households can absorb are unlikely to be acceptable. Consequently, interest rates for EWS and LIG housing currently stand at 8 per cent and 11.5 per cent, respectively. Between 1985-86 and 1990-91, these rates were fixed at 7 per cent and 8.75 per cent respectively. These rates have uniformly been lower than the average cost at which HUDCO has raised resources (Table 46).

Table 46
**Interest Rates Compared with Average Cost of
Loan Funds and Share Capital**

Years	Interest rates %		Average cost of loan funds and share capital
	EWS	LIG	
1985-86	7.0	8.75	9.66
1986-87	7.0	8.75	9.62
1987-88	7.0	8.75	10.37
1988-89	7.0	8.75	9.28
1989-90	7.0	8.75	9.39
1990-91	7.0	8.75	10.10
1991-92	7.5	11.50	10.82
1992-93	8.0	11.50	12.70

Source: Financing Pattern of HUDCO.

How crucial are these rates for EWS/LIG housing? Are their thresholds above which funds for EWS/LIG may remain unused? We give below a table showing the burden of interest rates on loan amounts at existing rates and at enhanced rates of 11 per cent and 12 per cent, keeping ceilings of costs and loans and repayments period unchanged. Table 47 shows that at existing rates, the equal monthly instalments (EMI) is Rs.8.06 per Rs.1,000, which at 11 per cent interest rate, rises to Rs.10.094 per Rs.1,000 and to Rs.10.801 per Rs.1,000 at 12 per cent interest rate. At 11 per cent, EMI amounts to 18.7 per cent of the income of an EWS household and 20.5 per cent at 12 per cent interest rate.³⁰ Whether EMI of Rs.10.094 per Rs.1,000 or Rs.10.801 per Rs.1,000 are inside or outside the affordable limits is a matter of empirical scrutiny which this study has not entered into. It is necessary to point out here that the basis of the current interest rate which yield an EMI of Rs.8.06 per cent per Rs.1,000 is also not known. This study was unable to gain access to any source of data in this respect.

Table 47

EMI on EWS Loans at Current and Enhanced Interest Rates

Interest rate %	8.00	11.00	12.00
EMI/per Rs.1,000	8.06	10.09	10.80
Per cent of household income	14.97	18.70	20.50

Source: Amortisation Table supplied by HUDCO.

4. The Relevance of Cost/Loan Ceilings

An important aspect of HUDCO's social housing programme relates to the cost ceilings and loan ceilings. The purpose of cost ceilings is important in that it demonstrates that housing units for different income categories are possible to be constructed within the amount

30. The equal monthly instalment against a loan of Rs.19,500 at 11 per cent will be Rs.196.833 per month, and Rs.210.619 per month at 12 per cent rate of interest.

prescribed, and that these amounts are within the affordable limits of the different categories of households. Loan ceilings are a fixed percentage of cost ceilings. Data in respect of ceilings and how these have changed over time are given in an earlier Chapter of this part of the report.

The relevance and effectiveness of cost ceilings have in recent years been questioned on the ground that these are not able to cover the cost of particularly the EWS housing. Actual costs are significantly higher than the cost ceilings. Recent studies show overruns on the cost ceilings to be a normal feature in many HUDCO assisted housing projects. In a recent study, it was revealed that the cost overruns in the case of EWS housing units ranged from 116-144 per cent of the costs sanctioned by HUDCO. In other words, actual costs of EWS housing are 116-144 per cent higher than the ceilings. According to the study, the norms of cost ceilings have become irrelevant as the actual costs are much higher. The study notes, "planning costs of projects and forwarding to HUDCO is only a paper exercise which the implementing agency also is aware that the estimates forwarded to HUDCO are not realistic and is only an exercise to show the per unit cost within HUDCO ceiling norms for the purpose of getting projects sanctioned for financial assistance from HUDCO. Actual implementation goes quite independent of the estimates given to HUDCO and follows the guidelines of a parallel set of estimates called the **realistic estimates**..... The actual implementation costs are even much higher than the **realistic estimates**."³¹

Reclassification of EWS into LIG units is also a common practice when cost of EWS units exceed the HUDCO norms. The Lucknow Development Authority is reported to have resorted to reclassification of EWS units into LIG units wherever costs of units have exceeded

31. See, HSMI/HUDCO (1989), *Appraisal and Analysis of HUDCO's Operations and Performance in Terms of Financial Pattern and Policy Objectives, Case Study - Karnataka Housing Board*, (Authors : M.J. Rodell and N. Bhattacharjee).

the ceilings, with the result that the number of EWS housing is much less than actually planned. Lower rates of interest in such cases have not been particularly instrumental in the maintenance of this focus. In other places where agencies provide housing loans, it is common for EWS households to take other loans from the informal credit markets in order to meet the full cost of contribution of the housing units.³²

5. Transfer of Subsidies

Subsidised credit is an important means of focusing on the economically weaker and low income households. HUDCO, as pointed out earlier, receives subsidies in various forms and transfers them in the form of low interest loans, to the field level agencies. Similarly, high interest rates charged on MIG/HIG loans, and infrastructure and land acquisition also yield revenues which too are expected to be invested in EWS/LIG housing. Estimates of subsidies received by HUDCO have been discussed in an earlier section. Here, we estimate the amount of subsidies transferred by HUDCO to the field level agencies.

The rate of subsidy transferred by HUDCO is defined as the difference between the average rate of interest charged by HUDCO on housing and urban development loans and the benchmark rate of interest. The average rate of interest charged by HUDCO is the weighted average of various loans given by HUDCO. The benchmark rates of interest are the ceiling rates on the non-convertible debentures. This can be expressed as

$$S_{GH} = i - r' \quad (1)$$

32. The average rate of interest in such cases often turns out to be equal to or higher than the interest rate charged from the MIG/HIG households.

where i is the benchmark cost of capital and r' is the average rate of interest on housing and urban development loans.³³

Three steps have been followed in estimating the subsidies transferred:

- i. Calculation of the rate of subsidy which is the difference between the ceiling rate on non-convertible debentures and the average interest rate at which HUDCO advanced loans for various activities;
- ii. application of the subsidy rate to the volume of HUD loans; and
- iii. Adjustment of the volume of subsidies to the time lag between resources raised and resources released. A six months time lag is assumed for this purpose.

Subsidies received by HUDCO and subsidies transferred by HUDCO are shown in the following table (Table 48).

Table 48
Subsidy Received and Subsidy Transferred by HUDCO
(Individual Years)

(Rs. million)

Year	Subsidy received	Adjustment for time lag*	Subsidy transferred by HUDCO	Net subsidy balance
1985-86	49.77	44.78	52.62	7.84
1986-87	71.22	60.49	63.18	2.69
1987-88	56.56	63.89	52.37	-11.52
1988-89	123.73	90.14	73.85	-16.29
1989-90	182.21	152.97	82.28	-70.69
1990-91	384.91	283.56	127.19	-156.37
1991-92	209.74	297.33	131.91	-165.42
1992-93	61.53	135.64	97.49	-38.15

Note: * Six months time lag is assumed between resources raised and resources released $\frac{[n+(n-1)]}{2}$.

33. In the absence of data on category-wise release, average interest rate is derived by applying the interest rate to sanctions made for various activities.

As would be noted, subsidies received by HUDCO are higher than subsidies transferred in all years, excepting in 1985-86 and 1986-87. In undertaking HUD loan activity besides paying interest and dividend on resources raised and receiving interest on HUD loan, HUDCO incurs certain operation cost and also receives certain income in the form of fees and charges. Operation cost relates mainly to the salary and wages paid to employees and expenditure in mobilising resources. Income from fees and charges to HUDCO comprises largely of service charge on loans, front end fee and documentation charge. Such income needs to be added and expenditure deducted from the difference of interest subsidy received and given by HUDCO in arriving at the subsidy not passed by HUDCO.

Since the objective is to measure the total subsidy going in for HUD loans activity whether in the form of interest subsidy or operational expenditure, income and expenditure attributable to HUD loans are taken into account. This is done by subtracting income and expenditure attributable to investments³⁴ from the total income and expenditure of HUDCO. Income arising from investments is available in the profit and loss account of HUDCO. Expenditure attributable to investments is computed by multiplying total expenditure minus interest paid on borrowings by the ratio of investment to total assets. Expenditure so obtained is subtracted from the total expenditure minus interest on borrowings to arrive at the expenditure attributable to HUD loans. The volume of subsidy not passed by HUDCO may be represented by the following expression :

$$S' = S_{RH} - S_{GH} - E^* + I^* \quad (2)$$

34. Investment is one of the major non-housing activities of HUDCO. Further, Eswaran Committee has noted that HUDCO's profits are due to the return on its investments. If it is o, inclusion of income from investments may bias our estimates.

- where: S' = subsidy not passed by HUDCO.
 S_{RH} = subsidy received by HUDCO.
 S_{GH} = interest subsidy given by HUDCO on HUD loans.
 E^* = expenditure (other than interest paid on borrowings) attributable to HUD loans.
 I^* = income (other than interest received on HUD loans) attributable to HUD loans.

A positive S' would imply that subsidy received is not being passed fully by HUDCO. However, $S' < 0$ would mean cross subsidy to HUD loans from the return on investments. Estimates of S' are presented in Table 49.

Table 49
Subsidy Not Passed By HUDCO
 (Individual Years)

(Rs. million)						
Year	Subsidy to HUDCO*	Average# [n+(n-1)]/2	Subsidy by HUDCO*	Expendi- ture\$	Income@	Subsidy not passed by HUDCO
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1984-85	39.80					
1985-86	49.77	44.78	52.62	18.66	14.47	-12.02
1986-87	71.22	60.49	63.18	23.12	19.44	-6.37
1987-88	56.56	63.89	52.37	31.89	22.85	2.49
1988-89	123.73	90.14	73.85	49.56	44.85	11.58
1989-90	182.21	152.97	82.28	62.33	51.47	59.84
1990-91	384.91	283.56	127.19	142.55	41.72	55.54
1991-92	209.74	297.33	131.91	423.17	245.39	-12.36
1992-93	61.53	135.64	97.49	101.58	241.65	187.21

- Notes:** * Interest rate on non-convertible debentures is used as benchmark rate of interest.
 # Six months lag is assumed between resources raised and released.
 @ Total income - (Interest and dividend on investments + Profit on sale of investments + Interest received on HUD loans + work done for the year).
 \$ $\frac{[\text{Total exp.} - (\text{Interest paid on borrowings} + \text{Project exp.})]}{[\text{Assets Investments}]}$ x $[\text{Assets}]$
 Column (7) = (3) - (4) - (5) + (6).

It was noted earlier that while estimates of S_{RH} are biased downward, estimates of S_{GH} have an upward bias. Clearly, estimates of S' have a downward bias. It may also be mentioned here that in equation (2) I^* is an underestimate. The reason for this lies in the accounting method practised by HUDCO. For instance, while HUDCO treats brokerage charges and other expenses on issue of bonds and debentures as expenditure in the year of payment, service charges on loans and advances are amortised over a period of 10 years.

It is apparent from the computed results displayed in Table 49 that while in 1985-86, 1986-87 and 1991-92 subsidy given by HUDCO was more than the subsidy received by it, during the years 1987-88 to 1990-91 and 1992-93 subsidy received by HUDCO was more than the subsidy given to its borrowers. We have noted earlier that our estimate of subsidy to HUDCO is biased downward. Among others, one important reason is that a cash subsidy of Rs.28 million to HUDCO in 1985-86 is not included in the computation of subsidy to HUDCO. On including this, subsidy not passed by HUDCO will become positive in 1985-86 and 1986-87. In 1991-92, the reason for a cross subsidy of Rs.12.36 million appear to lie both in the steep rise in expenditure and different accounting method followed by HUDCO for accounting service charges on HUDCO loans.

6. Impact of the Withdrawal of Subsidies on EWS/LIG Housing

While the above evidence suggests a weakening of the social focus in HUDCO's operation, the basic question whether this focus can at all be maintained in the event of subsidy withdrawal or reduction is crucial for determining HUDCO's future role in housing finance. In fact, this is one of the central questions : Can HUDCO maintain a social focus if its access to subsidised credit is withdrawn or reduced? Would it be possible for HUDCO to invest 55 per cent cent of its resources meant for housing in EWS/LIG housing at current or even a slightly

higher interest rate, and still maintain a profit level, say at the same level at which it did in 1992-93? Several possibilities could arise :

- i. it may be possible;
- ii. it may be possible, provided the ceiling of 55 per cent is relaxed and brought downwards;
- iii. it may be possible, provided the interest rates are raised upwards; and
- iv. it may be possible provided the profitability level is reduced.

We examine below these possibilities with the help of several simulation exercises. The equations underlying the exercises are given below:

$$I_{pr} = (I_{hud} - I_{pr}.s2) / s1 \quad (1)$$

$$I_{pr} = (I_{hud} - I_{pr}.s1) / s2 \quad (2)$$

Where:

- I_{pr} = average rate of interest on priority loans.
 I_{pr} = average rate of interest on non-priority loans.
 $s1$ = proportion of priority loans to HUD loans.
 $s2$ = proportion of non-priority loans.

The simulation exercises rely on the same assumptions and configuration as the exercises given in Chapter 2 (Table 41). These trace the effect of the withdrawal of subsidies. The results of the exercises which are contained in Tables 50 and 51 show that:

- i. it is possible to maintain the social focus - 55 per cent of housing loans for EWS and LIG, provided the interest rates on these loans are raised to anywhere between 17.62 per cent and 19.62 per cent, depending on whether the interest rates on non-priority loans are 18 per cent or 15 per cent.

Table 50
Conditions for Maintaining the Social Focus - I
(55 % of Housing Loans) and Profits Staying at 1992-93 Level*

Interest rates on non-priority loans (%)	Interest rates on EWS/LIG housing (%)
15	19.62
16	18.80
17	17.98
18	17.16

Note: * In these simulations, the cost of loan funds and dividend rate are taken to be 15 per cent and 24 per cent respectively.

- ii. it is possible to maintain the social focus - interest rate of 10 per cent on EWS/LIG loans - provided (a) the interest rates on non-priority loans are raised, and (b) the proportion of EWS/LIG loans in total housing loans is reduced (see Table 51).

Table 51

**Conditions for Maintaining the Social Focus - II
(Interest Rate of 10 % on EWS/LIG Loan)
& Profits Staying at 1992-93 Level**

Interest rate on non-priority loans %	Proportion of EWS/LIG loans to total housing loans %	
	EWS/LIG	MIG/HIG
26.76	55	45
25.09	50	50
20.78	30	70
20.39	25	75
18.87	15	85

- iii. it is possible to maintain the social focus - 55 per cent of housing loans for EWS/LIG and existing interest rates - provided the profitability levels are brought downwards, and the average interest rate on loans other than EWS and LIG is 16.06 per cent to 16.67 per cent.

Table 52

**Conditions for Maintaining the Social Focus - III
(Cost of loan funds 15%, dividend rate 24%)**

Interest rate on HUD loans (%)	Interest rate on loans other than EWS & LIG (%)	Interest rate on EWS & LIG loans (%)	Profit after tax (Rs. million)
13.0	16.06	10.5	37.37
12.85	16.67	10.0	7.25

What this analysis amounts to is that *there is no way in which social focus on the existing scale can be maintained if subsidies are withdrawn, without affecting either the profitability level, or the interest rate at which EWS/LIG loans are advanced, or the interest rates on priority loans or the proportion of EWS/LIG housing loans in total housing loans.* Subsidies, under these circumstances, are essential for maintaining a strong social focus in HUDCO's activities and operations.

In sum, the following points emerge in respect of HUDCO's social housing programme -

- i. There has taken place over the years an extraordinarily large increase in the total loan sanctions for EWS/LIG housing. Moreover, in recent years, loan sanctions in excess of the norm of 55 per cent have been made towards EWS/LIG housing. An estimated amount of over Rs.30,000 million are said to have been sanctioned for EWS/LIG housing since the establishment of HUDCO. The comparative data on EWS/LIG sanctions together with other indices, however, seem to indicate that HUDCO's focus on this category of housing has begun to taper off. During the last two years, the EWS housing sanctions have declined in absolute terms. In relative terms, the rate at which these sanctions have declined is higher than that registered by other categories of housing.
- ii. There is absence of transparency with respect to actual investment flows into EWS/LIG housing. The accounting system of HUDCO does not permit calculation of what amounts have been released for the different categories of housing. It is, therefore, not possible to make any general statement as to what amounts have, in fact, been invested in EWS/LIG housing, and whether focus on social housing has been adequate.

- iii. In fifteen States and Union Territories, investment flows into EWS housing are low. In several States, no investments have been made in EWS housing at all, while in several others, these form less than 10 per cent of total flows into housing. This position establishes the point that pursuance of a focus on EWS/LIG housing requires an equal degree of participation by agencies which are engaged in implementation of housing and infrastructure development projects.
- iv. To what extent are interest rates crucial in EWS/LIG housing loans - has not been possible to be ascertained in this study. This question is matter of empirical scrutiny. Raising the interest rates, for instance to 11 or even 12 per cent would push up the affordability level to 18.7 and 20.5 per cent of the household incomes. HUDCO uses an affordability level of 15 per cent as the norm.
- v. The instrument of cost ceilings has been violated in many ways. Actual costs are generally in excess of HUDCO's norms, and have resulted in reclassification of EWS units into LIG units. Agencies are also reported to be moving away from EWS housing. EWS housing has suffered on these counts.
- vi. Not all subsidies are transferred by HUDCO to the field level agencies. In several years, subsidies which were retained by HUDCO accounted for over 40 per cent of the subsidies received by HUDCO.

- vii. Maintaining of social focus requires commitment of field-level agencies. If the principal objectives of field-level agencies in this respect are weak, there is no way in which HUDCO can push its objectives onto States and cities and other settlements. This point has been elaborated in Part V of the report.

- viii. Withdrawal of subsidies and other forms of support would seriously affect the EWS/LIG activities of HUDCO. It will be possible to maintain a social focus only under conditions of major compromises in respect of interest rates, levels of profitability, or reduction in the current norm of 55 per cent. Subsidies would thus appear to be crucial for the promotion of EWS/LIG housing.

Chapter 4 : Planning and Appraisal of Projects

The role of project planning - this term being used to comprise formulation, appraisal, monitoring and evaluation of projects, in the general context of any institution can hardly be overemphasised. Carefully planned projects are central to the viability and growth of institutions. Formulation of projects comprising identification of costs and benefits and their appraisal are crucial functions in any institution. Steps involving detailed planning of projects for implementation, i.e., who will do what at what stage, and devising monitoring and evaluation mechanisms are also important stages in project planning exercises.

Projects aim at the future. Consequently, project formulation exercises are based on institutions' own perceptions about the future course of events - the future likely demand for goods and services planned to be produced or sold, the likely behaviour of prices of inputs and outputs, possible shifts in policies, and other related factors. In this sense, all projects contain an element of uncertainty and risk. Risk analysis is also a part of comprehensive project planning exercises. Over the last two decades or so, a large number of highly sophisticated methods have been developed for appraising projects, for carrying out risk analysis, and for assessing the likely impact of projects on income distribution, employment, environment, etc. These methods and tools are now standard practices in most project planning exercises.

HUDCO lends to field-level agencies such as the housing boards, development authorities, water supply and sewerage boards, municipal bodies, cooperatives and others on the basis of *project* proposals. Proposals are formulated according to the guidelines and formats prescribed by HUDCO, which provide details of what the proposals should contain and what kinds of documents should accompany them. Proposals are formulated in what are referred to as

the loan application forms. The loan application forms require agencies to provide data on land costs including the cost of development (levelling of land, roads and pathways, drains, sewerage, water supply, external electrification, and landscaping), economics of plots/dwelling units/infrastructure services (cost of construction, administrative and service charge, interest on investment, sale price, subsidy or profit, mode of payment and the loan component), investment, and loan drawal and loan repayment programme.³⁵ Project proposals are also accompanied by another format requiring information on the financial performance of agencies. This information pertains to indices such as the percentage of administrative and service charges, percentage of overdue recoveries, long term liabilities, reserves and surplus, cash balance, and overall surplus/deficit.

Proposals are appraised by HUDCO. The appraisal process relates to an examination of the architectural, planning, engineering, legal and financial aspects of the proposed projects. It also relates to the appraisal of the track record of agencies.

The terms of reference of this study have noted that there are serious deficiencies in HUDCO's project appraisal procedures. It is often alleged that appraisal procedures are long and arduous and, directed more to ensuring that the formal documentation required with project proposals is complete, and less to the economic viability of proposals. It can be hypothesised that because of the prevalence of government guarantee systems appraisal of projects is conducted in a routine and lackadaisical manner. This Chapter attempts to analyse the existing practices of project appraisal, identifying the main weaknesses in the practices, and later suggests measures for overcoming them. For this purpose, proposals in respect of seventeen projects have been analysed with focus on the following issues -

35. A somewhat different set of data is required to be provided for infrastructure projects.

- i. *Viability of agencies.* Three indices have been used for testing the viability of agencies, namely - (a) income-expenditure balance, (b) overdue recoveries, and (c) percentage of administrative and supervision charges.
- ii. *Viability of projects.* This has been examined by using the internal rates of return of projects.
- iii. *Time taken in the appraisal of projects.* It needs to be stated here that every project proposal passes through at least five stages before the first loan instalment is released. Sequentially, these include (a) technical appraisal, (b) sanction note, (c) sanction letter, (d) loan agreement, and (e) loan release. Here, we have analysed the time taken at the different stages of project appraisal.

Note should be made of the fact at the outset that project proposals are required to be formulated within the parameters and norms laid down by HUDCO. As a result of this conditionality, there exists a high degree of standardization in the cost structure and loan drawal and loan repayment schedule of projects, and the local peculiarities barely get reflected in the proposals.³⁶

Basic details in respect of proposals which have been analysed may be seen in Table 53.

36. HUDCO's own studies show that there are significant differences in the projects cost and benefits when these are worked out for submission to HUDCO and agencies own estimates of cost, etc. See, HSMI/HUDCO, *Ibid.*

Table 53
Basic Details of Project Proposals

Project file number	Nature of the project	Total cost of the project (Rs. million)	Loan amount (Rs. million)	Loan amount as a % of project cost
TNHB				
6956	Composite	7.78	5.53	71.13
6957	Composite	14.21	10.12	71.18
7148	HIG	14.10	8.46	60.00
6908	Composite	13.78	10.59	76.91
LDA				
4127	EWS(U)	6.30	4.84	76.82
5719	Composite	6.89	5.28	76.63
5759	MIG	9.34	7.00	75.01
APUDHC				
9165	EWS(U)	0.33	0.29	90.15
8871	EWS(U)	0.39	0.33	83.25
8631	EWS(U)	0.63	0.50	79.84
7700	EWS(U)	1.67	1.24	74.22
APSHC				
8357	EWS(R)	45.00	20.00	44.44
7461	EWS(R)	21.00	10.00	47.61
7576	EWS(R)	30.23	15.00	49.62
6784	EWS(R)	21.10	10.00	47.39
MMWSSB				
7386	Infrastructure	537.03	375.00	69.83
7066	Infrastructure	151.04	105.73	70.00

Source: Loan files of HUDCO.

Notes:

- TNHB - Tamil Nadu Housing Board
- LDA - Lucknow Development Authority
- APUDHC - Andhra Pradesh Urban Development and Housing Corporation
- APSHC - Andhra Pradesh State Housing Corporation
- MMWSSB - Madras Metropolitan Water Supply and Sewerage Board

1. Viability of Agencies

The viability of agencies as stated above, is an important aspect of HUDCO's project appraisal system. Driven by the objective of financial soundness of agencies, HUDCO obtains from agencies data on a number of indicators. We, however, use here three indicators to ascertain the extent to which HUDCO considered the financial soundness of agencies in approving project proposals submitted by them. The three indicators are :

- i. Surplus/deficit
- ii. Overdue recoveries
- iii. Administrative and supervision charges

Table 54 provides information on the above indicators in respect of four agencies, namely, Tamil Nadu Housing Board, Lucknow Development Authority, Andhra Pradesh Urban Development and Housing Corporation, and Andhra Pradesh State Housing Corporation. It needs to be noted that agencies do not always maintain data on a comparable basis : some follow the guidelines as set in the Companies Act while others follow government accounting systems. Furthermore, as is shown in this study, the Lucknow Development Authority and the two housing Corporations of Andhra Pradesh have provided the surplus/deficit data on capital and revenue account; the Tamil Nadu Housing Board has supplied this data only on revenue account.

Table 54
The Financial Performance of Agencies, 1989-90

Agency	Indicators of Financial Soundness		
	Surplus/Deficit (Rs. million)	% of administrative and supervision charges	% of overdue recoveries
Tamil Nadu Housing Board	14.48#	1.63	18.15
Lucknow Development Authority	66.35	20.07	40.70*
Andhra Pradesh Urban Development and Housing Corporation	1.22	21.95	88.81\$
Andhra Pradesh State Housing Corporation	-66.50	41.20	98.39

Source: Annual Reports and Budgets of Agencies.

Notes: # TNHB data are on revenue account only, while data for all other agencies pertain to revenue and capital account. On revenue account, TNHB is in a deficit in 1992-93.

\$ Data relate to 1991-92.

* Estimated.

Three points need to be made in respect of the above table:

- i. The performance of agencies ranks low in the approval process of projects. This is evident from the fact that agencies with overdue recovery rates of as high as 88-98 per cent were able to secure loans from HUDCO. Evidently, considerations other than the efficiency level of agencies weighed in the approval of projects.

- ii. Loans were approved even for agencies which had a deficit (APSHC), or low level of surplus (APUDHC).
- iii. Administrative and supervision charges form a significant proportion of the total revenue budget in all agencies, excepting the Tamil Nadu Housing Board, however, these facts were evidently given low weightage in the approval process of projects.

2. Viability of Proposals

The most important aspect of HUDCO's project appraisal system lies in the financial viability of proposals. Needless to say that the entire system of housing and infrastructure finance depends on whether the proposal will generate a surplus, and recover the cost incurred on the project. It is important to note that the results of HUDCO's own examination in this respect are not contained in the project files. It is also not evident as to which ratios are used by HUDCO for determining the financial viability of projects, although admittedly, all project proposals indicate that they will generate a surplus.

For analysis in this Chapter, internal rates of return have been worked out for the projects reviewed here and shown in Table 55.

Table 55
Cash Flows and Internal Rates of Return

Project file	Cash flows (Rs. in million)			Internal rate of return (%)
	Outflows	Inflows	Net flow	
TNHB				
6956 (HIG)	1.34	3.29	1.95	14.31
6956 (MIG)	1.71	3.89	2.18	13.10
6956 (LIG)	2.48	4.43	1.95	8.62
6957 (HIG)	2.32	5.69	3.37	14.30
6957 (MIG)	5.02	11.44	6.43	13.09
6957 (LIG)	2.78	4.96	2.18	8.64
7148 (HIG)	8.46	20.74	12.28	14.31
6908 (MIG)	2.40	5.85	3.45	14.17
6908 (LIG)	8.19	15.32	7.12	9.28
LDA				
4127 (EWS)	4.84	7.68	2.84	8.05
5759 (MIG)	7.00	17.58	10.58	14.20
APUDHC				
9165	0.29	0.73	0.44	10.25
8871	0.33	0.57	0.24	7.92
8631	0.60	1.25	0.65	7.71
7700	1.24	2.38	1.14	6.78
APSHC				
8357	20.00	30.49	10.49	8.92
7416	10.00	13.92	3.92	7.02
7576	15.00	20.88	5.88	7.02
6784	10.00	13.92	3.92	7.02

Source: Loan files of HUDCO.

A number of points may be noted from the above table.

- i. In nominal terms, all projects generate a surplus. Inflows which are nothing but repayments consisting of principal and interest are in excess of outflows for all projects.
- ii. The internal rates of return (IRR) in respect of all projects are positive.
- iii. The IRR are uniformly higher for HIG and MIG housing projects in comparison with LIG and EWS. For HIG projects, the IRR are about 14.3 per cent, while the same vary between 6.8 to 10.25 per cent in the case of EWS projects.
- iv. The IRR are not high enough to contribute to the resources of agencies.

It needs to be noted here that the entire exercise of examining the financial viability of projects is of little consequence as projects are prepared on the basis of cost estimates (outflows) and loan repayment schedules (inflows) which are fixed and laid down by HUDCO. Under this situation, it is no surprise that the internal rates of return of all projects are positive and do not reflect the local peculiarities.

3. Time Taken in Project Appraisal

As pointed out above, HUDCO appraises project proposals in a sequence consisting of five stages:

- i. Loan application to technical clearance
- ii. Technical clearance to sanction note
- iii. Sanction note to sanction letter
- iv. Sanction letter to loan agreement
- v. Loan agreement to release of the first instalment.

Table 56 gives the number of days taken in the processing of proposals. The following points emerge from the table:

- i. The average time taken for processing of project proposals was about 430 days. In the case of the seventeen project proposals analysed for this study, the time taken varied between a low of 236 days to a high of 784 days, which, from every measure, would seem to be extremely long.
- ii. Significantly, technical appraisal of projects which involve a detailed examination of the architectural, planning, engineering, legal and financial aspects is the least-time consuming stage in the appraisal process. According to the table, the average time taken for technical clearance was as low as 4 to 8 days in the case of all the four project proposals submitted by the Tamil Nadu Housing Board. For all projects combined, the average time taken was 73 days.
- iii. Other stages involving the issue of sanction note and letter, or the finalisation of loan agreement which are essentially procedural, take longer time as compared to time taken in technical clearance of projects. For instance, the preparation of loan agreement which is the stage after the issuance of the sanction letter took on an average 131 days, and the first release after the signing of the agreement took 124 days.

The excessively long time taken in the appraisal of projects is explained in the main by the legal and procedural parameters within which the field-level agencies are permitted to operate by the respective State governments. According to the information furnished by HUDCO -

Table 56
Time Taken at Various Stages of Project Appraisal

Project file No.	Project Appraisal Stages (Number of days)				
	Loan applica- tion to technical clearance	Sanction note	Sanction letter	Loan agree- ment	First release
TNHB					
6956	8	49	66	54	203
6957	8	49	69	35	584
7148	7	55	120	87	202
6908	4	68	41	67	177
LDA					
4127	230	25	10	145	203
5719	56	36	38	138	84
5759	NA	40	103	110	22
APUDHC					
9165	5	9	49	126	80
8871	185	244	251	104	NA
8631	89	104	131	53	36
7700	NA	NA	228	243	29
APSHC					
8357	1	16	20	148	51
7461	252	9	74	69	22
7576	112	73	180	42	8
6784	27	29	31	138	42
MMWSSB					
7386	NA	47	39	313	NA
7066	43	12	23	365	NA

Source: Loan files of HUDCO.

- i. the State-level agencies cannot enter into any contract or agreement involving an expenditure of Rs.1 million or more without the prior sanction of the State government;
- ii. the State-level agencies can only borrow funds with the prior sanction of the State governments;
- iii. in case a HUDCO loan is to be backed up by a State-government guarantee, the approval to provide such a guarantee has to be accorded at the level of the State Cabinet.

The entire process is thus long and arduous, increasing the cost of the project, apart from upsetting the schedule and involving transaction costs of various kinds.

The project appraisal process is characterised by yet another deficiency which is related to the slippages in the loan drawal programme. The loan agreement specifies the scheduled date for the drawal of the first instalment and subsequent instalments. The actual date for the release of the first instalment which usually takes place after the agency has completed some work on the project, however, turns out to be different from the scheduled date. What is important to note in this connection is that the slippages in terms of the number of days are large. As is noted, in the case of Tamil Nadu Housing Board, the difference between the scheduled and actual release was 276 days, and in the case of the APUDHC and APSHC, the number of days lost at this stage were 373 and 191 respectively.

The project appraisal process is thus highly deficient and inefficient. There are far too many stages involved in the project appraisal process and each stage is noted for enormous procedural delays. The norms of viability which are so crucial for the sustenance of the housing finance system stands grossly violated. Apart from several factors which would explain the deficiencies, one of the important reasons can be found in the government guarantee system which accompanies all project proposals. This system is the single most important impediment to bringing about any systematic improvement in project planning exercises. The provisions in the existing statutes governing the operations of the housing boards and development authorities are highly constraining. Many agencies cannot even put up their own assets as mortgages for securing loans from HUDCO and other agencies.

The entire project planning system needs to be revamped. While it is outside the scope of this study to provide a design of the system, certain guidelines can be advanced for developing the system.

- i. Projects should be formulated and appraised on the basis of standard practices, meaning that proposals should be "bankable". The bankability of projects is crucial for a long term sustainability of the housing finance system. It also means that projects should be based not on assumed costs and prices as happens to be the case at present, but on prices and costs that are realistic. Subsidies where necessary, are possible to be explicitly built into the cost structure of projects. It needs to be stated that there is no incompatibility between a bankable project and provision of subsidies for certain groups of households.

- ii. It follows that projects that are bankable will be able to secure bank guarantees. The replacement of the system of government guarantees by bank guarantees is in the long run, indispensable for imparting efficiency not only to project appraisal exercises but to the overall housing finance system. It is recognised that the provisions in the existing statutes do not permit agencies to put up bank guarantees; however, there is no reason why as a part of the financial reform process such provisions should not be relaxed or done away with.

- iii. The existing system of assessing the financial performance of agencies needs to be scientific. There are three measures that are important -
 - a. the capacity of agencies to recover loans from the ultimate beneficiaries or users. This is central to the performance of any agency. As we saw earlier, HUDCO, in its lending operations, has given low weightage to this basic norm. Irrespective of whether loans are accompanied by State government or bank guarantees, the extension of loan should be contingent upon the performance of agencies in so far as recovery of loans is concerned. The sustainability of housing finance system is not possible to be ensured without meeting the condition of a satisfactory loan recovery rate.

 - b. the income-expenditure balance.

 - c. the track record in respect of repayment of previous loans.

- iv. The existing procedures involving a multi-stage project appraisal and approval system should be replaced by one which is simple and transparent. Long and arduous procedure systems, it is obvious, escalate cost and seriously affect the overall housing activity in the country.

Questions have often been raised if HUDCO should continue to extend loans on a project-by-project basis or shift to other forms of lending. This question has been dealt with in Part V of the report.

Part III

A STUDY OF HUDCO'S BORROWERS

Chapter 1 : The Finances of HUDCO's Borrowers : An Overview

1. Introduction

A study of "HUDCO Borrowers" - this term being used in a generic sense to represent a variety of agencies engaged in housing and infrastructure development - must begin with a few general observations. First, HUDCO's borrowers constitute a heterogeneous group of agencies which principally include the housing boards, development authorities, slum clearance boards, water supply and sewerage boards, cooperative societies, municipalities and municipal corporations. Among these, housing boards account for over 40 per cent of HUDCO's loans. Development authorities absorb another 20-25 per cent, with the balance being shared by other agencies. The share of infrastructure-related agencies in HUDCO's portfolio is small but rising at a rapid rate.

Second, these agencies have been set up under different statutes of either the Central Government, such as Companies Act of 1956, or the State governments (.e.g, Housing Board Acts, State Municipal Corporation Acts, etc.). As such, their main objectives, mandates, and the focus of activities are not always identical. Note should be made of the fact that excepting those agencies which are wholly dedicated to social housing, i.e. housing for the economically weaker sections and lower income groups, the objectives of others are not *necessarily or dominantly "social"*. None of them seem to be governed by Social housing norms such as those which happen to be the hallmark of HUDCO's activities.

Third, the powers of agencies in respect of raising resources or undertaking housing and infrastructure projects are grossly limited, and they cannot claim to have any worthwhile autonomy in their functioning. An analysis of the various circulars of the Reserve Bank of India and provisions in the State-level legislations shows that -

- i. the State-level agencies can borrow funds only with the prior sanction of the State governments;
- ii. these agencies cannot enter into any contract/agreement involving an expenditure of Rs.1 million or more without the prior approval of the State governments;
- iii. the housing schemes undertaken by agencies are required to be approved by the State governments, and required to be published in the gazette prior to their execution;
- iv. in case agencies are securing loans from HUDCO with guarantees from the State governments, such guarantees are required to be accorded by the Cabinet of the State governments;
- v. agencies in many States are not authorised to create mortgages of their own assets and properties in favour of lending agencies such as HUDCO and LIC³⁷;
and

37. A few States have amended their Acts, in order to permit their agencies to create mortgages of their properties in favour of HUDCO and LIC. See, e.g., the 1976 amendment of the U.P. Urban Planning and Development Act, 1973.

- vi. agencies are not permitted to secure bank guarantees for implementation of infrastructure projects.

As we shall see later, these provisions have imparted a high degree of inflexibility and inefficiency into the housing and infrastructure system.

Fourth, although the main objective of these agencies is to promote and encourage housing and infrastructure development, the methods and modes which they employ to achieve it vary. Thus, if the agencies are distinguished on the basis of the methods, these would fall into four groups:

- i. agencies which are engaged in the construction and sale of houses. Sales may be made on hire-purchase, outright, or self-financing basis;
- ii. agencies which offer finance, technical inputs and other forms of assistance for housing construction;
- iii. agencies which are devoted to the development of infrastructure on behalf of municipalities and municipal corporations; and
- iv. agencies which are responsible for the provision and maintenance of city-level infrastructure services.

Finally, excepting the municipalities and municipal corporations which have a long history, all other categories of borrowers are the product of the 1960s and 1970s. These agencies came into being under conditions of mounting housing and infrastructure deficits, particularly in the urban areas of the country. It was widely held that specialised agencies with their autonomous codes would be able to meet the mounting deficits faster than the State governments which were hamstrung by their own administrative and financial procedures, rules and regulations. Such objectives, as this study will show, have been achieved, at best, partially.

These agencies, it should be noted, are extremely important in implementing the housing and infrastructure development policies and programmes of the respective States. Indeed, given the fact that housing and infrastructure development are State subjects and that the leverage of the Central government in these sectors is, at most, small and indirect, the role of these agencies assumes special significance. These agencies execute State-level policies and programmes, and additionally undertake housing and infrastructure development with financial assistance from institutions such as HUDCO, and often from external agencies. Their scale of operations and the efficiency with which they pursue the sector's objectives are thus extremely crucial and important.

As explained in Part I, the broader concern underlying the two studies is how to increase the investment flows into the housing and infrastructure sectors. These sectors, as referred to earlier, are, on the one hand, faced with severe and increasing deficits and, on the other hand, with low levels of investments. In many States, as may be seen from the Annex tables, the housing and infrastructure deficits are large, and financial allocations low. As pressures on the country's scarce financial resources mount and as the basic conditions underlying financial reforms are met, it will be necessary for such agencies to restructure their functioning in a way that, firstly, they are able to gain access to the various sources of credit; secondly, use these

resources in an efficient manner; and, thirdly, reach out to the needy groups who are otherwise constrained in securing any kind of housing finance from the formal sources. This study of HUDCO's Borrowers has grown out of such concerns, and is designed to especially examine, (i) the level of their financial performance, and (ii) the social focus in their operations. Suggestions for the future course of action are contained in Part IV of the report.

A sample of the following eight agencies has been studied:

Tamil Nadu Housing Board (TNHB)

Rajasthan Housing Board (RHB)

Lucknow Development Authority (LDA)

Andhra Pradesh Urban Development and Housing Corporation (APUDHC)

Andhra Pradesh State Housing Corporation (APSHC)

Maharashtra Water Supply and Sewerage Board (MWSSB)

Madras Metropolitan Water Supply and Sewerage Board (MMWSSB)

Baroda Municipal Corporation (BMC)

The sample is important in that of the five housing agencies -

- i. APUDHC and APSHC are devoted exclusively to housing activities of the economically weaker households. These agencies provide housing finance to economically weaker households and assist them in housing construction activities;
- ii. RHB and LDA are designed to meet the housing needs of all income groups of households. Both agencies construct houses and allot them to the different groups of households on hire-purchase, outright sale or self-financing basis.

- iii. TNHB services the housing needs of primarily the LIG, MIG and HIG households. The EWS focus in TNHB's activity profile is insignificant.

Of the two water supply and sewerage boards, the MWSSB is a State-level board whose main function includes the development and construction of water supply and sewerage projects for, and, on behalf of, municipalities and municipal corporations. Upon completion, the projects are transferred to municipal bodies who manage, operate and maintain them. The Madras Metropolitan Water Supply and Sewerage Board, on the other hand, is a city-level agency, responsible for the development, provision and maintenance of water supply systems in the Madras metropolitan area. The Baroda Municipal Corporation conducts its activities in pursuance of the Municipal Corporation Act, and is responsible for the provision and maintenance of infrastructure and services.

On account of the fact that these agencies owe themselves to different statutes, their accounting systems, and the formats in which they maintain their accounts vary. Broadly, two sets of accounting systems are followed: (i) the commercial accounting system which is followed by the Tamil Nadu Housing Board, the Andhra Pradesh Urban Development and Housing Corporation, the Andhra Pradesh State Housing Corporation, the Maharashtra Water Supply and Sewerage Board, and the Madras Metropolitan Water Supply and Sewerage Board, and (ii) the government accounting system which is followed by the Rajasthan Housing Board, the Lucknow Development Authority, and the Baroda Municipal Corporation.³⁸

38. Andhra Pradesh State Housing Corporation has not maintained audited accounts since 1985-86. Even the income and expenditure statements were unavailable for purposes of this study.

The study is based on the data obtained from the Annual Reports and Budgets of these agencies. In addition, use has been made of additional information furnished by agencies in prescribed questionnaires.

Note should be made of the extremely primitive and fragile data systems of these agencies. Apart from the absence of even the most essential data on the pattern and mode of resource mobilisation and resource use, the data systems are equally handicapped by the lack of coherence in formats used for the maintenance of budgets and accounts. For this reason, assessment of financial performance in this study is made by using indicators and ratios on which data could be assembled from the Annual Reports and Budgets. It is with this background that we present in this Chapter an overview of the finances of eight agencies, to be followed in Chapter 2 by an analysis of their financial performance, and of social focus in Chapter 3. In providing an overview, this Chapter undertakes an analysis, on the resources side, of the trends and composition of resources, and on the use of resources side, the pattern of investment/lending in activities such as housing and infrastructure development.

2. The Size and Composition of Resources

There are two types of data on resources. One: the stock data on resources as maintained by agencies following the commercial accounting systems, and two: the flow data by those keeping the government accounting system. Table 57 below presents data on the total outstanding resources as on 31 March, 1993 of agencies maintaining the commercial accounting system and the annual average growth rate of resources for the period the data are available from them.

Table 57**Resource Mobilisation**

(Outstanding as at the end of the year 1992-93)

Name of Agency	Amount outstanding (Rs. million)	Annual growth rate (%)	Period
Tamil Nadu Housing Board	4904.37	10.45	1989-90 to 1992-93
Andhra Pradesh Urban Development and Housing Corporation	552.95	131.68\$	1989-90 to 1992-93
Madras Metropolitan Water Supply and Sewerage Board	3009.57	15.28	1986-87 to 1992-93
Maharashtra Water Supply and Sewerage Board*	8762.86	14.72	1985-86 to 1991-92

Source: Annual Reports of agencies (various years).

Note: \$ The value is significant at 5 per cent level of significance.

* Amount outstanding relates to 1991-92.

From the data displayed in this table, it is seen that MWSSB is the largest agency in terms of total outstanding resources, followed by TNHB and MMWSSB with a resource base of Rs.8,762.9 million, Rs.4,904.4 million and Rs.3,009.6 million, respectively. APUDHC's total outstanding resources are lower but have increased during the period 1989-90 to 1992-93 at an extraordinarily high rate of 131.7 per cent per annum. The growth rate in the resources of other agencies is very moderate, and, significantly, lower than that registered by HUDCO.

Resource data on agencies following the government accounting system pertain to resources raised in the individual years. As would be noted from Table 58, of these agencies, BMC has been able to raise resources, annually at a rate of over 70 per cent. Resources raised by other agencies are, by and large, stagnant, rising at very low growth rates. Moreover, the

resources raised by LDA have declined during the period at an average rate of 7 per cent annually (Table 58).

Table 58
Resource Mobilisation During the Year 1992-93

Name of agency	Amount raised (Rs. million)	Growth rate (%)	Period
Andhra Pradesh State Housing Corporation 1	979.94	2.82	1985-86 to 1992-93
Rajasthan Housing Board 2	333.83	5.81	1986-87 to 1991-92
Lucknow Development Authority 1	87.42	-7.04	1987-88 to 1992-93
Baroda Municipal Corporation 1	118.37	73.95	

Source : 1. From NIPFP Questionnaire.
2. From Budget Documents.

Total resources of agencies comprise of shareholders' funds and loan funds. Shareholders' funds are further broken into share capital and reserves and surplus. Data contained in Table 59 show that the component of shareholders' funds in 1992-93 was 12.3 per cent in the case of TNHB, - 0.87 per cent in APUDHC, 47.5 per cent in MMWSSB, and 39.27 per cent in MWSSB. Over the period for which data are available, there has been a general decline in the component of shareholders' funds in the resource base of agencies, excepting in the case of MMWSSB where it rose from 42.9 per cent in 1986-87 to 47.5 per cent in 1992-93.³⁹ It is important to note that, during this period, the shareholders' funds in the case of

39. For trend data, see Annex tables.

APUDHC turned negative, the agency having even drawn on these funds to maintain themselves. As will be shown later, APUDHC resorted to drawing from the shareholders' funds on account of the non-recovery of loans from beneficiaries.

Growth in the shareholders' funds of MWSSB during the period of the study was 11.7 per cent per annum. The share of these funds in total resources declined from 47.5 per cent in 1985-86 to 39.3 per cent in 1992-93. It is, however, to be noted that MWSSB is the only agency which posted a noticeable increase in reserves and surplus. Reserves and surplus increased at an annual average rate of 24.5 per cent compared to the growth rate of either the loan funds (17.1%) or the shareholders' funds (11.7%). Annex tables may be seen in respect of data for various years.

Table 59

Structure of Resources

(Outstanding as at the end of the year 1992-93)

(Per cent)

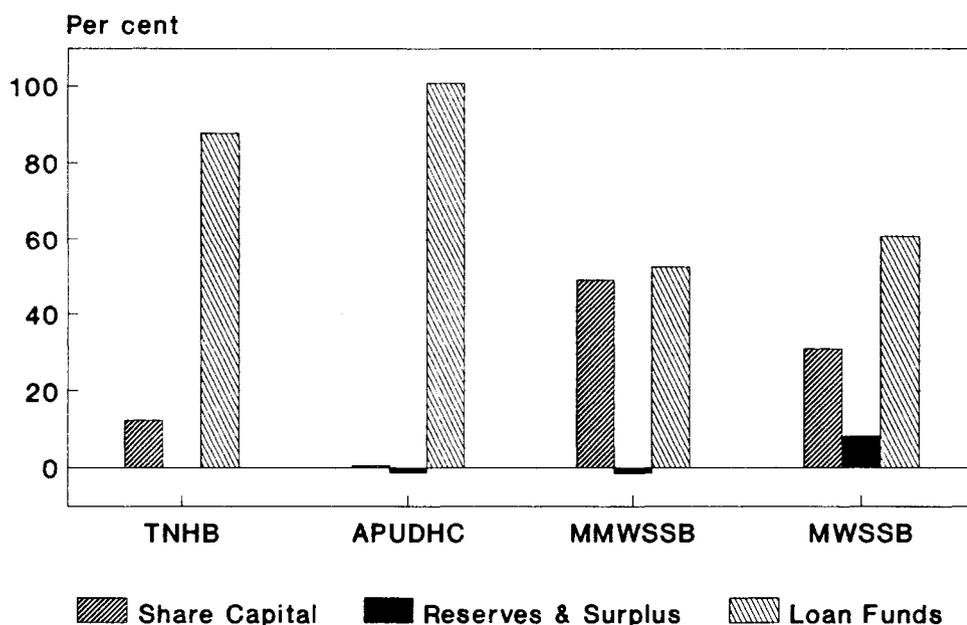
Agency	Structure of Resources				
	Shareholders' funds			Loan funds	Total
	Share capital	Reserves & surplus	Total		
TNHB	12.26	-	12.26	87.74	100.00
APUDHC	0.45	-1.32	-0.87	100.87	100.00
MMWSSB	48.93	-1.42	47.51	52.49	100.00
MWSSB	31.01	8.26	39.27	60.73	100.00

Source: Annual Reports of agencies.

Note: * Figures for MWSSB relate to 1991-92.

Figure 14

**Composition of Agencies' Resources
Percentage Outstandings
as at the End of the Year 1992-93**



Loan funds of any organisation comprise of government loans, institutional borrowings, market borrowings and mobilisation of savings, or deposits. The composition of loan funds in respect of the four agencies following the commercial accounting system is shown in Table 60.

Table 60
Structure of Loan Funds
(Outstanding at the end of the year 1992-93)

(Per cent)

Agency	Structure of Loan Funds			
	HUDCO	Government	Deposits	Others
TNHB (87.74)	31.28	17.28	25.19	13.99
APUDHC (100.87)	70.41	30.45	-	-
MMWSSB (52.49)	-	40.80	8.47	3.22#
MWSSB (60.73)	0.58	0.15	28.02	31.98

Source: Annual Reports of agencies.

Note: Figures in parenthesis relate to the share of loan funds in total resources.

Includes HUDCO's loan share.

The table shows that:

- i. Loan funds are an important source of resources with all the four agencies, although the level of their importance varies. TNHB is dependent to the extent of over 87 per cent on loan funds, while APUDHC's entire resource base consists only of loan funds. As pointed out earlier, the entire share capital of APUDHC currently stands wiped out. Loan funds constitute over 50 per cent of the total resources of MMWSSB and 60 per cent of MWSSB's resources.
- ii. A distinguishing feature of the resource base of these agencies lies in their dependence on government loans. Government loans comprise 40 per cent of MMWSSB's resources, 30 per cent in the case of APUDHC and 17 per cent of TNHB's resources. Moreover, the share of government loans in the resource base of TNHB and MMWSSB has consistently increased over the years.
- iii. HUDCO is an important source of loan funds with the two housing agencies, namely TNHB and APUDHC. HUDCO's share in total resources mobilised by TNHB amounted, at the end of the 1992-93 financial year, to Rs.1,533 million or 31.3 per cent of the total outstanding resources. For APUDHC, HUDCO's share was 70.41 per cent. It needs to be noted that HUDCO resources do not constitute an important source of funds with either of the two water supply and sewerage boards.

- iv. Deposits are an important source of funds with TNHB, MMWSSB and MWSSB. In 1992-93, over 25 per cent of TNHB's resources, 28 per cent of MWSSB and 8.5 per cent of MMWSSB's resources consisted of deposits from the public.

The primary source of funds for the Rajasthan Housing Board and the Lucknow Development Authority is HUDCO. For RHB, HUDCO was the only source of funds during the period 1985-86 to 1991-92; in 1992-93, however, RHB diversified the structure of its resources by raising 22 per cent of funds from other institutional sources. HUDCO's funds in RHB's resources grew at an average annual growth rate of 10.7 per cent during the period of the study. For LDA, too, HUDCO has been a principal source of funds, with its share ranging between 50 - 94 per cent during the different years of the reference period. In 1988-89, however, the share of HUDCO's funds fell below 20 per cent of its total resources. LDA's dependence on the State government is low.⁴⁰

3. Structure of Assets

In this section, we present an analysis of the asset structure which broadly comprise, on the one hand, of fixed assets and current assets, and on the other hand, of investments made in housing and infrastructure activities. In view of the dissimilar formats, a set of tables are presented below which give the structure and volume of assets of agencies, which maintain the commercial accounting system.

40. See Annex tables for data on the composition of resources in respect of RHB, LDA and BMC.

It is important to note that TNHB's outstanding fixed and current assets accounted for nearly 60 per cent of its total assets in 1992-93, while instalments receivable from allottees formed 39.5 per cent of its assets (Table 61). Even this level of receivable has been achieved only in recent years: in 1989-90, only 25 per cent of its assets were of this type. Other investments play no role in TNHB's assets profile. In fact, over the period 1989-90 to 1992-93, other investments, in absolute terms, have plummeted from Rs.175.23 million to Rs.44.14 million and their share in total assets from 4.8 per cent to 0.9 per cent.

Table 61
Structure of Assets, TNHB

Structure	Percentage to total amount outstanding at the end of the year			
	1989-90	1990-91	1991-92	1992-93
Instalments receivable from allottees	25.11	28.08	34.54	39.51
Investments	4.79	4.19	3.64	0.90
Fixed assets (net block)	8.67	7.70	7.59	7.56
Net current assets	61.42	60.03	54.23	52.03
Total assets	100.00	100.00	100.00	100.00

Source: Annual Reports of TNHB.

The structure of assets in the case of APUDHC presents a highly oscillating picture. Between the period 1989-90 to 1991-92, current assets accounted for anywhere between 55 - 97 per cent of the total assets suggesting that this agency was doing little in so far as its main activity of providing housing finance was concerned. Loans and advances formed 23 per cent, 42 per cent and 2.6 per cent of the total assets in these years. In 1992-93, however, current and fixed assets declined substantially and loans and advances for housing stepped up to 75 per cent (Table 62). Loans and advances, in absolute numbers, have risen from Rs.52.9 million in 1990-90 to Rs.413.4 million in 1992-93.

Table 62
Structure of Assets, APUDHC

Structure	Percentage to total amount outstanding at the end of the year			
	1989-90	1990-91	1991-92 (Est.)	1992-93 (Prov.)
Net Fixed Assets	1.25	0.71	0.21	0.25
Net Current Assets	75.26	55.77	97.16	24.52
Loans and Advances	23.31	42.14	2.61	74.76
Preliminary Expenses	0.17	0.07	0.02	0.02
Other Assets	0.00	1.31	0.00	0.45
Total Assets	100.00	100.00	100.00	100.00

Source: Annual Reports of APUDHC.

The structure of assets of MMWSSB consists of either fixed assets (85.1%) or current assets (14.9%). MMWSSB has no investments of any kind (Table 63). On the other hand, MWSSB has a large loan portfolio in its assets although it has fallen over time (Table 64).

Table 63
Structure of Assets, MMWSSB
(Madras Metropolitan Water Supply and Sewerage Board, Madras)

Structure	Percentage of total amount outstanding at the end of the year						
	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93
Fixed Assets (Net Block)	77.61	82.56	79.38	77.89	78.89	83.73	85.10
Net Current Assets	22.39	17.44	20.62	22.11	21.11	16.27	14.90
Total Assets	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Annual Reports of MMWSSB.

Table 64

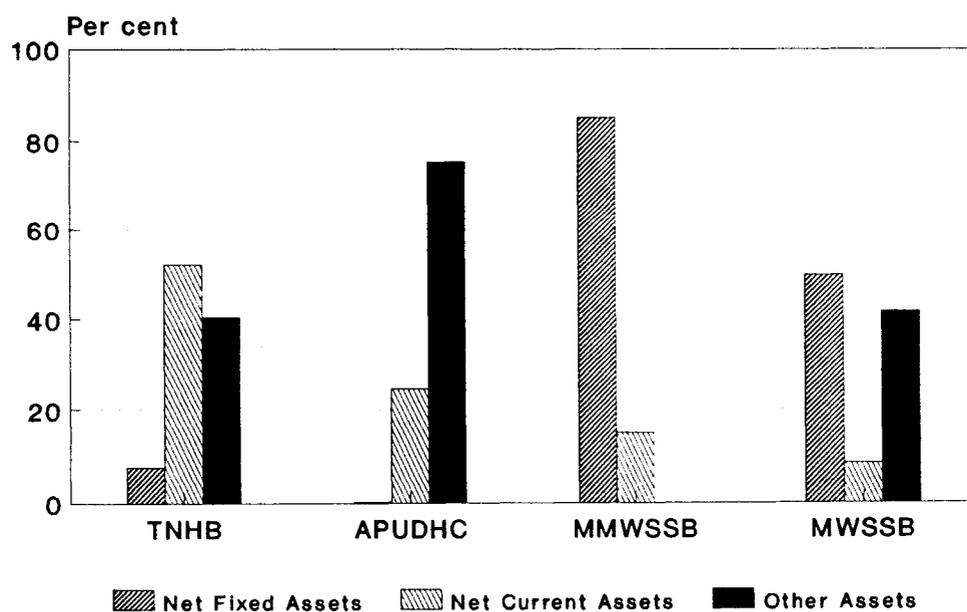
Structure of Assets, MWSSB
(Maharashtra Water Supply and Sewerage Board)

Structure	Percentage to total amount, outstanding at the end of the year						
	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92
Fixed assets	42.73	47.80	45.63	49.83	48.44	48.27	49.77
Loans & Advances	32.95	34.93	34.35	30.85	28.04	28.00	25.37
Deposits	1.27	1.46	1.78	1.71	1.95	2.16	2.28
Net Current Assets	0.38	0.97	2.80	3.11	5.27	7.53	8.45
Cash and Investments	22.66	14.85	15.44	14.51	16.31	14.04	14.13
Total Assets	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Annual Reports of MWSSB.

Figure 15

Composition of Agencies' Assets
Percentage Outstandings
as at the End of the Year 1992-93



The structure of assets of these agencies, it needs to be noted, is at sharp variance with that of HUDCO which, as pointed out in Part II of the Report, has an extremely low component of fixed and current assets, a high share of loans for housing and infrastructure development, and also a noticeable share of resources in various kinds of short-term investments.

Profile of Operations

The extent to which agencies focus on ESW/LIG housing is an important issue in this study. This data has been obtained by using a questionnaire from three housing agencies, namely, TNHB, RHB and LDA. The two housing corporations of Andhra Pradesh are wholly dedicated to EWS housing, while the water supply and sewerage boards and the Baroda Municipal Corporation do not distinguish their activities by income or any other criterion. The data for the five housing agencies are contained in Table 65.

Table 65
Composition of Expenditure on Different Categories
of Housing, 1992-93

Name of agency	(Rs. million)										
	EWS	(%)	LIG	(%)	MIG	(%)	HIG	(%)	Others	(%)	Total
Tamil Nadu Housing Board	0.33	0.03	129.50	10.79	305.83	25.47	**	**	765.07	63.72	1200.73
Andhra Pradesh Urban Development and Housing Corporation	303.80	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	303.80
Andhra Pradesh State Housing Corporation	2534.55	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2534.55
Rajasthan Housing Board*	53.00	7.05	144.24	19.18	246.96	32.84	161.78	21.51	146.13	19.43	752.12
Lucknow Development Authority	12.86	6.53	39.15	19.87	58.77	29.83	60.10	30.50	26.16	13.28	197.04

Source : NIPFP Questionnaire.

Note: * denotes figures from Budget Documents; the figure relates to the year 1991-92.
** denotes MIG figure for Tamil Nadu Housing Board includes HIG.

It would be noted from the table that TNHB's expenditure on EWS and LIG constituted, in 1992-93, 10.8 per cent of the total expenditure, while the same was 26.2 percent in the case of RHB and 26.4 per cent in the case of LDA. The level of expenditure on EWS and LIG has been steady in the case of TNHB, but oscillating significantly in LDA. It is further noted that EWS component in total expenditure in both the TNHB and LDA is extremely low - it being 0.03 per cent and 6.5 per cent, respectively. This point will be elaborated later in Chapter 3 of this study.

5. Recoveries and Defaults

Recoveries are crucial for the financial health of agencies. Unlike in the case of HUDCO which reported a near-100 per cent recovery rate of its loans, the field-level agencies have a high default rate on their loans. In 1992-93, APUDHC's recovery rate was a mere 6.4 per cent. The collection-demand ratios were higher for TNHB (88.9%), MMWSSB (92.6%), and MWSSB (53.9%). RHB reported a recovery rate of approximately 50-60 per cent, and BMC of 77 per cent. In the case of LDA, recovery rates ranged between 60 per cent and 95 per cent.

In sum, the following points emerge from this overview:

- i. The resource base of sampled agencies has shown a low to moderate rate of growth over the past few years. The component of shareholders' funds in the resource base of these agencies has been shrinking excepting in the case of MMWSSB. APUDHC, however, is one agency which made, during the period of the study, heavy inroads into its own share capital, wiping it out completely on account of, as will be shown later, non-recovery of loans. Other agencies, too, drew heavily on their reserves and surplus, once again, with the exception of MMWSSB.

- ii. Loan funds are an important component in the structure of agencies' resources. An important point to note is the high level of government loans in TNHB, APUDHC and MMWSSB. Besides the government loans, HUDCO's loans constitute an important source of funds with the housing agencies.
- iii. Unlike HUDCO which has a relatively low level of fixed and current assets, the fixed and current assets of field-level agencies are very high. It is one feature that distinguishes the field-level agencies from HUDCO. While the agencies that undertake construction of houses and infrastructure are expected to have a large proportion of their assets in the form of fixed and current assets, a similar asset pattern in the case of housing finance agencies indicates their inefficiency in portfolio management.
- iv. Apart from the two housing corporations of Andhra Pradesh which are wholly dedicated to EWS housing, the focus of other agencies on EWS and LIG housing is far lower than what is generally believed. The expenditure levels on EWS/LIG housing are about 26 per cent in the case of RHB and LDA, and only about 11 per cent in TNHB.
- v. Loan recoveries from the beneficiaries are strikingly low except in the case of MMWSSB and TNHB.

Chapter 2 : The Financial Performance of HUDCO's Borrowers

1. Introduction

In this Chapter, an attempt is made to gauge and evaluate the financial performance of the sampled agencies. Three observations are, however, necessary at the outset in order that their financial performance is understood in a proper perspective. The first relates to the different accounting system followed by different agencies, these being the commercial accounting system, and government accounting system. Even within the same accounting system, it needs to be stressed, the formats in which agencies collect and maintain data differ considerably, making it exceedingly difficult to measure the agencies' performance on a comparative basis, or isolate the factors which explain why the level of performance of one agency differs from that of others.

Secondly, as a result of the different accounting systems, the constituents of income and expenditure of agencies vary, adding further to the complexity in measuring their performance, in particular, their profitability. TNHB's income, for instance, consists of income from the sale of houses and from interest earned on investments. Its expenditure includes expenditure incurred on the construction of houses, salaries of staff and other charges that it has to meet. The income of APUDHC consists of interest earned on deposits with banks, while its expenditure consists of interest paid on borrowings and administrative and other charges. In comparison, the income of MMWSSB consists of income from the sale of water, tax on water and sewerage, and grants and subsidies from the State government. Its main expenditure items include operating and maintenance expenditure, payment and provision to employees, and other miscellaneous expenses.

Thirdly, many agencies provide income (receipts) and expenditure data separately on capital and revenue accounts making it difficult to make proper judgements about their financial performance. These include, in the main, the Rajasthan Housing Board and the Lucknow Development Authority.

Within the limitations of these observations, we present below the structure of income and expenditure and the profitability of all agencies covered in this study.

2. Structure of Income and Expenditure

As stated above, income earned by agencies accrues from a variety of sources, and, likewise their pattern of expenditure includes numerous items. In 1992-93, the main source of income in the case of TNHB was the income earned from the sale of houses (71.4 %); interest income from term deposits in the case of APUDHC (57.8%); sales of water by MMWSSB (69.1%), and income from water charges by MWSSB (56.8%) (Table 66).

Table 66
Principal Source of Income, 1992-93

Agency	Principal source	Per cent of income drawn from the principal source
TNHB	Sale of houses	71.36
APUDHC	Interest income on term deposits	57.84
MMWSSB	Sale of water	69.10
MWSSB	Income from water charges	56.84

The Rajasthan Housing Board and Lucknow Development Authority have shown their income and expenditure under capital and revenue accounts. As may be seen from Table 67, the revenue income of RHB consists of interest (88.9%), while the capital receipt comprises of sale proceeds and auctions of land and houses (43.2%) and loan (35%). LDA derives most of its receipts on capital account from the sale of buildings (36.2%), loans (28.7%), and sales of plots (18.3%). BMC which is a civic body has a different structure of receipts and expenditure (Table 68).

Table 67
Principal Sources of Income and Receipts on Revenue and Capital Accounts (1992-93)

Sources	RHB (%)	LDA (%)
Revenue income:		
Interest	88.94	-
Rent	-	11.90
Income from hire-purchase	-	37.79
Registration charges	-	39.86
Capital receipts:		
Sale of plots	-	18.29
Sale of buildings	43.23*	36.21
Loan	34.96	28.65

* This includes all sale proceeds and auctions.

Table 68
BMC's Main Sources of Income for Selected Years

Sources	1985-86 (%)	1988-89 (%)	1991-92 (%)	1992-93 (%)	Annual growth rate (%)*
Octroi	53.60	45.40	50.53	47.23	16.72
Tax on land & buildings	15.23	16.89	15.48	18.70	20.48
Government grants	8.63	13.64	12.96	12.86	25.33

* Annual growth rates have been worked out on the basis of data for all years from 1985-86 to 1992-93.

With the exception of APUDHC, all agencies besides having incomes from their main activities, have other sources of income which include interest income from investments, water and sewerage tax, managerial subsidy (an euphemism for meeting the staff cost), and grants and subsidies from the State governments. Over the years, the structure of income of agencies has undergone a noticeable change. For instance, income from the sale of houses in the case of TNHB has risen from Rs.280 million in 1989-90 to Rs.693 million in 1992-93, yielding an annual average growth rate of 30.3 per cent. Other operating and miscellaneous incomes too have risen at a little over 20 per cent per annum. MMWSSB has been able to push its income from the sale of water from a relatively low base of Rs.75 million in 1986-87 to Rs.352 million in 1992-93, and from water and sewerage tax and charges at about 10 per cent annually. Income from octroi in the case of BMC has risen over the years 1985-86 to 1992-93 by 16.7 per cent per annum. The structure of incomes in respect of these agencies is given in Part V of the report.

The main expenditure items of the sampled agencies include for the year 1992-93 the cost of construction of houses in the case of TNHB (53.5%), finance and other charges in APUDHC (84.6%), payment to employees (42.4%) and operating and maintenance expenditure in MMWSSB (42.4%), and operating expenditure on water supply in the case of MWSSB (56.2%) (Table 69). RHB's main item of expenditure in 1992-93 was "works", accounting for 79.3 per cent of capital expenditure. For LDA too, construction works was the single most important item of capital expenditure in 1992-93, followed by repayment of loans and interest (Table 70).

The pattern of expenditure in the case of Baroda Municipal Corporation is, however, very different with its major heads being tax collection charges (16%), loan charges (10.4%), public works (8.9%), water storage (7.7%), and pensions and gratuities (5.3%). Public works expenditure has risen over the years at a higher rate as compared to other heads of expenditure

(see Table in Part V of the report).

Table 69
Principal Component of Expenditure 1992-93 and Growth Rates

Agency	Principal component	Per cent of expenditure to total expenditure	Annual average growth rate %	
TNHB	Cost of house construction	53.47	(-)	
APUDHC	Finance & other charges	84.58	(-)	
MMWSSB	Payments made to employees	42.41	18.03	(1986-87 to 1992-93)
MWSSB	Operating expenditure on water supply	56.24	16.58	(1985-86 to 1991-92)

Note: (-) denotes regressions not applicable.

Table 70
The Composition of Expenditure on Revenue and Capital Accounts, 1992-93

Expenditure components	RHB (%)	(LDA (%)
Revenue account:		
Establishment	42.27	49.41
Interest payment	59.16	-
Capital account:		
Works	79.33	37.58
Provision for repayment of capital	19.56	-

A close examination of the income -expenditure statement of these agencies (see Annex tables) shows that:

- i. the income and expenditure of these agencies is precariously balanced. In 1992-93, the level of expenditure of TNHB and APUDHC was higher than the income level; similarly, the expenditure on revenue account of RHB and on capital account of LDA was in excess of the corresponding incomes of these agencies. In other years too, often the incomes have fallen behind the levels of expenditures;

Table 71
Income-Expenditure Balance, 1992-93

(Rs. million)

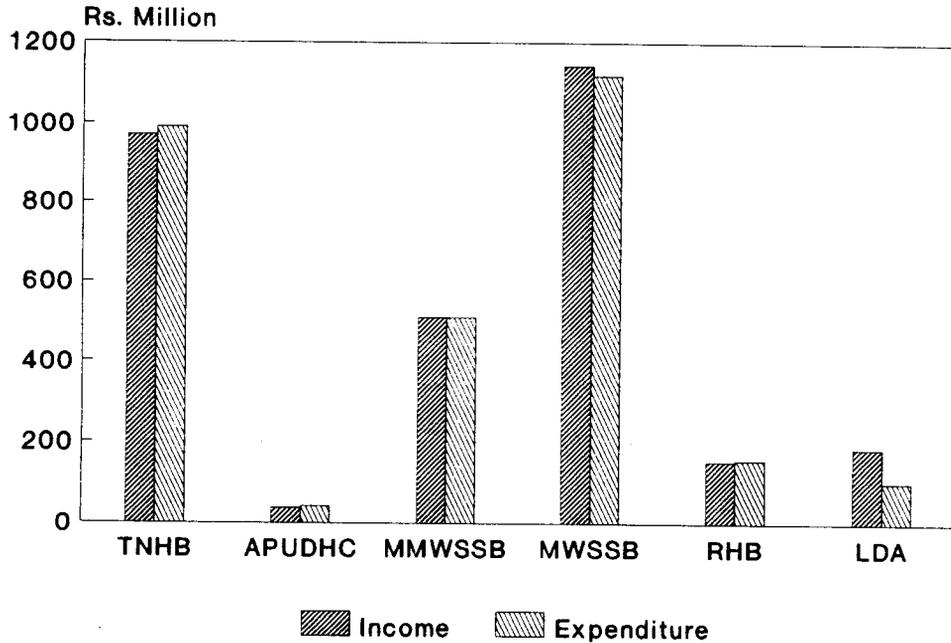
Agencies	Income	Expenditure	Balance
TNHB	971.51	990.06	-18.55
APUDHC	36.95	41.54	-4.59
MMWSSB	510.34	509.56	0.78
MWSSB	1,144.94	1,119.51	25.43
RHB :			
i. Revenue account*	152.75	156.16	-3.41
ii. Capital account*	954.92	948.03	6.89
LDA :			
i. Revenue account*	185.41	101.40	84.01
ii. Capital account*	959.98#	993.00	-33.02

Notes: * Figures relate to 1991-92.

excludes transfers from revenue account.

Figure 16

**Agencies' Income and Expenditure
During the Year 1992-93**



- ii. the rate of growth of expenditure is higher than the rate of growth of income for all agencies maintaining the commercial accounting system, the exception being the MWSSB;
- iii. Other sources of income play a crucial role in the income portfolio of all agencies;
- iv. Staff expenditures including the salaries, welfare and other staff related expenses are uniformly higher with all agencies, particularly when these are compared with the staff expenditures of HUDCO;

- v. APUDHC is a special case whose main source of income is interest earned on term deposits with banks. Significantly, the share of this component in total income has increased successively over the years.

3. Measures of Profitability

Various measures of profitability have been used in the literature. However, the two measures of profitability which are possible to be used in this study are:

- a. Net profit as per cent of total income. This measure is very useful in tracking performance of a particular agency.
- b. Net profit as per cent of total assets is another useful measure in assessing agency's performance.

Profitability ratios in respect of four agencies viz., TNHB, APUDHC, MMWSSB and MWSSB are displayed in Table 72. As can be seen from Table 72, net profits of both TNHB and APUDHC have consistently declined over the period of study. TNHB's profits which stood at Rs.14.5 million in 1989-90 declined to Rs.5.6 million in 1991-92, and then turned into losses in 1992-93 - losses amounting to Rs.18.55 million. APUDHC's profits too declined from Rs.1.22 million in 1989-90 to Rs.0.16 million in 1991-92, and then turned into losses. In the case of MMWSSB and MWSSB measures of profitability show no clear pattern, fluctuating widely between profits and losses.

Table 72

Measures of Profitability in Respect of Agencies Maintaining Commercial Accounting Systems

Agency	Net profits as a ratio of total income			Net profits as a ratio of total assets		
	1989-90	1991-92	1992-93	1989-90	1991-92	1992-93
TNHB	0.0277	0.0067	-0.0191	0.0040	0.0013	-0.0038
APUDHC	0.4083	0.0055	-0.1242	0.0226	0.0003	-0.0083
MMWSSB	0.0573	-0.1833	0.0015	0.0099	-0.0247	0.0003
MWSSB	0.0251	0.0222	-	0.0031	0.0029	-

In spite of a moderate to good recovery rate, hovering between 82 per cent to 92 per cent, and about 30 per cent annual growth in income from sale of housing units, TNHB's net profit to total income ratio has declined from 2.77 per cent in 1989-90 to -1.91 per cent in 1991-92. Reasons for this are traceable in part, to two items on the expenditure side, viz., the emoluments of employees, and administrative cost. These together account for 14 per cent to 19 per cent of the total expenditure which is very high by any standards. Further, expenditure on repairs and maintenance also appears to be on the high side in relation to the size of fixed assets (6 per cent to 7 per cent of total assets) of this agency.

A sharp decline in profitability (net profit/total income) from 40.83 per cent in 1989-90 to -12.42 in 1992-93 is observed in the case of APUDHC. One of the reasons of this trend lies in the high establishment cost. The establishment cost of APUDHC varies between 14 - 50 per cent of the total expenditure. Another major factor responsible for the deterioration in the level of profits is poor recovery which is reflected in the wide gap between interest paid and interest realised. If interest income is adjusted on account of interest earned on financial investments, the gap between interest paid and realised will be even larger.

Deterioration in the profitability of MMWSSB is largely a result of the exceptionally high establishment cost ranging between 40 per cent - 50 per cent of the total expenditure. As can be seen from MMWSSB's income and expenditure statement (Tables 69 and 75), the growth in total income has been sluggish when compared to the growth in total expenditure. Sluggish growth in income is partly a consequence of the decline in grants and subsidies from the government. While subsidies and grants have registered a steep decline, revenues from the Board's main activity have failed to show a corresponding increase. Reasons for this are traced to the non-adjustment of water rates to higher costs and increasing maintenance costs.

Rajasthan Housing Board is characterised (Table 73), both on revenue and capital accounts, by an overall deficit in that its expenditure has all along been higher than the receipts. In this sense, it has been a drain on resources. Explanations for such a situation are not evident except that the receipts consisting of interest and receipts from sale and auctions have risen at a lower rate as compared to expenditure heads.

Table 73
Profits of the Rajasthan Housing Board

Year	Surplus/Deficit (Rs. million)		Surplus/Deficit as % of total receipts	
	Revenue account	Capital account	Revenue account	Capital account
1986-87	-18.29	-58.73	-22.60	-12.84
1987-88	-19.46	-96.72	-19.88	-17.51
1988-89	-4.09	-67.96	-3.42	-10.68
1989-90	11.20	-206.30	8.12	-26.76
1990-91	-7.71	-125.24	-5.22	-17.13
1991-92	-3.41	-188.90	-2.24	-19.78

LDA has a comparatively better record in so far as the level of profitability is concerned (Table 74). On revenue and capital accounts, it posted a profit in 1989-90 and 1990-91; in 1991-92, however, LDA posted a negative balance on capital account. What is important is that LDA transferred from revenue account Rs.81.19 million to its capital account - a phenomenon which is generally not noticed among housing boards or development authorities.

Table 74
Profits of the Lucknow Development Authority

Year	Surplus/Deficit (Rs. million)		Surplus/Deficit as a % of total receipts	
	Revenue account	Capital account	Revenue account	Capital account
1989-90	8.30	58.05	12.51	9.03
1990-91	1.65	128.26	1.93	16.23
1991-92	84.01	-33.02	45.31	-3.44

The Baroda Municipal Corporation too presents a somewhat similar position (Table 75), posting deficits all through the period of the study if grants made by the State government are excluded from its total receipts. In fact the losses of the BMC have ranged between 6.81 per cent and 16.73 per cent. Inclusion of grants, however, turns the BMC into a surplus-posting body.

Figure 17

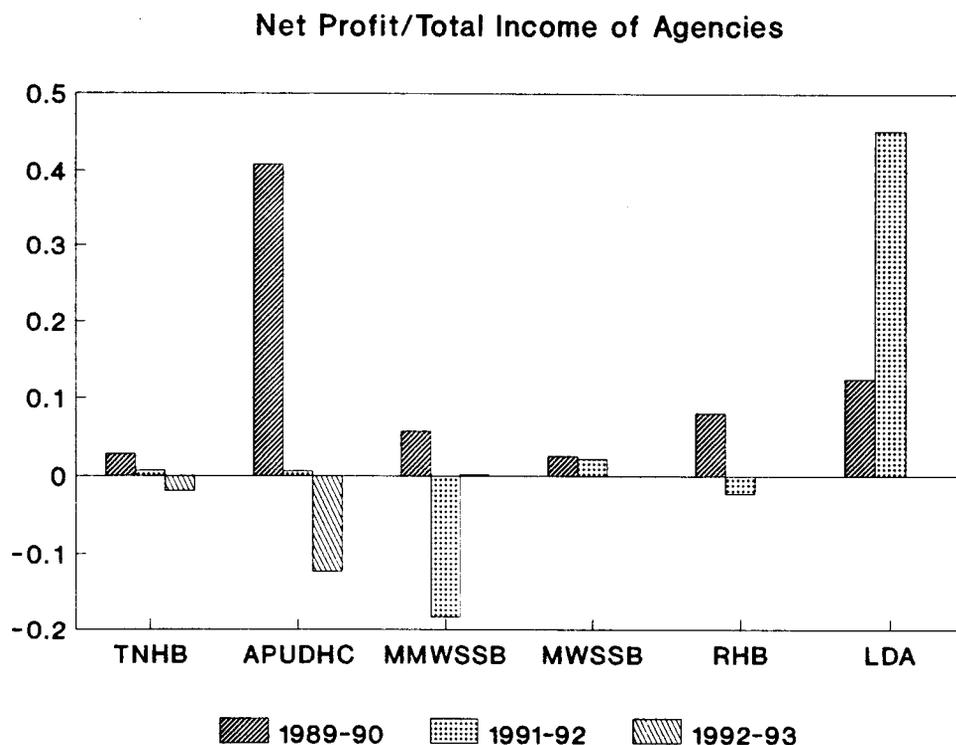


Table 75
Profits of the Baroda Municipal Corporation

Year	Surplus/Deficit (Rs. million)		Surplus/Deficit as a % of total receipts	
	Excluding government grant	Including government grant	Excluding government grant	Including government grant
1985-86	18.92	42.07	7.72	15.69
1986-87	-23.06	4.54	-8.55	1.53
1987-88	-24.28	15.68	-7.82	4.48
1988-89	-2.39	62.32	-0.58	13.14
1989-90	-60.27	15.78	-13.36	2.99
1990-91	-76.31	-5.20	-16.73	-0.99
1991-92	-61.97	20.20	-10.23	4.05
1992-93	-52.61	61.35	-6.81	6.92

4. Credit Performance

Performance of agencies is also measured by using indices such as return on equity, after tax coverage ratio, and debt-equity ratio. These ratios are also often used in credit rating of agencies which is a process by which agencies' performance is assessed with respect to the safety of capital and the timeliness of principal and interest payments. We present in three tables data in respect of the above-mentioned three indices (Table 76 to 78).

Table 76
Return on Equity

Year	Return on equity (ratio)			
	TNHB	APUDHC	MMWSSB	MWSSB
1989-90	0.03	0.33	0.02	0.01
1990-91	0.01	0.01	0.01	0.01
1991-92	0.01	0.04	-0.05	0.01
1992-93	-0.03	0.96*	-0.00	-

Note: * The figure is misleading because both the numerator and denominator are negative.

It is evident that the return on equity for all agencies is uniformly low. In several years, the return has fallen below zero, suggesting that agencies are far from being healthy. The high return on equity in the case of APUDHC is misleading and a statistical illusion as both the equity and the return on equity are negative.

Similarly, the after tax coverage ratio (ATCR) for all agencies is low, falling below one, at least once during the period of the study.

Figure 18

Return on Equity of Agencies

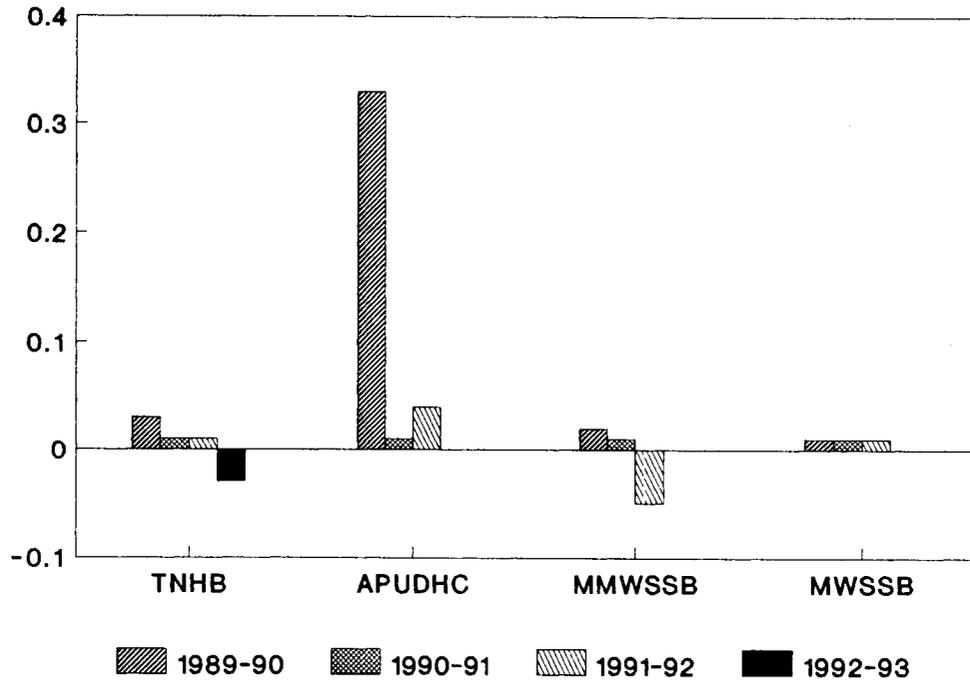
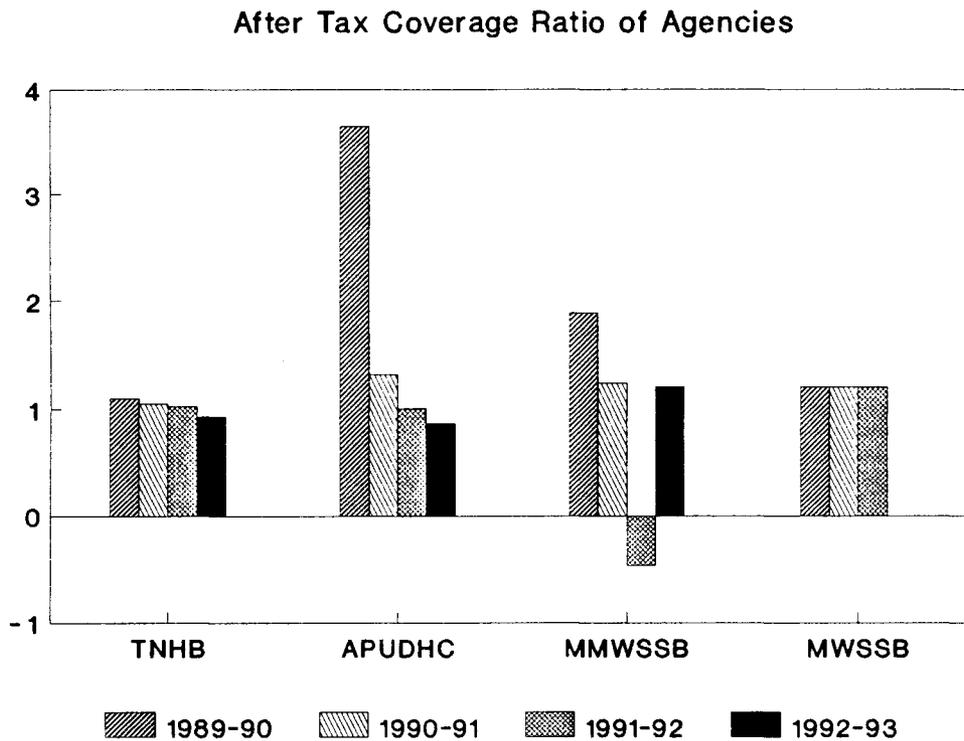


Table 77

After Tax Coverage Ratio

Year	After tax coverage ratio			
	TNHB	APUDHC	MMWSSB	MWSSB
1989-90	1.10	3.65	1.89	1.20
1990-91	1.05	1.32	1.24	1.20
1991-92	1.03	1.01	-0.47	1.20
1992-93	0.93	0.87	1.01	-

Figure 19

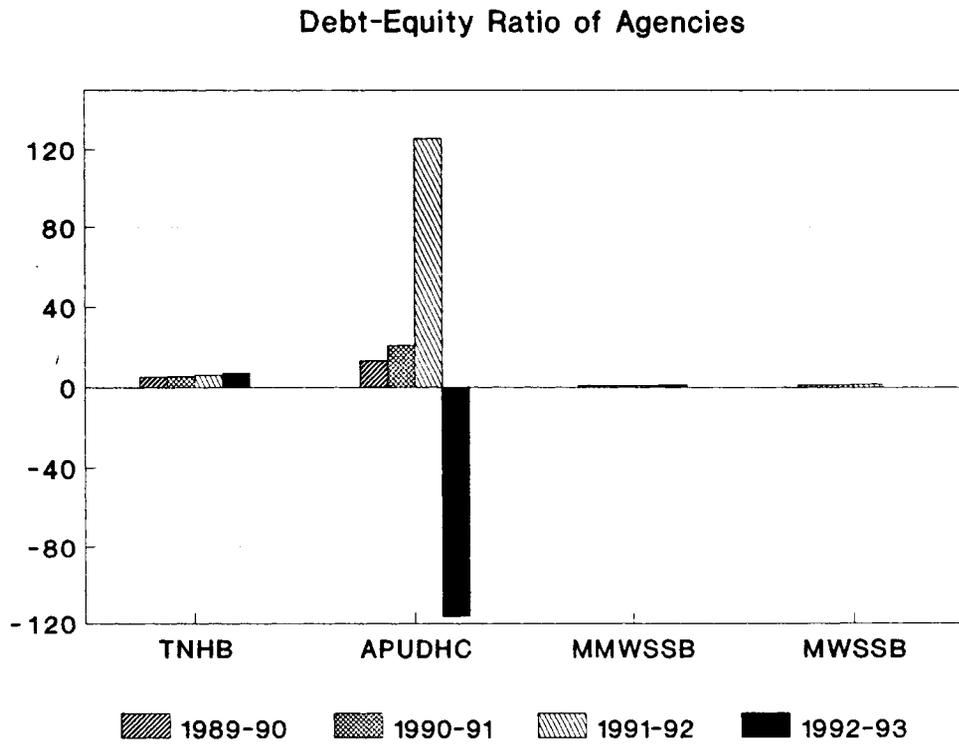


The debt-equity ratio of TNHB has risen over the years, reaching 7.16 in 1992-93 from a relatively low base of 5.08 in 1989-90. On the other hand, the two water supply and sewerage boards have extremely low debt-equity ratios, relying more on budgets and State plan allocations. APUDHC's finances are in a mess as an already high debt-equity ratio of 13.44 in 1989-90 rose dramatically to 125.89 in 1991-92

Table 78
Debt-Equity Ratio

Year	Debt-Equity ratio			
	TNHB	APUDHC	MMWSSB	MWSSB
1989-90	5.08	13.44	0.91	1.19
1990-91	5.50	20.86	0.83	1.41
1991-92	6.28	125.89	0.89	1.55
1992-93	7.16	-116.44	1.10	-

Figure 20



The financial and credit performance of HUDCO's borrowers can be summed up as follows:

- i. There is a high degree of variability in the way financial accounts are maintained by HUDCO's borrowers. Even within the two main financial accounts systems, namely, commercial accounting and government accounting, the format and accounting heads vary. A more important point to note is the absence of a proper accounting system that would enable a proper understanding of the agencies' financial performance.
- ii. With the exception of APUDHC whose financial dealings are in doldrums, there has been a general expansion over the years in the financial operations of agencies. As this Chapter shows, the income and expenditure of agencies have increased, though the level of expenditure appears to have risen at a somewhat higher rate than the income.
- iii. All agencies derive their income from a number of sources. The principal activities of the agencies such as TNHB, APUDHC, MMWSSB and MWSSB yield anywhere between 57 to 71 per cent of incomes, the balance accruing from other sources.
- iv. The income-expenditure of most agencies is precariously balanced. In 1992-93, for instance, while the water supply and sewerage boards showed a small surplus of income over expenditure, housing agencies covered in this study reported a deficit of income over expenditure.

- v. The financial performance of all agencies as measured by profitability, return on equity, after tax coverage ratio, and debt-equity ratio, is grossly unsatisfactory. All agencies have shown losses in at least one year over the period 1985-86 to 1992-93. Even when the agencies have posted a profit, the ratio of profit to total income or total assets is very low, it being in the case of TNHB (1991-92), 0.0067 and 0.0013 respectively. APUDHC's ratios are even lower - these being 0.0055 and 0.0003 respectively. On capital account, RHB's deficits as a percentage of total receipts have oscillated between 10.7 per cent in 1988-89 and 26.76 per cent in 1989-90. In other years too, these percentages are very high. On other measures too, the performance of other agencies is, at the least, dismal.
- vi. Given these ratios, it is unlikely that these can operate in the housing market, without government assistance and guarantees.

Chapter 3 : The Social Focus at the Field Level

What is the degree of commitment of field-level agencies such as the housing boards, development authorities, slum clearance boards and others to social housing programmes? How do these agencies target and deliver such programmes? The importance of these questions has risen in recent years for two reasons: (i) there is the general perception that the housing programmes for the poor do not reach them, and (ii) the overall cost of such programmes which is reflected in various forms of explicit and implicit subsidies is extremely high and consequently these programmes are not sustainable. On the first, it is argued that housing programmes are poorly targeted, and a significant proportion of subsidies which is attached with these programmes leak out to other groups. The issue of sustainability is more complex, and is linked with the process of financial reforms which are based on a planned reduction in the overall burden on total public resources.

Prima facie, many of these contentions would appear to be justified. Increasing numbers of the poor and large number of households without housing, water supply and other basic infrastructure are evidence of how the housing and other needs of the poor have been bypassed. With mounting pressures on the housing market, poor households have been completely priced out, as they have found the economic gains from such transactions to be higher than the loss incurred on account of losing a proper habitat. Moreover, it is argued that subsidies have a distortionary effect and have no place in the changing financial environment.

This Chapter attempts to analyse the extent of social focus in the housing programmes of agencies covered in this study. Focus is placed on the following aspects, namely:

- i. The extent of social focus in the activities of agencies, as measured by the proportion of investments made by them in EWS and LIG housing;
- ii. The targeting procedures;
- iii. The issue of subsidies and loan recoveries from the EWS/LIG households.

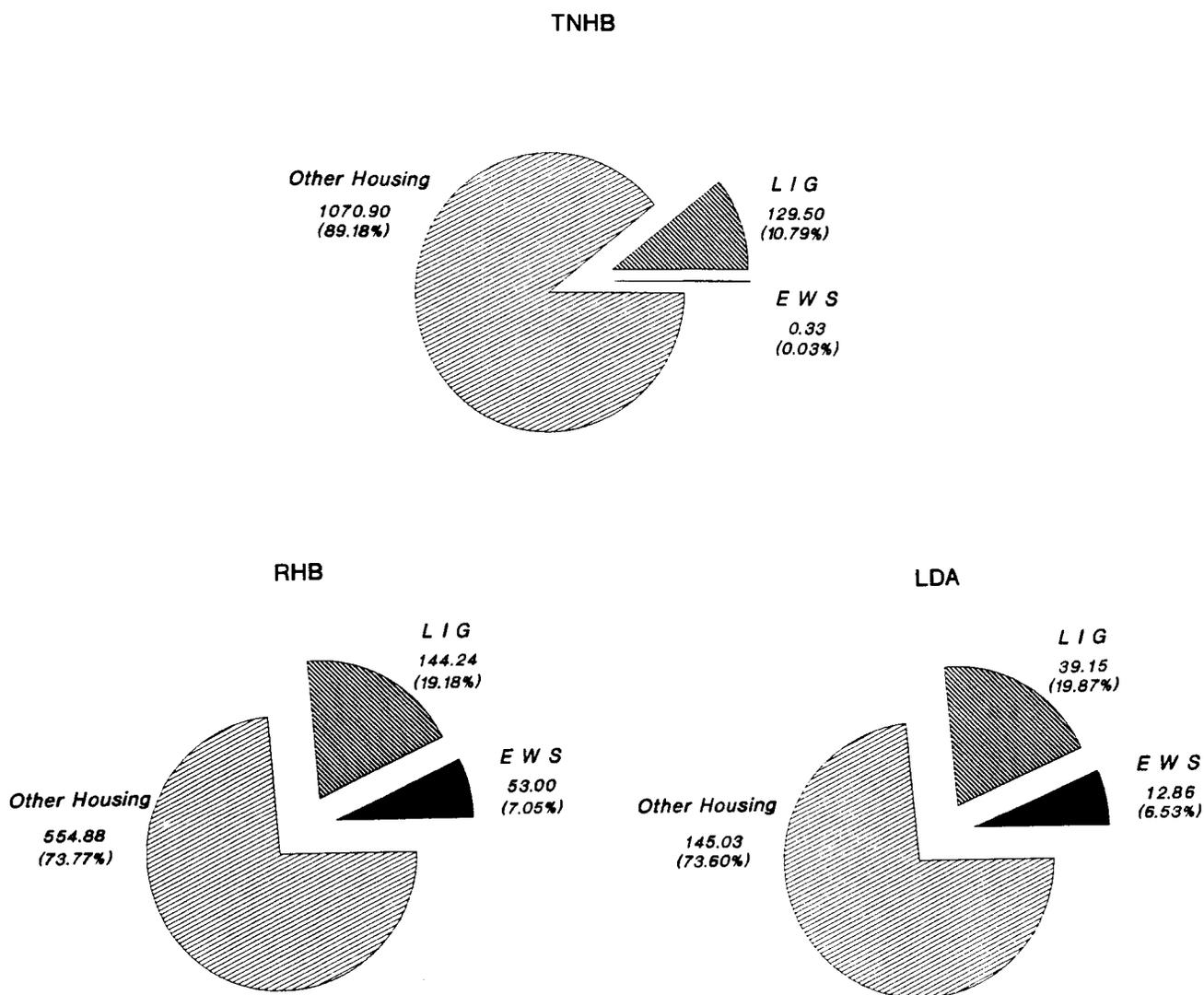
It is necessary to point out at the outset that unlike HUDCO which is required to commit a certain percentage of its funds for EWS/LIG housing, the field-level agencies such as the housing boards and development authorities are not required to do so. Thus, these agencies are not governed by a 55-45 or for the matter, any other similar mandate. Given this, it is instructive to see in the following table the extent of social focus in their housing programmes.

Table 79
Social Focus in Agencies' Housing Activities,
Expenditure During the Year 1992-93

Agency	Expenditure on					
	EWS housing		LIG housing		EWS & LIG housing	
	Amount (Rs. million)	%	Amount (Rs. million)	%	Amount (Rs. million)	%
TNHB	0.33	0.03	129.50	10.79	129.83	10.82
RHB	53.00	7.05	144.24	19.18	197.24	26.23
LDA	12.86	6.53	39.15	19.87	52.01	26.40
APUDHC	303.80	100.00	-	-	303.80	100.00
APSHC	2,534.55	100.00	-	-	2,534.55	100.00

Figure 21

**Social Focus of Agencies
Categorywise Expenditure (Rs.Million)
During the Year 1992-93**



It is obvious that social housing forms a relatively small component in the housing activities of agencies which are not exclusively dedicated to EWS/LIG housing. EWS component in the housing programmes of these agencies is particularly low - it being, as the table shows 7 per cent in the case of RHB and about 6.5 per cent in the case of LDA. These figures confirm the point made in the study report on HUDCO that the actual disbursements for EWS are significantly lower than the sanctioned amounts. These figures also confirm the point that one of the prerequisites for ensuring that social housing goals are carried is that a commitment to this effect should run through the entire chain of the network of institutions. There is no way in which these goals can be pursued by HUDCO or HUDCO's Borrowers in isolation of each other.

The issue of targeting has been widely discussed in the literature. It is argued on the one hand that the targeting methods as employed in EWS/LIG housing programmes are far from satisfactory, and on the other hand, even where targeting is proper, there are no tested methods by which the targeted households can be enabled to keep to the allotted housing. EWS housing slips out to other income groups.

Three sets of criteria are generally used by agencies for selecting the target groups, these being the presentation of -

- i. an income or salary certificate
- ii. an affidavit
- iii. a patta.

The local authorities also undertake identification of EWS households. The method of identification and the criteria stated above are extremely weak, more so, when these are unaccompanied by any mechanism of field-level scrutiny of certificates or involvement of community-based organisations in the selection process of target groups. The absence of any other satisfactory measure is a major factor in the weak social focus in the housing programmes of these agencies.

The notion of subsidy at the level of agencies is somewhat different from the one that is found relevant of HUDCO. At the level of HUDCO, as we saw in Part II of the report, subsidy to HUDCO included share capital contribution at either 0 per cent dividend rate or a dividend rate much below the market rate, its access to low cost and mandated credit, and a slightly lower tax rate. Subsidies accruing to HUDCO via these channels are meant to be transferred to the field-level agencies in order that they can maintain a social focus in their operations. We saw in Part II that over the period 1985-86 to 1992-93, HUDCO was able to transfer over 95 per cent of subsidies that accrued to it in different ways.

The position of subsidies at the level of agencies is however, different in that many of these have access to State government grants, State government loans, loans at low interest rates from the State governments apart from low interest loans from HUDCO and other institutions. An estimate of subsidies accruing to agencies via these channels, however, is not possible in view of the non-availability of any data on the quantum of such loans, interest rates, maturity periods etc. Note should be made of the fact that TNHB, RHB and LDA make use of these funds, both that are available to them at subsidised rates and those that are unsubsidised, in the production of housing units for the various income categories of households. EWS/LIG housing loans carry a lower interest rate. Since the differential between the "stated" sale price and stated cost price of housing units is insignificant in the case of EWS/LIG unit, agencies do not generate

any surplus on that account.

TNHB's data on the stated cost and stated price show that there is no difference between the two sets of prices, and, as such no subsidies accrue on this account to TNHB. On the other hand, a perusal of data on cost and price of EWS/LIG housing of LDA suggest that in their system, cost ceilings cease to exist once a loan is drawn. For, both the reported cost and sale price of EWS and LIG housing is reported to exceed the normative cost and prices. The relevant data in respect of TNHB and LDA are contained in the following two tables:

Table 80
Cost and Price of a LIG Unit
(Schemes 6956 and 6957)

(Rs.)

Schemes		Total cost	Sale price
6956	(IIA)	28,730	29,000
	(IIB)	32,856	33,000
6957	(IIA)	28,741	29,000
	(IIB)	32,871	33,000

Table 81
LDA : Cost and Price of EWS/LIG Units

(Rs.)

Item	EWS		LIG	
	1988-89	1991-92	1988-89	1992-93
Cost	20,000	27,000	50,000	65,000
Price	25-30,000	40-45000	60-85000	135-16,000

APUDHC and APSHC are engaged in the provision of housing finance at low interest rates to the eligible groups for the construction of housing units. They obtain loans from HUDCO and other agencies, and transfer these loans to the eligible EWS households. APUDHC, in 1992-93, advanced these loans at 10 per cent interest rate, which was 1.5 per cent higher than the interest rate charges by HUDCO. On the other hand, APSHC extended these loans at 7 per cent rate of interest which was lower than the rate charged by HUDCO.

While the above does not indicate either the volume of subsidy that accrues to either the agencies or the volume that eventually is transferred to the target groups, it is important to note here that there is yet another form of subsidy whose dimensions are extremely large. It is represented by loans that are not recovered from the target groups. although it is an indirect form of subsidy, its overall burden on the State resources is exceedingly large as can be assessed from the following table:

Table 82
Non-Recovery of Loans from Beneficiaries (%), 1992-93

Agency	TNHB	APUDHC	APSHC	RHB	LDA	MMWSSB	MWSSB	BMC
Per cent of loans not recovered	11.1	93.6	95.0	40-50	33	7.4	46.1	23

The non-recovered component is extremely high in the case of APUDHC (93.6%) and APSHC (95.%), and moderately high in the case of the RHB, MWSSB, LDA and BMC. When translated, into money terms, these amounts of indirect subsidies would be staggering. Note needs to be made of the fact that the non-recoverd component of loans is met out by government grants (APUDHC and APSHC), own funds (LDA, MWSSB and BMC) and non-statutory grants

(MWSSB), adding enormously to the cost of the overall housing finance system in the country. The non-recovery of loans is an important factor, impeding the expansion of housing finance in the country. While delinquency is a common trait of many poverty-related programmes, the scale at which poverty-related programmes, the scale at which it is increasing in housing activities is unaffordable and unsustainable.⁴¹

In sum, the following points may be emphasised:

- i. Unlike HUDCO which is governed by various kinds of norms in respect of the degree of social focus that it should maintain, the field-level agencies do not have such mandates. As a consequence, the share of EWS/LIG housing in the housing operations of HUDCO's borrowers is extremely low. The data of these agencies confirm the observations made in Part II of the report that it is essential for the entire chain of the institutional network to commit itself to social housing goals. Commitment by HUDCO or by HUDCO's Borrowers is not adequate. Exceptions are, however, those agencies which are wholly dedicated to EWS housing.
- ii. The methods employed by agencies for targeting on the EWS households are extremely weak. Studies have indicated that income certificates, pattas, salary statements, etc. do not correctly reflect the income status of the households. Although there are serious problems in locating more stable and durable targeting systems, the inability to properly target and enabling the targeting households to

41. Barring the delinquency rate of APUDHC and APSHC which indicates the delinquency in EWS and LIG housing, the figures for other agencies are the overall rates of non-recovery of loans. Separate figures of non-recovery in EWS/LIG components are not known.

keep the allotted housing units is one of the key reasons for a low level of focus on social housing. Setting up of mechanisms that would permit scrutiny of certificates and use of community organisations are critical for the selection of target groups.

- iii. The issue of subsidy at the level of housing boards and development authorities is different from that at HUDCO. Subsidies to agencies accrue in the form of grants and low-cost loans from the State governments and access to low cost credit from agencies such as HUDCO. Given the sparse nature of information, it has not been possible to assess the amount of subsidy that agencies receive from various channels and the amounts that they transfer to the eligible groups.
- iv. Subsidies to target groups accrue in various forms: (a) pattas, (b) housing units at below the market rates, and (c) low cost credit. However, the indirect form of subsidy as represented by the non-recovery of loans is extremely high and threatens the sustenance of the entire housing finance system.

Part IV

HUDCO AND HUDCO'S BORROWERS IN A CHANGING FINANCIAL ENVIRONMENT

What is it that needs to be done so that HUDCO and HUDCO's borrowers can absorb the challenge of the changing financial environment, without affecting the social focus in their operations? What changes should be made, endogenously, i.e., in the way HUDCO and HUDCO's borrowers raise resources, use them, and target them on particularly the economically weaker and low-income households? What changes should be made, exogenously, i.e., in the system that regulates and controls the functioning of HUDCO and HUDCO's borrowers? It is these sets of questions that form the central theme of this penultimate part of the report.

This part of the report is divided into two sections. Section 1 recapitulates the main problems which have been noted in the functioning of HUDCO and HUDCO's borrowers. This section also notes the systemic problems that have impinged on the functioning of these agencies. Section 2 presents a package of suggestions for addressing the problems - the problems that are endogeneous to the agencies and that are exogenous in nature.

1. The Functioning of HUDCO and HUDCO's Borrowers : A Recapitulation of Problems

It is useful to begin this section by recalling the extraordinarily large growth that has taken place in recent years in the institutional network concerned with housing and infrastructure finance, and within the network, of HUDCO and the field-level agencies, euphemistically referred to in this report as HUDCO's borrowers. Over the years, HUDCO's operations have multiplied several times. Its total outstanding resources amounted to Rs.36,492 million as on 31 March 1993, having risen at an annual average rate of 28.8 per cent since 1985-86. The outstanding resources of the Tamil Nadu Housing Board (TNHB) which is among the leading State-level housing agencies in the country stood at Rs.4,904 million at the end of the financial year 1992-93. Within a short span of three years, the resource base of APUDHC

expanded phenomenally, reaching a total of Rs.553 million in March 1993. The same position is observed in respect of the infrastructure agencies, namely, the Madras Metropolitan Water Supply and Sewerage Board (MMWSSB) and Maharashtra Water Supply and Sewerage Board (MWSSB). As a result of this growth, HUDCO and HUDCO's borrowers and other similar agencies account for a major part of the formal component of the housing and infrastructure finance in the country.

Corresponding with the expansion in the capital resources of agencies, their activities have also grown over this period. Many of the agencies have diversified the pattern of their investments. A detailed account of how HUDCO and HUDCO's borrowers have deployed their capital, the efficiency with which it has been done, and its impact on housing for the economically weaker sections and other indices is contained in Parts II and III of the report. Here, we recapitulate the main problems that HUDCO and HUDCO's borrowers appear to be confronted with, and the problems that they may have to face in the coming years, with the economy opening up to the process of financial and economic reforms.

i. High degree of dependence of HUDCO and HUDCO's Borrowers on the governments

The first major problem relates to the high degree of dependence of HUDCO and HUDCO's borrowers on the governments for resources. As shown earlier, HUDCO and HUDCO's borrowers are heavily dependent on the governments either directly, i.e., via the equity, contributions and loans provided by the governments, or indirectly, by providing to HUDCO and HUDCO's borrowers access to low cost funds, a share in priority sector lending, or by such means as providing exemptions to them from payment of dividend on share capital, and payment of corporate taxes at the prevailing rates, etc.⁴²

42. Note should be made of the fact that in relative terms, the direct stake of government by way of equity may have declined in the case of some agencies.

Over the period 1985-86 to 1992-93, HUDCO mobilised a little over 80 per cent of its total resources at interest rates which were below the market rates of interest and which, in one way or the other, carried governmental support (Table 8). It included a share capital of Rs.1,100 million, tax free bonds and debentures that HUDCO was permitted to issue, as also a share of the total priority sector funds. The dependence of HUDCO's borrowers on the States is even larger. At the end of the financial year 1992-93, direct government support comprising share capital, loans and contributions accounted for 29.5 per cent of the total outstanding resources of TNHB, 30.9 per cent of APUDHC, 89.7 per cent of MMWSSB, and 31.2 per cent of MWSSB (See Annex tables).

The dependence of these agencies on governments is, in fact, higher if account is taken of the support that they received during the period 1985-86 to 1992-93 for purposes of redeeming their loans. As noted earlier, HUDCO's borrowers are able to recover, at best, only a part of the loans from the loanees, and the uncovered part is met, in many cases, by the State governments. In the case of the APUDHC and APSHC, for instance, the non-recovered part of loans was over 90 per cent of the total loans, and was met by the State government, raising serious questions about the long term sustainability of a housing finance system which has such characteristics.

Such a high level of dependence of HUDCO and HUDCO's borrowers is neither sustainable for any length of time nor compatible with the changing financial environment. Moreover, as the subsequent paragraphs will demonstrate, this dependence has not particularly helped agencies in adequately executing their mandate.

ii. *The financial fragility of HUDCO and HUDCO's borrowers*

Despite the fact that HUDCO and HUDCO's borrowers are recipients of large scale support from the governments, their financial performance is fragile, and their incomes and expenditures are precariously balanced. While HUDCO has been a profit-making agency over the period 1985-86 to 1992-93, its profits, it needs to be noted, are principally made up of incomes from housing and infrastructure investments, and incomes derived from other short term investments. Exclusion of income from short term investments turns HUDCO into a loss-making agency in at least one year over the period 1985-86 to 1992-93 (See Table 31), testifying to the weaknesses in the financial management system of HUDCO. Weaknesses are also shown in the declining rates of profits during the period 1985-86 to 1991-92.

The income and expenditure of HUDCO's borrowers is precariously balanced. In 1992-93, for instance, the expenditure level of TNHB and APUDHC was higher than the level of their income; similarly, the expenditure on revenue account of RHB and on capital account of LDA was in excess of the corresponding income of these agencies (Table 71). In other years too, the incomes of these agencies often fell behind the expenditure levels.

The overall financial performance of HUDCO's borrowers is dismal. TNHB's net profit to total income declined from 2.8 per cent in 1989-90 to -1.9 per cent in 1992-93. A sharp decline in profitability, 40.8 per cent in 1989-90 to -12.4 per cent in 1992-93 is observed in the case of APUDHC. RHB is characterised, both on the revenue and capital account, by an overall deficit in that its expenditure has all along been higher than the receipts, and, in this sense, RHB is a drain on the public resources. The Baroda Municipal Corporation (BMC) too is similarly placed, posting deficits all through the period of the study, i.e., if grants made by the State government are excluded from the receipts. The losses of BMC ranged between 6.8 per cent

and 16.7 per cent between 1985-86 to 1992-93 (See Tables 72 to 75).

The financial fragility of the system is further brought out by the fact that instead of using their capital resources for the financing of housing and infrastructure development, agencies have used them for propping up their incomes, and, consequently, the profits. APUDHC placed in 1992-93, nearly 97 per cent of its funds with banks as current assets and derived 57 per cent of the total income from such deposits. TNHB drew 18 per cent of its income from such investments. Other agencies too used a part of their resources for making investments in short term securities, etc.

Admittedly, such investments are a normal practice with most institutions including the housing finance institutions. However, when such investments become a predominant activity or a principal source of income as indeed was the case with many of HUDCO's borrowers, and, to a minor extent, with HUDCO in 1991-92, questions arise whether such agencies should, in fact, be supported by subsidised credit, or provided with a share in priority sector funds, or government equity with low dividend rates.

iii. An uncertain and weak social focus in the activities of HUDCO and HUDCO's borrowers.

Maintenance of a strong social focus is an important objective in the activities of HUDCO. According to the norms, 30 per cent of housing loans of HUDCO are expected to be set aside for the economically weaker households and another 25 per cent for the low income households. As a result of these norms, it is alleged, over Rs.30,000 million have been sanctioned by HUDCO for these groups of households. No such specified norms exist at the level of field agencies.

However, as the analysis contained in Parts II and III shows -

- a. there is uncertainty about the volume of the actual releases that have been made to EWS/LIG housing. Thus, it is not known as to what amounts have been released and spent on EWS/LIG housing. Absence of this basic information is a serious handicap in the management information system of HUDCO.
- b. data for a few smaller States indicate considerable slippages on the disbursement of loans to the EWS category of households.
- c. loan sanctions data as contained in Tables 18 and 19 indicate that the focus on EWS housing in HUDCO's activities has begun to weaken.
- d. social focus in the activities of HUDCO's borrowers is extremely low. The Rajasthan Housing Board invested only about 7.1 per cent of its total investments in housing for EWS households. This percentage was 6.5 in the case of Lucknow Development Authority (Table 79). Even in the case of APUDHC which is fully dedicated to EWS housing, the commitment does not seem to be high, as APUDHC maintained a significant proportion of its capital funds in current assets.

Indirect evidence tends to suggest that the various norms and conditionalities that were imposed on HUDCO to enable it to maintain a decisive focus on EWS/LIG housing have not worked; indeed, there is sufficient evidence to conclude that those norms have helped to shift the investments - meant for EWS housing, to other higher housing categories. Thus, as earlier parts of the report demonstrate -

- a. On account of the cost ceilings which bear no relationship to the actual costs, the agencies have either not availed of HUDCO's EWS loans or diverted funds to LIG housing, whenever costs turned out to be in excess of cost ceilings.
- b. a lower interest rate carried on EWS loans is not a critical factor in maintaining a social focus in HUDCO's operations. The existing practices assume that the EWS households can absorb loans at interest rates ranging between 8-10 per cent, but loans at higher interest rates may be outside of their affordable capacity. Related studies on the subject, however, indicate that EWS households may have higher affordability, casting doubts about the relevance of a differential interest rates policy that has been followed over the years. This position would also stand justified on the basis of evidence that EWS households often raise additional loans at market or even at above the market interest rate in order to supplement the HUDCO loans.

In sum, a social focus in the activities of HUDCO and HUDCO's borrowers is nowhere as strong as it is often made out to be. The analysis further brings out the futility of fixing norms and ceilings for enforcing a social focus in their operations.

iv. Inadequate and unrealistic project planning exercises

The lending programme of HUDCO, as explained earlier, is based on project proposals submitted by field-level agencies. For this purpose, HUDCO uses a set of detailed procedures on how projects should be formulated and what kinds of details should accompany the proposals. Sound proposals are central to HUDCO's lending programme. The analysis of the existing procedures, however, shows that -

- a. projects are formulated on normative/given costs and prices rather than those that prevail or are most likely to prevail in the market. The entire exercise of formulating projects on the basis of costs provided by HUDCO makes the exercise irrelevant and unrealistic.
- b. the project planning exercises are extremely weak as they do not use any of the standard appraisal methods.
- c. since all project proposals are accompanied by State government guarantees, and are consequently safe and protected from risk of delinquency and defaults, their appraisal is conducted routinely. The widespread usage of State government guarantees, it needs to be stressed, has imparted a high level of inefficiency in project planning exercises and implementation of projects.

Absence of adequate attention to project planning exercises which happen to be extremely important in HUDCO's operations raises a question whether HUDCO should continue to use the existing project method for advancing loans or substitute it by programme lending or extending lines of credit to the field level agencies.

Note was made earlier that HUDCO and HUDCO's borrowers operate within the framework of a set of regulations, rules, and norms. They are set and laid down often under the statutes which define their powers and often by the respective governments. They define what HUDCO and the HUDCO's borrowers can do, and often what they must do. The analysis made in Parts II and III points to the constraining effect that those regulations, norms, etc., have exercised on HUDCO and agencies. In many ways, *HUDCO and HUDCO's borrowers stand over-regulated, and cannot adjust to the changing financial markets without major*

deregulation and flexibility in their operations. A few examples will illustrate the point.

In respect of HUDCO, as has been pointed out at several places in the report, the Central Government has specified -

- a. the proportion in which housing loans should be sanctioned;
- b. the ceiling of construction costs for the different categories of housing; and
- c. the interest rates at which loans should be advanced.

The powers of HUDCO's borrowers in respect of mobilising resources or undertaking housing and infrastructure activities too are highly regulated. For instance:

- i. the State-level agencies cannot borrow funds without the prior sanction of the State governments;
- ii. they cannot enter into any contract/agreement involving an expenditure of Rs.one million or more, without the prior approval of State governments;
- iii. in case the agencies are securing loans from HUDCO with State government guarantees, such guarantees are required to be approved by the Cabinet of the State governments;
- iv. agencies in many States are not authorised to create mortgage of their own assets and properties in favour of lending agencies such as HUDCO and LIC; and

- v. agencies are not permitted to secure bank guarantees for implementation of infrastructure projects

These provisions have restricted the operations of HUDCO and HUDCO's borrowers, and led to enormous delays and consequent inefficiencies in the financing of housing and infrastructure development. The continuance of such provisions, it should be evident, is incompatible with the growing requirements of the housing and infrastructure sectors. The basic assumption that fixing of norms will channel funds to certain groups of households has proved to be misplaced by the evidence on the functioning of HUDCO and HUDCO's borrowers.

2. HUDCO and HUDCO's Borrowers : The Process of Adjustment

What changes should be made within HUDCO and HUDCO's Borrowers and in the system, in order that the problems as brought out in Parts II and III and recapitulated above can be effectively addressed? We present here a package of suggestions in this regard. The package is based on several assumptions, these being -

- i. As a result of the ongoing process of economic and financial reforms, there will take place a major reduction and eventual elimination of subsidised credit and priority sector lending, withdrawal of tax saving instruments, and substitution of instruments such as the government guarantees by guarantees which are bankable, mortgages that are transferable etc.
- ii. The financial reforms will not be limited to a reduction or elimination of subsidised credit, but will be extended to cover those rules, regulations, norms, and ceilings which have constrained the functioning of HUDCO and HUDCO's

borrowers.

- iii. Social focus in the activities of HUDCO and HUDCO's borrowers will be direct and transparent. All circuitous routes to reaching the economically weaker and low income groups of households will be jettisoned in favour of those that are easily identifiable and measurable.
- iv. The principle of full loan recovery will be applied uniformly to all activities, irrespective of the differentiation of activities by income groups.

The package of suggestions has six major constituents relating to -

- i. a strategy of resource mobilisation which relies on the market for funds and on other innovative ways that would minimise the problems of matching the supply of resources with the demand for resources;
- ii. a pattern of financing of different activities that would take into account the financial soundness and viability of projects;
- iii. a direct and transparent programme to reach out to the economically weaker groups which is clearly identifiable and measurable;
- iv. a system of project formulation which makes use of the field level costs and prices and uses the widely used project appraisal methods;

- v. a broadbased management information system which allows the management to assess its net worth, monitor projects, and introduces mid-term corrections; and
- vi. a set of rules and regulations that facilitates the integration of HUDCO and HUDCO's borrowers with the financial markets.

a. Resource mobilisation strategy

HUDCO and HUDCO's borrowers should depart from the present strategy of resource mobilisation to one which relies, in a greater measure, on the market and market-based instruments. There are three important components of the proposed strategy:

- i. Extensive use of the instrument of line of credit which may be established with international organisations such as the World Bank, with bilateral agencies, and with the domestic financing institutions. Establishment of lines of credit has a decisive advantage over several other methods as it enables the agencies to draw funds as and when the funds are required.
- ii. Mobilisation of savings via credit-rated bonds and debentures as one of the principal source of funds.
- iii. Securitisation of mortgages.

HUDCO and HUDCO's borrowers should continue to compete for resources in the capital market. The stake of the governments in HUDCO and HUDCO's borrowers should continue via the share capital.

b. Financing pattern of housing and infrastructure activities

The financing of housing and infrastructure activities should be based on the existing pattern of demand, and project proposals. *Adjustment of HUDCO to the changing financial environment requires that funds are advanced for financially sound projects.* The formulation of such projects means that -

- i. projects are based on field-level costs and prices;⁴³
- ii. projects are appraised by using the established methods such as the internal rates of return;
- iii. projects should use bankable "guarantees" and "mortgages" as collaterals. The existing practices of using State government guarantees as a substitute for financial viability of projects are inefficient and need to be given up.
- iv. all regulations that prevent agencies from securing bankable guarantees or bank guarantees or putting their assets as mortgages have no place in the changing financial environment and should be withdrawn.

c. A transparent programme to reach out to the economically weaker groups

- i. It is necessary to formulate a social housing programme which is clearly identifiable, transparent, direct, and measurable. We envisage three possible

43. It is possible to include subsidies, etc., as a part of the cost/benefit stream of projects.

scenarios -

(a) Uniform interest rates⁴³ for all income categories of households. Under this scenario, it is important that -

- * adequate funds are set aside to meet the requirements of EWS housing;
- * funds flow to EWS households in a timely manner;
- * there is a close monitoring of the flow and use of funds; and
- * recovery follows a pre-determined schedule.

(b) Differentiated interest rates with lower interest rates for the EWS households.

Under this scenario, it will be necessary to provide for a budgetary support which is equal to the difference in the interest rate at which funds are mobilised and at which funds are made available for EWS housing. In addition to the difference, budgetary support should provide for an incentive, over and above the difference, to encourage agencies to invest larger funds in EWS housing. This method of providing funds for EWS housing will be direct and measurable.

(c) If adequate funds under scenarios (a) and (b) do not flow to EWS housing, then there is a strong case for special-purpose corporations at the Centre and State levels, which are dedicated wholly to EWS housing. The

43. This is based on the assumption that income tax subsidies currently provided for ownership housing will be withdrawn.

governing principles for such corporations will be the same as outlined in this section of the report.

- ii. The various norms and ceilings which were laid down to ensure a stronger social focus are unrealistic, and are widely ignored to the disadvantage of housing for the economically weaker groups. They should be withdrawn.

d. Management information system

The existing management information system maintained at HUDCO is weak and obsolete, and unsuited to meet the future information needs which would demand information on the net worth of HUDCO, on the status of projects, and numerous other indices. Instances where even the most essential information on HUDCO's various activities was not available, have already been given in the report. There is need to have a new, powerful information system which can anticipate the information needs and make it available for decision making. Similar systems will be necessary to be set up at the field-level with appropriate hook-ups and linkages. The efficiency of the housing finance system depends on how effective and powerful the information system is.

e. A set of rules and regulations that would help to integrate HUDCO and HUDCO's borrowers with the capital market

The need to "deregulate" HUDCO and HUDCO's borrowers has been stressed in the earlier parts of the report. For HUDCO and HUDCO's agencies to adjust to the changing financial environment, it is necessary to provide them with the flexibility and autonomy that is necessary to manage the funds and activities. The era when they had assured sources of funds

and when their lending programme was determined by the governments is gradually being replaced by one where HUDCO and HUDCO's borrowers may have to compete for funds in the capital market and where the capital market conditions may determine the pattern of financing various activities. Similarly, ceilings, capping of interest rates, restrictions on their borrowing powers or enforcement of State guarantee systems have outlived their utility. At the same time, there is greater need to monitor the functioning of HUDCO and HUDCO's borrowers in respect of -

- i. recovery rates
- ii. social focus in their programmes
- iii. information management.

HUDCO and HUDCO's borrowers are entering a phase where they will encounter stiffer competition from other sectors and from each other in a bid to gain access to the capital market, in issuing of the credit-rated bonds and debentures, and in reaching out to the needy groups. The efficiency of the housing system will be contingent upon the simultaneous development and expansion of capital market, homogenization of interest rates, and the marketability of mortgages.

Summary of Package

Problems

Overdependence of HUDCO and HUDCO's borrowers on the governments.

The financial fragility of HUDCO and HUDCO's borrowers.

An uncertain and weak social focus in the activities of HUDCO and HUDCO's borrowers.

Inadequate and unrealistic project planning exercises.

Over-regulation of HUDCO and HUDCO's borrowers by existing statutes, rules and regulations.

Assumptions

As a result of the ongoing process of financial reform there will take place a major reduction and eventual elimination of subsidised credit and priority sector lending, and withdrawal of tax-savings instruments, etc.

The financial reforms will involve withdrawal of those rules, regulations, norms, etc. that constrain the flexibility of HUDCO and HUDCO's borrowers.

Social focus in the activities of HUDCO and HUDCO's borrowers will continue as a strategy to safeguard the interests of the poor.

The principle of cost recovery will be applied uniformly to all activities.

Package

Change the resource mobilisation strategy in a way that it uses -

- Lines of credit mechanism for funds with the international, bilateral and national level financing institutions.
- Credit-rated bonds and debentures.
- Securitisation of mortgages.
- Share capital with the proviso that it carries the market-determined dividend.

Restructure the lending profile in a way that -

- it is based on the financial viability of projects.
- projects are formulated on the basis of field-level costs and prices. The existing practice of using normative/given costs and prices should be given up.
- projects are appraised by using methods such as the internal rates of return.
- projects use bankable guarantees and mortgages instead of government guarantees as collaterals.

Commit the entire institutional network to programmes to the poor. Commitment of one agency is not adequate.

Focus on the augmentation and improvement of the flow of funds for EWS housing and other activities, in case the EWS households have the capacity to absorb the market rates of interest.

If subsidised credit is considered essential, then the subsidy, i.e., the difference in the interest rates at which funds are mobilised and the rates at which funds are lent, should be met by budgetary support. Budgetary support should also consist of an incentive for agencies to assign larger allocations for the EWS.

If funds for EWS housing and other activities do not flow in adequate quantities, then there should be separate corporations for EWS. These corporations should operate like other housing finance agencies and be provided with a budgetary support equal to the difference in interest rates.

Withdraw those rules and regulations that limit the flexibility of agencies to adjust to the housing and infrastructure market.

Regulations that prevent agencies from securing bankable guarantees or bank guarantees, and putting their assets as mortgages should be withdrawn.

Set up a new, powerful information system that can enable the market to assess the net worth and financial standing of HUDCO and HUDCO's borrowers, help the agencies to plan out their investment strategy, and assist them to monitor the progress on activities.

Trends in Resource Mobilization and in Resource Deployment
(Individual Years)

Annex A1

Year	Annual Resource Mobilization			Cumulative Resource Mobilization	Annual Resource Deployment			Cumulative Resource Deployment
	Equity + Loan Funds+ Net Profit	Repay. to HUDCO	Total Resource Mobilization		Loan Releases	Repay. by HUDCO	Total Deployment	
1971-72	91.10	0.00	91.10	91.10	55.10	-0.72	54.38	54.38
1972-73	78.80	29.20	108.00	199.10	74.40	-0.79	73.61	127.99
1973-74	54.90	63.80	118.70	317.80	131.50	1.51	133.01	261.00
1974-75	126.10	63.90	190.00	507.80	226.30	0.01	226.31	487.31
1975-76	275.80	118.20	394.00	901.80	358.40	9.69	368.10	855.40
1976-77	261.90	152.20	414.10	1315.90	400.80	0.00	400.80	1256.20
1977-78	282.80	180.90	463.70	1779.60	487.80	0.00	487.80	1744.00
1978-79	501.50	178.20	679.70	2459.30	658.60	0.00	658.60	2402.60
1979-80	560.60	237.70	798.30	3257.60	770.40	0.00	770.40	3173.00
1980-81	561.50	363.70	925.20	4182.80	899.70	0.00	899.70	4072.70
1981-82	670.40	450.40	1120.80	5303.60	1052.40	0.00	1052.40	5125.10
1982-83	888.80	618.30	1507.10	6810.70	1317.80	0.00	1317.80	6442.90
1983-84	1261.60	800.50	2062.10	8872.80	1491.10	100.60	1591.70	8034.60
1984-85	667.80	873.80	1541.60	10414.40	1998.20	80.83	2079.03	10113.63
1985-86	1162.70	1162.10	2324.80	12739.20	2225.10	103.43	2328.53	12442.17
1986-87	1718.30	1422.60	3140.90	15880.10	2701.50	305.61	3007.11	15449.27
1987-88	2057.10	1766.70	3823.80	19703.90	3146.00	427.21	3573.21	19022.49
1988-89	3008.50	2011.80	5020.30	24724.20	4380.50	266.73	4647.23	23669.72
1989-90	4626.50	2176.60	6803.10	31527.30	5410.00	803.66	6213.66	29883.38
1990-91	10233.90	2720.10	12954.00	44481.30	7350.00	639.66	7989.66	37873.04
1991-92	7292.00	3558.20	10850.20	55331.50	8340.00	585.06	8925.06	46798.10
1992-93	4383.97	4177.69	8561.66	63893.16	8590.00	918.58	9508.58	56306.68

Source : Table on Resource Mobilization at a Glance
(1971-72 to 1991-92) supplied by HUDCO.
: Provisional Annual Report for 1992-93.

HUDCO's Structure of Resources, Volumes and Growth Rates

Source	Amount Outstanding (Rs. Million) as on March 31								Average Growth Rate(%)
	1986	1987	1988	1989	1990	1991	1992	1993	
1 Shareholders' Funds	1666.98	1879.98	2122.51	2446.67	2944.17	3435.00	3954.31	5030.32	16.85
% Change		12.78	12.90	15.27	20.33	16.67	15.12	27.21	
a. Share Capital	810.00	890.00	957.50	1130.00	1362.70	1600.00	1650.00	1850.00	13.44
% Change		9.88	7.58	18.02	20.59	17.41	3.13	12.12	
b. Reserves & Surplus etc.	856.98	989.98	1165.01	1316.67	1581.47	1835.00	2304.31	3180.32	19.48
% Change		15.52	17.68	13.02	20.11	16.03	25.58	38.02	
2 Loan Funds	5485.33	6684.93	8072.11	10489.08	13814.22	22916.76	29108.30	31461.82	31.48
% Change		21.87	20.75	29.94	31.70	65.89	27.02	8.09	
a. Institutional	2180.13	2863.70	3192.25	3922.29	3997.33	5918.05	7942.94	9714.54	23.06
% Change		31.35	11.47	22.87	1.91	48.05	34.22	22.30	
LIC	727.33	642.00	536.67	421.33	326.00	230.67	165.33	620.00	
% Change		-11.73	-16.41	-21.49	-22.63	-29.24	-28.32	275.00	
GIC	1402.80	1629.00	1784.86	1980.35	2179.38	2473.08	2648.22	2837.00	10.56
% Change		16.12	9.57	10.95	10.05	13.48	7.08	7.13	
CGEON	50.00	95.00	145.00	240.40	284.70	331.30	366.60	375.20	32.29
% Change		90.00	52.63	65.79	18.43	16.37	10.65	2.35	
NHB	0.00	0.00	0.00	0.00	0.00	1443.64	2191.27	3148.90	47.69
% Change		-	-	-	-	-	51.79	43.70	
UTI	0.00	50.00	100.00	100.00	300.00	600.00	1590.00	1757.50	90.21
% Change		-	100.00	0.00	200.00	100.00	165.00	10.53	
EPF	0.00	0.00	0.00	0.00	0.00	0.00	200.00	200.00	(-)
% Change		-	-	-	-	-	-	0.00	
Banking Sector	0.00	395.00	508.22	888.90	846.85	773.67	680.65	775.95	
% Change		-	28.66	74.90	-4.73	-8.64	-12.02	14.00	
Loans & Overdrafts from Banks	0.00	0.00	4.98	188.97	10.39	15.70	100.88	0.00	(-)
% Change		-	-	3694.48	-94.50	51.06	542.60	-100.00	
HDFC	0.00	2.70	2.52	2.34	0.00	0.00	0.00	0.00	(-)
% Change		-	-6.67	-7.14	-100.00	-	-	-	
NOIDA	0.00	0.00	10.00	0.00	0.00	0.00	0.00	0.00	(-)
% Change		-	-	-100.00	-	-	-	-	
Cooperative Banks	0.00	50.00	100.00	100.00	50.00	50.00	0.00	0.00	(-)
% Change		-	100.00	0.00	-50.00	0.00	-100.00	-	

(Contd..)

HUDCO's Structure of Resources, Volumes and Growth Rates

S.No. Source	Amount Outstanding (Rs. Million) as on March 31								Average Growth Rate(%)
	1986	1987	1988	1989	1990	1991	1992	1993	
b. Market	3073.20	3573.20	4646.27	6290.11	9505.62	16707.33	20600.49	20967.75	37.02
% Change		16.27	30.03	35.38	51.12	75.76	23.30	1.78	
Debentures	3073.20	3573.20	4123.20	4728.20	5338.20	5958.20	6708.20	7108.20	12.97
% Change		16.27	15.39	14.67	12.90	11.61	12.59	5.96	
Bonds	0.00	0.00	523.07	1524.12	4022.56	10521.82	13519.91	13517.61	97.22
% Change		-	-	191.38	163.93	161.57	28.49	-0.02	
Cap Gain Debentures	0.00	0.00	0.00	37.79	144.86	227.32	372.38	341.94	70.73
% Change		-	-	-	283.33	56.92	63.81	-8.17	
c. External	232.00	248.03	233.60	276.68	311.28	291.38	564.87	779.52	17.27
% Change		6.91	-5.82	18.44	12.51	-6.39	93.86	38.00	
RTA	203.50	192.00	180.50	169.00	157.50	146.00	134.50	123.00	-6.91
% Change		-5.65	-5.99	-6.37	-6.80	-7.30	-7.88	-8.55	
World Bank	28.50	56.03	53.10	107.68	153.78	145.38	136.99	128.59	24.48
% Change		96.58	-5.22	102.78	42.81	-5.46	-5.77	-6.13	
KFW	0.00	0.00	0.00	0.00	0.00	0.00	293.39	527.93	(-)
% Change		-	-	-	-	-	-	79.94	
3 Total Resources (1+2)	7152.31	8564.91	10194.62	12935.75	16758.39	26351.77	33062.61	36492.14	28.82
% Change		19.75	19.03	26.89	29.55	57.25	25.47	10.37	

Source : Annual Reports of HUDCO

Note : (-) denotes that Regression is not applicable.

* denotes that value is statistically insignificant at 1% level of significance.

HUDCO's Structure of Resources, Shares of Different Sources

S.No. Source	Percentage to Total Amount Outstanding as on March 31							
	1986	1987	1988	1989	1990	1991	1992	1993
1 Shareholders' Funds	23.31	21.95	20.82	18.91	17.57	13.04	11.96	13.78
a. Share Capital	11.33	10.39	9.39	8.74	8.13	6.07	4.99	5.07
b. Reserves & Surplus etc.	11.98	11.56	11.43	10.18	9.44	6.96	6.97	8.72
2 Loan Funds	76.69	78.05	79.18	81.09	82.43	86.96	88.04	86.22
a. Institutional	30.48	33.44	31.31	30.32	23.85	22.46	24.02	26.62
LIC	10.17	7.50	5.26	3.26	1.95	0.88	0.50	1.70
GIC	19.61	19.02	17.51	15.31	13.00	9.38	8.01	7.77
CGEOH	0.70	1.11	1.42	1.86	1.70	1.26	1.11	1.03
NHB	0.00	0.00	0.00	0.00	0.00	5.48	6.63	8.63
UTI	0.00	0.58	0.98	0.77	1.79	2.28	4.81	4.82
EPF	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.55
Banking Sector	0.00	4.61	4.99	6.87	5.05	2.94	2.06	2.13
Loans&Overdrafts from Banks	0.00	0.00	0.05	1.46	0.06	0.06	0.31	0.00
HDFC	0.00	0.03	0.02	0.02	0.00	0.00	0.00	0.00
NOIDA	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00
Cooperative Banks	0.00	0.58	0.98	0.77	0.30	0.19	0.00	0.00
b. Market	42.97	41.72	45.58	48.63	56.72	63.40	62.31	57.46
Debentures	42.97	41.72	40.44	36.55	31.85	22.61	20.29	19.48
Bonds	0.00	0.00	5.13	11.78	24.00	39.93	40.89	37.04
Cap Gain Debentures	0.00	0.00	0.00	0.29	0.86	0.86	1.13	0.94
c. External	3.24	2.90	2.29	2.14	1.86	1.11	1.71	2.14
RTA	2.85	2.24	1.77	1.31	0.94	0.55	0.41	0.34
World Bank	0.40	0.65	0.52	0.83	0.92	0.55	0.41	0.35
KFW	0.00	0.00	0.00	0.00	0.00	0.00	0.89	1.45
3 Total Resources (1+2)	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : Calculated from Annual Reports of HUDCO

HUDCO's Structure of Assets, Volumes and Growth Rates

Application	Amount Outstanding (Rs. Million) as on March 31								Average Growth Rate(%)
	1986	1987	1988	1989	1990	1991	1992	1993	
Loans (HUD)	6886.15	8189.40	9705.15	12035.12	15353.51	20125.25	24711.52	29510.46	24.11
% Change		18.93	18.51	24.01	27.57	31.08	22.79	19.42	
Investments	217.60	131.88	458.05	578.64	1626.24	2589.37	7275.07	1927.81	64.00
% Change		-39.39	247.33	26.33	181.04	59.22	180.96	-73.50	
Fixed Assets (Net Block)	24.48	27.78	33.37	61.53	121.73	137.19	136.19	177.83	37.50
% Change		13.48	20.12	84.36	97.85	12.70	-0.73	30.57	
Net Current Assets (incl. Other Loans & Advances)	24.081	215.845	-13.175	247.27	-343.101	3499.962	939.829	4876.04	91.18
		796.33	-106.10	-1976.81	-238.76	-1120.10	-73.15	418.82	
Misc. Exp. Not Written Off	0.00	0.00	11.22	13.19	0.00	0.00	0.00	0.00	(-)
% Change		-	-	17.57	-	-	-	-	
Total Assets	7152.31	8564.91	10194.62	12935.75	16758.38	26351.77	33062.61	36492.14	28.82
% Change		19.75	19.03	26.89	29.55	57.25	25.47	10.37	

Source : Annual Reports of HUDCO

Note : (-) denotes that Regression is not applicable.

HUDCO's Structure of Assets, Shares of Different Applications

Application	Percentage to Total Amount Outstanding as on March 31							
	1986	1987	1988	1989	1990	1991	1992	1993
Loans (HUD)	96.28	95.62	95.20	93.04	91.62	76.37	74.74	80.87
Investments	3.04	1.54	4.49	4.47	9.70	9.83	22.00	5.28
Fixed Assets (Net Block)	0.34	0.32	0.33	0.48	0.73	0.52	0.41	0.49
Net Current Assets (incl. Other Loans & Advances)	0.34	2.52	-0.13	1.91	-2.05	13.28	2.84	13.36
Misc. Exp. Not Written Off	0.00	0.00	0.11	0.10	0.00	0.00	0.00	0.00
Total Assets	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : Calculated from Annual Reports of HUDCO

Resources Mobilised by HUDCO from 1985-86 to 1992-93
(Individual Years)

(Rs.Million)

Particulars	1 9 8 5 - 8 6				1 9 8 6 - 8 7				1 9 8 7 - 8 8				1 9 8 8 - 8 9			
	Amount	Rate of Interest (%)	Matr. Period (Year)	Intr. Liab.	Amount	Rate of Interest (%)	Matr. Period (Year)	Intr. Liab.	Amount	Rate of Interest (%)	Matr. Period (Year)	Intr. Liab.	Amount	Rate of Interest (%)	Matr. Period (Year)	Intr. Liab.
Share Capital	70.00	-	-	-	80.00	-	-	-	67.50	-	-	-	172.50	-	-	-
Reserve & Surplus etc.	141.68	-	-	-	133.00	-	-	-	175.03	-	-	-	151.66	-	-	-
Govt. Guaranteed Debentures	467.00	9.75	13	45.53	350.00	10.50	10	36.75	699.70	11.00	15	76.97	755.00	11.50	20	86.83
	-	-	-	-	298.50	11.00	15	32.84								
Loan from GIC & its Subsidiaries	415.00	11.00	15	45.65	285.00	11.00	15	31.35	300.00	11.00	15	33.00	300.00	11.00	15	33.00
Loan from LIC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Banking Sector Funds	-	-	-	-	228.70	4.00	10	9.15	34.50	4.00	10	1.38	320.30	4.00	10	12.81
	-	-	-	-	166.30	12.50	10	20.79	107.10	12.50	10	13.39	114.70	12.50	10	14.34
UTI	-	-	-	-	50.00	13.50	9	6.75	50.00	13.50	9	6.75	-	-	-	-
BDCCB/MSCB	-	-	-	-	50.00	13.50	5	6.75	50.00	13.50	5	6.75	-	-	-	-
HDFC	-	-	-	-	2.70	8.50	16	0.23	-	-	-	-	-	-	-	-
NHB Line of Credit	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Public Sector Bonds	-	-	-	-	-	-	-	-	107.50	13.00	7	13.98	200.00	13.00	7	26.00
	-	-	-	-	-	-	-	-	415.60	9.00	10	37.40	800.00	9.00	10	72.00
EPF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Capgain Debentures	-	-	-	-	-	-	-	-	-	-	-	-	37.80	9.00	3	3.40
RTA Loan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
World Bank Loan	19.50	10.25	20	2.00	29.00	10.25	20	2.97	-	-	-	-	57.50	10.25	20	5.89
CGEH Schemes	50.00	11.00	20	5.50	45.00	11.00	20	4.95	50.00	11.00	20	5.50	98.40	11.00	20	10.82
KFW Line of Credit	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(Contd..)

Resources Mobilised by HUDCO from 1985-86 to 1992-93
(Individual Years)

(Rs.Million)

Particulars	1 9 8 9 - 9 0				1 9 9 0 - 9 1				1 9 9 1 - 9 2				1 9 9 2 - 9 3			
	Amount	Rate of Interest (%)	Matr. Period (Year)	Intr. Liab.	Amount	Rate of Interest (%)	Matr. Period (Year)	Intr. Liab.	Amount	Rate of Interest (%)	Matr. Period (Year)	Intr. Liab.	Amount	Rate of Interest (%)	Matr. Period (Year)	Intr. Liab.
Share Capital	232.70	-	-	-	237.30	-	-	-	50.00	-	-	-	200.00	5.50	-	11.00
Reserve & Surplus etc.	264.80	-	-	-	253.53	-	-	-	469.31	-	-	-	876.01	0.00	-	0.00
Govt. Guaranteed Debentures	810.00	11.50	20	93.15	700.00	11.50	20	80.50	350.00	11.50	20	40.25	650.00	13.00	15	84.50
									420.00	12.00	20	50.40	-	-	-	-
Loan from GIC & its Subsidiaries	360.00	11.00	15	39.60	514.00	12.00	15	61.68	455.40	12.00	15	54.65	500.00	12.00	15	60.00
Loan from LIC	-	-	-	-	-	-	-	-	-	-	-	-	500.00	16.50	15	82.50
Banking Sector Funds	23.90	4.00	10	0.96	3.40	4.00	10	0.14	-	-	-	-	100.00	19.00	10	19.00
	25.90	12.50	10	3.24	24.10	12.50	10	3.01	-	-	-	-	100.00	4.00	10	4.00
UTI	200.00	13.50	10	27.00	300.00	13.50	10	40.50	1000.00	15.50	10	155.00	250.00	18.00	10	45.00
BDCCB/MSCB	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HDFC	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NHB Line of Credit	-	-	-	-	1477.80	12.50	15	184.73	179.10	12.50	15	22.39	133.00	12.00	10	15.96
	-	-	-	-	-	-	-	-	145.00	10.50	10	15.23	50.00	10.50	10	5.25
	-	-	-	-	-	-	-	-	500.00	13.50	15	67.50	950.00	13.50	15	128.25
Public Sector Bonds	2500.00	9.00	10	225.00	5750.00	9.00	10	517.50	3000.00	9.00	10	270.00	-	-	-	-
	-	-	-	-	750.00	13.00	7	97.50	-	-	-	-	-	-	-	-
EPF	-	-	-	-	-	-	-	-	200.00	12.00	10	24.00	-	-	-	-
Capgain Debentures	107.10	9.00	3	9.64	82.50	9.00	3	7.43	182.80	9.00	3	16.45	76.60	9.00	3	6.89
RTA Loan	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
World Bank Loan	51.90	10.25	20	5.32	-	-	-	-	-	-	-	-	-	-	-	-
CGEH Schemes	50.00	11.00	20	5.50	46.60	12.00	20	5.59	50.00	12.00	20	6.00	35.00	12.00	20	4.20
KFW Line of Credit	-	-	-	-	-	-	-	-	293.40	5.75	22	16.87	234.50	5.75	22	13.48

Source : Table on Details of Resources Mobilized by HUDCO
(1980-81 to 1992-93) supplied by HUDCO.
: Annual Reports of HUDCO.

Average Cost of Capital by Source
(Individual Years)

(Percent)

S.No	Source	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93
1.	Shareholders' Funds	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.02
	a.Share Capital	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.50
	b.Reserves,Surplus etc	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.	Loan Funds	10.37	10.13	10.75	9.88	9.92	10.35	10.90	13.10
	a.Institutional	11.00	9.66	11.29	8.52	11.56	12.50	13.63	13.91
	LIC	-	-	-	-	-	-	-	16.50
	GIC	11.00	11.00	11.00	11.00	11.00	12.00	12.00	12.00
	CGEOM	11.00	11.00	11.00	11.00	11.00	12.00	12.00	12.00
	NHB	-	-	-	-	-	12.50	12.75	13.19
	UTI	-	13.50	13.50	-	13.50	13.50	15.50	18.00
	EPF	-	-	-	-	-	-	12.00	-
	Banking Sector	-	7.58	10.43	6.24	8.42	11.45	-	11.50
	HDFC	-	8.50	-	-	-	-	-	-
	BDCCB/MSCB	-	13.50	13.50	-	-	-	-	-
	b.Market	9.75	10.73	10.50	10.50	9.59	9.65	9.54	12.58
	Debentures	9.75	10.73	11.00	11.50	11.50	11.50	11.77	13.00
	Bonds	-	-	9.82	9.80	9.00	9.46	9.00	-
	Capgain Debentures	-	-	-	9.00	9.00	9.00	9.00	9.00
	c.External	10.25	10.25	-	10.25	10.25	-	5.75	5.75
	RTA	-	-	-	-	-	-	-	-
	World Bank	10.25	10.25	-	10.25	10.25	-	-	-
	KFW	-	-	-	-	-	-	5.75	5.75
3.	Total Resources	8.48	8.88	9.49	8.81	8.85	9.85	10.13	10.31

Source : Calculated from Table on Details of Resources Mobilized by HUDCO (1980-81 to 1992-93) supplied by HUDCO and from Annual Reports of HUDCO.

Breakup of Resources according to Interest Rates
(Individual Years)

(Rs. Million)

Year	Interest Rate Range							Total
	At 0%	0.1 - 4%	4.1 - 9%	9.1 - 11%	11.1 - 12.5%	12.6 - 13.5%	Above 13.5%	
1985-86	211.68	-	-	951.50	-	-	-	1163.18
1986-87	213.00	228.70	2.70	1007.50	166.30	100.00	-	1718.20
1987-88	242.53	34.50	415.60	1049.70	107.10	207.50	-	2056.93
1988-89	324.16	320.30	837.80	455.90	869.70	200.00	-	3007.86
1989-90	497.50	23.90	2607.10	461.90	835.90	200.00	-	4626.30
1990-91	490.83	3.40	5832.50	-	2762.50	1050.00	-	10139.23
1991-92	519.31	-	3476.20	145.00	1654.50	500.00	1000.00	7295.01
1992-93	876.01	100.00	511.10	50.00	668.00	1600.00	850.00	4655.11

Source : Calculated from Table on Details of Resources Mobilized by HUDCO (1980-81 to 1992-93) supplied by HUDCO and from Annual Reports of HUDCO.

Note : Total = Loan Funds + Share Capital + Reserves & Surplus

Composition of HUDCO's Investments, Volumes and Growth Rates
(Individual Years)

Items	Amount (Rs.Millions) for the Year Ended March 31								Average Growth Rate(%)
	1986	1987	1988	1989	1990	1991	1992	1993	
A. Long Term Investments									
Government & UTI	-	-	93.50	88.60	90.40	-	-	-	(-)
% Change				-5.24	2.03				
Equity Shares	-	-	154.50	-	0.85	0.70	10.50	1.00	37.65*
% Change						-17.65	1400.00	-90.48	
Total LTI	-	-	248.00	88.60	91.25	0.70	10.50	1.00	-67.03
% Change				-64.27	2.99	-99.23	1400.00	-90.48	
B. Short Term Investments									
Public Sector Bonds	1637.6	-	-	-	-	-	-	-	(-)
% Change									
Treasury Bills	-	79.10	-	-	-	-	-	-	(-)
% Change									
Placement of Funds with Banks	-	-	498.50	605.00	955.00	-	-	1612.30	(-)
% Change				21.36	57.85				
Other Investments	-	1520.00	775.00	1761.70	5827.50	1677.50	5195.20	-	31.78*
% Change			-49.01	127.32	230.79	-71.21	209.70		
Total STI	1637.6	1599.10	1273.50	2366.70	6782.50	1677.50	5195.20	1612.30	9.55*
% Change		-2.35	-20.36	85.84	186.58	-75.27	209.70	-68.97	
C. Total Investments									
Total Investments	1637.6	1599.10	1521.50	2455.30	6873.75	1678.20	5205.70	1613.30	8.84*
% Change		-2.35	-4.85	61.37	179.96	-75.59	210.20	-69.01	

Source : Annual Reports of HUDCO.

Note : STI = Short Term Investments.
LTI = Long Term Investments.

: (-) denotes that Regression is not applicable.

: * denotes that value is statistically insignificant at 1% level of significance.

Composition of HUDCO's Investments, Shares of Different Items
(Individual Years)

Items	Percentage to Total Investments for the Year Ended March 31							
	1986	1987	1988	1989	1990	1991	1992	1993
A. Long Term Investments								
Government & UTI	-	-	6.15	3.61	1.32	-	-	-
Equity Shares	-	-	10.15	-	0.01	0.04	0.20	0.06
Total LTI	-	-	16.30	3.61	1.33	0.04	0.20	0.06
B. Short Term Investments								
Public Sector Bonds	100.00	-	-	-	-	-	-	-
Treasury Bills	-	4.95	-	-	-	-	-	-
Placement of Funds with Banks	-	-	32.76	24.64	13.89	-	-	99.94
Other Investments	-	95.05	50.94	71.75	84.78	99.96	99.80	-
Total STI	100.00	100.00	83.70	96.39	98.67	99.96	99.80	99.40
C. Total Investments	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : Annual Reports of HUDCO.

Note : STI = Short Term Investments.
LTI = Long Term Investments.

Lending Profile of HUDCO from 1985-86 to 1992-93
(Individual Years)

(Rs.Million)

Categories	(1985 - 86)				(1986 - 87)				(1987 - 88)				(1988 - 89)			
	Amount	Rate of Interest (%)	Matr. Period (Years)	Intr. Liab.	Amount	Rate of Interest (%)	Matr. Period (Years)	Intr. Liab.	Amount	Rate of Interest (%)	Matr. Period (Years)	Intr. Liab.	Amount	Rate of Interest (%)	Matr. Period (Years)	Intr. Liab.
EWS	-	-	-	-	1034.20	7.00	22	72.39	1083.40	7.00	22	75.84	1499.20	7.00	22	104.94
a. Rural	627.08	7.00	22	43.90	-	-	-	-	-	-	-	-	-	-	-	-
b. Urban	327.80	7.00	22	22.95	-	-	-	-	-	-	-	-	-	-	-	-
LIG	871.90	8.75	15	76.29	899.30	8.75	15	78.69	1008.20	8.75	15	88.22	1268.90	8.75	15	111.03
MIG	695.50	11.75	15	81.72	882.10	11.75	15	103.65	881.10	11.75	15	103.53	1227.00	11.75	15	144.17
HIG	549.10	13.50	15	74.13	412.70	13.50	15	55.71	516.50	13.50	15	69.73	653.90	13.50	15	88.28
Urban Infrastructure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utility Infrastructure	-	-	-	-	-	-	-	-	69.20	10.00	12	6.92	-	-	-	-
Commercial	91.50	15.00	10	13.73	-	-	-	-	-	-	-	-	226.15	15.00	10	33.92
Disaster Relief	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Basic Sanitation	142.10	6.00	12	8.53	31.40	6.00	12	1.88	114.60	6.00	12	6.88	83.90	6.00	12	5.03
Building Materials	-	-	-	-	-	-	-	-	-	-	-	-	226.15	13.50	8	30.53
Staff Housing	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Package Loan	-	-	-	-	40.00	10.00	-	4.00	-	-	-	-	-	-	-	-
Night Shelter	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land Acquisition	-	-	-	-	240.00	13.50	-	32.40	539.70	13.50	6	72.86	337.10	13.50	6	45.51
Social Infrastructure	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Low Cost Sanitation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Non - Conventional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CGES	-	-	-	-	80.80	12.00	20	9.70	158.42	12.00	20	19.01	94.30	12.00	20	11.32
H.Y Loans	-	-	-	-	-	-	-	-	-	-	-	-	606.70	15.00	10	91.01
Operational Finance	-	-	-	-	-	-	-	-	161.30	15.00	10	24.20	289.50	15.00	10	43.43
Sites & Services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NRV	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others	569.20	12.00	10	68.30	299.90	12.00	10	35.99	434.80	12.00	10	52.18	-	-	-	-
Total	3874.18	-	-	389.54	3920.40	-	-	394.41	4967.22	-	-	519.35	6512.80	-	-	709.16

(Contd..)

Lending Profile of HUDCO from 1985-86 to 1992-93
(Individual Year)

(Rs.Million)

Categories	(1989 - 90)				(1990 - 91)				(1991 - 92)				(1992 - 93)			
	Amount	Rate of Interest (%)	Matr. Period (Years)	Intr. Liab.	Amount	Rate of Interest (%)	Matr. Period (Years)	Intr. Liab.	Amount	Rate of Interest (%)	Matr. Period (Years)	Intr. Liab.	Amount	Rate of Interest (%)	Matr. Period (Years)	Intr. Liab.
EWS	1669.80	7.00	22	116.89	2545.50	7.00	22	178.19	-	-	-	-	-	-	-	-
a. Rural	-	-	-	-	-	-	-	-	1040.70	7.00	11	72.85	1023.92	7.75	18.5	79.35
b. Urban	-	-	-	-	-	-	-	-	652.90	8.00	22	52.23	787.72	8.00	22	63.02
LIG	1543.90	8.75	15	135.09	1721.20	8.75	15	150.61	1529.10	11.50	15	175.85	1720.00	11.50	15	197.80
MIG	1098.50	11.75	15	129.07	1577.00	11.75	15	185.30	1389.60	13.00	15	180.65	1628.55	13.00	15	211.71
HIG	773.10	13.50	15	104.37	1180.30	13.50	15	159.34	1019.40	15.00	15	152.91	929.66	15.00	15	139.45
Urban Infrastructure	1842.80	15.00	12	276.42	-	-	-	-	-	-	-	-	3012.50	15.00	15	451.88
Utility Infrastructure	-	-	-	-	3204.80	15.00	12	480.72	2911.00	15.00	12	436.65	-	-	-	-
Commercial	339.60	15.00	10	50.94	328.40	15.00	10	49.26	49.70	16.00	15	7.95	140.39	16.00	15	22.46
Disaster Relief	17.50	5.00	22	0.88	171.40	5.00	22	8.57	-	-	-	-	-	-	-	-
Basic Sanitation	171.70	6.00	12	10.30	7.00	6.00	12	0.42	-	-	-	-	3.00	8.00	-	0.24
Building Materials	41.20	13.50	8	5.56	236.10	13.50	8	31.87	-	-	-	-	-	-	-	-
Staff Housing	257.00	15.00	10	38.55	173.90	15.00	10	26.09	304.70	15.00	10	45.71	373.90	15.00	10	56.09
Package Loan	18.80	10.00	10	1.88	-	-	-	-	-	-	-	-	-	-	-	-
Night Shelter	-	-	-	-	14.20	6.25	10	0.89	39.90	6.25	10	2.49	5.42	6.25	10	0.34
Land Acquisition	1149.80	13.50	6	155.22	1619.00	13.50	6	218.57	1584.30	15.00	6	237.65	904.31	15.00	6	135.65
Social Infrastructure	-	-	-	-	16.40	10.00	12	1.64	7.50	12.50	12	0.94	-	-	-	-
Low Cost Sanitation	-	-	-	-	1029.10	6.25	12	64.32	1164.70	8.00	12	93.18	135.20	8.00	-	10.82
Non - Conventional	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CGES	4.90	12.00	20	0.59	25.50	12.00	10	3.06	68.50	13.00	12	8.91	-	-	-	-
H.Y Loans	64.10	15.00	10	9.62	-	-	-	-	671.50	16.00	15	107.44	200.00	16.00	15	32.00
Operational Finance	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sites & Services	75.70	5.00	22	3.79	9.10	5.00	22	0.46	160.20	7.00	22	11.21	-	-	-	-
NRY	-	-	-	-	-	-	-	-	887.10	7.00	12	62.10	239.52	8.00	-	19.16
Others	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	9068.40	-	-	1039.16	13858.90	-	-	1559.28	13480.80	-	-	1648.70	11104.09	-	-	1419.96

Source : Information Sheets of HUDCO.
: Financing Pattern for HUDCO Schemes.

Loan Sanctions and Releases
(Individual Years)

Year	Loan Sanctions		Loan Releases		Release/ Sanction (%)	Annual Change (%)
	Amount	Annual Change (%)	Amount	Annual Change (%)		
1971-72	348.60	-	55.10	-	15.81	-
1972-73	360.60	3.44	74.40	35.03	20.63	30.53
1973-74	306.30	-15.06	131.50	76.75	42.93	108.08
1974-75	375.20	22.49	226.30	72.09	60.31	40.49
1975-76	544.70	45.18	358.40	58.37	65.80	9.09
1976-77	727.00	33.47	400.80	11.83	55.13	-16.21
1977-78	880.50	21.11	487.80	21.71	55.40	0.49
1978-79	1079.80	22.63	658.60	35.01	60.99	10.09
1979-80	1392.00	28.91	770.40	16.98	55.34	-9.26
1980-81	1616.80	16.15	899.70	16.78	55.65	0.55
1981-82	1936.20	19.76	1052.40	16.97	54.35	-2.32
1982-83	2213.30	14.31	1317.80	25.22	59.54	9.54
1983-84	2839.30	28.28	1491.10	13.15	52.52	-11.80
1984-85	3528.80	24.28	1998.20	34.01	56.63	7.82
1985-86	3874.20	9.79	2225.10	11.36	57.43	1.43
1986-87	3920.20	1.19	2701.50	21.41	68.91	19.99
1987-88	4967.30	26.71	3146.00	16.45	63.33	-8.09
1988-89	6512.80	31.11	4380.50	39.24	67.26	6.20
1989-90	9068.40	39.24	5410.00	23.50	59.66	-11.30
1990-91	13858.90	52.83	7350.00	35.86	53.03	-11.10
1991-92	13480.90	-2.73	8340.00	13.47	61.87	16.65
1992-93	11100.00	-17.66	8590.00	3.00	77.39	25.09
1971-93	84931.80		52065.60		61.30	8.83

Source : 22nd Annual Report of HUDCO .
: Information Sheet of HUDCO (1992-93).

Agency-wise Cumulative Loan Sanctions
as on November, 1991

(Rs.Million)

Agency Type	Amount Sanctioned	Percentage to Total
Housing Boards	26312.96	44.39
Rural Housing Boards	1230.87	2.08
Slum Clearance Boards	1245.07	2.10
Development Authorities	10561.77	17.82
Improvement Trusts	856.57	1.45
Municipal Corporations	3384.28	5.71
Town/Area Committees	34.14	0.06
Panchayat Samitis	87.87	0.15
State Governments	467.46	0.79
Public Sector	9723.17	16.40
Private Sector	462.94	0.78
Apex Cooperative Societies	1355.29	2.29
Apex Cooperative Societies (R)	1075.72	1.81
Primary Cooperative Societies	594.01	1.00
Universities	94.73	0.16
State Government Agencies	1332.57	2.25
Gujarat L L Housing Board	438.64	0.74
Voluntary Organisations	16.59	0.03
Total	59274.63	100.00

Source : Eswaran Committee Report.

Statewise Cumulative Loan Sanctions as on March 31, 1993

(Rs. Million)

State/UT	Cumulative (1970-93)			Sectorwise Share (%)			Statewise Share (%)		
	Housing	Others	Total	Housing	Others	Total	Housing	Others	Total
Andhra Pradesh	4613.12	1788.01	6401.13	72.07	27.93	100.00	8.83	6.19	7.89
Arunachal Pradesh	40.05	0.00	40.05	100.00	0.00	100.00	0.08	0.00	0.05
Assam	437.01	645.95	1082.96	40.35	59.65	100.00	0.84	2.24	1.34
Bihar	1131.88	420.04	1551.92	72.93	27.07	100.00	2.17	1.45	1.91
Goa	81.00	12.66	93.66	86.49	13.51	100.00	0.16	0.04	0.12
Gujarat	4371.26	1413.22	5784.49	75.57	24.43	100.00	8.37	4.89	7.13
Haryana	1167.25	131.68	1298.93	89.86	10.14	100.00	2.23	0.46	1.60
Himachal Pradesh	439.04	175.93	614.97	71.39	28.61	100.00	0.84	0.61	0.76
Jammu & Kashmir	284.48	120.75	405.23	70.20	29.80	100.00	0.54	0.42	0.50
Karnataka	3863.16	1523.69	5386.85	71.71	28.29	100.00	7.40	5.28	6.64
Kerala	4511.29	1269.97	5781.26	78.03	21.97	100.00	8.64	4.40	7.13
Madhya Pradesh	2316.69	1055.95	3372.64	68.69	31.31	100.00	4.44	3.66	4.16
Maharashtra	4585.68	4278.31	8863.99	51.73	48.27	100.00	8.78	14.81	10.93
Manipur	206.90	17.69	224.60	92.12	7.88	100.00	0.40	0.06	0.28
Meghalaya	561.49	154.38	715.87	78.43	21.57	100.00	1.07	0.53	0.88
Mizoram	124.58	0.00	124.58	100.00	0.00	100.00	0.24	0.00	0.15
Nagaland	219.52	0.00	219.52	100.00	0.00	100.00	0.42	0.00	0.27
Orissa	1805.16	1344.01	3149.17	57.32	42.68	100.00	3.46	4.65	3.88
Punjab	1209.62	922.03	2131.65	56.75	43.25	100.00	2.32	3.19	2.63
Rajasthan	3504.73	965.13	4469.87	78.41	21.59	100.00	6.71	3.34	5.51
Sikkim	184.05	53.06	237.10	77.62	22.38	100.00	0.35	0.18	0.29
Tamil Nadu	6422.12	3040.84	9462.96	67.87	32.13	100.00	12.30	10.53	11.67
Tripura	79.98	2.12	82.10	97.42	2.58	100.00	0.15	0.01	0.10
Uttar Pradesh	7056.69	8114.22	15170.91	46.51	53.49	100.00	13.51	28.09	18.70
West Bengal	1823.73	1273.80	3097.53	58.88	41.12	100.00	3.49	4.41	3.82
Andaman & Nicobar	25.08	1.95	27.03	92.78	7.22	100.00	0.05	0.01	0.03
Chandigarh	736.02	28.19	764.21	96.31	3.69	100.00	1.41	0.10	0.94
Delhi	306.48	116.27	422.75	72.50	27.50	100.00	0.59	0.40	0.52
Pondicherry	122.52	13.63	136.15	89.99	10.01	100.00	0.23	0.05	0.17
Dadra & Nagar Haveli	2.39	0.14	2.53	94.66	5.34	100.00	0.00	0.00	0.00
Total All-States	52232.99	28883.59	81116.58	66.26	33.74	100.00	100.00	100.00	100.00

Source : Eswaran Committee Report for 1970-71 to 1985-86.

: Information Sheets of HUDCO for the rest of the period.

Trends in Category-wise Loan Sanctions
(Individual Years)

(Rs. Million)

Category	Amount for the Year Ended March 31									Average Growth Rate(%)
	1986	1987	1988	1989	1990	1991	1992	1993		
Housing	Amount	3071.40	3228.42	3489.35	4648.94	5161.11	7033.20	5791.92	6089.85	12.54
	% Change		5.11	8.08	33.23	11.02	36.27	-17.65	5.14	
Infrastructure	Amount	-	-	-	-	1842.82	4250.34	4083.27	3150.76	16.99 *
	% Change						130.64	-3.93	-22.84	
Land Acquisition	Amount	-	-	539.69	337.18	1149.78	1618.96	1584.30	904.31	24.13 *
	% Change				-37.52	241.00	40.81	-2.14	-42.92	
Others	Amount	802.80	691.84	938.27	1526.70	914.75	956.47	2021.43	959.24	7.60 *
	% Change		-13.82	35.62	62.72	-40.08	4.56	111.34	-52.55	
Total	Amount	3874.20	3920.26	4967.31	6512.82	9068.45	13858.97	13480.92	11104.16	22.37
	% Change		1.19	26.71	31.11	39.24	52.83	-2.73	-17.63	

Source : Information Sheets of HUDCO.

Note : * denotes the value is statistically insignificant at 1% level of significance.

HUDCO's Average Lending Rate
(Individual Years)

(Rs.Million)

Categories	1985-86		1986-87		1987-88		1988-89	
	Amount	Rate (%)						
EWS	954.88	7.00	1034.20	7.00	1083.40	7.00	1499.20	7.00
LIG	871.90	8.75	899.30	8.75	1008.20	8.75	1268.90	8.75
EWS & LIG	1826.78	7.84	1933.50	7.81	2091.60	7.84	2768.10	7.80
MIG	695.50	11.75	882.10	11.75	881.10	11.75	1227.00	11.75
HIG	549.10	13.50	412.70	13.50	516.50	13.50	653.90	13.50
Infrastructure	-	-	-	-	69.20	10.00	-	-
Action Plan Schemes	142.10	6.00	31.40	6.00	114.60	6.00	83.90	6.00
Others	660.70	12.42	660.70	12.42	1294.22	13.00	1779.90	14.37
Total	3874.18		3920.40		4967.22		6512.80	

(Contd..)

HUDCO's Average Lending Rate
(Individual Years)

(Rs.Million)

Categories	1989-90		1990-91		1991-92		1992-93	
	Amount	Rate (%)	Amount	Rate (%)	Amount	Rate (%)	Amount	Rate (%)
EWS	1669.80	7.00	2545.50	7.00	1693.60	7.39	1811.63	7.86
LIG	1543.90	8.75	1721.20	8.75	1529.10	11.50	1720.00	11.50
EWS & LIG	3213.70	7.84	4266.70	7.71	3222.70	9.34	3531.63	9.63
MIG	1098.50	11.75	1577.00	11.75	1389.60	13.00	1628.55	13.00
HIG	773.10	13.50	1180.30	13.50	1019.40	15.00	929.66	15.00
Infrastructure	1842.80	15.00	3221.20	14.97	2918.50	14.99	3012.50	15.00
Action Plan Schemes	264.90	5.65	1230.80	6.07	2251.90	7.50	383.14	7.98
Others	1875.40	13.99	2382.90	13.80	2678.70	15.22	1618.61	15.21
Total	9068.40		13858.90		13480.80		11104.09	

Source : Calculated from Information Sheets of HUDCO and Financing Pattern of HUDCO.

Lending Profile (1985-86)
Top Fourteen States in Order of Sanctions (Rs.Million)

States	Number of Schemes	Amount Sanct- ioned	Amount Relea- sed	Percentage to	
				Sanctions	Releases
Uttar Pradesh	88	653.35	334.50	16.86	15.03
Andhra Pradesh	136	476.27	217.30	12.29	9.77
Kerala	53	413.95	163.50	10.68	7.35
Maharashtra	74	388.92	342.70	10.04	15.40
Tamil Nadu	51	280.36	279.40	7.24	12.56
Gujarat	56	270.51	169.40	6.98	7.61
Karnataka	52	254.88	118.00	6.58	5.30
Madhya Pradesh	52	249.43	50.70	6.44	2.28
Rajasthan	39	244.71	228.60	6.32	10.27
Orissa	22	155.10	76.10	4.00	3.42
Bihar	11	121.83	20.00	3.14	0.90
Punjab	18	94.48	71.60	2.44	3.22
West Bengal	8	84.25	8.70	2.17	0.39
Haryana	15	69.08	70.20	1.78	3.15
Total 14 States	675	3757.13	2150.70	96.98	96.65
All States / UTs	697	3874.16	2225.20	100.00	100.00

Lending Profile (1985-86)
Top Fourteen States in Order of Releases (Rs.Million)

States	Number of Schemes	Amount Sanct- ioned	Amount Relea- sed	Percentage to	
				Sanctions	Releases
Maharashtra	74	388.92	342.70	10.04	15.40
Uttar Pradesh	88	653.35	334.50	16.86	15.03
Tamil Nadu	51	280.36	279.40	7.24	12.56
Rajasthan	39	244.71	228.60	6.32	10.27
Andhra Pradesh	136	476.27	217.30	12.29	9.77
Gujarat	56	270.51	169.40	6.98	7.61
Kerala	53	413.95	163.50	10.68	7.35
Karnataka	52	254.88	118.00	6.58	5.30
Orissa	22	155.10	76.10	4.00	3.42
Punjab	18	94.48	71.60	2.44	3.22
Haryana	15	69.08	70.20	1.78	3.15
Madhya Pradesh	52	249.43	50.70	6.44	2.28
Bihar	11	121.83	20.00	3.14	0.90
West Bengal	8	84.25	8.70	2.17	0.39
Total 14 States	675	3757.13	2150.70	96.98	96.65
All States / UTs	697	3874.16	2225.20	100.00	100.00

Source : Information Sheets of HUDCO.

Lending Profile (1986-87)
Top Fourteen States in Order of Sanctions (Rs.Million)

States	Number of Schemes	Amount Sanct- ioned	Amount Relea- sed	Percentage to	
				All States/ UTs Sanctions	UTs Releases
Uttar Pradesh	52	517.99	526.30	13.21	15.95
Tamil Nadu	49	479.28	234.10	12.23	7.09
Gujarat	75	447.98	254.30	11.43	7.71
Andhra Pradesh	105	403.00	273.50	10.28	8.29
Kerala	35	375.63	388.80	9.58	11.78
Karnataka	35	298.01	127.10	7.60	3.85
Maharashtra	45	226.22	282.50	5.77	8.56
Madhya Pradesh	53	224.91	127.70	5.74	3.87
Rajasthan	22	167.63	197.30	4.28	5.98
Orissa	23	165.97	54.80	4.23	1.66
Punjab	20	104.09	69.60	2.66	2.11
West Bengal	8	99.95	30.00	2.55	0.91
Haryana	17	96.54	53.30	2.46	1.62
Bihar	5	39.61	12.40	1.01	0.38
Total 14 States	544	3646.80	2631.70	93.02	79.74
All States / UTs	581	3920.26	3300.30	100.00	100.00

Lending Profile (1986-87)
Top Fourteen States in Order of Releases (Rs.Million)

States	Number of Schemes	Amount Sanct- ioned	Amount Relea- sed	Percentage to	
				All States/ UTs Sanctions	UTs Releases
Uttar Pradesh	52	517.99	526.30	13.21	0.16
Kerala	35	375.63	388.80	9.58	0.12
Maharashtra	45	226.22	282.50	5.77	0.09
Andhra Pradesh	105	403.00	273.50	10.28	0.08
Gujarat	75	447.98	254.30	11.43	0.08
Tamil Nadu	49	479.28	234.10	12.23	0.07
Rajasthan	22	167.63	197.30	4.28	0.06
Madhya Pradesh	53	224.91	127.70	5.74	0.04
Karnataka	35	298.01	127.10	7.60	0.04
Punjab	20	104.09	69.60	2.66	0.02
Orissa	23	165.97	54.80	4.23	0.02
Haryana	17	96.54	53.30	2.46	0.02
West Bengal	8	99.95	30.00	2.55	0.01
Bihar	5	39.61	12.40	1.01	0.00
Total 14 States	544	3646.80	2631.70	93.02	79.74
All States / UTs	581	3920.26	3300.30	100.00	100.00

Source : Information Sheets of HUDCO.

Lending Profile (1987-88)
Top Fourteen States in Order of Sanctions (Rs.Million)

States	Number of Schemes	Amount Sanct- ioned	Amount Relea- sed	Percentage to	
				All States/ Sanctions	UTs Releases
Uttar Pradesh	70	949.96	806.50	19.13	24.85
Tamil Nadu	47	453.66	346.00	9.13	10.66
Kerala	35	445.70	197.40	8.97	6.08
Karnataka	61	429.40	231.70	8.65	7.14
Andhra Pradesh	78	426.10	315.40	8.58	9.72
Gujarat	62	385.90	293.30	7.77	9.04
Madhya Pradesh	70	363.30	197.00	7.31	6.07
Maharashtra	81	351.30	209.60	7.07	6.46
Rajasthan	34	308.90	206.30	6.22	6.36
Bihar	20	183.20	7.90	3.69	0.24
Orissa	21	151.12	141.40	3.04	4.36
Punjab	14	113.30	55.90	2.28	1.72
West Bengal	13	98.00	36.90	1.97	1.14
Haryana	8	45.66	83.50	0.92	2.57
Total 14 States	614	4705.49	3128.80	94.74	96.39
All States / UTs	650	4966.98	3246.00	100.00	100.00

Lending Profile (1987-88)
Top Fourteen States in Order of Releases (Rs.Million)

States	Number of Schemes	Amount Sanct- ioned	Amount Relea- sed	Percentage to	
				All States/ Sanctions	UTs Releases
Uttar Pradesh	70	949.96	806.50	19.13	24.85
Tamil Nadu	47	453.66	346.00	9.13	10.66
Andhra Pradesh	78	426.10	315.40	8.58	9.72
Gujarat	62	385.90	293.30	7.77	9.04
Karnataka	61	429.40	231.70	8.65	7.14
Maharashtra	81	351.30	209.60	7.07	6.46
Rajasthan	34	308.90	206.30	6.22	6.36
Kerala	35	445.70	197.40	8.97	6.08
Madhya Pradesh	70	363.30	197.00	7.31	6.07
Orissa	21	151.12	141.40	3.04	4.36
Haryana	8	45.66	83.50	0.92	2.57
Punjab	14	113.30	55.90	2.28	1.72
West Bengal	13	98.00	36.90	1.97	1.14
Bihar	20	183.20	7.90	3.69	0.24
Total 14 States	614	4705.49	3128.80	94.74	96.39
All States / UTs	650	4966.98	3246.00	100.00	100.00

Source : Information Sheets of HUDCO.

Lending Profile (1988-89)

Top Fourteen States in Order of Sanctions (Rs.Million)

States	Number of Schemes	Amount Sanct- ioned	Amount Relea- sed	Percentage to	
				All States/ Sanctions	UTs Releases
Uttar Pradesh	69	1191.03	1055.60	18.29	24.56
Tamil Nadu	71	917.78	386.70	14.09	9.00
Gujarat	74	595.78	364.80	9.15	8.49
Andhra Pradesh	91	504.19	322.90	7.74	7.51
Karnataka	52	399.01	126.30	6.13	2.94
Kerala	50	381.17	442.70	5.85	10.30
Maharashtra	78	364.80	235.80	5.60	5.49
Punjab	37	359.70	178.20	5.52	4.15
Rajasthan	27	273.38	237.80	4.20	5.53
Madhya Pradesh	97	260.74	295.30	4.00	6.87
Bihar	20	251.48	157.80	3.86	3.67
West Bengal	17	234.12	138.70	3.59	3.23
Orissa	12	153.67	71.20	2.36	1.66
Haryana	12	129.57	116.70	1.99	2.72
Total 14 States	707	6016.39	4130.50	92.38	96.11
All States / UTs	755	6512.84	4297.90	100.00	100.00

Lending Profile (1988-89)

Top Fourteen States in Order of Releases (Rs.Million)

States	Number of Schemes	Amount Sanct- ioned	Amount Relea- sed	Percentage to	
				All States/ Sanctions	UTs Releases
Uttar Pradesh	69	1191.03	1055.60	18.29	24.56
Kerala	50	381.17	442.70	5.85	10.30
Tamil Nadu	71	917.78	386.70	14.09	9.00
Gujarat	74	595.78	364.80	9.15	8.49
Andhra Pradesh	91	504.19	322.90	7.74	7.51
Madhya Pradesh	97	260.74	295.30	4.00	6.87
Rajasthan	27	273.38	237.80	4.20	5.53
Maharashtra	78	364.80	235.80	5.60	5.49
Punjab	37	359.70	178.20	5.52	4.15
Bihar	20	251.48	157.80	3.86	3.67
West Bengal	17	234.12	138.70	3.59	3.23
Karnataka	52	399.01	126.30	6.13	2.94
Haryana	12	129.57	116.70	1.99	2.72
Orissa	12	153.67	71.20	2.36	1.66
Total 14 States	707	6016.39	4130.50	92.38	96.11
All States / UTs	755	6512.84	4297.90	100.00	100.00

Source : Information Sheets of HUDCO.

Lending Profile (1989-90)
Top Fourteen States in Order of Sanctions (Rs.Million)

States	Number of Schemes	Amount Sanct- ioned	Amount Relea- sed	Percentage to	
				Sanctions	Releases
Uttar Pradesh	104	1963.57	1760.80	21.65	32.05
Tamil Nadu	93	1220.32	761.70	13.46	13.87
Kerala	75	952.55	425.70	10.50	7.75
Gujarat	65	912.77	461.60	10.07	8.40
Karnataka	40	668.17	283.70	7.37	5.16
Maharashtra	76	588.25	267.80	6.49	4.88
Madhya Pradesh	102	563.00	316.90	6.21	5.77
Andhra Pradesh	114	515.00	313.70	5.68	5.71
Rajasthan	32	366.56	212.30	4.04	3.86
Orissa	26	261.41	85.80	2.88	1.56
West Bengal	19	196.66	63.10	2.17	1.15
Bihar	4	172.90	57.50	1.91	1.05
Punjab	32	145.28	70.40	1.60	1.28
Haryana	12	98.07	47.10	1.08	0.86
Total 14 States	794	8624.51	5128.10	95.11	93.35
All States / UTs	844	9068.39	5493.30	100.00	100.00

Lending Profile (1989-90)
Top Fourteen States in Order of Releases (Rs.Million)

States	Number of Schemes	Amount Sanct- ioned	Amount Relea- sed	Percentage to	
				Sanctions	Releases
Uttar Pradesh	104	1963.57	1760.80	21.65	32.05
Tamil Nadu	93	1220.32	761.70	13.46	13.87
Gujarat	65	912.77	461.60	10.07	8.40
Kerala	75	952.55	425.70	10.50	7.75
Madhya Pradesh	102	563.00	316.90	6.21	5.77
Andhra Pradesh	114	515.00	313.70	5.68	5.71
Karnataka	40	668.17	283.70	7.37	5.16
Maharashtra	76	588.25	267.80	6.49	4.88
Rajasthan	32	366.56	212.30	4.04	3.86
Orissa	26	261.41	85.80	2.88	1.56
Punjab	32	145.28	70.40	1.60	1.28
West Bengal	19	196.66	63.10	2.17	1.15
Bihar	4	172.90	57.50	1.91	1.05
Haryana	12	98.07	47.10	1.08	0.86
Total 14 States	794	8624.51	5128.10	95.11	93.35
All States / UTs	844	9068.39	5493.30	100.00	100.00

Source : Information Sheets of HUDCO.

Lending Profile (1990-91)
Top Fourteen States in Order of Sanctions (Rs.Million)

States	Number of Schemes	Amount Sanct- ioned	Amount Relea- sed	Percentage to	
				All States/ Sanctions	UTs Releases
Uttar Pradesh	206	3117.00	2151.60	22.49	29.27
Tamil Nadu	150	1859.20	967.20	13.42	13.16
Maharashtra	68	1807.80	712.30	13.05	9.69
Karnataka	117	964.40	448.80	6.96	6.10
Kerala	74	898.00	805.20	6.48	10.95
Andhra Pradesh	173	879.40	398.80	6.35	5.42
West Bengal	27	797.00	101.60	5.75	1.38
Rajasthan	59	534.20	308.30	3.85	4.19
Gujarat	58	526.20	508.50	3.80	6.92
Madhya Pradesh	57	515.80	297.20	3.72	4.04
Orissa	55	514.40	62.30	3.71	0.85
Punjab	40	366.30	128.80	2.64	1.75
Bihar	15	245.00	128.70	1.77	1.75
Haryana	11	124.20	55.60	0.90	0.76
Total 14 States	1110	13148.90	7074.90	94.88	96.24
All States / UTs	1164	13857.97	7351.50	100.00	100.00

Lending Profile (1990-91)
Top Fourteen States in Order of Releases (Rs.Million)

States	Number of Schemes	Amount Sanct- ioned	Amount Relea- sed	Percentage to	
				All States/ Sanctions	UTs Releases
Uttar Pradesh	206	3117.00	2151.60	22.49	29.27
Tamil Nadu	150	1859.20	967.20	13.42	13.16
Kerala	74	898.00	805.20	6.48	10.95
Maharashtra	68	1807.80	712.30	13.05	9.69
Gujarat	58	526.20	508.50	3.80	6.92
Karnataka	117	964.40	448.80	6.96	6.10
Andhra Pradesh	173	879.40	398.80	6.35	5.42
Rajasthan	59	534.20	308.30	3.85	4.19
Madhya Pradesh	57	515.80	297.20	3.72	4.04
Punjab	40	366.30	128.80	2.64	1.75
Bihar	15	245.00	128.70	1.77	1.75
West Bengal	27	797.00	101.60	5.75	1.38
Orissa	55	514.40	62.30	3.71	0.85
Haryana	11	124.20	55.60	0.90	0.76
Total 14 States	1110	13148.90	7074.90	94.88	96.24
All States / UTs	1164	13857.97	7351.50	100.00	100.00

Source : Information Sheets of HUDCO.

Lending Profile (1991-92)
Top Fourteen States in Order of Sanctions (Rs.Million)

States	Number of Schemes	Amount Sanct- ioned	Amount Relea- sed	Percentage to	
				All States/ Sanctions	UTs Releases
Uttar Pradesh	169	3279.38	2552.20	24.33	30.58
Maharashtra	55	1956.85	1132.80	14.52	13.57
Tamil Nadu	112	1304.90	1228.10	9.68	14.71
Andhra Pradesh	174	1194.48	691.70	8.86	8.29
Karnataka	70	967.70	306.20	7.18	3.67
Orissa	65	786.70	140.90	5.84	1.69
Kerala	54	785.40	626.40	5.83	7.50
Madhya Pradesh	36	676.30	213.00	5.02	2.55
Rajasthan	42	517.76	364.80	3.84	4.37
Gujarat	50	435.48	291.60	3.23	3.49
West Bengal	22	355.76	106.80	2.64	1.28
Punjab	37	247.25	71.70	1.83	0.86
Haryana	10	116.70	104.10	0.87	1.25
Bihar	6	104.79	22.60	0.78	0.27
Total 14 States	902	12729.45	7852.90	94.43	94.08
All States / UTs	956	13480.56	8347.00	100.00	100.00

Lending Profile (1991-92)
Top Fourteen States in Order of Releases (Rs.Million)

States	Number of Schemes	Amount Sanct- ioned	Amount Relea- sed	Percentage to	
				All States/ Sanctions	UTs Releases
Uttar Pradesh	169	3279.38	2552.20	24.33	30.58
Tamil Nadu	112	1304.90	1228.10	9.68	14.71
Maharashtra	55	1956.85	1132.80	14.52	13.57
Andhra Pradesh	174	1194.48	691.70	8.86	8.29
Kerala	54	785.40	626.40	5.83	7.50
Rajasthan	42	517.76	364.80	3.84	4.37
Karnataka	70	967.70	306.20	7.18	3.67
Gujarat	50	435.48	291.60	3.23	3.49
Madhya Pradesh	36	676.30	213.00	5.02	2.55
Orissa	65	786.70	140.90	5.84	1.69
West Bengal	22	355.76	106.80	2.64	1.28
Haryana	10	116.70	104.10	0.87	1.25
Punjab	37	247.25	71.70	1.83	0.86
Bihar	6	104.79	22.60	0.78	0.27
Total 14 States	902	12729.45	7852.90	94.43	94.08
All States / UTs	956	13480.56	8347.00	100.00	100.00

Source : Information Sheets of HUDCO.

Lending Profile (1992-93)
Top Fourteen States in Order of Sanctions (Rs.Million)

States	Number of Schemes	Amount Sanct- ioned	Amount Relea- sed	Percentage to	
				Sanctions	Releases
Uttar Pradesh	97	1972.89	1762.80	17.77	20.53
Maharashtra	81	1474.36	1017.30	13.28	11.85
Tamil Nadu	89	1048.53	1053.00	9.44	12.27
West Bengal	31	907.68	142.90	8.17	1.66
Rajasthan	58	717.73	452.90	6.46	5.28
Andhra Pradesh	63	694.61	781.20	6.26	9.10
Karnataka	53	683.13	481.90	6.15	5.61
Gujarat	63	604.08	581.00	5.44	6.77
Madhya Pradesh	74	556.43	319.00	5.01	3.72
Orissa	25	546.30	140.50	4.92	1.64
Kerala	36	519.01	704.40	4.67	8.21
Haryana	59	253.59	121.40	2.28	1.41
Bihar	13	231.27	131.80	2.08	1.54
Punjab	31	166.70	286.60	1.50	3.34
Total 14 States	773	10376.30	7976.70	93.45	92.92
All States / UTs	831	11104.16	8584.60	100.00	100.00

Lending Profile (1992-93)
Top Fourteen States in Order of Releases (Rs.Million)

States	Number of Schemes	Amount Sanct- ioned	Amount Relea- sed	Percentage to	
				Sanctions	Releases
Uttar Pradesh	97	1972.89	1762.80	17.77	20.53
Tamil Nadu	89	1048.53	1053.00	9.44	12.27
Maharashtra	81	1474.36	1017.30	13.28	11.85
Andhra Pradesh	63	694.61	781.20	6.26	9.10
Kerala	36	519.01	704.40	4.67	8.21
Gujarat	63	604.08	581.00	5.44	6.77
Karnataka	53	683.13	481.90	6.15	5.61
Rajasthan	58	717.73	452.90	6.46	5.28
Madhya Pradesh	74	556.43	319.00	5.01	3.72
Punjab	31	166.70	286.60	1.50	3.34
West Bengal	31	907.68	142.90	8.17	1.66
Orissa	25	546.30	140.50	4.92	1.64
Bihar	13	231.27	131.80	2.08	1.54
Haryana	59	253.59	121.40	2.28	1.41
Total 14 States	773	10376.30	7976.70	93.45	92.92
All States / UTs	831	11104.16	8584.60	100.00	100.00

Source : Information Sheets of HUDCO.

HUDCO's Profit & Loss Account, Volumes and Growth Rates

Source	Income/Expenditure (Rs. Millions) for the Year Ended March 31								Average Growth Rate(%)
	1986	1987	1988	1989	1990	1991	1992	1993	
Income :									
Interest (HUD Loans)	537.70	679.56	828.48	1000.73	1327.98	1789.62	2407.67	3031.06	28.44
% Change		26.38	21.91	20.79	32.70	34.76	34.53	25.89	
Interest&Dividend (Investments)	29.90	23.98	42.11	83.03	150.07	344.03	776.82	797.12	75.54
% Change		-19.77	75.56	97.18	80.75	129.24	125.80	2.61	
Charges (Documentation, Commitment, Service)	7.80	9.00	12.43	22.12	15.42	20.29	17.65	14.97	11.36
% Change		15.33	38.14	77.93	-30.29	31.59	-13.02	-15.19	
Front-end Fees	0.00	0.00	0.00	0.00	0.00	0.00	99.43	110.65	(-)
% Change		-	-	-	-	-	-	11.29	
Interest (Net Current Assets etc.)	5.95	9.37	9.34	21.62	33.18	16.26	120.82	106.79	51.84
% Change		57.34	-0.31	131.48	53.49	-51.01	643.21	-11.61	
Others	0.72	1.07	1.08	18.72	33.59	54.87	200.17	409.51	168.48
% Change		49.89	0.85	1630.96	79.43	63.34	264.80	104.58	
Total Income	582.07	722.99	893.44	1146.22	1560.25	2225.08	3622.55	4470.10	35.27
% Change		24.21	23.58	28.29	36.12	42.61	62.81	23.40	
Expenditure :									
Interest Paid (Borrowings)	449.41	565.57	705.87	901.66	1215.02	1666.75	2476.77	3093.25	32.70
% Change		25.85	24.81	27.74	34.75	37.18	48.60	24.89	
Staff Expenditure	7.94	10.93	13.07	18.18	22.76	30.75	39.59	54.25	31.00
% Change		37.65	19.58	39.15	25.18	35.10	28.73	37.05	
Others	11.31	12.55	20.32	45.45	64.87	174.62	695.64	446.88	87.10
% Change		11.02	61.88	123.67	42.74	169.18	298.38	-35.76	
Total Expenditure	468.65	589.05	739.25	965.29	1302.65	1872.12	3211.99	3594.38	36.00
% Change		25.69	25.50	30.58	34.95	43.72	71.57	11.91	
Profit/Loss :									
Profit Before Tax	113.42	133.94	154.19	180.93	257.60	352.96	410.55	875.72	31.10
% Change		18.10	15.12	17.34	42.38	37.02	16.32	113.30	
Profit After Tax	113.42	133.94	154.19	180.93	257.60	251.65	278.01	604.87	22.71
% Change		18.10	15.12	17.34	42.38	-2.31	10.48	117.57	
Dividend	-	-	-	-	-	-	-	101.70	(-)

Source : Annual Reports of HUDCO

Note : (-) denotes that Regression is not applicable.

HUDCO's Profit & Loss Account, Shares of Different Items

Source	Percentage to Total Income/Expenditure for the Year Ended March 31							
	1986	1987	1988	1989	1990	1991	1992	1993
Income :								
Interest (HUD Loans)	92.38	93.99	92.73	87.31	85.11	80.43	66.46	67.81
Interest&Dividend (Investments)	5.14	3.32	4.71	7.24	9.62	15.46	21.44	17.83
Charges (Documentation, Commitment, Service)	1.34	1.24	1.39	1.93	0.99	0.91	0.49	0.33
Front-end Fees	0.00	0.00	0.00	0.00	0.00	0.00	2.74	2.48
Interest (Net Current Assets etc.)	1.02	1.30	1.05	1.89	2.13	0.73	3.34	2.39
Others	0.12	0.15	0.12	1.63	2.15	2.47	5.53	9.16
Total Income	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Expenditure :								
Interest Paid (Borrowings)	95.89	96.01	95.48	93.41	93.27	89.03	77.11	86.06
Staff Expenditure	1.69	1.86	1.77	1.88	1.75	1.64	1.23	1.51
Others	2.41	2.13	2.75	4.71	4.98	9.33	21.66	12.43
Total Expenditure	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Profit/Loss :								
Profit Before Tax	19.48	18.53	17.26	15.78	16.51	15.86	11.33	19.59
Profit After Tax	19.48	18.53	17.26	15.78	16.51	11.31	7.67	13.53
Dividend	-	-	-	-	-	-	-	2.28

Source : Calculated from Annual Reports of HUDCO.

Note : Profit/Loss Items are as Percentage of Total Income.

HDFC's Profit & Loss Account, Volumes and Growth Rates

Source	Income/Expenditure (Rs. Million) for the Year Ended March 31								Average Growth Rate(%)
	1986	1987	1988	1989	1990	1991	1992	1993	
Income :									
Interest (HUD Loans)	403.69	587.34	799.97	791.55	1455.56	2076.37	2812.41	3423.43	36.71
% Change		45.49	36.20	-1.05	83.89	42.65	35.45	21.73	
Fees & Other Charges	41.87	53.20	70.12	69.03	119.91	150.77	131.33	173.57	22.90
% Change		27.06	31.81	-1.55	73.71	25.74	-12.89	32.16	
Others	114.68	128.10	190.15	216.77	367.99	407.01	778.85	1137.96	39.40
% Change		11.70	48.45	14.00	69.76	10.60	91.36	46.11	
Total Income	560.23	768.63	1060.24	1077.35	1943.47	2634.15	3722.59	4734.96	36.52
% Change		37.20	37.94	1.61	80.39	35.54	41.32	27.20	
Expenditure :									
Interest Paid (Borrowings)	417.41	568.95	793.51	814.37	1459.69	2002.10	2841.39	3647.77	37.22
% Change		36.30	39.47	2.63	79.24	37.16	41.92	28.38	
Staff Expenditure	12.64	17.94	21.80	21.03	32.65	40.90	54.24	62.81	25.51
% Change		42.00	21.49	-3.54	55.28	25.26	32.61	15.80	
Others	36.75	62.25	74.04	69.90	143.92	203.07	229.21	293.89	34.38
% Change		69.37	18.94	-5.59	105.90	41.10	12.87	28.22	
Total Expenditure	466.80	649.14	889.35	905.30	1636.26	2246.08	3124.83	4004.46	36.72
% Change		39.06	37.00	1.79	80.74	37.27	39.12	28.15	
Profit/Loss :									
Profit Before Tax	93.43	119.49	170.89	172.05	307.20	388.07	597.76	730.50	35.45
% Change		27.89	43.02	0.68	78.55	26.33	54.03	22.21	
Profit After Tax	66.43	92.49	130.89	145.05	247.20	298.07	457.76	555.50	36.06
% Change		39.23	41.52	10.82	70.43	20.58	53.57	21.35	
Dividend	15.00	18.68	34.00	28.00	39.98	57.42	108.00	118.17	34.91
% Change		24.51	82.05	-17.65	42.79	43.62	88.08	9.42	

Source : Annual Reports of HDFC.

HDFC's Profit & Loss Account, Shares of Different Items

Item	Percentage to Total Income/Expenditure for the Year Ended March 31							
	1986	1987	1988	1989	1990	1991	1992	1993
Income :								
Interest (HUD Loans)	72.06	76.41	75.45	73.47	74.90	78.82	75.55	72.30
Fees & Other Charges	7.47	6.92	6.61	6.41	6.17	5.72	3.53	3.67
Others	20.47	16.67	17.94	20.12	18.93	15.45	20.92	24.03
Total Income	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Expenditure :								
Interest Paid (Borrowings)	89.42	87.65	89.22	89.96	89.21	89.14	90.93	91.09
Staff Expenditure	2.71	2.76	2.45	2.32	2.00	1.82	1.74	1.57
Others	7.87	9.59	8.33	7.72	8.80	9.04	7.33	7.34
Total Expenditure	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Profit/Loss :								
Profit Before Tax	16.68	15.55	16.12	15.97	15.81	14.73	16.06	15.43
Profit After Tax	11.86	12.03	12.35	13.46	12.72	11.32	12.30	11.73
Dividend	2.68	2.43	3.21	2.60	2.06	2.18	2.90	2.50

Source : Calculated from Annual Reports of HDFC.

Note : Profit/Loss Items are as Percentage of Total Income.

HDFC's Structure of Resources, Volumes and Growth Rates

S.No.	Source	Amount Outstanding (Rs. Million) as on March 31								Average Growth Rate(%)
		1986	1987	1988	1989	1990	1991	1992	1993	
1	Shareholders' Funds	259.31	431.00	529.61	645.46	849.77	1533.65	1879.82	3255.84	40.46
	% Change		66.21	22.88	21.88	31.65	80.48	22.57	73.20	
	a. Share Capital	100.00	197.88	199.59	199.85	199.95	447.22	449.63	686.18	26.89
	% Change		97.88	0.87	0.13	0.05	123.66	0.54	52.61	
	b. Reserves & Surplus etc.	159.31	233.13	330.02	445.62	649.82	1086.43	1430.19	2569.67	47.22
	% Change		46.33	41.56	35.03	45.82	67.19	31.64	79.67	
2	Loan Funds	4094.71	5716.87	7473.43	9916.34	13006.26	18559.29	24177.27	30380.72	33.45
	% Change		39.62	30.73	32.69	31.16	42.70	30.27	25.66	
	a. Institutional	714.68	993.56	1346.22	1807.59	2407.54	4335.07	6122.75	7625.17	42.01
	% Change		39.02	35.49	34.27	33.19	80.06	41.24	24.54	
	NHB	0.00	0.00	0.00	0.00	0.00	1576.62	2780.93	4031.81	59.91
	% Change		-	-	-	-	-	76.39	44.98	
	Banking Sector	438.18	627.31	903.22	1196.84	1535.51	1678.86	1984.81	1923.09	24.23
	% Change		43.16	43.98	32.51	28.30	9.34	18.22	-3.11	
	LIC	100.00	200.00	280.00	460.00	680.00	929.33	1199.60	1520.27	46.36
	% Change		100.00	40.00	64.29	47.83	36.67	29.08	26.73	
	Army Group Insurance Fund	150.00	150.00	150.00	150.00	150.00	150.00	150.00	150.00	0.00
	% Change		0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	Loan from Bank	0.00	0.00	0.00	0.00	21.53	0.00	7.41	0.00	(-)
	% Change		-	-	-	-	-100.00	-	-100.00	
	ICICI	1.50	1.25	1.00	0.75	0.00	0.00	0.00	0.00	(-)
	% Change		-16.67	-20.00	-25.00	-100.00	-	-	-	
	UTI	0.00	0.00	7.00	0.00	0.00	0.00	0.00	0.00	(-)
	% Change		-	-	-100.00	-	-	-	-	
	GIC	25.00	15.00	5.00	0.00	0.00	0.00	0.00	0.00	(-)
	% Change		-40.00	-66.67	-100.00	-	-	-	-	
	Other Loans	0.00	0.00	0.00	0.00	20.50	0.25	0.00	0.00	(-)
	% Change		-	-	-	-	-98.78	-100.00	-	

(Contd..)

HDFC's Structure of Resources, Volumes and Growth Rates

S.No.	Source	Amount Outstanding (Rs. Million) as on March 31							Average Growth Rate(%)	
		1986	1987	1988	1989	1990	1991	1992		1993
b.	Market	2825.63	3871.91	5093.89	5827.87	6719.35	7834.96	11675.15	15334.04	25.07
	% Change		37.03	31.56	14.41	15.30	16.60	49.01	31.34	
	Bonds	300.00	450.00	850.00	996.75	1430.97	1804.72	2963.94	4097.45	43.51
	% Change		50.00	88.89	17.26	43.56	26.12	64.23	38.24	
	Deposits	2522.46	3409.05	4217.87	4765.07	5288.39	6030.25	8711.21	10291.59	20.57
	% Change		35.15	23.73	12.97	10.98	14.03	44.46	18.14	
	Home Savings Plan	3.18	12.86	26.02	66.05	0.00	0.00	0.00	0.00	(-)
	% Change		304.88	102.30	153.84	-100.00	-	-	-	
	Fully Convertible Debentures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	945.00	(-)
	% Change		-	-	-	-	-	-	-	
c.	External	554.33	851.15	1033.04	2280.43	3878.41	6387.60	6377.60	7419.85	50.30
	% Change		53.54	21.37	120.75	70.07	64.70	-0.16	16.34	
	World Bank	0.00	0.00	0.00	1250.00	2363.20	4132.66	4132.66	4132.66	34.32
	% Change		-	-	-	89.06	74.88	0.00	0.00	
	USAID	540.00	840.00	1020.00	1020.00	1510.00	1510.00	1450.00	1687.50	15.74
	% Change		55.56	21.43	0.00	48.04	0.00	-3.97	16.38	
	IFC	14.33	11.15	13.04	10.43	5.22	724.64	724.64	724.64	103.54
	% Change		-22.22	16.97	-20.00	-50.00	13794.93	0.00	0.00	
	KFW	0.00	0.00	0.00	0.00	0.00	20.30	70.30	176.51	(-)
	% Change		-	-	-	-	-	246.25	151.06	
	Commonwealth Development Corporation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	698.55	(-)
	% Change		-	-	-	-	-	-	-	
d.	Interest Accrued & Due	0.07	0.25	0.28	0.46	0.95	1.66	1.77	1.66	56.94
	% Change		255.01	8.62	65.93	107.88	74.95	6.33	-6.04	
3	Total Resources (1+2)	4354.03	6147.87	8003.03	10561.80	13856.03	20092.94	26057.10	33636.56	33.97
	% Change		41.20	30.18	31.97	31.19	45.01	29.68	29.09	

Source : Annual Reports of HDFC.

Note : (-) denotes that value is statistically insignificant at 1% level of significance.

HDFC's Structure of Resources, Shares of Different Sources

S.No. Source	Percentage to Total Amount Outstanding as on March 31							
	1986	1987	1988	1989	1990	1991	1992	1993
1 Shareholders' Funds	5.96	7.01	6.62	6.11	6.13	7.63	7.21	9.68
a. Share Capital	2.30	3.22	2.49	1.89	1.44	2.23	1.73	2.04
b. Reserves & Surplus etc.	3.66	3.79	4.12	4.22	4.69	5.41	5.49	7.64
2 Loan Funds	94.04	92.99	93.38	93.89	93.87	92.37	92.79	90.32
a. Institutional	16.41	16.16	16.82	17.11	17.38	21.58	23.50	22.67
NHB	0.00	0.00	0.00	0.00	0.00	7.85	10.67	11.99
Banking Sector	10.06	10.20	11.29	11.33	11.08	8.36	7.62	5.72
LIC	2.30	3.25	3.50	4.36	4.91	4.63	4.60	4.52
Army Group Insurance Fund	3.45	2.44	1.87	1.42	1.08	0.75	0.58	0.45
Loan from Bank	0.00	0.00	0.00	0.00	0.16	0.00	0.03	0.00
ICICI	0.03	0.02	0.01	0.01	0.00	0.00	0.00	0.00
UTI	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00
GIC	0.57	0.24	0.06	0.00	0.00	0.00	0.00	0.00
Other Loans	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00
b. Market	64.90	62.98	63.65	55.18	48.49	38.99	44.81	45.59
Bonds	6.89	7.32	10.62	9.44	10.33	8.98	11.37	12.18
Deposits	57.93	55.45	52.70	45.12	38.17	30.01	33.43	30.60
Home Savings Plan	0.07	0.21	0.33	0.63	0.00	0.00	0.00	0.00
Fully Convertible Debentures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.81
c. External	12.73	13.84	12.91	21.59	27.99	31.79	24.48	22.06
World Bank	0.00	0.00	0.00	11.84	17.06	20.57	15.86	12.29
USAID	12.40	13.66	12.75	9.66	10.90	7.52	5.56	5.02
IFC	0.33	0.18	0.16	0.10	0.04	3.61	2.78	2.15
KFW	0.00	0.00	0.00	0.00	0.00	0.10	0.27	0.52
Commonwealth Development Corporation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.08
d. Interest Accrued & Due	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00
3 Total Resources (1+2)	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : Calculated from Annual Reports of HDFC.

HDFC's Structure of Assets, Volumes and Growth Rates

Application	Amount Outstanding (Rs. Million) as on March 31								Average Growth Rate(%)
	1986	1987	1988	1989	1990	1991	1992	1993	
Loans (HUD)	3517.59	4841.69	6548.90	8449.07	12217.84	17269.35	21298.60	25617.15	33.98
% Change		37.64	35.26	29.02	44.61	41.35	23.33	20.28	
Investments	431.22	645.65	779.17	1353.67	1140.62	1447.07	3224.75	3079.48	32.26
% Change		49.73	20.68	73.73	-15.74	26.87	122.85	-4.50	
Fixed Assets (Net Block)	47.01	143.72	200.61	224.59	335.22	386.79	468.68	568.35	35.84
% Change		205.73	39.58	11.95	49.26	15.39	21.17	21.27	
Net Current Assets (incl. Other Loans & Advances)	355.59	514.69	472.72	534.48	162.36	989.74	1065.07	4371.59	30.29
		44.74	-8.15	13.06	-69.62	509.61	7.61	310.45	
Misc. Exp. Not Written Off	2.62	2.13	1.63	0.00	0.00	0.00	0.00	0.00	(-)
% Change		-18.77	-23.13	-100.00	-	-	-	-	
Total Assets	4354.03	6147.87	8003.03	10561.80	13856.03	20092.94	26057.10	33636.56	33.97
% Change		41.20	30.18	31.97	31.19	45.01	29.68	29.09	

Source : Annual Reports of HDFC.

Note : (-) denotes that Regression is not applicable.

HDFC's Structure of Assets, Shares of Different Applications

Application	Percentage to Total Amount Outstanding as on March 31							
	1986	1987	1988	1989	1990	1991	1992	1993
Loans (HUD)	80.79	78.75	81.83	80.00	88.18	85.95	81.74	76.16
Investments	9.90	10.50	9.74	12.82	8.23	7.20	12.38	9.16
Fixed Assets (Net Block)	1.08	2.34	2.51	2.13	2.42	1.92	1.80	1.69
Net Current Assets (incl. Other Loans & Advances)	8.17	8.37	5.91	5.06	1.17	4.93	4.09	13.00
Misc. Exp. Not Written Off	0.06	0.03	0.02	0.00	0.00	0.00	0.00	0.00
Total Assets	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : Calculated from Annual Reports of HDFC.

HDFC's Financial Ratios
(For the Year Ended March 31)

Item	1986	1987	1988	1989	1990	1991	1992	1993
Resources :								
Debt/ Equity = Loan Funds/ Shareholders' Funds	15.7907	13.2642	14.1113	15.3631	15.3056	12.1014	12.8615	9.3311
PBT/ Shareholders' Funds	0.3603	0.2772	0.3227	0.2666	0.3615	0.2530	0.3180	0.2244
PAT/ Shareholders' Funds	0.2562	0.2146	0.2471	0.2247	0.2909	0.1944	0.2435	0.1706
Dividend Rate = Dividend/ Share Capital	0.1500	0.0944	0.1704	0.1401	0.2000	0.1284	0.2402	0.1722
Interest Paid (Borrowings) /Loan Funds	0.1019	0.0995	0.1062	0.0821	0.1122	0.1079	0.1175	0.1201
Loan Funds/ Total Resources	0.9404	0.9299	0.9338	0.9389	0.9387	0.9237	0.9279	0.9032
Assets :								
Interest (HUD Loans)/ HUD Loans	0.1148	0.1213	0.1222	0.0937	0.1191	0.1202	0.1320	0.1336
HUD Loans/ Total Assets	0.8079	0.7875	0.8183	0.8000	0.8818	0.8595	0.8174	0.7616
Investments/ Total Assets	0.0990	0.1050	0.0974	0.1282	0.0823	0.0720	0.1238	0.0916
Fixed Assets/ Total Assets	0.0108	0.0234	0.0251	0.0213	0.0242	0.0192	0.0180	0.0169
PBT/ Total Assets	0.0215	0.0194	0.0214	0.0163	0.0222	0.0193	0.0229	0.0217
PAT/ Total Assets	0.0153	0.0150	0.0164	0.0137	0.0178	0.0148	0.0176	0.0165

(contd..)

HDFC's Financial Ratios
(For the Year Ended March 31)

Item	1986	1987	1988	1989	1990	1991	1992	1993
Income :								
Interest (HUD Loans)/ Total Income	0.7206	0.7641	0.7545	0.7347	0.7490	0.7882	0.7555	0.7230
PBT/ Total Income	0.1668	0.1555	0.1612	0.1597	0.1581	0.1473	0.1606	0.1543
PAT/ Total Income	0.1186	0.1203	0.1235	0.1346	0.1272	0.1132	0.1230	0.1173
Expenditure :								
Interest Paid (Borrowings) /Total Expenditure	0.8942	0.8765	0.8922	0.8996	0.8921	0.8914	0.9093	0.9109
Staff Expenditure/ Total Expenditure	0.0271	0.0276	0.0245	0.0232	0.0200	0.0182	0.0174	0.0157

Source : Calculated from Annual Reports of HDFC.

Note : The terms Capital Employed and Total Assets are interchangeable
and so are the terms Gross Earnings and Total Income.

MODEL - PAT Simulations
(1992-93)

I N P U T S					OUTPUT
Clf (%)	Ihud (%)	Iinv (%)	a1 (%)	a2 (%)	PAT (Rs.Million)
9.50	10.33	41.35	80.87	5.28	678.72
10.00	10.33	41.35	80.87	5.28	571.67
9.50	11.00	41.35	80.87	5.28	813.27
10.00	11.00	41.35	80.87	5.28	706.22
11.00	11.00	41.35	80.87	5.28	492.12
12.00	11.00	41.35	80.87	5.28	278.03
13.00	11.00	41.35	80.87	5.28	63.93
13.28	11.00	20.00	80.87	5.28	(-)275.01
14.00	11.00	20.00	80.87	5.28	(-)430.23
15.00	11.50	20.00	80.87	5.28	(-)543.92
14.00	11.00	16.00	80.87	5.28	(-)482.71
15.00	12.00	16.00	80.87	5.28	(-)495.98
15.00	12.00	16.00	95.62	5.70	(-) 24.22
8.80	8.64	9.23	95.62	5.70	409.52
10.00	8.64	9.23	95.62	5.70	182.60
10.00	8.64	12.00	95.62	5.70	191.81
12.00	9.00	15.00	95.62	5.70	(-)108.40
11.00	9.00	15.00	95.62	5.70	105.66
12.00	9.50	15.00	95.62	5.70	10.29

MODEL - PAT Simulations
(Average 1985-86 to 1992-93)

I N P U T S					OUTPUT
Clf (%)	Ihud (%)	Iinv (%)	a1 (%)	a2 (%)	PAT (Rs.Million)
9.50	9.53	15.17	83.50	9.77	223.16
10.00	9.53	15.17	83.50	9.77	159.43
9.50	11.00	15.17	83.50	9.77	408.32
10.00	11.00	15.17	83.50	9.77	344.59
11.00	11.00	15.17	83.50	9.77	219.12
12.00	11.00	15.17	83.50	9.77	89.65
13.00	11.00	15.17	83.50	9.77	(-) 37.81
13.28	11.00	15.17	83.50	9.77	(-) 72.87
13.28	11.00	20.00	83.50	9.77	(-) 1.68
14.00	11.00	20.00	83.50	9.77	(-) 94.10
15.00	11.50	20.00	83.50	9.77	(-) 158.58
14.00	11.00	16.00	83.50	9.77	(-) 153.05
15.00	12.00	16.00	83.50	9.77	(-) 154.56
15.00	12.00	16.00	95.62	5.70	(-) 28.64
8.80	8.64	9.23	95.62	5.70	218.79
10.00	8.64	9.23	95.62	5.70	65.83
10.00	8.64	12.00	95.62	5.70	89.65
12.00	9.00	15.00	95.62	5.70	(-) 87.56
11.00	9.00	15.00	95.62	5.70	39.90
12.00	9.50	15.00	95.62	5.70	(-) 15.44

MODEL - IHUD Simulations
(1992-93)

I N P U T S				OUTPUT
Clf (%)	Iinv (%)	Ct (%)	Csc (%)	Ihud (%)
12.00	41.35	31.95	5.50	12.64
13.00	41.35	31.95	5.50	13.71
14.00	41.35	31.95	5.50	14.77
15.00	41.35	31.95	5.50	15.84
12.00	15.00	31.95	5.50	14.36
13.00	15.00	31.95	5.50	15.43
13.00	15.00	40.00	5.50	15.84
15.00	15.00	40.00	5.50	17.97
15.00	15.00	32.00	5.50	17.56
14.00	15.00	32.00	5.50	16.50
12.00	15.00	32.00	5.50	14.37
12.00	15.00	32.00	20.00	15.70
14.00	15.00	32.00	20.00	17.83
15.00	20.00	32.00	20.00	18.90
15.00	20.00	32.00	20.00	18.57
14.00	20.00	32.00	20.00	17.51
14.00	20.00	32.00	24.00	17.88
15.00	20.00	32.00	24.00	18.94
14.00	41.35	40.00	24.00	17.11
15.00	41.35	40.00	24.00	18.18
14.00	20.00	40.00	24.00	18.57
15.00	20.00	40.00	24.00	19.57
14.00	41.35	40.00	24.00	16.48
15.00	41.35	32.00	24.00	17.54

MODEL - IHUD Simulations
(Average 1985-86 to 1992-93)

I N P U T S				OUTPUT
Clf (%)	Iinv (%)	Ct (%)	Csc (%)	Ihud (%)
12.00	15.17	20.35	0.06	12.93
13.00	15.17	20.35	0.06	13.94
14.00	15.17	20.35	0.06	14.95
15.00	15.17	20.35	0.06	15.96
12.00	15.00	20.35	0.06	12.95
13.00	15.00	20.35	0.06	13.96
13.00	15.00	40.00	0.06	14.83
15.00	15.00	40.00	0.06	16.85
15.00	15.00	32.00	0.06	16.44
14.00	15.00	32.00	0.06	15.43
12.00	15.00	32.00	0.06	13.40
12.00	15.00	32.00	20.00	15.78
14.00	15.00	32.00	20.00	17.80
15.00	15.00	32.00	20.00	18.81
15.00	20.00	32.00	20.00	18.23
14.00	20.00	32.00	20.00	17.21

MODEL - Social Focus I Simulations
(1992-93)

I N P U T S							OUTPUT
Clf (%)	Csc (%)	Iinv (%)	Ihud (%)	S1 (%)	S2 (%)	Inpr (%)	Ipr (%)
9.83	5.50	41.35	10.33	31.80	68.20	10.66	9.63
13.10	15.00	41.35	14.96	31.80	68.20	12.00	20.46
15.00	15.00	41.35	16.72	31.80	68.20	13.00	24.68
15.00	20.00	20.00	18.57	31.80	68.20	14.00	28.37
14.50	18.00	20.00	17.85	31.80	68.20	16.00	21.83
15.00	18.00	20.00	18.39	31.80	68.20	17.00	21.36
15.00	18.00	20.00	18.39	31.80	68.20	18.00	19.22
15.00	18.00	30.00	17.73	31.80	68.20	18.00	17.16
15.00	18.00	20.00	18.39	25.00	75.00	18.00	19.55
15.00	15.00	20.00	18.11	25.00	75.00	18.00	18.44
14.00	5.50	41.35	14.77	31.80	68.20	15.00	14.29
14.00	5.50	41.35	14.77	31.80	68.20	16.00	12.14
14.00	5.50	41.35	14.77	31.80	68.20	17.00	10.00
14.00	5.50	41.35	14.77	31.80	68.20	18.00	7.86
14.00	20.00	41.35	16.11	31.80	68.20	15.00	18.49
14.00	20.00	41.35	16.11	31.80	68.20	16.00	16.35
15.00	5.50	41.35	15.84	31.80	68.20	16.00	15.50
15.00	5.50	41.35	15.84	31.80	68.20	17.00	13.35
15.00	5.50	41.35	15.84	31.80	68.20	18.00	11.21
15.00	15.00	17.50	18.27	31.80	68.20	21.78	10.75
12.50	13.50	15.00	15.63	31.80	68.20	18.38	9.75
10.00	11.00	12.50	12.90	31.80	68.20	14.84	8.75

MODEL - Social Focus II Simulations
(1992-93)

I N P U T S							OUTPUT
Clf (%)	Csc (%)	Iinv (%)	Ihud (%)	S1 (%)	S2 (%)	Inpr (%)	Ipr (%)
9.83	5.50	41.35	10.33	31.80	68.20	9.63	10.66
14.00	20.00	41.35	16.11	31.80	68.20	9.00	19.43
14.00	5.50	41.35	14.77	31.80	68.20	9.00	17.47
15.00	5.50	41.35	15.84	31.80	68.20	10.00	18.56
15.00	5.50	41.35	15.84	31.80	68.20	11.00	18.10
14.00	20.00	41.35	16.11	31.80	68.20	10.00	18.96
14.00	20.00	41.35	16.11	31.80	68.20	11.00	18.49

Structure of Resources, Volumes and Growth Rates
(Tamil Nadu Housing Board, Madras)

Source	Amount Outstanding (Rs. Million) as at the End of the Year				Average Growth Rate(%)
	1989-90	1990-91	1991-92	1992-93	
1. Shareholders' Funds	601.71	601.71	601.71	601.17	-0.27 *
(Govt. Grants) % Change		0.00	0.00	-0.09	
2. Loan Funds	3055.19	3308.99	3778.50	4303.20	12.30
% Change		8.31	14.19	13.89	
HUDCO	1041.50	1206.12	1319.34	1533.87	13.33
% Change		15.81	9.39	16.26	
Government	539.00	614.12	694.16	847.64	15.96
% Change		13.94	13.03	22.11	
Other Loans	172.08	134.93	222.22	192.65	8.74
% Change		-21.59	64.69	-13.31	
Debentures	363.30	398.60	443.60	493.60	10.81
% Change		9.72	11.29	11.27	
Deposits	939.31	955.21	1099.19	1235.45	10.10 \$
% Change		1.69	15.07	12.40	
3. Total Resources (1+2)	3656.90	3910.69	4380.21	4904.37	10.45
% Change		6.94	12.01	11.97	

Source : Annual Reports of TNHB.

Note : * denotes that the value is statistically insignificant at 5% level of significance.

: \$ denotes that the value is statistically significant at 5% level of significance.

Structure of Resources, Shares of Different Sources
(Tamil Nadu Housing Board, Madras)

(Per cent)

Source	Percentage to Total Amount Outstanding at the End of the Year			
	1989-90	1990-91	1991-92	1992-93
1. Shareholders' Funds (Govt. Grants)	16.45	15.39	13.74	12.26
2. Loan Funds	83.55	84.61	86.26	87.74
HUDCO	28.48	30.84	30.12	31.28
Government	14.74	15.70	15.85	17.28
Other Loans	4.71	3.45	5.07	3.93
Debentures	9.93	10.19	10.13	10.06
Deposits	25.69	24.43	25.09	25.19
3. Total Resources (1+2)	100.00	100.00	100.00	100.00

Source : Calculated from Annual Reports of TNHB.

**Structure of Resources, Volumes and Growth Rates
(Andhra Pradesh Urban Development and Housing Corporation)**

Source	Amount Outstanding (Rs. Million) as at the End of the Year				Average Growth Rate(%)
	1989-90	1990-91	1991-92 (Est.)	1992-93 (Prov.)	
1. Shareholders' Funds	3.72	5.74	4.04	-4.79	4.21 *
% Change		54.35	-29.64	-218.69	
Share Capital	2.50	2.50	2.50	2.50	0.00
% Change		0.00	0.00	0.00	
Reserves & Surplus	1.22	3.24	1.54	-7.29	12.38 *
% Change		166.04	-52.53	-574.54	
2. Loan Funds	50.00	119.76	508.59	557.74	138.26 \$
% Change		139.53	324.66	9.66	
HUDCO	0.00	31.77	374.19	389.34	(-)
% Change		-	1077.99	4.05	
Government	50.00	88.00	134.40	168.40	50.18 \$
% Change		76.00	52.73	25.30	
3. Total Resources (1+2)	53.72	125.50	512.63	552.95	131.68 \$
% Change		133.64	308.46	7.87	

Source: Annual Reports of APUDHC.

Note : * denotes that the value is statistically insignificant at 5% level of significance.

: \$ denotes that the value is statistically significant at 5% level of significance.

: (-) denotes that Regression is not applicable.

**Structure of Resources, Shares of Different Sources
(Andhra Pradesh Urban Development and Housing Corporation)**

Source	Percentage to Total Amount Outstanding at the End of the Year			
	1989-90	1990-91	1991-92	1992-93 (Prov.)
1. Shareholders' Funds	6.92	4.57	0.79	-0.87
Share Capital	4.65	1.99	0.49	0.45
Reserves & Surplus	2.26	2.58	0.30	-1.32
2. Loan Funds	93.08	95.43	99.21	100.87
HUDCO	0.00	25.31	72.99	70.41
Government	93.08	70.12	26.22	30.45
3. Total Resources (1+2)	100.00	100.00	100.00	100.00

Source : Calculated from Annual Reports of APUDHC.

Structure of Resources, Volumes and Growth Rates
(Madras Metropolitan Water Supply and Sewerage Board, Madras)

Source	Amount Outstanding (Rs. Million) as at the End of the Year							Average Growth Rate(%)
	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	
1. Shareholders' Funds	545.67	654.98	859.30	1132.08	1287.37	1398.02	1429.73	18.74
% Change		20.03	31.19	31.74	13.72	8.60	2.27	
a. Share Capital	663.61	752.54	867.63	1119.01	1265.62	1441.55	1472.47	15.64
% Change		13.40	15.29	28.97	13.10	13.90	2.15	
Contribution	227.63	228.31	228.30	446.53	631.27	659.86	694.59	26.07
% Change		0.30	0.00	95.59	41.37	4.53	5.26	
Grants from Government	435.98	524.23	639.33	672.49	634.34	781.69	777.88	9.45
% Change		20.24	21.96	5.19	-5.67	23.23	-0.49	
b. Reserves & Surplus	-117.94	-97.55	-8.33	13.07	21.75	-43.52	-42.75	(-)
% Change		-17.29	-91.46	-256.87	66.48	-300.08	-1.79	
2. Loan Funds	726.57	826.84	983.68	1028.00	1064.41	1242.07	1579.84	12.20
% Change		13.80	18.97	4.51	3.54	16.69	27.19	
Loans from Government	474.28	542.29	648.76	739.93	781.09	928.62	1217.95	15.73
% Change		14.34	19.63	14.05	5.56	18.89	31.16	
Guaranteed Loans from Public	65.15	65.15	65.15	102.65	65.15	65.15	65.15	0.00 *
% Change		0.00	0.00	57.56	-36.53	0.00	0.00	
Loans from Government - Drought	9.80	9.80	9.80	9.80	9.80	9.80	9.80	0.00
% Change		0.00	0.00	0.00	0.00	0.00	0.00	
Loans from Financial Institutions	0.00	0.00	0.00	0.00	0.00	5.55	11.32	(-)
% Change		-	-	-	-	-	103.89	
Deposits from Public - General Works & Service Conn.	158.78	189.29	240.36	155.47	185.86	210.63	255.00	5.04 *
% Change		19.22	26.98	-35.32	19.55	13.33	21.07	
Security Deposits and Retention	18.56	20.31	19.61	20.16	22.52	22.32	20.63	2.33 *
% Change		9.43	-3.45	2.82	11.72	-0.89	-7.55	
3. Total Resources (1+2)	1272.23	1481.82	1842.98	2160.08	2351.78	2640.09	3009.57	15.28
% Change		16.47	24.37	17.21	8.87	12.26	14.00	

Source : Annual Reports of MMWSSB.

Note : * denotes that the value is statistically insignificant at 5% level of significance.

: (-) denotes that Regression is not applicable.

Structure of Resources, Shares of Different Sources
(Madras Metropolitan Water Supply and Sewerage Board, Madras)

(Per cent)

Source	Percentage of Total Amount Outstanding at the End of the Year						
	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93
1. Shareholders' Funds	42.89	44.20	46.63	52.41	54.74	52.95	47.51
a. Share Capital	52.16	50.78	47.08	51.80	53.82	54.60	48.93
Contribution	17.89	15.41	12.39	20.67	26.84	24.99	23.08
Grants from Government	34.27	35.38	34.69	31.13	26.97	29.61	25.85
b. Reserves & Surplus	-9.27	-6.58	-0.45	0.60	0.92	-1.65	-1.42
2. Loan Funds	57.11	55.80	53.37	47.59	45.26	47.05	52.49
Loans from Government	37.28	36.60	35.20	34.25	33.21	35.17	40.47
Guaranteed Loans from Public	5.12	4.40	3.54	4.75	2.77	2.47	2.16
Loans from Government - Drought	0.77	0.66	0.53	0.45	0.42	0.37	0.33
Loans from Financial Institutions	0.00	0.00	0.00	0.00	0.00	0.21	0.38
Deposits from Public -	12.48	12.77	13.04	7.20	7.90	7.98	8.47
General Works & Service Connection	0.00	1.30	1.46	-1.64	0.83	0.50	0.70
Security Deposits and Retention Monie	1.46	1.37	1.06	0.93	0.96	0.85	0.69
3. Total Resources (1+2)	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : Calculated from Annual Reports of MMWSSB.

Structure of Resources, Volumes and Growth Rates
(Maharashtra Water Supply and Sewerage Board)

Source	Amount Outstanding (Rs. Million) as at the End of the Year							Average Growth Rate(%)
	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	
1. Shareholders' Funds	1971.27	1952.84	2161.56	2615.52	3203.03	3282.53	3441.52	11.72
% Change		-0.93	10.69	21.00	22.46	2.48	4.84	
Share Capital	1765.90	1710.46	1870.02	2220.59	2708.77	2676.83	2717.67	9.57
% Change		-3.14	9.33	18.75	21.98	-1.18	1.53	
Reserves and surplus	205.37	242.38	291.54	394.93	494.26	605.70	723.85	24.51
% Change		18.02	20.28	35.46	25.15	22.55	19.51	
2. Loan Funds	2180.52	2306.92	2712.68	3234.03	3824.22	4633.09	5321.35	17.08
% Change		5.80	17.59	19.22	18.25	21.15	14.86	
HUDCO	3.09	4.65	3.11	2.62	1.52	37.75	50.94	52.88 *
% Change		50.60	-33.15	-15.57	-41.96	2378.79	34.92	
Government	20.64	19.26	17.89	16.51	15.61	14.24	12.84	-7.44
% Change		-6.67	-7.14	-7.69	-5.45	-8.81	-9.79	
Other Loans	1087.54	1181.91	1397.43	1596.50	2035.21	2289.60	2643.39	16.86
% Change		8.68	18.23	14.25	27.48	12.50	15.45	
Deposits	1028.07	1049.81	1229.63	1539.72	1658.23	2151.14	2455.10	16.79
% Change		2.11	17.13	25.22	7.70	29.73	14.13	
General Provident Fund	41.19	51.28	64.63	78.68	113.65	140.37	159.08	26.73
% Change		24.52	26.02	21.74	44.46	23.50	13.33	
3. Total Resources	4151.79	4259.77	4874.24	5849.55	7027.25	7915.62	8762.86	14.72
% Change		2.60	14.43	20.01	20.13	12.64	10.70	

Source: Annual Reports of MWSSB.

Note : * denotes that the value is statistically insignificant at 5% level of significance.

Structure of Resources, Shares of Different Sources
(Maharashtra Water Supply and Sewerage Board)

(Per cent)

Source	Percentage to Total Amount Outstanding as at the End of the Year						
	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92
1. Shareholders' Funds	47.48	45.84	44.35	44.71	45.58	41.47	39.27
Share Capital	42.53	40.15	38.37	37.96	38.55	33.82	31.01
Reserves and surplus	4.95	5.69	5.98	6.75	7.03	7.65	8.26
2. Loan Funds	52.52	54.16	55.65	55.29	54.42	58.53	60.73
HUDCO	0.07	0.11	0.06	0.04	0.02	0.48	0.58
Government	0.50	0.45	0.37	0.28	0.22	0.18	0.15
Other Loans	26.19	27.75	28.67	27.29	28.96	28.93	30.17
Deposits	24.76	24.64	25.23	26.32	23.60	27.18	28.02
General Provident Fund	0.99	1.20	1.33	1.34	1.62	1.77	1.82
3. Total Resources	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : Calculated from Annual Reports of MWSSB.

Structure of Assets, Volumes and Growth Rates
(Tamil Nadu Housing Board, Madras)

Application	Amount Outstanding (Rs. Million) as at the End of the Year				Average Growth Rate(%)
	1989-90	1990-91	1991-92	1992-93	
Instalments Receivable from Allottees	918.32	1098.01	1512.92	1937.79	29.19
% Change		19.57	37.79	28.08	
Investments	175.23	163.91	159.42	44.14	-34.06 *
% Change		-6.46	-2.74	-72.31	
Fixed Assets (Net Block)	317.17	301.01	332.28	370.71	5.83 *
% Change		-5.09	10.39	11.56	
Net Current Assets	2246.18	2347.75	2375.58	2551.73	4.02 \$
% Change		4.52	1.19	7.41	
Total Assets	3656.90	3910.69	4380.21	4904.37	10.45
% Change		6.94	12.01	11.97	

Source : Annual Reports of TNHB.

Note : * denotes that the value is statistically insignificant at 5% level of significance.

: \$ denotes that the value is statistically significant at 5% level of significance.

Structure of Assets, Shares of Different Applications
(Tamil Nadu Housing Board, Madras)

(Per cent)

Application	Percentage to Total Amount Outstanding at the End of the Year			
	1989-90	1990-91	1991-92	1992-93
Instalments Receivable from Allottees	25.11	28.08	34.54	39.51
Investments	4.79	4.19	3.64	0.90
Fixed Assets(Net Block)	8.67	7.70	7.59	7.56
Net Current Assets	61.42	60.03	54.23	52.03
Total Assets	100.00	100.00	100.00	100.00

Source : Calculated from Annual Reports of TNHB.

Structure of Assets, Volumes and Growth Rates
(Andhra Pradesh Urban Development and Housing Corporation)

Application	Amount Outstanding (Rs. Million) as at the End of the Year				Average Growth Rate(%)
	1989-90	1990-91	1991-92 (Est.)	1992-93 (Prov.)	
Net Fixed Assets	0.67	0.89	1.08	1.40	26.99
% Change		32.35	21.73	28.91	
Net Current Assets	40.43	69.99	498.04	135.59	74.94 *
% Change		73.12	611.60	-72.77	
Loans and Advances	12.52	52.88	13.40	413.36	148.88 *
% Change		322.30	-74.65	2983.70	
Preliminary Expenses	0.09	0.09	0.09	0.09	0.00
% Change		0.00	0.00	0.00	
Other Assets	0.00	1.65	0.00	2.50	(-)
% Change		-	-100.00	-	
Total Assets	53.72	125.50	512.63	552.95	131.68 \$
% Change		133.64	308.46	7.87	

Source: Annual Reports of APUDHC.

Note : * denotes that the value is statistically insignificant at 5% level of significance.

: \$ denotes that the value is statistically significant at 5% level of significance.

: (-) denotes that Regression is not applicable.

**Structure of Assets, Shares of Different Applications
(Andhra Pradesh Urban Development and Housing Corporation)**

Application	Percentage to Total Amount Outstanding at the End of the Year			
	1989-90	1990-91	1991-92 (Est.)	1992-93 (Prov.)
Net Fixed Assets	1.25	0.71	0.21	0.25
Net Current Assets	75.26	55.77	97.16	24.52
Loans and Advances	23.31	42.14	2.61	74.76
Preliminary Expenses	0.17	0.07	0.02	0.02
Other Assets	0.00	1.31	0.00	0.45
Total Assets	100.00	100.00	100.00	100.00

Source : Calculated from Annual Reports of APUDHC.

Structure of Assets, Volume and Growth Rates
(Madras Metropolitan Water Supply and Sewerage Board, Madras)

Application	Amount Outstanding (Rs. Millions) at the End of the Year							Average Growth Rate(%)
	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	
Fixed Assets (Net Block)	987.33	1223.42	1463.02	1682.58	1855.27	2210.66	2561.13	16.52
% Change		23.91	19.58	15.01	10.26	19.16	15.85	
Net Current Assets	284.90	258.40	379.95	477.50	496.51	429.43	448.44	9.91 \$
% Change		-9.30	47.04	25.67	3.98	-13.51	4.43	
Total Assets	1272.23	1481.82	1842.98	2160.08	2351.78	2640.09	3009.57	15.28
% Change		16.47	24.37	17.21	8.87	12.26	14.00	

Source : Annual Reports of MMWSSB.

Note : \$ denotes that the value is statistically significant at 5% level of significance.

Structure of Assets, Shares of Different Applications
(Madras Metropolitan Water Supply and Sewerage Board, Madras)

(Per cent)

Application	Percentage of Total Amount Outstanding at the End of the Year						
	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93
Fixed Assets (Net Block)	77.61	82.56	79.38	77.89	78.89	83.73	85.10
Net Current Assets	22.39	17.44	20.62	22.11	21.11	16.27	14.90
Total Assets	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : Calculated from Annual Reports of MMWSSB.

**Structure of Assets, Volumes and Growth Rates
(Maharashtra Water Supply and Sewerage Board)**

Application	Amount Outstanding (Rs. Million) as at the End of the Year							Average Growth Rate(%)
	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	
Fixed assets	1774.27	2036.08	2224.00	2914.60	3403.92	3820.73	4361.15	16.94
% Change		14.76	9.23	31.05	16.79	12.24	14.14	
Loans & Advances	1368.18	1487.80	1674.42	1804.43	1970.50	2216.31	2222.76	9.01
% Change		8.74	12.54	7.76	9.20	12.47	0.29	
Deposits	52.89	62.24	86.56	99.82	136.68	170.65	200.00	25.97
% Change		17.69	39.08	15.32	36.93	24.85	17.20	
Net Current Assets	15.83	41.12	136.54	181.95	370.05	596.28	740.38	89.38
% Change		159.79	232.01	33.26	103.38	61.14	24.17	
Cash and Investments	940.64	632.52	752.72	848.75	1146.09	1111.64	1238.58	8.85 *
% Change		-32.76	19.00	12.76	35.03	-3.01	11.42	
Total Assets	4151.80	4259.77	4874.24	5849.55	7027.25	7915.62	8762.86	14.72
% Change		2.60	14.43	20.01	20.13	12.64	10.70	

Source : Annual Reports of MWSSB.

Note : * denotes that the value is statistically insignificant at 5% level of significance.

Structure of Assets, Shares of Different Applications
(Maharashtra Water Supply and Sewerage Board)

(Per cent)

Application	Percentage to Total Amount Outstanding as at the End of the Year						
	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92
Fixed assets	42.73	47.80	45.63	49.83	48.44	48.27	49.77
Loans & Advances	32.95	34.93	34.35	30.85	28.04	28.00	25.37
Deposits	1.27	1.46	1.78	1.71	1.95	2.16	2.28
Net Current Assets	0.38	0.97	2.80	3.11	5.27	7.53	8.45
Cash and Investments	22.66	14.85	15.44	14.51	16.31	14.04	14.13
Total Assets	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : Calculated from Annual Reports of MWSSB.

Profit and Loss Account, Volumes and Growth Rates
(Tamil Nadu Housing Board, Madras)

Item	Income/Expenditure (Rs. Million) for the Year				Average Growth Rate(%)
	1989-90	1990-91	1991-92	1992-93	
Income :					
Income from Sales	280.98	615.59	579.65	693.29	30.34 *
% Change		119.09	-5.84	19.61	
Income from Interest	183.81	178.69	165.30	183.47	-0.83 *
% Change		-2.79	-7.49	11.00	
Other Operating Income	46.85	44.09	60.82	78.10	20.38 *
% Change		-5.88	37.93	28.43	
Miscellaneous Income	10.89	11.56	28.44	15.64	21.97 *
% Change		6.12	146.12	-45.03	
Revenue Grant from Govt.	1.00	1.00	1.00	1.00	0.00
% Change		0.00	0.00	0.00	
Total Income	523.53	850.93	835.21	971.51	20.16 *
% Change		62.54	-1.85	16.32	

(Contd..)

Profit and Loss Account, Volumes and Growth Rates
(Tamil Nadu Housing Board, Madras)

Item	Income/Expenditure (Rs. Million) for the Year				Average Growth Rate(%)
	1989-90	1990-91	1991-92	1992-93	
Expenditure :					
Cost of Sales	224.96	495.51	431.05	532.01	27.67 *
% Change		120.27	-13.01	23.42	
Repairs and Maintenance	20.92	25.40	29.02	30.05	12.97 \$
% Change		21.39	14.28	3.53	
Employees Emoluments and Welfare Expe	84.29	108.79	122.68	136.74	17.02 \$
% Change		29.07	12.76	11.46	
Special Staff Cost - Land Acquisition	3.66	4.21	4.42	3.25	-3.03 *
% Change		15.01	4.99	-26.47	
Administrative Cost	16.04	19.89	20.94	21.83	10.25 *
% Change		24.02	5.27	4.25	
Finance Charges	145.49	171.63	206.72	247.39	19.47
% Change		17.97	20.45	19.67	
Depreciation	10.20	9.02	8.79	8.67	-4.99 *
% Change		-11.52	-2.53	-1.39	
Loss from Production Units	3.50	7.49	5.99	10.13	34.57 *
% Change		114.22	-19.97	69.04	
Total Expenditure	509.05	841.93	829.61	990.06	21.91 *
% Change		65.39	-1.46	19.34	
Profit/Loss:					
Net Profit	14.48	8.99	5.60	-18.55	(-)
% Change		-37.91	-37.75	-431.44	

Source: Annual Reports of TNHB.

Note : * denotes that the value is statistically insignificant at 5% level of significance.

: \$ denotes that the value is statistically significant at 5% level of significance.

: (-) denotes that Regression is not applicable.

Profit and Loss Account, Shares of Different Items
(Tamil Nadu Housing Board, Madras)

(Per cent)

Item	Percentage to Total Income/Expenditure for the Year			
	1989-90	1990-91	1991-92	1992-93
Income:				
Income from Sales	53.67	72.34	69.40	71.36
Income from Interest	35.11	21.00	19.79	18.89
Other Operating Income	8.95	5.18	7.28	8.04
Miscellaneous Income	2.08	1.36	3.41	1.61
Revenue Grant from Govt.	0.19	0.12	0.12	0.10
Total Income	100.00	100.00	100.00	100.00
Expenditure:				
Cost of Sales	44.19	58.85	51.96	53.74
Repairs and Maintenance	4.11	3.02	3.50	3.03
Employees Emoluments and Welfare Expe	16.56	12.92	14.79	13.81
Special Staff Cost - Land Acquisition	0.72	0.50	0.53	0.33
Administrative Cost	3.15	2.36	2.52	2.20
Finance Charges	28.58	20.38	24.92	24.99
Depreciation	2.00	1.07	1.06	0.88
Loss from Production Units	0.69	0.89	0.72	1.02
Total Expenditure	100.00	100.00	100.00	100.00
Profit/Loss:				
Net Profit	2.77	1.06	0.67	-1.91

Source : Calculated from Annual Reports of TNHB.

Profit & Loss Account, Volumes and Growth Rates
(Andhra Pradesh Urban Development and Housing Corporation)

Item	Income/Expenditure (Rs. Million) for the Year				Average Growth Rate(%)
	1989-90	1990-91	1991-92 (Est.)	1992-93 (Prov.)	
Income :					
Admission Fee	0.63	1.19	1.53	3.52	71.54 \$
% Change		88.15	28.05	130.95	
Interest	0.25	4.12	15.24	21.37	335.34 *
% Change		1578.80	269.93	40.26	
Managerial Subsidy	2.10	5.80	6.00	2.88	10.26 *
% Change		176.19	3.45	-52.08	
Other Receipts	0.00	0.28	6.50	9.18	(-)
% Change		17764.62	2202.83	41.23	
Total Income	2.98	11.39	29.26	36.95	133.88 \$
% Change		282.29	156.86	26.27	

(Contd..)

Profit & Loss Account, Volumes and Growth Rates
(Andhra Pradesh Urban Development and Housing Corporation)

Item	Income/Expenditure (Rs. Million) for the Year				Average Growth Rate(%)
	1989-90	1990-91	1991-92 (Est.)	1992-93 (Prov.)	
Expenditure :					
Employees Cost	0.80	1.75	2.68	3.39	60.88 \$
% Change		117.90	53.49	26.48	
Welfare Cost	0.04	0.20	0.65	0.39	123.32 *
% Change		395.56	228.82	-39.92	
Finance and Other Charges	0.46	6.40	21.03	35.13	313.36 *
% Change		1289.13	228.61	67.03	
Administrative Expenses	0.46	1.03	2.06	2.62	80.61 \$
% Change		122.71	100.60	27.34	
Supervision Charges	0.00	0.00	2.50	0.00	(-)
% Change		-	-	-	
Depreciation	0.00	0.00	0.18	0.00	(-)
% Change		-	-	-	
Total Expenditure	1.76	9.37	29.10	41.54	188.96 \$
% Change		431.50	210.50	42.74	
Profit/Loss :					
Net Profit	1.22	2.02	0.16	-4.59	
% Change		66.04	-91.98	-2930.54	

Source: Annual Reports of APUDHC.

Note : * denotes that the value is statistically insignificant at 5% level of significance.

: \$ denotes that the value is statistically significant at 5% level of significance.

: (-) denotes that Regression is not applicable.

Profit & Loss Account, Shares of Different Items
(Andhra Pradesh Urban Development and Housing Corporation)

(Per cent)

Item	Percentage to Total Income/Expenditure for the Year			
	1989-90	1990-91	1991-92 (Est.)	1992-93 (Prov.)
Income :				
Admission Fee	21.24	10.45	5.21	9.53
Interest #	8.23	36.15	52.07	57.84
Managerial Subsidy	70.47	50.91	20.51	7.78
Other Receipts	0.05	2.48	22.21	24.85
Total Income	100.00	100.00	100.00	100.00
Expenditure :				
Employees Cost	45.45	18.63	9.21	8.16
Welfare Cost	2.26	2.11	2.23	0.94
Finance and Other Charges	26.13	68.30	72.28	84.58
Administrative Expenses	26.16	10.96	7.08	6.32
Supervision Charges	0.00	0.00	8.59	0.00
Depreciation	0.00	0.00	0.60	0.00
Total Expenditure	100.00	100.00	100.00	100.00
Profit/Loss :				
Net Profit	40.83	17.73	0.55	-12.42

Source : Calculated from Annual Reports of APUDHC.

Note : # Interest income is on account of term deposits with banks

Profit & Loss Account, Volumes and Growth Rates
(Madras Metropolitan Water Supply and Sewerage Board, Madras)

Item	Income/Expenditure (Rs. Million) for the Year							Average Growth Rate(%)
	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	
Income:								
Sale of Water	75.12	125.03	158.42	186.35	208.22	205.38	352.63	23.48
% Change		66.43	26.71	17.63	11.74	-1.36	71.70	
Water Tax and Sewerage Tax	53.92	77.33	99.40	97.37	112.81	130.00	94.54	10.71 \$
% Change		43.42	28.53	-2.04	15.85	15.24	-27.28	
Grants and Subsidy from Govt.	3.33	82.82	71.42	73.93	67.08	0.00	38.22	28.07 *
% Change		2388.70	-13.76	3.51	-9.26	-	-	
Other Income	10.21	10.14	9.69	10.31	13.04	20.71	24.95	17.03
% Change		-0.70	-4.48	6.40	26.47	58.86	20.46	
Prior Period Adjustment	0.00	6.35	57.11	5.16	1.56	0.00	0.00	(-)
% Change		*100	799.13	-90.96	-69.89	-	-	
Excess Provision for Bad and Doubtful Debts Written Back - taxes	0.44	0.59	0.00	0.00	0.00	0.00	0.00	(-)
% Change		35.32	-	-	-	-	-	
Total Income	143.02	302.26	396.04	373.12	402.70	356.09	510.34	16.02 \$
% Change		111.35	31.03	-5.79	7.93	-11.57	43.32	

(Contd..)

Profit & Loss Account, Volumes and Growth Rates
(Madras Metropolitan Water Supply and Sewerage Board, Madras)

Item	Income/Expenditure (Rs. Millions) for the Year							Average Growth Rate(%)
	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	
Expenditure:								
Operating and Maintenance Expenditure	43.24	46.98	48.66	56.88	77.17	102.53	111.64	18.99
% Change		8.66	3.57	16.90	35.67	32.88	8.88	
Payments and Provisions to Employees	80.68	100.87	121.71	148.21	172.08	197.10	216.08	18.03
% Change		25.02	20.66	21.78	16.11	14.54	9.63	
Office and Administration Expenses	5.77	8.56	9.60	8.31	10.14	9.93	11.53	9.07 \$
% Change		48.26	12.20	-13.41	22.00	-2.04	16.03	
Repairs and Maintenance - Drought	1.23	81.16	0.00	0.00	0.00	25.82	12.82	(-)
% Change		6487.82	-	-	-	-	-50.33	
Prior Period Adjustment	1.18	0.00	69.82	72.33	67.08	0.00	38.22	(-)
% Change		-	-	3.59	-7.25	-	-	
Depreciation	15.62	18.03	0.00	0.00	0.00	1.83	26.66	(-)
% Change		15.38	-	-	-	-	1353.54	
Debt Servicing Charges	17.73	22.46	22.43	24.02	36.01	44.38	52.46	19.93
% Change		26.63	-0.13	7.12	49.89	23.24	18.21	
Provision for Bad and Doubtful Debts	0.09	3.83	34.61	41.97	31.53	39.76	40.15	126.74 \$
% Change		4203.37	803.60	21.27	-24.88	26.13	0.97	
Total Expenditure	165.55	281.88	306.82	351.72	394.01	421.36	509.56	17.13
% Change		70.27	8.85	14.63	12.02	6.94	20.93	
Profit/Loss:								
Net Profit	-22.53	20.39	89.22	21.39	8.69	-65.27	0.78	(-)
% Change		-190.51	337.60	-76.02	-59.40	-851.49	-101.19	

Source : Annual Reports of MMWSSB.

Note : * denotes that the value is statistically insignificant at 5% level of significance.

: \$ denotes that the value is statistically significant at 5% level of significance.

: (-) denotes that Regression is not applicable.

Profit & Loss Account, Shares of Different Items
(Madras Metropolitan Water Supply and Sewerage Board, Madras)

(Per cent)

Item	Percentage to Total Income/Expenditure for the Year						
	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93
Income:							
Sale of Water	52.53	41.36	40.00	49.94	51.71	57.68	69.10
Water Tax and Sewerage Tax	37.70	25.58	25.10	26.10	28.01	36.51	18.52
Grants and Subsidy from Govt.	2.33	27.40	18.03	19.81	16.66	0.00	7.49
Other Income	7.14	3.36	2.45	2.76	3.24	5.82	4.89
Prior Period Adjustment	0.00	2.10	14.42	1.38	0.39	0.00	0.00
Excess Provision for Bad and Doubtful Debts Written Back - taxes	0.30	0.20	0.00	0.00	0.00	0.00	0.00
Total Income	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Expenditure :							
Operating and Maintenance Expenditure	26.12	16.67	15.86	16.17	19.58	24.33	21.91
Payments and Provisions to Employees	48.74	35.78	39.67	42.14	43.67	46.78	42.41
Office and Administration Expenses	3.49	3.04	3.13	2.36	2.57	2.36	2.26
Repairs and Maintenance - Drought	0.74	28.79	0.00	0.00	0.00	6.13	2.52
Prior Period Adjustment	0.71	0.00	22.76	20.56	17.03	0.00	7.50
Depreciation	9.44	6.39	0.00	0.00	0.00	0.44	5.23
Debt Servicing Charges	10.71	7.97	7.31	6.83	9.14	10.53	10.30
Provision for Bad and Doubtful Debts	0.05	1.36	11.28	11.93	8.00	9.44	7.88
Total Expenditure	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Profit/Loss :							
Net Profit	-15.75	6.75	22.53	5.73	2.16	-18.33	0.15

Source : Calculated from Annual Reports of MMWSSB.

Profit & Loss Account, Volumes and Growth Rates
(Maharashtra Water Supply and Sewerage Board)

Item	Income/Expenditure (Rs. Millions) for the Year							Average Growth Rate(%)
	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	
Income :								
Operating Income (Water Supply)	223.47	281.90	341.34	466.96	466.98	568.02	650.78	19.22
% Change		26.15	21.09	36.80	0.00	21.64	14.57	
Income (Overheads)	152.72	202.83	229.28	275.53	278.55	313.11	348.78	13.48
% Change		32.81	13.04	20.17	1.10	12.41	11.39	
Other Income	69.78	77.44	99.96	98.87	111.17	144.71	145.38	13.55
% Change		10.98	29.08	-1.09	12.45	30.17	0.46	
Total Income	445.97	562.17	670.58	841.36	856.71	1025.85	1144.94	16.50
% Change		26.06	19.28	25.47	1.82	19.74	11.61	
Expenditure :								
Operating Expenditure (Water Supply)	244.04	298.20	360.83	464.39	458.93	546.65	629.56	16.58
% Change		22.19	21.00	28.70	-1.18	19.11	15.17	
Expenditure (Overheads)	139.42	167.73	186.24	251.48	258.15	310.97	344.96	16.51
% Change		20.30	11.04	35.03	2.65	20.46	10.93	
Other Expenditure	67.40	82.17	109.91	100.85	118.12	142.91	144.99	13.22
% Change		21.90	33.76	-8.24	17.13	20.98	1.46	
Total Expenditure	450.87	548.10	656.98	816.72	835.21	1000.53	1119.51	16.07
% Change		21.56	19.87	24.31	2.26	19.79	11.89	
Profit/Loss :								
Net Profit	-4.90	14.08	13.60	24.64	21.50	25.32	25.43	14.32
% Change		-387.32	-3.37	81.11	-12.74	17.79	0.42	

Source : Annual Reports of MWSSB.

Profit & Loss Account, Shares of Different Items
(Maharashtra Water Supply and Sewerage Board)

(Per cent)

Item	Percentage to Total Income/Expenditure for the Year						
	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92
Income :							
Operating Income (Water Supply)	50.11	50.14	50.90	55.50	54.51	55.37	56.84
Income (Overheads)	34.24	36.08	34.19	32.75	32.51	30.52	30.46
Other Income	15.65	13.78	14.91	11.75	12.98	14.11	12.70
Total Income	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Expenditure :							
Operating Expenditure (Water Supply)	54.13	54.41	54.92	56.86	54.95	54.64	56.24
Expenditure (Overheads)	30.92	30.60	28.35	30.79	30.91	31.08	30.81
Other Expenditure	14.95	14.99	16.73	12.35	14.14	14.28	12.95
Total Expenditure	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Profit/Loss :							
Net Profit	-1.10	2.50	2.03	2.93	2.51	2.47	2.22

Source : Calculated from Annual Reports of MWSSB.

Revenue Account, Volumes and Growth Rates
(Rajasthan Housing Board)

Item	Revenue Receipts and Expenditure (Rs.Million) for the Year						Average Growth Rate(%)
	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	
Revenue Receipts :							
Grants	0.00	0.00	0.00	0.00	0.15	0.00	(-)
% Change		-	-	-	-	-	
Interest	70.08	86.01	105.99	119.38	128.72	135.85	14.17
% Change		22.73	23.24	12.63	7.82	5.54	
Miscellaneous	10.88	11.92	13.44	18.58	18.85	16.90	11.80 \$
% Change		9.56	12.83	38.23	1.45	-10.36	
Refunds	0.00	0.00	0.00	0.00	0.00	0.00	(-)
% Change		-	-	-	-	-	
Total Receipts	80.95	97.92	119.44	137.96	147.72	152.75	13.89
% Change		20.96	21.97	15.51	7.07	3.41	
Transfer to CER	0.00	0.00	-20.00	-40.00	-20.00	-40.00	(-)
% Change				100.00	-50.00	100.00	
Net Receipts	80.95	97.92	99.44	97.96	127.72	112.75	7.22 \$
% Change		20.96	1.55	-1.48	30.38	-11.72	

(Contd..)

Revenue Account, Volumes and Growth Rates
(Rajasthan Housing Board)

Item	Revenue Receipts and Expenditure (Rs.Million)						Average Growth Rate(%)
	for the Year						
	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	
Revenue Expenditure :							
Establishment	26.00	33.30	40.36	51.86	55.84	66.01	20.27
% Change		28.08	21.19	28.51	7.66	18.22	
Net Tools & Plant	-0.97	-1.16	-1.59	-1.95	-1.84	-2.57	(-)
% Change		19.07	38.01	22.58	-5.78	39.33	
Net Interest	73.79	84.85	83.80	76.70	101.17	92.39	4.57 *
% Change		14.99	-1.24	-8.47	31.91	-8.69	
Suspense	0.00	0.00	0.00	0.00	0.00	0.00	(-)
% Change		-	-	-	-	-	
Miscellaneous	0.42	0.38	0.96	0.15	0.27	0.34	-10.92 *
% Change		-9.24	150.39	-84.36	78.00	26.59	
Total Expenditure	99.25	117.38	123.52	126.76	155.43	156.16	9.37
% Change		18.27	5.23	2.62	22.62	0.47	
Administrative Charges	-19.11	-21.38	-29.13	-35.11	-32.68	-48.36	(-)
% Change		11.87	36.27	20.53	-6.94	47.98	
Net Expenditure	80.13	96.00	94.39	91.65	122.76	107.81	6.46
% Change		19.80	-1.68	-2.91	33.95	-12.18	
Total Revenue Surplus/Deficit :	-18.29	-19.46	-4.09	11.20	-7.71	-3.41	(-)
% Change		6.40	-79.01	-374.18	-168.87	-55.75	

Source : Budget Documents of RHB.

Note : * denotes that the value is statistically insignificant at 5% level of significance.

: \$ denotes that the value is statistically significant at 5% level of significance.

: (-) denotes that Regression is not applicable.

Revenue Account, Shares of Different Items
(Rajasthan Housing Board)

(Per cent)

Item	Percentage to Total Receipts/Expenditure for the Year					
	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92
Revenue Receipts :						
Grants	0.00	0.00	0.00	0.00	0.10	0.00
Interest	86.57	87.83	88.74	86.53	87.14	88.94
Miscellaneous	13.43	12.17	11.26	13.47	12.76	11.06
Refunds	0.00	0.00	0.00	0.00	0.00	0.00
Total Receipts	100.00	100.00	100.00	100.00	100.00	100.00
Revenue Expenditure :						
Establishment	26.20	28.37	32.67	40.92	35.92	42.27
Net Tools & Plant	-0.98	-0.98	-1.29	-1.54	-1.18	-1.64
Net Interest	74.35	72.29	67.84	60.51	65.09	59.16
Suspense	0.00	0.00	0.00	0.00	0.00	0.00
Miscellaneous	0.43	0.33	0.78	0.12	0.17	0.22
Total Expenditure	100.00	100.00	100.00	100.00	100.00	100.00
Total Revenue Surplus/Deficit :	-22.60	-19.88	-3.42	8.12	-5.22	-2.24

Source : Calculated from Budget Documents of RHB.

Capital Account, Volumes and Growth Rates
(Rajasthan Housing Board)

Item	Capital Receipts and Expenditure (Rs.Million) for the Year						Average Growth Rate(%)
	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	
Capital Receipts :							
Opening Balance	0.53	1.09	3.16	2.05	10.02	12.53	87.80
% Change		105.10	191.06	-35.24	389.83	25.08	
Loans	209.29	220.94	257.10	227.85	204.12	333.83	5.81
% Change		5.57	16.37	-11.38	-10.41	63.55	
Grants	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Change		-	-	-	-	-	
Sale Proceeds & Auctions	188.75	232.92	305.80	330.92	384.28	412.77	16.99
% Change		23.40	31.29	8.21	16.13	7.41	
Withdrawals from Internal Resources	59.00	97.30	70.00	210.00	132.81	195.79	25.79
% Change		64.92	-28.06	200.00	-36.76	47.42	
Miscellaneous	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Change		-	-	-	-	-	
Total Receipts	457.57	552.25	636.06	770.82	731.23	954.92	14.41
% Change		20.69	15.18	21.19	-5.14	30.59	

(Contd..)

Capital Account, Volumes and Growth Rates
(Rajasthan Housing Board)

Item	Capital Receipts and Expenditure (Rs.Million) for the Year						Average Growth Rate(%)
	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	
Capital Expenditure :							
Works	291.81	344.22	475.57	571.44	542.14	752.12	19.65
% Change		17.96	38.16	20.16	-5.13	38.73	
Tools & Plant	0.01	0.08	0.32	0.26	0.15	0.05	44.70
% Change		1150.00	330.67	-19.20	-41.00	-64.94	
Furniture, Fixtures etc.	0.14	0.21	0.25	1.05	-0.11	0.52	37.23
% Change		54.35	16.90	319.68	-110.72	-562.50	
Suspense	23.88	6.30	-1.65	20.80	12.66	9.91	-5.22
% Change		-73.62	-126.16	-1361.95	-39.11	-21.77	
Miscellaneous	0.00	0.00	0.00	0.00	0.00	0.00	0.00
% Change		-	-	-	-	-	
Repayment Provisions for Repayment Of Capital	141.46	200.86	159.52	173.57	168.82	185.44	2.65
% Change		41.99	-20.58	8.81	-2.74	9.84	
Total Expenditure	457.30	551.67	634.02	767.12	723.66	948.03	14.20
% Change		20.64	14.93	20.99	-5.66	31.00	
Closing Balance	0.27	0.58	2.04	3.70	7.57	6.89	-101.86
% Change		116.92	254.42	80.93	104.51	-8.99	
Closing Balance Excluding Withdrawals from Internal Resources	-58.73	-96.72	-67.96	-206.30	-125.24	-188.90	(-)
		64.68	-29.74	203.58	-39.29	50.83	

Source : Budget Documents of RHB.

Note : * denotes that the value is statistically insignificant at 5% level of significance.

: \$ denotes that the value is statistically significant at 5% level of significance.

: (-) denotes that Regression is not applicable.

Capital Account, Shares of Different Items
(Rajasthan Housing Board)

Item	Percentage to Total Receipts/Expenditure for the Year					
	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92
Capital Receipts :						
Opening Balance	0.12	0.20	0.50	0.27	1.37	1.31
Loans	45.74	40.01	40.42	29.56	27.91	34.96
Grants	0.00	0.00	0.00	0.00	0.00	0.00
Sale Proceeds & Auctions	41.25	42.18	48.08	42.93	52.55	43.23
Withdrawals from Internal Resources	12.89	17.62	11.01	27.24	18.16	20.50
Miscellaneous	0.00	0.00	0.00	0.00	0.00	0.00
Total Receipts	100.00	100.00	100.00	100.00	100.00	100.00
Capital Expenditure :						
Works	63.81	62.40	75.01	74.49	74.92	79.33
Tools & Plant	0.00	0.01	0.05	0.03	0.02	0.01
Furniture, Fixtures etc.	0.03	0.04	0.04	0.14	-0.02	0.05
Suspense	5.22	1.14	-0.26	2.71	1.75	1.04
Miscellaneous	0.00	0.00	0.00	0.00	0.00	0.00
Repayment Provisions for Repayment Of Capital	30.93	36.41	25.16	22.63	23.33	19.56
Total Expenditure	100.00	100.00	100.00	100.00	100.00	100.00
Total Capital Surplus/Deficit :	-12.84	-17.51	-10.68	-26.76	-17.13	-19.78

Source : Calculated from Budget Documents of RHB.

Revenue Account, Volumes and Growth Rates
(Lucknow Development Authority)
(Rs.Million)

Item	Revenue Receipts and Expenditure		
	1989-90	1990-91	1991-92
Revenue Receipts :			
Rent	18.08	19.43	21.87
% Change		7.51	12.56
Stamp Duty	0.00	0.00	0.00
% Change		-	-
Water Charges	0.00	0.00	2.00
% Change		-	-
Interest Income	0.00	0.71	3.99
% Change		-	462.39
Income From Building Regulation Development	3.78	3.46	4.00
% Change		-8.52	15.68
Income From Sale Of Forms etc.	0.00	0.00	0.27
% Change		-	-
Cancellation Charges	0.00	0.00	0.00
% Change		-	-
Income From Hire Purchase	26.84	31.45	69.44
% Change		17.19	120.76
Other Receipts	0.00	0.00	1.08
% Change		-	-
Registration Charges	0.00	0.00	73.24
% Change		-	-
Miscellaneous	16.09	22.28	7.87
% Change		38.49	-64.70
Total Revenue Receipts	64.78	77.33	183.76
% Change		19.37	137.62
Opening Balance	1.60	8.30	1.65
% Change		419.00	-80.12
Gross Total Revenue Receipts	66.38	85.64	185.41
% Change		29.01	116.50
Transfers To Capital Account	0.00	0.00	-81.19
% Change		-	-
Net Total Revenue Receipts	66.38	85.64	104.22
% Change		29.01	21.70

(Contd..)

Revenue Account, Volumes and Growth Rates
(Lucknow Development Authority)
(Rs.Million)

Item	Revenue Receipts and Expenditure		
	1989-90	1990-91	1991-92
Revenue Expenditure :			
Wages And Salaries	28.38	51.01	50.10
% Change		79.76	-1.78
Machinery And Vehicles	4.85	5.54	4.59
% Change		14.20	-17.08
Miscellaneous Expenditure	14.56	15.92	21.55
% Change		9.39	35.35
Other Office Expenditure	-	-	0.10
% Change		-	-
Maintenance Of Buildings,Parks & Public Places	8.35	9.75	11.36
% Change		16.82	16.54
Staff Advances	1.45	1.28	1.94
% Change		-11.35	51.60
Refund Of Guarantee	0.50	0.48	10.39
% Change		-4.17	2051.35
Bank And HUDCO Charges	-	-	1.36
% Change		-	-
Total Revenue Expenditure	58.08	83.99	101.40
% Change		44.61	20.73
Gross Revenue Surplus/Deficit :	8.30	1.65	84.01
% Change		-80.12	4988.25

Source : Budget Documents of LDA.

Revenue Account, Shares of Different Items
(Lucknow Development Authority)

(Per cent)

Item	Percentage to Total Receipts/ Expenditure		
	1989-90	1990-91	1991-92
Revenue Receipts :			
Rent	27.90	25.13	11.90
Stamp Duty	0.00	0.00	0.00
Water Charges	0.00	0.00	1.09
Interest Income	0.00	0.92	2.17
Income From Building Regulation Dev.	5.83	4.47	2.18
Income From Sale Of Forms etc.,	0.00	0.00	0.14
Cancellation Charges	0.00	0.00	0.00
Income From Hire Purchase	41.43	40.67	37.79
Other Receipts	0.00	0.00	0.59
Registration Charges	0.00	0.00	39.86
Miscellaneous	24.83	28.81	4.28
Total Revenue Receipts	100.00	100.00	100.00
Revenue Expenditure :			
Wages And Salaries	48.86	60.74	49.41
Machinery And Vehicles	8.35	6.60	4.53
Miscellaneous Expenditure	25.06	18.96	21.25
Other Office Expenditure	0.00	0.00	0.10
Maintenance of Buildings, Parks & Public Places	14.37	11.61	11.21
Staff Advances	2.49	1.53	1.92
Refund Of Guarantee	0.87	0.58	10.25
Bank And HUDCO Charges	0.00	0.00	1.34
Total Revenue Expenditure	100.00	100.00	100.00
Gross Revenue Surplus/Deficit :	12.51	1.93	45.31

Source : Calculated from Budget Documents of LDA.

Capital Account, Volumes and Growth Rates
(Lucknow Development Authority)

(Rs.Million)

Item	Capital Receipts and Expenditure		
	1989-90	1990-91	1991-92
Capital Receipts :			
Sale Of Plots	316.42	237.37	152.14
% Change		-24.98	-35.91
Sale Of Buildings	203.62	185.18	301.15
% Change		-9.06	62.63
Reduction In Inventory	0.00	0.00	81.39
% Change		-	-
Sale Of Machinery And Equipment	0.00	0.00	0.00
% Change		-	-
Loan Receipts	82.79	262.44	238.30
% Change		217.01	-9.20
Repayment Of Loans	0.00	0.00	0.32
% Change		-	-
Income From Investments	5.00	23.20	18.08
% Change		363.94	-22.05
Government Grants	1.00	0.00	0.00
% Change		-	-
Income From Deposits	10.43	9.94	7.81
% Change		-4.65	-21.47
Other Income	9.78	8.16	27.08
% Change		-16.57	232.03
Remittances	0.00	5.76	5.47
% Change		-	-5.02
Total Capital Receipts	629.03	732.04	831.73
% Change		16.38	13.62
Transfers From Revenue Account	0.00	0.00	81.19
% Change		-	-
Opening Balance	13.98	58.05	128.26
% Change		315.18	120.92
Gross Total Capital Receipts	643.02	790.09	1041.17
% Change		22.87	31.78

(Contd..)

Capital Account, Volumes and Growth Rates
(Lucknow Development Authority)

(Rs.Million)

Item	Capital Receipts and Expenditure		
	1989-90	1990-91	1991-92
Capital Expenditure :			
Purchase Of Land	133.58	119.06	57.31
% Change		-10.87	-51.87
Purchase Of Machinery Equipment And Vehicles	1.34	0.00	1.44
% Change		-	-
Development Works	99.44	122.12	188.85
% Change		22.81	54.64
Construction Work	138.63	166.90	373.13
% Change		20.39	123.56
Stores (Inventory)	17.46	32.48	122.59
% Change		86.07	277.44
Advances	0.00	0.00	15.60
% Change		-	-
Repayment Of Loans	101.25	125.45	152.91
% Change		23.90	21.88
Repayment Of Interest	62.08	65.30	74.65
% Change		5.18	14.32
Repayment Of Instalments/Registration Amount As Cancellations On Surrender	9.28	8.82	6.54
% Change		-4.93	-25.90
Transfer To Funds	21.91	21.71	0.00
% Change		-0.94	-
Total Capital Expenditure	584.97	661.84	993.00
% Change		13.14	50.04
Gross Capital Surplus/Deficit :	58.05	128.26	48.17
% Change		120.95	-62.44

Source : Budget Documents of LDA.

Capital Account, Shares of Different Items
(Lucknow Development Authority)

(Per cent)

Item	Percentage to Total Receipts/ Expenditure		
	1989-90	1990-91	1991-92
Capital Receipts :			
Sale Of Plots	50.30	32.43	18.29
Sale Of Buildings	32.37	25.30	36.21
Reduction In Inventory	0.00	0.00	9.79
Sale Of Machinery And Equipment	0.00	0.00	0.00
Loan Receipts	13.16	35.85	28.65
Repayment Of Loans	0.00	0.00	0.04
Income From Investments	0.79	3.17	2.17
Government Grants	0.16	0.00	0.00
Income From Deposits	1.66	1.36	0.94
Other Income	1.55	1.11	3.26
Remittances	0.00	0.79	0.66
Total Capital Receipts	100.00	100.00	100.00
Capital Expenditure :			
Purchase Of Land	22.84	17.99	5.77
Purchase Of Machinery Equipment And Vehicles	0.23	0.00	0.15
Development Works	17.00	18.45	19.02
Construction Work	23.70	25.22	37.58
Stores (Inventory)	2.98	4.91	12.34
Advances	0.00	0.00	1.57
Repayment Of Loans	17.31	18.96	15.40
Repayment Of Interest	10.61	9.87	7.52
Repayment Of Instalments/Registration Amount As Cancellations On Surrender	1.59	1.33	0.66
Transfer To Funds	3.75	3.28	0.00
Total Capital Expenditure	100.00	100.00	100.00
Gross Capital Surplus/Deficit :	9.03	16.23	4.63

Source : Calculated from Budget Documents of LDA.

Receipts and Expenditure, Volumes and Growth Rates
(Baroda Municipal Corporation)

	Receipts and Expenditure (Rs.Million) for the Year								Average Growth Rate(%)
	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	
Receipts :									
Revenue	207.98	226.99	263.19	354.20	364.90	411.87	523.22	700.09	18.20
% Change		9.14	15.95	34.58	3.02	12.87	27.03	33.81	
Property	143.76	158.66	181.68	215.31	257.76	282.00	351.69	420.00	16.72
% Change		10.37	14.51	18.51	19.71	9.41	24.71	19.42	
Tax on Land and Buildings	40.84	43.72	38.56	80.12	65.82	64.37	107.72	165.67	20.48
% Change		7.06	-11.80	107.77	-17.85	-2.20	67.35	53.79	
Water Tax	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	(-)
% Change		-	-	-	-	-	-	-	
Water Charges	10.86	11.72	31.41	31.03	34.26	39.24	53.35	70.72	29.11
% Change		7.94	167.95	-1.22	10.41	14.54	35.95	32.58	
Metered	8.80	7.73	24.54	21.58	25.92	30.01	51.22	53.00	31.20
% Change		-12.14	217.38	-12.06	20.11	15.76	70.69	3.48	
Unmetered	2.06	3.99	6.87	9.44	8.33	9.23	2.13	17.72	16.59 *
% Change		93.83	72.12	37.53	-11.74	10.75	-76.98	734.07	
Household Servancy Tax	11.62	11.35	10.76	26.28	25.44	25.16	9.03	42.15	13.16 *
% Change		-2.31	-5.21	144.21	-3.21	-1.11	-64.11	366.88	
Drainage	11.49	11.17	10.65	25.73	25.28	24.58	8.39	41.40	12.68 *
% Change		-2.79	-4.65	141.56	-1.76	-2.78	-65.87	393.56	
Sanitation	0.08	0.14	0.07	0.12	0.09	0.13	0.02	0.15	-3.80 *
% Change		67.07	-45.99	60.81	-22.69	41.30	-82.31	552.17	
Others [Sewer Surcharge]	0.05	0.04	0.04	0.43	0.07	0.45	0.62	0.60	55.33
% Change		-4.35	-20.45	1128.57	-84.42	573.13	36.81	-2.76	
Other Taxes	0.91	1.53	0.78	1.47	-18.37	1.10	1.43	-1.45	(-)
% Change		67.58	-49.11	88.92	-1353.34	-106.01	29.53	-201.33	
Tax Receipts	19.03	24.45	20.05	23.56	38.21	20.46	56.67	30.36	10.01 *
% Change		28.44	-17.97	17.47	62.21	-46.46	177.01	-46.44	
Government Grants	23.16	27.60	39.95	64.71	76.04	71.11	90.18	113.96	25.33
% Change		19.20	44.76	61.95	17.52	-6.48	26.81	26.38	
Other Receipts	18.02	18.25	27.13	31.74	48.01	23.71	25.95	41.71	9.53 *
% Change		1.30	48.66	16.97	51.26	-50.61	9.42	60.76	
Total Receipts	268.19	297.28	350.33	474.20	527.16	527.15	696.01	886.12	18.07
% Change		10.85	17.84	35.36	11.17	0.00	32.03	27.31	

(Contd..)

Receipts and Expenditure, Volumes and Growth Rates
(Baroda Municipal Corporation)

Item	Receipts and Expenditure (Rs.Million) for the Year								Average Growth Rate(%)
	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93	
Expenditure :									
General Administration	7.39	9.16	9.34	11.78	19.32	16.36	19.27	31.28	20.98
% Change		24.05	1.93	26.11	64.07	-15.35	17.83	62.30	
Tax Collection Charges	38.27	34.69	55.60	66.26	75.37	85.02	106.97	132.00	20.55
% Change		-9.35	60.26	19.18	13.74	12.81	25.81	23.41	
Pensions and Gratuities	6.44	6.73	27.09	38.53	39.06	23.53	46.54	43.80	30.99
% Change		4.46	302.57	42.27	1.35	-39.76	97.83	-5.89	
Land Acquisition etc.	10.10	14.13	15.23	13.95	20.21	17.96	20.55	18.39	8.60
% Change		39.88	7.79	-8.44	44.92	-11.17	14.42	-10.47	
Water Storage	30.45	37.25	36.50	45.21	60.85	58.46	107.41	63.61	15.58
% Change		22.32	-2.00	23.87	34.58	-3.92	83.73	-40.78	
Conservancy	11.26	12.93	10.30	14.39	21.31	21.24	28.78	36.31	19.21
% Change		14.89	-20.38	39.78	48.04	-0.33	35.52	26.18	
Public Works	14.10	16.77	16.63	19.60	24.49	31.50	35.34	73.64	23.07
% Change		18.95	-0.82	17.82	24.98	28.60	12.19	108.39	
Roads, Pavements, Bridges etc.	16.74	17.97	14.28	18.67	28.30	29.77	28.43	24.95	9.61
% Change		7.38	-20.54	30.74	51.57	5.22	-4.52	-12.23	
Loan Charges	38.95	40.38	47.49	44.07	62.51	73.30	70.10	85.66	12.54
% Change		3.68	17.60	-7.21	41.85	17.26	-4.36	22.20	
Other Expenditures	52.42	102.72	102.19	139.43	159.97	175.23	204.43	315.13	23.53
% Change		95.97	-0.52	36.43	14.74	9.54	16.66	54.15	
Total Expenditure	226.11	292.74	334.65	411.89	511.38	532.35	667.80	824.77	19.25
% Change		29.47	14.32	23.08	24.16	4.10	25.44	23.51	
Surplus/Deficit	42.07	4.54	15.68	62.32	15.77	-5.20	28.20	61.35	16.03
% Change		-89.21	245.33	297.49	-74.69	-132.98	-642.09	117.51	

Source : Budget Documents of BMC.

Note : * denotes that the value is statistically insignificant at 5% level of significance.

: \$ denotes that the value is statistically significant at 5% level of significance.

: (-) denotes that Regression is not applicable.

Receipts and Expenditure, Shares of Different Items
(Baroda Municipal Corporation)

(Per cent)

Item	Percentage to Total Receipts/Expenditure for the Year							
	1985-86	1986-87	1987-88	1988-89	1989-90	1990-91	1991-92	1992-93
Receipts:								
Tax Revenue :	77.55	76.35	75.13	74.69	69.22	78.13	75.17	79.01
Octroi	53.60	53.37	51.86	45.41	48.90	53.50	50.53	47.40
Tax on Land and Buildings	15.23	14.71	11.01	16.89	12.49	12.21	15.48	18.70
Water Tax	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34
Water Charges	4.05	3.94	8.97	6.54	6.50	7.44	7.66	7.98
Metered	3.28	2.60	7.01	4.55	4.92	5.69	7.36	5.98
Unmetered	0.77	1.34	1.96	1.99	1.58	1.75	0.31	2.00
Conservancy Tax	4.33	3.82	3.07	5.54	4.83	4.77	1.30	4.76
Drainage	4.29	3.76	3.04	5.43	4.80	4.66	1.21	4.67
Sanitation	0.03	0.05	0.02	0.03	0.02	0.02	0.00	0.02
Others [Sewer Surcharge]	0.02	0.01	0.01	0.09	0.01	0.09	0.09	0.07
Other Taxes	0.34	0.51	0.22	0.31	-3.49	0.21	0.21	-0.16
Non Tax Receipts	7.10	8.22	5.72	4.97	7.25	3.88	8.14	3.43
Government Grants	8.63	9.28	11.40	13.65	14.42	13.49	12.96	12.86
Other Receipts	6.72	6.14	7.75	6.69	9.11	4.50	3.73	4.71
Total Receipts	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Expenditures:								
General Administration	3.27	3.13	2.79	2.86	3.78	3.07	2.89	3.79
Tax Collection Charges	16.93	11.85	16.61	16.09	14.74	15.97	16.02	16.00
Pensions and Gratuities	2.85	2.30	8.09	9.36	7.64	4.42	6.97	5.31
Land Acquisition etc.	4.47	4.83	4.55	3.39	3.95	3.37	3.08	2.23
Water Storage	13.47	12.72	10.91	10.98	11.90	10.98	16.08	7.71
Conservancy	4.98	4.42	3.08	3.49	4.17	3.99	4.31	4.40
Public Works	6.24	5.73	4.97	4.76	4.79	5.92	5.29	8.93
Roads, Pavements, Bridges etc.	7.40	6.14	4.27	4.53	5.53	5.59	4.26	3.03
Loan Charges	17.23	13.80	14.19	10.70	12.22	13.77	10.50	10.39
Other Expenditures	23.18	35.09	30.54	33.85	31.28	32.92	30.61	38.21
Total Expenditure	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Surplus/Deficit :	15.69	1.53	4.48	13.14	2.99	-0.99	4.05	6.92

Source : Calculated from Budget Documents of BMC.