

## Islamic Republic of Iran Ministry of Housing and Urban Development

**Strategies for the Housing Sector** 

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#### Glossary

Exchange Rate: 8,000 IRR/Dollar

- BH: Banque de l'Habitat
- CBI: Central Bank of Iran
- CSH: Contractual Savings for Housing
- CPI: Consumer Price Index
- DFC: Development Financial Company
- FAR: Floor-to-Area Ratio
- FYDP: Five-Year Development Plan
- FOB: Free on Board
- GPS: Global Positioning System
- GIS: Geographic Information system
- GPM: Gradual Payment Method
- GDP: Gross Domestic Product
- GNP: Gross National Product
- HF: Housing Foundation
- IKRC: Imam Khomeini Relief Committee
- LTV: Loan-to-Value Ratio
- LUFB: Law for Usury-Free Banking
- MHUD: Ministry of Housing and Urban Development
- MPO: Management and Planning Organization
- MOF: Ministry of Finance
- MOI: Ministry of Interior
- NLHO: National Land and Housing Organization
- RTO: Rent-to-Own
- RRR: Reserve Required Ratio
- SOE: State-Owned Enterprises
- SME: Small and Medium Enterprises
- TSE: Tehran Stock Exchange
- SSO: Social Security Organization
- ULDO: Urban Land Development Organizations
- ULO: Urban Land Organization

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## **Executive Summary**

## Introduction

1. The objective of this Housing Sector Strategy Report is to assist the Government of Iran in aligning its housing policy with its overall national policy of growth-led distribution. This implies directing housing policy toward enabling housing markets to meet the growing demand for housing, while targeting subsidies to those most in need of assistance. To do this, the government must develop an appropriate policy framework with a view to putting the housing sector on a sustainable, market-based path to meet pent-up demand for housing and to contribute to the new paradigm of growth-led distribution articulated in the country's Third Five Year Development Plan.

2. This study comprises five chapters. Chapter 1 presents Iran's macroeconomic circumstances and the effect its volatile oil-dependent economy has had on the housing sector. The first chapter also discusses the principal challenges posed by the housing sector, with particular reference to demographic pressures, centralized and supply-oriented housing policies, and segmented markets along income. The rest of the chapters examine policies and identify bottlenecks affecting major sectors—including land, subsidies, finance, and the construction industry. Policy recommendations are provided. Chapter 2 discusses the performance of land markets since the 1979 Revolution. Housing subsidies, a critical issue, is examined in Chapter 3. Chapter 4 takes up housing finance: the size of the mortgage market, accessibility to housing loans, and the state's approach. Finally, the construction industry—how it is organized, and the related regulatory and institutional frameworks—is described in Chapter 5.

## **Policy Issues**

3. Housing is one of the most important sectors in the Iranian economy. Over the past decade, about 40 percent of total annual investment was poured into it, generating more than 8 percent of the GDP. Although the sector represents about 12 percent of added value—much lower than the share of agriculture (15 percent) and industry (17 percent)—its economic importance is considerable given its potential for growth and its ability to create jobs and generate personal income. The housing sector employs 11.3 percent of Iran's working population.

4. An unfavorable macroeconomic context. Iran has experienced its own version of the "Dutch disease," so-called because of the experience in the Netherlands, where conditions prevented the diversification of the economy into nontraditional exports and export-substituting industries. Other symptoms of this economic ailment include unstable land and real estate markets. High and volatile inflation (49 percent in 1995–96; 12 percent in 2000–01) and low purchasing power—associated with low productivity and high unemployment rates (13.8 percent)—would be the major constraints on the housing sector.

5. Urban demographic pressures. During the early years of the Revolution, families responded to government incentives to produce more children, increasing the population growth rate from 3.1 percent in the mid-1970s to 3.7 percent in the mid-1980s. Households also responded to promises of free land and housing, causing the urban population to rise from 46 percent in the mid-1970s to 53 percent in the mid-1980s and 61.5 percent in the mid-1990s. Although these population trends have subsided (population growth rate is down to 1.4 percent), Iran has a disproportionately large cohort of young people who will be demanding jobs, housing, and other urban services within this and the next decade. Iran's housing stock of 198 units per 1,000 residents is already low by international standards.

6. *Centralized and supply-driven policies*. Decisions on supply of land, infrastructure, and housing have been highly centralized and supply driven. The housing sector has also been relying on heavy subsidies. The municipalities have not been empowered to address land supply; constrained supply of serviced land through supply-driven public land allocation policies; underdeveloped housing finance system governed through central bank credit allocation; heavy housing subsidies, most of which are poorly targeted.

7. Segmented markets. Although housing conditions have gradually improved over the past decade, a serious mismatch still exists between supply and demand. Studies of the problem paint a picture of three markets segmented by income: upper-income housing, which is supplied through wealth-driven and speculative investments; housing for middle-income/formal sector employees is secured mainly through government-subsidized programs. Lower-income groups find housing through their own efforts and incremental house construction, although the latter has been declared unauthorized as it falls outside formal plans.

8. The demand in these markets is met in different ways and to different extents. Highincome groups (the top 20 percent) reported housing expenditures of close to 40 percent of all housing expenditures by all income groups. Around 60 percent of new housing supply was affordable only by this group (accommodations with more than 100 m<sup>2</sup>). In contrast, the low-income groups (bottom 40 percent) had housing expenditures equivalent to only 20 percent of all housing expenditures and could afford only 8 percent of the units built during the Second Five-Year Development Plan (accommodations with less than  $50m^2$ ). Data also suggest that affordability has deteriorated for low-income groups.

## **Bottlenecks and Policy Recommendations**

9. The Third FYDP committed the government to important policy objectives and set out four strategic objectives to be accomplished by 2003–04:

- (i) increase the flow of long-term domestic and foreign resources for housing finance;
- (ii) promote financing for and mass production of small, affordable housing units adapted to the needs of low-income and vulnerable households;
- (iii) improve the efficiency of taxation and subsidies in the housing sector;

(iv) reduce government controls and devolve responsibilities to local authorities (provincial agencies and municipalities) for housing, urban land management (including government owned land) and promotion of rental housing and housing cooperatives.

10. A primary question is how to realize these objectives. To start, the government should develop a more coherent housing program. Overall efficiency will improve when, first, objectives and instruments are better harmonized, second, operating roles<sup>1</sup> are allocated among institutions more efficiently, and, finally, there are more incentives to leverage competition and private markets—notably to build housing units and to mobilize the capital for long-term finance.

11. To realize these objectives, Iran must institute significant reforms on institutional arrangements, the supply of land, housing finance and subsidies, and private-sector provision of housing.

#### 12. Institutional Arrangements.

- *Streamlining decision-making:* Institutional reform must encourage better and more current analyses of the housing sector and produce data in a more timely fashion. Iran needs to improve the coordinating mechanisms among the various bodies—from the Ministry of Housing and Urban Development (MHUD), Management and Planning Organization (MPO), Ministry of Finance (MOF), to Central Bank of Iran (CBI). Such improvements are strategically important for the sector.
- *Empowering and engaging local government:* The reform agenda must assist local authorities and communal associations to assume their full responsibilities through capacity building and other supportive investments.

13. *Supply of Land, Trunk Infrastructure, and Tenure Regularization.* Land has been the cornerstone of the Iran's housing policy over the past two decades. Today the primary land issues include:

- supplies are not commensurate with effective demand—public agencies are acquiring much more land than is being released, and compulsory land acquisitions in and around urban areas have allowed the state to amass vast land holdings;
- private land transactions are severely constrained;
- inelastic land supply translates into high market prices, in spite of deep subsidies in public land pricing; overall land as a proportion of housing cost is high (at around 40–50 percent);
- financing for infrastructure is constrained, further reducing supply of serviced land; and
- inflexible land use regulations prevent a timely expansion of city boundaries and redevelopment/densification of neighborhoods, further restricting private supply

<sup>&</sup>lt;sup>1</sup> These roles include: Setting social housing priorities; allocating and monitoring various housing subsidies; funding credit capital and/or interest rate subsidies; providing banking services; acting as an institutional investor; conducting building and development activities through subsidiary companies.

of land and giving rise to informal and/or illegal settlements, account around 25 percent of urban settlements.

- 14. In this context, Iran needs a land policy that will:
  - develop the regulatory environment for efficient land market operations, effective land management and transaction mechanisms, and for improved infrastructure supply;
  - reduce the market power of public land by phasing out acquisition and hoarding of residential land
  - devolve land management/allocation responsibilities to local governments;
  - regularize tenure and upgrade infrastructure in existing sub-standard settlements.

15. *Housing Subsidies*. Housing subsidies comprise a significant share of the national budget (3-6.5 percent of GDP in 2000-01).<sup>2</sup> Evidence suggests that the special groups the government has decided to assist have not benefited from the subsidies provided. In support of the government's effort to provide better-targeted subsidies, Iran needs a housing subsidies policy that will:

- *Collect better and more specific information on subsidies;* improve government accountability by measuring subsidies; review and evaluate the current programs, and consolidate them as appropriate.
- Withdraw from direct involvement in provision of housing and eliminate implicit subsidies—such as land allocations at sub-market prices, interest rate caps, and others. Institute direct and demand-side subsidies.
- *Eliminate utility subsidies* through a comprehensive national energy sector reform program, and utilizing part of the savings from reduced energy subsidies towards targeted demand side housing subsidies.

16. *Housing Finance*. Iran's small housing finance system is controlled by the public sector. The stock of long-term housing loans has been fluctuating between 2.5 percent and 3.3 percent of GDP over the past five years. Furthermore, only 40 percent of the total credit to housing is for long-term purchase finance, and 60 percent goes to long-term construction credits that usually become more risky in the absence of purchase finance.

17. In view of the major bottlenecks and given that improved macroeconomic stability is an important condition for expanding long-term finance, the government should first seek to determine when and where subsidies are needed, and then attempt to separate them from the financing. Housing credits should be extended to existing housing and rental accommodations, even if subsidy programs for targeted groups remain focused on new housing and major renovation because of the desired short-term impacts on labor and growth. It will take time to build the appropriate legal, regulatory, and financial market infrastructures required by a market-based housing finance system. Housing finance will be conditioned by the overall rate of financial liberalization. Housing production will also benefit from more efficient policies on land and other urban

<sup>&</sup>lt;sup>2</sup> The latter figure includes 3 percent for housing utility subsidies.

development issues. Otherwise, increased housing demand brought on by better financing will lead to higher rates of inflation.

18. Iran is developing new financing products; in view of their deficiencies several precautions should be taken into account when further development takes place:

- *Reduce the risk associated with loan-linked deposit products.* New loan-linked deposit products have been expanding rapidly in Iran. As presently designed, these instruments carry liquidity risks that are growing with the size of these deposit programs. These liquidity risks constitute a growing contingent liability for the government and/or the Central Bank of Iran in the medium term. A supervisory model of liquidity of each type of instrument is urgently needed.
- *Revise the current secondary-facility finance company (Metrom)<sup>3</sup> project.* The draft legislation designed to promote a secondary mortgage market carries significant risks for a market-based housing finance system in Iran. This legislation could lead to another directed-credit scheme lending below market. It is strongly recommended that alternatives to Metrom be explored in the effort to develop secondary markets. International experience teaches that secondary markets are beneficial in the long term and should be encouraged. But no meaningful short-term impact should be expected, at least in terms of expanded funding.
- *Redesign housing credit products.* In view of the prospects for continuing inflation in Iran, fixed-rate credit products carry a *de facto* subsidy indexed to inflation. Financing products must carry an inflation-risk premium. A new generation of more affordable housing credits can be designed by adjusting the credit return every three or five years to a transparent index that shows the evolution of funding costs.

19. *Housing Construction*. The construction industry in Iran is marked by the major role played by the private sector in construction and the strong government role in production, pricing, and importing of several essential materials such as steel and cement. Despite the Government involvement in some areas, the sector has the potential to grow through increased private sector participation. In particular: first, the number of construction firms, developers, and service companies is sufficient to form the basis for a competitive sector. Second laws and regulations do not inhibit entry into the sector. Third, the supply of unskilled labor is not a constraint, and finally, construction materials are available. Notwithstanding these advantages, Iran needs to exert public-sector control over the construction material industry, and institute a more favorable treatment of public and semi-public construction companies.

20. Public-sector dominance of the construction industry can be mitigated in several ways. One way would be for the government to relinquish ownership and control over construction companies; another would be to encourage banks to sell their equity interests

<sup>&</sup>lt;sup>3</sup> The Ministry of Finance and the Economy has drafted an organic law for a new secondary facility finance company: The National Corporation for the Long-Term Sale of Residential Units in Iran, known as Metrom. The new finance company would be chartered to purchase housing credits from the retail market and issue participatory papers backed by these credits to professional investors. By -laws would then follow. In terms of structure and governance, Metrom would be licensed by the CBI as a finance company with mixed public and private ownership.

in construction companies to the core private investors and to the public via listing on the Tehran Stock Exchange; *bonyad*-owned (nonprofit) construction firms would benefit from a separation of commercial and social support functions.

21. Meanwhile, the private sector's role in the construction sector needs to be supported. This requires revision of the regulations favoring the quasi-public companies, and regulations for issuing building permits; increasing the supply of serviced land; expanding insurance products; liberalizing the equipment leasing industry, increasing access to credit, upgrading the skills of workers, and encouraging banks to finance government receivables. Iran does not have an integrated building code. Construction codes need to be developed to support and encourage substitution of energy-efficient materials and appropriate technology.

## **Sequencing the Reforms**

Table EXCE-1 classifies the reforms presented above by short, medium, and long term.

|                       | Short term                                       | Medium term                    | Long term                   |
|-----------------------|--|--------------------------------|-----------------------------|
| Prerequisites to land | Decentralize land management and urban planni    | ng.                            |                             |
| reform                |  |                                |                             |
| Priorities            | Supply of land                                   |                                |                             |
| 1                     | Ensure that NLHO land acquisition does not       | Cease acquisitions by NLHO of  | NLHO should divest          |
|                       | exceed land allocation.                          | land intended for residential  | itself of all land intended |
|                       |  | use.                           | for residential use.        |
| 2                     | Rely more on market price and competition in     | Streamline procedures for      | Improve private-sector      |
|                       | allocations of public land.                      | private sector led land        | participation in            |
|                       |  | development.                   | infrastructure provision    |
|                       |  |                                | and coordinate trunk        |
|                       |  | <b>T 1 1 1 1 1</b>             | infrastructure.             |
| 3                     | Improve NLHO's monitoring of land and            | Improve land registration/land |                             |
|                       | housing prices and constraints to land supply.   | transactions services.         |                             |
|                       |  |                                |                             |
|                       |  | Restart vacant land tax,       |                             |
|                       |  | tax                            |                             |
| Δ                     | Ensure that local authorities regularize tenure  | Revise urban planning          |                             |
| т<br>                 | and guide future city development in response    | regulations to allow more      |                             |
|                       | to demand  | demand-responsive density and  |                             |
|                       |  | land use.                      |                             |
| Prerequisites to      | Reduce supply constraints, especially on service | d land.                        |                             |
| subsidies reform      | III J III III III J IIII III J IIII III J        |                                |                             |
| Priorities            | Housing subsidies                                |                                |                             |
| 1                     | Improve information collection on subsidies,     | Improve targeting of subsidies | Eliminate interest rate     |
|                       | and harmonize different subsidy programs.        | by adjusting scoring           | subsidies (depends on       |
|                       |  | mechanism.                     | housing finance             |
|                       |  |                                | reforms).                   |
| 2                     | Introduce limits on the size and cost of housing | Introduce demand-side          | Transform fully from        |
|                       | in eligibility requirements.                     | subsidies.                     | supply-side (including      |
|                       |  |                                | tax subsidies) to demand-   |
|                       |  | Eliminate general utility      | side subsidies.             |
|                       |  | subsidies.                     |                             |

#### Table EXEC-1. Proposed Sequencing of Reforms

| Prerequisites to housing | Improve macroeconomic context and deregulate credit se     | ctors                                 |                               |
|--------------------------|--|---------------------------------------|-------------------------------|
| finance reform           |  |                                       |                               |
| Priorities               | Housing finance  |                                       |                               |
| 1                        | Reduce risk associated with loan-linked deposit            | Redesign housing credit products      | Build the legal, regulatory,  |
|                          | products.  | to resist inflationary shocks.        | and financial market          |
|                          |  |                                       | infrastructure.               |
| 2                        | Explore alternatives to the proposed Metrom secondary      | Permit banks and insurance            | Sever links between           |
|                          | mortgage project.  | companies to finance land             | government and financial      |
|                          |  | acquisition and development.          | institutions and construction |
|                          |  |                                       | companies.                    |
| Prerequisites to housing | Reduce preferential treatment and access to credit by quas | si-public enterprises.                |                               |
| construction reform      |  |                                       |                               |
| Priorities               | Housing construction                                       |                                       |                               |
| 1                        | Revise regulations favoring the quasi-public companies,    | Sever the links between               |                               |
|                          | especially as regards government contracts and             | government and financial              |                               |
|                          | contractor grading.  | institutions, as those between        |                               |
|                          |  | government and construction           |                               |
|                          |  | companies.                            |                               |
| 2                        | Revise municipality regulations for building permits to    |                                       |                               |
|                          | allow for multiple-housing projects, with special          |                                       |                               |
|                          | discounts or privileges for low-income housing.            |                                       |                               |
| 3                        | Develop a framework for attracting private investors in    | Fully liberalize the equipment        | Increase timely and           |
|                          | nousing project ventures.                                  | leasing industry.                     | adequate access to credit.    |
|                          |  | Allow and encourage banks to          |                               |
|                          |  | finance government receivables.       |                               |
|                          |  | Increase insurance products at        |                               |
|                          |  | affordable prices.                    |                               |
| 4                        | Revise building codes and standards in publicly funded     | Promote substitution of energy-       | Standardize building          |
|                          | housing projects to allow for substitution of energy-      | efficient materials in place of steel | components in a voluntary     |
|                          | efficient materials and appropriate technology             | and cement without compromising       | way.                          |
|                          | techniques.  | safety.                               |                               |

# 1 The Housing Sector in Iran and Its Place in the Macro-economy

## **1. Introduction**

22. Housing is one of the most important economic sectors in Iran. Over the past decade, about 40 percent of total annual investment was poured into this sector, and it generated more than 8 percent of GDP. Although the housing sector represents about 12 percent of added value—much lower than the share of agriculture (15 percent) and industry (17 percent)—it holds an important place in, <sup>4</sup>because of its potential for growth and for its ability to generate both jobs and income. The sector currently employs 11.3 percent of the working population in the country. As a labor-intensive activity where about 40 percent of those employed are 15 to 29 years old, meeting the demand for housing can also help to address the current unemployment problem (13.8 percent by the end of 2001), particularly among the young and the unskilled, and address the regional imbalances.<sup>5</sup>

23. The housing sector has a prominent role in the current Third Five-Year Development Plan (FYDP) (1999–00 to 2003–04). It aims to alleviate poverty with empowerment initiatives, including the creation of jobs, improved access to education and health care, and a social safety net for those most in need of government assistance. The plan has set a goal of cutting the percentage of poor households to 7 percent from its current level of 15 percent; annual job creation is set at an ambitious 765,000 jobs. As a labor-intensive economic sector linked to a number of other sectors (and as a major consumer of intermediate materials), the housing sector is ideally placed for assuming such prominence. Indeed, given the present unemployment levels (13.8 percent at the end of 2001) and the corollary need to create jobs for the baby-boom generation coming of age, housing could become one of Iran's key engines of economic growth.

24. But significant impediments to such growth remain. Iran still relies on overly centralized planning.<sup>6</sup> The country's institutional and regulatory environment (a combination of directed credit and excessive public-sector involvement) has weakened local capacity to address rapid urbanization and an underdeveloped housing-finance sector overall. But Iran has made good progress with a series of structural reforms put into place after oil prices fell in the mid-1990s. Some reforms modified subsidies and tax incentives to the housing sector, as the government lowered its profile in the direct supply of housing. In order to meet the high employment targets, the current FYDP further commits the government to a series of fiscal and structural reforms and sets challenging

<sup>&</sup>lt;sup>4</sup> Figures correspond to building construction and include both residential and nonresidential activities. Ratios were calculated using the *Iran Statistical Yearbook 1379* (March 2000–March 2001), Tehran: Statistical Center of Iran, 2001.

<sup>&</sup>lt;sup>5</sup> Regional social imbalances can be described in terms of employment and housing conditions. For a classification of the provinces by housing and by employment conditions, see Minoo Rafiei, "Housing, Employment and Sustainable Development," BHE, Tehran: Bureau of Housing Planning and Economics, NLHO, October 2001.

<sup>&</sup>lt;sup>6</sup> The current economic structure of Iran emerges from a complex and highly regulated planned model based on oil revenues.

housing targets by 2003–04. But in spite of significant housing gains over the past ten years, the government will likely have a difficult time meeting the Third FYDP targets. Several factors are responsible: first, there is a continued dependence on oil; second, the unification of the rial is worsening prospects for inflation; third, falling levels of personal income and highly skewed income distribution; four, persistent macroeconomic instability, which creates a volatile supply of private housing; and, finally, a weak fiscal base, which hinders the government's ability to target programs and subsidies.

25. The objective of this chapter is to understand the housing sector's impact on the *real* side of the economy, by establishing linkages with other sectors, and by establishing the contribution of the housing sector, in particular, concerning the distributional impacts of reform. While the emphasis in this chapter is on the economic relevance of developments in the housing sector (i.e., in terms of employment, output, investment, prices), this cannot be achieved without a basic understanding of the nature of housing markets in Iran. Section 2 presents the objectives of the Third Housing Development Plan. Section 3 analyzes the housing's sector impact on the real side of the economy by establishing the links with other sectors and the multiplier effects. Section 4 comprises a short discussion of housing markets in Iran, including the country's macroeconomic circumstances. The last section reviews the impact of subsidy reduction on the affordability of housing, by income decile and draws some conclusions.

## 2. The Current Government Strategy

26. The Third Housing Development Plan committed the government to important policy objectives. It sets out four strategic objectives to be accomplished by 2003–04:

- increased flow of long-term domestic and foreign resources for housing finance in tandem with the adoption of adequate building technologies and the development of a professional and efficient construction industry;
- better financing for and mass production of small housing units adapted to the needs and affordability of low-income and vulnerable households in urban and rural areas;
- more efficient taxation and subsidies in the housing sector and improved housing insurance;
- reduced government controls and devolution of responsibilities to local authorities (provincial agencies and municipalities) for housing, urban land management (including government-owned land), and the promotion of rental housing and housing cooperatives.

27. A primary question, of course, is how to realize these objectives. In Iran, the average built area per housing unit decreased from 149  $n^2$  in 1986 to 124  $n^2$  in 1997. The country therefore needs to produce smaller accommodations and reduce household density to 1.12. The housing plan is moving in this direction by removing most controls from land markets and freeing financial markets for housing finance (i.e., the most recent

Commercial Bank Act). The plan envisions a total of IRR 142,060 million (in 1999–2000 prices) in government and private investment from 1999/00 to 2003/04.

28. As with the Second FYDP, the Third plan supports mass production of housing by allocating to developers a large share of banking facilities in housing and construction sectors. The objective is for developers to build almost half the 3.1 million new housing units in the period 2000–04, 69 percent of which are to be erected in urban areas. So far, if one counts the number of dwellings, Iran is meeting its annual targets for 1999/00–2001/02; but only around half of Iran's "social" (less than 50 n<sup>2</sup>) and "supported" units have been built. The current housing plan is summarized in Table 1-1.

| Housing supply   | Base year | Budget  | Total year |         |         |         |           |  |
|--|-----------|---------|------------|---------|---------|---------|-----------|--|
| (equivalent thousand units)  | 1998–99   | 1999–00 | 2000-01    | 2001-02 | 2002–03 | 2003–04 | 1999–2004 |  |
| Total units  | 464       | 510     | 560        | 620     | 680     | 744     | 3,114     |  |
| Housing units = 100 sq. m./unit  | 122       | 146     | 175        | 211     | 250     | 292     | 1,074     |  |
| Urban rent-to-own units built  | 41.4      | 54.4    | 64.6       | 77.4    | 91.2    | 106.8   | 393.6     |  |
| Units built for Sale   | 36.5      | 47.6    | 60.8       | 77.4    | 100.8   | 127.2   | 413.8     |  |
| Investment—(RI b)  |           |         |            |         |         |         |           |  |
| Total (constant prices)  | 21,180    | 23,580  | 25,840     | 28,360  | 30,940  | 33,400  | 142,060   |  |
| Total (current Prices)   | 2,180     | 26,407  | 35,478     | 43,277  | 51,546  | 59,879  | 216,587   |  |
| GDP (current prices) IRR b   |           |         | 582,050    |         |         |         |           |  |
| Totals may not add up due to rounding.   |           |         |            |         |         |         |           |  |
| Source: Third Housing Development Plan, Tehran: Ministry of Housing and Urban Development, 1999. |           |         |            |         |         |         |           |  |

 Table 1-1. Housing Supply for the Third Five - Year Development Plan

## **3.** The Housing Sector's Impact on the Real Economy

29. The housing sector in Iran is seen as one of the engines for economic growth, and as such, key assumptions have been built into the Third FYDP. With a view to providing smaller accommodations (built area of housing unit decreased from 149 sq m in 1986 to 124 sq m in 1997) and reducing the household density to 1.12, the housing plan aims at removing most controls from land markets and freeing financial markets for housing finance (i.e., recent Commercial Bank Act). This plan has been the focus of much evaluation by Iranian experts—only the most important features of the plan are discussed here. An outline of the plan is presented in Annex 1.4.

30. The current plan envisages a total of about IRR 142,060 million (in 1999–2000 prices) of government and private investment from 1999–00 to 2003–04.<sup>7</sup> Like the

<sup>&</sup>lt;sup>7</sup> This investment must be accompanied by increased governmental credits to the sector. A study has found that if one rial is added to governmental credits for the private sector, the private sector will increase its investment in housing by 0.0814 rials (i.e., an increase of 12 rials to credits will result in one rial worth of increased investment by the private sector). See Mansour Khalili Araghi, *The Effects of Credit Policies on the Housing Sector with a Look at the Supply Side, BHE,* Tehran: Bureau of Housing Planning and Economics, NHLO, 2001

Second FYDP, it supports mass-housing production by allocating a large share of banking facilities in housing and construction sectors to developers. The objective is to have almost half the 3.1 million new housing units in the period 2000–2004 built by the developers, 69 percent of which are to be in urban areas.

31. This proposal raises several important economic issues. First, is it wise to devote immense resources to housing in order to stimulate the economy? Second, will the housing program have significant effects on income and employment? Third, will increased imports of construction materials have important negative effects? Fourth, is the program likely to deliver distributional impacts of policy reforms? As for the first question, it appears that, yes, assigning such large resources to the housing sector is indeed justifiable; the impact on the economy may well be significant. Second, the housing sector may be capable of generating important increases in income and employment, particularly for unskilled workers, who have relatively low incomes. These effects are due mainly to the linkages of housing with other sectors and, to a lesser extent, to multiplier effects. Supporting arguments, along with possible constraints that may hinder economic benefits to the neediest households, are presented below.

32. Iran has a demonstrable need for increased flows of annual housing at the low end of the income distribution. But far fewer "social" housing units were built during the Second FYDP and the first three years of the Third FYDP, especially in comparison with the goals in the original plan. Moreover, the private sector built more "free" housing, by definition for the high-income groups. In addition, the construction sector enjoys excess capacity, and the main construction materials used in housing are readily available. Since the private sector is sufficiently mature, it is quite likely that if private developers were granted timely and adequate access to long-term credit, the industry would become more responsive to the housing needs of the poor, including rental accommodations. Finally, the Third FYDP follows the trends set out in the previous plan concerning number of units and public/private participation. So its implementation will likely suffer no loss of time and thus no substantial delays in the delivery of the benefits.

#### 3.1. Linkages with Other Sectors: Income and Employment Effects

33. The housing sector is very important to the economy partly because of the high level of interdependence with other sectors. Recent studies show that the backward linkage coefficient between housing and industry has increased from 0.37139 in 1986–87 to 0.45714 in 1991–92.<sup>8</sup> This means that the amount of goods and services the housing sector requires to produce the same output has increased, mainly because of altered construction patterns and technologies.<sup>9</sup>

34. The extent of backward and forward linkages between housing and other sectors is shown in Annex 1.5. The production of one unit of output in housing requires 0.06276

<sup>&</sup>lt;sup>8</sup> Mansour Khalili Eraghi, "The plan of economic analysis of investment in housing sector," BHE, Tehran: Bureau of Housing Planning and Economics, NLHO, 1378 (1999).

<sup>&</sup>lt;sup>9</sup>According to 1991 official statistics, 85 percent of total housing was built of steel, concrete, brick and mortar, a significant increase from 65 percent in 1986. In so far as durable buildings use to a greater extent industrial materials, it is expected that backward linkages between housing and industry would be stronger.

(forward linkage) and 0.86175 (backward linkage) production in other sectors. A study<sup>10</sup> of the 1991–92 input-output table for 78 subsectors ranked the housing sector at 27 and 58, respectively, in backward and forward linkages, and at 32 in net linkage (net coefficient equals 0.462688). This means that the production of each unit of output in the housing sector requires a total intermediate consumption of 0,462688 and generates 0.537312 units of value added.<sup>11</sup> In addition, 10.8 percent of total housing demand is in the form of intermediate demand and 89.1 percent is in the form of final demand for finished goods.<sup>12</sup>

35. Translating the above coefficients into estimates of actual national income during the Third FYDP shows that housing, a labor-intensive sector with significant forward linkages to other economic sectors, has an important role to play in increasing both employment<sup>13</sup> and overall national income. It has been well established that, in general terms, housing generates more employment per unit of output than does construction as a whole, because housing construction is more labor-intensive than other types of construction.<sup>14</sup> Iran has assumed a total of IRR 142,060 billion investment from 1998–99 to 2003–04 to meet final demand for housing in these years (Table 1-1). In this case, an additional IRR 122,430 billion worth of output from other economic sectors will be generated. This corresponds to an additional IRR 122,420 billion <sup>15</sup> and IRR 8,916 billion <sup>16</sup> worth of output from other economic sectors originating from backward and forward linkages, respectively, with the housing sector.

#### **3.2. Import Effects**

36. As mentioned above, production of one unit of output in housing requires 0.06276 (forward linkage) and 0.86175 (backward linkage) production in other sectors (Annex 1.5). A comparison of these coefficients with those for domestic backward linkages (0.710084) and domestic forward linkages (0.07281)<sup>17</sup> shows the small share of imported products used in the housing sector. Thus, the additional input required to generate one unit of output in housing is most likely all domestic, and as a result IRR 21,567 billion out of the IRR 122,430 billion of additional output generated in other sectors will be in the form of imports. The small generation of imports will proceed from multiplier effects that stimulate demand outside the housing sector.

37. This conclusion rests on the fact that most construction materials Iran requires are domestically produced, and that the few imported electronic materials represent a

<sup>&</sup>lt;sup>10</sup> Mansour Khalili Eraghi, 1999.

<sup>&</sup>lt;sup>11</sup> Of total 1991 housing sector output of IRR 3,450 billion, IRR 1,596 billion were in intermediate materials, IRR 596 billion in labor costs, IRR 1,179 billion in operational surplus and IRR 77.7 billion as tax.

<sup>&</sup>lt;sup>12</sup>Of the 1991 housing sector output of IRR 3,450 billion, IRR 376 billion were in the form of intermediate demand, IRR 3,054 billion in the form of final consumption demand of households and IRR 22 billion in the form household investment.

investment. <sup>13</sup> The inverted Input -Output table shows all direct and indirect employment effects of production changes in all sectors of the economy.

<sup>&</sup>lt;sup>14</sup> Edwin S Mills, *Macroeconomic Aspects of Proposed Chilean Housing Assistance*, Washington, D.C.: World Bank, 1983.

<sup>&</sup>lt;sup>15</sup> Estimated as 142,060 times 0.86175 (Annex 5).

<sup>&</sup>lt;sup>16</sup> Estimated as 142,060 times 0.06276 (Annex 5).

<sup>&</sup>lt;sup>17</sup> Mansour Khalili Eraghi, 1999.

negligible percentage of housing construction costs in Iran, particularly of low-income housing. Should this assumption be incorrect, and the Third FYDP were greatly to stimulate imports, the domestic multiplier effects will not materialize and the program will not be entirely desirable—unless, that is, foreign earnings increase exports.

#### **3.3.** Multiplier Effects: Income and Employment Effects

38. The construction sector is the third sector after agriculture and manufacturing, in terms of employment. According to the 1996–97 census, there are 14.57 million persons employed in Iran, of which 1.65 million are employed in the construction sector. Estimates for 2000-01 show that 19.61 percent of all those employed work in manufacturing, 25.62 percent in agriculture, and 10.25 percent in construction. Direct employment by the housing sector is estimated at about  $54^{\circ}$  percent<sup>18</sup> of all employment in the construction sector.

39. As with the construction sector, the labor-intense housing sector has a high potential for job creation; its share of total employment in the country, its high elasticity of production, and its high potential for growth are other positive features. Recent studies<sup>19</sup> on the job- creation potential of the construction sector have estimated the production elasticity of employment to be 87 percent. Thus, expansion and contraction of activity in the construction sector will lead to a rapidly increased and decreased employment in the sector. This is partly the result of a flexible employment structure that relies on shortterm labor contracts, often based on daily wages. This suggests that if existing obstacles for investment and production are removed (for example, laws/regulations restricting investment), then increased production will result in increased employment

40. A detailed study of 78 subsectors<sup>20</sup> places the housing sector at seventh in potential employment generation. In 1988–89, this sector, with an employment multiplier coefficient of 4.26, generated a total of 714 new jobs (575 direct jobs and 139 indirect) for each IRR 1 billion of additional final demand.<sup>21</sup> Based on this, the potential for job creation by the housing sector for the Third FYDP (1999/00–2003/04) was estimated as 502,500 jobs (404,300 direct jobs and 98,200 indirect jobs) as shown in Table 1-2.<sup>22</sup> Using a GDP multiplier of 3.13, typical of other countries with excess capacity, <sup>23</sup> we can see that this kind of investment in the housing sector will raise GDP by more than 1 percent.

<sup>&</sup>lt;sup>18</sup> Calculated from 0.89 million in 1997–98 in housing and 1.65 million in construction (1996–97 census data). Employment in residential and non-residential building construction is 87 percent of employment in construction sector (see G. Farjadi, "An analysis of the job creation potential in the construction sector," BHE, Tehran: Bureau of Housing Planning and Economics, NLHO, December 2001").

<sup>&</sup>lt;sup>19</sup> G. Farjadi, 2001.

<sup>&</sup>lt;sup>20</sup> Pejman Sourshejani Samani, "Determining the key sector of the Iranian economy (using the input-output table)," Plan and Budget Journal, no.36, 1378 (1999):12-24.

<sup>&</sup>lt;sup>21</sup> Mansour Khalili Eraghi, 1999.

<sup>&</sup>lt;sup>22</sup> Assuming annual population growth of 1.65 percent and average unemployment in 1999–00-2003–04 of 13–15.1

percent.<sup>23</sup> Edwin S. Mills, *Macroeconomic Aspects of Proposed Chilean Housing Assistance* (Washington, D.C.: World Bank, 1983).

|            |            | Year                                       | 1997–<br>98 | 1998–<br>99 | 1999–<br>2000 | 2000–<br>01 | 2001–<br>02 | 2002–<br>03 | 2003–<br>04 | 2004–<br>05 |
|------------|------------|--|-------------|-------------|---------------|-------------|-------------|-------------|-------------|-------------|
| Housing    | Production | Urban (1000)                               | 283         | 286         | 304           | 340         | 380         | 430         | 480         | 530         |
|            |            | Rural (1000)                               | 141         | 143         | 152           | 170         | 180         | 190         | 200         | 214         |
|            |            | Investment (RI<br>billion), 1999<br>prices | -           | -           | 21,180        | 23,580      | 25,840      | 28,360      | 30,940      | 33,340      |
| Cumulative | Urban      | Direct (1000)                              | 691         | 709.5       | 724.9         | 797.7       | 789.2       | 868.3       | 950.8       | 1019.2      |
| employment |            | Indirect (1000)                            | 167.9       | 172.4       | 176.2         | 193.8       | 191.8       | 211.0       | 231         | 247.7       |
|            | Rural      | Direct (1000)                              | 203.4       | 206.3       | 219.2         | 245.5       | 256.2       | 277.7       | 300         | 329.2       |
|            |            | Indirect (1000)                            | 49.4        | 50.1        | 53.3          | 59.6        | 62.2        | 67.5        | 72.9        | 80          |
|            | Total      | Direct (1000)                              | 894.4       | 915.8       | 944.1         | 1042.9      | 1045.4      | 1146        | 1250.8      | 1348.4      |
|            |            | Indirect (1000)                            | 217.3       | 222.5       | 229.5         | 253.4       | 254         | 278.5       | 303.9       | 327.7       |
|            |            | Direct and<br>indirect (million)           | 1.11        | 1.14        | 1.17          | 1.29        | 1.30        | 1.42        | 1.55        | 1.68        |

Table 1-2. Estimate of Cumulative Employment Generated by the Housing Sector

*Source*: Mansour Khalili Eraghi, "The plan of economic analysis of investment in housing sector," Bureau of Housing Planning and Economics, NLHO, 1378 (1999).

 Table 1-3.
 Employment Generation Assumed in the Third FYDP

| Year   | New direct<br>employment  | New indirect<br>employment | Total<br>employment | New housing (million m <sup>2</sup> ) |  |  |  |  |  |
|--|---|----------------------------|---------------------|---------------------------------------|--|--|--|--|--|
| 1999–00  | 78,900  | 18,500                     | 97,400              | 5                                     |  |  |  |  |  |
| 2000-01  | 98,000  | 24,000                     | 122,000             | 4.7                                   |  |  |  |  |  |
| 2001–02  | 109,000   | 26,000                     | 135,000             | 5.3                                   |  |  |  |  |  |
| 2002–03  | 112,000   | 28,000                     | 140,000             | 5.4                                   |  |  |  |  |  |
| 2003–04  | 104,000   | 25,000                     | 129,000             | 5.1                                   |  |  |  |  |  |
| 1999–00 to 2003–04   | 501,900   | 121,500                    | 623,400             | 25.5                                  |  |  |  |  |  |
| Note: These estimates are over table.  | Note: These estimates are overestimated because these were prepared used the outdated 1988 Input -Output table.   |                            |                     |                                       |  |  |  |  |  |
| <i>Source</i> : Base-year figure<br>figures were estimated u<br>construction sector," BH<br>December 2001. | <i>Source</i> : Base-year figures are from the Bureau of Housing Planning and Economy. Other figures were estimated using, G. Farjadi, "An analysis of the job creation potential in the construction sector," BHE, Tehran: Bureau of Housing Planning and Economics, NLHO, Desember 2001 |                            |                     |                                       |  |  |  |  |  |

41. A more current estimate,<sup>24</sup> shown in Table 1-3, indicates that total employment generated by the housing sector during the Third FYDP may be slightly higher, indeed, as

 $<sup>^{24}</sup>$  New direct and indirect employment generated is estimated using figures for new housing production and investment shown in Table 1.14, employment multiplier coefficients for 1989/80, and average floor areas per housing unit of 100 m<sup>2</sup> as shown in Table 1.24. According to statistics published by the central bank of Iran, the house price index in 1999– 2000 was 13.24 times higher than in 1988–89. Thus, assuming the relationship between housing price and investment is unchanged, and IRR 1 billion final demand in housing sector in 1999–00, the employment generated would be 44.7 (direct) and 10.5 (indirect), resulting in an employment multiplier coefficient of 4.25.

high as 623,400 jobs (501,900 direct and 121,500 indirect jobs),<sup>25</sup> or 16 percent of the estimated jobs to be generated economy-wide (3.8m). Thus, the housing sector may help to address Iran's growing unemployment problem, which some estimates say will reach 24 percent by 2011 if the current policies fail to deliver.<sup>26</sup> Indeed, forecasting undertaken for the Third FYDP shows that each year (1999–00 to 2003–04), on average, 676,000 people have sought entrance into the job market.

42. The extent of additional direct or indirect income from housing activities, and how these will affect additional consumption spending, is uncertain. Some additional income will be paid as taxes, and some will be saved, depending on the savings propensities of those involved and their tax rates. As the housing sector employs low-income and unskilled workers, it can be assumed that their spending will reflect their means and therefore it will trickle down into the same income group. As a result, multiplier effects may be large should employment generation take place among the low-income groups; recall too that low-income groups have higher propensities to consume and lower tax rates than high- income workers.

#### 3.4. Savings—Housing as an Asset with Particular Focus on the Poor

43. In the past, inflation and the presence of an underdeveloped finance sector made housing the preferred asset for accumulation of household wealth. Investments in housing would preserve, to some extent, the real value of savings. This gave rise to the speculative nature of the housing market, which has reinforced its market relation to assets such as gold, foreign exchange, and stocks. Indeed, econometric studies have found a link between price expectation in the housing market (and its results on housing demand) and the price expectation in the foreign exchange market.<sup>27</sup> The relationship between housing markets and the Tehran stock exchange is less pronounced, owing mainly to the fact that the stock exchange initiated operations in 1990–91.

44. Thus, tight foreign exchange controls, implemented in 1995–96, led investors to the housing market. Housing prices increased 28 percent and then 35 percent (Table 1-4). The average price of a residential unit in Tehran grew by 58 percent and 47 percent respectively. Total urban housing investment increased from IRR 14,000 billion in 1994–95 to IRR 16,000 and IRR 39,000 billion in the following years. On average, increases in house construction costs from 1996 to 2001 are around 46 percent; price increases for land are about 58 percent. In large cities like Tehran, land prices increased 55 percent while infrastructure costs increased 28 percent<sup>28</sup>.

<sup>&</sup>lt;sup>25</sup> This estimate relied on Farjadi, "Analysis of job creation," cited above, which used the 1988 Input-Output table. The use of these outdated coefficients would overestimate the employment generation today.

<sup>&</sup>lt;sup>26</sup> Masoud Nili, "Iranian economic development outlook," *Budget and Planning Journal*, nos. 34 and 35, 1377 (1998–99).

<sup>&</sup>lt;sup>27</sup>. Fardin Yazdani, "A review on the efficiency of market performance in urban areas," *BHE*, *Tehran:* Bureau of housing planning and economics, NLHO, 1380 (2001).

<sup>&</sup>lt;sup>28</sup> Report on the Activities of Housing Construction in Urban Areas of the Country, 1991–2000, Tehran: Central Bank of Islamic Republic of Iran, 2001

45. Studies of household's savings by income deciles were carried out in the cities of Esfahan and Tehran during 1995 and 1997 respectively (see Table 1-4); low-income households save only 5 percent of their annual income, while middle-income households save up to 34 percent of their annual income (estimate for the fifth decile). Similarly, households with the lowest incomes tend to invest in dwellings with purchase values of up to 66 percent of their annual income; households with the highest incomes tend to invest in dwellings with purchase values up to three times their annual income. Thus, for low-income households, the purchase of a home is the only possible vehicle for wealth accumulation. This is getting increasingly more difficult over time because of the overall deterioration in the savings rate since 1992–93 (Table 1-5).

| Esfahan (1995)                  |  |                                   |                                 |                                  |                                  | Tehran (1997)       |                            |  |                             |                           |                              |
|---------------------------------|--|-----------------------------------|---------------------------------|----------------------------------|----------------------------------|---------------------|----------------------------|--|-----------------------------|---------------------------|------------------------------|
| Decile <sup>a</sup>             | Annual<br>income<br>(RI m)                       | Saving<br>and<br>assets<br>(RI m) | Housing<br>investment<br>(RI m) | Savings<br>and assets/<br>Income | Housing<br>investment/<br>income | Decile <sup>1</sup> | Annual<br>income<br>(RI m) | Dwelling<br>present<br>value (RI<br>m) | Annual<br>savings<br>(RI m) | Savings/<br>income<br>(%) | Dwelling<br>value/<br>income |
| Q1                              | 3.0  | 1.98                              | 1.98                            | 0.66                             | 0.66                             |                     |                            |  |                             |                           |                              |
| Q2                              | 5.5  | 6.6                               | 6.6                             | 1.2                              | 1.2                              | Q2                  | 5.2                        | 15                                     | 0.26                        | 5                         | 2.88                         |
| Q3                              | 9.8  | 19.6                              | 16.66                           | 2                                | 1.7                              | Q3                  | 8.2                        | 37                                     | 1.31                        | 16                        | 4.51                         |
|                                 |  |                                   |                                 |                                  |                                  | Q4                  | 11.2                       | 44                                     | 2.69                        | 24                        | 3.93                         |
|                                 |  |                                   |                                 |                                  |                                  | Q5                  | 14.2                       | 103                                    | 4.87                        | 34                        | 7.25                         |
| Q6                              | 15.6   | 40.56                             | 30.42                           | 2.6                              | 1.95                             |                     |                            |  |                             |                           |                              |
| Q10                             | 32.3   | 96.9                              | 62.98                           | 3                                | 1.95                             |                     |                            |  |                             |                           |                              |
| a. Based o<br><i>Note</i> : Res | L Based on 2001 average annual income by decile. |                                   |                                 |                                  |                                  |                     |                            |  |                             |                           |                              |

 Table 1-4. Savings and Investment in Housing by Income Decile (1995 and 1997)

Source: Naghsheh Jahan Counsultancy Engineers, Comprehensive Project of Sepahan Shahr, Tehran: 1995, and Sharmand Consulting Engineers, Feasibility of the Housing Construction Implementation in Pakdasht, Tehran: 1997.

46. Estimated household savings from 1992 to 2001 by income decile (in 1992–93 prices)<sup>29</sup> are displayed in Table 1-5, which also shows the real reduction in savings over this period for all income groups. This has resulted in a reduction in the rate of homeownership for all income groups and in particular for the lowest decile, for which the ownership rate fell by 3 percent.

47. It appears that this speculative activity might decline in the short term, when inflation rises (Annex 1.6). With rising inflation will come some degree of instability in foreign exchange, which may in turn create economic volatility—which in turn may affect housing demand among high-income groups, as their speculative preference might

<sup>&</sup>lt;sup>29</sup> Assuming that the average tendency to save follows the Gompertz function (i.e., savings of the lowest decile must be minimum 1 percent (for the low-income groups), 22 percent (for the middle-income groups), maximum 40 percent (for the high-income groups) and on average 18.5 percent. The results are derived using the equation S=K\*A^b^y, where S is the tendency to save; K is savings ceiling (i.e., 40 percent for the high-income groups); y is income and A and b are constants.

shift to foreign exchange. Studies<sup>30</sup> of the incentives affecting housing demand have shown that more than 70 percent of housing demand among households in mid- and highincome groups originates in the desire to accumulate and protect wealth *in the form of housing*. Rising inflation will also affect housing demand by the low-income groups because their consumption will increase in response to inflationary pressures, leaving even less spending power for housing. Evidence indeed suggests that low-income groups finance their consumption needs during inflationary periods through the sale of housing.<sup>31</sup>

| Decile  |                     | 1992–<br>RI n       | -93<br>n             | 2000–01<br>RI m |                     |                     |                      | 2000-<br>01   | 1992–93<br>Home              | 2000–01<br>Home |           |
|---------|---------------------|---------------------|----------------------|-----------------|---------------------|---------------------|----------------------|---------------|------------------------------|-----------------|-----------|
|         | Average expenditure | Housing expenditure | Other<br>expenditure | Savings         | Average expenditure | Housing expenditure | Other<br>expenditure | Savings       | Annual<br>savings<br>(1992/3 | (percent)       | (percent) |
|         |                     |                     |                      |                 |                     |                     |                      |               | prices)<br>IRR m             |                 |           |
| 1       | 0.72                | 0.3                 | 0.4                  | 0.05            | 4.9                 | 2.2                 | 2.7                  | 0.04          | 0.006                        | 60              | 57        |
| 2       | 1.3                 | 0.49                | 1.23                 | 0.7             | 8.7                 | 3.5                 | 5.2                  | 2.3           | 0.39                         | 63              | 61        |
| 3       | 1.8                 | 0.66                | 1.14                 | 1.7             | 11.4                | 4.4                 | 7                    | 5             | 0.28                         | 71              | 69        |
| 4       | 2.2                 | 0.8                 | 1.4                  | 3.2             | 14                  | 5.1                 | 8.9                  | 9.4           | 1.6                          | 72              | 70        |
| 5       | 2.7                 | 1                   | 1.7                  | 6.1             | 16.6                | 5.8                 | 10.8                 | 25.3          | 4.4                          | 73              | 73        |
| 6       | 3.2                 | 1.1                 | 2.1                  | 9               | 19.5                | 6.5                 | 13                   | 33.1          | 5.6                          | 73              | 74        |
| 7       | 4                   | 1.4                 | 2.6                  | 19.6            | 23.3                | 7.7                 | 15.6                 | 53.6          | 9.2                          | 75              | 74.5      |
| 8       | 4.9                 | 1.7                 | 3.2                  | 27.6            | 28.5                | 9.1                 | 19.4                 | 94.2          | 16.2                         | 76              | 75        |
| 9       | 12.1                | 3.4                 | 8.7                  | 112.9           | 37.4                | 11                  | 26.4                 | 216.9         | 19.4                         | 80              | 79        |
| 10      | 13.2                | 3.5                 | 9.7                  | 124.9           | 74.5                | 17.2                | 57.3                 | 686.6         | 119                          | 81              | 80        |
| Source: | Statistics on th    | e expenditure o     | und income of th     | he urban ha     | ouseholds in the    | country, 1992-      | -2000, Tehran:       | Statistical C | Center of Ira                | an, 2001. Als   | o World   |

Table 1-5. Changes in Savings and Housing Ownership of Urban Households from 1992 to 2001

*Source: Statistics on the expenditure and income of the urban households in the country, 1992–2000*, Tehran: Statistical Center of Iran, 2001. Also Worl Bank estimates based on consultants' reports.

#### **3.5.** The Housing Sector and the Distributional Effects of Reform

48. Income and employment multiplier effects, in addition to forward and backward linkages, suggest that Iran may be justified in assigning such resources to the housing sector and that the impact on the real economy may be significant. The housing sector may be capable of generating income and employment, mainly for the unskilled who receive relatively low incomes. In particular, there is a case for a stronger emphasis on low-income accommodation. The social need is great and the negative effects of imports would be minimized. For the housing potential to materialize, however, the regional differences in terms of real capacity of housing production must be taken into account and a careful assessment of the current constraints and future potential (particularly financing for supply and demand) must be carried out at the regional level. For example, during the past five years Tehran built an average of around 75,000 units per year.

<sup>&</sup>lt;sup>30</sup> Ali Akbar Gholi Zadeh, "Demands for housing asset," *Journal of Planning and Budget*, Tehran: 1999–2000.

<sup>&</sup>lt;sup>31</sup> Following the increase in inflation in 1994–95, households in Tehran sold or traded down their homes for cheaper alternatives and spent the surplus income on consumption needs (Naghsh Jahan Pars Consulting Engineers, Tehran Municipalities, Project of Organizing the South of Tehran, Tehran: 1998).

Khouzestan built only 7,000 units per year, and many other less populated provinces built fewer than 5,000 units per year.

49. As noted before, based on the estimation of income and employment multiplier effects and forward and backward linkages, the investment assumed between 1998 and 2004 to meet final demand for housing in these years, will generate an additional IRR 122,430 billion worth of output from other economic sectors, create 623,400 jobs, and raise GDP by more than 1 percent.<sup>32</sup> It is uncertain to what extent additional direct or indirect income from housing activities will result in additional consumption spending. Insofar as employment is generated mostly in the low-income groups (which have higher propensities to consume and lower tax rates to pay than high-income workers), we shall assumed a large multiplier effect. It appears that the restricted availability of affordable housing for low-income groups may result in this group losing out on housing wealth; with gains accrued mostly among the relatively high income groups. Therefore, the distributional impacts of reform, as far as the low-income groups are concerned, may be largely restricted to increased employment.<sup>33</sup>

50. Although the plan does not break down the new supply of housing by income group, as a rough approximation it can be assumed that social units (of less than 50 n<sup>2</sup>) will target low-income groups, supported units will target the middle-income groups, and the high-income groups will have access to free units, namely, those built by the private sector. If this is the case, then analysis of the reported figures for the first three years of the plan suggests that the overall targets for new housing units built has been met. The social housing share, however, is only 7–9 percent of the units built; the target was 13–18 percent. Supported housing turned in a similar performance; more private-sector free houses have been built than were budgeted.

51. So the restricted availability of affordable housing for the poor may produce even fewer opportunities for them to make housing gains. Any gains, in fact, will go to the higher-income groups, making the distributional impact of reform, for the poor, largely restricted to greater employment opportunities. The only way to improve assistance to low-income groups would be to emphasize the construction of social and supported dwellings. Unfortunately, as mass producers tend to build toward the middle-income groups, it is unlikely that they would be interested in even less profitable projects. One possibility worth investigating is whether the government could create more incentives for the construction of smaller rental properties. Current rental laws provide no additional tax incentives for units smaller than  $120 \text{ m}^2$ .

<sup>&</sup>lt;sup>32</sup> Local experts consider this estimate to be low due to inappropriate definitions in the input -output table, particularly concerning the prices of crude oil.

<sup>&</sup>lt;sup>33</sup> This is based on the assumption that 'social' units will target low income groups, and based on the fact that the social housing share of annual new housing supply has been only 7–9 percent of the units built compared with a target of 13–18 percent.

## 4. Policy Issues

#### 4.1. Characteristics of the Housing Sector

52. Urban demographic pressure. During the early years of the Revolution, households responded to government calls and incentives for larger families, with the result that the population grew at a rate of 3.7 percent in the mid-1980s, up from 3.1 percent in the mid1970s. They also responded to promises of free land and housing, causing the urban population to rise from 46 percent in the mid-1970s to 53 percent in the mid-1980s and to 61.5 percent in the mid-1990s. These demographic pressures have created major housing and employment challenges for the Iranian government, which has also been contending with a housing sector changed in fundamental ways by the Revolution. As the population burgeoned, Article 31 of the Islamic Republic Constitution made it "the right of every Iranian individual and family to possess housing commensurate with his needs."

53. Although population trends have eased recently in Iran (the growth rate is down to 1.4 percent), a disproportionately large cohort of young Iranians is demanding jobs, housing, and other services within this and the next decade.<sup>34</sup> The annual rate of new urban household formation (about 375,000 in 2000–01) is currently superior to the number of new urban units produced across cities (350,000 in 2000/1). In parts of large cities like Tehran, families are doubling up at an increasing rate in the existing housing stock. In other words, because of the Iran-Iraq war and the postwar baby boom, Iran's housing stock of 198 units per 1,000 residents is low by international standards (Table 1-6).

| Indicator   | Iran Values (2000–01) | International Range |  |  |  |  |  |  |
|---|-----------------------|---------------------|--|--|--|--|--|--|
| Share of total investment (%)   | 54                    | 11 to 38            |  |  |  |  |  |  |
| Share of GDP (%)  | 8.8                   | 2.0 to 7.7          |  |  |  |  |  |  |
| Share of value added—construction (%)   | 4                     | 3–6                 |  |  |  |  |  |  |
| Share of value added—real estate services (%) <sup>a</sup>  | 11.7                  | 9–14                |  |  |  |  |  |  |
| Stock of units per 1,000  | 198                   | 265-440             |  |  |  |  |  |  |
| New units per 1000  | 5.4                   | 2.1-10.4            |  |  |  |  |  |  |
| Notes: (a) Real estate, specialized, and professional services.                                   |                       |                     |  |  |  |  |  |  |
| Secure a International values are based on UN/ECE data for industrial countries from 1060 to 1090 |                       |                     |  |  |  |  |  |  |

 Table 1-6. Basic Housing Indicators

*Source:* International values are based on UN/ECE data for industrial countries from 1960 to 1980.

54. A supply-driven government response. In response to increased need for housing, the government has adopted a largely supply-driven housing strategy. Using a redistribution-before-growth paradigm, the government responded to needy households with an urban land redistribution program and the provision of "social" housing (defined as units of less than 50 m<sup>2</sup>), mainly through mass production.<sup>35</sup> By the mid-1980s, this approach proved unsustainable: the rationing of housing and land ensued, creating typical problems. Significant but piecemeal housing reforms were instituted in the decade that

<sup>&</sup>lt;sup>34</sup> Iran Statistical Yearbook, 1378 (March 1999–March 2000), Tehran: Iran Statistical Center, 2001.

<sup>&</sup>lt;sup>35</sup> Since the budget law of 1994–95 was passed (1373, Article 52), Iranian housing policies divide markets into three segments: "free," "protected," and "social" housing. Protected housing comprises units under 75 m<sup>2</sup> of floor space in Tehran, Isfahan, Tabriz, Shiraz, and Mashad, and 100 m<sup>2</sup> in other cities. Social housing refers to units under 50 m<sup>2</sup>.

followed; some were intended to moderate demand, mostly through population-planning programs gradually reversing incentives to migrate to urban areas and modifying subsidies and tax incentives. Other reforms sought gradually to reduce the government role in the direct supply of housing and to encourage the use of the banking sector as a main conduit for subsidies.

55. Analyses suggest that the quality of housing has improved during the past decade. Moreover, in the past few years, the government has met annual housing production targets by increasing the allocation of budget and nonbudget resources (land and so forth.) to the housing sector and increasing reliance on the private sector in construction. As indicated above, however, housing supply still lags behind need. Furthermore, a highly skewed income distribution, rising housing and transportation costs, and rising cost of finance (small savings and limited possibility to further mobilize resources) have resulted in a significant deterioration in affordability,<sup>36</sup> particularly for the lower half percent of the population. According to different estimates, the house price-to-income ratio in Tehran varies between 6 and 8—high by international standards.

56. *Mismatch between supply and demand.* A significant increase in housing supply since 1996–97 has resulted in a housing stock of 12.2 million (March 2002); 8.1 million in urban areas and 4.1 million in rural areas.<sup>37</sup> Based on estimations of 13.8 million households, the current household density may be approaching 1.13, significantly close to the 1.12 density target of the Third FYDP.<sup>38</sup> These national averages, however, obscure important geographical and income-related differences in housing conditions. According to the 2001 household survey, about 69 percent of the households in urban areas own their homes (and generally also the land) but ownership is only 55–58 percent of low income households (the bottom 40 percent in the income distribution—with annual expenditure below IRR 9m) compared to 64–79 percent for the rest of the population.

57. Taking into account the population that is economically active, it has been estimated that there is a total effective demand of about  $570,000^{39}$  units per year to which about  $113,000^{40}$  units per year for the next three years should be added, to the extent that the government intends to reduce household density to 1.12 by the end of the Third FYDP. An estimate for the low income groups suggests that its need for housing during 2000–04 is slightly over 1 million housing units, around 30 percent of annual total demand (Table 1-7). Actual effective demand may be smaller if the gradual reduction of subsidies on core goods such as fuel, energy, and food, planned to commence in FY2002,

 $<sup>^{36}</sup>$  It has been estimated that housing purchasing power per household ranges between 28 m<sup>2</sup> for the first income decile to 226 m<sup>2</sup> for the last. Once the number of persons per household is taken into account, housing purchasing power per capita drops to 9 m<sup>2</sup> for the first income decile and to 46 m<sup>2</sup> for the last.

<sup>&</sup>lt;sup>37</sup> Population and Housing Statistics 1976-2002, Tehran: Planning Bureau, MHUD, 2003

<sup>&</sup>lt;sup>38</sup> Population has been estimated as 64.9 million as of March 2002—41.9 million in urban areas and 23 million in rural areas.

<sup>&</sup>lt;sup>39</sup> Assuming no changes to household size and household density, it has been estimated that an additional 889,000 units will be added to the demand for housing in the next 5 to 10 years as the baby boomers mature (approximately 89,000 units per year). This increases effective demand to approximately 569,000 units per year. Obviously, this demand will be higher if household density is reduced to 1 and household size is temporarily reduced to 2 (for newlywed couples).

 $<sup>^{40}</sup>$  Currently there are 1.63 million households sharing accommodation—resulting in a need for 340,000 households (at the current household size of 4.79).

is indeed implemented. This will have a major impact on housing affordability in Iran, particularly for the low-income groups, and consequently on effective housing demand. Based on our estimations, the share of housing expenditure may decrease by 14 percent for low-income groups, 13 percent for middle-income groups and 2 percent for high-income groups, and on average, the demand for housing may be reduced by as much as 12.5 percent. Housing purchasing power may also be reduced in the case of reduction of subsidies. For instance, a middle-income household (in the fifth decile) may see its housing purchasing power drop from 72 m<sup>2</sup> to 63 m<sup>2</sup>, the current housing purchasing power for a low-income household (in the fourth decile).<sup>41</sup>

58. Based on the estimated housing purchasing power<sup>42</sup> of 28 n<sup>2</sup> for the low-income groups, these households are able to afford only accommodation classified as "social" in the development plan. The planned supply of this accommodation, however, ranges from 66,000-133,000 housing units per year from 1999–00 to 2003–04, just 45 percent of the accommodation needed by these groups. This situation is worsened by the fact that no more than half of the planned social housing was built during 1999/00–2000/01. Clearly, the existing incentives do not result in sufficient accommodation built by the private sector or by the mass producers. According to some estimates, at least 7 percent of housing construction is carried out by 100 percent State-Owned-Enterprises (SOEs). The actual total involvement of the public sector, however, may be significantly higher as a large proportion of the government's intervention is carried out in some form or another through quasi-public enterprises, foundations, and cooperatives<sup>43</sup>.

| Year  | Number (thousands of units) | Requested investment (RI b) |  |  |  |  |
|---|-----------------------------|-----------------------------|--|--|--|--|
| 1999–2000   | 146                         | 7,665                       |  |  |  |  |
| 2000-01   | 175                         | 11,287                      |  |  |  |  |
| 2001-02   | 211                         | 15,192                      |  |  |  |  |
| 2002–03   | 250                         | 19,500                      |  |  |  |  |
| 2003–04   | 292                         | 24,747                      |  |  |  |  |
| Total   | 1,074                       | 78,391                      |  |  |  |  |
| <i>Source</i> : Naser Nikooseresht, "The Main Issues in Housing Market: Policies, Strategies, and Implementation" Tehran: (BHE, No. 32), 3–10, 2002 |                             |                             |  |  |  |  |

 Table 1-7. Need for Housing by Low Income Groups in Iran (2000–04)

59. Segmented markets. The picture that emerges is of three segmented markets along income lines: the rich (with incomes in the top 20 percent) obtain housing through wealth-driven and speculative investments; middle-income and formal-sector employees obtain housing mainly through government-subsidized programs (which supply "protected" and "social" housing; see n. 1); and lower-income housing is built either

<sup>&</sup>lt;sup>41</sup> Source: World Bank estimates based on consultants reports.

 <sup>&</sup>lt;sup>42</sup> Taking into account the 2000–01 average rental price per m<sup>2</sup> of housing of IRR 5,827/month, housing purchasing power per household ranges from 28 m<sup>2</sup> for the first income decile to 226 m<sup>2</sup> for the last.
 <sup>43</sup> There are no statistics available on the share of these foundations in the supply of housing. Bonyad Maskan (Housing

<sup>&</sup>lt;sup>43</sup> There are no statistics available on the share of these foundations in the supply of housing. Bonyad Maskan (Housing Foundation) and Bonyade Panzdahe Khordad (5<sup>th</sup> June Foundation) directly provide some housing, especially in rural areas. Based on an unpublished report prepared by Bonyad Maskan in 1990, the share of these foundations in construction of housing was less than 1 percent.

through self-help or incremental house construction. It has been declared "unauthorized" as it falls outside formal housing definitions and plans.

60. The demand in these markets is met in different ways and to different extents. The high-income groups made housing expenditures of nearly 40 percent of all housing expenditure by all groups (Table 1-8). Around 60 percent of new housing supply was affordable only by this group (accommodation with more than 100  $\text{m}^2$ ). In contrast, the low-income groups (the bottom 40 percent) had housing expenditures equivalent to only 20 percent of all housing expenditure and could afford only 8 percent of the units built during the Second FYDP (accommodation with less than 50 n<sup>2</sup>). Housing affordability deteriorated for the low-income groups. This situation does not appear to have improved during the Third FYDP. Of the units targeted for low-income groups during the first two years of the Third FYDP, only half were built.

61. It appears that the restricted availability of affordable housing for low-income groups may result in their losing a share in the available housing wealth. Any gains have been accrued by the relatively high income groups. Thus, the distributional impacts of reform, insofar as the low-income groups are concerned, may be largely restricted to increased employment.

| Table 1-8. Mismatch between housing supply and demand (share of supply and demand) | ply by income group, |  |  |  |  |  |  |
|--|----------------------|--|--|--|--|--|--|
| percent)   |                      |  |  |  |  |  |  |

|  | Low Income        |               | М                 | liddle Income | Hi                | Total                      |         |  |
|--|-------------------|---------------|-------------------|---------------|-------------------|----------------------------|---------|--|
|  | (Bottom 40%)      |               | (Middle 40%)      |               | (Top 20%)         |                            | million |  |
|  |                   |               |                   |               |                   |                            | $m^2$   |  |
|  | Of m <sup>2</sup> | Of affordable | Of m <sup>2</sup> | Of affordable | Of m <sup>2</sup> | Of affordable              |         |  |
|  |                   | accommodation |                   | accommodation |                   | accommodation <sup>a</sup> |         |  |
| First FYDP   | 20.6              | 13            | 39.4              | 31            | 40                | 56                         | 175     |  |
| Second   |                   |               |                   |               |                   |                            |         |  |
| FYDP   | 19.7              | 8             | 39.9              | 32.6          | 40.4              | 59                         | 188     |  |
| <i>Notes:</i> (a) Affordable accommodation is defined as those with less than 50 m <sup>2</sup> for the low income groups; between 50 to 100 |                   |               |                   |               |                   |                            |         |  |
| m <sup>2</sup> for the middle-income groups; above 100 m <sup>2</sup> for the high income groups.  |                   |               |                   |               |                   |                            |         |  |

Source: Estimated using square meters derived from housing expenditures from the Expenditure and Income Survey of Households, Tehran, Iran Statistical Center, various years.

62. *Centralized housing policies.* Despite significant progress made by the policies pursued in the current and previous development plans, the housing sector continues to rely heavily on government subsidies and persists in inefficient allocations of land and capital in city development. Decisions on supply of land, infrastructure, and housing have been highly centralized. Iran faces six major challenges:

- the housing finance market is underdeveloped and governed through central bank credit allocation;
- the supply of serviced urban land remains constrained and distorted by large public land allocation policies;

- the sector remains heavily subsidized  $(3-6.5 \text{ percent of GDP in } 2000-01)^{44}$  through direct and indirect subsidies, most of which are poorly targeted;
- quasi-public construction companies receive preferential access to credit, land, and regulatory protection from private sector competitors;<sup>45</sup>
- rigid city boundaries and their management have resulted in a proliferation of informal settlements in and around major cities;<sup>46</sup> urban planning is centralized and controlled by the Ministry of Housing and Urban Development (MHUD);
- relatively insignificant empowerment of municipalities has constrained their ability to address issues impairing the proper functioning of local housing markets.<sup>47</sup>

63. An unfavorable macroeconomic context. Housing problems are bedeviled by macroeconomics. Iran has contracted its own case of the "Dutch disease,"<sup>48</sup> which in the Netherlands prevented the economy from diversifying into nontraditional exports and export-substituting industries. Volatile land and real estate markets are other symptoms of this economic ailment. Statistics suggest that on average over the past decade about 40 percent went into housing, although statistics on urban housing investment<sup>49</sup> as a percentage of total investment are not available for Iran. Nevertheless, considering the degree of urbanization in Iran (64 percent in 2000–01), it is quite likely that a significant percentage of total investment went into urban housing. In the absence of this information, however, the inverse relationship can be seen between housing prices and total investment (i.e., net capital account) over the period 1986–2000 (Table 1-9). Thus, it appears that for those years when tighter foreign exchange controls were imposed (e.g., 1996–97 and 1999–00) and lower foreign exchange left the country, housing prices increased because of higher speculative demand and reduced the net capital account.<sup>50</sup> In addition, available studies<sup>51</sup> on the relationship between inflation and the net capital account have estimated the (general) price elasticity of the net capital account to be 0.8.

<sup>&</sup>lt;sup>44</sup> The latter figure includes 3 percent for housing utility subsidies.

<sup>&</sup>lt;sup>45</sup> Although quasi-public companies are less powerful in the housing sector than in public works/engineering.

<sup>&</sup>lt;sup>46</sup> A decade ago, city planning and zoning became quite flexible and developers were able to obtain several times the "approved" density. City boundaries, on the contrary, have remained fixed, reducing land supply. This planning function does not cover the urban periphery, where the informal settlements are prolific. One of the reasons for this situation is that in Iran, unlike in many other countries, the municipal boundary is limited to the city itself. The sum of the area covered by municipalities is a very small percentage of the total national territory.

<sup>&</sup>lt;sup>47</sup> Recent developments have granted more power to municipalities in Iran (e.g., after city councils receive nominations for Mayors from the Ministry of the Interior, the councils directly elect the mayors). In addition, a policy of financial self sufficiency by municipalities has been pursued by the government (e.g., only 8 percent of 2000 revenues in Tehran municipality were transfers from central government). In the absence of alternative revenues, most of the municipalities' income has been generated from sale of land and densities. Thus, the opportunity to utilize land and density as policy instruments to create an efficient housing market has not been realized. Land and density are seen as revenue earning assets.

<sup>&</sup>lt;sup>48</sup> Max Corden made the first formulation of the dynamics of "Dutch disease" in 1984. See Peter Neary and Sweder van Wijnbergen, eds., Natural Resources and the Macroeconomy (Cambridge: MIT Press, 1986).

<sup>&</sup>lt;sup>49</sup> Using the construction activities of the private sector in urban areas (published by the central bank) as a proxy, 2000– 01 expenditures on land and buildings for started, semi-completed, and completed buildings amounted to IRR 44,282 billion. Rural housing is a very complex issue in its own right and therefore is not the object of this chapter.

<sup>&</sup>lt;sup>50</sup> The correlation coefficient between the net capital account and the housing price index was estimated as -0.6 based

on consultants reports. <sup>51</sup> Rahimi Broujerdi, "Effective Factors on Capital Flight," Tehran: Central Bank of Islamic Republic of Iran, 1999– 2000

Thus, a 1 percent change in the capital account will result in a 0.8 percent change in inflation.

64. Recent economic developments in Iran, however, show that the oil sector continues to shrink relative to the rest of the economy, that the service and agriculture sectors are generating much of Iran's economic growth, and that volatility will persist as long as domestic demand (increasingly less dependent on oil revenues) and private consumption continue to fluctuate. The declining importance of oil revenues is a major accomplishment in its own right. Nevertheless, falling oil prices are likely to continue having an impact on public and private consumption and investment spending. More recently, oil price increases in 1999–2000 have helped the economy somewhat, signs of which are seen in annual GNP growth rates of more than 6 percent.

| Year   | Househol<br>ds ('000) | Consumpt<br>ion (RI b) | Net<br>saving<br>(RI b) | Average<br>household<br>consumpti<br>on (RI th) | Average<br>household<br>savings<br>(RI th) | Housing<br>price<br>index | Goods<br>and<br>services<br>price<br>index | General<br>inflation<br>rate | Housing<br>inflation<br>rate | Net<br>capital<br>account<br>(US\$m) |
|--|-----------------------|------------------------|-------------------------|---|--|---------------------------|--|------------------------------|------------------------------|--------------------------------------|
| 1986   | 96,723                | 6,459                  | 79                      | 667   | 8.1  | 163                       | 167  | 23                           | 20                           | 2,541                                |
| 1987   | 9,886                 | 6,074                  | 334                     | 614   | 33   | 202                       | 214  | 27                           | 26                           | 1,245                                |
| 1988   | 10,103                | 6,119                  | -46                     | 605   | -4.5                                       | 259                       | 275  | 29                           | 25                           | 1,220                                |
| 1989   | 10,324                | 6,298                  | 112                     | 610   | 10.8                                       | 305                       | 324  | 17                           | 17                           | 2,624                                |
| 1990   | 10,551                | 7,523                  | 534                     | 713   | 50   | 328                       | 353  | 9                            | 7                            | 4,539                                |
| 1991   | 10,787                | 8,276                  | 1,030                   | 762   | 95   | 391                       | 422  | 21                           | 19                           | 6,032                                |
| 1992   | 11,091                | 8,720                  | 1,290                   | 786   | 116  | 476                       | 513  | 24                           | 22                           | 5,924                                |
| 1993   | 11,403                | 8,865                  | 1,145                   | 777   | 100  | 579                       | 650  | 23                           | 22                           | 5,563                                |
| 1994   | 11,722                | 9,089                  | 678                     | 775   | 57   | 683                       | 879  | 35                           | 18                           | -347                                 |
| 1995   | 12,050                | 9,313                  | 889                     | 772   | 73   | 875                       | 1,314                                      | 49                           | 28                           | -774                                 |
| 1996   | 12,398                | 9,644                  | 1,362                   | 777   | 109  | 1,179                     | 1,620                                      | 23                           | 35                           | -5,508                               |
| 1997   | 12,721                | 10,053                 | 696                     | 790   | 54   | 1,529                     | 1,898                                      | 17                           | 30                           | -4,822                               |
| 1998   | 13,051                | 10,738                 | 257                     | 822   | 19.6                                       | 1,818                     | 2,244                                      | 18                           | 19                           | 2,270                                |
| 1999   | 13,390                | 11,085                 | 633                     | 827   | 47   | 2,163                     | 2,692                                      | 20                           | 19                           | -5,894                               |
| 2000   | 13,764                | 11,545                 | 1,109                   | 838   | 80   | 2,682                     | 3,015                                      | 12                           | 24                           | -1,091                               |
| Source: Statistics of the National Accounts of Iran, Tehran: Ministry of Finance, 1996; Economic Report and the Balance Sheet for the years 1981–2000, Tehran: Central Bank of Islamic Republic of Iran, 2001. |                       |                        |                         |   |  |                           |  |                              |                              |                                      |

 Table 1-9. Relationship between Housing Prices and National Investment (1982 prices)

65. The macroeconomic environment from 1990–01 to 2000–01—and in particular the presence of high and volatile inflation—has been hostile to the development of a marketbased housing sector. Deposit rates in banks have been regulated at levels well below inflation, thus ensuring a negative return to small savers<sup>52</sup> and a shortage of funds.<sup>53</sup> As a result, housing finance services, paramount for the expansion of the housing sector, have become increasingly scarce.<sup>54</sup> Macroeconomic conditions in Iran reached their worst stage in 1995–96 when CPI inflation reached 50 percent per annum. In such an

<sup>&</sup>lt;sup>52</sup> When inflation was low during 1990–92, positive returns were offered to savers.

<sup>&</sup>lt;sup>53</sup> Due to a higher Reserve Required Ratio (RRR) until 1998–99, the banks had fewer funds available for lending.

<sup>&</sup>lt;sup>54</sup> The scarcity of finance is correlated with a large gap between regulated bank rates and free market curb rates.

environment, market-based, long-term housing finance was unaffordable to potential homebuyers and the housing finance system could not expand in real terms. Low purchasing power associated with the low productivity and high unemployment rates was an additional factor obstructing the development of the sector. Since the mid-1990s, better macroeconomic policies across the board are improving the environment. Nominal lending rates have finally become higher than inflation for the first time in 2000–01, and positive deposit rates are already attracting more savings into the banking system.<sup>55</sup>

66. An underdeveloped finance sector in Iran, combined with inflation, has rendered housing the preferred asset for accumulating household wealth. This in turn gave rise to a speculative housing market, fueling not only housing-sector booms but also accentuating recession periods. This represents a certain danger for Iran's economy. Indeed, the role this sector has played in creating economic crisis has come to light only recently—namely after the Asian crisis, and in particular, the case of Thailand.

#### **4.2. Iran's Housing Challenge**

67. Demographic pressures <sup>56</sup> point toward a rapidly increasing demand for housing and housing finance during the present decade. As the annual rate of new urban household formation (about 375,000 in 2000–01) is currently superior to the number of new urban units produced across cities (350,000 in 2000–01), growing numbers of families are doubling up in large cities like Tehran.

68. In response, the government's housing strategy has been largely supply-driven and has emphasized the expansion of the supply of "social" housing (of less than 50 n<sup>2</sup>) mainly through mass production. <sup>57</sup> A highly skewed distribution of income, however, has raised housing and transportation costs and the cost of finance by limiting both savings and the ability to mobilize resources. These factors have adversely affected affordability, <sup>58</sup> particularly for the bottom half of the population. As explained before, this situation proceeds from the macroeconomic and financial environment of significant inflation, financial repression, and very limited access to housing finance—an environment that has prevailed for more than a decade. Demographic pressures are not likely to translate into effective economic demand because of the following factors:

• Low purchasing power. Gains in real household purchasing power during the 1990s have been negligible and real wages have been eroded by inflation (i.e., the wage

<sup>&</sup>lt;sup>55</sup> Iran is not a low-saving country. The aggregate savings rate fluctuates at around 30 percent of GDP.

<sup>&</sup>lt;sup>56</sup> Iran's population pyramid is marked by an unusually large demographic bulge of young people who will be entering the housing markets during the next 7 to 10 years. Annual population growth rate has declined very significantly during the 1990s, but was still high at 1.67 percent in 2000–01. Iran's population growth still remains above the average growth rate of 1.5 percent p.a. for middle-income countries during the period 1990–98 (World Development Indicators, Washington DC: The World Bank, 2000).

<sup>&</sup>lt;sup>57</sup> Since the budget law of 1994–95 (1373, Article 52), Iranian housing policies divide housing markets into three segments: "free" housing, "protected" housing and "social" housing. "Protected" housing comprises units under 75 m<sup>2</sup> of floor space in Tehran, Isfahan, Tabriz, Shiraz, and Mashad, and 100 m<sup>2</sup> in other cities. "Social" housing is defined as units under 50 m<sup>2</sup>.

<sup>&</sup>lt;sup>58</sup> It has been estimated that housing purchasing power per household ranges from 28 m<sup>2</sup> for the first income decile to 226 m<sup>2</sup> for the last. Once the number of persons per household is taken into account, housing purchasing power per capita drops to 9 m<sup>2</sup> for the first income decile and to 46 m<sup>2</sup> for the last.

index remained below inflation during the past decade). Per capita GDP has risen slowly and remains 25 percent below what it was in 1976.

- *Skewed urban income distribution.* Iran has a skewed urban income distribution by international standards, despite its improvement over the past decade. Rural-urban and interregional disparities are large, although in the urban sector the income distribution is slightly better and has improved during the past decade. The ratio of urban deciles D10/D1 was 16.5 in 1992–93 and improved to 14.3 in 1999–00. The ratio of quintiles Q5/Q1 was 8.7 in 1992–93, moving down to 7.9 in 2000–01. Some 18 percent<sup>59</sup> of the urban population is below the poverty line.
- Low levels of ownership affordability. The triple combination of a skewed income distribution, high price-to-income ratios, and a small housing finance system with housing loans capped at IRR 50 million is cutting off access to homeownership for a majority share of the population in large cities, particularly for young households. In Tehran a housing unit with 75 n<sup>2</sup> of floor space was estimated to cost IRR 168 million in 2000–01 (\$21,300). The loan maximum yields a low loan-to-value ratio of 30 percent which is not manageable for most families. In the other large cities of Esfahan, Mahsad, Shiraz, and Tabriz the price of a similar 75 n<sup>2</sup> unit was estimated at IIR75.8 million. In these markets, the loan-to-value ratio becomes a more reasonable but still difficult ratio at 66 percent, as most households cannot afford a 34 percent down payment without the help of their families.
- *Rapidly rising rents.* Those households that cannot gain access to home ownership must rely on rental markets or double up with other families. Rents in Iran appear to be rising even more rapidly than housing prices. These trends reveal important imbalances between housing demand and housing supply, especially in major cities. Security deposits are very large (about two years of rent or more) reflecting high inflation, the reluctance of banks to extend loans, and a likely preference for curb market arrangements by landowners given present financial market conditions. This tends to make the rental market more regressive and more dependent on prior wealth for young households<sup>60</sup>.

69. As a result, after a decade of housing reforms and major government efforts, 20 percent of Iran's population, the lowest-income group, has little access to adequate housing. Despite concerted government efforts to reduce income inequality, low-income groups continue to see their purchasing power erode. The housing sector continues to rely heavily on government subsidies. Urban planning continues to make inefficient allocations of land and capital. Future reforms must address these constraints, in particular:

<sup>&</sup>lt;sup>59</sup> The urban poverty line in 1378 (1999–2000) was set at IRR 854,410 or approximately \$110 per month.

<sup>&</sup>lt;sup>60</sup> Overall unemployment rates in the European Union from 1990 to 1998 reached its lowest (3.9 percent) when a substantial proportion of housing (about 40 percent) was provided in the form of rental accommodation. Similarly, when unemployment reached 22.9 percent, rental accommodation constituted only about 15 percent of the housing market. Indeed, there is evidence linking the elimination/reduction of private rental markets with high unemployment rates. Gordon Hughes and McCormick estimated an increase in unemployment by 1.5 percent n the 1990s due to the elimination of the private rental market (See EU Economic review, European Economy, Luxembourg: Office for Official Publications of the EC,1987).

- the supply of serviced urban land remains constrained (see Chapter 2);
- the sector remains heavily subsidized through direct and indirect subsidies, most of which are poorly targeted (see Chapter 3);
- the housing finance market is underdeveloped and governed through central bank credit allocation (see Chapter 4);
- a large percentage of the construction sector's capacity is in the form of informal microenterprises, or SMEs, which cannot grow because quasi-public construction companies possess preferential access to credit, land, and regulatory protection (see Chapter 5);<sup>61</sup>
- rigid city boundaries and their management have resulted in a proliferation of informal settlements in and around major cities;<sup>62</sup> and
- municipalities have not been empowered to address issues related to its municipal housing markets<sup>63</sup>.

## 5. Current and Future Affordability of Housing

70. A major policies of the Third FYDP, yet to be implemented, include the eventual elimination of subsidies. This gradual process (eliminating the subsidy system for core goods such as fuel, energy, and food), was to commence in FY2002. If implemented, the reform will have a major impact on the housing affordability in Iran, particularly for low-income groups.

71. The objective of the section below is to provide an estimate of the impact of reduced subsidies on affordable housing and consequently on effective housing demand. Household expenditures on rent for 2000–01 by income deciles are used as a proxy for housing expenditure to estimate the ability to pay in  $m^2$  (housing purchasing power).<sup>64</sup> All other expenses such as gas, water, and electricity have been excluded.

72. Trends in Housing Expenditures by Income Group. On average, 35 percent of household expenditures in 2000–01 went to housing, compared with 34 percent in 1994–

<sup>&</sup>lt;sup>61</sup> Quasi-public companies are less powerful in the housing sector than in public works/engineering.

<sup>&</sup>lt;sup>62</sup> A decade ago, city planning and zoning became quite flexible and developers were able to obtain several times the "approved" density. City boundaries, on the contrary, have remained fixed, reducing land supply. This planning function does not cover the urban periphery where the informal settlements are prolific. One of the reasons for this situation is that in Iran, unlike in many other countries, the municipal boundary is limited to the city itself. The sum of the area covered by municipalities is a very small percentage of the total national territory.

<sup>&</sup>lt;sup>63</sup> Recent developments have granted more power to municipalities in Iran (e.g., after city councils receive nominations for Mayors from the Ministry of the Interior, the councils directly elect the mayors). In addition, the government has pursued a policy of financial self-sufficiency by municipalities (e.g., only 8 percent of 2000 revenues in Tehran municipality were transfers from central government). In the absence of alternative revenues, most of the municipalities' income has been generated from sale of land and densities. Thus, the opportunity to utilize land and density as policy instruments to create an efficient housing market has not been realized. Land and density are seen as revenue earning assets.

<sup>&</sup>lt;sup>64</sup> All income and expenditure data was taken from the *Iran Statistical Yearbook*, *1379* (March 2000–March 2001), Tehran: Iran Statistical Center, 2002.

95. Low-income groups saw their housing expenditures rise from 37 percent to 40 percent of total household expenditure, while housing expenditures stayed roughly the same (at 34 percent) for the middle-income groups, and decreased slightly from 27 percent to 26 percent for the high-income groups (Annex 1.2).

73. Price indices for the past decade reveal that these changes in the housing budget reflect price increases. Indeed, the average household expenditure increased from IRR 3 million in 1991–92 to IRR 20.7 million in 2000–01. As the consumer price index increased from 422 in 1991–92 to 2,940 in 2000–01 (Annex 1.1), the average household expenditures, in 1982–83 prices, remained stable at IRR 0.7 million in 1991–92 and IRR 0.71 million in 2000–01. Similarly, housing expenditures at constant prices have remained stable at IRR 250,000 and IRR 252,000 respectively.

74. As expected, high-income groups spend considerably more than other groups (Table 1-10). In 2000–01, low-income households spent on average IRR 3.6 million per year on housing, while high-income households spent IRR 14.1 million. For example, low-income groups incur 15 percent of all households' expenditure and 19 percent of expenditure on housing, while high-income groups incur 44.4 percent of all households' expenditure and 38 percent of expenditure on housing. Thus, on average, a household falling in the top 10 percent income bracket spends 15 times as much as a household in the first-income decile. A high-income household spends 3.9 times more on housing than low-income households, a significant decrease from 1991-92 (4.8 times). This expenditure gap is wider between the richest and the poorest households. The top 10 percent households today spend 7.8 times more on housing than the poorest 10 percent.<sup>65</sup>

75. Affordability Trends. A study<sup>66</sup> of three cities confirms that the ratio of housing price to household expenditure for an average household has improved since the mid-1990s, when it was as high as 10 in Tehran. Currently the ratio is estimated to be somewhere between 6 and 8. This improvement is mainly due to the lower growth rate of housing prices in the long term compared with the growth rate of household expenditures and incomes. Despite this, access to housing for the lower-income groups has gradually been reduced because the proportion of housing finance as percentage of the housing value is too small, requiring large individual savings. Additional research<sup>67</sup> shows that an urban middle-income family (mostly salaried employees) needs an additional 25 years' savings to purchase a housing unit today. In 1978, the same family could afford to build its house with nine years' savings and today it needs 34 years (these estimates have not been verified by the World Bank and the large change may be due to inflation).

<sup>&</sup>lt;sup>65</sup> The 2001–02 Gini coefficient equals 0.42. This coefficient decreased from 0.45 in 1995–96—used to be 0.38 in 1986-87 (Annual Report of the Plan and Budget Organization, various years).

<sup>&</sup>lt;sup>66</sup> Ali Chegani, The Financial Affordability of the Household in Procurement of Housing. A case study on Tehran, *Isfahan, Kermanshah, and Arak Cities,* BHE, Tehran, Bureau of Planning and Economics, NHLO, 2001. <sup>67</sup> See "The necessity of housing mass production from the point of view of household affordability," *Housing Mass* 

Production, No. 1, Tehran: 1379 (2000), 12-18.

76. Given an average rental price per m<sup>2</sup> of housing of IRR 5.827/month (2000–01).<sup>68</sup> it has been estimated that housing purchasing power per household ranges between 28 m<sup>2</sup> for the first income decile to 226 m<sup>2</sup> for the last (Table 1-10-column 5). Once household densities are taken into account, housing purchasing power per capita drops to 9  $\text{m}^2$  for the first income decile and to 46  $\text{m}^2$  for the last.

77. Affordability varies widely from region to region. Annex 1.3 shows an analysis of housing markets in Iran for the six most densely populated provinces, Tehran, Esfahan, Mashad, Tabriz, Shiraz, and Arhwaz. It concludes that Tehran has the lowest housing purchasing power across the board, except for households in the top 30 percent of the income distribution; their housing purchasing power increases sharply, to about 65 percent, in relation to the households just beneath them on the income scale. On average, Fars has the highest average housing purchasing power at 79 m<sup>2</sup> in comparison with Tehran (61 nf) and Esfahan (65 nf), and it also has the highest housing purchasing power for low- and middle-income households. Both Fars and Esfahan show extremely high housing purchasing power for the top 10 percent of the households.

#### **5.1. Subsidy Reductions and Their Impact**

78. The Plan and Budget Committee reported to Parliament in June 2001 that subsidies on energy (US\$12 billion) and food (US\$4.4 billion) for FY2000 amounted to US\$16.4 billion, 20 percent of GDP; of these, 12 percent were subsidies to petrol (at US\$0.05/liter), a large proportion of which went to high-income households. On average, Iranian households currently (2000–01) receive IRR 1.12 million each per year worth of subsidies for food, gasoline and electricity, broken down as follows:

- RI 645,000 worth of direct food subsidies, which corresponds to 9.5 percent of households expenditure on food (RI 6.8m)—direct subsidies for wheat amount to IRR 6,566 billion and for other foodstuff amount to IRR 1,692 billion<sup>69</sup>;
- RI 187,000 worth of direct and IRR 13,000 worth of indirect gasoline subsidies current gasoline price is IRR 450/lt and excludes IRR 550/lt of budgeted subsidies in the 2001–02 Budget Bill,<sup>70</sup> which corresponds to 122 percent of price per liter and 8.5 percent of households expenditure on transportation (RI 2.34m);
- RI 273,000 worth of direct electricity subsidies—current electricity price is IRR • 125/Kw while the cost of generation and distribution is IRR 250/Kw-a 100 percent price differential<sup>71</sup> and 4 percent of household expenditure on lighting and fuel (RI 6.69m).

<sup>&</sup>lt;sup>68</sup> Value is the average for the first half of 2000 of rental transactions reported in the questionnaire distributed to real estate agents by the Ministry of Housing.

<sup>&</sup>lt;sup>69</sup> HamidReza Vafadar,. "Estimating explicit and implicit subsidy on wheat and flour," Journal of Planning and Budget, No.18, 1376 (1997):21-39.

<sup>&</sup>lt;sup>70</sup> Jamshid Pajouyan, "Examining the ways of cash payment of the subsidies on gasoline," *Ettelaat Political-Economic* 

*Monthly*, no.169, 1380 (2001): 248–58. <sup>71</sup> Yadollah Sabouhi, "Optimum recognition of energy sources," *Plan and Budget Journal*, special issue on the Third Development Plan, 1376 (1997): 52–76.
79. The above figures show the extent to which subsidies on food, gasoline, and electricity have propped up household budgets and the likely effect of their elimination. But household budget pressures will vary from decile to decile. For example, it has been estimated that when energy subsidies are cut, expenditures in the first four deciles will increase by 27 percent, in the second four deciles by 26 percent, and in the two upper deciles by 24 percent<sup>72</sup>. Similarly, the impact of housing subsidy reductions varies from decile to decile. A one-percentage-point increase in food prices will reduce the share of housing expenditure among low-, middle- and high-income groups by 0.23 percent, 0.19 percent and 0.05 percent respectively (Table 1-11).

|            |                 |                   | Current       | situation       |                |                         | If su                  | bsidies are redu | iced        |
|------------|-----------------|-------------------|---------------|-----------------|----------------|-------------------------|------------------------|------------------|-------------|
| Decile     | Total           | Expenditure       | Share of      | Housing         | Household      | Per capita              | Share of               | Expenditure      | Housing     |
|            | (PIm)           | (PIm)             | rent          | purchasing      | size           | nousing                 | nousing                | (PI m)           | purchasing  |
|            | (KI III)        | (KI III)          | (percent)     | $(m^2)$         | (person)       | power (m <sup>2</sup> ) | (percent) <sup>a</sup> | (KI III)         | $(m^2)$     |
|            |                 |                   | (percent)     | ()              |                | power (m )              | (percent)              |                  | ()          |
| 1          | 4.9             | 1.96              | 40            | 28              | 3.05           | 9                       | 33.2                   | 1.62             | 23          |
| 2          | 8.7             | 3.11              | 35.4          | 44              | 3.94           | 11                      | 31                     | 2.69             | 38          |
| 3          | 11.4            | 3.78              | 33.1          | 54              | 4.38           | 12                      | 28.8                   | 3.28             | 46          |
| 4          | 14              | 4.47              | 31.9          | 63              | 4.56           | 13.8                    | 27.5                   | 3.85             | 55          |
| 5          | 16.6            | 5.1               | 30.7          | 72              | 4.72           | 15.2                    | 26.7                   | 4.43             | 63          |
| 6          | 19.5            | 5.7               | 29.2          | 81              | 4.7            | 17.2                    | 25.4                   | 4.95             | 70          |
| 7          | 23.3            | 6.7               | 28.7          | 95              | 4.93           | 19.2                    | 25                     | 5.82             | 83          |
| 8          | 28.5            | 8.1               | 28.4          | 115             | 4.96           | 23.1                    | 24.7                   | 7.03             | 100         |
| 9          | 37.4            | 9.9               | 26.4          | 141             | 5              | 28                      | 25.8                   | 9.65             | 138         |
| 10         | 74.5            | 15.8              | 21.2          | 226             | 4.93           | 46                      | 20.7                   | 15.42            | 220         |
| Average    | 25.3            | 6.75              | 26.6          | 96              | 4.52           | 21.2                    | 23.2                   | 5.87             | 84          |
| a. Reducti | ons in subsidie | s are proxied by  | a reduction   | in housing exp  | enditure. The  | new share of ho         | ousing expendit        | ure is estimated | after the   |
| following  | price changes a | are taken into ad | count: For le | ow-income—F     | oodstuff and b | everages: 37 pe         | rcent; Clothing        | and footwear: 2  | 27 percent, |
| Housing:   | 4 percent; Hous | sehold furniture  | and furnishi  | ng: 27 percent; | Transportatio  | n and communi           | cations: 27 perc       | cent; Other item | s: 27       |
| percent. T | hese price char | iges are reduced  | l by 1 percen | t for middle-in | come groups a  | and by 3 percent        | for high-incon         | ne groups. These | es changes  |

Table 1-10. Urban Households: Housing Affordability, 2000–01

are the sum of those shown above for food, transportation and lighting and those estimated by the MPO in Yadollah Sabouhi, "Optimum recognition of energy sources," *Plan and Budget Journal*, special issue on the Third Development Plan, 1376 (1997): 52–76. *Source: Iran Statistical Yearbook* 1379 (March 2000–March 2001), Tehran, Iran Statistical Center, 2001, and Fardin Yazdani, "A review on

Source: Iran Statistical Yearbook 13/9 (March 2000–March 2001), Tehran, Iran Statistical Center, 2001, and Fardin Yazdan, "A review on the efficiency of market performance in urban areas," *BHE, Tehran:* Bureau of housing planning and economics, NLHO, 1380 (2001).

| Table 1-11. Housing | g Expenditures, | 1976-2000: Price | Elasticity of the | Share of Urban Household |
|---------------------|-----------------|------------------|-------------------|--------------------------|
|---------------------|-----------------|------------------|-------------------|--------------------------|

| Income<br>deciles <sup>a</sup>  | Food and beverages  | Clothing and footwear | Housing | Household furniture and other furnishing | Transportation and communication | Other<br>goods |  |  |  |
|---|---|-----------------------|---------|--|----------------------------------|----------------|--|--|--|
| Low   | -0.23   | -0.24                 | -0.92   | 0.092                                    | 0.17                             | -0.19          |  |  |  |
| Middle  | -0.19   | -0.16                 | -0.74   | 0.045                                    | 0.12                             | -0.182         |  |  |  |
| High  | -0.05   | -0.09                 | -0.2    | 0.032                                    | 0.08                             | 0.12           |  |  |  |
| a. Low-income: first four deciles; Middle-income: second four deciles; High-income: the latter two deciles. |   |                       |         |  |                                  |                |  |  |  |
| <i>Source</i> : Fardin Y planning and eco   | <i>Source</i> : Fardin Yazdani, "A review on the efficiency of market performance in urban areas," <i>BHE, Tehran:</i> Bureau of housing planning and economics, NLHO, 1380 (2001). |                       |         |  |                                  |                |  |  |  |

<sup>&</sup>lt;sup>72</sup> This estimation appears to imply that they have the same size units and size of families, when in reality they do not. See Sabouhi, "Optimum recognition of energy sources", *Plan and Budget Journal*, special issue on the Third Development Plan, 1376 (1997): 52–76.

80. Assuming price changes for goods and services (to proxy reduction of subsidies), the share of housing expenditure decreases 14 percent for low-income groups, 13 percent for middle-income groups, and 2 percent for high-income groups. On average, the demand for housing may be reduced by as much as 12.5 percent. Housing purchasing power may also be reduced once subsidies are cut. For instance, a middle-income household (in the fifth decile) may see its housing purchasing power drop from 72 m<sup>2</sup> to 63 m<sup>2</sup>, the current housing purchasing power for a low-income household (in the fourth decile).

81. Affordability will be worsened by the indirect effect of subsidy reductions caused by increased construction costs and, quite likely, increased housing prices. It is estimated that about 30 percent of construction costs concerning construction materials will suffer a tenfold increase (see background paper on the Construction Sector).

### **5.2. Implications for Government Policy**

82. According to the Plan and Budget Organization, more than 20 percent of urban Iranian households live below the urban poverty line, corresponding to a 2000–01 annual income of IRR 10.5 million. Despite the growth in per capita incomes over the past decade, the quality of life for Iran's poor has not improved. On average, total expenditure for the low-income groups, in 1982–83 prices, has remained relatively stable at around IRR 0.3 million . By way of contrast, total expenditure for the high-income groups has increased from IRR 2.2 million to IRR 2.5 million.

83. The reduction/abolishment of subsidies in an inflationary environment will worsen the living conditions for the poor. Preliminary estimates<sup>73</sup> suggest that reduced subsidies may cause effective demand for housing to fall by 12.5 percent, particularly by low- and middle-income groups. It is understood that the government intends to develop a social security mechanism to protect the vulnerable from the consequences of mass unemployment and from the planned reduction of state subsidies.

84. To start, the government should consider a less fragmented approach to social housing. The overall efficiency of these programs will improve when (a) objectives and instruments are better harmonized, (b) operating roles<sup>74</sup> are more efficiently allocated among institutions, and (c) there are more incentives to leverage competition and private markets, notably to build housing units and to mobilize the capital for long-term finance.

85. Government assistance to low-income groups could be improved with greater planning emphasis on social or supported dwellings for purchase or rental. Unfortunately, as mass producers tend to build for middle-income groups, an increased supply of affordable units is unlikely. Still, there might be ways to increase the supply of affordable

<sup>&</sup>lt;sup>73</sup> Source: World Bank estimates based on consultants reports.

<sup>&</sup>lt;sup>74</sup> These roles include: Setting social housing priorities; allocating and monitoring various housing subsidies; funding credit capital and/or interest rate subsidies; providing banking services; acting as an institutional investor; conducting building and development activities through subsidiary companies.

rental properties for this sizable population of low-income households. Perhaps Iran could formalize the role of the country's real estate agents and improve the country's tenancy laws.<sup>75</sup> This would require a review of tenancy laws and regulations. Although the rental law protecting tenants was abolished in 1999, the market has been slow to respond; the mandatory large deposits are still in force as an overreaction to laws that protected tenants' rights. This practice, however, is more widespread in the high-income groups. Therefore, a review of the legal framework protecting tenants may have a salutary effect on rental prices and conditions.

86. Encouraging investments in small rental properties, it should be emphasized, would be only a temporary solution for housing low-income groups. The market must develop two basic requirements according to law or guideline:

- There are no additional tax incentives under current rental law to units smaller than 150 n<sup>2</sup>. Iran could pass laws that provide incentives to developers for much smaller properties (i.e., up to 50 m<sup>2</sup>) and for multi-unit properties.
- The MHUD, jointly with the Association of Private Sector Developers, should draft regulations specifying the format and content of a "Condominium Agreement," officially prepared and registered by the private-sector developer before it can rent out individual properties.
- 87. In this context, future *housing policy in Iran* sould take the following into account:
- 1st decile. The need for housing is so extensive for this decile that the government's household density targets for this group will not be possible to attain. Most households will have to rely on rental accommodations, co-habit with other families, or build incrementally in peripheral areas.
- 2nd–3rd deciles. Highly subsidized social rental housing is provided by nonprofit organizations. Many households will co-habit or build incrementally in peripheral areas.
- 4th–5th deciles. Home ownership for this group should be promoted; developers should receive some tax incentives.
- 6th–7th deciles. Regular bank loans should be made more widely available.
- Above 7th. No assistance should be provided.

<sup>&</sup>lt;sup>75</sup> In the early 1980s, Parliament approved the *Osr-va-Haraj* amendment to the Law of Tenant and Landlord. The amendment allowed the courts to extend the contract period for three times on behalf of the landlord with no changes in contract conditions. The result was the increase in advance payment as well as other guarantees such as the provision of blank checks to the landlord.

# 2 The Urban Land Markets in Iran

# 1. Introduction

88. Land has been the cornerstone of the Iran's housing policy over the past two decades: compulsory acquisition of land in and around urban areas has allowed the state to amass vast areas of land; more than half of all the urban land supplied for housing has come from the public sector; and the biggest share of housing subsidy has come in the form of free or heavily discounted land. The objectives of such a policy have been to eliminate land speculation; supply urban land to vulnerable groups; and inhibit price increases.

89. But evidence suggests that such policies have led to unintended consequences, including higher and more volatile land prices that far exceed general inflation. Land supply also became increasingly inelastic for a number of reasons. First, instead of responding to consumer demand, public supply of land has instead conformed to the demands of successive Five-Year Plans. Second, public agencies have acquired far more land than they release on a yearly basis. Third, financing for infrastructure is constrained, further reducing supply of serviced land. Finally, inflexible land-use regulations prevent a timely expansion of city boundaries and redevelopment/densification of neighborhoods, further restricting private supply of land and giving rise to informal settlements.

90. Although Iran has instituted a number of reforms in an effort to reduce public intervention in land markets, there remains a pressing need for a clear transition strategy toward a market-based land policy, one that seeks to (i) develop the regulatory environment for an efficient land market (flexible land-use regulations, efficient transaction mechanisms and real estate services, and infrastructure supply); (ii) reduce the market power of public land by phasing out acquisition and hording of residential land; (iii) devolve land management/allocation responsibilities to local governments; (iv) regularize tenure and upgrade infrastructure in existing ,substandard settlements; and (v) address legal and management inadequacies in the system of land management and use in urban and peri-urban areas.

# 2. Background: Land Policy Since the Revolution

91. Building the Stock of Public Land. Three laws, which were passed between 1979 and 1987, transformed Iran's property regime, the structure of land ownership, and land market dynamics. In general, these laws restricted the amount of land held by private landowners; prohibited land transactions, except to or from the government; and established provincial Urban Land Development Organizations (ULDO), bringing under its control all land belonging to the central government and its agencies (ULDO was later replaced by the Urban Land Organization [ULO], in turn replaced by the National Land and Housing Organization [NLHO]).

| Year of   | Title   | Relevant Provisions  |
|-----------|---|--|
| Enactment |   |  |
| 1979      | Orban Wasteland ( <i>Mavat</i> )<br>Ownership<br>(also referred to as the<br>Second Urban Land Law) | <i>Enabling broad based acquisition</i> :<br>Urban land divided into two groups: wasteland and non-<br>wasteland. Owners of wasteland were granted 3 years' grace<br>period to construct residential property or lose their land.  |
| 1982      | Urban Land Law<br>(also referred to as the<br>Third Urban Land Law)                                 | <i>Expanding broad based acquisition</i> : Non-wasteland was divided into cultivated ( <i>dayer</i> ) and uncultivated ( <i>bayer</i> ). Owners of uncultivated land were entitled to develop up to 1000 sq meters, the rest would be assigned to the Urban Land Organization (ULO) at a price determined by the Government. Private transactions of uncultivated land were also forbidden. Cultivated land (urban farmland) in 32 cities could be purchased by the ULO. |
| 1987      | New Urban Land Law<br>(also referred to as the<br>Fourth Urban Land Law)                            | <i>Restricting broad based acquisition:</i><br>Extended the ability of ULO to acquire cultivated ( <i>dayer</i> )<br>and uncultivated ( <i>bayer</i> ) lands for 5 years and to 48 cities  |
|           | Fourth Orban Dance Dawy   | After 1992, ULO's compulsory acquisition activities were restricted to wasteland ( <i>mavat</i> ).   |
| 1992      | Land Acquisition Act  | Regulating the acquisition of land:<br>Provided procedure for pricing the land for plots of up to<br>1,000 m2: (i) the purchase price must be paid to the owner;<br>(ii) agreement on price must be reached between parties;<br>and (iii) in case of disagreement, a pricing committee<br>comprising representatives of the owner, the seller and the<br>judiciary system will decide. Procedures for purchase of<br>plots larger than 1,000 m2 remained undefined.      |
| 2002      | Residential Land Use Act  | Regulating the use of land:<br>Prohibited the allocation of land without previous<br>confirmation that its use is residential, within city<br>boundaries (Commission Article 5) and in rural areas<br>(Housing Foundation).  |

| Table | 2-1. | Land | Policy | since | Revolution | n |
|-------|------|------|--------|-------|------------|---|
| Lanc  |      | Lunu | roncy  | Since | nevolution |   |

92. Large-Scale Distribution of Land. Until 1985 the ULO pursued a policy of distribution of mostly raw, undeveloped land to individual households. Although large areas were distributed through this approach, it was quickly discredited due to its lack of sustainability, inefficient use of land, and land profiteering/speculation by some of the recipients. The failure of this policy to address housing shortages (which were exacerbated by the government's commitment—spelled out in the Constitution—to home ownership for all citizens) led the Ministry of Housing and Urban Development (MHUD) in 1985 to initiate a new urban land development policy with the intention of greatly increasing the availability of developable land. With "sustainable urban development" its overarching objective, the policy intended to provide infrastructure for new residential areas (including the development of new/satellite towns), and to supply developed land to both individual applicants and construction companies and developmers.

93. *Proliferation of Informal Settlements*. Since 1985 new housing development has taken place largely outside previous urban boundaries. Cities, constrained by lack of local resources and a highly centralized and rigid planning system, could not cope with the demand. Today, it is estimated that some 25–30 percent of urban settlements are informal, illegal or both.<sup>76</sup> In the Tehran Metropolitan Region, and during the 20-year period since 1976, about 40 percent of the additional 5 million Iranians have lived in informal settlements (Zebardast, 2002).<sup>77</sup> Actual estimates of illegal and/or informal settlements are made more difficult in Iran because by law those settled on untitled lands are deemed the legal owners after 15 days of possession, unless proven otherwise.

94. *New Towns as the Answer.* The government's initial response to the increased demand for urban land was new towns. The New Towns Corporation was created in 1988 with the objective of building satellite towns. An ambitious program for the development of new towns began, with more than 26 new towns planned around major cities of Iran. Lack of funds, compounded by infeasible locations, reduced the number of new towns to 18. Only a few have been developed, and located, well enough to start attracting new inhabitants. A few, such as the new town of Pardis, 25 km outside Tehran, are very well located near employment centers and have attracted thousands of residents; they still lack in trunk infrastructure, which is supposed to be supplied by the New Towns Corporation. The company, which gets the land from the government, has had difficulty financing the trunk infrastructure, even though a number of construction companies and cooperatives have already purchased land for apartment buildings.

95. *The First, Second, and Third Five-Year Plans on Land Policy.* While the First Five-Year Plan envisioned land supply administered by the public sector, the Second Five-Year Plan sought to introduce land prices and increasingly rely on market mechanisms. The Third Five-Year Plan affirmed the liberalization of land markets. It called for the reliance on price mechanisms (Box 2-1) and on vacant land tax as a means to stem land speculation. The plan provides for NLHO to continue supplying about one-third of all needed land for urban development. It also allowed the introduction of varied land prices; the discussion below shows that land is still mostly allocated significantly below market price.

<sup>&</sup>lt;sup>76</sup> Informal settlements are those that have not been registered but may not necessarily be illegal. Illegal settlements are in violation of the property rights of legally recognized owners.

<sup>&</sup>lt;sup>77</sup> Esfandiar Zebardast, 2002, "Spontaneous Settlements: Perceptions and Realities," unpublished mimeo.

### Box 2-1. Current Methodology for Pricing of Public Land

Up until 1988, public land was allocated at the same nominal price regardless of its location. Successive Five-Year Development Plans provided for a market-based approach for pricing land. There are currently five methods for allocating land:

- 1. Market price for small plots arrived at through bidding. This method is used to allocate small plots of land within the texture of the city. The sale is advertised in newspapers and the base price is estimated based on current market value. The buyer is usually free to develop the land within the scope of zoning regulations or transfer it to a third party.
- 2. Negotiated price for mass production of housing through agreement. This method is used to allocate large parcels of serviced land to housing developers. The developer is bound to implement the project per negotiated timetable. The price cannot be less than the raw cost of land plus infrastructure improvements.
- 3. Negotiated share of the equity. This is a form of public/private partnership in which the public sector contributes the land in return for an agreed upon share of the building. The public sector sells its share of the units at market price.
- 4. Discounted sale to private sector developers of rental housing. At least 10 percent of public lands allocated annually in selected cities must go for construction of private housing for rent. This method allocates land at a subsidized rate of 15-65% (inversely related to the price of land) of market value to developers of rental housing. Developers are bound to rent the housing units for at least 5 years, after which they can be sold.
- 5. Allocation of land to individual applicants at "cost" price. These are allocated to special categories of beneficiaries, mostly comprised of civil servants and groups supported by the government.

### 3. Assessing the Performance of Land Markets

96. To assess the performance of urban land markets, this section examines public land acquisition and allocation in the context of overall land supply, and land prices over the past two decades.

97. *Land Acquisition.* The rise and fall of land acquisition as a public land strategy (see Figure 2-1) shows that the early 1990s saw an active policy of land acquisition, with compulsory acquisition of *Mavat* (wasteland) land, compulsory purchase of *Dayer* (cultivated) and *Bayer* (uncultivated) lands (purchased land); and public land assigned to National Land and Housing Organization (NLHO) from other public entities and *bonyads*. Although trends have declined since the early 1990s, they are still substantial. In 1999, the NLHO acquired 267 sq km. To put these numbers in perspective, this is more than double the area of Paris, at 105 sq km. By 1999, NLHO had amassed vast areas of land, around 6,000 sq km (Figure 2-3). Acquisition of land by the NLHO has followed the same trend over the past two years (1999–2002). NLHO acquired 574 sq km of land of which 112 sq km were in urban areas (within city limits) and 460 sq km were in the urban periphery (see Table A2-5, Annexes – Chapter 2).<sup>78</sup> In addition, only 1.1 sq km was purchased land. Ten percent of the land acquired within city limits and five percent of that acquired in the periphery was located in the 6 largest cities in Iran (see Table A2-8).

<sup>&</sup>lt;sup>78</sup> Since March 2000, the land acquired by the government has changed classification to within city limits and between city limits and periphery.

98. *Land Supply*. While the trends of supply of public land followed those of land acquisition, the quantity supplied (notice scale) has been a small fraction of land acquired for any of the years, often not exceeding 10 percent (see Figure 2-2). Furthermore, land allocation for residential use has gradually increased but remains less than half (39 percent) of total land allocation in 2000/01 (14 out of 36 sq km). Twenty-five percent of the residential land was allocated in the six largest cities in Iran. Of the residential land distributed, more than 50 percent went to individuals, an allocation method that has produced very low densities and very high infrastructure costs. Policymakers are well aware of the inefficiencies entailed in this method of land allocation. Nevertheless, in 2001/02, in spite of intentions in the Second and Third Five-Year Development Plans to increase reliance on private developers for mass housing production,<sup>79</sup> land allocations continued to be dominated by individual transactions (see Table 2-6).

### Figure 2-1.



### Land Acquisition by Government (1979-2000)

<sup>&</sup>lt;sup>79</sup> Mass housing in Iran is defined as five or more units to the plot.



# Compulsory Land Acquisition and Land Allocation (1979-2000)



### Land Allocation by Government (1979-



■ Non-residential transfer ■Developers ■Housing Cooperatives ■Individuals

99. Even if we exclude public land assigned to NLHO (as it is a public-public transfer), land allocated still represents only 10–30 percent of land acquired on a yearly basis (see Figure 2-3). A possible reason for this is that most of the land acquired is on the periphery of small cities, which makes it relatively more difficult to allocate than in larger cities that develop and grow at a faster pace. Indeed, around half the land acquired in large cities is allocated, a trend that may be improving, judging from the 2001/02 land allocations: land acquired in large cities was roughly the same amount as that allocated (see Figure 2-4). Remaining to be verified, however, is the market power held by the government of Iran in the large urban land markets.

#### Figure 2-4.



Compulsory Land Acquisition and Land Allocation Six Largest Cities in Iran (1995-2002)

100. The significance of public land allocation to overall urban land supply becomes apparent from Figure 2-5. On average, 54 percent of all residential urban land supplied from 1979 to 1997 was public. This is hardly surprising given the legal restrictions on private transactions in effect until the early 1990s. Since 1996, public land supply has been declining in both magnitude and share of total land supplied (see Table 2-1).





Figure 2-6.



101. The figures above show, first, a public sector gaining more and more control over the stock of land, especially along the urban peripheries; and, second, a declining allocation of public land for residential use. The effect of this supply pattern on prices is examined next.

102. Urban Land Prices. Until the early 1990s, private land transactions were severely constrained and public land was allocated at fixed/administratively determined prices—in other words, there was no land market or price signals to speak of. During the 1990s, land prices rose sharply as restrictions on private transactions were lifted and a highly inelastic land supply system went into effect. Oil revenues largely drove the demand for land and real estate. Only in the late 1990s, and as the Oil Stabilization Fund became effective, did land prices decline again. Still, a fivefold increase in land prices within a three-year period suggests not only highly inelastic land supply but also the impact on land prices of reduced exchange rate speculation starting in 1994–95. Although public land supply in the short term is inelastic by definition (i.e., is responding to Five-Year Plans and other considerations that have little to do with short-term changes in demand), it is clear that private supply of land did not come in to fill the gap, probably partly due to locational concentration of public land as well as other constraints (formal city limits, access to infrastructure) that affect private as well as public land.

103. *Horizontal Expansion and the Rise of Commuting Costs*. Eighty percent of the land acquired in the past two years (2000/1–2001/2) is located outside city boundaries on the peripheries. Thus, assuming that this trend is representative of the stock of land held by NLHO, only a very small proportion of NLHO public land is within city boundaries. This urban land is normally used as revenue-earning assets in projects for the high-income groups<sup>80</sup>.

104. The bulk of public ownership and supply has fallen outside city limits but on the urban periphery. Development projects on the periphery are preferred because low-density areas facilitate the construction process and also because there are normally fewer administrative procedures to deal with. Unfortunately, this preference has encouraged unnecessary urban sprawl; the city of Yazd has perhaps one of the worst cases of such sprawl. This has not only resulted in increasing trunk infrastructure costs (when urban densities are already low), but also in increasing commuting costs at the national level. The share of household transport expenditure has risen at a faster rate than housing expenditure between 1995 and 2000 (see Table A2-7). As transportation costs will rise sharply with the reduction of energy subsidies, illegal settlements within cities may increase. As these are expenditure figures, they do not include the real cost or the time spent commuting, which are likely to have risen at an even faster rate.

<sup>&</sup>lt;sup>80</sup> Although this is the case for public and quasi-public organizations such as the Housing Foundation, it is uncertain whether the profits earned actually go to fund low-income housing, or if they get reinvested in the profitable activities carried out by their subsidiaries.

Figure 2-7



105. *Revenue from Public Land Allocation*. Although the Second and Third Five-Year Plans made provisions for a market-based approach to their allocations, most land continued to be allocated at deep discounts. The various programs range from a 100 percent discount on land cost and development (for special groups such as families of martyrs, prisoners of war, the disabled), to a 90 percent discount (for targeted groups such as young families, women-headed, and low-income households), to a 10 percent discount for nontargeted schemes. The average price of allocated public land was about US\$1 per square meter in 1998–99 and dropped to about US\$0.8 in 2000 (see Table 2-2).<sup>81</sup> In spite of these deep subsidies in public land pricing, overall land as a proportion of housing cost has continued to hover between 40 and 50 percent in the past 10 years (compared with 25–30 percent in well-functioning housing markets, see Figure 2-8). Inelastic land supply translates into high market prices of privately sold land. This, in addition to low building densities, contributes to such a high average share of land cost.

<sup>&</sup>lt;sup>81</sup> Even if we assume that 50 percent of the land was allocated free for public services (roads, parks, etc.), the average price still would not exceed US\$2 from 1998 to 1999.





106. *Bayer (Vacant) Land Tax.* The government of Iran increasingly relied on Bayer land tax as a disincentive to speculative land holdings. All urban Bayer land remaining unutilized after two years, without a justifiable reason, was liable to an annual tax of 2 percent of its market value, increased to 4 percent after the fourth year. Although revenues from these taxes had increased since the early 1980s, they were still minute (less than US\$1million annually). As a result, because expenses for collecting this tax were high compared with actual revenues, the government decided to stop collection—a de facto elimination of this tax.

107. Besides providing important revenues to the municipalities, taxation can help to create an efficient land market and to improve the management of land use and densities in both urban areas and on the periphery. Therefore, implementation of the appropriate land tax policies in Iran deserves careful consideration. Both assessment of market values and enforcement of collections are issues to take into account when designing land taxes.

| Table 2-2. Lanu Tax (IKK D) | Table 2-2. | Land | Tax | (IRR | b) |
|-----------------------------|------------|------|-----|------|----|
|-----------------------------|------------|------|-----|------|----|

| 1982-83  | 83-84 | 84-85 | 85-86 | 86-87 | 87-88 | 88-89 | 89-90 | 90-91 | 91-92 | 92-93 | 93-94 | 94-95 | 95-96 | 96-97 | 97-98 |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0.1  | 0.2   | 0.2   | 0.3   | 0.2   | 0.3   | 0.4   | 0.5   | 0.5   | 0.8   | 1.4   | 1.7   | 3.2   | 5.8   | 7.2   | 6.9   |
| Source: Various sources, Ministry of Finance and Economics, Tehran: various years. |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |

108. *The Contribution of Urban Master Plans to Inelastic Supply of Land.* Serviced land supply in Iran is inelastic because of rigid city boundaries and/or unavailable serviced land. The abrupt growth of the primary cities in the early 1980s as a result of rural-to-urban influx and land distribution has left a deficit of infrastructure services that continues to this day. Adding to the problem has been the government's "new towns" policy, which began in the mid-1980s to divert scarce resources away from urban peripheries and toward 26 new towns, many of which eventually proved unviable.<sup>82</sup> City planning often followed the new towns policy by restricting development to areas within the official city limits despite the fact that migration to the cities consistently exceeded projections. The situation was further exacerbated by the lack of funds to extend infrastructure even within the city limits.

109. Limited funds for maintenance have also led to the deterioration of infrastructure in the inner cities, resulting in the familiar pattern of exodus of inhabitants to newer areas and the replacement by illegal immigrants, crime and drug activity. Reversing this process at this point requires more than physical investment in infrastructure: revitalization programs, including social services and local economic development would be needed. In addition, there is a strong case for master plans include the peri-urban areas beyond the city boundaries (i.e., zoning should apply to the metropolitan area and beyond). Most of prime agricultural lands and groundwater tables are located around cities—poorly managed expansion of the cities will have negative environmental consequences.

110. *The Proliferation of Informal Settlements.* The experience of Iranian cities suggests that the urban planning system has been too rigid to adapt to fast demographic shifts and that investments in infrastructure were not commensurate with the needs: land use restrictions within the city; rigid city boundaries; and the inability to extend infrastructure even within the city have resulted in the spill over of low income urban groups into the periphery, the unserviced areas, or the rundown inner areas of cities. As a result, and in contrast to many developing countries, Iran's informal settlements have more to do with their administrative status established by urban planning regulations than with property rights or housing quality: (i) illegal occupation of land and land invasion are relatively rare in Iran, and most land is bought on the informal market; (ii) construction is for the most part with permanent materials; and (iii) residents for the most part have moved from urban, not rural areas. It is the inflexibility of urban planning regulation and the inability to integrate areas on the periphery that render most of these settlement "informal." A study of 10 cities by local experts has shown that after these cities prepared and

<sup>&</sup>lt;sup>82</sup> Due to lack of funds and lack of feasibility of many of these locations, this program has been tailored down to 18. Only a subset of these towns has been developed far enough and is located appropriately to start attracting residents.

implemented their master plans, they experienced accelerated peri-urban population growth. In all these cities, residents acquired the land for housing through the informal land market (Rafiei and Athari, 1995,<sup>83</sup> cited in Zebardast, 2002). This is confirmed by studies of the Tehran Metropolitan Region, which have shown that largest cities of the region (except Tehran and Karaj) began as informal settlements but were granted formal city status: "Four out of the nine newly established towns during the 1991–1996 period, and eight out of nine newly established towns in 1997 were previous informal settlements. Currently there are 17 informal settlements with a population of 10,000 or more that are on the waiting list to be awarded the city status" (cited in Zebardast, 2002).

111. Few spontaneous settlements develop within the periphery. The main reason for this is that Article 100 allows the municipality to fine and even destroy, after a municipal court hearing, any illegal construction in the greenbelt area. This is not the case elsewhere, however. Regulations governing rural settlements close to the periphery are also partly responsible for the improper channeling of lands to the urban areas and effectively increasing the urban sprawl (Figure 2-9).<sup>84</sup>

# 4. Proposed Reforms

112. Iran's experience with direct interventions to control urban land prices is not unique. Indeed, a number of countries have experimented with various forms of "land banking" with the aim of stemming speculative activities in land markets and to keep land prices affordable. The most common model (India, Tunisia, some parts of Canada, etc.) is to create a public agency that would acquire land in urban and peri-urban areas through purchase, expropriation, or special legislation restricting land transactions. The agency would "bank" the land, safeguarding it from speculative pressure, and then release it administratively at a prescribed government price. Although land can indeed be used as an instrument for market stabilization, the unintended consequences of such policies are many and have tended to lead to the opposite outcomes from those hoped by policymakers: such public agencies typically manage to capture valuable urban or peri-urban land. But in the absence of access to infrastructure finance to service this land and release it when and where it is needed, and in the absence of price signals and corporate incentives to perform efficiently and use the land optimally, these agencies face tremendous difficulties meeting their policy objectives and also staying afloat.

113. *The Option of Doing Nothing*. As seen from the subsidies chapter, land represents the biggest part of the housing subsidy package, reaching anywhere from 0.3 to 0.8 percent of GDP. The wide range represents the yearly volatility in the volume of

<sup>&</sup>lt;sup>83</sup> Minoo Rafiei and Kamal Athari, "Informal Settlements in Iran: A Survey of Causes and Solutions," UPARC, Tehran (Persian) 1995.

<sup>&</sup>lt;sup>84</sup> There are several actors involved. The Housing Foundation, in charge of preparing the rural master plans and defining the boundaries of rural settlements. The Ministry of Agriculture is responsible for all rural land. The Ministry of the Interior (represented by the local governments) issues permits for individual housing construction outside the city boundaries (Article 6) and is responsible along with Commission 13 for new town development. The local governments can delegate their powers of issuing permits outside the city limits. In fact, some provinces have delegated this authority to the Housing Foundation.

allocated land in any single year. As the chapter on subsidies (chapter 3) clearly demonstrates, these subsidies are not well targeted; and they are not accounted for in the government budget. Perhaps the worst effect of these subsidies is the distortions they cause in the housing sector. Nevertheless, if appropriately targeted, land subsidies can play an important role in attracting developers to invest in low-income housing and in rental accommodations. As such, their role should be explored as part of a housing policy concerned particularly with the provision of low-income housing. This could be achieved through limited government intervention that is both efficient for the operation of land markets and effective in the provision of low-income housing.



114. *Protecting Private Property Rights*. With a fresh history of an active public policy that calls for the compulsory acquisition of private land, Iran's property rights regime is, as one would expect, far from stable. Although widespread land acquisition has declined since the early 1990s, the practice still exists for unused *Mavat* land in urban and rural

areas. It would be difficult for a private real estate development industry to develop and prosper given the risks of expropriation.

115. Scaling Back NLHO's Role in Land Development. NLHO continues to acquire land for its housing program (more than 2,500 ha per year). The rationale for such a role needs to be questioned at this stage of market development: are there strong institutional/policy arguments for NLHO continuing the active role in land markets? or is the NLHO a relic of outdated housing policies? Possible justifications for such a role are regulatory impediments, which would prevent private developers from acquiring and developing the land. These would include the inability to amalgamate large tracts of land, or the inability to coordinate infrastructure services, or the inability to get financing for land acquisition. As part of a long-term strategy, these types of impediments should be addressed directly by regulatory, enabling reforms rather than by having the NLHO replace private developers in acquiring land.

116. While the NLHO has the mandate to manage all public land and will always need to acquire land for public purposes, these purposes need to be defined more narrowly to cover public goods (infrastructure right of way, parks, schools, etc.). It should cease to acquire, and gradually divest itself of, land suitable for residential use. It should focus on efficiently allocating the large holdings in its possession. This has to be carried out in a transparent and predictable way to reduce further market volatility, prevent the formation of private land monopolies, and provide incentives for housing production that meets pent-up demand for housing among middle- and lower-income households. A portion of current land holdings could be used as a mean to promote the emergence of a privately led land development profession.

117. Transitioning to Private-led Land Development. There is clear evidence that the private construction/real estate sector is sufficiently well developed to identify appropriate locations for low-cost housing, preferably on a small, in-fill scale. The subsidies that are now are in the form of discounted land transfers can be channeled differently: developers can compete for direct NLHO subsidies by meeting certain building standards, costs, and/or profiles of buyers and tenants. NLHO, in turn, would assist private developers by facilitating the interface with public sector institutions (infrastructure, permits, etc.). As financing of land purchase is one of the constraints sometimes faced by private developers, tenders for NLHO land could be structured as bids for equity shares, which the NLHO could then transfer to eligible beneficiaries through rent-to-own programs. Beyond access to public land, the private sector's ability to accumulate private land, subdivide, it and serve it should be enhanced. This requires streamlining procedures for land accumulation/subdivision, and allowing private sector and land owners' (individual owners and/or land associations) participation in development of infrastructure. Timely provision of water and power will continue to be a challenge in the near future given their status as public monopolies. But steps can be taken in these sectors as well to realize gains from a more competitive environment, especially in private participation in distribution.

118. *Transitioning to a Greater Municipal Involvement in Urban Planning and Land Development.* The current highly centralized planning systems create a disadvantage to decision makers in accessing local information, developing participatory approaches, and enforcing urban policies. At the central level, institutional fragmentation of responsibilities over urban development makes addressing the problem more difficult. The Ministry of Housing and Urban Development (MHUD) has direct responsibility for urban planning and public land; Ministry of Interior (MOI) has direct authority over local authorities, and Management and Plan Organization (MPO) has direct responsibility for local budget allocation and management. At the city level, land management and urban development require extensive knowledge of local market conditions; these are best left to cities to manage locally. Current plans to devolve more responsibilities to local governments should aim at placing municipalities at the hub of urban development.

119. Endowed with proper planning, budgeting, and capacity-building measures, municipalities can be more responsive to local preferences and demand and can do a better job of coordinating private-sector and local community initiatives as well as supervising utility company investment programs in the areas under their jurisdiction. A prerequisite for this, and in fact for all the following recommendations, is to define appropriate roles for NLHO, MHUD, and the municipalities. Without the definition of roles, these recommendations will be difficult to implement. This, along with the explicit mechanisms to help transition to greater municipality involvement, should be carefully developed.

120. *Improving Land Registration/Land Transactions Infrastructure*. The transfer of ownership of land or real estate from one party to another in Iran takes two to three months if all documents are in order. This, according to interviews, represents only about 25 percent of the cases—the rest require more time. Even some large organizations such as the Housing Foundation have failed to provide title to the households involved in their programs.<sup>85</sup> Such performance is incompatible with a modern and efficient real estate sector. Modernization of land registries in a number of developed and developing countries (electronic storage of documents and maps, the automation of processes) has cut transaction costs considerably, allowing for one-stop-shopping services and less than 48-hour turnarounds.

121. Streamlined procedures and standardized documents become increasingly necessary as financial and capital markets develop. Iran's interest in developing a secondary mortgage facility requires streamlining and standardizing all upstream procedures and documents for transferring ownership rights, mortgaging, releasing, and transferring of mortgage across financial intermediaries. The programs<sup>86</sup> for modernizing the registration system should be supported. In particular, the work done by the National Surveying Organization reporting to the MPO, concerning Remote Sensing, GPS (Global

<sup>&</sup>lt;sup>85</sup> By 1998, the Housing Foundation had divided 75,000 hectares of rural land into 232,151 plots. However, the Housing Foundation was given this responsibility at the beginning of the Second FYDP (i.e., 1994/95) but by 1997 it had only given out 1,626 titles. Source: Housing Foundation, Report of Activities.

<sup>&</sup>lt;sup>86</sup> Iran has experimented in several ways to improve registration and titling. The implementation of a cadastre started about 10 years ago, but serious management problems inside the registry has resulted in little progress. Perhaps the appropriateness of having the registry under the judiciary system should be reevaluated.

Positioning System) and GIS is commendable. In addition, some municipalities, like Tehran, have been extremely successful in implementing GIS systems.

122. *Monitoring Land Prices and Constraints to Land Supply.* The previous section shows that land, far more than other inputs, has contributed to the inflation of housing prices. Previous experiments with restricting land transactions, expropriating land, and allocating land for free have not been clearly shown to be sustainable, efficient, or necessarily well targeted—hence the shift in policy.

123. As the share of the supply of public land decreases and that of private land increases, it becomes increasingly important for MHUD/NLHO to enable rather than control and supply residential land. It needs to monitor land prices at a local and city levels, identify any supply constraints on elasticity, such as predominance of public/*waqf* land in peripheral areas; lack of trunk infrastructure; city limits prohibiting further development; or density regulations preventing vertical densification. NLHO already has access to an extensive and regularly updated database of land and housing prices provided through surveying real estate agents around the country. In a market-based environment, NLHO needs to increasingly rely on this data for policy analysis and decision making. NLHO can also assume an increasing role in auditing all the policies, regulations, and procedures affecting the supply of land.

124. *Managing the Supply of Serviced Public Land.* NLHO should develop a marketbased methodology for use by cities to managing public land supply. The methodology would use local land market prices and share of land cost in total housing cost as inputs to help determine the quantity, location, and density of public land supply. Local managers would be evaluated according to their ability to keep the share of land cost to total housing cost within a band of, say, 30–40 percent. They would manage this relation not by subsidizing land prices, but by supplying more land for development and/or by modifying the floor-to-area-ratio (FAR) allowed in a particular neighborhood. Although private developers would be relied on for supplying secondary infrastructure, trunk infrastructure will still need to be provided by public authorities. NLHO needs to play a leading role in developing a coordinating mechanism for financing and provision of trunk infrastructure.

125. *Stemming Land Speculation*. Many of the land policies adopted in the past have been driven by a desire to stem land speculation. As the experience of resource rich countries has shown, inflation of real estate prices is more a symptom of what is known as the "Dutch disease," where a single sector (in Iran's case, oil) dominates the economy and causes the inflation of non-tradable goods (in this case, land). The limited alternatives for inflation-proof investments in Iran add to this effect, producing a volatile land market that shadows oil revenues. Stemming this phenomenon has more to do with macro policy and capital-markets development than with land policy per se. In conjunction with appropriate macro and capital-market policies to develop investment alternatives, a well-designed and -implemented vacant land tax could reduce incentives to store wealth in land.

126. *Tenure Regularization.* As with many countries of the developing world, the government of Iran finds its policy on tenure regularization caught between wanting to regularize existing settlements and at the same time not wanting to send a signal of tolerance/encouragement of future unauthorized occupation of land. Article 141 of the Third Five-Year Development Plan provides a mechanism for regularizing tenure in informal areas through registration in exchange for payment of the market value of land. Experience from other countries suggests that residents of informal settlements gain de facto security of tenure and services over time and, especially if they already paid for land informally, have a low willingness to pay for it again. This approach is unlikely, therefore, to result in radical changes in the status of informal settlements.87

127. A recent positive development is the convergence of the previously divergent approaches of the Ministry of Interior and Ministry of Housing on the approach to informal settlements. A combined policy note was recently developed. It acknowledged that settlements should be regularized but that the process should avoid creating the perception that the official acts did not constitute a gift of land, which is unsustainable and invites further unauthorized development. This balancing act needs to be designed carefully, first, to provide the right set of incentives for residents of informal settlements to regularize their ownership; and, second, to guide future land development to be more flexible, more responsive to demand, and better suited to meet low-income housing needs and to set standards.

<sup>&</sup>lt;sup>87</sup> See Zebardast (2001) and Rafeii and Athari (2001).

# **3** Housing Subsidies

### **1. Introduction**

128. The government of Iran is clearly concerned about the affordability and accessibility of housing, and therefore has sought to provide assistance to many different population groups. Yet this has often led to a fragmented system marked by the absence of a comprehensive approach to subsidies. Iran's Third Five-Year Development Plan indicates that the government is seeking to move toward better-targeted subsidies. These efforts are strongly supported and could provide a great opportunity for future policy reforms.

129. Due to the fact that so many of the subsidies appear at different points in the housing process (e.g., construction, finance, purchase and ownership), subsidies appear to be both inefficient and not well targeted; only a portion reaches the targeted population. Even when assistance is provided directly to the households, it is often inaccessible, particularly to those most in need. In addition, many subsidies are general (e.g., interest rate ceilings and energy subsidies) and thus benefit more prosperous households. Since many subsidies are implicit and not accounted for, they are much larger than what appears on the government's budget. In addition, the types of subsidies (and the ways they are provided) are very inefficient. This inefficiency increases the size of subsidies and introduces some distortions in the housing sector, hindering its development.

130. This chapter identifies the major types of subsidies used in Iran, provides an assessment of their size, and suggests recommendations for policy reforms. The scope of analysis here is limited by the lack of information; because of this, the paper does not cover housing subsidies directly targeted to housing-related institutions, including *bonyads*, for operating or capital costs. The housing reviewed here also excludes specific types of housing, such as hostels, which are covered by other ministries. Also, Iran's housing infrastructure is not addressed, as this would require a separate study. Nevertheless, the basic findings and conclusions presented in this chapter, and on which the recommendations are based, are sound<sup>88</sup>. The chapter begins with detailed descriptions of the different types of housing assistance; then it seeks to quantify their size and to assess how well they are targeted. The second section identifies some of the secondary effects of the subsidies and their distortions. Section three draws conclusions, and the final section recommends policy reforms.

# 2. Housing Assistance

131. Most subsidies in Iran are indirect and nontransparent. Because of this, they are not explicitly accounted for in any budget. Therefore, quantitative analysis involves

<sup>&</sup>lt;sup>88</sup> Due to the fact that information about subsidies is fragmented, the analyses offered here are based on certain assumptions and qualitative assessments obtained during interviews with experts in Iran. Therefore, these analyses should be considered indicative rather than absolute.

assessment of these invisible subsidies rather than taking the numbers from budget allocations. These assessments are based on assumptions about the limited secondary sources of data, which are measured as discounts provided or revenue foregone by the government as measured against the estimated market value of the respective assets or services. Due to lack of data, estimates on the size of subsidies were carried out only for 1999–00 and 2000–01.

### 2.1. Overview

132. Iran's government has sought to meet the housing needs of different population groups through an assortment of assistance programs. But these have taken a rather fragmented form—subsidies target households based on type of housing and social group rather than on income levels. Most subsidies are provided implicitly via regulatory and administrative pricing decisions. (See Annex 3.11).

133. Estimates for 1999–00 put Iran's housing subsidies at 1.5 percent of GDP, and at 2 percent in 2000–01; but these show great variation from year to year, mostly because of administrative allocations of land—how much and where and at what subsidized prices. At the higher levels, subsidies constitute nearly half the annual housing investment of 6.1 percent of GDP. When utility subsidies of another 3 percent are added, the total housing-related subsidies become rather excessive, nearly equaling the total annual housing investment.

| Type of subsidies             | Estimated size<br>(percent of GDP in 1999–2000) | Estimated size<br>(percent of GDP in 2000–01) |
|-------------------------------|---|---|
| Land                          | 0.3   | 0.8   |
| House price                   | 0.6   | 0.5   |
| Interest rate                 | 0.4   | 0.4   |
| Public housing (1999–2000)    | 0.1   | 0.1   |
| Subtotal                      | 1.4   | 1.9   |
| Utilities                     | 3.1   | 2.7   |
| Total                         | 4.5   | 4.6   |
| Source: World Bank estimates. |   |   |

Table 3-1. Summary of Housing Subsidies

134. At the same time subsidies are: (a) mostly nontransparent and unaccounted for (the government budget explicitly accounts for less than 2 percent of total housing-related subsidies); (b) inefficiently delivered (see Section 4); (c) regressive (interest rate and energy subsidies); and (d) provided through a highly fragmented system. In addition, these subsidies are provided in ways that create distortions with much broader negative effects on the economy than mere resource consumption; this is discussed in Section 4.

135. The authors studied subsidies from two different perspectives. First, what was the recipient's perspective? How did the benefits affect the recipient household? How did

the government finance the assistance? Was there an explicit cost to the government budget? Or was it an implicit subsidy in the form of government revenue foregone?

136. We found that the government made no direct transfers to low-income households for housing purposes. Nor did we find any publicly owned social housing in Iran. Public housing is provided either to public servants and public workers at sub-market rents or for sale under RTO (rent-to-own) schemes. Subsidies are provided in three main forms:

- the largest land subsidies could be as high as 1 percent of GDP;
- provided mainly by allocations of public land at below-market prices to different beneficiaries—developers, co-operatives, *bonyads*, funds, and private individuals;
- housing prices are subsidized through inputs and energy costs, preliminary assessment of which indicates they could be around 0.5 to 0.6 percent of GDP;
- such subsidies are obtained by limiting profitability of construction companies under government contracts and selling housing at cost; most price subsidies, however, are through energy subsidies that cut the cost of construction materials;
- housing finance benefits from interest rate subsidies from both banking and nonbanking institutions account for 0.4 percent of GDP;
- interest rate subsidies are provided in two forms—universal caps and specific subsidies to certain households, e.g., prisoners of war, young families, low-income households, public servants, and others. Developers that meet certain requirements are eligible for interest rate subsidies for limited periods, and buyers of these units are also eligible for such subsidies under RTO schemes. Additional subsidized funds are provided via programs administered by Bonyad Maskan, Imam Khomeini Relief Committee, and other institutions. Part of the subsidies provided by interest rate caps is financed by subsidized government funding, reduced reserves, and other banking-sector instruments.

137. Every household wishing to receive housing assistance applies to the Ministry of Housing and Urban Development. Private individuals are scored in accordance with a scoring system approved by the government (see Annex 3.4). The queue is arranged accordingly—the higher the score, the greater priority that household has in the queue. Once the household's turn comes, the housing is provided with subsidies determined appropriate for the social group to which the household belongs (for details see Annex 3.3).

138. Low-income groups receive some housing assistance through some of the *bonyads*, or charitable organizations, such as Bonyad Shahid (Martyrs' Foundation) and Bonyad Mostazafaan, which received huge assets at no cost during the nationalization process following the Revolution. They also benefit from some government assistance. It is not possible to determine the amount of government funds that went to these institutions for housing purposes. Affiliated with these *bonyads* are large holding companies with many subsidiaries. For the most part, they carry out profit-earning activities funded by revenues from real-estate management and other commercial activities and donations. These

activities have grown in response to incentives for the *bonyads*' nonprofit objectives. Because the holding companies have been taxable since 1997–98, some nonprofit activities have reverted to the *bonyads* from the holding companies. Therefore, the tax subsidies the *bonyads* receive may not be significant because such a large share of the profitable operation is performed by subsidiaries under the affiliated holdings. In order to determine the subsidies received by the *bonyads* and other housing-related institutions (such as public construction companies), additional research would be required. Such research would have to separate profitable and non-profitable construction and housing from other activities.

139. Because Iran's subsidies are not targeted to household income, there is no information about the kinds of households the subsidies are reaching. It appears, however, that only a limited share of subsidies are targeted (and accessible to) lower-income households. This is particularly true, because more than half of subsidies are general, which is to say they apply to utilities, construction materials, interest rate caps, and housing prices. Hence, they are regressive. Recipient-specific subsidies would affect land, specific interest rates, and housing prices. Yet even recipient-specific subsidies may not be accessible to its intended beneficiaries because only households in the middle- to high-income deciles would be able to buy newly constructed housing and utilize interest rate subsidies.

140. Since the government appears to want to provide assistance to specific social groups rather than explicitly to low-income households, it might be more appropriate to assess subsidy targeting to those groups. Although the allocation of specific subsidies could be transparent in principle through fair application and scoring mechanisms, many targeted groups would continue to have difficulties with access, as discussed above. Hence, the issue is not so much about the makeup of the specific groups the government wants to help (e.g., families of martyrs, prisoners of war, disabled veterans, young families, families headed by women, poor households). These households need and deserve assistance. The issue is rather that the types of subsidies the government is using and how they are being channeled. The same magnitude of resources could be used more efficiently and provide better help to those in need.

141. The government of Iran has already made the first steps toward addressing some of the above issues. Some of the subsidies have been eliminated in recent years; others are scheduled for elimination in the near future. Also, the Third Five-Year Development Plan (FYDP) emphasizes the need for better-targeted subsidies, reduced land subsidies, land allocations at market prices, and phasing out housing provisions to war martyrs by the end of the plan.

### 2.2. Scale of Subsidies

142. *Land subsidies*. Taksam<sup>89</sup> figures show that between March 1997 and September 2001 the government of Iran purchased 101,009 hectares (ha) of land; only 16,063 ha have been allocated. Of these 16,000 ha, only 6,240 ha were residential (see Annex 3.8).

<sup>&</sup>lt;sup>89</sup> Taksam manages the database for the National Housing and Land Organization (NHLO).

|  | 1997–98 | 1998–99 | 1999–2000 | 2000-01            |  |  |  |
|--|---------|---------|-----------|--------------------|--|--|--|
| Land acquisition   | 23,195  | 17,871  | 28,393    | 26,020             |  |  |  |
| Allocation of residential land <sup>a</sup>  | 1,322   | 899     | 1,140     | 2,879 <sup>b</sup> |  |  |  |
| Allocation of nonresidential land1,395b2,0053,2153,208                                     |         |         |           |                    |  |  |  |
| <sup>a</sup> These numbers exclude allocated land indicated in column "Rent" in Annex 3.8. |         |         |           |                    |  |  |  |
| <sup>b</sup> Data provided by the Taksam for these years are different.                    |         |         |           |                    |  |  |  |
| Source: Statistical Yearbook of Iran 2000/01, Tehran: Iran Statistical Center, 2001        |         |         |           |                    |  |  |  |

Table 3-2. Public Land (in hectares)

143. The NHLO allocates land for different projects, to mass producers (developers), *bonyads*, co-operatives, funds,<sup>90</sup> and individuals. During the past seven years more than 400,000 households have received land for housing purposes (see Chapter 2).

|                             | 1994–95            | 1995–96             | 1996–97 | 1997–98 | 1998–99 | 1999–2000          | 2000-01            | Total  |
|-----------------------------|--------------------|---------------------|---------|---------|---------|--------------------|--------------------|--------|
| Mass producers <sup>a</sup> | 265                | 1,014               | 614     | 181     | 56      | 155                | 1,444              | 3,729  |
| Cooperatives <sup>a</sup>   | 345                | 383                 | 255     | 250     | 128     | 294                | 187                | 1,842  |
| Individuals <sup>a</sup>    | 1,227              | 1,130               | 1,014   | 891     | 715     | 691                | 1,247              | 6,915  |
| Total <sup>b</sup>          | 1,547 <sup>a</sup> | 2, 891 <sup>a</sup> | 1,883   | 1,322   | 899     | 1,140 <sup>b</sup> | 2,879 <sup>b</sup> | 12,561 |

Table 3-3. Allocation of Public Land (hectares)

a. Numbers for these years provided by Taksam differ from those provided in the Statistical Year Book of 2000–01 and sum of the above equal 1,837 for 1994–95 and 2,527 for 1995–96.

b. Numbers for these years provided by Taksam differ from those provided in the Statistical Year Book of 2000-01.

*Source:* For dis aggregated data World Bank estimates based on consultants' reports. Statistical Yearbook of Iran 2000/01, Tehran: Iran Statistical Center, 2001 for annual totals.

144. Three types of prices exist for allocations of public land (for allocation procedures, see Annex 3.7).

- The 1980 price (estimated at close to zero in current market values) for Special Groups, e.g., martyrs, prisoners of war, and disabled veterans (also Ghadir Project). In addition, Special Groups receive 100 percent discounts on land development costs.
- The regional price (estimated to be around 20 percent of current market value) for young families, households headed by women, and low-income households (also Ghadir Project).<sup>91</sup>
- The "expert" price (90 percent of current market value) for construction of housing under RTO schemes.

<sup>&</sup>lt;sup>90</sup> There are four recently established funds—Youth, Teachers, Workers, and Guardian (see Annex 2). Another proposal to establish a new housing fund is currently in the process of being prepared by the Ministry of Housing and the Central Bank that would operate similarly to the already existing funds. Bonyad Maskan and NHLO also would like to establish a fund also for improvement of rural housing.

<sup>&</sup>lt;sup>91</sup> Low income for 2001–02 has been defined as a household with monthly income of less than IRR 570,000 (US\$ 71).

145. No data are available on the values of land allocated for housing construction and at what prices; more research is needed. Some rough estimates can be made, however, based on the assumptions described below.

146. Average land price per square meter in 2000–01 has varied between IRR298.000 (US\$37) in Ardebil and IRR1.89 million (US\$236) in Tehran.<sup>92</sup> For the sake of initial assessment, we attempted to calculate the weighted average price of land by applying the average price in the capital of the *ostan* (province) for the land allocated in the respective ostan; such prices were available for 19 of 28 ostans and accounted for 94 percent of land allocated. For those *ostans* where price was not available, we applied the lowest price of IRR298,000 (US\$37). This produced a weighted average price of IRR1.2 million (US\$150). But the *actual* weighted average price is expected to be lower because:<sup>93</sup> (i) government land is sold in large plots for prices per  $m^2$  that are 20 to 40 percent lower; (ii) plots are located primarily on the outskirts of towns, where prices are 40 to 50 percent lower; and (iii) some land has been allocated in smaller towns and more rural areas. This lowered the estimated price used in the calculations to IRR400,000. The study also assumed that the average discount on the allocated land was 58 percent in 1999-00 and 40 percent in 2000–01.<sup>94</sup> Based on these assumptions, the estimated land subsidies were IRR1,240 billion (US\$155 million), or 0.3 percent of GDP in 1999-00 and IRR4,600 billion (US\$ 0.6 billion) or 0.8 percent of GDP in 2000–01. Additional information<sup>95</sup> (see Annex 3.7) would indicate much larger subsidies, which may exceed 5 percent of GDP in 2000–01. However, these data require more study.<sup>96</sup>

147. As calculations for these two years already indicate, land subsidies are extremely volatile. They depend on the volume of allocated land in any single year—which varies significantly-and on the value of such land. The more than a six fold increase in subsidies from 1999 to 2001 was mainly because the total volume of allocated land increased by 152 percent in 2000-01, this in comparison with 1999-00. Moreover, 47 percent of this land was in Tehran for 2000-01, versus 10 percent in 1999-00, and land prices increased significantly.

148. Utility subsidies. Iran's highly subsidized energy prices translate into highly subsidized housing utilities;<sup>97</sup> in fact, utilities are probably the largest housing-related subsidy in Iran, accounting for more than 3 percent of GDP.

149. The following are assumptions used for purposes of calculation:

<sup>&</sup>lt;sup>92</sup> Iran Statistical Year Book, Tehran: Iran Statistical Center, 2001.

<sup>&</sup>lt;sup>93</sup> Source: World Bank estimates based on consultants reports.

<sup>&</sup>lt;sup>94</sup> Weighted average assumed an allocation price of 20 percent of market value to private individuals and 90 percent to developers and co-operatives. <sup>95</sup> Source: Bank estimates based on consultants reports.

<sup>&</sup>lt;sup>96</sup> See Annex 7, showing the total government revenue from land allocation was IRR367 billion in 1999–01 and IRR409 billion in 2000–01, which would indicate average revenue per  $m^2$  of IRR8,212  $^{96}$  and IRR6,708 in the two years, respectively. Hence, the average discount from the assessed weighted average market value of the allocated land is much larger than assumed 50 percent. Based on these data, the assessed annual subsidy would be IRR5,279 in 1999-00 and IRR34,260 billion in 2000–01 or 1.3 percent and 5.9 percent of GDP respectively.

<sup>&</sup>lt;sup>97</sup> See Fetini (1999)

- Market prices on water, electricity, and natural gas are assessed at 31, 117.6, and 260 percent higher than the current prices respectively;<sup>98</sup>
- Breakdowns of utility expenditures for different services are not available, so it is assumed that electricity counts for 50 percent of utilities consumption and that the other 50 percent is split between water and gas, which leads to a combined index of 132 percent<sup>99</sup> increase;
- Because total household expenditures on utilities are unavailable, an estimate was made by multiplying average household expenditure by the number of households (see Annex 3.10.). These data on household expenditures were available for 1999–00 and 2000–01; as were data on the number of households in 1996–97. Annual rates of growth for urban households were estimated at 4 percent; rural household growth rate was set at 1 percent.<sup>100</sup>

150. Based on the above assumptions, utility subsidies in 1999–00 would be IRR13,367 billion<sup>101</sup> (US\$1.7 billion) or 3.1 percent of GDP. In 2000–01 these subsidies would be IRR15,641 billion (US\$2 billion), or 2.7 percent of GDP.

151. *Housing price subsidies*. Housing price subsidies are estimated to reach 0.5 to 0.6 percent of GDP and are obtained through: (a) the sale of housing built at cost under government contracts; (b) limiting the profitability of government construction contracts at 10 percent (nominal) versus estimated market rate of return on housing of 30 to 50 percent;<sup>102</sup> and (c) implicit energy subsidies to construction materials.

152. Because publicly built housing is sold rather than allocated for free, the government subsidy takes the form of foregone revenues on the sold housing—excluding land and land development costs discussed above. In the absence of information, any assessments of the size of the subsidy are based on several assumptions, described below.

153. For the purposes of these calculations, we used nominal rates of return of 20 and 40 percent.<sup>103</sup> We also assumed that the final sales price of the publicly constructed housing would include construction costs at 100 percent and a government administration fee of 7

<sup>&</sup>lt;sup>98</sup> See Fetini (1999)

<sup>&</sup>lt;sup>99</sup>  $0.25 \ge 0.31 + 0.25 \ge 2.60 + 0.5 \ge 1.176 = 1.32$ 

<sup>&</sup>lt;sup>100</sup> Source: World Bank database, 2001.

<sup>&</sup>lt;sup>101</sup> Average urban household expenditure on utilities in 1999–00 was IRR779,834. Number of households = number of households in 1996–97 x  $1.04^3 = 7,948,925 \times 1.04^3 = 8,941,460$ . Total estimated urban expenditure on utilities = IRR779,834 x 8,941,460 households = IRR6,973 billion (b). Subsidy to urban households = IRR6,973 b x 1.32 = IRR9,173 b.

Average rural household expenditure on utilities in 1999–00 was IRR701,656. Number of households = number of households in 1996–97 x  $1.01^3 = 4,410,370 \times 1.01^3 = 4,544,009$ . Total estimated rural expenditure on utilities = IRR701,656 x 4,544,009 households = IRR3,188 b. Subsidy to rural households = IRR3,188 b x 1.32 = IRR4,194. Hence, total estimated subsidy = IRR9,204 b + IRR4,209 b = IRR13,367 b.

<sup>&</sup>lt;sup>102</sup> A survey of 100 developers in Tehran indicated that profit rates there are even higher and may reach 60–80 percent. <sup>103</sup> Under the government scheme the expected market return of 30–50 percent is split between the contractor (10 percent) and subsidy (20–40 percent).

percent.<sup>104</sup> However, these calculations do account for the time value of the money and assume that investment and revenues take place in the same year, whereas the actual time difference between two events could be two to four years. Based on these assumptions, the estimated subsidies would compose 0.01 to 0.04 percent of GDP.

|   | 1996–97                             | 1997–98                           | 1998–99           | 1999–20000    |  |  |  |
|---|-------------------------------------|-----------------------------------|-------------------|---------------|--|--|--|
| Government construction costs —RTO  | 64                                  | 183                               | 227               | 564           |  |  |  |
| Foregone revenue (i.e., subsidy) <sup>a</sup>   | 13–26                               | 37–73                             | 45–91             | 113–226       |  |  |  |
| Government admin. costs <sup>b</sup>  | 8                                   | 23                                | 28                | 70            |  |  |  |
| Net subsidy to the recipients as percent of GDP<0.1<0.1<0.1   |                                     |                                   |                   |               |  |  |  |
| a. Foregone revenue is calculated by multiplying construction co  | osts by rate of re                  | turn of 20–40 p                   | ercent.           |               |  |  |  |
| b. Six percent of the expected total value of the housing units, which, assuming land costs to be equal to 40 percent of the total price of a unit, is estimated to be IRR132, 378, 469 and 1,166 billion for each of the respective years. |                                     |                                   |                   |               |  |  |  |
| <i>Note:</i> Because house price subsidies to public rental housing are under RTP scheme is covered in the table. Such housing is sold  | e provided in the to the recipients | e form of discoust at completion. | inted rents, only | housing built |  |  |  |

Table 3-4. House Price Subsidies (RI b)—RTO

154. Energy subsidies on construction materials are assessed based on extensive work on energy subsidies in Iran by Fetini  $(1999)^{105}$ . His estimates indicate that raising oil prices to the market level would increase costs of construction and/or renovation by 11.7 percent. Subsidy on the total annual housing investment of IRR20,577 billion (US\$ 2.6 billion) in 1999–00 and IRR26,786 billion (US\$3.4 billion) in 2000–01 would be 0.5 percent and 0.6 percent of GDP respectively. This would correspond to the respective increase in housing price of 5 to 6 percent (with a ratio of construction costs at the total of approximately 50 to 60 percent).<sup>106</sup>

155. *Subsidies to finance*. Iran has a two-tier subsidy for housing finance: (a) retail interest rate subsidies made available to borrowers and (b) wholesale subsidies to financial institutions through public funding, reduced reserve requirements, and other measures. Since the latter subsidies are assessed in more detail later in this volume (see Chapter 4), this chapter focuses on retail subsidies to the borrowers.

156. Interest rate subsidies are provided in two forms: first, a profit-rate cap established for the banks and applicable to all borrowers of housing loans; and, second, an additional interest rate subsidy, available to specific types of borrowers—including Special Groups, public servants, and teachers. Special interest rate subsidies also go to developers in the event they meet certain criteria; these are usually available and/or passed over to the buyer as well, if the house is financed by a loan under an RTO scheme.

Source: government budget and World Bank estimates.

 $<sup>^{104}</sup>$  In an example provided by a developer as a typical one, the total costs of construction and land per m<sup>2</sup> was equal IRR750,000 (US\$ 94), out of which IRR50,000 (US\$ 6) or 6.7 percent of the total were for government administrative costs.

<sup>&</sup>lt;sup>105</sup> Habib Fetini, *Economic Aspects of Increasing Energy Prices to Border Price Levels in the Islamic Republic of Iran*, Washington DC: Unpublished World Bank Document, August 1999.

<sup>&</sup>lt;sup>106</sup> Iran Statistical Year Book, Tehran: Iran Statistical Center, 2001.

157. At the estimated market interest rates of 23 to 30 percent,<sup>107</sup> the implicit subsidies instituted by interest rate caps are between 4 and 15 percent, depending on the size of the housing and participation in savings scheme (see Table 3-2). In the absence of information on the structure of the housing loan portfolio, a 17 percent housing loan was assumed, for the purposes of calculating the weighted average interest rate cap; the market rate was set at 25 percent. Based on these assumptions, the estimated subsidies imposed by interest rate caps would compose 0.4 percent of GDP.

158. The housing loan portfolio was estimated based on the total loan portfolio classified as loans for "Housing and Construction" as of the end of 2000–01—applying the same ratio assigned by the Central Bank of 20:9 (housing versus construction). As clarified by the Central Bank, housing loans include housing construction loans, while construction loans are non-housing. Based on the total outstanding housing and construction loan portfolio of IRR39,915 billion (US\$5 billion) as of the end of 2000–01, the estimated housing loan portfolio would be IRR27,527 billion, or US\$3.4 billion.

159. The following table shows the additional interest rate subsidies to specific groups (see also Annex 3.3.):

| Recipient                             | Additional interest rate subsidy | Final interest rate |  |  |  |  |  |
|---------------------------------------|----------------------------------|---------------------|--|--|--|--|--|
| Developers                            | 6 or 8 <sup>a</sup>              | 9–11 <sup>b</sup>   |  |  |  |  |  |
| Special Groups <sup>108</sup>         | 11–15 <sup>b</sup>               | 4 <sup>a</sup>      |  |  |  |  |  |
| Teachers                              | 10 <sup>a</sup>                  | 7–9 <sup>b</sup>    |  |  |  |  |  |
| Public servants                       | $4^{\mathrm{a}}$                 | 11–15 <sup>b</sup>  |  |  |  |  |  |
| Rural and post-disaster housing       | 7–11 <sup>b</sup>                | 8 <sup>a</sup>      |  |  |  |  |  |
| <sup>a</sup> Fixed                    | •                                |                     |  |  |  |  |  |
| <sup>b</sup> -Calculated              |                                  |                     |  |  |  |  |  |
| Source: NHLO, unpublished information |                                  |                     |  |  |  |  |  |

 Table 3-5. Interest Rates and Interest Rate Subsidies (percent)

160. The above subsidies are explicitly budgeted, and paid from, a national budget via a refinancing mechanism with a delay of at least one year. In accordance with NHLO guidelines, 360,000 households received such subsidies in 2000–01 at an estimated total amount of IRR150 billion<sup>109</sup> (US\$19 million), or 0.03 percent of GDP for those years.

161. Hence, the total interest rate subsidies in 2000–01 (explicit and implicit) would compose 0.4 percent of GDP. Such subsidies create contingent liabilities for the

<sup>&</sup>lt;sup>107</sup> Interest rates on loans to industries with no profit rate caps are 23 percent, while the bazaar rate on housing loans was indicated to be around 30 percent. In the interviews with banks, possible market rates on housing loans could be estimated at around 25 percent.

<sup>&</sup>lt;sup>108</sup> Households of martyrs, prisoners of war, and disabled veterans.

<sup>&</sup>lt;sup>109</sup> There are 180,000 households receiving IRR75 billion in 2000–01 under supervision of NHLO. In accordance with NHLO there are another 180,000 households receiving interest rate subsidies under the supervision of the Ministry of Education. Since the loan amount is not dependant on the household's income, but rather set administratively, it was assumed that interest rate subsidies received by teachers under supervision of the Ministry of Education in monetary terms could approximate those under NHLO supervision. Hence, the total estimated amount is IRR150 billion.

government. Even if they were eliminated today, government liabilities would continue over the next 10 to 15 years. As indicated by the NHLO, the contingent liabilities of the government for loans granted by financial institutions as of the end 2001–02 are estimated to be IRR978 billion (US\$122 million).

162. Subsidized housing finance also is provided through the programs administered by institutions such as the Imam Khomeini Relief Committee (IKRC) and Bonyad Maskan. The former charitable organization provides housing and housing maintenance services among other activities to targeted households, including low-income households, households with a disabled member, households headed women, and students. It also provides loans for self-construction of houses and house maintenance. Many of these activities are financed by government. In 2001–02 the government allocated IRR170.5 billion (US\$ 21 million) for these activities. Even though funds are provided as loans, they are repayable only insofar as households are able; as a result, the repayment ratio has been negligible, as indicated by the IKRC. Additional implicit interest rate subsidies are provided by charging no interest rate on these loans. The total subsidies, including interest rate subsidies accounting for IRR43 billion or US\$ 5.4 million (at 25 percent market interest rate), provided via this mechanism would be less than 0.1 percent of GDP (around 0.04 percent).

163. Bonyad Maskan administers several government-funded programs that offer implicit interest rate subsidies on loans to targeted households. The government also offers special support to specific groups of households, such as public servants. These take the form of additional funds that are available through the Bank Maskan for lending to participants in the savings scheme. In the absence of information, however, it is not possible to assess the size of subsidies provided through these mechanisms; the small volumes of lending, leads one to assume that these subsidies are very small relative to GDP.

164. *Subsidized public housing*. As of the end of 1998–99 there were almost 200 thousand housing units provided to public servants and public employees such as military, teachers and others at highly subsidized rents.

|   | 1995–96                 | 1996–97             | 1997–98    | 1998–99    | 1999–2000               |
|---|-------------------------|---------------------|------------|------------|-------------------------|
| Housing units                                     | 170,000                 | 175,810             | 181,160    | 190,330    | 193,934                 |
| Area (m <sup>2</sup> )                            | 18,870,000 <sup>a</sup> | 19,163,290          | 19,202,960 | 20,174,980 | 20,537,610 <sup>a</sup> |
| Average rent (RI m <sup>2</sup> )                 | 500                     | 560                 | 1,500      | 1,500      | n/a                     |
| Estimated market rent (RI m <sup>2</sup> )        | 5,990                   | 7,198               | 8,524      | 10,494     | 12,891                  |
| <sup>a</sup> These numbers seem to be inconsisten | t when compared w       | ith those for other | years.     |            |                         |
| Source: World Bank estimates b                    | ased on consult         | ants reports.       |            |            |                         |

Table 3-6. Public Rental Housing

165. Although estimated annual rent subsidies do not appear to be significant composing 0.1 to 0.16 percent of GDP—the per-unit subsidies appear to be very high, constituting as much as 45 to 75 percent of estimated market rents. For the purposes of these estimates, the simple average of market rents in 21 cities was calculated (see Annex 3.9). Since total rental costs comprise both monthly payments and a deposit, a conservative opportunity cost of deposit was calculated using a 14 percent annual interest rate on a one-year deposit.<sup>110</sup>

166. Tax subsidies. A small property tax, no longer in force, was established after the Revolution, perhaps in 1980. It provided very modest revenues for the Ministry of Finance and Economic Affairs. The municipalities collected a council tax (comprising several fees, duties, and the like)—estimated to account for a rather small fraction of the expected current market value of any property. Significant amounts of potential revenue, in short, are left uncollected. Some municipalities like Tehran have therefore found other revenue sources, such as selling density.<sup>111</sup> There is a related issue. Taxes can be an efficient housing policy tool. Taxes on capital gains and on properties can be used to deter speculation and to encourage selling and renting of unused properties; for example, 10–15 percent of the properties in Tehran's northern neighborhoods are vacant. These taxes would very likely be more efficient than taxes on vacant units, which are not collected in practice, and the recently abolished vacant land tax. In addition, many countries use the property tax as a main source of local government revenue. In the case of Iran, the income from property taxes is so low, and the collection mechanism so inefficient, that local governments do not even bother to collect them. Often, construction permits are the only remaining source of revenue for local governments. As a consequence, ineffective tax instruments produce even greater price distortions in the issuance of such permits.

167. Other housing-related tax subsidies have been identified:

- Public servants may withdraw the entire installment of the housing loan repayment from their taxable income.
- Special income tax exemptions are provided on income from rental housing in the following two cases—(i) 150 m2 in large cities and 200 m2 elsewhere; (ii) properties of more than three units of less than 75 m2 in a single block in the five largest cities, and 100 m2 elsewhere.
- Transfer of tax exemption is available on the first sale of low-income housing that meets the following characteristics: (i) in cities with more than 250,000 inhabitants, projects with ten units and more with average unit size of less than 75 m<sup>2</sup>; (ii) in other cities, five units and more with average unit size of less than 100m<sup>2</sup>; (iii) and elsewhere, projects with three units and more with average unit size of less than 100m<sup>2</sup>; (iii)
- A transfer tax on nonexempt properties is calculated from the price set by the government, which is 10 percent of the actual market price; thus, the 5 percent rate of this tax corresponds to 0.5 percent of the actual market price.

<sup>&</sup>lt;sup>110</sup> Source: World Bank estimates based on consultants reports.

<sup>&</sup>lt;sup>111</sup> A shift in the Major's policy on Teheran towards the prohibition of selling density has resulted in a proposal to increase council tax by 15 times.

• General corporate income tax in Iran is progressive, depending on income ranging from 12 to 54 percent, and has the same structure as the individual income tax. Developers of multi-apartment units receive a preferential tax treatment. Under a progressive system, the tax rate would increase with the number of units owing to higher taxable income. Therefore, a new system was recently implemented; it provides for a flat tax rate per housing unit. In addition, income per unit is calculated based on a matrix (by types of materials and location); the government sets standard prices per m2. These prices are, however, much lower than average prices reported by the Statistics Bureau. The implicit tax subsidy has not been estimated.

# **3. Targeting Subsidies**

### 3.1. Overview

168. In Iran, the housing sector comprises three population groups: (a) the high- to medium-high-income households that require no government assistance; (b) mediumincome groups requiring limited assistance; and (c) low-income and poor households, which have limited access to "social" housing (also see Chapter 1). In Iran most of the public housing assistance is provided to the first two groups of households; only limited share is provided to lower-income ones and even then tend to be inaccessible to the poor.

169. Housing subsidies are provided based on the type of housing or social group of the household, and subsidies are not tracked by the recipient's income level.<sup>112</sup> Also, it is important to remember that the government of Iran provides no explicit subsidies to low-income households; instead, it has identified special groups—low-income households are one of these several groups. We will first assess how subsidies are targeted, then review how the government of Iran targets low-income households. Some of Iran's direct assistance for housing is supplied by the Imam Khomeini Relief Committee, Bonyad Maskan, the Ghadir Project, and public housing programs. Some of the land subsidies appear to be reasonably well targeted, except the recipients are not necessarily lower-income households (this is particularly true with public housing and land subsidies).

170. Despite that, more than half the subsidies—interest-rate caps, energy subsidies, and subsidies for land and housing prices—are regressive—even with respect to recipients specifically targeted by the government. Also, the interest-rate subsidies, even if directed to eligible beneficiaries, remain inaccessible to many of them, particularly those in lower income deciles. Only new construction is eligible for housing price and interest rate subsidies, and these properties are more expensive by far than comparable existing or second-hand units. Hence, lower-income population groups receive these subsidies only in the unlikely event of choosing and somehow affording more-expensive housing.

 $<sup>^{112}</sup>$  While application forms require to provide household's income, it is not clear how reliable these data are – some so not include this information.

171. To assess how well the subsidies target low-income households, two perspectives were used: first, eligibility requirements for recipients (i.e., government scoring), and second, types of subsidies. Each is discussed below. See Table 3-10 for of the distribution of subsidies by type of household; assessments are described in more detail in sections 3 and 4 below.

| Type of subsidy  | Estimated level of targeting   |  |
|--|--|--|
| Land   | Insufficient information on the recipients of land at discounted prices makes reasonable assessment impossible. Developers and co-operatives could be receiving as much as two-thirds of subsidies. In terms of affordability, it seems that at the estimated large discounts on land prices, it would be accessible even to those in the lowest deciles of income distribution. |  |
| Utilities  | 9 percent are estimated to be provided to the lowest quartile of income distribution, while 32 percent are estimated to be provided to the highest quartile.   |  |
| Housing price  | Due to energy subsidies <sup>a</sup>   |  |
|  | —It is estimated that 1.76–3.6 percent of these subsidies are targeted to households<br>likely to fall in the lower deciles of income distribution (Ghadir Project, housing<br>provided by Imam Khomeini Relief Committee, post-disaster and rural housing through<br>Bonyad Maskan)   |  |
|  | -2 percent of these subsidies go to those receiving housing built under government contracts   |  |
| Finance  | Specific interest rate subsidies (accumulated since inception) <sup>b</sup>  |  |
|  | —12 percent received by developers   |  |
|  | -28 percent by government employees  |  |
|  | -27 percent by special groups (expected to be in lower deciles of income distribution)   |  |
|  | —18 percent "supported" housing (see discussion in the text)   |  |
|  | —15 percent for rural households   |  |
| Subsidized public housing  | It is not expected that those eligible for public housing (public servants and employees) would be households in the lowest deciles of income distribution, but are probably in lower middle-income groups.  |  |
| Tax subsidies  | Most tax subsidies are expected to be captured by developers and investors rather than<br>passed on to households. Tax subsidies provided by income-tax deduction of mortgage<br>loan installments are available only to those public servants who are able to borrow.<br>Hence, it is highly unlikely that those in lower deciles of income distribution receive<br>them.       |  |
| <i>Notes</i> : (a) No detailed analysis was carried out because the estimated housing price subsidies are very small (0.03 percent of GDP) due to limited profitability on government contract. (b) Annual data on specific interest rate subsidies are not available. Insufficient information made it impossible to assess distribution of subsidies via interest rate caps. |  |  |

 Table 3-7. An Overview of Targeting of Subsidies

### **3.2. Scoring**

172. The scoring system assigns housing assistance priority. It does not target assistance specifically to the low-income households. Scoring consists of eight parameters (see Annex 3.4), only one of which relates to income and accounts for 16 percent of the total score. Two other parameters—women-headed households and Special Groups accounting for another 19 percent—tend to place these households in lower deciles of income

distribution and, hence, could be indirectly linked to income. Those receiving assistance have an average score of 17 to 18 out of 31 total possible points; one accrues points by other parameters such as number of years residing in the area, membership in a co-operative, number of children, and keeping a savings account, all of which are not even specific to the social groups the government says it is seeking to help. In addition, only 25 to 45 percent of subsidies are recipient specific and could be allocated through this or any other scoring mechanism (such as those applied by Funds, IKRC, or other groups).

173. A limited review of household application forms from nine provinces (Chahar Mahal va Bakhtiyari, Ilam, Hormozgan, Golestan, Kerman, Gilan, Azerbayjan Gharbi, Khorasan, and Hamedan)<sup>113</sup> indicated that the average annual income of applicants was IRR7.2 million (US\$900), which is around the second decile of urban and fourth decile of rural household expenditure. At the same time it was indicated that these data might not be very reliable and misrepresent the real situation.

### **3.3. Targeting of Specific Subsidies**

174. Although they can create a heavy initial burden on the budget, up-front subsidies are easy to control and alleviate long-term contingent liabilities to the government. They also are easy to target and adjust to the macroeconomic and housing market conditions as these change. Such subsidies have been used in several developed countries, including Belgium, Spain, and Finland. Chile reorganized its housing policy in the late 1970s and developed a system of up-front subsidies to compensate for high real interest rates on mortgage loans, which is also very much the case in Iran.

175. Following Chile's example (box 3.1), several Latin American countries (Costa Rica, El Salvador, Uruguay, and to some extent Mexico) transformed their traditional subsidy systems into direct subsidies. Close attention ensures that these subsidies are well targeted and progressive (i.e., the lower the income, the larger the subsidy).

176. Tax deductions are one of the most popular supply-side subsidies. When used as demand-side incentives, they are considered rather inefficient and regressive. Developers can be encouraged to produce low-cost housing through tax subsidies for building lower-cost and smaller housing; particular attention would be paid to the provision of low-income rental housing and the avoidance of ghettoization. More specifically, early steps could change the requirements that limit housing size in order to receive benefits by applying size limits to each unit, rather than as a project average. Further lowering of this limit should remain under consideration.

<sup>&</sup>lt;sup>113</sup> Source: World Bank estimates based on consultants reports.

### Box 3-1. Up-front subsidies in Chile

In 1977–78 the government of Chile substantially altered its housing policy by reducing its direct involvement in providing low-income housing. It shifted much of the initiative for housing construction, and administrative responsibility, to the private sector. The new system involved public expenditures in the form of up-front subsidies and allocated most of the responsibility for arranging construction and financing to the private sector. The up-front subsidies were established to compensate for high real mortgage interest rates.

The following three housing programs, for different levels of household income, evolved in Chile:

—The Progressive Housing Program provided private developers with minimum housing units (up to 14 m2) on a plot of land serviced by the government. A small share of the costs was financed by the household from either savings or a mortgage loan, and a large part was provided as an up-front subsidy by local governments.

—In the Basic Housing Program, private developers built small housing units (40–45 m2) under government contracts; the purchase was financed by the household's savings and a Housing Ministry loan granted on market terms. Resale of the unit was restricted for five years.

—The Unified Subsidies Program offered households an up-front subsidy based on a scoring mechanism pegged to household savings; households obtained additional financing in the form of mortgage loans from commercial banks.

This system allowed an important development of housings production in Chile. Between 1990 and 1997 the annual number of started construction of housing units increased by 68 percent and the area of housing built increased by 12 percent.

*Source*: World Bank Project Staff Appraisal Report for Chile Public Sector Housing Project; November 30, 1984.

177. Land subsidies. In the absence of detailed information, several assumptions about the distribution of subsidies were made. Until 2000–01 most land was allocated to individuals; in 2000–01 57 percent of the land was allocated to mass producers and co-operatives. Assuming that individuals receive an 80 percent discount and developers and co-operatives only 10 percent, then in 2000–01 majority of subsidies (almost 85 percent) would be received by private individuals and 15 percent of subsidies would be received by developers and co-operatives. Based on the numbers in Annex 3.8, however, it appears that most land subsidies go to developers and co-operatives. Even if it is assumed that all payments for the land were made by the mass producers and co-operatives (i.e. private individuals received their land for free), 44 and 66 percent of the total estimated land subsidies in 1999-2000 and 2000-01 respectively would be received by the mass producers and co-operatives.

178. In principle, land allocation prices for individuals are estimated very low and, hence, are affordable even to those in lower-income deciles. Still, there is no information to help in assessing how these subsidies are targeted—either to the intended recipient or to low-income groups.

179. *Utility subsidies*. Utility subsidies are regressive by nature and most are captured by the higher-income households due to their higher levels of energy consumption. Based
on annual household expenditures for light, fuel, and water by income decile (see Annex 3.10.) and assumptions described earlier in section on utility subsidies (Housing Assistance, Section) the lowest quartile of income distribution receives only 9 percent of utility subsidies; 32 percent are captured by those in the highest quartile of income distribution.

|  | 1         | 2       | 3       | 4    | 5     | 6     | 7     | 8     | 9     | 10    |
|--|-----------|---------|---------|------|-------|-------|-------|-------|-------|-------|
| Urban households   |           |         |         |      |       |       |       |       |       |       |
| Average annual household<br>expenditure on utilities (RI th) | 288       | 476     | 577     | 658  | 782   | 835   | 977   | 1,068 | 1,143 | 1,472 |
| Estimated annual subsidy (RI th per household) <sup>a</sup>  | 380       | 626     | 759     | 866  | 1,029 | 1,099 | 1,285 | 1,405 | 1,504 | 1,936 |
| Subsidy received (percent of total)                          | 3         | 6       | 7       | 8    | 9     | 10    | 12    | 13    | 14    | 18    |
| Cumulative subsidy received (percent)                        | 3         | 9       | 16      | 24   | 33    | 43    | 55    | 68    | 82    | 100   |
| Rural households   |           |         |         |      |       |       |       |       |       |       |
| Average annual household<br>expenditure on utilities (RI th) | 250       | 448     | 557     | 658  | 739   | 852   | 943   | 1,079 | 1,312 | 1,775 |
| Estimated annual subsidy (RI'000<br>per household)           | 329       | 590     | 732     | 866  | 972   | 1,121 | 1,241 | 1,419 | 1,726 | 2,335 |
| Subsidy received (percent of total)                          | 3         | 5       | 6       | 8    | 9     | 10    | 11    | 13    | 15    | 20    |
| Cumulative subsidy received (percent)                        | 3         | 8       | 14      | 22   | 31    | 41    | 52    | 65    | 80    | 100   |
| Notes: (a) Average household expenditure on                  | utilities | x 1.32. |         |      |       |       |       |       |       |       |
| Source: World Bank estimates based                           | l on co   | nsultan | ts repo | rts. |       |       |       |       |       |       |

 Table 3-8.
 Distribution of Utility Subsidies by Income Deciles (2000-01)

180. *Housing price subsidies*. The largest share of housing price subsidies goes toward construction costs owing to below-market energy prices (discussed above). Housing programs that appear more oriented to low-income recipients—for example, the Ghadir Project, the Imam Khomeini Relief Committee,<sup>114</sup> or post-disaster and rural programs through Bonyad Maskan comprised only 1.8 (2000–01) and 3.6 percent (1999–00) of total annual housing construction. Hence, even if other programs supply more low-income housing, the proportion of housing price subsidies reaching those in the lower deciles of income distribution is expected to be negligible—less than 5 percent. Recipients of post-disaster assistance, as assessed by the Housing Foundation, are households in the lower deciles of income distribution.

<sup>114</sup> Housing built under Ghadir Project and by Imam Khomeini Relief Committee cost IRR20–30 million (construction costs only, but land, at least for those eligible for housing under these programs, is probably provided at close to zero cost). Most of the housing provided by IKRC is provided at no cost of the recipient. Housing under Ghadir Project, however, is provided with loans. Based on optimistic assumptions that those in the first decile of expenditure distribution (due to lack of data on income distribution, expenditure distribution is used instead.) are able to pay 30 percent of their income for housing loan, at 4 percent interest rates (some of those eligible under Ghadir Project—martyrs, prisoners of war, disabled veterans, etc.—are eligible for loans at 4 percent) they would be able to borrower IRR16 million. In order for them to be able to save the remaining IRR14 million it would take six to seven years at 20 percent savings rate.

181. Another form of housing price subsidies—provided by limiting the profitability of government-funded construction contracts—also does not appear to be received by those in lower deciles of income distributions. Annual numbers of government housing budgets in 2000–01 and 20001–02 indicate that only 1 and 0.6 percent of government housing budgets in the respective years was allocated specifically for low income hosing (see Annex 3.6.). Another 10 and 4 percent respectively were allocated for housing for recipients who could be expected to belong to the lower deciles of income distribution—housing for former prisoners of war and war refugees, rural housing, and war-damaged housing. At the same time, civil servants, public employees, military personnel, and seminary students have been allocated a large share of the housing subsidies (at least 47 and 65 percent in the respective years). Although there is no information on the income of recipients of housing built under government contracts, and it is not clear what shares go for rent and purchase, one suspects that a negligible share of these subsidies go to low-income households.

182. *Finance Subsidies*. Based on the information provided by NHLO on specific interest rate subsidies paid to different recipients since their inception, <sup>115</sup> 27 percent of the finance subsidies have been paid to those in special groups, which are expected to be in lower income deciles; 18 percent goes to *supported* groups and 15 percent to rural households. However, developers get 12 percent and 28 percent goes to government employees.

| Group of recipients  | In IRR     | Percent of total |  |  |  |
|--|------------|------------------|--|--|--|
| Government employees   | 46,672,103 | 28               |  |  |  |
| Special groups   | 44,889,835 | 27               |  |  |  |
| Supported  | 29,514,692 | 18               |  |  |  |
| Rural  | 24,380,443 | 15               |  |  |  |
| Developers   | 19,019,952 | 12               |  |  |  |
| Total 164,477,025 100  |            |                  |  |  |  |
| <i>Note:</i> Does not include interest rate subsidies to teachers that are accounted for and managed by the Ministry of Education. |            |                  |  |  |  |
| Source: NHLO, unpublished information.   |            |                  |  |  |  |

 Table 3-9.
 Distribution of Finance Subsidies by Groups of Recipients

183. Interest rate subsidies help to lower the borrower's income requirements and make loans more affordable. At current expected market interest rates of 25 percent, only those in the eighth decile of expenditure distribution would be able to borrow even IRR30 million (US\$3,750). Lowering interest rates to an average of 17 percent by imposing caps lowers the income requirement to that of the sixth decile. But those in the lower income deciles would be able to borrow IRR30 million (the cost of housing under the Ghadir Project) only at interest rates below 5 percent—and then only if they could afford to use

<sup>&</sup>lt;sup>115</sup> Annual data on specific interest rate subsidies are not available. Due to lack of information, it is not possible to assess distribution of subsidies provided via interest rate caps.

30 percent of their income to repay the loan. At the same time, borrowers are required to make interest payments for which the government reimburses them in a year's time. Hence, households have to be able to make full payments for at least the first year. Hence, interest rate subsidies go mostly to households in the higher income deciles. Considering prices for newly constructed housing—outside the Ghadir Project and IKRC housing—it is clear that only households in top income deciles are able to afford housing. This is not only because of insufficient borrowing capacity but also because of the onerous down-payment requirements, which sometimes is as high as 80 percent of the housing price. In addition, interest rates subsidies create long-term contingent liabilities for the government, which are hard to control and unsustainable over the long run. They also create larger distortions in both the financial sector and housing market.

184. *Subsidized public housing*. Insufficient information about individuals living in public housing makes it nearly impossible to assess how well such subsidies are targeted. However, it is not expected that public servants and public employees would be households in the lowest deciles of income distribution.

185. *Tax subsidies*. Even though this paper does not attempt to assess Iran's tax subsidies, it is nevertheless apparent that they tend to be regressive and inefficient—either as (a) income tax deductions on a borrower's mortgage payments, or (b) as tax exemptions extended to developers of, and investors in, low-income housing. The former does not affect the initial affordability of housing (apparently one of Iran's key problems); those in higher income deciles benefit because of a progressive tax rate. The latter subsidies tend to be inefficient because only a portion of them reaches their intended beneficiaries; the developer and investor consume the rest.

## 4. Subsidies: Efficiencies and Distortions

186. While it is important to account for subsidies, it is equally important to track the distortions and inefficiencies that subsidies introduce into the system. These have by far the broader implications for the housing sector and the economy as a whole. Distortions become particularly worrisome in an environment of increasing urbanization, with its potential for rapid increases in demand for housing. The following section explains the impact of subsidies on the housing sector in Iran in a broader context.

187. The different decisions households have to make when obtaining a house—ranging from type and location to financing—are affected by subsidies and how they are provided. Obtaining housing involves different elements such as the cost of the unit itself, which includes land, land development costs, and construction; the cost of different financing options—saving, borrowing, subsidies; and the cost of selecting among locations, types of housing, and developers. The types of subsidies create distortions in all of these areas, including inefficient use of resources (land and housing), and efficiency losses on interest-rate caps and in-kind subsidies, each of which is discussed below.

### 4.1. Inefficient Use of Resources

188. Use of resources is largely determined by the capital and operating costs. The capital costs, or unit costs, comprise the cost of land and land development and input cost such as materials and labor. By way of contrast, utilities are a major component of housing operating costs. To the extent subsidies affect any of these parameters, they affect resource use.

189. *Land.* Large swaths of public-sector land tend to be in high-price areas. Allocated mainly by administrative fiat, the land also tends to be sold to meet budget needs rather than in response to market forces; as a result, these transactions take place at below-market prices (see discussion in Section 2). At least two unintended consequences proceed from this practice. First, the resource is not used efficiently either for land-use purposes (e.g., low-income vs. high-income housing, office vs. residential vs. manufacturing buildings, etc.) or for building type (e.g., low vs. high rise).<sup>116</sup> Second, since land prices can vary by a factor of 100 in a given city, the seemingly small subsidy (in the form of foregone revenue) may have an enormous impact when land is used in sub-optimal ways to locate the wrong kind of building or housing.

190. As discussed throughout this chapter, a few plots of public land in high-price areas have been allocated for construction of low-income housing. Most of these plots are developed for high-income groups to generate revenue to build low-income residences elsewhere. Since the market value of such housing would be much higher than the price set for allocation, it creates speculative activity, as mentioned earlier and also strongly suggested by private developers and real estate agencies. At the same time, Iran must be careful not to create extreme social segregation—for example, locating low-income housing in remote suburbs that may come with rather high economic and social costs.

191. Additional distortions were introduced through the pricing of construction permits and utility connections—practices that have been recently changed. Previously, fees per unit were much higher for multi-apartment high rise buildings than for buildings with fewer units, which discouraged efficient use of high-priced land.

192. Construction costs. Construction materials and subsidies provided by belowmarket energy prices are another important component of unit cost; it generally translates into a 5 to 6 percent subsidy to a housing price. This subsidy tends to contribute to lessefficient housing design, which in turn creates inelastic and high-cost construction materials. Moreover, highly subsidized utilities encourage investment in less energyefficient housing. In addition, utilities appear to be priced seasonally. For example, electricity tariffs are lowered in the southern provinces during the summer when consumption rises because of air conditioning. As demonstrated most vividly in the

<sup>&</sup>lt;sup>116</sup> One of the most extreme cases is post-Soviet reforming economies and, particularly, former Soviet republics, where planned economies and public ownership of land created land use patterns quite the opposite of those in market economies—which is to say, land at the city center was used less intensively than it was on the urban peripheries (for discussion see Alain Bertaud and Bertrand Renaud, *Cities without Land Markets: Location and Land Use in the Socialist City*, Washington DC: Policy Research Working Paper, World Bank, 1995).

Soviet economies, which before 1990 had highly subsidized utility costs, lack of incentives for the efficient use of energy creates housing that is very energy inefficient.

### 4.2. Inefficiencies: Interest Rate Subsidies and Limited Loan Amounts

193. Although the total subsidies on (implicit and explicit) interest rates, relative to loan amount, may be as high as 40 to 80 percent, not all of them go to households. For instance, some subsidies may be capitalized into the house value, which increases the price caused by the subsidies themselves.<sup>117</sup> In addition, under the savings scheme, no interest is paid on the deposit. In an optimistic scenario in which an average-income urban household would be saving at a rate of 20 percent,<sup>118</sup> the required period of savings for purchasing a unit priced at IRR56 million (US\$7,000)<sup>119</sup> would be around three to four years. In such cases, income lost by the household during the savings period may amount to as much as 50 percent of the amount of the subsidy.

194. Major inefficiencies are also created by the regulatory interest rate caps that affect households' savings and borrowing decisions and the form in which their assets are held. The caps may account for up to 50 percent reduction in interest rates on housing loans, <sup>120</sup> shifting the costs to the savers—that is, interest rates on deposits are below market rate and, until recently, were also below the rate of inflation. In such situations, the effective tax on deposits to finance such subsidies exceeds 100 percent (in the latter case); because it not only provides zero real return, but, because of inflation, it also consumes part of the principal. This type of distortion discourages household savings and is one of the least efficient ways to provide assistance. As a result, people tend to shift to inflation-proof assets, such as housing, and away from the financial sector. Interviews with housing experts in Iran often noted that housing is one of Iran's very important assets for household investment. If the rate of inflation stays below the deposit rate, this process might be somewhat reversed.

195. Regulatory limits on the amount of housing loans introduce another distributional distortion. In Tehran and other larger cities, loans have an estimated loan-to-value ratio of around 20 percent; in other areas it may be as high as 80 percent. This distribution suggests that available financing is *inversely* related to regional productivity; the subsidy is not responding to locations where asset productivity would be greatest.

196. The resulting distortions may add to the indirect costs of the transfer.

### 4.3. Inefficiencies: In-kind Subsidies

197. "In kind" housing subsidies in Iran are quite common. They introduce large inefficiencies because the value of the asset is different for the recipient and for the provider. Many studies suggest that in-kind subsidies are less efficient than cash; the

 <sup>&</sup>lt;sup>117</sup> For discussion see Berger, T., P. Englund, P. H. Hendershott, and B. Turner, "The Capitalization of Interest Subsidies: Evidence from Sweden" Journal of Money, Credit, and Banking, Volume 32, Number 2: 199-218, May 2000
 <sup>118</sup> Assuming that household income is increasing at a rate of inflation.

<sup>&</sup>lt;sup>119</sup> Indicated as a rather typical price for a newly built house for medium-income household outside of Tehran.

<sup>&</sup>lt;sup>120</sup> From 30 to 15 percent.

closer the design of subsidies is to cash or cash equivalent, the more efficient the subsidy (Aaron and von Furstenberg, 1971; Bradford and Shaviro, 1999; Friedman and Weinberg 1982). Because the value of the asset to the recipient is usually lower than its cost to the subsidy provider; this disparity creates further speculation (see Chapter 1), including resale of housing, cashing in the subsidy, and moving to cheaper housing, as Iranian developers and real estate agents explained in their interviews. <sup>121</sup> The extent of the inefficiencies is closely related to the size of the subsidy relatively to the total cost of the asset and elasticity of housing substitution for other goods, which may be from 8 percent at 20 percent subsidies (house price and land subsidies) may easily account for at least 45 to 50 percent of the value. At this level of subsidy, the corresponding efficiency loss at elasticity of substitution of 1 would be 25 percent as estimated by Aaron and von Furstenberg.

198. As a result of all the above distortions the "shadow price" of all the different subsidies can easily approach 60 percent of the subsidy.

# **5.** Conclusions

199. Analysis of the available information shows that Iran's housing quality has improved over the past decade. In the past few years, moreover, the government has met annual housing production targets by increasing allocations of budget and non-budget (land, etc.) resources to the sector and increasing reliance on the private sector in construction. The demographic stresses created by the Iran-Iraq war and the baby boom, has also stressed Iran's housing stock (198 units per 1,000 residents), which is low by international standards. In addition, housing in Iran is further stressed by a serious mismatch between supply and demand—segmented markets by regions and incomes are not served well. These issues will become particularly important in few years' time when the rate of new household formation is expected to increase rapidly.

200. Subsidies are fragmented and nontransparent. The government is clearly concerned about its housing issues and is aware of the impending leap in demand for housing by young families. Toward these ends, the government has set up a number of different channels of assistance for the many social groups requiring help (and some that do not). Although well-intentioned, these initiatives are fragmented. Housing assistance is provided by different institutions to different beneficiaries at different stages of the process—to developers, financiers, and buyers. There are more than 15 different housing assistance programs targeting a number of social groups and developers. Several programs target the same social group, although they are administered by different organizations. Iran, in short, has no clear and comprehensive housing subsidy system.

<sup>&</sup>lt;sup>121</sup> In accordance with a survey carried out by one developer in a building built by it in Mashad 10 percent of households had resold their units within the first year. Real estate agencies indicated that in Tehran this ratio would exceed 50 percent.

201. The estimated housing subsidies are rather large—as high as 2 to 4 percent of GDP, which in 2000–01 nearly reached the total annual housing investment of 4.6 percent of GDP. When utility subsidies of another 3 percent are added, total housing-related subsidies become excessive and by far exceed the annual housing investment. Since these subsidies tend to be nontransparent and not accounted for, they do not appear on the government's budget. In addition, subsidies (such as those on interest rates) create ever-increasing contingent liabilities for the government.

202. There is a widespread lack of knowledge in Iran about subsidies and their effects. Information about housing subsidies seems to be both limited and fragmented; in short, the government would benefit from more thorough analyses of its programs and policies on low-income housing.

203. Regressive and inefficiently delivered, housing subsidies in Iran are also, for the most part, badly targeted. Subsidies are often inaccessible to the households targeted by the government. Those in the lower deciles of income distribution in particular rarely have access to subsidies set aside for them. Having said that, we should acknowledge that programs administered through charitable organizations like the Imam Khomeini Relief Committee seem to be reaching the very poor. Still, at less than 1 percent of total housing-related subsidies, such programs have a negligible overall impact.

204. Many of the subsidies (energy and universal interest rate ceilings) are very general and, therefore, regressive. In addition, many are provided "in kind" or relate to the housing unit rather than the household. This leads to greater inefficiencies and speculation as suppliers, and not the recipients, seek to capture the subsidy benefits.

205. Further inefficiencies are introduced by subsidies oriented to the supply side. Supply-oriented subsidies run the risk of developing housing concentrations of low-income groups; ghetto creation has occurred in a number of countries to no good effect.

206. Subsidies have much broader effects and distortions on the entire housing sector. The form of subsidies and the way they are provided have much broader effect on the housing sector and hinder its development and ability to meet housing demand effectively. The distortions and controls involved in providing these subsidies are significant and impose large, indirect, and unmeasured costs on an urbanizing, high-inflation economy like Iran.

207. The population groups the government has decided to assist are not receiving the full benefits of such assistance. For many, such assistance is inaccessible. Iran has a great opportunity to reach those most in need of housing simply by improving the manner in which this assistance is provided. It can improve assistance, in other words, without increasing government expenditures. This will require efforts to make its subsidies more efficient; short- and long-term changes are discussed below.

## 6. Recommendations

208. The housing sector in any country is characterized by internal contradictions. For example, housing is one of the most indispensable and expensive goods for any household, requiring short- and long-term views. A short-term positive effect might have negative long-term consequences. Governments need to balance economic efficiency and social equity, public and private action, collective and individual choices, tenant protection and property rights, and so on. These are difficult decisions. And neither an ideological approach nor an imported scheme is likely to provide the needed fixes. The development of any scheme requires the careful consideration of all the aspects of the sector.

209. Several important rules apply to subsidies as a tool of housing policy.

- well-targeted, direct subsidies minimize inefficiency;
- transparent and manageable subsidies reduce uncertainties and long-term contingent liabilities for the government;
- explicit and measurable subsidies are easier to control and evaluate.

210. Demand-side subsidies are better than supply-side subsidies. Within demandoriented subsidies, up-front subsidies are favored, despite the monitoring and control systems required to guarantee the subsidy is used as intended.

211. The government should withdraw from direct involvement in providing housing. The government should improve its awareness of subsidies—their extent, their efficiency, their targeting effectiveness—by:

- collecting more specific information on recipient income and other important characteristics;
- recognizing and measuring subsidies to improve government accountability; and
- reviewing and evaluating extant programs and those being developed or prepared, and simplifying and consolidating redundant programs.

212. The government should target subsidies to the intended beneficiaries and those in lowest deciles of income distribution by:

- reviewing, adjusting, and eliminating any subsidy programs as is seen necessary;
- improving its scoring mechanism for determining housing need to account for household income; and
- including some limits on the size and cost of the housing unit in the subsidyeligibility requirements.

213. Inefficient subsidies should be eliminated gradually. Some candidates are:

- land subsidies. Government policy should allow households (via demand-side subsidies) and developers (if a supply-side subsidy is used) to make their own choices on location. Public land should be sold at market prices and the resources used for the necessary demand-side subsidies, if these are used. During the transition, if the land is allocated as the government's equity investment in housing construction under participation arrangement, the government's "share" of the constructed housing could be constructed in accordance with appropriate requirements (limited size of the unit and standards) and either sold or rented to low-income households. This would also avoid ghettoization since "social" units would join the larger housing pool of private units;
- interest rate subsidies; and
- tax subsidies provided specifically to public servants (irrespective of income level); replace them with more efficient and direct up-front subsidies (see below).

214. Regarding the transition period, during which some subsidies are replaced with more progressive and transparent subsidies, the government of Iran could prepare a detailed work plan, which would identify:

- currently supported groups that no longer require government assistance, and set a date for their subsidies to cease;
- groups that continue to require assistance and decide when and how the current subsidies should be reorganized;
- demand-side subsidies, such as up-front subsidies, that could improve initial housing affordability and reduce the amount of required borrowing;
- better incentives for developers to supply low-income housing, which would meet demand and be linked to demand-side subsidies directed to low-income household; and
- energy subsidies that might be eliminated. A comprehensive reform of the national energy sector could realize savings that could be targeted at demand-side housing subsidies.

# 4 Housing Finance

# 1. Iran's Housing Finance System: Organization and Performance

215. For both social and economic reasons, the Third Five-Year Development Plan (1379–1384) made the housing sector a high-priority issue. Small wonder, for the number of new urban households continues to break records, and the official national unemployment rate has passed 17 percent.<sup>122</sup> These housing priorities are also reflected in the system of credit allocation administered through the public banks system. Yet Iran's housing finance system is small compared to the size the national economy and will have difficulty meeting the ambitious objectives Iran has for affordable housing, as set out in the current Five-Year Plan.

216. This report focuses on three main aspects: the size and performance of the housing finance systems, the present supply of housing finance services, and reform issues and options.

### **1.1. Iran's Small Housing Finance System Relative to the Economy**

217. The housing finance system in Iran serves a small portion of the overall economy, particularly when compared with other economies. The ratio of construction and housing loans (for residential construction and purchase finance) that are still outstanding at the end of each year compared with GDP is currently fluctuating around 7 percent. But in recent years about 59 percent of these are short-term construction loans. The stock of long-term housing loans, strategically the most important, has been fluctuating between 2.5 percent and 3.3 percent of GDP over the past five years. (See Table 4.1)

218. International research over the past decade has clearly established that the financial sector is *not* a passive component of development. Rather, the quality of the financial system contributes directly to economic growth. This leading role of financial services in promoting growth applies to individual sectors like housing as well. Social programs funded by government budgets and other sources outside the financial system are not substitutes but only complements—provided they are properly designed and do not undercut financial development.<sup>123</sup>

 <sup>&</sup>lt;sup>122</sup> Persian years start on March 21. The current year 1381 straddles international years 2002 and 2003. U.S. dollar figures are based on the CD exchange rate of IRR7,916.6 per dollar for the Persian period, 1379-Q4 (2001-Q1).
 <sup>123</sup> See World Bank, *Finance for Growth: A Policy Research Report* (Oxford University Press, 2001), and Asli Demigüc-Kunt and Ross Levine, Financial *Structure and Economic Growth*, Chapter 3 (Cambridge: MIT Press, 2001).

| Persian    | International  | GDP at market | Outstanding Loans to | Ratio of Construction  | Ratio of Housing |  |  |  |
|------------|--|---------------|----------------------|------------------------|------------------|--|--|--|
| Year       | Year   | prices        | Construction and     | and Housing Credits to | Loans to GDP     |  |  |  |
|            |  | (RI b)        | Housing (RI b)       | GDP (Percent)          | (Percent)        |  |  |  |
| 1375       | 1996-97  | 239,185.0     | 14,065.8             | 5.9                    | 2.4              |  |  |  |
| 1376       | 1997-98  | 281,074.0     | 17,331.7             | 6.2                    | 2.5              |  |  |  |
| 1377       | 1998-99  | 317,085.0     | 23,534.6             | 7.4                    | 3.3              |  |  |  |
| 1378       | 1999-00  | 426,367.0     | 32,819.4             | 7.7                    | 3.2              |  |  |  |
| 1379       | 2000-01  | 582,050.0     | 39,914.7             | 6.9                    | 2.8              |  |  |  |
| Sources: 1 | Sources: MPO and Iran Central Bank, World Bank estimates |               |                      |                        |                  |  |  |  |

| Table 4-1 | . Iran: | Depth | of the | Housing | Finance | System |
|-----------|---------|-------|--------|---------|---------|--------|
|-----------|---------|-------|--------|---------|---------|--------|

219. Housing finance depth ratios of 2.5 percent to 3 percent such as those of Iran are found mostly in the transition economies of Central and Eastern Europe that have been rebuilding their financial systems since the early 1990s, after years of central planning. It is also noteworthy that financial systems are considerably more developed in East and Southeast Asian countries than in the Middle East, which correlates with the economic performance of each region. See Table 4-2 for a comparison of different housing finance systems; a tabular comparison with other oil-dependent countries would be particularly interesting, but such data are not available.<sup>124</sup>

| Country           | Outstanding Housing        | Year      | Per Capita      | Urban, 1997 | GDP Deflator |
|-------------------|----------------------------|-----------|-----------------|-------------|--------------|
|                   | Loans to GDP (%)           |           | GNP (US\$)      | (%)         | 1990-98 (%)  |
| Pakistan          | < 1                        | 2000      | 434             | 35          | 11.2         |
| IRAN              | 2.8                        | 2000      | 1,770           | 60          | 32.5         |
| Morocco           | 4.0                        | 1997      | 1,250           | 53          | 3.8          |
| Tunisia           | 5.9                        | 2000      | 1,535           | 63          | 4.8          |
| Thailand          | 16.4                       | 1999      | 1,505           | 28          | 4.8          |
| Malaysia          | 21.8                       | 2000      | 2,630           | 55          | 4.5          |
| European Union    | 36.0                       | 1998      | 17,720          | 74          | 1.8          |
| Canada            | 43.0                       | 2000      | 17,280          | 77          | 1.7          |
| USA               | 53.0                       | 2000      | 19,415          | 77          | 2.2          |
| Source Housing Fi | inance Indicators (HFI) de | atabase ' | World Bank Indi | icators     |              |

 Table 4-2. Iran's Housing Finance System: Some Comparisons

### **1.2.** Why Does Iran Have a Small Housing Finance System?

220. International evidence shows that four core factors affect the performance of a housing system in any country. These four factors have had a cumulative negative impact on the development of the housing finance system in Iran and on the performance of its

<sup>&</sup>lt;sup>124</sup> It would bee worth comparing in some detail financial development in Iran and in Thailand. At the start of the new millennium, the two countries have comparable population sizes and per capita GNP, but they have followed very different economic and financial paths. In 1999, the per capita GNP of Iran was \$1,588, while that of Thailand was \$1,982 (IMF-IFS data). However, in 1980, Iran's per capita GNP was \$2,369 when that of Thailand was only \$687. Using oil boom figures for 1976 makes the contrast in growth dynamics is even greater, with Iran's per capita GNP at

<sup>\$2,471</sup> and Thailand's at \$394. As Table 4.2 shows: the present housing finance system of Thailand is about six times deeper than that of Iran.

housing sector for much of the last two decades. However, a gradual policy turnaround has started over the last five years and the current FYP period offers opportunities for significant improvements. The four key factors that shape the outlook for housing are: (a) first and foremost, inflation and macroeconomic (in)stability that can create an environment hostile to financial development, and most particularly long-term housing finance; (b) the legal and institutional environment that conditions the development of the entire financial system; (c) policy and structural shifts that can improve risk-adjusted returns to investment in the sector; (d) demographic trends and economic housing demand that can offer the prospect for rapid growth of a housing finance system.

221. *Macroeconomic volatility and inflation have been major constraints*. Housing prices are always a multiple of the annual income of households that want to buy housing. Therefore, access to long-term finance is required for most families to purchase housing. Access to home ownership has two major and very distinct dimensions: (a) the price of the unit compared with purchasing power, and (b) the cost of finance. During the 1990s, Iran has faced serious problems on both fronts. The ratio of the housing price-to-annual household income faced by most income groups has reached values as high as 10 in the mid-1990s in Tehran and have declined only to around 8 in 2001. In sound and balanced housing markets, such ratios have a value of 4 and usually less; and it is only in small Iranian cities that such ratios can be observed today (see Figure 3 of the synthesis report).

222. The macroeconomic environment during the period 1379 (1990–91) to 1389 (2000– 01) has also been hostile to the development of the housing finance system: inflation has been very high and volatile while deposit rates in banks have been regulated at Evels well below inflation, thus insuring a negative return to small savers and a chronic shortage of deposits. As a result, housing finance services became increasingly scarce. They also contain a large embedded subsidy indexed to inflation given the gap between artificially low lending rates and actual inflation, conditions that always create a strong, regressive dynamic across income groups. The scarcity of finance is correlated with the large gap between regulated bank rates and free market curb rates. Financial economists call such a policy environment "financial repression" because rates in the banking system are repressed below the true cost of capital in the economy.



Figure 4-1.

Sources: MPO, Central Bank, Banking Training Institute.

223. As seen in Figure 4-1, macroeconomic conditions in Iran reached their worst stage in 1374 (1995–96) when CPI inflation reached 50 percent per annum. Curb market rates in the unregulated financial markets reached well above 60 percent for short-term finance. In such an environment, market-based, long-term housing finance was unaffordable to potential homebuyers and the housing finance system could not expand in real terms. Since then, better macroeconomic policies pursued across a wide front are improving the environment. Nominal lending rates have finally become higher than inflation for the first time in 1379 (2000–01). Positive deposit rates are already attracting more savings into the banking system.<sup>125</sup>

224. The level of inflation risk remains significant going forward,<sup>126</sup> and the design of suitable housing finance instruments is one of the immediate, short-term needs of the housing finance system. The weighted average return charged on new credits granted by the housing bank (Bank Maskan) in the first half of year 2001 was only 15.4 percent per year.<sup>127</sup> This return was below the level of inflation observed over the past 15 years. It is only during the year 1379 (2000–01) that this weighted credit rate rose above the CPI inflation rate of 12.4 percent that year. In most years, Bank Maskan has been unable simultaneously to offer positive real returns to its depositors after inflation; cover its operating expenses; cover forward-looking credit, interest and inflation risks; and build up its capital. (Refer to Section 2.2, where Bank Maskan operations are examined).

<sup>&</sup>lt;sup>125</sup> Iran is not a low-saving country. The aggregate savings rate fluctuates at around 30 percent of GDP. However, specific data on household savings performance was not available for this report. <sup>126</sup> A short-term refueling of inflation can be one of the short-term costs of the very important and much needed

exchange rate reform of March 2002. <sup>127</sup> The credits cover in this weighted average return exclude "civil partnership" financing facilities whose returns are

calculated differently.

Presently, the way Bank Maskan is able to generate new loans is by taking advantage of its special privileges and by assuming liquidity risks of unmeasured magnitude on its new loan-linked deposit products. (See section 2.2) Under current inflation, about 60 percent of Bank Maskan credits go to short-term construction finance, and only 40 percent goes to critically important long-term purchase finance.

225. *Institutional framework of directed credit*. The environment of directed credit is a second explanatory factor behind the low performance of the housing finance system. Four core laws are shaping the dynamics of the system. Their main features are as follows:

- On 3.17. 1358 (June 7, 1979), the *Bank Nationalization Act* nationalized the entire banking system.<sup>128</sup> The present housing bank, Bank Maskan, results from the nationalization of the 40-year old Mortgage Bank of Iran and of its merger with the construction bank, whose shareholders comprised a number of private banks, and 16 savings and loan associations. After this nationalization, Bank Maskan became the only specialized bank for the housing sector.
- The same year 1358, the Bank Management Act specified the system of directed credit under which the newly nationalized banks would become financing instruments of the national plans under the control of the central bank (Bank Markazi) and the government. In particular, the law removed from the housing bank commercial autonomy in defining types of lending products, loan ceilings, and rates of return on deposits as well as on loans. As a result, major elements of financial risk management are currently removed from the housing bank's direct management responsibility. Instead, they are embedded in laws and decrees that are not always easy to modify in a timely fashion.<sup>129</sup> The explicit guarantee of the government stands behind Bank Maskan operations, which creates an environment of "moral hazard" for decision-making in at least three ways: fragmented and overlapping decision-making where those who give orders do not necessarily bear the risks of their decisions, indirect liabilities for the government that remained unaccounted for, and a lack of transparency.<sup>130</sup> Note also that until 1995 (10-7-1373) commercial banks were prohibited from lending to housing.
- On 6.8.1363 (August 30, 1983), Iran enacted an epochal comprehensive legislation in the form of the Law of Usury-Free Banking. This law mandates Islamic finance principles not for selected banks but to the entire financial system including banks and other financial institution making Iran one of only three such countries in the

<sup>&</sup>lt;sup>128</sup> Before the nationalization of 1979 36 banks operated in Iran, 26 were commercial banks, 7 of them were specialized banks, and the other 3 were regional development banks. These banks were banks with 100 percent Iranian ownership, others had mixed Iranian and foreign shareholders, a number of them were public banks. New forms of mutual Islamic housing banks offering savings and housing finance services to local urban markets have not replaced the system of 16 mutual savings and loan associations. What exists now is only a network of more than 5,500 active construction cooperatives that are not credit cooperatives but building organizations aiming at preferential treatment for access to land and other inputs.

 <sup>&</sup>lt;sup>129</sup> In the absence of the text of the Bank Management Law, the Bank did not clarify the specific channels through which the Housing Bank receives policy directions from the Ministry of Housing and Urban Development.
 <sup>130</sup> See Chapter 3 "Government Failure in Finance," in *Finance for Growth: Policy Choices in a Volatile World.* A World Bank Research Report (Oxford University Press, 2001).

world.<sup>131</sup> To finance housing, four types of Islamic contracts were selected and acceptable financing services were redefined as reviewed below. In implementing the law, the central bank sets minimum and maximum rates of profits of the new financing products of the housing bank and other banks. In spite of the volatile macroeconomic environment, these rates have changed very infrequently over the years, as seen in Figure 4-1.

• The fourth core law structuring the Iranian banking system is the pre-revolutionary Monetary and Banking Act of 1972, subsequently amended in 1979 and again in later years. This law defines the framework of monetary policy for the new Islamic financial system as implemented by the central bank. As a deposit-taking institution, Bank Maskan is subject to regulation and supervision by the central bank for monetary policy. The Money and Credit Council decides on credit allocation across sectors and approves deposits and credit rates, as well as new banking products.

226. In addition to these four core laws, other legal and regulatory factors come into play for the development of housing finance. The Monetary Council's financial laws and regulations affect the overall quality of the financial infrastructure and apply to all lenders. Some directly affect long-term financial risks in housing finance. In addition, the quality of urban, laws, regulations, and practices affecting housing and construction has a decisive impact on the credit risks faced by lenders. These urban laws and institutions affect areas such as: land titling and property registration systems, as well as real estate market monitoring and standards of valuation. Urban-planning regulations and the structure of land ownership in a specific housing market can raise the housing-price income ratio to high levels, as is the case in Tehran, which makes housing finance even more difficult and also more risky. This chapter focuses on financial problem areas identified by the Bank team. The urban regulatory environment is discussed in other section of the report.

227. Overall financial sector performance and recent policy shifts. If the housing finance system is small, what has been the overall performance of the Iran financial system in the decade of the 1990s? Table 4-3 presents comparative performance indicators for Iran and 17 other national financial systems. <sup>132</sup> This data extend to the entire financial system the results reported for housing finance. In spite of its significant per capita GDP level, Iran has one of the smallest and least performing financial countries among the 18 countries covered in Table 4-3. <sup>133</sup> Iranian ratios are considerably lower than the world average of 70 countries. See Table 4-3, where countries are ranked according the ratio of liquid liabilities in the financial system to GDP, which is the ratio most representative of the total size of a financial system (see column 2). The size of the Iranian banking system proper is one of the two smallest with Turkey (see column 3).

 <sup>&</sup>lt;sup>131</sup> The two other countries where only Islamic forms of finance are permitted are Sudan and Pakistan. All other countries have financial laws that allow the coexistence of conventional finance and Islamic finance.
 <sup>132</sup> See Asli Demigüç-Kunt and Ross Levine, *Financial Structure and Economic Growth*, Chapter 3 (Cambridge: MIT

<sup>&</sup>lt;sup>132</sup> See Asli Demigüç-Kunt and Ross Levine, *Financial Structure and Economic Growth*, Chapter 3 (Cambridge: MIT Press 2001). This project supported by the World Bank offers the first worldwide comparative study in 30 years.

<sup>&</sup>lt;sup>133</sup> The project did not access data on the financial systems of oil-rich countries among the 70 countries covered, except Iran and Indonesia. Note that Iran's per capita GNP was higher than what is calculated now for several reasons, including low growth, an overvalued official exchange rate, and a smaller population.

Severely affected by inflation and macroeconomic instability, both banking systems are considerable smaller than in the other 16 countries. The level of financing provided by the banks to the private sector in Iran is also low, reflecting the fact that state-owned banks tend to give preferential access to state-owned enterprises (see column 4). Finally, the ratio of central bank asset to GDP of 6 percent reflects in part the active development-banking role that the central bank in Iran plays in the economy (see column 5).

| Country  | GDP per Capita, | Liquid          | Bank       | Claims of Deposit | Central Bank  |  |  |  |
|--|-----------------|-----------------|------------|-------------------|---------------|--|--|--|
|  | 1990–95 (US\$)  | liabilities/GDP | Assets/GDP | Banks on Private  | Assets/(%GDP) |  |  |  |
|  |                 | (%)             |            | Sector/(% GDP)    |               |  |  |  |
| Turkey   | \$2,259         | 22              | 19         | 13                | 6             |  |  |  |
| Pakistan   | \$435           | 41              | 36         | 23                | 14            |  |  |  |
| Indonesia  | \$610           | 42              | 49         | 46                | 2             |  |  |  |
| Iran   | \$2,395         | 44              | 22         | 20                | 6             |  |  |  |
| India  | \$385           | 44              | 34         | 24                | 13            |  |  |  |
| Philippines  | \$734           | 45              | 37         | 28                | 9             |  |  |  |
| Tunisia  | \$1,534         | 47              | 55         | 51                | 1             |  |  |  |
| United States  | \$19,413        | 60              | 73         | 64                | 5             |  |  |  |
| France   | \$15,233        | 64              | 102        | 89                | 1             |  |  |  |
| Korea  | \$3,910         | 65              | 55         | 53                | 1             |  |  |  |
| Germany  | \$16,573        | 66              | 121        | 94                | 1             |  |  |  |
| Israel   | \$9,260         | 69              | 92         | 60                | 6             |  |  |  |
| Thailand   | \$1,502         | 77              | 82         | 78                | 2             |  |  |  |
| Egypt  | \$1,042         | 81              | 63         | 26                | 34            |  |  |  |
| Great Britain  | \$11,795        | 96              | 116        | 114               | 3             |  |  |  |
| Malaysia   | \$2,629         | 97              | 82         | 75                | 1             |  |  |  |
| Jordan   | \$1,289         | 111             | 71         | 62                | 21            |  |  |  |
| Japan  | \$15,705        | 191             | 131        | 117               | 5             |  |  |  |
| MEAN (70 countries)  | \$6,546         | 59%             | 58%        | 48%               | 8%            |  |  |  |
| Source: Asli Demigüç-Kunt and Ross Levine, Financial Structure and Economic Growth, 2001. Table 3.1. |                 |                 |            |                   |               |  |  |  |

 Table 4-3. The Performance of Financial Systems in the 1990s: A Comparison

228. Acknowledging these performance problems, the framework of the current Five-Year Plan (FYP) (2000-2004) commits the government to a series of fiscal and structural reforms. These economic policy measures remain vulnerable to the complexities of policymaking processes. One significant achievement of the first term of the present administration has been to bring inflation down and to improve the stability of the economy. Ongoing work is now focusing on privatization in the banking system and fiscal reforms. A priority concern of economic policies is to bring up living standards that have been deteriorating. Hence the current interest in the housing sector where proper housing finance policies can raise domestic savings and stabilize aggregate domestic demand.

229. The establishment of private banks has already been approved. On August 25, 2001, Bank Markazi (central bank) issued the first operating license to a privately owned bank (out of 30 applicants). According to plans, private banks will be able to set their new

rates. It is also expected that the banking reforms will lead to the restructuring of the 10 state-owned banks (six commercial banks and four specialized banks). Initial steps will give more discretion on loan decisions and somewhat greater flexibility in employment policies. In that context, it must be noted that Iran wants to adhere to the Core Principles on Banking of the Basel Committee. Financing information technology which is the heart of banking today will be a challenge because the banks do not have the capital to move fast in this critical area.

230. Other actions already taken by Bank Markazi and the Money and Credit Council to prepare the liberalization of the financial system include

- In 1999, Article 3 of the charter of Bank Maskan was modified to permit the same activities as those of commercial banks.
- Since 1379 (2000–01) banks are allowed to allocate up to 20 percent of their new lending freely outside sector credit guidelines. The balance of 80 percent remains subject to sector allocation rules. The current credit allocation rules for non–public sector credit are as follows:

| Agriculture                  | 25.0%  |
|------------------------------|--------|
| Manufacturing and mining     | 33.5   |
| Housing                      | 20.0   |
| Construction                 | 9.0    |
| Exports                      | 8.0    |
| Domestic trade and services  | 4.5    |
| TOTAL                        | 100.0% |
| Source: Central Bank of Iran |        |

- New private bank and finance companies can offer credits at high rates (some currently reach up to 30 percent per year). Given the lack of access to long-term funding, however, such credits are available for three years of less and carry low loan-to-value ratios, which limit private lenders to a small percentage of the very high-income population.
- The Central Bank will deregulate short-term credit pricing covering new construction, completion, and improvement loans as well as deposit rates for commercial banks.
- Specialized housing finance companies or banks will be permitted to raise long-term resources through interbank credit.
- The Ministry of Finance and the Economy is currently revising regulations to permit the private sector to issue partnership papers.
- As discussed further in Section 3.3, legal work is in progress to develop a long-term capital market for housing finance securities. But a short-term market is not yet in place.

231. *Demographic trends and structure of housing demand*. The Iranian government faces considerable public pressures to improve housing conditions through the Third and Fourth Five-Year Plans. At first sight, this presents a paradox because macroeconomic

indicators of housing sector performance have improved over the past five years. But these apparent improvements in aggregate trends are misleading. Moreover, they throw little light on why social pressures are actually mounting, and on why expanding the supply of "social housing" is a policy priority of the current Third FYP.<sup>134</sup> The pressures arising from predictable demographic trends are certainly high. But actual market performance will be dominated by effective economic demand, and not by demographic needs and the associated political expectations. In the absence of a soundly based housing finance system, the *structure* of housing demand today —and therefore access to housing—varies sharply across income deciles, and across cities. The structure of housing demand and the supply response are central elements to the design of successful housing and housing finance policies.

232. What do we know about the structure of economic housing demand in Iran for the next two plans? How is it likely to affect the demand for housing finance services?

233. *Demography*. The population growth rate has declined very significantly during the 1990s from very high evels in the 1980s. But at 1.67 percent p.a. in 1379 (2000-01), Iran's population growth still remains above the average growth rate of 1.5 percent p.a. for middle-income countries during the period from 1990 to 1998.<sup>135</sup> There is great concern about the demographic bulge created by young people who will enter housing markets during the next decade. Social pressures arise from the accelerating rate of urban household formation.

| Year   | Total Population | Urban Population | Urban Household | New HH per year |  |  |
|--|------------------|------------------|-----------------|-----------------|--|--|
| 1349 (1970-71)   | 28,727,000       | 11,795,000       | 2,373,000       | 129,000         |  |  |
| 1359 (1980-81)   | 39,646,000       | 19,468,000       | 3,714,000       | 196,000         |  |  |
| 1369 (1990-91)   | 53,401,000       | 31,849,000       | 6,124,000       | 304,000         |  |  |
| 1379 (2000-01)   | 63,800,000       | *40,768,200      | *9,060,000      | *375,000        |  |  |
| 1389 (2010-11)   | *75,300,000      | *51,200,000      | *12,800,000     | *385,000        |  |  |
| Source: MPO statistics, UN Population Division, and World Bank estimates |                  |                  |                 |                 |  |  |

Table 4-4: Iran's Urban Demography, 1970-2010

234. The rate of new urban household formation is currently greater than the number of new urban units produced across cities. This implies an increasing rate of doubling up of families in parts of the existing housing stock of large cities like Tehran given also stock replacement needs and city-to-city migration.

235. *Education*. Education is a very positive factor for Iran, where the literacy rate is considerably higher among young people. For the age groups 6 to 29, the literacy rate was 96.3 percent in 1378 (1999-00). This population will be able to use modern financial services effectively; the overall level of financial literacy should increase significantly.

<sup>&</sup>lt;sup>134</sup> Since the Budget Law of 1994–95 (1373, Article 52), Iranian housing policies divide markets into three segments: "free," "protected" (sometimes called "supported" housing), and "social" housing. "Protected housing" are units under 75 m<sup>2</sup> of floor space in Tehran, Esfahan, Tabriz, Shiraz, and Mashad, and 100 m<sup>2</sup> in other cities. "Social housing" includes units under 50 m.

<sup>&</sup>lt;sup>135</sup> World Development Indicators, Washington DC: The World Bank, 2000.

236. *Household purchasing power*. Gains in real household purchasing power during the 1990s have been minimal. In terms of per capita income, Iran is part of the group of lower middle-income countries as defined by the World Bank. As shown in Figure 4-2, per capita GDP has risen only very slowly and remains 25 percent below what it was in 1976 at the peak of the oil boom. In fact real GDP per capita appears to track rather closely the pattern of crude oil production Iran, reflecting the continuing dominance of that sector in the economy. According to the Household Survey, the average urban household size today is 4.7 persons; richer families have larger households. This is unusual and contrary to expectations.



Figure 4-2.

237. *Urban income distribution*. The income distribution has a major impact on the actual demand for housing finance services and on home ownership. During the past 20 years, Iran has had an unequal distribution by international standards, as Table 4-5 shows. The national Gini coefficient of income distribution is currently estimated at 0.42 in year 2000 and has improved over earlier years. Rural-urban and inter-regional disparities are large, and inequalities within the rural sector are greater than in the urban sector. Iran urban income distribution is slightly less skewed with a Gini ratio of 0.40. Within the urban sector, the income distribution is better and has improved over the past decade. The ratio of urban deciles D10/D1 was 16.5 in 1371 (92/93) and improved to 14.3 in 1379 (99/00). The ratio of urban quintiles Q5/Q1: was 8.7 times in 1992 and improved down to 7.9 in 2000. (Source: Statistical Center of Iran).<sup>136</sup>

<sup>&</sup>lt;sup>136</sup> This latest quintile ratio would rank Iran with the five U.S. states with the narrowest income gaps in 1998–2000. Those five U.S. states with the worst ratios ranged from 10.5 to 12.8. See Jon. E Hilsenrath "The Income Gap Shrank at the End of the 1990's." *Wall Street Journal*, April 24, 2002.

| Canada  | 30.8 |  |  |  |  |
|---|------|--|--|--|--|
| Germany   | 31.4 |  |  |  |  |
| France  | 34.9 |  |  |  |  |
| United States   | 37.1 |  |  |  |  |
|   |      |  |  |  |  |
| Egypt, Arab Republic of   | 32.0 |  |  |  |  |
| Jordan  | 39.2 |  |  |  |  |
| Morocco   | 39.2 |  |  |  |  |
| Iran, Islamic Republic of   | 42.9 |  |  |  |  |
| Turkey  | 44.1 |  |  |  |  |
| Notes: Average of Gini coefficients over the period 1980–1995         |      |  |  |  |  |
| Source: Deininger, K. and Squire L. (1996). "A New Data Set Measuring |      |  |  |  |  |
| Income Inequality" The World Bank Economic Review, Vol. 10. No. 3.    |      |  |  |  |  |

 Table 4-5. Income Inequality in Iran compared with Selected Countries

238. Some 18 percent of the urban population is below the poverty line, which implies that the lowest quintile of the population needs multidimensional assistance programs and that this group cannot access market-based financial services directly. The urban poverty line in 1378 (1999–00) was set at IRR854,410 or approximately \$110 per month.

239. It is *prior wealth*—mostly in the form of housing and real estate wealth —rather than income power that currently drives economic demand and permits access to home ownership in Iranian cities. This situation is inherited from the macroeconomic and financial environment of significant inflation, financial repression, and very limited access to housing finance that prevailed for more than a decade. The fact that the private supply of new housing is cash- and wealth-driven is central to the design of new housing and housing finance policies

240. The triple combination of a skewed income distribution, high price-to-income ratios, and a small housing finance system with housing loans capped at IRR50 million is cutting off access to home ownership for a majority share of the population in large cities, in particular young households. In Tehran a housing unit with 75  $n^2$  of floor space was estimated to cost IRR168 million in 2000–01 (US\$21,300). The loan maximum yields a low loan-to-value (LTV) ratio of 30 percent, which is not manageable for most families. In the other large cities of Esfahan, Mahsad, Shiraz, and Tabriz the price of a similar 75  $m^2$  unit was estimated at IRR75.8 million. In these markets, the LTV ratio becomes a more reasonable but still difficult ratio of 66 percent because most households could not afford a 34 percent down payment without the help of their families. It is possible to suggest what fraction of the population might have access to homeownership in specific market by using national urban household expenditures as a biased proxy of actual incomes in selected cities. In Table 4-6, the gray area of lower income deciles suggests the extent of the housing problem. In Tehran in particular, about 70 percent of the population appears to be confined to the low-cost "social" housing stock of 50 m<sup>2</sup> units.

| Income   | National Average.         | Price to HH                   | Price/Expenditures  |  |  |  |
|--|---------------------------|-------------------------------|---------------------|--|--|--|
| Decile   | Annual HH Expenditures    | Expenditures                  | Ratio In Large      |  |  |  |
|  | (RI1,000)                 | Ratios In Tehran <sup>a</sup> | Cities <sup>b</sup> |  |  |  |
| 1  | 4,942                     | 34.2                          | 15.3                |  |  |  |
| 2  | 8,721                     | 19.4                          | 8.7                 |  |  |  |
| 3  | 11,474                    | 14.7                          | 6.6                 |  |  |  |
| 4  | 14,083                    | 12.0                          | 5.4                 |  |  |  |
| 5  | 16,655                    | 10.1                          | 4.5                 |  |  |  |
| 6  | 19,569                    | 8.6                           | 3.9                 |  |  |  |
| 7  | 23,344                    | 7.2                           | 3.2                 |  |  |  |
| 8  | 28,557                    | 5.9                           | 2.7                 |  |  |  |
| 9  | 37,498                    | 4.5                           | 2.0                 |  |  |  |
| 10   | 74,579                    | 2.7                           | 1.0                 |  |  |  |
| <i>Notes:</i> (a): Based on the price of a 75 m <sup><math>2</math></sup> unit in Tehran. (b): Based on the average price of four large cities |                           |                               |                     |  |  |  |
| Source: Data compiled by the World Bank using various publications from the  |                           |                               |                     |  |  |  |
| Iran Statistic   | cal Center, Tehran, 2001. |                               |                     |  |  |  |

 Table 4-6. Iran: Ownership Affordability, 2000-2001 (1379)

241. *Rates of housing appreciation*. The annual rate of housing appreciation at the national level has been extremely volatile in Iran over the last thirty years<sup>137</sup>. The appreciate rates was the highest during the oil boom prior to the Revolution in 1979. Prices were severely depressed in the early years of the Revolution for many reasons, including the confiscation of a large volume of land and other types of real estate assets across the country, and the nationalization of the housing finance system. Over the past 15 years, the national rate of housing appreciation has been 21.5 percent. Obviously, appreciation rates vary widely across cities, and across neighborhood within cities. No disaggregated data were available to the Bank team, but if international experience is any guide, one would expect appreciation rates in the upper-income areas of major cities to have been significantly higher than the national average. Underlying the great volatility of prices (see Figure 4-3) is a steadily rising trend in housing price gains since the mid-1980s. Surprisingly, the data suggest that housing appreciation rates have often been lower that inflation. This would suggest that housing has not been a very good protection against inflation in Iran. Before reaching such a firm conclusion, the structure of the housing price index would need to be reviewed. In particular, is the housing price index reflecting supply costs or market values? What kinds of housing units does the index cover?

<sup>&</sup>lt;sup>137</sup> Table 9 in Bureau of Housing Planning and Economics, National Land and Housing Organization, "A Study on the Efficiency of Housing Market Mechanisms in Urban Areas." Part 2. First Edition. No date.





*Source:* Bureau of Housing Planning and Economics, National Land and Housing Organization, "A Study on the Efficiency of Housing Market Mechanisms in Urban Areas." Part 2. First Edition. No date. Table 9

242. *Rapidly rising rents.* The households that cannot gain access to home ownership have to rely on the rental markets or must double up with other families. Rents in the rental markets appear to be rising even more rapidly than housing prices, as shown in Table 4-7. These trends reveal important imbalances between housing demand and housing supply, especially in major cities. Security deposits are very large, representing about two years of rent or more. These required large deposits reflect high inflation, the avoidance of banks, and a likely preference for curb market arrangements by landowners given present financial market conditions. They tend to make the rental market more regressive and more dependent on prior wealth for young households.

|                          |           | Tehran    |         |            | Esfahan    |           |           | Shiraz     |       |  |
|--------------------------|-----------|-----------|---------|------------|------------|-----------|-----------|------------|-------|--|
|                          | Rental    | Deposit   | Ratio   | Rental     | Deposit    | Ratio     | Rental    | Deposit    | Ratio |  |
| 1377 (1998-99)           | 5,060     | 130,894   | 26      | 2,372      | 53,816     | 23        | 2,857     | 68,417     | 24    |  |
| 1378 (1999-2000)         | 5,805     | 160,998   | 28      | 3,001      | 65,926     | 22        | 3,425     | 86,059     | 25    |  |
| 1379 (2000-2001)         | 7,595     | 195,078   | 26      | 3,678      | 81,804     | 22        | 4,113     | 93,483     | 23    |  |
| 1380 (2001-2002)         | 10,471    | 242,519   | 23      | 5,056      | 84,040     | 17        | 5,632     | 112,461    | 20    |  |
| 1381 (2002-2003)         | 13,640    | 323,837   | 24      | 7,002      | 107,495    | 15        | 7,446     | 129,889    | 17    |  |
| Five-year change         | 170%      | 147%      |         | 195%       | 100%       |           | 161%      | 90%        |       |  |
| Source: Housing, Constru | ction and | Infrastru | cture S | tatistics. | Tehran: St | atistical | Center of | Iran, 2002 | 2.    |  |

 Table 4-7. Iran: Trends in Monthly Rents and Deposits in Major Cities, 1997-2003

### **1.3. Housing Dynamics: The Impact of Scarce Financial Services**

243. Iran's relatively small housing finance system plays an important role in unbalancing housing output at present, but relative size is not the only cause. Several structural factors are combining to make the output of housing very cyclical and to skew the composition of new output toward large units generally out of reach of the purchasing power of a large portion of the population. As discussed, macroeconomic volatility and high inflation have interacted with the system of directed credit to generate an important degree of financial repression. This repression makes it very difficult for the housing finance system to mobilize long-term funds anywhere near an adequate scale.

244. To ration scarce funds and to maximize the number of clients reached, the housing finance authorities offer only very low financing-to-value ratios to home purchasers. The impact of these important distortions is that housing investment, especially in major markets such as Tehran, is cash- and wealth-driven. Over the past two decades, effective housing demand in Iran could not be income based. Young families with good life-income prospects are left out. Private supply responded only to the skewed income distribution, and to the even more highly skewed distribution of wealth. From a macroeconomic viewpoint, the housing sector is not contributing to the stability of aggregate demand, which is already very sensitive to fluctuating oil prices.

245. Housing and other real estate assets have been prime "assets of refuge" against permanent two-digit inflation over the past two decades. Iran is already a very urban economy with more than 60 percent of its population residing in cities. In the absence of Iran wealth surveys, international evidence points to housing as already being the single largest class of assets in the entire Iranian economy. Because the financial system is not offering adequate assets, urban households are limited to housing, consumer durables like cars—or more traditional assets such as collector carpets, gold and jewelry, and so forth, for their economic security and wealth accumulation. SME owners can also invest in their own businesses. Pension systems are not well developed. Because financial repression has been strong since 1979 and deposit rates have been kept continuously below inflation, banks were providing only a negative return to savers. The stock market is small and its access is limited at best to the top 20 percent of the population because information barriers are very significant in that market.

246. Additional factors contributing to distorting housing markets also exists on the supply side. The high share of land in the total cost of housing units strongly suggests that the supply of housing in Iran—and in major cities like Tehran and Esfahan in particular—is quite inelastic (see Chapter 2). According to the National Land and Housing Organization, the share of land in total housing cost has risen steadily over the past two decades. This land ratio has passed the 50 percent mark several times in the past five years, which is a surprisingly high ratio for a land-abundant country like Iran, suggesting an inadequate supply of new serviced urban land.<sup>138</sup>

<sup>&</sup>lt;sup>138</sup> See Table 13, Bureau for Housing Planning and Economics, NLHO, "A Study of the Efficient of the Housing Market Mechanisms in Urban Areas," 2001.

247. The present emphasis on a rapid expansion of the small, affordable housing units is a practical short-term policy response. The structural problems of the housing sector identified above, however, will need to be addressed in a consistent and sustained manner if any lasting solution is to be achieved during the next two plans. In the absence of such structural reforms, the possible recurrence of cycles of booms and busts with their corollary social tensions could not be dismissed. The broad directions of reform are known.<sup>139</sup> On the demand side, a liberalized housing finance system should develop the capacity to offer positive after-inflation return to savers. To improve macroeconomic stability and continue to lower inflation, the large array of subsidies should be consolidated and their volume reduced. A primary concern in restructuring these subsidies will be to leverage in the private resources of households and businesses. On the supply side, improving the responsiveness of housing supply should lower the high share of land cost in total housing costs. <sup>140</sup> More affordable housing prices will expand the demand for housing finance services. This report focuses on possible actions to improve the housing finance system, but before proceeding it may be useful to document some recent features of Iran's housing output.

248. *Private housing market: A volatile output*. Access to new housing ownership is conditional on the sale of previous housing or other real estate assets. The system is therefore highly pro-cyclical. Risks are amplified for all participants—and not only for over-leveraged developers. Output volatility appears to be substantial in Tehran, as suggested by the volatility of permit approvals in estimated floor space from year to year:

249. The volatility of output in Tehran probably affects the entire national economy because of Tehran's weight in the urban economic system. In 1379 (2000–01), Tehran represented 32.4 percent of the urban building industry, i.e., 9,487 out of IRR29,219 billion. In U.S. dollars the national building industry output amounted to \$ 3.69 billion that year (new starts: 28.7 percent; semi-finished: 46.6 percent; completed: 24.7 percent). The building industry output across cities was even with: 32.4 percent for Tehran; 33.1 percent in large cities; and, 34.3 percent in other urban areas.

| Year                                 | Million of Square Meters Approved | Year-on-Year Change |  |  |  |  |
|--------------------------------------|-----------------------------------|---------------------|--|--|--|--|
| 1376 (97/98)                         | 7.4                               | -39.3%              |  |  |  |  |
| 1377 (98/99)                         | 5.3                               | -28.4%              |  |  |  |  |
| 1378 (99/00)                         | 10.1                              | + 89.7%             |  |  |  |  |
| Source: Bank team estimates and MHUD |                                   |                     |  |  |  |  |

 Table 4-8. Tehran: Volatile Year -to-Year Permit Approvals

<sup>&</sup>lt;sup>139</sup> In spite of significantly different institutional and growth contexts, South Korea experienced 15 years ago a pattern of housing distortions driven by policies that bear some similarity to Iran's difficulties today. See Bertrand Renaud "Compounding Financial Repression with Rigid Urban Regulations: Lessons of the Korea Housing Market," *Review of Urban and Regional Studies, Tokyo,* Vol.1,No.1 (January 1989): 1–22.

<sup>&</sup>lt;sup>140</sup> In addition to land as an asset of refuge, very high land costs could be due to one or more of three broad factors: institutional factors such as government land ownership and land ownership by nonprofit organizations that fragment urban land markets and restrict supply to only a fraction of its potential; the weak financial conditions of local governments that prevent them from providing infrastructure and expanding the supply of serviced land; and, third, rigid physical urban planning rules that are not market responsive. These factors may differ across cities.

250. Such volatile conditions affect construction material prices negatively as suppliers face rapid shifts from feast to famine and back again. International experience suggests that the quality of construction and finishing materials tends to be affected negatively as well. In Iran, the annual construction materials index shot up from 100.0 in 1376 (97–98) to 155.5 in 1379 (00–01). Quarterly variations appear to be even greater.

251. Unbalanced housing output favors very large units. As noted, housing and other forms of real estate are preferred assets of refuge against inflation for high-income groups.<sup>141</sup> This is confirmed by the very large average size of new units supplied by the private sector compared to the average purchasing power of the population.

| Year  | New           | Average                      | Floor Area per           | Year on Year  |  |  |  |  |
|---|---------------|------------------------------|--------------------------|---------------|--|--|--|--|
|   | Housing Units | Floor Area (m <sup>2</sup> ) | Person (m <sup>2</sup> ) | Output Change |  |  |  |  |
| 1375 (1996-97)  | 204,688       | 130                          | 28.9                     |               |  |  |  |  |
| 1376 (1997-98)  | 193,641       | 124                          | 27.5                     | - 5.4%        |  |  |  |  |
| 1377 (1998-99)  | 210,994       | 129                          | 28.7                     | + 8.9%        |  |  |  |  |
| 1378 (1999-00)  | 291,046       | 124                          | 27.5                     | + 37.9%       |  |  |  |  |
| 1379 (2000-01)  | 339,659       | 122                          | 27.1                     | + 16.7%       |  |  |  |  |
| Source: Report on the Housing Construction by the Private Sector, Tehran: Central Bank of |               |                              |                          |               |  |  |  |  |
| Iran, 2001 (Annex 4.1., Table 5)  |               |                              |                          |               |  |  |  |  |

 Table 4-9. Iran: Recent Private Urban Housing Production, 1375-1379

252. In the absence of an effective housing finance system, the size-distribution of housing units produced by the private sector suggests how the cash- and wealth-driving investment goals significantly affect the composition of output. According to the price affordability (Table 4-6), about 15 percent of the new units were readily affordable to a sizable percentage of the population. 31 percent of the units would fall under the categories of "protected" or "social" units. The total output in 1995 of about 210,000 units fell significantly short of the rate of new urban household formation. (Table 4-4).

Table 4-10: Size-Distribution of Housing Units Produced by the Private Sector in 1995

|                               | Floor area  |         |          |             |            |            |             |          |                    |  |
|-------------------------------|-------------|---------|----------|-------------|------------|------------|-------------|----------|--------------------|--|
| Units                         | 50 and      | 51-70   | 71-100   | 101-150     | 151-200    | 201-250    | 251 and     | Total    | Average            |  |
|                               | less        |         |          |             |            |            | more        |          | Unit size          |  |
| Number                        | 14,564      | 14,346  | 37,464   | 68,494      | 45,624     | 15,782     | 13,579      | 209,853  | 140 m <sup>2</sup> |  |
| Percentage                    | 6.9         | 6.8     | 17.8     | 32.6        | 21.7       | 7.5        | 6.5         | 100      |                    |  |
| <i>Source</i> : Repo<br>1995. | rt on the I | Housing | Construc | ction by th | ne Private | Sector, To | ehran: Cent | ral Bank | of Iran,           |  |

253. *The fragmentation of financing into various public housing programs.* An unintended consequence of policies, inflation, and financial repression is the proliferation of special housing programs for various groups of public employees and other special groups in order to remedy scarce financial services. But these housing assistance

<sup>&</sup>lt;sup>141</sup> Twenty years ago, in the1980s, Korea experienced distortions in its housing markets, but the high economic growth rate was a mitigating factor. See Bertrand Renaud, "Compounding Financial Repression with Rigid Urban Regulations: Lessons of the Korean Housing Market," *Review of Urban and Regional Studies, Tokyo,* 1,1 (January 1989): 3-23.

programs can only serve to complement, not substitute for, a market-based system.<sup>142</sup> Because these special programs lend at rates significantly below the cost of capital in the Iran economy, they carry a significant element of subsidy that is *de facto* indexed to inflation, and they face chronic underfunding. These programs must ration their services, and access to them can easily become a kind of housing lottery. Iranian households that succeed in purchasing a new unit have to patch together small financial resources from a large number of sources. A successful household is forced to play the role of financial intermediary, but without specialized skills, professional experience, funding efficiency, or economies of scale. Access to home ownership today is based on wealth and prior savings (see Box HF-1). Under such conditions, embedding subsidies into housing loans by means of subsidized interest rates becomes income-regressive because a low financing-to-value ratio on the order of 30 percent requires that 70 percent of the house value be accumulated first, which is obviously easiest for higher-income and older households.

254. Lack of financing for the purchase of existing housing units. Internationally, a frequent asset-building strategy used by young professional households with little accumulated wealth but good expected lfetime earnings is the purchase of a cheaper existing housing unit. Such families follow their first-time purchase with a trade up for a new housing unit five to eight years later. Moving up the housing ladder by trading existing units takes longer, but overall social welfare is improved in these chains of move that benefit the households involved in them. The law in Iran currently prohibits the financing of existing units by financial institutions. When the 1983 Law for Usury-Free Banking was being drafted, the Islamic Consultative Assembly did not authorize financing for the purchase of an existing housing unit. Given high inflation and the decline of deposits and other funds at the Housing Bank, this ruling was perceived at the time as being of little practical significance. However, it is noteworthy that prior to this 1983 legal decision, in times of low inflation the records of the Housing Bank reportedly showed that up to 50 percent of annual credits in some years were granted for the purchase of existing units.<sup>143</sup>

255. In a situation of serious housing and credit shortages, the provision of credit to finance the acquisition or the improvement of existing housing, or to finance rental units, can have important efficiency and welfare benefits for exposed younger and lower-income households groups.<sup>144</sup> The prohibition against financing existing, modest units<sup>145</sup> lowers the value of the existing stock, the wealth of households owning such units, and

<sup>&</sup>lt;sup>142</sup> For more details, see the subsidies chapter. Table 13. The Bank team identified 28 special housing programs funded with budgetary resources. These housing programs are of various scale, focus, and length in existence. In addition, most large-scale employers, whether public, nonprofit (*bonyads*), or fully private, have some housing assistance programs for their employees. <sup>143</sup> The requirement to finance only new units has been lifted recently in the specific case of government officials

<sup>&</sup>lt;sup>143</sup> The requirement to finance only new units has been lifted recently in the specific case of government officials borrowing from the Housing Bank under its program of loan-linked deposit accounts known as "Housing Savings Fund Accounts."

<sup>&</sup>lt;sup>144</sup> A former public program for social rental failed and was re-directed into rent-to-own homeownership schemes, because the targeted developers/builders are not natural long-term landlords. A limited number of workers also enjoy very cheap rent from public companies and *bonyads*, but most tenants pay increasing market rents. Private investors get rental income exemptions for units of less than 120 m<sup>2</sup>.

<sup>&</sup>lt;sup>145</sup> Except for the civil servants participating in housing saving schemes with the Housing Bank.

reduces the fluidity needed for an active housing market, in particular for lower-income households that may need to relocate to get a better job. It is worth examining whether such prohibitions serve either the interests of the construction industry or the welfare of families. The eligibility of housing loans should be extended to the purchase of existing units. This will be an important business decision that might require different loan processing rules, especially regarding the value of properties. Since all existing loans contain an element of implicit or explicit subsidy, a different pricing policy might be needed. Meanwhile, subsidy programs for targeted groups might remain focused on new housing and major housing renovations because of the desired short-term impacts on employment, economic growth and the expansion of the housing stock.

| Share in total cost of<br>purchasing a unit   | less<br>than | 11<br>to | 21 to<br>30% | 31<br>to | 41<br>to | 51<br>to | 61<br>to | 71<br>to | more<br>than | total |
|---|--------------|----------|--------------|----------|----------|----------|----------|----------|--------------|-------|
|   | 10%          | 20%      |              | 40%      | 50%      | 60%      | /0%      | 80%      | 80%          |       |
| Savings   | 12           | 11       | 13           | 15       | 21       | 6        | 11       | 8        | 3            | 100   |
| Bank facility   | 0            | 12       | 41           | 36       | 11       | 0        | 0        | 0        | 0            | 100   |
| Sale of other asset   | 62           | 17       | 15           | 2        | 2        | 2        | 0        | 0        | 0            | 100   |
| Transfer from relatives   | 64           | 18       | 11           | 1        | 1        | 1        | 2        | 0        | 0            | 100   |
| Employer loans  | 83           | 14       | 3            | 0        | 0        | 0        | 0        | 0        | 0            | 100   |
| Tenant's advance payment <sup>a</sup>   | 68           | 11       | 20           | 0        | 0        | 1        | 0        | 0        | 0            | 100   |
| Informal market finance   | 93           | 5        | 0            | 2        | 0        | 0        | 0        | 0        | 0            | 100   |
| Others  | 97           | 3        | 0            | 0        | 0        | 0        | 0        | 0        | 0            | 100   |
| a. When the tenant gives an advance payment, the interest rate on the money is counted as the monthly<br>rent. For each 5 million Rials of advance payment, the tenant get a deduction in rent of 150,000 Rials<br>per month. The advance payment is returned to the tenant upon departure. |              |          |              |          |          |          |          |          |              |       |

| Box 4-1. | Home 1 | Purchase | Strategies— | -How Succe | ssful Home | Buyers | Assemble | Their Fi | nancing |
|----------|--------|----------|-------------|------------|------------|--------|----------|----------|---------|
|          |        |          |             |            |            |        |          |          |         |

This frequency table provides an overview of the dominant strategies currently used by successful Bank Maskan borrowers. These rows reflect the main sources of fund listed from top down in order of significance for total financing. The columns give the frequency distribution in the proportion of total financing coming from each source. For instance, the top row shows that 21% of Bank Maskan borrowers rely on their own savings for 41% to 50% of the purchase of their housing unit. The second row shows that nobody can finance more than 50% of the housing purchas e price with a Bank Maskan loan.

The table highlights how the purchase of a house in Iran is heavily dependent on prior wealth accumulation. The core source of funding is private savings that can cover up to 80 percent of the entire unit cost, exceptionally even more. Bank facilities provide only 10 to 50 percent of the financing, never more; most commonly from 20 to 40 percent of the entire funding needs. More details on the forms in which savings are accumulated would be useful to understand the structure of savings markets in Iran.

Other funding sources are complementary to savings and the bank facility. These sources cover less that 30 percent of financing needs. They include: sales of other assets, financing by relatives, employer loans, mortgaging of a residential units, and as a last resort the informal market. The reliance on the tenant's advance payment is a frequent strategy, highlighting again the dependence on a significant level of prior wealth.

# 2. The Supply of Housing Finance Services

256. It is difficult to estimate precisely the flow of financing going to new housing construction every year. There are several reasons: the multiplicity of housing finance windows; differences in the types of financing products used; incomplete data on gross and net annual credit flows; and also, non-standardized accounting practices across programs that do not always separate credit financing from other data such household financing, direct budget contributions, or even subsidies in kind like subsidized land. Table 4-11 shows the level of intermediation in the sector—about 20 percent of annual housing investment comes from facilities granted by the Banking sector.

| Year / Billion Rials          | 1996     | 1997     | 1998     | 1999       | 2000      |
|-------------------------------|----------|----------|----------|------------|-----------|
| Outstanding Balance of        | 53,307.1 | 62,321.2 | 84,073   | 11,5840.,9 | 152,138.3 |
| bank Financing to all         |          |          |          |            |           |
| sectors                       |          |          |          |            |           |
| New Bank Financing to all     | 12,339.4 | 9,014.1  | 21,751.8 | 31,767.9   | 36,297.4  |
| Sectors                       |          |          |          |            |           |
| New Bank Financing to         | 2,775    | 3,399    | 4,374    | 9,052      | 10,002    |
| Housing and Construction      |          |          |          |            |           |
| Share of construction and     | 22.5%    | 37.7%    | 20.11%   | 28.5%      | 27.6%     |
| housing from new              |          |          |          |            |           |
| financing                     |          |          |          |            |           |
| New Bank Financing to         | 1,770.7  | 2,277.9  | 5,176.9  | 6,493.4    | 7,520.8   |
| Housing                       |          |          |          |            |           |
| Share of housing in total     | 14.3%    | 25.3%    | 23.8%    | 20.4%      | 20.7%     |
| new bank financing            |          |          |          |            |           |
| Outstanding Balance of        | 3,359.2  | 4,745.7  | 6,979.7  | 10,843.7   | 13,874.4  |
| bank housing financing        |          |          |          |            |           |
| Annual Investment in the      | 16,665   | 21,336   | 22,181   | 28,980     | 37,400    |
| housing at current prices     |          |          |          |            |           |
| Ratio of bank financing to    | 10.6%    | 10.7%    | 23.3%    | 22.4%      | 20.1%     |
| annual housing investment     |          |          |          |            |           |
| Sources: Central Bank of Iran | 1.       |          |          |            |           |

 Table 4-11. Iran—Level of Intermediation in the Housing Sector (1996-2000)

257. A performance review of the first year of the Third FYP estimates the sources of funds for new housing to amount to IRR 30,411 billion (US\$3.84 billion). Section 1 presents a discussion of the sector's dependence on direct private savings—estimated for the Persian year1379 at about 62 percent of total funding (see also Table 4-12). Section 2 discusses the role of the banking system, estimated to have provided about 33 percent of all funding. The primary focus is on Bank Maskan, which presently dominates the entire supply of housing finance services.<sup>146</sup>

<sup>&</sup>lt;sup>146</sup> The World Bank report on housing subsidies covers direct funding by the public sector estimated in Table 11 at less than 5 percent of total funding. The subsidy review discusses the complex variety of resources that benefit housing directly and indirectly, in cash and in kind, on the demand side and on the supply side.

| Source   | Percentage | RI billion |  |  |  |  |  |  |
|--|------------|------------|--|--|--|--|--|--|
| Public Budget  | 1.62       | 491.5      |  |  |  |  |  |  |
| Government Companies   | 3.02       | 920.0      |  |  |  |  |  |  |
| 1. Total Public Sector   | 4.64       | 1,411.5    |  |  |  |  |  |  |
| 2. Banking system  | 33.22      | 10,100.0   |  |  |  |  |  |  |
| 3. Private savings   | 62.14      | 18,899.5   |  |  |  |  |  |  |
| TOTAL  | 100.00%    | 30,411.0   |  |  |  |  |  |  |
| Source: Review of the First-Year Results of the Third FYP, Tehran: |            |            |  |  |  |  |  |  |
| MHUD, 2001.  |            |            |  |  |  |  |  |  |

 Table 4-12. Iran: Sources of Funds for Housing in 2000–01 (1379)

### 2.1. Housing Finance: The Regulatory Framework

258. *Implementing the development plans: The role of the financial sector*. In the strong planning environment of Iran over the past two decades, the financial system has been used as an instrument of implementation of the plans. The system has not played the autonomous role in resource allocation and risk management that a financial system plays in a more market-oriented environment. The Iranian financial system has also been entirely bank-dependent and the ratio of stock-market capitalization to GDP was a very low 4 percent of GDP in the mid-1990s. Access to finance by private enterprises has been very difficult, as the nationalized banking system has been used primarily to fund state-owned enterprises. The ratio of bank claims on the private sector has been very low and amounted to only 22 percent of GDP in the mid-1990s.

259. *The present housing finance system*. What are the main features of the present Iran housing finance system? The results from the financial policies of the past two decades could be summarized as follows. Since 1983, Iran has built a special circuit for housing finance that is segregated from the rest of the financial system. Bank Maskan, the housing bank, dominates that system and may represent about 30–40 percent of total bank funding of housing, depending on years, and very occasionally as high as 90 percent.<sup>148</sup>

260. The system of directed credit allocates 20 percent of incremental new credit to "housing and construction" where "construction" refers here to housing construction, as opposed to other building and civil engineering projects.<sup>149</sup>

261. Without access to market-based long-term funds, Bank Maskan has restricted means to manage liquidity and interest risks. The bank allocates about 60 percent of its funding to short-term construction finance and only 40 percent to long-term home purchase finance. Other lenders who do not benefit from Bank Maskan's special privileges lend almost exclusively for short-term construction finance.

<sup>&</sup>lt;sup>147</sup> See A Demirgüç-Kunt and R. Levine (2001). The mean values for the 70 countries were: 39 percent of GDP for stock market capitalization and 48 percent of GDP for bank claims on the private sector. (Table 3.1 in D-K and L, 2001, pp. 86–99).

<sup>&</sup>lt;sup>148</sup> No consistent and complete table of all nonbank sources of loans has been obtained.

<sup>&</sup>lt;sup>149</sup> Another 9 percent of credit allocation goes to civil engineering construction projects for a total earmarking of 29% to the" housing and construction" industry broadly defined. See section 1.2.3.

262. At present, Iran has a comprehensive regulatory framework that covers all aspects of banking. Monetary authorities at the Central Bank of Iran (Bank Markazi) control the evolution of public bank credit to the private sector. Bank Markazi closely regulates public bank credit activities on a continuing basis. The Money and Credit Council approves new product designs and their pricing. This regulatory structure leaves limited room for bank management autonomy to manage flexibly and to innovate. Banking spreads between deposits and savings rates are reflecting high administrative costs.

263. Most public commercial banks operate housing finance programs for a fee under contracts from various ministries to provide home purchase finance for the staff of these ministries and/or targeted social groups of special concern to these ministries. These housing programs carry significant subsidies such as interest subsidies, land sold for a fraction of the market price with other explicit or implicit subsidy features:<sup>150</sup>

- *Bank Refah Kari-e garan* (Welfare Bank for Workers) is one of the six public commercial banks. It offers various housing products. Some contracts are short-term home-improvement facilities. Others are long-term purchase finance facilities. For instance, in a contract the with the National Land and Housing Organization (NLHO), Bank Refah co-finances with the government home purchases products under the Ghadir Project with 4/7<sup>th</sup> from the bank's fund and 3/7<sup>th</sup> from the government.
- *Bank Sepah* offers purchase facilities to military personnel under IRR 30 million and less than 15 years, usually through cooperative housing societies.
- Bank Melli manages teachers home purchase facilities.
- *Bonyad Maskan*. The Housing Foundation has low-income housing programs, and also manages some government programs. Other *bonyads* such as Mostazafan manage their own large housing projects. So do large state enterprises.
- The *Social Security Administration* also offers construction finance and purchase finance.

264. Leading issues and reform initiatives. Access to the domestic capital market is critical for long-term funding and risk management in housing finance. The fixed-income securities market was effectively shut down in 1983 with the passage of the Law for Usury-Free Banking. This fundamental change affected government finance even more than housing finance. The volume of new Islamic capital market instruments such as the "partnership papers" has grown very slowly because of the lack of interest of the market in the yields and other features of the securities offered. In a series of stopgap measures, the government had to rely on CBI financing to finance part of public expenditures. Occasionally, the government has also funded housing finance programs such as in 1377 (1998–99) when the Money and Credit Council allocated IRR500 billion through the CBI to fund the "Eskan77" housing program that could not be financed autonomously by Bank Maskan and the banking system for lack of deposit resources. This lack of voluntary financial savings appears to be a financial market structure issue rather than a

<sup>&</sup>lt;sup>150</sup> At least 29 such programs sponsored by various ministries were identified for the Bank. Details for the descriptions of these financial products were incomplete, including the number of loans, the value of new loans made each year, and the value of the total portfolio outstanding at the end of each period.

savings issue because the aggregate savings rate in Iran is high and close to 30 percent of GDP.

265. The financial authorities are now working toward developing the new securities market needed to improve the conduct of monetary policy. In the case of housing finance and urban development, Section 85 of the Second FYP Law of 1993 authorized the issue of partnership papers on the domestic capital market. However, only four housing or urban development security issues have been issued between October 1994 and February 2001.<sup>151</sup> A new project led by the Ministry of Finance and the Economy aims to create a new corporation that would issue partnership papers and develop a market for such papers. This project is discussed in Section 3.3 below. Improperly designed and subsidized as proposed in some quarters, this new institution would merely amount to another direct-credit scheme and would not benefit long-term financial development in Iran.

266. Deposit funds mobilization is another leading issue. Because deposit rates have been consistently below inflation so far, Bank Maskan is unable to mobilize voluntary deposits fast enough to meet the rapidly rising potential urban demand. To fund this gap and respond to rapidly rising social pressures, the GOI and sector ministries are promoting under the Third FYP a variety of loan-linked deposits (also known as contractual savings for housing, or CSH). These CSH products carry significant medium-term financial risks. Their introduction also has longer-term financial development implications that need to be fully assessed.<sup>152</sup> A further expansion of construction finance is a lesser priority, although untimely disbursement practices that raise housing costs through delays are reported.

267. Recent financial measures therefore aim to liberalize the Iranian housing finance system very gradually and to support innovations. These various measures include:

- Since the start of the second FYP in 1373 (1994–95), the six public commercial banks are permitted to lend for housing purchases. However, these banks limit their housing lending to shorter-term construction finance typically using civil partnership *musharaka* contracts, strongly collateralized by the pledged housing unit. All these banks offer subsidized housing finance purchase products to their own employees. They also offer home improvement loans.
- As noted in section 1.2, the charter of Bank Maskan was changed in 1999 to expand it asset powers to those of a commercial bank.

<sup>&</sup>lt;sup>151</sup> The size of these four issues ranged between IRR35 billion for a new town company and IRR250 billion for a Tehran Municipality project. Maturities ranged between three and five years. The dealer bank for two of these issues was Bank Maskan.
<sup>152</sup> International experience in Europe and the Middle East shows that contractual savings for housing carry several

<sup>&</sup>lt;sup>152</sup> International experience in Europe and the Middle East shows that contractual savings for housing carry several important risks that must be properly assessed *ex-ante*: a large liquidity risk, potential dependence on costly subsidies that could become politically impossible to phase out, and as a result lasting distortions in the financial savings that in turn affects the efficiency of mortgage markets. There has been a serious debate across Central and Eastern Europe about the suitability of such instruments in modern financial systems. Contractual savings for housing were created in a different era of limited information technology and financial innovations, relatively closed economies, closed domestic financial markets, and significant directed-credit policies after World War II. In Western Europe they function as second loans, not as first mortgage loans.

- The Construction Industry Development Financial Company is a finance company active in the construction and housing sector. Its charter was recently expanded and it was renamed the Development Financial Company.<sup>153</sup> The DFC is actively supporting the development of a capital market for housing participation paper and the creation of a centralized issuer of participation papers temporarily known as The National Corporation for the Long-Term Sale of Residential Units in Iran (or Metrom, see section 3.3 below).
- Three private banks have begun operations: Parsian Bank, Saman Eghtesad, and Eghtesade Novin. They are not subject to directed-credit guidelines. Two of them (Saman Eghtesad and Eghtesade Novin) are offering housing finance products with returns ranging between 27 percent and 30 percent and maturities under five years, which limits their potential markets to a fraction of higher-income groups. These products include loan-linked deposits.

268. Bank Maskan dominates the supply of housing finance. An analysis of its operations can provide an understanding of the present constraints and reform needs of the entire system. Section 2.2 therefore now turns to a review of Bank Maskan operations.

### 2.2. Operations of the Housing Bank (Bank Maskan)

269. Bank Maskan was chartered in 1358 (1979) as one of four specialized public banks. It is the only specialized bank to finance housing. Article 3 of its charter expanded its assets power in 1999 to permit the same activities as commercial banks. (See section 1.1 above).

270. The housing bank constitutes Iran's *de facto* housing finance system. Yet as a bank it is a medium-sized institution in the overall financial system. Bank Maskan is the sixth-largest out of ten banks in terms of deposits (see Table 4-13); its assets represented 8.4 percent of the entire system (including small non-bank credit institutions not listed in the table). In terms of *loans to the nonpublic sector*, Bank Maskan is the second-largest lender because public commercial banks lend significantly to state-owned enterprises (SOEs).<sup>154</sup> It is noteworthy that the Housing Bank's share of *long-term deposits* is small even compared with some of the commercial banks. The liquidity risk of borrowing short and lending long is a very significant issue for the present housing finance system.

<sup>&</sup>lt;sup>153</sup> Non-bank Credit Institutions can be licensed by the central bank. Such institutions are financial intermediaries that mobilize resources through the acceptance of **only long-term** deposits and other funding facilities. Iranian law distinguishes two categories of non-bank credit institutions: a Specialized Credit Institution operating within the framework of a particular credit facility, or a particular economic activity; and a General Credit Institution functioning in a number of economic fields and offering various types of credit facilities.

<sup>&</sup>lt;sup>154</sup> Here "nonpublic sector" refers to corporations that are not directly owned by the state. In terms of governance and incentives structure, a spectrum of corporate charters exists in Iran between fully public and fully private companies; the *bonyads* being one major example.

| Banks          | Total Deposits               | Of which     | Loans to Non- | Total Assets | Percent of   |  |  |  |  |  |
|----------------|------------------------------|--------------|---------------|--------------|--------------|--|--|--|--|--|
|                | (IRR Trillion)               | L-T deposits | Public Sector |              | Total Assets |  |  |  |  |  |
| Melli          | 64.8                         | 16.2         | 36.7          | 102.7        | 29.1%        |  |  |  |  |  |
| Saderat        | 41.3                         | 9.7          | 25.9          | 61.7         | 17.5%        |  |  |  |  |  |
| Tejarat        | 24.8                         | 7.2          | 13.6          | 38.1         | 10.8%        |  |  |  |  |  |
| Mellat         | 28.2                         | 6.9          | 18.4          | 40.9         | 11.6%        |  |  |  |  |  |
| Sepah          | 22.4                         | 5.6          | 13.1          | 35.0         | 9.9%         |  |  |  |  |  |
| Refah          | 6.4                          | 0.9          | 5.3           | 10.4         | 3.0%         |  |  |  |  |  |
| Commercial     | 187.7                        | 46.5         | 113.1         | 288.8        | 81.9%        |  |  |  |  |  |
| Maskan         | 12.1                         | 1.9          | 27.0          | 29.5         | 8.4%         |  |  |  |  |  |
| 3 Others       | 8.5                          | 0.7          | 24.7          | 33.7         | 9.5%         |  |  |  |  |  |
| Specialized    | 20.6                         | 2.6          | 52.7          | 63.2         | 17.9%        |  |  |  |  |  |
| Source: Centra | Source: Central Bank of Iran |              |               |              |              |  |  |  |  |  |

 Table 4-13. Size of Bank Maskan in the Iran Banking System, December 2000

271. At the end of year 2000, Bank Maskan had more than 7,140 employees to manage IRR29.8 trillion in assets (or \$3.8 billion), 5.6 million deposit accounts, and less than 2 million loans.<sup>155</sup> The bank's network of branches expanded by 37 percent during the Second FYDP (from 453 branches in 1995–96 to 719 branches in September 2001). This expansion reflects the increasing volume of business Bank Maskan has been conducting in smaller cities.

272. There are now 61 cities with a population of more than 100,000 people. Over the past three years Bank Maskan has rapidly expanded its network of branch offices throughout the provinces.

273. The housing bank services a very large number of deposit accounts and credit operations across the country (see Table 4-14). Those accounts are on average very small. The population seems to open them as options to get into the queue for a possible future housing loan. During the six-year period (1375–1380, i.e. 1996–2002) the number of deposit accounts has expanded rapidly by 88 percent, up to a total of 6.51 million accounts by March 2002. The average size of each deposit was IRR3,048 million, or US\$381. Bank Maskan incurs significant administrative costs to service of the many small-deposit accounts in smaller cities.

274. There is no yield curve in Iran. The central bank fixes the minimum and the maximum rates of return on loans made to major economic sectors. The rates for construction and housing are currently 15 to 16 percent. In practice, a wider range of rates is observed across a variety of special programs. Bank Maskan financing activities in smaller cities are considerably greater than in Tehran (see Table 4-15). The reason for this is more regulatory than commercial. In order to maximize the number of subsidized credits, the supervisory authority has placed a low ceiling on the maximum credit amount the housing bank can offer in Tehran and the other cities.

<sup>&</sup>lt;sup>155</sup> Has Bank Maskan high administrative costs? For comparison, in 1998 the Government Housing Bank of Thailand had 2,114 employees to manage total assets US\$9.78 billion, a portfolio of more than 440,000 loans in a network of 202 branches and sub-branches in a country of 62 million people. A GHB employee managed \$4.63 million. A Bank Maskan employee managed only \$0.53 million in year 2000.

|               | Т         | `ehran          | Lar         | Large Cities    |            | Other Cities  |           | Total          |  |
|---------------|-----------|-----------------|-------------|-----------------|------------|---------------|-----------|----------------|--|
| Year          | Accounts  | Amount          | Accounts    | Amount          | Accounts   | Amount        | Accounts  | Amount         |  |
| 1375          | 655,090   | IRR 972.0       | 919,632     | IRR 887.2       | 1,893,724  | IRR 990.6     | 3,468,446 | IRR 2,849.9    |  |
| 1376          | 758,620   | IRR 1,855.6     | 1,019,326   | IRR 1,384.1     | 2,073,232  | IRR 1,628.5   | 3,851,178 | IRR 4,868.1    |  |
| 1377          | 887,040   | IRR 3,051.3     | 1,185,516   | IRR 2,107.6     | 2,350,628  | IRR 2,445.2   | 4,423,184 | IRR 7,604.1    |  |
| 1378          | 1,000,256 | IRR 4,127.6     | 1,336,504   | IRR 2,899.7     | 2,582,353  | IRR 3,171.7   | 4,919,113 | IRR 10,199.0   |  |
| 1379          | 1,188,819 | IRR 4,990.0     | 1,537,389   | IRR 3,748.0     | 2,858,908  | IRR 4,082.5   | 5,585,116 | IRR 12,820.5   |  |
| 1380 (01/02)  | 1,451,635 | IRR 8,157,031   | 1,798,750   | IRR 5,663,258   | 3,262,135  | IRR 6,032,309 | 6,512,930 | IRR 19,852,598 |  |
| Percent of    | 22.3      | 41.1            | 27.6        | 28.5            | 50.1       | 30.4          | 100.0     | 100.0%         |  |
| Total in 1380 |           |                 |             |                 |            |               |           |                |  |
| Average       |           | 5,619.20        |             | 3,148.45        |            | 1,849.19      |           | 3,048.18       |  |
| 1380 Deposit  |           |                 |             |                 |            |               |           |                |  |
| (IRR 1,000)   |           |                 |             |                 |            |               |           |                |  |
| US Dollar     |           | 702.4           |             | 393.55          |            | 231.15        |           | 381.02         |  |
| Source: Bank  | Maskan A  | nnual Report, T | Tehran: Bar | nk Maskan, vari | ous vears. |               |           |                |  |

Table 4-14. Housing Bank Number and Regional Distribution of Deposit Accounts

Table 4-15. Housing Bank: Annual Loans (IRR billion)

|                                      |          | Tehran          | Larg                  | ge Cities     | Othe    | er Cities  |         | Total        |
|--------------------------------------|----------|-----------------|-----------------------|---------------|---------|------------|---------|--------------|
| Year                                 | No.      | Amount          | No.                   | Amount        | No.     | Amount     | No.     | Amount       |
| 1375                                 | 21,262   | RI 1,002.4      | 40,199                | IRR 856.5     | 86,480  | RI 1,023.8 | 147,941 | RI 2,882.80  |
| 1376                                 | 24,337   | RI 1,197.7      | 47,451                | IRR 1,247.4   | 103,953 | RI 1,549.5 | 175,741 | RI 3,994.70  |
| 1377                                 | 35,573   | RI 2,037.4      | 69,149                | IRR 1,845.7   | 181,090 | RI 2,606.1 | 285,812 | RI 6,489.10  |
| 1378                                 | 47,883   | RI 2,932.9      | 71,728                | IRR 2,745.5   | 138,644 | RI 3,774.3 | 258,255 | RI 9,452.70  |
| 1379 (00/01)                         | 50,273   | RI 3,643        | 64,832                | RI 2,902      | 101,894 | RI 3,900   | 216,999 | RI 10,445.60 |
| Percent of Total in 1379 (2000/01)   | 23.2     | 33.5            | 29.9                  | 29.8          | 47.0    | 36.6       | 100.0   | 100.0        |
| 1380 (01/02)                         |          | RI 4,212        |                       | RI 3,981      |         | RI 4,263   |         | RI 12,456    |
| Percent of Total in 1380 (2001/2)    |          | 33.82           |                       | 31.96         |         | 34.22      |         | 100.0        |
| 1379 Average<br>Credit (RI millions) |          | 69.70           |                       | I 48.03       |         | 37.57      |         | 48.14        |
| 1379 Average<br>Credit (US\$)        |          | 8,804           |                       | 6,067         |         | 4,746      |         | 6,080        |
| Source · Bank Mask                   | an Annus | al Report Tehra | n <sup>.</sup> Bank M | askan various | vears   |            |         |              |

275. This ceiling on the total credit size is misaligned with prevailing prices for new housing in Tehran and some of the largest cities; as a result, financing-to-value ratios are very low in these markets. This means that a very significant amount of prior wealth is required to borrow from the Housing Bank in major urban markets, as shown already in BOX HF-1.<sup>156</sup> To see the regional impact of the credit ceiling more explicitly, see Table 4-16, which shows the price per square meter of housing units transacted by real estate

<sup>&</sup>lt;sup>156</sup> Maximum credit amounts are IRR 30 million for purchase loans made by commercial banks, which further discourages them from financing housing. The maximum credit amount permitted to the housing bank is IRR 50 million. Note that the calculated average credit in Tehran is IRR 69.7 million because the figure includes loans for multiple units bundled into a "mass housing" reporting line.

agencies in Tehran and the four next-largest cities. Presumably, these transactions involve a mix of new and existing housing units.

| City    | 1375  | 1376   | 1377   | 1378   | 1379   | 1380   | 1381   | "Protected" 75 m <sup>2</sup> | "Protected"           |
|---------|---|--------|--------|--------|--------|--------|--------|-------------------------------|-----------------------|
|         | (1996-  | (1997- | (1998- | (1999- | (2000- | (2001- | (2002- | Unit                          | 75m <sup>2</sup> Unit |
|         | 1997)   | 1998)  | 1999)  | 2000)  | 2001)  | 2002)  | 2003)  | 1379 (2000-2001)              | (US\$)                |
| Tehran  | 1,603   | 1,560  | 1,558  | 1,755  | 2,251  | 3,198  | 4,810  | 168,825                       | 21.325                |
| Esfahan | 642   | 756    | 906    | 1,000  | 1,136  | 1,411  | 2,215  | 85,200                        | 10.762                |
| Tabriz  | 583   | 663    | 742    | 831    | 942    | 1,204  | 1,671  | 70,650                        | 8.924                 |
| Shiraz  | 686   | 796    | 823    | 922    | 1,043  | 1,263  | 1,945  | 78,225                        | 9.881                 |
| Mashad  | 530   | 620    | 768    | 820    | 920    | 1,997  | 1,983  | 69,000                        | 8.716                 |
| Source: | Source: Statistical Center of Iran and World Bank estimates based on consultants reports. |        |        |        |        |        |        |                               |                       |

 Table 4-16. Iran: Average Price per Square Meter of Housing Units Transacted (IRR )

276. The notional price of a unit of 75 m<sup>2</sup> is given in the last column of Table 4-15. The rationing effect of the credit ceiling of IRR 50 million is apparent. Its impact on high-priced cities is worsening given rapid rates of appreciation in housing prices.<sup>157</sup>

277. *Bank Maskan's regulatory privileges and housing-related tax benefits*. Regulators have granted the housing bank a number of regulatory privileges that are not available to other banks or finance companies potentially interested in housing finance. The CBI has established low statutory reserve requirements for Bank Maskan deposits products:

- 2 percent for loan-linked savings deposits
- 10 percent for other types of deposits

278. Reserve requirements for commercial bank deposits are significantly higher:

- 20 percent for call deposits, Gharz-al-Hasaneh deposits, and for investment deposits under one year
- 10 percent reserves for investment deposits one year or longer

279. Reserves requirements for finance companies deposits are:

- 15 percent for Gharz-al-Hasaneh deposits and investment deposits under one year
- 10 percent for investment deposits for investment deposits two years or more
- Only for the housing specialized Development Finance Institution is the reserve requirement 10 percent for all types of deposits.

<sup>&</sup>lt;sup>157</sup> The Budget Law of 1373 (1994–1995) defined three main categories of housing units for policy purposes: "Free," "protected" (or "assisted" housing), and "social" housing. Social housing units have a maximum floor area of 50 m<sup>2</sup> across the country. Protected units have a maximum of  $75m^2$  for Tehran, Esfahan, Tabriz, Shiraz, and Mashad; and, a maximum area of 100 m<sup>2</sup> for all other cities. In Tehran, the maximum financing that the buyer of  $75m^2$  unit could expect in 1379 was only 29.5 percent of the price.

280. Article 55 of the Plan Law specifies that 3 percent of the statutory reserves deposited by banks at the CBI will be allocated on the basis of one percent each of three specialized banks (Agricultural Bank, Housing Bank, Bank for Industry and Mining). The basis for calculating this allocation is the level of reserves at CBI in year 1378.

281. Securities issued by Bank Maskan qualify for the 20 percent housing sector lending requirements of other banks, thereby permitting a favorable rate of return for Bank Maskan on its securities on the interbank market.

282. The second FYP 1374–79 has allocated part of the funds of insurance companies to the housing sector. No further details are available. Returns from deposits are tax-exempt for all banks and finance companies, including Bank Maskan.

283. Among the tax benefits to housing are the following:

- The monthly installment on housing loans and housing facilities are deductible from gross income for income tax purposes. The ceiling for deductibility is based on a maximum floor area of 120 m<sup>2</sup>.
- Article 138 of the Plan Law specifies that all "mass housing" builders are exempt from taxes on the first-time sale of residential units.

284. Funding structure and main types of deposits of the Bank Maskan. In the framework of Islamic banking set by the 1983 Law for Usury-Free Banking, banks are authorized to accept deposits of two main types:

- *Gharz-al-hasaneh* deposits, of which:
  - Current deposits are entirely interest free deposits;
  - Saving deposits are also not entitled to any interest. But in order to attract and encourage such deposits the banks may pay prizes in cash or in kind through two annual drawing of lots.
- *Term investment deposits* provide a rate of return. The range of maturity options has expanded over time. By the end of 1379 (March 2001) the rates on term investment deposits were regulated as follows:

| 0 | special short-term investment deposits: | 8 percent |
|---|---|-----------|
| 0 | short-term investment deposits:         | 10        |
| 0 | one-year investment deposits:           | 14        |
| 0 | two-year deposit:                       | 15        |
| 0 | three-year deposit:                     | 16        |
| 0 | four-year deposit:                      | 17        |
| 0 | five-year deposit:                      | 18        |

285. High inflation has ensured negative rates on investment deposits and makes it very difficult for Bank Maskan to attract voluntary savings (see Figure 4-1). The main instrument offered today by the housing bank is a loan-linked contractual deposit that is considered a *Gharz-al-hasaneh* deposit. This contractual deposit, like such products used
in France, Germany, and parts of Central Europe trades off a low return during the savings phase (in Iran a zero return) for the prospect of credit at a very low rate during the borrowing phase. Table 4-17 gives the basic composition of deposits at Bank Maskan.<sup>158</sup>

| Year   | 1996–97 | Percent | 1997–98 | 1998–99 | 1999–00 | 2000-01 | 2001-02  | Percent |  |  |
|--|---------|---------|---------|---------|---------|---------|----------|---------|--|--|
| 1. Loan-linked deposits  | 1,952   | 68.5    | 3,277   | 5,013   | 6,421   | 7,551   | 9,909.5  | 49.9    |  |  |
| 2. Term investment deposits  | 358     | 12.6    | 928     | 1,834   | 2,792   | 3,928   | 7,746.3  | 39.0    |  |  |
| 3. Demand deposits   | 540     | 18.9    | 663     | 757     | 986     | 1,341   | 2,196.7  | 11.01   |  |  |
| Total  | 2,850   | 100.0   | 4,868   | 7,604   | 10,199  | 12,820  | 19,852.5 | 100.0   |  |  |
| Source: Bank Maskan Summary Report of Activities and World Bank estimates based on consultants |         |         |         |         |         |         |          |         |  |  |
| reports.   |         |         |         |         |         |         |          |         |  |  |

Table 4-17. The Housing Bank: Main Types of Deposits, in IRR billion

286. Deposit rates and banking spread. The summary structure of deposits at Bank Maskan in September 2001 and March 2002 is shown in Table 4-18. This table shows that 61 percent of deposits at the bank were classified as interest-free, which is the main reason why the bank was able to distribute profits to its depositors at the beginning of 2002 for the first time since the scheme started. A calculation of the weighted returns paid on all Bank Maskan funds based on a more fully detailed table of deposits yields a very low overall cost of funds of only 5.65 percent.<sup>159</sup> Considering that the weighted average return on assets was 15.4 percent in September 2001, *the estimated banking spread at Bank Maskan appears to be very large, at 9.75 percent.* 

September 2001 March 2002 Type of Deposits RI b RI b Percent Percent Current interest free 994.40 6.44 1,200.7 6.0 Saving interest free 8,663.40 56.07 10,905.5 55.0 2.999.3 Term investment deposits 2,405.00 15.57 15.1 18.53 L-T investment deposits 23.3 2,862.60 4,631.6 Other deposits 42.50 0.28 115.4 0.6 TOTAL 15,450.00 100 19,852.5 100 Source: Bank Maskan Summary Report of Activities

 Table 4-18. Structure of Bank Maskan Deposits

287. *Main types of credit* The 1983 Law for Usury-Free Banking (LUFB) changed all the financing products available for housing until that date. Out of the various types of

<sup>&</sup>lt;sup>158</sup> As indicated in Table 4-7, for monetary policy purposes most of Bank Maskan deposits are apparently considered short-term deposits by the central bank.

<sup>&</sup>lt;sup>159</sup> This estimate excludes the interest paid to depositors, in housing saving schemes, who decide not to take the housing loans and as a result receive their deposit back with interest. About 30–40 percent of depositors in this scheme do not take out housing loans.

Islamic contracts defined as permissible by the LUFB, four main types contracts are used in housing finance; Namely:

- Civil partnership in the construction of residential units
- Installment sales<sup>160</sup>
- Hire purchase
- *Jo'alah* (under *Jo'alah*, one party who is the employer (*Ja'el*) is committed to pay a certain amount of compensation (*Ja'al*) to another party, the agent or contractor, for a certain work.

288. The commercial autonomy of Bank Maskan in designing financing products is restricted by the LUFB under which to the CBI is fixing a minimum and maximum rate of profit for banks in their joint venture and also fixes minimum prospective rates of profit for the various investment and partnership projects. Within thisIslamic finance framework, financing instruments have been refined and made more flexible, as can be seen in the case of loan-linked deposits instruments introduced during the Third FYP.

289. Article No.10 of the LUFB permits banks to construct low-priced residential units for sale on installment or hire purchase. The housing bank, as the only specialized bank in housing, operates within this framework.<sup>161</sup> See Table 419 for the breakdown of housing credits provided by Bank Maskan in 1380 (2001–02).

| Type of Contract      | Description                 |                              |               | 1380 (2001-02) |           |         |  |  |
|-----------------------|-----------------------------|------------------------------|---------------|----------------|-----------|---------|--|--|
|                       |                             |                              |               | Number         | Amount    | Percent |  |  |
| 1. Civil partnership  | Linked with saving          | Single units                 |               | 16,206         | 648,660   | 5.0     |  |  |
|                       | Not linked with saving      | single units                 | civil servant | _              | _         |         |  |  |
|                       |                             |                              | others        | 850            | 16,001    | 0.1     |  |  |
|                       | Cooperative Housing         |                              |               |                | 47,294    | 0.14    |  |  |
|                       |                             | Building Complex             |               | 818            | 316,531   | 2.5     |  |  |
|                       |                             | Note No.29                   |               | 14             | 88,986    | 0.7     |  |  |
| 2. Credit for Special | Azadegan and Ashayer        | 960                          | 18,550        | 0.1            |           |         |  |  |
| Groups                | Janbazan and Martyrs' fam   | Janbazan and Martyrs' family |               |                |           |         |  |  |
| 3. Installment sales  | Housing purchase            |                              |               | 115,902        | 8,588,113 | 69      |  |  |
|                       | Banks civil partnership     | 30,490                       | 2,007,107     | 16.1           |           |         |  |  |
| 4. Other contracts    | Different sectors of econor | ny                           |               | 1,524          | 37,033    | 0.13    |  |  |
| 5. Jo'alah            |                             |                              |               | 26,600         | 204,415   | 1.6     |  |  |

Table 4-19. Bank Maskan: Housing Credit Instruments

<sup>&</sup>lt;sup>160</sup> Unit installment sale contracts have been put into effect only in the following ways: (1) Sale of the bank's share generated from *civil partnership* in the construction and completion of residential units with real persons or legal entities. (2) Sale of residential units constructed by the bank. Then the contract that is applicable in the sale of the constructed residential units is the *hire purchase* contract.

<sup>&</sup>lt;sup>161</sup> As already discussed, the Islamic Consultative Assembly did not authorize the financing of the purchasing of already built units. But this decision has been selectively rescinded for government officials, see the "Housing Saving Fund" line for government officials in Table 4-19.

| Type of Contract        | Description                                    | 1          | 1380 (2001-02) |         |  |  |  |  |
|-------------------------|--|------------|----------------|---------|--|--|--|--|
|                         |  | Number     | Amount         | Percent |  |  |  |  |
| 6. Gharz-al-Hassaneh    | 33,079   | 182,619    | 1.5            |         |  |  |  |  |
| 7. Other kinds of credi | t  | 10,966     | 243,629        | 2       |  |  |  |  |
| GRAND TOTAL             | 239,953  | 12,457,616 | 100.0          |         |  |  |  |  |
| Source: Housing Bank    | x, Planning and Organization Dept. (in IRR th) |            |                |         |  |  |  |  |

290. Loan-linked deposit accounts and liquidity risk. The new deposit products introduced just before the Third FYP functionally link both sides of the balance sheet of Bank Maskan. The five main types of loan-linked savings accounts—also known as contractual savings for housing—offered by the housing bank represent about 70 percent of its entire deposit base. These deposit contracts carry with them significant elements of liquidity risk, depending on the timing and amount of credit that clients might choose. A critical stability component is the percentage of clients deciding not to exercise their financing rights during a given period and leaving their money with the bank. The conditions under which clients are likely to exercise their option to borrow deserve careful analysis by the housing bank and the regulatory authorities. (This liquidity risk issue is addressed in section 3.4 below)

291. For instance, in Tunisia in the late 1970s, a housing finance institution called CNEL relied exclusively on loan-linked deposit accounts. Given the extreme shortage of housing finance in the country, CNEL was very successful during the start-up years and it became extremely liquid as new contract money poured in. CNEL began offering anticipatory loans to earn income on its excess liquidity and also to meet housing policy goals. Soon enough, however, as waiting periods were completed and participants started to exercise their contract rights, the balance between inflows and outflows reversed itself. In the early 1980s, CNEL experienced a severe liquidity crisis and had to be closed down. A trigger of the run was that holders of deposit accounts had concluded that waiting lines to borrow were getting longer and longer and their chances to borrow too slim. The largest and most significant depositors were among the first to withdraw their accounts from the system. With government financial support, CNEL accounts had to be transferred to a newly created Banque de l'Habitat (BH), which is still in operation today. Operating rules used by BH were changed—and most important, these types of contracts became complementary to first mortgage loans, instead of being promoted as substitutes.<sup>162</sup> The lesson of that crisis is that Iranian supervisory authorities need to carry out a thorough analysis of alternative liquidity scenarios for each type of CSH product and identify prudent ratios between deposit and credits. Liquidity lines of credit might be signed, but at a price.

292. Bank Maskan offers several types of contractual savings products. These contracts are complex. They include a menu of contract options that change according to the socioeconomic characteristic and profession of the depositor-saver. For these reasons, two tables are presented. Table 4-19 provides a basic quantitative overview of these loan-

<sup>&</sup>lt;sup>162</sup> See also, Michael Lea and Bertrand Renaud, "Contractual Savings and Their Suitability for TSE Financial Reforms." Washington DC: *World Bank Policy Research Paper 1516*, 1995 at http://www-wds.worldbank.org/

linked deposit" products. Then Table 4-20 aims to provide more details of the options available to various individuals in the various products offered. It also covers the new Youth Savings Accounts. Yet Table 4-21 remains only indicative of the variety of contracts offered.

| Types of   | Minimum  | Minimum  | Maximum   | ]  | LOAN AMOUI                                     | NT                  | Type of   |
|--|--|--|---|--|--|---------------------|---|
| Loan-Linked<br>Saving<br>Products  | average<br>saving<br>(RI m)  | saving period<br>(months)  | multiplier<br>(loan to<br>savings)                            | Max.<br>amount<br>(RI m.)                  | Annual rate<br>of return (%)                   | Maturity<br>(years) | housing unit  |
| <ol> <li>All social<br/>groups</li> </ol>  | 5-7  | 6-12   | 7   | 35-50                                      | 15-16 <sup>a</sup>                             | 12/15/18            | First hand,<br>Newly built                              |
| 2. Civil<br>servants   | —  | 6  | 7.5   | 25   | 15-16 <sup>b</sup>                             | 20                  | Newly built or<br>existing unit                         |
| 3. Senior<br>officials and<br>bank<br>employees  |  | 9  | 7.5   | 25   | 15-16 <sup>b</sup>                             | 20                  | City-specific<br>maximum size<br>and price <sup>c</sup> |
| 4. Civil<br>servants<br>special <sup>d</sup>   | 2  | 5  | 10  | 25   | 15 <sup>b</sup>                                | 20                  |   |
| a. To borrow the n<br>b. Rates usually pa<br>c. Floor area under<br>d. Married, not ow | haximum of 50<br>hid to banks. Di<br>$75 \text{ m}^2$ in Tehr<br>ming a house al | IRR million the min<br>iscounts or subsidies<br>an, Mashad, Esfahan<br>Iready. | nimum average sa<br>s to borrowers are<br>n, Shiraz. Floor ar | ving is IRR<br>not shown.<br>rea under 100 | 7 million and the m<br>) $m^2$ in other cities | ninimum per ioc     | l is one year.  |
| Source: Bank I   | Maskan   |  |   |  |  |                     |   |

 Table 4-20. Saving Funds for Housing: Types of Loan-Linked Saving Products, 2002

293. Quality of housing collateral guarantees<sup>163</sup>. According to the 1983 Law for Usury-Free Banking and relevant by-laws, the only security for granting financing facilities to buyers of residential units (through installment sale or hire purchase) and construction funding (through civil partnership) is to mortgage the property involved. In case of insufficiency of collateral, only an additional property could also be pledged. Collateral substitutes appeared *not* to be permitted. In fact, substitutes are now explicitly discouraged in the new Law of No Obligation to Give Property as Collateral to Banks and Other Public Institutions and Companies, passed in 2001 (3.27.1380). According to this law, "no property outside the project could be pledged against the inclination of the client." The acceptable collaterals are assets within a wide range from the liquidity point of view, including certificate of deposits, partnership papers checks, promissory notes, etc. So far, however, none of these new provisions has been adopted for housing finance.

294. Given the shortage of housing finance and the very low credit-to-value ratios of current financing facilities, credit risk in housing finance has been low for the housing bank. The situation could change drastically, however, when macro-economic stability is achieved, real profit rates after inflation on financing facilities turn positive, and LTV ratios increase because bank deposits become attractive. The quality of foreclosure procedures on mortgage guarantees will become important to the soundness of the

<sup>&</sup>lt;sup>163</sup> Source: World Bank estimates based on consultants reports.

system. Currently, Iranian experts find foreclosure procedures slow and complicated by the lack of coordination across regulations. The only practical avenue is case-by-case negotiation.

|   | HSF Account<br>Type 1                                    | HSF Account<br>Type 2                                    | HSF Account<br>Gvt Staff  | Housing Deposit<br>Fund for Gvt<br>Staff                                    | Youth Housing<br>Savings<br>Account   |
|---|--|--|---|---|---|
| Maximum<br>credit<br>amount                           | Up to IRR 35<br>million                                  | 7 times the<br>deposits up to<br>max. IRR 50<br>million  | 7.5 times up to<br>IRR<br>25 million  | 10 times up to<br>IRR 25 million  | Up to 30 times<br>amount saved  |
| Minimum<br>saving at the<br>time credit is<br>granted | RI 5 million<br>(in one time,<br>or every 6<br>months)   | 6 month<br>minimum wait                                  | 6 month<br>minimum wait   | Minimum<br>deposit of IRR 2<br>million to get<br>maximum loan               | Minimum deposit set<br>by city. 15-year<br>schedule of required<br>annual deposits. But<br>can be used after 5<br>years |
| Rate of<br>return<br>charged on<br>the credit         | 15-16 percent  | 15-16 percent  | Rising interest<br>discounts<br>applies to first<br>IRR 15 million<br>as waiting<br>period is<br>extended | Reduced rates of<br>return apply if<br>clients accept a<br>shorter maturity | 2 percent discount<br>from the profit rate as<br>regulated by central<br>bank at the time                               |
|   |  |  |   | 5-8 percent<br>subsidies<br>possible for<br>certain units                   |   |
| Credit<br>maturity                                    | 12-year loan<br>for waiting<br>period up to<br>12 month: | 12-year loan<br>for waiting<br>period up to<br>12 month: | 20-year maturity for all contracts  | Maximum of 20<br>years  |   |
|   | 15-year loan<br>Waiting for<br>period 13 -18<br>months   | 15-year loan<br>Waiting for<br>period 13 -18<br>months   |   | Waiting periods<br>by tranches of<br>10 months                              |   |
|   | 18-year loan<br>for waiting<br>period >19<br>months.     | 18-year loan<br>for waiting<br>period >19<br>months.     |   |   |   |
| Type of unit<br>financed                              | New unit.<br>Maximum<br>price<br>unspecified             | New unit.<br>Maximum<br>price<br>unspecified             | borrowers can<br>finance an<br>existing unit  | New or existing<br>units. Maximum<br>LTV of 90%                             | Account holders on<br>priority list. City<br>specific price applies.  |
| Other<br>features                                     | lation by the Wor  | 1d Bank using un   | Yes, but not<br>provided here   | Yes, but not<br>provided here   | Youth account can be<br>moved to other<br>contracts, but not the<br>reverse   |

 Table 4-21. Loan-linked Account at Bank Maskan: Contract Features

## **3. Reform Issues in Housing Finance**

295. Section 3 outlines the reform issues suggested by the preceding evaluation of Iran's housing finance system.

#### **3.1. Strategic and Regulatory Issues**

296. Iran is still following the model of a specialized circuit for housing finance, from which most countries are rapidly moving away in their efforts to achieve better systemic risk management, expand resource mobilization and stimulate product innovations. As already discussed, in Iran, commercial public banks tend to limit their housing lending to shorter-term construction finance. The specialized housing bank is practically the sole provider of long-term credit to households. This situation reflects its mandate as a specialized public banking along with its related regulatory privileges. It must be noted that current effort to develop a secondary mortgage market will move Iran toward a housing finance system fully integrated into the financial system.

297. Toward a well-integrated housing finance system. Provided that macroeconomic conditions continue to improve, the proper strategy for Iran is to expand the housing finance system by bringing *both* deposit rates of return and financial profit rates on financing up to the true level of the cost of capital in the economy. Housing finance reforms, however, are dependent on the overall speed of financial liberalization. When and where subsidies are needed, the aim should be to separate them from the financing by favoring direct demand-side subsidies not channeled through the banking sector. At present, the numerous government subsidy programs are not leveraging scarce budget resources effectively.

298. These government subsidies should aim to leverage in private resources through better incertives given to potential program participants. As Section 1 stresses, under the present financing structure, housing market dynamics contribute to macro instability in aggregate demand. Housing finance deregulation is also dependent on a more responsive physical housing supply system. Otherwise shifting the demand by means of more financing without improving the responsiveness of land markets to demand and construction and real estate development processes would only result in higher housing prices. It may be worth repeating that subsidies embedded in the present rates below inflation are in fact indexing the subsidy scale to inflation: the higher inflation, the larger the subsidy. A priority is to gradually deregulate the market pricing of the housing loans made by *all* public banks, at least for the loans to middle- and upper-income groups. Subsidies may still be targeted to targeted vulnerable groups.

299. The speed of these reforms for the housing finance sector may depends on:

• The deregulation pace of housing loans vis-à-vis other credit sectors.

- The exposure of regulated public banks to the competition of the new private banks, not subject to similar allocation and return rules.
- The needed institutional and regulatory reforms of the housing bank toward equal treatment among all providers of housing finance.

300. The regulatory ceiling for housing credit amounts<sup>164</sup> has been gradually eroding the affordability of housing loans. It is not clear whether the housing bank carries out detailed annual surveys of its borrowers. Such surveys would most likely show that access to financing favors middle- to upper-income families, because of the required large down payment to acquire housing in large cities. There are two options: either the existing ceiling is differentiated between large and smaller cities on the basis of surveys; or the ceiling is simply replaced by a reasonably prudential loan-to-value ceiling, for example of 70 percent. In that second case, regulations of all prospective lenders should require, first, a market appraisal of the house value, and, second, an analysis of repayment capacity as part of the bank's underwriting policy. Note that the whole system of housing saving funds should be reformed *before* increasing the corresponding maximum financing amount because of the subsidies and risks embedded into these products.

301. Credit rationing and the quality of the collateral have so far secured a good portfolio performance, notably at Bank Maskan, where only 1.7 percent of credits are more than three months late. Banks do not feel the need of strengthening their credit risk management. Yet, they do not know the detailed nature of portfolios, and their information systems are not developed. In the process, risks are presently hidden and not really managed.

302. Given the housing and credit shortage, no financing is available for either the purchase of existing housing<sup>165</sup> or to help finance rental investments.<sup>166</sup> Some financing is available for improvement of existing housing, but for limited amounts and with no interest rate subsidy 167. This adverse situation reduces the existing stock value, the wealth of households, and the fluidity needed for an active housing market, in particular for lower-income groups. The eligibility of housing loans should be extended, even if some related subsidy programs for targeted groups might remain focused on new housing and major renovation because of the desired short-term impacts on employment and economic growth.

<sup>&</sup>lt;sup>164</sup> Already noted as being IRR 30 million for commercial banks, and up to IRR 50 million for the members of the housing saving funds of the housing bank. These amounts are significant in small cities, but they cover only a small portion a housing unit price in Tehran (250 million). <sup>165</sup> Except for the civil servants participating in the special housing saving scheme of the Housing Bank.

<sup>&</sup>lt;sup>166</sup> A former public program for social rental failed (and was redirected into rent-to-own homeownership schemes), because the targeted developers/builders are not natural long-term landlords. A limited number of workers also enjoy very cheap rent from public companies and *bonyads*, but most tenants pay increasing market rents. Investors get rental income exemptions for units of less than 120 m<sup>2</sup>. <sup>167</sup> The loan ceilings are 8m Rials in Teheran and 6m Rials in other cities. The minimum rate is 23 percent. This facility

is offered also by some commercial banks.

303. The present specialized housing finance system is at a dead-end. The Housing Bank has reached its maximum production capacity because it is unable to offer a long-term positive rate of return to savers under market conditions. Positive guaranteed rates are offered at the moment<sup>168</sup> e.g., 17 percent for five-year deposits when inflation is 12 percent in early 2002; but this is not sustainable if/when inflation returns. The bank is already over-exposed to systemic and liquidity risks given its very limited capital. Its ability to withstand its vulnerability is predicated upon keeping its regulatory privileges. Commercial banks have currently no incentives to lend more long-term housing loans, first, because alternative credit activities are more profitable, second, because they have unequal regulatory funding tools when compared to Bank Maskan, and, third, because they face significant market and liquidity risks that are not well priced in the current inflationary context.

304. *Redesign of housing credit products.* Given the chronic inflation experienced by Iran, a market-priced, long-term, fixed-rate financing instrument needs to include an expensive premium caused by inflation uncertainties. The result is the front-loading of repayments and a sharp loss of affordability, especially for young potential borrowers. A new generation of more affordable housing credits can be designed by adjusting the credit return every three or five years to a transparent index reflecting the evolution of funding costs. The market risk for lenders can then be reduced without exposing borrowers to excessive rising payment to income ratios and credit risks, provided that the frequency of adjustment is not too rapid. An in-depth analysis of credit affordability by potential clients will be needed. The housing finance system may then become more resistant to inflationary shocks, and so would the overall economy.

305. The affordability of housing loans could be more significantly improved even during inflationary times, without exposing lenders to further losses, by indexing at least partially both housing debt and credit installments. The index must (a) be transparent and not subject to administrative fiat, and, (b) reflect the best compromise between the lender's costs of funds, the borrower's nominal incomes, and the housing value. A housing price index may represent a second-best proxy to a consumer price index. Further work is needed to meet Islamic finance principles in designing such indices.<sup>169</sup> Partial indexation may be introduced in order to reduce the credit risk.

306. Such design proposals should be analyzed and compared with the recent proposal of the Ministry of Housing now under review by the central bank for new gradual payment, fixed-return loans (GPM) in which nominal periodic payments are fixed for limited periods of time, and regularly increased according to a pre-set ratio. GPM products have been discussed internationally for three decades, but they have met with

<sup>&</sup>lt;sup>168</sup> As the housing bank has had excess money since January 2002, it has distributed profits to depositors for the first time. Five-year deposits received 4 percent above the guaranteed rate and one-year deposits received 1 percent above the guaranteed rate.

<sup>&</sup>lt;sup>169</sup> *Musharaka* shares may be gradually sold through long-term installments, to create a debt indexation. Or the installments may be directly adjusted according to the housing value. Or some new *ijara* leasing contracts (with gradual equity participation) may adjust rents to inflation or housing prices. Problems of "negative equity" may need attention. Negative equity arises when the amount of financing to repay becomes larger than the value of the housing unit. This situation can arise due to accelerating financial costs or to falling housing prices, or a combination of both.

very mixed success in practice. Why? Because they improve initial credit affordability but they do not reduce the significant market risk of lenders. They also require a conservative forecast of long-term inflation that is nearly impossible to make. If the preset ratio actually exceeds observed inflation, the payment pressure on clients will increase along with credit risks triggered by payment shocks at the end of the initial fixed period. A conservatively low ratio is then needed that would probably not be higher than 5 percent yearly in Iran, thus limiting the expected affordability gain—and the ability of the lender to pay a satisfactory return to depositors.

307. Another regulatory step would be additional prudential banking capital requirements to better protect banks against both credit and market risks. Given inflationary uncertainties, a market-determined fixed-rate housing loan may be unreasonably expensive and risky.

### **3.2. Specific Housing Bank Activities and Products**

308. *Special privileges*. The Housing Bank draws special benefits from its privileged status as of a public specialized bank. These privileges are granted in order to reduce its cost of funds and to finance cheaper long-term loans, through:

- Contractual housing saving schemes<sup>170</sup>
- Lower deposit statutory reserves<sup>171</sup>
- Privileged access to special CBI refinancing lines<sup>172</sup>
- Refinancing lines from commercial public banks<sup>173</sup>

309. Every year, the housing bank balances its operating budget by taking advantage of its special refinancing options, but the bank has no real incentive to further improve its longer-term funding strategy. The bank has been fully exploiting its cheaper statutory reserves in order to better remunerate its depositors, and it has worked out several attractive housing saving schemes, in order to continue its steady production of housing loans.<sup>174</sup>

310. Loan-linked deposit products: The risks. The design of the loan-linked deposits promoted by the housing bank may create new, large contingent risks for the state because the liquidity equilibrium of these programs in the medium term will require that

<sup>&</sup>lt;sup>170</sup> As reported in Section 2, the general program of housing saving funds has been complemented by two new subprograms designed with slightly different variants for employees and youth saving funds. The common principle consists in not remunerating these term savings (only 10 percent is paid back if no credit is used), and instead to offer attractive and transferable housing credit rights, with a high multiplier of credit amount when compared to savings, a cheaper credit rate (with discount between 2 percent and 4 percent) and long maturities (15 years for the main program). In addition, payments for these products are income tax deductible.

program). In addition, payments for these products are income tax deductible. <sup>171</sup> Bank Maskan deposit reserve ratio is set at 2 percent versus at least 10 percent for the other banks, sometimes up to 20 percent for particular types of deposits.

<sup>&</sup>lt;sup>172</sup> Granted at more favorable conditions than the usual market-oriented and short-term overdraft facility.

<sup>&</sup>lt;sup>173</sup> Recall that Bank Maskan is not charged at full market conditions because its refinancing is eligible for the banks' mandatory 20 percent credit allocation

<sup>&</sup>lt;sup>174</sup> The estimated volume is stable in real terms.

a high proportion of savers does not exercise their personal, transferable credit rights. Such expectations of a significant share of non-borrowers are not consistent with the economic incentives embedded in the present loan-linked deposits.<sup>175</sup> The system can then generate longer queuing effects, and lead to a sharply discounted value of these credit rights. We have already referred to the lessons of CNEL in Tunisia two decades ago.

311. In order to improve its short-term liquidity, the housing bank may well have created a delayed liquidity crisis that could explode within a few years, to the detriment of the central bank as the last-resort provider of liquidity. A dynamic supervisory model of liquidity is urgently needed. The proposed multiplier<sup>176</sup> between the saving and loan amounts should be reduced, as well as the current mismatch between the terms of the saving and credit maturity.

312. Contractual savings schemes have been used in a number of countries to expand funding for housing finance by facilitating the equity-building-up phase of households and revealing their financial discipline, *but these products cannot function durably as the only credit instrument for an housing investment. Contractual savings work as a complementary tool to other sources of funding.* In the case of Iran, these products could be matched with land and other types of housing vouchers for lower-income groups. They can function as private complementary mortgage finance for higher-income groups.

313. Partial analyses of contractual savings products for housing are very risky. For instance, the Ministry of Housing proposes to the central bank to increase the credit ceiling from 50 to 70 million for the participants of the housing saving funds. The housing bank has proposed to the government the increase in the minimum period to obtain loans from 12 to 18 months. The ministry knows that such an increase would improve housing affordability, but does it also appreciate that new ceilings will worsen the liquidity disequilibria for these products that now represent 60 percent of the housing bank's deposit base? A general reform of all the parameters of these contractual housing funds is therefore needed.

314. Once the liquidity management risks for the housing savings fund products is fully understood and tightened, such products should be made available to every public or private bank that wants to offer it. This broadening of the housing finance system should be done within the context of a unified and standardized regulatory framework applicable to all interested financial institutions.

<sup>&</sup>lt;sup>175</sup> Housing Saving Funds participants gain more from the leveraged discounted credits than they lose in the returns to their deposits. They have a strong incentive to exercise their options to borrow. The main disincentive to participate in these programs results from the low credit ceiling.

<sup>&</sup>lt;sup>176</sup> The loan-linked deposits in Iran have evolved and currently are estimated with very short (less than a year) duration of deposits. Should the rental market develop, these schemes could facilitate the later purchase of a home by young couples who could start by living in rented accommodations while at the same time paying into long-term deposits until they are entitled to receive a loan.

#### 3.3. Developing Secondary Mortgage Markets

315. A current policy initiative aims at the mobilization of funds for housing on the capital markets. Capital market access could help finbance housing credits, which are perceived as a low-risk growing business activity, provided that returns after inflation are attractive. Public pension funds and insurance company appear to be interested. For example, the pension fund for civil servants (CSRO) holds a major part of its assets into public illiquid shares, and would prefer to invest in liquid assets with a satisfactory return. Most issues of participatory papers have been oversubscribed, but the identity of these investors is unknown because securities issued were bearer securities. Technically, Islamic securities could be designed as simple over-collateralized bonds, or as participatory papers used to securitize long-term housing-credit receivables.

316. *Iran's proposed securitization: What can be expected?*. Going by international experience, the development of secondary markets is beneficial in the long term and as such should be encouraged, but no meaningful impact in terms of expanded funding should be expected in the short term from securitization. This technique will be restricted to new credits—once they have been "seasoned"—<sup>177</sup>because the existing portfolio of credit is neither sufficiently attractive in terms of yield, nor adequately documented. What can be expected in the short term from this initiative is better pricing of the new housing credits. Another likely outcome is that more cheap funds should be expected from this technique, for example, to fund Bank Maskan and its construction subsidiary. There is currently a proposal, however, to guarantee a rate of return to investor and to subsidize it in addition. If implemented, such a proposal would be a seriously distorting setback for the sound development of the housing finance system. Therefore, alternative ways to develop secondary mortgage markets, suitable for the current Iranian conditions, should be explored.

317. *The Metrom project.* The Ministry of Finance and the Economy has drafted an organic law for a new secondary facility finance company: The National Corporation for the Long-Term Sale of Residential Units of Iran," more conveniently known at present as Metrom. The new finance company would be chartered to purchase housing credits from the retail market and issue participatory papers backed by these credits to professional investors. By-laws would then follow. In terms of structure and governance, the CBI would license Metrom as a finance company with mixed public and private ownership. A recently proposed shareholder structure would include:

- Foreign Investors: 30% of the shares
   Private banks and corporations: 10%
   Public banks 20% (with priority to Bank Maskan and National Bank Melli)
   Public Insurance companies 20%
- Social Security Organization 10%

<sup>&</sup>lt;sup>177</sup> The word "seasoned" is a standard term in international mortgage finance. It refers to the fact that credit risks and other problems with a new retail financing tend to occur in the earlier life of a housing loan. After 24 to 36 months—or longer depending on the market—mortgage loans behave much more predictably.

• Gvt Employees Pension Fund 10%

318. It is planned that the National Land and Housing Organization would become a shareholder with up to a 20 percent share. Other shareholders would see their shareholdings reduced proportionately once the relevant approvals to the NLHO have been granted. The policy views of the government would be carried by MHUD through the NLHO votes.

319. As expected with endeavors of this importance and magnitude, there are many legal, financial, and regulatory issues that need to be worked out beyond this first step. In addition, *a major pricing issue has arisen.* The government should not directly subsidize the difference between the market price of these papers and the perceived "affordable" credit return needed to make long-term housing credits. The relevant section of the draft law should be reviewed and modified.<sup>178</sup> Such a subsidy would start the project on the wrong footing and it would defeat the central purpose of the project, which is the mobilization of more voluntary savings on the domestic market. Market mechanisms can be expected to price properly the risk-adjusted portfolio profitability. There is no reason why higher income groups should capture most of the subsidies. One possible option to evaluate is the set of existing programs of interest rate subsidy, which may be continued and expanded if targeted properly and in an efficient manner, without mixing up the funding and credit sides of housing finance.

320. Iran has made good progress concerning participatory papers that were sold on the market. These were designed to finance projects of public interest with some government and/or bank guarantees. In order to benefit from the experienced already gained in this area, the structure of these deals may require several legal and financial adjustments in order to fit a pool of housing-credit receivables. These receivables consist mostly of share sale installments and/or leasing contracts with a growing equity participation; they are not associated to any given public project and they should not need any extra blanket guarantee.

321. The financial authorities may also want to explore alternative funding securities, including much simpler collateralized bonds and CDs. It is extremely difficult to provide more detail at this point on these alternatives, without fully knowing, first, their retail products, and, second, mortgage-related securities. An adequate understanding of the credit products offered by Bank Maskan (see Table 4-19) is necessary, as some of these products may be as complex as loan-linked deposits and include various risky embedded options.

322. Given the Iranian financial context described above, the government should avoid a rushed development of the Metrom project that would ignore important prior developments that the housing finance system so clearly requires—and that would in fact aims to bypass these needed development prerequisites with a reliance on government

<sup>&</sup>lt;sup>178</sup> One draft version of the organic law for Metrom states: "if the commission fee rate of the purchased long-term sales contracts is less than the promised interest rate for participation papers, its difference balance which is included in the annual budget each year by the government will be paid to the corporation."

subsidies to investors. Because only new house loans would be funded this way, it is still possible to take some time to carefully review the proposals and evaluate alternatives. Moreover, the general financial infrastructure of the capital markets itself remains largely underdeveloped. In particular, there are no liquid benchmarks, no regulatory framework has been developed, and there is no professional supervisory body to monitor the system. The successful prior development of the infrastructure of the new partnership markets is a *prerequisite* for the development of secondary mortgage markets and as such it will be a key factor in facilitating more specific housing finance reforms in these markets.

323. In addition to the development of the infrastructure mentioned above, a considerable sequence of legal work remains to be carried out. Several important by-laws need to be prepared to insure a sound start-up phase in Iran. They include: (a) the bankruptcy-remote true sale of the credit pool, (b) independent custody function and standardized information disclosure for investors, (c) listing and trading conditions, (d) regulations about differentiated payment rights and credit enhancements compatible with Islamic finance, (d) CBI oversight capacities, and (e) possible indexation of the coupons.

324. In the current Iranian context -- and bearing in mind the required legal and financial infrastructure for the successful development of secondary mortgage markets -- it is strongly recommended that alternative ways to develop these markets should be explored. Due to the fact that there are ongoing discussions concerning the Metrom project, the sooner the suitability of these alternatives is explored the better.

### **3.4. Financing Social Housing Policy**

325. Section 1 stressed that there are two distinct dimensions to housing affordability: the price of the housing unit to be purchased, and the financing cost of that purchase. Housing finance reforms need to be linked to a comprehensive housing policy strategy that will improve price affordability through a better use of land, more efficient construction technology, and sounder construction codes. The efficiency of the multiplicity of housing subsidies programs needs to be reviewed closely.

326. *The fragmentation of social housing programs: Some remedies.* An informal inventory done for the World Bank identifies some 29 separate programs. Most of these programs are operated vertically by different public institutions, like the Ministry of Housing, other Ministries, the Social Security Organization ("SSO"), the bonyads, state corporations, etc. The overall efficiency of these programs will improve when (a) objectives and instruments are better harmonized, (b) operating roles<sup>179</sup> are more efficiently allocated, and (c) there are more incentives to leverage competition and private markets, notably to build housing units and to mobilize the capital for long-term finance. For example, the operations of the SSO—through a constructing subsidiary and its subsidized housing loans—may well be in direct conflict with its main fiduciary responsibilities, while benefiting yearly less than 0.1 percent of its members.

<sup>&</sup>lt;sup>179</sup> Setting social housing priorities, allocating and monitoring various housing subsidies, funding credit capital and/or interest rate subsidies, providing banking services, acting as an institutional investor, conducting building, and developing activities through subsidiary companies.

- The government has implemented several programs of subsidized housing credit rates whose efficiency may be substantially improved. Some guiding principles should be:
- Discounts on the profit rate in order to improve affordability are not needed over the full life of the credit given the long-term increase of nominal incomes according to inflation.
- The Workers' Welfare Bank Refah operates social programs with public advances deposited yearly at the bank in order to co-finance loans to targeted social groups. Meanwhile, Bank Maskan relies on interest rate rebates to special groups. These social housing programs should be harmonized.
- Interest rate rebates create adverse budgetary effects as subsidies accrue on a growing debt stock, leading gradually to an erosion of new beneficiaries.
- The payment of interest subsidies through Bank Maskan wrongly requires that borrowers advance the full interests before being paid back the subsidy at year-end.<sup>180</sup>

327. More efficient subsidies can be designed. Those include: upfront equity vouchers for lower-income groups in association with the use of the housing saving funds; guarantee fund to cover additional credit risks; etc. The taxation of housing transactions, housing savings, and credits may also need further reforms.

328. The recent proposal made by the Ministry of Housing to create another social housing fund to refinance cheap credits, co-financed by the Ministry, the CBI, and the HB, should be examined within the full housing sector context. Similar instruments already exist such as the Ghadir Project in partnership with Bank Refah, and discounted loans with Bank Maskan.

329. The inflationary impact of greater demand: Central Bank concerns. The central bank considers the current situation housing shortage as inflationary through its impact on the inputted rent in the CPI index that keeps rising. The central bank is therefore reluctant to liberalize and expand housing credits if such a policy further increases housing demand without an adequate supply response. A thorough study of housing markets economics in Iran should help to better estimate such effects on the short and longer terms. Some of the issues are:

- More thorough analysis should clarify the level of low elasticity of the housing supply, which appears to be city specific, and the institutional and regulatory causes.
- Measuring inflation's impact requires a calculation different from the CPI.
- The overall magnitude of housing loans will remain marginal for a while until reforms take hold. Better models of the housing finance sector would be useful to clarify the medium-term outlook.

<sup>&</sup>lt;sup>180</sup> The efficiency is reduced as beneficiaries are assisted late during the construction phase and may end up also deferring their due bills to the constructor, before using the subsidy for non-housing purposes.

330. Should inflation rise again, the production of affordable housing loans may decline, but the housing demand, even if constrained, will remain strong because housing is an asset of refuge as an inflation-proof investment. Some households could still finance new housing from their equity savings. Presently, these private funds are not circulating through the financial intermediation system, where they would contribute to a more efficient and productive housing finance system. The policy issue is what kinds of rates of return on deposits would be needed to attract these private funds into the banking system, which goes back to the issue of designing appropriate deposit and savings instruments.

# 4. Conclusions

331. Continuing housing reforms are necessary if the housing finance system is to achieve a size, diversity and efficiency commensurate to the size of the economy and the scale of urban investment. Housing finance reforms, however, are dependent on the overall speed of financial liberalization. Given that context, a suitable ranking of policy priorities is:

- An in-depth, modern evaluation of the risks embedded in the dominant reliance on the "housing savings funds for housing" to fund the housing system, desirable design changes in these instruments and the development of related risk management techniques. These savings instruments should be made available to all banks.
- A comprehensive review of the numerous subsidized lending programs and the development of a consistent framework for their coordination and better targeting in order to maximize the benefits of the public resources devoted to these programs.
- The development of "inflation-resistant" housing finance instruments for saving mobilization and funding of housing purchases.
- Improvements in the regulation and supervision of Bank Maskan as well as its internal modernization in order to facilitate this specialized bank's evolution from its present status as an administrator of public programs to a modern bank with low operating costs better able to manage risks and mobilize funds.
- Worldwide trends show that housing finance can make a substantial contribution to development of fixed-income securities markets in Iran. Given that the capital markets of Iran are still at a very early stage of development, great care needs to be taken that the proposed development of a "secondary mortgage market" and the development of secured funding instruments will be properly sequenced and will focus on the development of the required legal, regulatory and market infrastructure in close coordination with other capital market development efforts. The successful prior development of the infrastructure of the new partnership markets is a prerequisite for the development of secondary mortgage markets. International evidence suggests that attempts to artificially speed up the development of capital markets in order to expand funding to the housing sector by relying on state provided subsidies to investors are not likely to be sustainable market development in the medium and long term. Such distorting tactics could in fact lead to a slow-down in

the development of that segment of the domestic capital markets, as other segments of the capital markets develop.

# 5 The Construction Sector

## **1. Introduction**

332. The construction sector plays a significant role in the Iranian economy. It employs more than 11 percent of the working population in the country, and about 40 percent of those aged 15 to 29 years, simultaneously meeting the demand for housing while addressing a serious problem of unemployment (13.8 percent by the end of 2001), particularly among the young and the unskilled. Over the past decade, about 40 percent of total annual investment was in this sector, where it generated more than 8 percent of GDP.

333. The construction industry has several important characteristics, particularly with regard to housing. First, it is highly competitive; private-sector developers dominate the industry, which is chock-full of firms, developers, and specialist service companies. Second, construction sector laws and regulations permit entry into the field. Third, the sector has a ready supply of unskilled labor. Finally, primary construction materials are readily available; if managed properly, there is even enough export capacity. Notwithstanding these positive features, Iran has several issues to address—particularly the special treatment of public and semi-public construction material industry. Indeed, building patterns and construction modes in Iran are shifting away from one-story masonry buildings to multi-story structures. Although this shift is increasing the demand for steel and cement, recent government policies have started to eliminate energy subsidies threatening the energy-intensive production of these materials.

334. This chapter describes the conditions and trends in Iran's construction industry and assesses its ability to cope with the increasing demand for housing. Analyses focus on how the industry is organized and the institutional and regulatory framework in which the various players operate, as follows:

- *Organization.* The construction industry in Iran is marked by the major role played by the private sector in construction and the strong government role in production, pricing, and importing of several essential materials such as steel and cement.
- *Institutional and regulatory framework.* Industry practices are regulated in a framework that governs the production and the import/export of building materials. Regulations and institutional practices also affect technology and resources and influence the business environment.

## 2. Industry Organization

#### 2.1. Who Builds?

335. The private sector has a major role in Iran's residential construction. Building permits issued between 1996 and 2000 show that by the private sector built 86 percent of new housing in Iran; cooperatives and the public sector built 11 percent and 3 percent respectively (see Table A5-19 in Annexes – Chapter 5). Expenditures in 1375 (1996–97) show that the private sector has built 65 percent of urban projects, amounting to 83 percent of total expenditures. About 90 percent of annual private sector expenditure on urban construction is in housing (see Table A5-17). Additions and renovations comprise a fifth of urban projects, accounting for 22 percent of the private sector expenditure on urban areas.

336. In spring 2001 private sector investment in construction amounted to IRR8,510 billion. More than half (56.2 percent) was in Tehran, Khorassan, and Isfahan provinces, 40.7 percent of which was in Tehran province alone. Over the past five years (1995-1999) the city of Tehran has attracted an average of 35 percent of all private sector investments in urban housing. Although this investment has grown at an average of 28 percent per annum over the same period, this growth rate is lower than the national average (i.e. 35 percent). Recently, other urban areas have started to attract more private sector housing investments and as a result show a higher average annual growth rates (39 percent).

337. Traditionally, housing cooperatives have been the second most important players in housing construction in Iran, but their share has been decreasing. Building permits records show that the percentage of total dwellings built by cooperatives decreased from 14 percent in 1997 to 7 percent in 2000 (see Table A5-19). In 2000, there were 9,044 registered housing cooperatives with 1.7 million members and a capital of over IRR478 billion. Nevertheless, 40 percent of these cooperatives were in-active. The majority (66 percent) of active cooperatives is based in six provinces, and one third of them are in Tehran (see Table A5-20).

338. The public sector has a surprisingly small share of housing construction. The average share of government in housing construction between 1996 and 2000 was 3 percent; several Ministry of Housing and Urban Development schemes initiated during that period caused this share to rise to 5 percent.

### 2.2. How Is It Built? Building Patterns

339. One- story masonry detached houses have long been the prevailing structure in Iran; they still constitute a significant portion of national housing production. 1996 census data show that 83 percent of houses are masonry, while nearly half of these (45 percent) are built with brick walls covered by steel beams featuring brick jack arch roofs<sup>181</sup>. The

<sup>&</sup>lt;sup>181</sup> Other types of masonry structures include brick walls with timber roofs (14 percent), adobe walls with timber roofs (10 percent), concrete block walls (6 percent), and adobe walls with adobe vaults (5 percent).

pattern is gradually shifting, however, in favor of multi-story steel structures, particularly in Tehran. This change results in a constant increase in use of steel and cement in residential construction (see figure 5-1).<sup>182</sup> As shown by the census data, between 1986 and 1996 the share of steel and concrete frame structures in the housing stock increased by 334 percent throughout the country, and the share of adobe structures decreased<sup>183</sup>.





340. Even in rural areas less and less housing stock is constructed of timber (a 42 percent decline), adobe walls with timber roofs (a 32 drop), and adobe walls with adobe vaults (a 40 decrease), while more and more buildings are built with brick walls covered by steel beams and brick jack arch roofs (77 percent). There has been a 36 percent increase in building with brick walls and timber roofs (36 percent), and a 62 percent rise in concrete block buildings (see Table A5-1). Nevertheless, the share of framed structures in total housing stock is not as significant as masonry structures (see Table A5-2). Changing construction techniques and material are being driven by new building code requirements

<sup>&</sup>lt;sup>182</sup> There are not many differences between urban and rural housing in terms of type of structures. According to the same data, in 1996 masonry buildings prevailed in both urban (77 percent) and rural (94 percent) areas. In urban areas more than half of the housing stock (56 percent) was built with brick walls roofed by steel beams and brick jack arch roofs, while the share of steel and concrete frame structures was also significant (16 and 5 percent respectively). The overall share of framed structures (21 percent) was considerably higher as compared to rural areas (3 percent). The prevailing masonry types in rural areas were brick walls roofed by steel beams and brick jack arch roofs (26 percent), brick walls with timber roofs (24 percent), adobe walls with timber roofs (22 percent), concrete block walls (9 percent) and adobe walls with adobe vaults (9 percent).

<sup>&</sup>lt;sup>183</sup> In the urban areas the 304 percent increase in steel and concrete frame structures goes along with a marked reduction in masonry structures, especially in adobe walls with timber roofs (47 percent reduction), adobe walls with adobe vaults (42 percent reduction) and brick walls with timber roofs (34 percent reduction), and to a lesser extent brick walls covered by steel beams and brick jack arch roofs (13 percent reduction).

and the trend toward multi-story buildings. In addition, with changing patterns in building construction, cement and steel consumption will continue to increase.

341. Despite this substantial increase in the durability of housing structures, much of Iran's housing stock is still vulnerable. According to data from the Housing Foundation, in the period between1993 and 2001, more than 599,500 dwellings were damaged by natural disasters. About a quarter (24 percent) of these homes were considered reparable, meaning they sustained damages of less than 30 percent, making them eligible for repair.

342. In most Iranian cities the municipality can control neither the working drawings nor the quality of construction. Given the fact that more than half of registered engineers in the country are based in Tehran, the final construction quality actually depends on the know-how of small-scale contractors and builders. As shown by the damages incurred in the recent earthquakes, introduction of new materials without the necessary construction know-how has adversely affected the safety of built structures. Lack of knowledge on reinforced concrete construction and other safety recommendations of the national seismic code for example, have been found to be a major cause of structural failure in the 1998 Qa'en earthquake.

343. Most buildings in Iran are one or two story buildings. With the exception of Tehran, multi-story construction throughout the country has not been common. A countrywide survey shows that 85 percent of permits issued in 1998 (excluding the city of Tehran) were for one- and two-story buildings; three-story buildings accounted for 12 percent of the permits issued. Only 1 percent of the permits were for buildings with more than five floors. By way of contrast, almost every permit issued in Tehran in 1998 and 1999 was for buildings with 3 or more floors. For all cities, the share of buildings with three or more stories has risen from 15 percent to 23 percent. Similarly, the number of dwellings per buildings with 5 dwellings and more increased at an annual rate of 1 percent. A third of the permits issued for buildings with five dwellings and more were in Tehran province,<sup>184</sup> followed by Isfahan, with a share of 11 percent.

#### **2.3. Production and Consumption of Materials**

344. The construction industry in Iran is marked by a strong government role in production, pricing, and importing of several essential materials such as steel and cement. The consumption of structural steel in construction of new residential units during the Third Five-Year Development Plan (2000–2004) is projected as 10.7 and 3.5 million tons for urban and rural areas, respectively.<sup>185</sup> This adds up to 14.2 million tons of reinforcement bars, steel profiles, and corrugated sheets.

<sup>&</sup>lt;sup>184</sup> The data excludes the city of Tehran. The city of Tehran is where there is the highest share of multiple dwelling permits, as in the same year only 22 percent of the permits were issued for buildings with 4 dwellings and less, while 49 percent of the permits were for buildings with 9 dwellings and more.

<sup>&</sup>lt;sup>185</sup> See: Behrooz Sohrab Veyseh; Masoud Ghasemzadeh; and Nahid Khodabandeh Kouranloo; "Estimation of the Construction Materials Requirements in the Third Economic, Social and Cultural Development Plan." *BHE*, no.28, pp.11–29. (Some assumptions in this estimation should be cautiously accepted, namely the distribution of building

345. Steel. Steel is produced by the public sector companies and regulated by the Ministry of Industries and Mining. From April to July 2002, according to National Steel Company, the production of reinforcement bars increased 69 percent; while hot-rolled steel sheets increased by 32 percent. The mean increase for steel products in the same period was 26 percent, corresponding to 2.486 million tons. Several initiatives are in place to increase national steel production. Total production of steel in 2002, around 7 million tons, is behind the projected consumption amount of around 10 million tons.<sup>186</sup>

346. Importing steel however, is not always determined by actual demand. This is partly because the import of steel by the private sector, under the supervision of the Chamber of Commerce, does not take into account steel production by the public companies. In 2001, for example, Iran imported around 4.3 million tons of steel—at least 1.9 million in excess of national demand. That same year, Iran exported steel products to Europe and other countries. According to International Iron and Steel Institute, Iran ranked 19 worldwide, with 3.9 million tons of total imports in 2001, while in terms of net imports it was ranked 8.

347. Domestic steel prices are government-controlled in Iran. In 2002, the average FOB price for steel products was determined as IRR1,950 (US\$244) per ton-i.e., about 89 percent of the actual finished price. With international steel price constantly rising, government controls are likely to become a problem. The price of reinforcement bars, for example, increased 35 percent the first six months of 2002 while the domestic price remained fixed. Nevertheless, steel imported from central Asia is considerably less than the national and international prices. These conditions make the import of steel very profitable since domestic price is fixed. Nevertheless, in early 2001 the Parliament approved IRR350 per kg tax (US\$44 per ton) on all steel imports, which affects the price of finished products. The government also sets ceilings on the amount of steel imports and sets taxes.

348. The challenge for the government is relieving the limitations on steel imports while supporting domestic production. One alternative would be to encourage the private sector to import ingots, billets, and blooms instead of finished products so as to promote domestic production as well. This is obviously contrary to the inclination of the private investor who prefers the finished product. Efforts to increase the domestic production are also under way.

349. *Cement.* Demand for cement is on the rise and efforts are being made to increase production. Nine new cement plants are currently under construction with an additional production capacity of 5.3 million tons. Projections of cement consumption owing to the increase in residential construction set the figure at more than 44 million tons under the Third Five-Year Development Plan (2000–004), 32.5 million tons for urban areas and

typologies and the quantity of planned construction versus real urban and rural construction, and the choice of different steel products in particular buildings.)<sup>186</sup> The estimations are based on projections of 9.5 and 10.5 million tons by Ministry of Industries and Mining and

Ministry of Commerce, respectively.

11.4 million tons for rural projects.<sup>187</sup> Average residential consumption is 9 million tons per annum. Consumption derived from new residential building construction is estimated at 37 percent of 24 million tons of total domestic consumption in all sectors for 2001.

350. Total domestic consumption has increased 12.8 percent in 2001, which is somewhat more than the rate of growth in domestic production. The Ministry of Industry and Mining forecasts an annual increase of 2 million tons in cement production to meet the projected increase in demand of 70 million tons by 2021. The average rate of growth between 1995 and 1999 has been around 10 percent. Currently Iran has 34 cement plants in operation. In 2001 they produced about 26.650 million tons of cement, about 5 percent of which was exported. In the first four months of 1381 (April to July 2002) 433,000 tons of cement were exported to Spain, Italy, Saudi Arabia, Kuwait, the UK, Afghanistan, North Iraq, Turkmenistan, Azerbaijan, and the Gulf States. The production in the year 2002 is projected to be 28.3 million tons; about 1.3 million tons, again, 5 percent, will be exported.

351. Public and semi-public organizations own the greatest numbers of shares of Iran's cement plants. Nevertheless, according to the Privatization Organization, sale of cement plant shares on the stock exchange has greatly reduced the shares of public organizations. Semi-public organizations, such as Bonyad Mostazafan, are still significant actors in the market. Insurance companies have recently bought large shares of cement and ceramic industries.

352. Iran is seeking to increase the private sector's share by providing financial and foreign currency incentives for investors. The steering committee for the Foreign Currency Reserve Fund offers short-term loans in foreign currency to investors who wish to invest in nongovernmental cement production. Some foreign investments have been made in the new Ardebil cement plant, but the industry's depreciation rates and initial investment costs make this difficult. Cement prices are still determined by the Ministry of Industries and Mining, although this may be easing some. Rising demand for cement and steel on the one hand, and on the other the very strong public sector control, leads us to think that cement shortages are in store for Iran.

353. Other Materials. There are no apparent shortages in other construction materials. Production of tiles and ceramics, for example, has constantly grown at an average rate of 10 percent between 1995 and 1999, when the total production was about 64.1 million square meters. For the Third Five-Year Development Plan period (2000–2004), projected production capacity is 200 percent of 184.74 million sq. m. of estimated consumption.<sup>188</sup> Similarly, glass production responds to demand very well, in 2001 390,000 tons of glass panes were produced. 14 percent of which was exported. There are plans to add two new factories, which will add an additional production capacity of 240,000 tons per annum.

<sup>&</sup>lt;sup>187</sup> See: Behrooz Sohrab Veyseh; Masoud Ghasemzadeh; and Nahid Khodabandeh Kouranloo; "Estimation of the Construction Materials Requirements in the Third Economic, Social and Cultural Development Plan." BHE, no.28, pp.11–29. <sup>188</sup> The consumption estimation is by Behrooz Sohrab Veyseh; *et al.* For production capacity see Table A5-6.

354. Even if Iran suffers no significant shortages in construction materials, construction costs are expected to rise because of the recent elimination of energy subsidies. A tenfold increase in tar prices was registered in early 2002 as some petroleum subsidies were abolished. Tar is Iran's primary bituminous material, so this has affected the building costs to some degree. If the trend continues, energy-intensive building materials, especially steel and cement, may see sizable price increases. The price of steel products, for example, has increased 12 to 14 percent in early 2002. Such price hikes may affect the choice of building materials and technologies.

355. *Machinery and Equipment*. Although production of machinery and trucks grew by 18 percent between 1996 and 1999, over the past few years the production of heavy construction machinery has fallen by 14 percent; production of trucks has decreased by 28 percent) (see Table A5-7 for further details). In addition, the vintage of construction equipment is very old and much of the machinery in use is practically worn out. Therefore, the construction-machinery industry needs to be reorganized if it is to meet the increasing demand and to cope with the needs of the private sector.

356. Although Iran has a number of small-scale equipment leasing companies concerned mostly with excavation jobs, the country has only a few large-scale equipment-leasing companies—namely, Jihad Nasr and the Machinery Bank. The former is a major holding company for some 28 provincial companies, which are also active contractors for public and private projects. The latter is affiliated to the Housing Foundation and provides services both to the foundation and its affiliated organizations, as well as leasing equipment on the market. It is based in Tehran with a number of provincial branches that also work as contractors. Capacity in this area needs to be improved significantly to facilitate the better functioning of construction industry. Support, including credit facilities, is needed for the private leasing industry.

### 2.4. Building Codes

357. In spite of the fact that the Ministry of Housing and Urban Development was mandated to develop the Iranian National Building Code in 1977 and despite a number of sporadic efforts by academia and individual researchers, the serious attempt to develop a comprehensive code for Iran did not start until 1987, when the Ministry set up a Technical Committee and 21 working groups, each responsible for developing a particular chapter of the Code<sup>189</sup>. While some chapters such as steel and concrete

<sup>&</sup>lt;sup>189</sup> The Iranian Building Code is developed according to articles 13 of the Law for Reforms in Architecture and Building Systems (1977). Article 14 obligates the municipalities to follow the code, while article 15 underlines the right for legal pursuit of non-compliance cases. The Board of Ministers adopts all chapters of the code. The code is further mentioned and enforced in Engineering Disciplinary and Building Control Law (1995), whereby the municipalities under the jurisdiction of the law are required to accept only the working drawings of licensed engineers who are by the same law made responsible for compliance of their design to the National Building Code. The law also requires that all urban areas should be included within its jurisdiction within a period of 10 years. Article 33 mentions also the possibility of adapting the code to provincial conditions and the necessity of revising the code every three years.

structures have been adopted for more than a decade<sup>190</sup>, at the time of writing, the part covering most of Iranian construction (masonry structures) has been only recently developed<sup>191</sup>. The building regulations in Iran implicitly favor steel and concrete structures. Thus modern energy-intensive materials are promoted both in formal urban and rural construction.

358. Nevertheless the implementation of the code requirements demands higher technical capacity, which is not currently available in most parts of Iran. The municipality supervision also lacks the capacity to perform any effective form of quality control. This has led to an increased use of energy-intensive expensive materials for building vulnerable structures suffering from poor workmanship. Lack of knowledge on reinforced concrete construction for example, has been found to be a major cause of structural failure in the past earthquakes.

### 2.5. Technical and Human Resources

359. The construction sector's technical capacity is well developed. Iran has a good supply of engineers, consulting firms, and large-scale contractors able to take on international projects in addition to small-scale builders.<sup>192</sup> Thus, the number of construction firms, developers, consultants, and service companies is sufficient to form the basis for a competitive sector.

360. The housing construction sector has a capacity for generating significant employment opportunities for unskilled labor owing to the use of traditional construction methods. The sector employs 11.3 percent of the working population in the country, and about 40 percent of those so employed are 15 to 29 years old. Therefore meeting the demand for housing also addresses Iran's current unemployment problem, particularly for the young and the unskilled. Iran's working seasons vary by region, meaning there is a constant supply of employment opportunities for seasonal and informal workers willing to follow the work. This is an important property for a country facing serious unemployment problems—around 11.3 percent in 2001, projected to reach 16.5 percent in 2002, and likely to rise in the coming years.

<sup>&</sup>lt;sup>190</sup> Owing to its urgent nature, the Iranian Code for Seismic Resistant Design of Buildings was adopted separately as the Standard 2800. The code has been revised once since its adoption in February 1988. It covers loading methods for steel and concrete structures and provisions for non-reinforced masonry structures. <sup>191</sup> The following parts explain the structural requirements: Building materials and products (part 5); Loading

<sup>&</sup>lt;sup>191</sup> The following parts explain the structural requirements: Building materials and products (part 5); Loading conditions (part6); Foundations (part7); Masonry Construction (part8); Concrete structures (part9); and Steel structures (part10). Other aspects covered by the code include: Fire protection (part 3); Safety during construction (part12); Electric installations (part13); HVAC installations (part14); Lifts and escalators (part15); Sanitary equipment (part16); Acoustical requirements (part18); and Energy conservation (part19). At the time of writing only two parts remain to be developed: the part on architecture (part2) and the one on signage (part1).

<sup>&</sup>lt;sup>192</sup> In 2000, there were about 44, 000 registered construction engineers throughout 28 provinces of Iran. Most of the engineers are civil engineers (68 percent) and architects (14 percent). However, 83 percent of them were concentrated in Tehran and seven other urbanized provinces. Tehran itself houses 51 percent of construction engineers. Compared with the number of building permits issued in the same year, the mean number of permits issued throughout Iran per registered engineers is 3.4, while the ratio is 2.4 and 4.4 for Tehran and seven other provinces, respectively. In some provinces (e.g., Bushehr and Lorestan) the ratio increases to about 20 permits per registered construction engineers.

361. The government plans for the construction sector to play a substantial role in generating employment. The housing sector's share in total employment was set at 25 percent in the current Five-Year Development Plan, while the actual share was around 28 percent in 2001 and 2002 (see Table A5-9). Nevertheless, the increase in equipment-intensive structures will reduce the sector's need especially for unskilled labor. Between 3.7 and 4.2 man-day jobs are generated by one square meter of construction. Masonry structures require more than twice the unskilled labor needed for steel or concrete structures (see Table A5-10). The share of steel structures and brick masonry in employment generation are 13 percent and 81 percent, respectively.<sup>193</sup> This justifies a serious attention to training programs. Developing the capacity can also help to increase employment opportunities outside the country—e.g., in the Gulf States and Afghanistan<sup>194</sup>.

362. The Technical Vocational Training Organization (operating under the Ministry of Labor) has a system of continuing education and training in place. It has the authority to issue professional certificates in coordination with the Ministry of Housing and Urban Development. The Organization is represented throughout the country by about 200 training centers and implements its activities through partnership with some 5,000 private sector training institutions. Although it has quite an extensive network, its capacity has not been used to address the needs of the market. A number of professional associations mediate between the government and the private sector—including the Syndicate of Construction Companies, the Society of Consultants, and the Developers Professional Association.

## **3. Institutional and Regulatory Framework**

363. Sector institutions and decision-making in urban and housing development are quite centralized in Iran. According to the 1974 law, the Ministry of Housing and Urban Development is esponsible for overall policy-making and monitoring of the housing sector as well as for planning at national, local, and city levels. Planning activities are under the supervision of the vice minister for urban development, who also acts as the secretariat for the High Council of Architecture and Urban Development. Following the 1972 law that established the High Council of Architecture and Urban Development, two

<sup>&</sup>lt;sup>193</sup> Gholamali Farjadi and Hassan Safari, *Project on Employment in the Housing Sector*, Institute for Research in Planning and Development, Management and Planning Organization, Tehran 1997. See also Table A5-11. Some assumptions in this estimate should be treated with caution, regarding the assumed vs. actual construction patterns. Also compare their results with the Table A5-9.

<sup>&</sup>lt;sup>194</sup> The employment opportunities and daily wages for labor might also be affected by the return of Afghan refugees. According to the Ministry of Interior there are currently 2.650 million migrants in Iran, of which 2.330 million are Afghans, 0.202 million are Iraqi, and 5 thousands come from Pakistan and Bangladesh. According to UNHCR, the number of Afghan refugees who have voluntarily returned to their country since April until September 2002 is 214,587 people—i.e., only 9 percent of Afghanistan's migrant population. The plan is to continue encouraging the return of Afghan refugees, although presently there is a flow of illegal migration from Afghanistan to Iran. The situation might change if the reconstruction of Afghanistan starts. However, there has been an increase in construction labor wages in 2002. The total wages index of construction workers in May 2002 has increased 13.3 percent as compared to May 2001. Compared with April 2002, the wages index in May has increased 2.1 percent and 2.3 percent for skilled and nonskilled labor respectively. The mean value of total construction labor index in May and April 2002 also shows 12.4 percent increase as compared with the previous year.

vice presidents and eight ministers are Council members. The municipalities are obliged to comply with the decisions of the Council. Although some of them are relaxed<sup>195</sup> in accordance with local capacities, little delegation of powers to them has taken place.

364. The centralized and supply-driven provision of production factors (primarily land and construction material) hampers private sector operations (see Chapter 2). Furthermore, the regulatory framework provides public and semi public construction companies with several privileges that are not available to private sector companies although they are the main actors in construction. The ministry therefore established the New Towns Development Company in an effort to address the housing needs created by an overflowing urban population. The company acts as a holding for a number of subsidiary companies, each responsible for developing a particular new town. The companies acquire land and develop residential housing in their respective towns. In cities, National Land and Housing Organization (NLHO) is the executing body for land and housing under the ministry; since its inception in 1979, the NLHO has been the major owner and supplier of urban land. It owns a great deal of land in more than two hundred of Iran's larger cities. About 51 percent of NLHO projects were built by subcontracting; 38 percent were constructed through joint ventures—NLHO and a private company—and 11 percent were built by selling the land to private developers.<sup>196</sup> The main contractors for NLHO have been quasi-public companies such as Sazman Tose-e Maskan Iran Company and Ekbatan Company (both affiliated to Housing Foundation) and Housing Investment Company (affiliated to Bank Maskan). The provision of land to different groups has undergone sporadic change (figure 5-2),<sup>197</sup> but most of these were not related to demand (also see Table A5-23).

<sup>&</sup>lt;sup>195</sup> In Tehran, for example, two sets of drawings have to be submitted in order to obtain a building permit. A registered architect should sign the architectural drawings, while a registered civil engineer should sign the structural drawings and calculation sheets. There are fixed limits on the number and size of projects for professionals according to their ranking. In Tehran the owner is also required to hire a third engineer for construction supervision. Many of the regulations are not applied at length in smaller cities. For example, no distinctions between civil engineers and architects are made for signing architectural drawings and structural calculations. In many cities no drawings are submitted at all. Furthermore, the Third Five-Year Development Plan approved in December 2000 by the Board of Ministers mandates a number of ministries and public agencies to pursue reforms in housing sector during the Plan. One of these is to review and simplify the procedures for issuing building permits under the supervision of city councils. For further details, see Table A5-8

<sup>&</sup>lt;sup>196</sup> See also Table A5-21 for the distribution of projects according to type of contract.

<sup>&</sup>lt;sup>197</sup> Land allocation in the first decade of its operation focused more on supply of land to individuals and later to cooperatives, so that from 1979 to 1988 about 86 percent of dwellings built on NHLO allocated land was by individuals (55 percent) and cooperatives (31 percent). During the First Five-Year Development Plan (1989–1993) more emphasis was on developers and the share of their land increased from 14 to 37 percent, while the share of individuals and cooperatives decreased to 42 percent and 21 percent, respectively. Under the Second Plan (1994–2000) the share of cooperatives and developers reduced to 18 percent and 26 percent respectively, while the share of individual land allocation increased to 55 percent (see figure 5-2).



Figure 5-2. NLHO Land Allocation to Diverse Actors

365. Construction companies need to be graded by the Management and Planning Organization according to their personnel and resources in order to be eligible for public contracts (see Figure 5-3). Points are awarded with reference to machinery, equipment and tools at the possession of the company, as well as managerial qualifications, working experience and financial status (see Table A5-16). There is a national grading and a provincial grading, for which two separate lists are published.<sup>198</sup> Public organizations fall mostly in higher-grade scales. The dominating presence of public and semi-public companies in the higher grades is explained by the high costs of obtaining equipment.<sup>199</sup>

<sup>&</sup>lt;sup>198</sup> The number of contractors in lower grades is naturally higher, but in buildings category there is a disproportionate concentration of contractors in grades 1 and 2, as 80 percent of some 8,438 of national and provincial contractors are in grades 1 and 2, while only 8 percent are graded 4 to 8. The number of contractors in grade 8 is merely 1 percent. Not only there is a disproportionate distribution of contractors in national grading, but also there is an uneven distribution of lower grade contractors throughout the country as well. In September 2001 for example 59 percent of provincial contractors were based in only 8 provinces, while 41 percent were distributed throughout 22 other provinces.

<sup>&</sup>lt;sup>199</sup> The grading for 31 contracting companies affiliated to the Ministry of Agricultural Jihad for example is 3 to 8 in road-building category, while many of these are highly graded in specialized categories such as High-tech Concrete Structures, Dams, Tunnels, Irrigation, etc. Other prominent grade 8 contractors in Buildings category belong to the armed forces (*Sepah*, air force, and police), *bonyads*, ministries, and the banks. It is not possible to determine the exact percentage of quasi-public graded companies, but their prominent presence in the higher grades is evident in *The List of Building and Installations Contractors: National (not Provincial) Contractors Eligible for Invitation to Bidding and Contracting*, Deputy for Technical Affairs, Management and Planning Organization, Tehran: 2001.



Figure 5-3. Graded Contractors by Management and Planning Organization

366. Public or semi-public contractors enjoy a number of advantages unavailable to private sector companies. They enjoy greater flexibility with regard to evaluation, securities requirements, and technical supervision. They have ready access to bank credit. The armed forces can recruit young engineers at very low wages for compulsory military service. Some *bonyads* (the Housing Foundation, for example) do not have to comply with the Labor Law and are exempt from arbitration costs. Until recently, many *bonyads* enjoyed various tax exemptions. There are no minimum profit margins for public and semi-public organizations.

367. In early 2003, the Management and Planning Organization announced the Government approval of a revised version of regulations for grading contractors and contracting procedures. The revised version introduces new concepts such as annual selection of successful contractors. The most important concept however, is the two-stage bidding in which a short list is developed out of eligible bidders in an open bidding. The final selection is based on a technical evaluation<sup>200</sup>.

368. Although there are various penalties for delays in public contract provisions, they are rarely applied if a public organization suffers delays. In many cases, full payment is rendered with delays of as great as a year. There is no compensation or price adjustment for these delays; therefore private contractors prefer to accept fewer public contracts than allowed by their ceiling, while public or semi-public companies rely on the financial support of the holding company that keeps them from bankruptcy.

369. Public housing schemes, however, are dominated by lower-grade and individual contractors, most public sector contractors are not interested in small-scale, labor-intensive projects because they are not profitable. Nevertheless, according to

<sup>&</sup>lt;sup>200</sup> The Cabinet approved the revised regulations in October 2002 on the basis of the MPO proposal of August 2000.

Management and Planning Organization regulations, minimum and maximum commissions are calculated merely on the basis of costs—irrespective of technical complexity. Any government-initiated large-scale residential project can be contracted only to higher-grade contractors (see Table A5-16 for details on minimum and maximum contracting limits)<sup>201</sup>. Evidently, higher-grade contractors subcontract the project to lower-grade companies and individual contractors, which increases overhead costs to no particular advantage.

370. Provision of serviced land for housing is subject to various regulations which have contradictory objectives. For example, the law adopted by the parliament (*Majlis*) prohibits land subdivisions for residential purposes without first determining residential land use. This would adversely affect the supply of urban land and thus the production of new housing. By way of contrast, the government has instituted several subsidies to encourage housing production.

371. There are tax exemptions<sup>202</sup> and finance subsidies planned for developers to encourage the production of mass-housing. Subsidized loans are offered to developers who build more than three dwellings in rural areas, more than five dwellings in small cities (under 250,000 population), and more than ten dwellings in bigger cities. Further, interest rate subsidies are extended to developers who use new technologies, build energy-efficient buildings, and construct rental units. For each item there is a 4 percent discount on the interest rate, amounting to a maximum of 12 percent. They can lead to increases in housing production, if construction material industry's capacity is upgraded and developers have good access to serviced land.

372. Municipality regulations for obtaining building permits need to be simplified for production of mass-housing projects<sup>203</sup>. Also, utility connections should be speed up considerably.

373. The Third Five-Year Plan hopes to improve the economic environment for the construction sector with the following changes: (i) Ministry of Interior and municipalities have been mandated to review and simplify the procedures for issuing building permits

<sup>&</sup>lt;sup>201</sup> In particular, article 8 of Regulations for Qualification of Building and Installations Contractors and Contracting (Deputy for Technical Affairs, Management and Planning Organization, Tehran: 2001) emphasizes that the amount and number of contracts should be according to the maximum and minimum limits of a corresponding grade. The decision to award contracts to higher or lower grade contractors can only be made by the Office for Contractors' Affairs at Management and Planning Organization.

<sup>&</sup>lt;sup>202</sup> The first transaction of newly built premises which are not older than two years as shown by the certificate of completion are subject to a developers tax (10 percent of purchased value of the building) and a transactions tax (5 percent of the value of land and building). Nevertheless, according to amendments to Direct Taxation Law in the period 2000-2004 the developers who build according to the Housing Consumption Pattern and build more than three dwellings in rural areas, more than five dwellings in small cities (under 250,000 population), and more than ten dwellings in bigger cities are exempted from transaction taxes. This means that in cities such as Tehran, Mash-had, Tabriz, Isfahan, and Shiraz the built area should be less than 75 square meters, while for other cities the maximum built area should be less than 100 square meters.

<sup>&</sup>lt;sup>203</sup> For example despite the replication of design in a mass-housing project several architects have to be hired. In Tehran, projects of more than 2,000 square meters, a consulting firm has to approve the drawings prepared and signed by respective engineers, regardless of the technical complexity of the project. For developments on plots of land over 6,000 square meters, the master plan has to be approved by the commission monitoring the implementation of the city master plan (commission article 5).

under the supervision of city councils; (ii) Ministry of Economy and Finance should provide the regulatory framework to promote insurance for securitizing housing investment; (iii) Ministry of Housing and Urban Development has been mandated to support the formation of professional associations, while qualifying and grading developers; and (iv) Ministry of Housing and Urban Development is also required to promote cost-effective, energy-efficient, environment-friendly housing typologies and reduce the use of hazardous materials; make provisions for increasing effective life and durability of building stock; complete the remaining parts of Iranian National Building Code; and develop a national standard for building materials.

## 4. Recommendations

374. The main recommendations for developing Iran's real estate and construction sectors are as follow:

- Sever the links between Government and financial institutions and construction companies: (i) the Government should relinquish ownership and control over construction companies; and (ii) banks should consider selling their equity interests in construction companies to the core private investors and to the public via listing on the Teheran Stock Exchange.
- Develop the private sector's role in the construction sector and reduce the relative dominance of quasi-public companies by: (i) revising the regulations favoring quasi-public companies, especially with regard to government contracts and contractor grading; (ii) revising the municipality regulations for issuing building permits to encourage multiple-housing projects, with special discounts/ privileges for low-income housing; (iii) increasing the supply of land by removing the blockages in the regulatory system; (iv) improving insurance coverage for construction companies. More affordable liability insurance products, and more flexible conditions, to support the development of small companies with limited resources; (v) allowing and encouraging banks to finance government receivables; (vi) developing a framework for attracting private investors in housing project ventures; (vii) liberalizing the equipment leasing industry and improving timely and adequate access to credit; and (viii) upgrading worker skills through training and accreditation programs supported by the professional associations.
- Revise and simplify building odes and regulations to balance safety requirements with demand for housing and Iran's available pool of skills and materials. This could encourage investment in the technology for low-cost and energy-efficient housing. The following options are recommended: (i) revising building codes and standards in publicly funded housing projects in order to allow for substitution of energy-efficient materials and appropriate technology techniques; (ii) promoting substitution of energy-efficient materials in place of steel and cement without compromising safety; and (iii) noncompulsory standardization of building components.

# **ANNEXES - CHAPTER 1**

| Year    | Consumer price         | Housing         | General        | Housing        | US\$ exchange     | US\$ ex. rate          | Stock market      | Stock market     |
|---------|------------------------|-----------------|----------------|----------------|-------------------|------------------------|-------------------|------------------|
|         | index (PI)             | price index     | inflation rate | inflation rate | rate              | increase (percent)     | index             | growth (percent) |
| 1979/0  | 55.3                   | 75.9            | 11.3           | -5.5           | 138               | 8.6                    |                   |                  |
| 1980/1  | 68.3                   | 81.4            | 23.6           | 7.2            | 150               | 8.6                    |                   |                  |
| 1981/2  | 83.8                   | 89.2            | 23             | 9.5            | 250               | 66                     |                   |                  |
| 1982/3  | 100                    | 100             | 19.2           | 12.1           | 350               | 40                     |                   |                  |
| 1983/4  | 114.8                  | 126.6           | 14.8           | 24.6           | 550               | 57                     |                   |                  |
| 1984/5  | 126.7                  | 126.8           | 10.4           | 1.7            | 613               | 11.4                   |                   |                  |
| 1985/6  | 135.4                  | 137             | 6.9            | 8              | 741               | 21                     |                   |                  |
| 1986/7  | 167.5                  | 163.8           | 23.7           | 19.5           | 990               | 33                     |                   |                  |
| 1987/8  | 213.9                  | 201.9           | 27.7           | 26.2           | 1,018             | 2.8                    |                   |                  |
| 1988/9  | 275.7                  | 258.7           | 28.9           | 25.2           | 1,211             | 18.9                   |                   |                  |
| 1989/0  | 323.8                  | 304.4           | 17.4           | 17.6           | 1,410             | 16                     |                   |                  |
| 1990/1  | 352.8                  | 327.6           | 9              | 7.6            | 1,419             | 0.6                    | 100               |                  |
| 1991/2  | 421.9                  | 390.8           | 20.7           | 19.2           | 1,498             | 5.5                    | 472               | 472              |
| 1992/3  | 513.2                  | 475.6           | 24.3           | 21.6           | 1,810             | 21                     | 435               | -8               |
| 1993/4  | 650                    | 578.9           | 22.9           | 21.6           | 2,808             | 55                     | 403               | -8               |
| 1994/5  | 879.8                  | 683.4           | 35.2           | 18             | 4,064             | 44                     | 694               | 72               |
| 1995/6  | 1,314                  | 875.4           | 49.4           | 28             | 4,446             | 9.3                    | 1,549             | 120              |
| 1996/7  | 1,620                  | 1,179           | 23             | 35             | 4,781             | 7.5                    | 1,936             | 25               |
| 1997/8  | 1,898                  | 1,529.4         | 17             | 29.7           | 6,468             | 35                     | 1,653             | -15              |
| 1998/9  | 2,244                  | 1,818.5         | 18             | 18.9           | 7,146             | 10                     | 1,537             | -8               |
| 1999/0  | 2,701                  | 2,162           | 20.3           | 18.9           | 8,420             | 17.8                   | 1,690             | 9                |
| 2000/1  | 3,025                  | 2,680           | 12             | 24             | 8,180             | -3                     | N/A               | N/A              |
| Source: | Central Bank of Islan  | nic Republic of | Iran, Economic | Report and An  | nual Balance Shee | t, 1971–1999. Iran Sta | tistical Yearbook | 1373-2000,       |
| Tehran. | Iran Statistical Cente | r. 2000         |                | -              |                   |                        |                   |                  |

# Annex 1.1. Trend of Selected Price Indices, 1979–2001

# Annex 1.2. Housing Expenditure by Income Deciles

|  |           | Group 1                  | Group 2 | Group 3   | Group 4   | Group 5      | Group 6     | Group 7   | Group 8    | Group 9    | Group 10  |
|--|-----------|--------------------------|---------|-----------|-----------|--------------|-------------|-----------|------------|------------|-----------|
|  | Total     | $= 7.2 \mathrm{m}$ rials | 7.2–9m  | 9–12m     | 12–16.5m  | 16.5–19.5m   | 19.5–24m    | 24–30m    | 30–45 m    | 45–60m     | Above 60m |
| Urban Household                        |           |                          |         |           |           |              |             |           |            |            |           |
| Av. Size                               | 4.52      | 3.17                     | 3.82    | 4.26      | 4.59      | 4.64         | 4.82        | 5.06      | 4.98       | 5.09       | 4.82      |
| Av. no. employed (income)              | 1.37      | 1.14                     | 1.23    | 1.27      | 1.35      | 1.37         | 1.42        | 1.45      | 1.49       | 1.54       | 1.5       |
| Urban Tenure Type (%)                  |           |                          |         |           |           |              |             |           |            |            |           |
| Ownership of land and building         | 68.35     | 6.05                     | 3.43    | 7.21      | 11.02     | 6.95         | 8.37        | 7.96      | 9.74       | 3.86       | 3.77      |
| Ownership of building                  | 0.71      | 0.08                     | 0.05    | 0.03      | 0.15      | 0.03         | 0.09        | 0.09      | 0.08       | 0.03       | 0.07      |
| Rent                                   | 16.49     | 2.66                     | 1.40    | 2.23      | 3.04      | 1.62         | 1.65        | 1.27      | 1.52       | 0.55       | 0.54      |
| Against service                        | 2.77      | 0.12                     | 0.06    | 0.13      | 0.25      | 0.33         | 0.32        | 0.57      | 0.66       | 0.21       | 0.11      |
| Free                                   | 8.75      | 1.88                     | 0.80    | 1.44      | 1.51      | 0.81         | 0.80        | 0.50      | 0.59       | 0.19       | 0.14      |
| Miscellaneous                          | 2.92      | 0.22                     | 0.14    | 0.31      | 0.52      | 0.35         | 0.37        | 0.32      | 0.45       | 0.11       | 0.15      |
| Characteristics of Urban Housing U     | nity      |                          |         |           |           |              |             |           |            |            |           |
| Av. size (no. rooms)                   | 3.7       | 2.51                     | 2.94    | 3.23      | 3.53      | 3.77         | 3.94        | 4.1       | 4.33       | 4.55       | 4.75      |
| Access to piped water (%)              | 98.59     | 95.58                    | 97.79   | 97.92     | 98.82     | 99.2         | 98.71       | 99.32     | 99.63      | 99.84      | 99.83     |
| Access to electricity (%)              | 99.88     | 99.63                    | 99.86   | 99.93     | 99.85     | 99.84        | 99.93       | 100       | 99.94      | 100        | 99.83     |
| Av. Expenditure for Urban Househo      | lds       |                          |         |           |           |              |             |           |            |            |           |
| Country                                | 24.18     | 3.78                     | 8.07    | 10.45     | 14.07     | 17.52        | 21.11       | 25.94     | 35.11      | 50.15      | 91.59     |
| East Azarbayejan                       | 22.20     | 3.68                     | 8.20    | 10.52     | 13.87     | 17.62        | 21.02       | 26.36     | 34.81      | 49.38      | 98.46     |
| Esfahan                                | 20.23     | 4.18                     | 8.11    | 10.59     | 14.06     | 17.28        | 21.06       | 25.38     | 34.76      | 49.20      | 82.51     |
| Tehran                                 | 32.79     | 0.79                     | 8.15    | 10.50     | 14.24     | 17.78        | 21.42       | 26.34     | 35.83      | 50.85      | 95.77     |
| Khuzestan                              | 21.41     | 5.05                     | 7.54    | 10.45     | 14.19     | 17.61        | 21.28       | 25.69     | 32.90      | 49.91      | 66.91     |
| Khorasan                               | 20.64     | 3.89                     | 8.02    | 10.33     | 14.04     | 17.28        | 20.64       | 25.52     | 35.07      | 49.11      | 102.91    |
| Fars                                   | 23.16     | 4.61                     | 8.12    | 10.46     | 14.01     | 17.61        | 21.02       | 26.50     | 34.61      | 51.45      | 85.83     |
| Sources: 1997 Census; Iran Statistical | Yearbook, | 1379 (March              | 2000-Ma | arch 2001 | ); MOH, H | ousehold Sur | vey 1379, ' | Tehran, I | ran Statis | tical Cent | er.       |

 Table A1-12.
 2001 Household Summary: Annual Statistics by Expenditure Groups

|            |              |              |             | Tota         | al expendi   | iture        |           |              |            |           |           |           | Housi     | ng expend  | liture <sup>a</sup> |            |              |         |
|------------|--------------|--------------|-------------|--------------|--------------|--------------|-----------|--------------|------------|-----------|-----------|-----------|-----------|------------|---------------------|------------|--------------|---------|
| Decile     | 1992/3       | 1993/4       | 1994/5      | 1995/6       | 1996/7       | 1997/8       | 1998/9    | 1999/0       | 2000/1     | 1992/3    | 1993/4    | 1994/5    | 1995/6    | 1996/7     | 1997/8              | 1998/9     | 1999/0       | 2000/1  |
| First      | 0.67         | 0.95         | 1.4         | 1.8          | 2.3          | 2.97         | 3.6       | 4.5          | 4.9        | 0.25      | 0.4       | 0.54      | 0.75      | 0.97       | 1.2                 | 1.6        | 2            | 2.2     |
| Second     | 1.14         | 1.7          | 2.4         | 3.2          | 4.1          | 5.2          | 6.4       | 7.7          | 8.7        | 0.54      | 0.7       | 0.94      | 1.2       | 1.6        | 2                   | 2.5        | 3.1          | 3.5     |
| Third      | 1.5          | 2.3          | 3.2         | 4.3          | 5.5          | 6.8          | 8.4       | 10.1         | 11.4       | 0.67      | 0.87      | 1.1       | 1.5       | 2          | 2.5                 | 3.2        | 3.9          | 4.3     |
| Fourth     | 1.8          | 2.8          | 3.9         | 5.3          | 6.8          | 8.3          | 10.4      | 12.3         | 14.1       | 0.77      | 1         | 1.4       | 1.8       | 2.5        | 3.1                 | 3.8        | 4.6          | 5.1     |
| Fifth      | 2.1          | 3.4          | 4.6         | 6.4          | 8.2          | 9.9          | 12.3      | 14.7         | 16.6       | 1.01      | 1.3       | 1.7       | 2.1       | 2.9        | 3.6                 | 4.5        | 5.3          | 5.9     |
| Sixth      | 2.7          | 4.1          | 5.5         | 7.6          | 9.8          | 11.7         | 14.6      | 17.5         | 19.5       | 1.1       | 1.5       | 1.9       | 2.4       | 3.3        | 4.1                 | 5.1        | 6            | 6.5     |
| Seventh    | 3.3          | 4.9          | 6.5         | 9            | 11.7         | 13.8         | 17.4      | 20.8         | 23.3       | 1.36      | 1.7       | 2.2       | 2.8       | 3.9        | 4.8                 | 5.9        | 6.8          | 7.7     |
| Eighth     | 3.8          | 6            | 8           | 11.1         | 14.4         | 16.9         | 21.2      | 25.2         | 28.5       | 1.65      | 2.1       | 2.6       | 3.4       | 4.6        | 5.6                 | 7          | 8            | 9.2     |
| Ninth      | 4.9          | 7.7          | 10.4        | 14.5         | 18.8         | 22           | 27.8      | 33           | 37.3       | 2.1       | 2.7       | 3.2       | 4.1       | 5.8        | 7                   | 8.9        | 9.9          | 11      |
| Tenth      | 9.3          | 14.7         | 19.6        | 21.2         | 35.9         | 42.4         | 51.8      | 63.1         | 74.5       | 3.3       | 4.2       | 4.7       | 6.1       | 9.4        | 10.5                | 13.4       | 14.8         | 17.2    |
| Average    | 3.07         | 4.6          | 6.2         | 8.8          | 11.06        | 13.3         | 16.7      | 20.7         | 24.1       | 0.97      | 1.6       | 2.04      | 2.7       | 3.7        | 4.47                | 5.6        | 6.6          | 7.6     |
| a. Housing | expenditur   | e is the sum | of rent and | l water, fue | l, and elect | ricity expen | ses.      |              |            |           |           |           |           |            |                     |            |              |         |
| Source: St | tatistical C | Center of In | ran, "The   | Results of   | the Statis   | tics from t  | he Expend | liture of th | ne Urban I | Household | s, 1973–2 | 000." Cen | tral Bank | of Islamic | Republic            | of Iran, S | Statistics f | rom the |

 Table A1-13.
 Expenditure Trends for Urban Households by Income Decile, 1992–93 to 2000–01(RI m)

Expenditure and Income of the Urban Households, 1970–1986.

|                                | Total Household       |               |             |              |              | Deci       | ile         |       |                 |       |                  |
|--------------------------------|-----------------------|---------------|-------------|--------------|--------------|------------|-------------|-------|-----------------|-------|------------------|
|                                | Average               | 1st           | 2nd         | 3rd          | 4th          | 5th        | 6th         | 7th   | $8^{\text{th}}$ | 9th   | 10 <sup>th</sup> |
| Avg. Household Income          | 22.39                 | 3.49          | 7.55        | 10.19        | 12.48        | 14.90      | 17.58       | 20.71 | 24.86           | 31.84 | 64.32            |
| Urban                          |                       |               |             |              |              |            |             |       |                 |       |                  |
| Nonfood                        | 18.5                  | 3.18          | 5.61        | 7.46         | 9.36         | 11.11      | 13.23       | 16.03 | 20.1            | 27.43 | 60.38            |
| Food, beverages, tobacco       | 6.81                  | 1.76          | 3.11        | 4.01         | 4.73         | 5.56       | 6.34        | 7.32  | 8.45            | 10.07 | 14.2             |
| Total                          | 25.31                 | 4.94          | 8.72        | 11.47        | 14.09        | 16.67      | 19.57       | 23.35 | 28.55           | 37.5  | 74.58            |
| Of which housing               | 7.6                   | 2.25          | 3.59        | 4.37         | 5.14         | 5.89       | 6.53        | 7.7   | 9.16            | 11.08 | 17.21            |
| 1. Rent (1)                    | 6.75                  | 1.96          | 3.11        | 3.79         | 4.48         | 5.11       | 5.69        | 6.72  | 8.09            | 9.94  | 15.74            |
| 2. Water, fuel, light          | 0.85                  | 0.29          | 0.48        | 0.58         | 0.66         | 0.78       | 0.84        | 0.98  | 1.07            | 1.14  | 1.47             |
| Avg. Household size            | 4.52                  | 3.05          | 3.94        | 4.38         | 4.56         | 4.72       | 4.7         | 4.93  | 4.96            | 5.01  | 4.93             |
| Rural                          |                       |               |             |              |              |            |             |       |                 |       |                  |
| Nonfood                        | 9.31                  | 1.25          | 2.4         | 3.36         | 4.56         | 4.66       | 5.93        | 7.38  | 9.58            | 13.2  | 27.36            |
| Food, beverages, tobacco       | 6.63                  | 1.16          | 2.54        | 3.5          | 4.3          | 5.19       | 6.28        | 7.21  | 8.49            | 10.31 | 17.01            |
| Total                          | 15.94                 | 2.41          | 4.94        | 6.86         | 8.86         | 9.85       | 12.21       | 14.59 | 18.07           | 23.51 | 44.37            |
| Of which housing               | 2.49                  | 0.75          | 1.26        | 1.53         | 1.83         | 2.19       | 2.46        | 2.79  | 3.26            | 3.87  | 4.94             |
| Rent <sup>a</sup>              | 1.63                  | 0.5           | 0.81        | 0.97         | 1.17         | 1.45       | 1.6         | 1.85  | 2.18            | 2.56  | 3.17             |
| Water, fuel, light             | 0.86                  | 0.25          | 0.45        | 0.56         | 0.66         | 0.74       | 0.86        | 0.94  | 1.08            | 1.31  | 1.77             |
| Avg. household size            | 5.27                  | 2.66          | 4.2         | 4.99         | 5.11         | 5.43       | 5.71        | 5.72  | 6.02            | 6.31  | 6.63             |
| a. Rents and rental value of o | owner occupied hous   | ing, repair a | and mainter | nance; (2) 7 | otals are th | e sum of r | ounded figu | ures. |                 |       |                  |
| Sources: 1997 Census; Iran     | Statistical Yearbook, | 1379 (Mar     | ch 2000–M   | arch 2001)   | MOH, Ho      | usehold Su | rvey 1379.  |       |                 |       |                  |

 Table A1-14.
 2001 Annual Gross Household Expenditure by Income Decile (RI million)

### **Annex 1.3.** Housing Markets

Iran's housing market is highly segmented by geography and household income. It is somewhat misleading, therefore, to present aggregate figures for demand and supply. This abstraction will nevertheless be supplied, but it will be complemented by analysis of segments (by regions or income distribution) where appropriate.

#### **Housing Conditions**

Iran has a relatively high percentage of homeownership, but recent government efforts to extend homeownership to more low-income households have largely failed. The 2001 household survey suggests that, among urban households, about 69 percent own their homes (and generally also the land). Ownership is only 55-58 percent among lowincome households (the bottom 40 percent in the income distribution-with annual expenditure below IRR 9 million, compared with 64-79 percent for the rest of the population. In 1991 ownership among the low-income groups was on average 71 percent. Population has been estimated at 64.9 million by March 2002; 41.9 million of those reside in urban areas and 23 million in rural areas.

Housing conditions in Iran—the quality of the housing unit (as measured by the facilities households have access to), household densities, household size, number of rooms—have gradually improved over the past decade. Household density has dropped from 1.18 in 1986–97 to 1.15 in 1996–97, and the number of individuals per room has gone from 1.53 in 1986–87 to 1.38 in 1996–97. During this period, the number of houses made of durable materials has increased<sup>204</sup> from 46 percent to 61 percent, and access to telephone and gas rose 20 percent.<sup>205</sup> These improvements aside, low-income households have experienced substantial hikes in their housing budgets, particularly of those in the first decile. In addition, this improvement is more marked in urban areas.

#### **Housing Demand**

Taking into account the maturing of Iran's sizable baby-boom generation (figure A1-1),<sup>206</sup> it has been said that as this generation marries, it will create a demand for 500,000 new housing units per year on top of current demand.<sup>207</sup> In order to give an idea of the magnitudes involved in housing demand see table A1-15. About 113,000<sup>208</sup> units per year over the next three years should be added to the total effective demand of  $570.000^{209}$ 

<sup>&</sup>lt;sup>204</sup> The durability of the residential unit is related to the type of materials used. According to the definition of the Statistical Center of Iran, buildings are classified as: durable, semidurable and nondurable.<sup>205</sup> Iran provides nearly 100-percent access to piped water and electricity.

<sup>&</sup>lt;sup>206</sup> Population projections from 2005 to 2035 produced by the World Bank's Human Development Network indicate annual population growth rates ranging from a high of 1.74 percent in the earliest years to a significantly lower 0.90 percent in 2035. Figure 1-1 shows the projection of household formation assuming an average household size of 4.6 (slightly lower than the current urban household size of 4.73). <sup>207</sup> Local experts estimate that about 400,000 are in urban areas and 100,000 in rural areas. The annual demand for

<sup>600,000</sup> new jobs does not necessarily translate into demand for housing.

<sup>&</sup>lt;sup>208</sup> Currently there are 1.63 million households sharing accommodation—resulting in a need for 340,000 households (at the current household size of 4.79). <sup>209</sup> Assuming no changes to household size and household density, it has been estimated that an additional 889,000

units will be added to the demand for housing in the next 5 to10 years as the baby boomers mature (approximately
units per year—to the extent that the government intends to reduce household density to 1.12 by the end of the Third FYDP. Therefore, current production of 520,000 units per year (in 2000–01) appears to be nearly sufficient for an effective demand of about 570,000 new housing units per year—considering only the economically active population—assuming that only the employed will be able to purchase a home.

Statistics on housing demand by income group are not readily available in Iran. An estimate for the low-income groups (table A1-16) suggests that its need for housing during 2000–04 is slightly more than 1 million housing units,<sup>210</sup> around 30 percent of the annual total demand estimated above. Based on the purchasing power estimated for the low-income groups (see section 4), these households are able to afford only social (i.e., subsidized) accommodations under the development plan. Yet the supply of social units has ranged from only 66,000 to 133,000 housing units per year in the 1999–00 to 2003– 04 period, or merely 45 percent of the units these groups require. This situation is further worsened in that only 7–9 percent of the actual housing supply, as a percentage of total supply, is social housing. The FYDP called for 13–18 percent.



Figure A1-1.

Source: World Bank Statistical Database

<sup>89,000</sup> units per year). This increases effective demand to approximately 569,000 units per year. Obviously, this demand will be higher if household density is reduced to 1 and household size is temporarily reduced to 2 (for newlywed couples). <sup>210</sup> Naser Nikooseresht, "The Main Issues in Housing Market: Policies, Strategies, and Implementation" (Bureau of

Housing Economics BHE, No. 32), 3-10.

| Existing<br>housing<br>stock | Workin;<br>Million   | Working age populationDesiredAnnual desired flow (m units)MillionAveragehousingReplacement cShortfallPopulationTotal |                    |      |                        |                     |      |                   |  |
|------------------------------|--|--|--------------------|------|------------------------|---------------------|------|-------------------|--|
| Million                      |  | annual growth (percent) <sup>a</sup>   | stock <sup>b</sup> |      | reduction <sup>d</sup> | growth <sup>e</sup> |      | flow <sup>f</sup> |  |
| 12.2                         | 45.40 <sup>g</sup>   | 3.5  | 27.24              | 0.31 | 0.59                   | 0.95                | 1.85 | 0.510             |  |
| 12.2                         | 16.03 <sup>a</sup>   | 1.75   | 9.62               | 0.31 | -                      | 0.17                | 0.48 | 0.510             |  |
| a. 1998 Ecor                 | a. 1998 Economically active population of 10 years and over. Growth rate estimated for 1993-1998. This rate has come down from 6.2 percent |  |                    |      |                        |                     |      |                   |  |

Table A1-15. Estimation of Annual Demand for New Housing in Iran, 2000–01

in 1983-1988 and 3 percent in 1989-1992.

b. Benchmark for industrial countries of 60 percent of estimated working age population-this ratio is consistent with Dhonte et al.,

Demographic Transition in the Middle East: Implications for Growth, Employment and Housing, IMF Working Paper WP/00/41, March 2000. c. 2.5 percent of existing stock (30-year life of unit growing at 2.5 percent)—consistent with Dhonte et al.

d. Elimination of the gap between actual and desired stock over a 30-year period at a steady geometric rate of 5 percent per year-consistent with Dhonte et al.

e. Growth rate of the working age population times the desired housing stock.

f. Annual production reported for 2000/1.

g. Total population.

Source: 1997 Census; Iran Statistical Yearbook 1379 (March 2000–March 2001); Household Survey 1379.

Therefore, an incongruence between the housing plan and the actual needs of the different income groups will impede the translation of this need into effective demand due to first, the lack of bng-term finance for house purchase; second, the limited supply of affordable low income housing for both rent and purchase (even mass producers build mostly for the middle-income households—Q4 to Q8 in income distribution). Indeed, in the absence of long-term finance for low-income households, their only option available is rental accommodation, of which there is a limited supply, mostly because long-term finance is insufficient for rental housing.

| Year   | Number (thousand units) | Requested Investment (RI b) |  |  |  |  |  |
|--|-------------------------|-----------------------------|--|--|--|--|--|
| 1999–2000  | 146                     | 7,665                       |  |  |  |  |  |
| 2000-01  | 175                     | 11,287                      |  |  |  |  |  |
| 2001-02  | 211                     | 15,192                      |  |  |  |  |  |
| 2002–03  | 250                     | 19,500                      |  |  |  |  |  |
| 2003–04  | 292                     | 24,747                      |  |  |  |  |  |
| Total 1,074 78,39  |                         |                             |  |  |  |  |  |
| <i>Source:</i> Naser Nikooseresht, "Main Issues in Housing Market: Policies, Strategies, and Implementation" (BHE, No.32), 3–10. |                         |                             |  |  |  |  |  |

Need for Housing by Low-Income Groups in Iran Table A1-16.

#### **Housing Supply**

According to the available estimations by the MPO (based on growth projections), there are expected to be 12.2 million housing units by March 2002—8.1 million in urban areas and 4.1 million in rural areas.<sup>211</sup> Based on estimations of 13.8 million households, the current household density may be 1.13, and may be the result of an increase in the supply of housing in the period from 1996–97 to 2000–01; more than 1.2 million housing units were built during these years in urban areas, corresponding to 146 million m<sup>2</sup>.

If density is indeed approaching 1.13, it appears that the density target (i.e., 1.12) of the Third FYDP is well within reach. To the extend that the actual population and household growth rates are different from those assumed in the plan by the MPO, and to the extent that the estimates on housing completions (mainly in rural areas) are different in reality, the actual household density may be slightly different from that of 1.13. This supply, however, appears to have addressed the demand by middle- and high-income (top 20 percent of income distribution) groups.

An analysis of the results of the First and Second FYDPs and the first three years of the current plan, shows that the first two plans delivered fewer housing units (74 percent and 92 percent respectively) than expected. Because the average unit was larger than originally envisaged (53 and 15 percent respectively), total expenditures were well over budget.<sup>212</sup> As partial proof of this, figures for the first three years of the Third FYDP suggest that Iran has met targets for new housing units. The share of "social" housing, however, was only 7-9 percent of the units; the target was 13–18 percent. A similar performance was estimated for "supported" housing and as a result more private-sector "free" houses were built than allowed for in the budget. Since in the Second plan, one of the key goals was to build social (with less than 50 nf), supported, and free housing units, it is clear that the failure to produce enough affordable units to the low-income groups may eventually worsen the distribution of housing in Iran.

It is said that 95 percent<sup>213</sup> of the housing construction is carried out by nongovernmental groups. But when cooperatives, foundations, and quasi-public government companies are taken into account, it is clear that the actual involvement of the public sector is significantly higher than 5 percent. An examination of rent-to-own schemes<sup>214</sup> in Iran since their inception in March 1999 (table A1-17) shows that the government intervened, through these schemes, in approximately 9 percent of the units built in 1999. The Third FYDP (table A1-19) shows that the government intervention to 14 percent by 2004, reaching an overall intervention of 12.6 percent under

<sup>&</sup>lt;sup>211</sup> MOH, Planning Bureau, Population and Housing Statistics, 1976–2002.

<sup>&</sup>lt;sup>212</sup> The volatility and discrepancy between government budget and actual expenditures can be traced to several reasons. The most important one is that before the Oil Stabilization Fund (OSF) was established, changes in oil prices had a huge impact on Iran's economy, enhancing the business cycles and partly determining housing supply. For example, in 1995–96, the government decided to finance only up to 60 percent of those projects that already had committed funds (irrespective of whether they were under construction). Similarly, due to the emphasis given to the housing sector as a potential engine for growth and redistribution made the government increase its expenditure significantly in the following years. Presumably many more houses than planned were started. The OSF is expected to minimize the impact of oil prices on the economy and therefore reduce the cyclical influences on housing supply. <sup>213</sup> MHUD, Interview with the Planning Bureau.

<sup>&</sup>lt;sup>214</sup> Rent-to-own schemes awarded title of the property only upon total repayment of the loan.

the current housing plan. The extent of this intervention varies; therefore the effective percentage of government-provided rent-to-own units might be as high as 7 percent<sup>215</sup>. This is consistent with the estimate supplied by the MPO experts—namely, that the share of production budgeted (100 percent) for the public sector between 1999 and 2004 would be 7.5 percent.

The Second FYDP set aside 9 percent of total housing expenditures toward rent-to-own schemes, apportioned as follows:

- the public sector would supply 48.9 percent (i.e., providing both land and paying the construction costs);
- the private sector, in partnership with the government, would supply 37.8 percent (i.e., government-provided land; construction costs borne by the private sector);
- 13.3 percent of the rent-to-own schemes would be fully private.

| Type of execution arrangement | Status of operation<br>by phase | Number of projects | Number of<br>units | Land Area<br>(m <sup>2</sup> ) | Total Built Area<br>(m <sup>2</sup> ) |
|-------------------------------|---------------------------------|--------------------|--------------------|--------------------------------|---------------------------------------|
| Contracting <sup>a</sup>      | Design                          | 19                 | 3,627              | 203,681                        | 184,625                               |
|                               | Execution                       | 197                | 38,137             | 2,538,170                      | 1,998,777                             |
|                               | Completed                       | 123                | 11,399             | 745,547                        | 620,051                               |
| Contributive <sup>b</sup>     | Design                          | 60                 | 6,763              | 1,274,817                      | 384,652                               |
|                               | Execution                       | 70                 | 29,902             | 1,862,825                      | 1,630,944                             |
|                               | Completed                       | 24                 | 4,472              | 294,380                        | 266,606                               |
| Private <sup>c</sup>          | Design                          | 37                 | 10,951             | 690,705                        | 554,102                               |
|                               | Execution                       | 35                 | 3,421              | 205,771                        | 181,121                               |
|                               | Completed                       | 3                  | 146                | 9,226                          | 7,200                                 |
| Total                         |                                 | 668                | 108,818            | 7,825,123                      | 5,828,078                             |

 Table A1-17.
 Rent-to-Own Housing in Iran since March 1999

Totals may not add up due to rounding.

a. Government provides land and cost of construction, but contracts out to private.

b. Participatory joint venture. Land and supervision by government.

c. Qualifies for 8 percent loan.

Source: Planning Unit of the MOH.

The key issue, however, is whether the private sector can take on the challenge and then assume the investment spelled out in the Third FYDP. Of the total investment specified in the national plan (RI 579,642 billion in constant 1999 prices), 63 percent is identified as private-sector investment (i.e., IRR 106,243 billion). In addition, the plan assumes a much larger annual growth rate (i.e., 8.5 percent for private investments versus 7.1 percent for all investment), even for the housing sector (9.5 percent). Of the total investment, 24.5 percent is assumed to have taken place in the housing sector (i.e., IRR 142,060 billion), 67 percent by the private sector. Therefore, a net 16.4 percent of total

<sup>&</sup>lt;sup>215</sup> Assuming that land provided under partnership agreements is 20 percent of total construction costs.

national investment is assumed as private investment in housing. So, in addition to a 16.4 percent investment in private-sector housing, it is assumed that this sector will see greater growth than other sectors in the economy.

Is this a realistic, achievable target? This is a key issue for Iran to address. Stable economic and foreign exchange conditions, higher oil prices, and, more recently, an increase in the housing loan ceiling from IRR 30 to 50 million have greatly increased housing supply.<sup>216</sup> Housing transactions in major cities have declined, however, since mid-2001, a trend expected to continue in the short term. This may reflect a reduced demand for housing, which may ultimately affect Iran's efforts to meet the goals of the Third FYDP.

Concerning supply of rental properties, prices are rising rapidly (see Table A1-18), and security deposits are punitively large, representing nearly two years of rent or more. These large mandatory deposits require prior wealth, something the poor by definition do not possess. They are also a testament to the high inflation rates. Obviously, the rental market is almost entirely inaccessible to low-income households. In short, these trends reveal serious imbalances between housing demand and supply, especially in major cities.

|                              |          | Tehran      |         |           | Esfahan   |          |          | Shiraz      |       |  |
|------------------------------|----------|-------------|---------|-----------|-----------|----------|----------|-------------|-------|--|
| Year                         | Rental   | Deposit     | Ratio   | Rental    | Deposit   | Ratio    | Rental   | Deposit     | Ratio |  |
| 1375 (1996–97)               | 3,387    | 108,109     | 32      | 1,803     | 38,925    | 22       | 1,225    | 40,986      | 33    |  |
| 1376 (1997–98)               | 4,345    | 116,910     | 27      | 2,051     | 46,732    | 23       | 2,513    | 54,553      | 22    |  |
| 1377 (1998–99)               | 5,060    | 130,894     | 26      | 2,372     | 53,816    | 23       | 2,857    | 68,417      | 24    |  |
| 1378 (1999–2000)             | 5,805    | 160,998     | 28      | 3,001     | 65,926    | 22       | 3,425    | 86,059      | 25    |  |
| 1379 (2000–01)               | 7,595    | 195,078     | 26      | 3,678     | 81,804    | 22       | 4,113    | 93,483      | 23    |  |
| Five-year change (percent)   | 224      | 180         |         | 204       | 210       |          | 336      | 228         |       |  |
| Source: Housing, Constructio | n and In | ifrastructi | ure Sta | tistics," | Tehran: S | tatistic | al Cente | er of Iran, | 2001. |  |

 Table A1-18.
 Trends in Monthly Rents and Deposits in Major Cities

Article 10 (budget law, June 1998), concerning the supply of rental residential units, sought to encourage the supply and management of rental housing. It states that the government is committed to encouraging the supply of nongovernmental rental units and to proffer the possibility of ownership. For example, the rental income tax could be waived for residential units of up to 120 m<sup>2</sup> and for residential complexes of more than three units serving as rentals for at least five years. This law, along with recent modifications to laws affecting owners and tenants, may increase the number of rental units on the market. But if the government wishes to address the housing needs of the poor, then it should seek to ease legal constraints and dispense with cumbersome

<sup>&</sup>lt;sup>216</sup> Esfahan Municipality, "Report on Housing Transactions (Selling and Buying) in Isfahan City."

administrative procedures that prevent the owners of rental units from supplying badly needed housing.

|   | Base year   | FYDP bud     |            | Total   |        |         |           |
|---|-------------|--------------|------------|---------|--------|---------|-----------|
| Quantitative indicator  | 1998–99     | 1999–00      | 2000-01    | 2001-02 | 2002–3 | 2003–04 | 1999–2004 |
| Total housing<br>production (equivalent<br>thousand units)        | 464         | 510          | 560        | 620     | 680    | 744     | 3,114     |
| Housing units = 100<br>sq. m./unit (equivalent<br>thousand units) | 122         | 146          | 175        | 211     | 250    | 292     | 1,074     |
| Urban rent-to-own<br>units built (equivalent<br>thousand units)   | 41.4        | 54.4         | 64.6       | 77.4    | 91.2   | 106.8   | 393.6     |
| Units built for sale<br>(equivalent thousand<br>units)            | 36.5        | 47.6         | 60.8       | 77.4    | 100.8  | 127.2   | 413.8     |
| Investment (RI b)   |             |              |            |         |        |         |           |
| Total (constant prices)   | 21,180      | 23,580       | 25,840     | 28,360  | 30,940 | 3,340   | 142,060   |
| Total (current prices)  | 2,180       | 26,407       | 35,478     | 43,277  | 51,546 | 59,879  | 216,587   |
| Totals may not add up due top                                     | rounding.   |              |            |         |        |         |           |
| Source: Third Housing I   | Development | Plan, Tehrar | n: MHUD, 2 | 000     |        |         |           |

 Table A1-19.
 Estimated Housing Supply for the Third FYDP

### **Regional Housing Markets in Iran**

The most important urban centers in Iran are in the provinces of Tehran, Esfahan, Fars, Khorasan, West Azerbaijan and Khouzestan, all of which have acceptable to excellent housing conditions (Table A1-20). According to the last census, these provinces hold 53 percent of Iran's population (i.e., 32 million people) and 59 percent of its housing stock. In the past five years, 62 percent of new housing has been supplied in these regions (Table A1-22). As these provinces (except for Eastern Azarbajan) receive a significant number of immigrants every year (Table A1-21), the performance of the housing sector in Iran is likely to continue being closely linked to the performance of these regions.

### **Regional Differences in Housing Supply and Affordability**

Table A1-24 shows key socioeconomic data for these six provinces, such as unemployment (ranging from 8.7 percent in West Azerbaijan to 19.8 percent in Khouzestan), and average annual expenditure on housing (from IRR 5.1 million in Khouzestan to IRR 12.6 million in Tehran). Further regional differences can be shown by the increase in the number of housing units between 1996–01 and 2000–01, in terms of building capacity. For example, Table A1-22 shows that Tehran built an average of around 75,000 units per year, while Khouzestan built only 7,000 units per year, and many other, less-populated provinces built fewer than 5,000 units per year.

Table A1-25 shows that between 1996 and 2000 affordability has significantly increased for these six urban centers. For example, the price-to-income ratio for Teheran has dropped from 9.7 to 5.9 and in Esfahan from 10.9 to 8.2. These regional averages hide important differences that exist by income group. Using data available for Tehran, Esfahan and Fars, Table A1-27 shows the extent of regional differences concerning housing affordability and possibility of ownership, by income decile. Overall, Tehran shows the lowest housing purchasing power across the board, except for households in the top 30 percent of the income distribution, which experience a 65 percent increase in housing purchasing power over the households immediately below them on the income scale. On average, Fars has the highest average housing purchasing power at 79 m<sup>2</sup> in comparison with Teheran (61 nf) and Esfahan (65 nf); it also has the highest housing purchasing power for low- and middle-income households. Both Fars and Esfahan show extremely high housing purchasing power for the top 10 percent of the households.

|                       |              |                  |                       | Housing condi             | tions                   |                     |
|-----------------------|--------------|------------------|-----------------------|---------------------------|-------------------------|---------------------|
|                       |              | Best             | Proper                | Acceptable                | Improper                | Critical            |
| Employment            | Best         |                  | Kerman                | Chahrmahal va             |                         |                     |
| conditions            |              |                  |                       | Bakhtiyari                |                         |                     |
|                       |              |                  |                       | Azarbayjan                |                         |                     |
|                       |              |                  |                       | Gharbi                    |                         |                     |
|                       |              |                  |                       | Ardabil                   |                         |                     |
|                       |              |                  |                       | Azarbayjan                |                         |                     |
|                       |              |                  |                       | Sharghi                   |                         |                     |
|                       |              | Tehran           | Hamadan               |                           |                         |                     |
|                       |              | Markazi          | Esfahan               |                           |                         |                     |
|                       |              | Yazd             | Semnan                |                           |                         |                     |
|                       |              |                  | Khorasan              |                           |                         |                     |
|                       |              |                  | Ghom                  |                           |                         |                     |
|                       |              | Ghazvin          | Fars                  | Zanjan                    | Golestan                | Kurdistan           |
|                       |              |                  | Booshehr              | Mazandaran                |                         |                     |
|                       |              |                  | Hormozgan             | Khoozestan                | Gilan                   |                     |
|                       |              |                  |                       | Kohgilooye va             |                         |                     |
|                       |              |                  |                       | Booyer                    |                         |                     |
|                       | Worst        |                  | Lorestan              | Eelam                     | Kermanshahan            | Sistan va           |
|                       |              |                  |                       |                           |                         | Baloochestan        |
| The regions are class | ified accord | ling to a relati | ive standard score sl | howing how different the  | performance of the re-  | gion is compared to |
| housing production i  | n the past 5 | vears, and the   | e ratio of housing st | ock growth rate to family | reentage of durable not | using, average      |
| Source: Minoo R       | Rafiei, "H   | ousing, En       | ployment, and         | Sustainable Develop       | oment," October 20      | 001.                |

 Table A1-20.
 Housing and Employment Conditions by Provinces in Iran

| Province  | 1996–97 population                  | Net of migrants | Ratio of migrants to total population |  |  |  |  |  |
|---|-------------------------------------|-----------------|---------------------------------------|--|--|--|--|--|
| Tehran  | 11,176                              | 429             | 3.8                                   |  |  |  |  |  |
| Esfahan   | 3,923                               | 91              | 2.3                                   |  |  |  |  |  |
| Fars  | 3,817                               | 6               | 0.1                                   |  |  |  |  |  |
| Khorasan  | 6,047                               | 9.3             | 1.5                                   |  |  |  |  |  |
| West Azer   | 3,326                               | -85             | -2.5                                  |  |  |  |  |  |
| Khouzestan  | 3,746                               | $102^{1}$       | 2.7                                   |  |  |  |  |  |
| (1) This high number  | er is due to the arrival of war imm | igrants.        |                                       |  |  |  |  |  |
| Source: Statistical Center of Iran, Public Census of Population and Housing of the Provinces of the |                                     |                 |                                       |  |  |  |  |  |
| Country, 1996.  |                                     |                 |                                       |  |  |  |  |  |

 Table A1-21.
 Migration into Selected Provinces in Iran, 1986–96 (thousands)

| Characteristic                   | Region                      | 1996/7      | 1997/8       | 1998/9     | 1999/0      | 2000/1     |
|----------------------------------|-----------------------------|-------------|--------------|------------|-------------|------------|
| Number of units                  | Country                     | 204,688     | 193,641      | 210,994    | 291,046     | 339,659    |
|                                  | Tehran                      | 66,509      | 65,727       | 58,632     | 89,328      | 96,316     |
|                                  | Esfahan                     | 18,694      | 21,360       | 20,840     | 24,484      | 33,049     |
|                                  | Fars                        | 10,937      | 8,791        | 8,737      | 12,301      | 15,884     |
|                                  | Khorasan                    | 20,458      | 18,116       | 25,430     | 32,752      | 37,674     |
|                                  | West Azer                   | 12,179      | 11,445       | 11,812     | 7,652       | 9,949      |
|                                  | Khouzestan                  | 6,342       | 3,778        | 5,591      | 8,992       | 12,064     |
| Floor area (100 m <sup>2</sup> ) | Country                     | 24,737      | 22,504       | 25,470     | 34,144      | 39,257     |
|                                  | Tehran                      | 3,048       | 6,976        | 6,879      | 10,424      | 13,346     |
|                                  | Esfahan                     | 2,747       | 2,744        | 2,707      | 3,312       | 4,150      |
|                                  | Fars                        | 1,542       | 1,341        | 1,106      | 1,684       | 2,298      |
|                                  | Khorasan                    | 2,522       | 2,302        | 3,191      | 3,204       | 4,602      |
|                                  | West Azer                   | 1,437       | 1,234        | 934        | 945         | 1,151      |
|                                  | Khouzestan                  | 1,173       | 503          | 786        | 975         | 1,659      |
| Cost of land and floor           | Country                     | 2,087       | 2,084        | 2,100      | 3,915       | 5,188      |
| area (RI b)                      | Tehran                      | 882         | 830          | 586        | 1,418       | 1,891      |
|                                  | Esfahan                     | 180         | 156          | 208        | 345         | 444        |
|                                  | Fars                        | 108         | 115          | 87         | 171         | 259        |
|                                  | Khorasan                    | 180         | 156          | 254        | 302         | 565        |
|                                  | West Azer                   | 82          | 128          | 78         | 108         | 146        |
|                                  | Khouzestan                  | 79          | 41.6         | 56         | 137         | 233        |
| Source: Central Bank of          | f Islamic Republic of Iran, | Report on 0 | Construction | Activities | in the Urba | n Areas of |
| the Country, 1996–200            | 0.                          |             |              |            |             |            |

| Characteristic                       | Province             | 1996–97      | 1997–98      | 1998–99      | 1999–2000       | 2000-01   |
|--------------------------------------|----------------------|--------------|--------------|--------------|-----------------|-----------|
| Floor area (1000 m <sup>2</sup> )    | Country              | 31,595       | 23,707       | 34,630       | 36,365          | 43,061    |
|                                      | Tehran               | 11,752       | 7,754        | 7,471        | 9,184           | 15,159    |
|                                      | Esfahan              | 4,532        | 2,227        | 5,445        | 3,439           | 4,520     |
|                                      | Fars                 | 1,391        | 1,567        | 1,843        | 2,248           | 2,214     |
|                                      | Khorasan             | 2,832        | 1,772        | 3,155        | 3,746           | 3,518     |
|                                      | West Azer            | 1,711        | 1,317        | 1,132        | 1,128           | 770       |
|                                      | Khouzestan           | 962          | 713          | 1,131        | 1,460           | 1,857     |
| Cost of 1 m <sup>2</sup> of land (RI | Country              | 0.31         | 0.35         | 0.23         | 0.327           | 0.49      |
| m)                                   | Tehran               | 1.3          | 1.4          | 1.1          | 1.5             | 2         |
|                                      | Esfahan              | 0.23         | 0.25         | 0.21         | 0.23            | 0.28      |
|                                      | Fars                 | 0.18         | 0.22         | 0.19         | 0.23            | 0.24      |
|                                      | Khorasan             | 0.16         | 0.37         | 0.15         | 0.18            | 0.26      |
|                                      | West Azer            | 0.13         | 0.192        | 0.29         | 0.28            | 0.24      |
|                                      | Khouzestan           | 0.096        | 0.08         | 0.12         | 0.15            | 0.21      |
| Cost of 1 m <sup>2</sup> floor area  | Country              | 0.39         | 0.43         | 0.43         | 0.49            | 0.57      |
| (RI th)                              | Tehran               | 0.57         | 0.58         | 0.6          | 0.67            | 0.73      |
|                                      | Esfahan              | 0.22         | 0.34         | 0.35         | 0.39            | 0.44      |
|                                      | Fars                 | 0.38         | 0.47         | 0.47         | 0.57            | 0.59      |
|                                      | Khorasan             | 0.26         | 0.31         | 0.31         | 0.35            | 0.44      |
|                                      | West Azer            | 0.3          | 0.38         | 0.38         | 0.48            | 0.46      |
|                                      | Khouzestan           | 0.32         | 0.36         | 0.41         | 0.44            | 0.51      |
| Total investment (RI b)              | Country              | 3991843      | 2721827      | 173840       | 5343784         | 7250362   |
|                                      | Tehran               | 1635008      | 1118014      | 10332        | 1709010         | 2926115   |
|                                      | Esfahan              | 262516       | 227155       | 24242        | 302124          | 500130    |
|                                      | Fars                 | 110049       | 170901       | 9861         | 314201          | 363904    |
|                                      | Khorasan             | 209101       | 217807       | 22470        | 445394          | 486990    |
|                                      | West Azer            | 159458       | 157371       | 9099         | 195228          | 134309    |
|                                      | Khouzestan           | 71779        | 74110        | 8845         | 188621          | 319332    |
| Source: Central Bank of I            | slamic Republic of I | ran, "Report | t on Constru | action Activ | ities in the Ur | ban Areas |
| of the Country, 1996–200             | 0."                  |              |              |              |                 |           |

 Table A1-23.
 Characteristics of Urban Housing Starts in Selected Provinces

|                                   | Country | East Azarbayejan | Esfahan | Tehran | Khuzestan | Khorasan | Fars   |
|-----------------------------------|---------|------------------|---------|--------|-----------|----------|--------|
| Population ('000) <sup>a</sup>    | 60,994  | 3,696            | 3,923   | 11,176 | 3,747     | 6,048    | 3,817  |
| Private Settled                   | 59,844  | 3,284            | 3,864   | 11,009 | 3,648     | 5,950    | 3,704  |
| Institutional                     | 938.00  | 412.00           | 58.00   | 167.00 | 63/00     | 94.00    | 58.00  |
| Private Unsettled                 | 211.41  | 0.27             | 1.29    | 0.18   | 36.31     | 3.59     | 55.00  |
| Housing Units ('000) <sup>b</sup> | 10,770  |                  |         |        |           |          |        |
| Urban Units                       | 6,914   |                  |         |        |           |          |        |
| Rural Units                       | 3,856   |                  |         |        |           |          |        |
| Households ('000)                 | 12,398  | 695.00           | 889.00  | 2,596  | 645.00    | 1,283    | 755.00 |
| Urban Households                  | 7,949   | 446.00           | 670.00  | 2,227  | 736.00    | 425.00   | 448.00 |
| Rural Households                  | 4,410   | 249.00           | 218.00  | 369.00 | 547.00    | 214.00   | 297.00 |
| Unsettled Households              | 38.94   | 0.05             | 0.25    | 0.12   | 0.65      | 6.26     | 9.81   |
| Urban with Piped Water (%)        | 98.59   | 95.69            | 99.86   | 99.85  | 99.40     | 99.74    | 99.57  |
| Urban Average Prices per Sq. Mt.  |         |                  |         |        |           |          |        |
| Land (RI m) <sup>c</sup>          |         | 0.66             | 1.03    | 1.89   | 0.60      | 0.78     | 0.82   |
| Built Area (RI m) <sup>d</sup>    |         | 0.94             | 1.14    | 2.25   | 0.89      | 0.92     | 1.04   |
| Monthly Rent IRR th <sup>e</sup>  |         | 4.34             | 3.68    | 7.60   | 3.96      | 3.96     | 4.11   |
| Deposits IRR th <sup>e</sup>      |         | 49.08            | 81.80   | 195.08 | 72.86     | 57.92    | 93.48  |
| Construction IRR th <sup>f</sup>  | 613.81  | 517.42           | 540.59  | 591.50 | 692.68    | 609.44   | 704.00 |
| CPI <sup>g</sup>                  | 159.70  | 160.30           | 153.10  | 159.60 | 166.10    | 159.90   | 158.20 |
| Urban Av. Annual Income (RI m)    | 22.39   | 19.70            | 19.62   | 30.71  | 22.46     | 18.11    | 25.58  |
| Urban Av. Annual Gross            | 25.31   | 22.20            | 20.23   | 32.79  | 21.41     | 19.64    | 23.16  |
| Household Expenditure             |         |                  |         |        |           |          |        |
| Nonfood (RI m)                    | 18.50   | 16.21            | 14.58   | 25.33  | 13.68     | 13.24    | 16.52  |
| Food, Beverages, Tobacco (RI m)   | 6.81    | 5.99             | 5.65    | 7.47   | 7.73      | 6.40     | 6.64   |
| Of which Housing                  | 7.60    | 6.78             | 5.92    | 12.66  | 5.07      | 5.55     | 7.57   |
| Rents (RI m) <sup>h</sup>         | 6.75    | 5.74             | 5.08    | 11.88  | 4.33      | 4.82     | 6.62   |
| Water, fuel, light (RI m)         | 0.85    | 1.04             | 0.84    | 0.79   | 0.74      | 0.73     | 0.95   |
| Av. Size of Household             | 4.79    |                  |         |        |           |          |        |

 Table A1-24.
 Statistical Summary for Selected Regions, 2001

a. 2002 population was estimated as 64.9 million; 41.9 million in urban areas and 23 million in rural areas.

b. In 1997. Estimates for 2001 reach 12.2 million.
c. For dilapidated residential buildings transacted by real estate agents.

d. For housing units transacted by real estate agents e. Agreed in contracts completed by real estate agents.

f. Net built area. Informal evidence says that provision of water, electricity, wastewater, etc to site during construction is about 300,000/sq. m.

g. 1998=100.

h. Rents and rental value of owner occupied housing, repair and maintenance.

Sources: 1997 Census; Iran Statistical Yearbook 1379 (March 2000–March 2001); Household Survey 1379; Provided by MOH (population and Housing Indicators 1976-2002).

| Province     | 1996–97     |                    | 199         | 1997–98       |               | 1998–99    |            | 1999–2000  |            | 2000-01  |  |
|--------------|-------------|--------------------|-------------|---------------|---------------|------------|------------|------------|------------|----------|--|
|              | Av.         | Price to           | Av.         | Price to      | Av.           | Price to   | Av.        | Price to   | Av.        | Price to |  |
|              | house       | income             | house       | income        | house         | income     | house      | income     | house      | income   |  |
|              | price       | ratio <sup>a</sup> | price       | ratio         | price         | ratio      | price      | ratio      | price      | ratio    |  |
| Tehran       | 145         | 9.7                | 148         | 8.1           | 150           | 6.5        | 165        | 5.9        | 218        | 6.6      |  |
| Esfahan      | 92          | 10.9               | 108         | 10.1          | 130           | 9.2        | 143        | 8.2        | 171        | 8.4      |  |
| Shiraz       | 87          | 7.7                | 101         | 6.8           | 104           | 6.3        | 117        | 5.6        | 153        | 6.6      |  |
| Mashad       | 52          | 5.5                | 61          | 5.4           | 76            | 5.2        | 81         | 4.1        | 146        | 7.1      |  |
| Tabriz       | 59          | 6.5                | 67          | 5.8           | 75            | 5.1        | 84         | 4.6        | 111        | 5        |  |
| Ahvaz        | 49          | 4.2                | 54          | 4.1           | 61            | 3.8        | 74         | 4.1        | 102        | 4.8      |  |
| a. Household | l expenditu | re is used as p    | roxy for ho | usehold incom | me, for all y | /ears.     |            |            |            |          |  |
| Source: St   | tatistical  | Center of I        | ran, The    | Results of    | Statistics    | from the P | rice of La | and and Ho | ousing, 19 | 96-      |  |

 Table A1-25.
 Affordability of Housing in Selected Provinces (RI millions)

*Source:* Statistical Center of Iran, The Results of Statistics from the Price of Land and Housing, 1996–2000. Statistical Center of Iran, The Results of Statistics from the Expenditure and Income of the Urban Households, 1996–2000.

| Table A1-26. | Household Expenditure and | <b>Unemployment Rate</b> | e in Selected | Provinces, 2000–01 |
|--------------|---------------------------|--------------------------|---------------|--------------------|
|--------------|---------------------------|--------------------------|---------------|--------------------|

| Province         | Average<br>expenditure<br>(PL m) | Housing<br>expenditure<br>(PL m) | Unemployment<br>rate (percent) | Price index<br>(1996/7 base | Average expenditure<br>to average national |
|------------------|----------------------------------|----------------------------------|--------------------------------|-----------------------------|--|
|                  |                                  | (KI III)                         |                                | year)                       | price                                      |
| Country          | 24.1                             | 7.6                              | 13.86                          | 645                         | 24.1                                       |
| Tehran           | 32.7                             | 12.6                             | 12.19                          | 635                         | 33.2                                       |
| Esfahan          | 20.2                             | 5.9                              | 13.87                          | 674                         | 19.3                                       |
| Fars             | 23.1                             | 7.6                              | 15.8                           | 689                         | 21.6                                       |
| Khorasan         | 11.6                             | 5.5                              | 13.64                          | 658                         | 11.3                                       |
| West Azer        | 22.2                             | 6.7                              | 8.75                           | 673                         | 21.2                                       |
| Khouzestan       | 21.4                             | 5.1                              | 19.8                           | 658                         | 20.9                                       |
| a. The average e | xpenditure to national           | l price is obtained by           | dividing the average ex        | penditure of each provi     | nce by the relative prices of              |
| the province. Th | e relative price in the          | province is estimated            | l by dividing the price i      | ndex in the province by     | the price index in the                     |
| country.         |                                  |                                  |                                |                             |  |

*Source:* Statistical Center of Iran, The Results of the Statistics from Expenditure and income of the Urban Households of the Country, 2000

| Province/Decile         | Average | First | Second | Third | Fourth | Fifth | Sixth | Seventh | Eighth | Ninth | Tenth |
|-------------------------|---------|-------|--------|-------|--------|-------|-------|---------|--------|-------|-------|
| Tehran <sup>a</sup>     |         |       |        |       |        |       |       |         |        |       |       |
| Total                   | 32.8    | 6.8   | 13.4   | 17    | 21.3   | 23.2  | 30.5  | 33.1    | 61     | 63    | 82    |
| expenditure (RI         |         |       |        |       |        |       |       |         |        |       |       |
| m)                      |         |       |        |       |        |       |       |         |        |       |       |
| Housing                 | 11.5    | 2.9   | 5.4    | 6.4   | 8      | 8.7   | 11    | 12      | 20     | 22    | 24    |
| expenditure (RI         |         |       |        |       |        |       |       |         |        |       |       |
| m)                      |         |       |        |       |        |       |       |         |        |       |       |
| Housing                 | 61      | 15    | 28     | 34    | 42     | 46    | 58    | 64      | 106    | 118   | 153   |
| purchasing              |         |       |        |       |        |       |       |         |        |       |       |
| power (m <sup>2</sup> ) |         |       |        |       |        |       |       |         |        |       |       |
| % of rental             | 24      | 31    | 34     | 36    | 30     | 21    | 19    | 20      | 18     | 16    | 12    |
| units                   |         |       |        |       |        |       |       |         |        |       |       |
| % of durable            | 93      | 86    | 85     | 89    | 90     | 94    | 95    | 96      | 94     | 98    | 99    |
| housing units           |         |       |        |       |        |       |       |         |        |       |       |
| Esfahan <sup>b</sup>    |         |       |        |       |        |       |       |         |        |       |       |
| Total                   | 20.2    | 4.1   | 8.2    | 11    | 13.5   | 15.2  | 18    | 21      | 26     | 35    | 68    |
| expenditure (RI         |         |       |        |       |        |       |       |         |        |       |       |
| m)                      |         |       |        |       |        |       |       |         |        |       |       |
| Housing                 | 5.9     | 1.5   | 3.2    | 4     | 4.8    | 5.2   | 5.7   | 6       | 7      | 8.7   | 16    |
| expenditure (RI         |         |       |        |       |        |       |       |         |        |       |       |
| m)                      |         |       |        |       |        |       |       |         |        |       |       |
| Housing                 | 65      | 16    | 35     | 44    | 53     | 58    | 63    | 66      | 77     | 96    | 175   |
| purchasing              |         |       |        |       |        |       |       |         |        |       |       |
| power (m <sup>2</sup> ) |         |       |        |       |        |       |       |         |        |       |       |
| % of rental             | 19      | 32    | 30     | 27    | 28     | 23    | 20    | 16      | 14     | 13    | 10    |
| units                   |         |       |        |       |        |       |       |         |        |       |       |
| Fars <sup>c</sup>       |         |       |        |       |        |       |       |         |        |       |       |
| Total                   | 23      | 4.6   | 8.1    | 11.2  | 14     | 16.5  | 21    | 24      | 28     | 34    | 69    |
| expenditure (RI         |         |       |        |       |        |       |       |         |        |       |       |
| m)                      |         |       |        |       |        |       |       |         |        |       |       |
| Housing                 | 7.5     | 1.7   | 3.4    | 4.8   | 6.1    | 6.9   | 7.4   | 7.8     | 8.1    | 9     | 20    |
| expenditure (RI         |         |       |        |       |        |       |       |         |        |       |       |
| m)                      |         |       |        |       |        |       |       |         |        |       |       |
| Housing                 | 79      | 18    | 36     | 50    | 64     | 72    | 78    | 82      | 85     | 94    | 210   |
| purchasing              |         |       |        |       |        |       |       |         |        |       |       |
| power (m <sup>2</sup> ) |         |       |        |       |        |       |       |         |        |       |       |
| % of rental             |         |       |        |       |        |       |       |         |        |       |       |
| units                   |         |       |        |       |        |       |       |         |        |       |       |

| Table A1-27. | Housing Condition in the Urban Areas of Selected Provinces by Income Group |
|--------------|--|
|--------------|--|

a. Rent price per m<sup>2</sup>/month: IRR 15,633. b. Rent price per m<sup>2</sup>/month: IRR 7,600 . c. Rent price per m<sup>2</sup>/month: IRR 7,907. (4) Housing expenditure figures are converted into housing purchasing power (m<sup>2</sup>) using the rent price per m<sup>2</sup> per month. Because actual rental rates vary significantly from decile to decile, housing purchasing power (m<sup>2</sup>) may vary.

Source: Statistical Center of Iran, "The Results of Statistics from the Expenditure and Income of the Urban Households of Esfahan (Tehran and Fars produced separately) Province, Year 2000," unpublished.

### Annex 1.4. The Development Plans

#### The First and Second Five-Year Development Plans

One objective of the Second FYDP was the mass production of housing. The implementing agencies included civil organizations such as the municipalities, cooperatives, and nonprofits including Bonyad, Mostazafan, and Janbazan, and other public institutions. It was intended that the government would pay only 20 percent of the total investment.<sup>217</sup> The reluctance of the implementing agencies to respond caused the Ministry of Housing and Urban Development (MHUD) to intervene by building a considerable number of small dwellings throughout the country. It is understood that MHUD tried to launch the scheme in 1999 by building a large number of small dwellings, some of which are already occupied. A recent significant rise in mass-produced housing in Tehran has been associated with the unification of the exchange rate and the stagnation of durable goods and gold markets.<sup>218</sup>

#### The Third Five-Year Development Plan

The overall objective of the Third FYDP is to increase housing supply and to encourage mass production of smaller housing units (see Table A1-28). In addition, the plan aims at increasing the share of rentals to at least 15 percent of new annual production and reducing the rate of demolition.

| Issue  | Large cities | Small cities (200,000- | Urban | Rural |  |  |  |
|--|--------------|------------------------|-------|-------|--|--|--|
|  | (>1m people) | 1m people)             | areas | areas |  |  |  |
| Maximum built area (m <sup>2</sup> )                           | 85           | 100                    |       |       |  |  |  |
| Land/capita (m <sup>2</sup> ) 30 60                            |              |                        |       |       |  |  |  |
| Source: The Third Housing Development Plan, Tehran: MHUD, 2000 |              |                        |       |       |  |  |  |

 Table A1-28.
 Key features of the Third FYDP

The four strategic objectives considered in this plan are:

- To establish investment security at a macro scale and in housing mass production in order to absorb domestic and foreign capital, in tandem with the adoption of desirable technology and the development of a professional and efficient construction industry
- To support the builders of small-size housing units with emphasis on housing complexes and mass production, by encouraging the formation of professional associations and financial institutions that can provide housing for the low-income group, the vulnerable, and the residents of rural areas.
- To establish coordination between (a) taxation policies and subsidies and (b) policies and terms and conditions of housing supply and demand. In addition, a linked objective is the promotion of insurance for housing units.

<sup>&</sup>lt;sup>217</sup> Mr. Fardanesh, Satisfactorily Small, October 2001

<sup>&</sup>lt;sup>218</sup> Minoo Rafiee, Housing Mass-Production in Tehran: For Whom Do They Build?

• To reduce government control and at the same time strengthen local powers (provincial agencies and municipalities) to participate in housing planning management, urban land market management (including lands that belong to the government), promoting the concept of rental housing and strengthening and completing the chain of housing cooperatives.

#### Conclusions

The quantitative targets of the current housing plan, shown in Table A1-29, are broken down by rural/urban and type of unit (i.e., rent-to-own or for sale).<sup>219</sup> The plan is extremely ambitious, and although it is quite likely that the overall targets will be met, the individual targets are another matter. Again, this will likely result in an oversupply of housing for the middle- and high-income groups and an undersupply of affordable housing for the poor.

Although suitable in theory, the plan may be fraught with practical difficulties. Unless properly implemented (i.e., supply constraints must be addressed in tandem), these housing policies may feed into speculative demand and result in even greater misallocations of housing along income lines. Legal and banking regulations make it difficult for low-income groups, which live in informal settlements, to gain access to financing. Gains are likely to be accrued by mass-housing suppliers and by middle- and high-income speculators.

<sup>&</sup>lt;sup>219</sup> The plan has assumed a target annual rate of demolition, depreciation and renovation of 1.69 percent in the whole country, of 1 percent in urban areas and of 3.3 percent in rural areas. The annual household rate of growth of the total country during the period of the plan was assumed as 2.8 percent.

| Plan   | Year          | Description | Total       | Rural       | Urban              | Rural built area | Urban av. built area |
|--------|---------------|-------------|-------------|-------------|--------------------|------------------|----------------------|
|        |               |             | residential | residential | residential units  | (million sq m)   | (million sq m)       |
|        |               |             | units (th)  | units (th)  | (th)               |                  |                      |
| First  | 1989–90       | Planned     |             |             | 292                | 39               | 97                   |
|        |               | Actual      | 279         | 93          | 186                | 29               | 155                  |
|        | 1990–91       | Planned     |             |             | 307                | 30               | 97                   |
|        |               | Actual      | 226         | 75          | 151                | 24               | 157                  |
|        | 1991–92       | Planned     |             |             | 315                | 31               | 97                   |
|        |               | Actual      | 337         | 112         | 225                | 36               | 150                  |
|        | 1992–93       | Planned     |             |             | 328                | 22               | 96                   |
|        |               | Actual      | 430         | 143         | 287                | 43               | 144                  |
|        | 1993–94       | Planned     |             |             | 340                | 32               | 94                   |
|        |               | Actual      | 451         | 157         | 314                | 43               | 137                  |
|        | Total 1989-94 | Planned     |             |             | 1,582              | 152              | 96                   |
|        |               | Actual      | 1,723       | 580         | 1,173              | 175              | 147                  |
| Second | 1994–95       | Planned     | 397         | 127         | 270                | 32               | 120                  |
|        |               | Actual      | 451         | 157         | 314                | 43               | 127                  |
|        | 1995–96       | Actual      | 447         | 156         | 291                | 32.5             | 112                  |
|        |               | Actual      | 510         | 170         | 340                | 44               | 130                  |
|        | 1996–97       | Planned     | 505         | 195         | 310                | 33               | 108                  |
|        |               | Actual      | 471         | 157         | 314                | -                | 127                  |
|        | 1997–98       | Planned     | 579         | 249         | 330                | 33.9             | 103                  |
|        |               | Actual      | 424         | 141         | 283                | 34.8             | 123                  |
|        | 1998–99       | Planned     | 663         | 311         | 352                | 34               | 97                   |
|        |               | Actual      | 429         | 143         | 286                | 31.4             | 132                  |
|        | Total 1994-99 | Planned     | 2,696       | 1,037       | 1,659              | 169.5            | 107                  |
|        |               | Actual      | 2,290       | 763         | 1,537 <sup>a</sup> | 188.2            | 123 <sup>b</sup>     |
| Third  | 1999–2000     | Planned     | 510         | 170         | 376 <sup>c</sup>   | 35.7             | 97                   |
|        |               | Actual      | 456         | 152         | 304                | 38               | 127                  |
|        | 2000-01       | Planned     | 560         | 180         | 380                |                  |                      |
|        |               | Actual      | 510         | 170         | 340                |                  |                      |
|        | 2001-02       | Planned     | 620         | 190         | 430                |                  |                      |
|        |               | Actual      |             |             | 430                |                  |                      |

 Table A1-29.
 Evaluation of the First and Second FYDPs, and Initial Years of the Third FYDP

Totals may not add up due to rounding. Urban numbers are obtained from the Central Bank Completions Report. This report is based on information collected for the annual survey of GDP and value added. Rural numbers are very rough and are compiled by the MOH based on reports by the municipalities. As a rule of thumb, rural housing is 50 percent of urban housing but it is difficult to verify. a. Includes both formal and informal housing (based on reports by the Central Bank of Iran).

b. Only formal housing—actual average may be lower if informal housing is included.

c. Inconsistent number of 340,000 units vs. 376,000.

*Source:* Documents of the Third Development Plan in Housing Sector: *Report No. 1, Assessment of First and Second Dev. Plans*, pp. 13–16, 29–36. MOH, Planning Bureau, Population and Housing Indicators, 1976–2002; MUD, Second Five-Year Plan Economic, Social, Cultural Housing Sector.

|                                  | Base Budget for the Third Housing Development Total Annual |             |          |        |        |        | Annual  |          |
|----------------------------------|--|-------------|----------|--------|--------|--------|---------|----------|
| Quantitative Indicator           | Year   |             | Plan     |        |        |        | Year    | Growth   |
|                                  | 1998–99  | 1999–0      | 2000-1   | 2001-2 | 2002-3 | 2003-4 | 1999–4  | Rate (%) |
| Urban rent-to-own units          | 15   | 16          | 17       | 18     | 19     | 20     |         | -        |
| built/total units (%)            |  |             |          |        |        |        |         |          |
| Units built for sale/total       | 12   | 14          | 16       | 18     | 21     | 24     |         | -        |
| units (%)                        |  |             |          |        |        |        |         |          |
| Housing Production               |  |             |          |        |        |        |         |          |
| ('000 units)                     | 304  | 340         | 380      | 430    | 480    | 520    | 2,160   | 11.7     |
| - Urban                          | 160  | 170         | 180      | 190    | 200    | 214    | 954     | 5        |
| - Rural                          | 464  | 510         | 560      | 620    | 680    | 744    | 3,114   | 9.1      |
| - Total                          |  |             |          |        |        |        |         |          |
| Built Area (Sq. Mt.)             |  |             |          |        |        |        |         |          |
| - Urban                          | 33.4   | 37.4        | 41.04    | 45.2   | 49.4   | 53     | 226.1   | 9.7      |
| - Rural                          | 11.2   | 12.2        | 13.3     | 14.6   | 15.6   | 17.1   | 72.6    | 8.8      |
| - Total                          | 44.6   | 49.6        | 54.3     | 59.6   | 65     | 70.7   | 298.6   | 9.1      |
| Housing Units = 100 sq           | 122  | 146         | 175      | 211    | 250    | 292    | 1,074   | 19.1     |
| m/unit (thou units)              |  |             |          |        |        |        |         |          |
| Urban rent-to-own units          | 41.4   | 54.4        | 64.6     | 77.4   | 91.2   | 106.8  | 393.6   | 18.4     |
| built (thou units)               |  |             |          |        |        |        |         |          |
| Units built for sale (thou       | 36.5   | 47.6        | 60.8     | 77.4   | 100.8  | 127.2  | 413.8   | 28.4     |
| units)                           |  |             |          |        |        |        |         |          |
| Investment (RI b)                |  |             |          |        |        |        |         |          |
| - Urban (constant                | 16,700   | 18,700      | 20,520   | 22,600 | 24,700 | 26,500 | 113,020 | 9.7      |
| prices)                          | 4,480  | 4,880       | 5,320    | 5,760  | 6,240  | 6,840  | 29,040  | 8.8      |
| - Rural (constant                | 21,180   | 23,580      | 25,840   | 28,360 | 30,940 | 33,400 | 142,060 | 9.5      |
| prices)                          | 21,180   | 26,407      | 35,478   | 43,277 | 51,546 | 59,879 | 216,587 | 23.1     |
| - Total (constant                |  |             |          |        |        |        |         |          |
| prices)                          |  |             |          |        |        |        |         |          |
| - Total (current                 |  |             |          |        |        |        |         |          |
| prices)                          |  |             |          |        |        |        |         |          |
| Totals may not add up due top ro | unding.  |             | MILLER   | 2000   |        |        |         |          |
| <i>Source:</i> Inita Housing De  | velopment P  | ian, Tenrai | 1: MHUD, | 2000   |        |        |         |          |

 Table A1-30.
 Quantitative Objectives of the Third FYDP

Source: Third Housing Development Plan, Tehran: MHUD, 2000

| Title                    | 19                | 996              | 19             | 97              | 19               | 998                | 19              | 999       |        |        |        |        |        |
|--------------------------|-------------------|------------------|----------------|-----------------|------------------|--------------------|-----------------|-----------|--------|--------|--------|--------|--------|
|                          | Approved          | Performed        | Approved       | Performed       | Approved         | Performed          | Approved        | Performed | 2000   | 2001   | 2002   | 2003   | 2004   |
|                          |                   |                  |                |                 |                  |                    |                 |           |        |        |        |        |        |
| Total                    | 6,443             | 1,613            | 6,606          | 17,000          | 6,725            | 22,475             | 7,114           | 26,475    | 26,306 | 35,478 | 43,277 | 51,546 | 59,879 |
| investment               |                   |                  |                |                 |                  |                    |                 |           |        |        |        |        |        |
| By                       | 425               | 399              | 495            | 1,122           | 560              | 1,391              | 750             | 1,623     | 1,503  | 1,944  | 2,338  | 2,767  | 3,215  |
| government               |                   |                  |                |                 |                  |                    |                 |           |        |        |        |        |        |
| Development              | 68                | 64               | 81             | 183             | 91               | 227                | 103             | 564       | 447    | 525    | 607    | 705    | 820    |
| credits                  |                   |                  |                |                 |                  |                    |                 |           |        |        |        |        |        |
| Government               | 357               | 335              | 414            | 939             | 469              | 1,164              | 647             | 1,059     | 1,056  | 1,419  | 1,731  | 2,062  | 2,395  |
| companies <sup>a</sup>   |                   |                  |                |                 |                  |                    |                 |           |        |        |        |        |        |
| By non-                  | 6,018             | 1,214            | 6,111          | 15,878          | 6,166            | 21,084             | 6,362           | 24,853    | 24,803 | 33,534 | 40,939 | 48,779 | 56,664 |
| governmental             |                   |                  |                |                 |                  |                    |                 |           |        |        |        |        |        |
| sector                   |                   |                  |                |                 |                  |                    |                 |           |        |        |        |        |        |
| Private                  | 4,213             | 850              | 4,278          | 11,115          | 4,316            | 14,759             | 4,453           | 17,398    | 17,395 | 23,547 | 28,807 | 34,442 | 40,435 |
| Cooperative              | 1,203             | 243              | 1,222          | 3,175           | 1,233            | 4,216              | 1,272           | 4,970     | 4,939  | 6,658  | 8,088  | 9,558  | 10,819 |
| Public                   | 602               | 121              | 611            | 1,588           | 616              | 2,108              | 636             | 2,485     | 2,469  | 3,329  | 4,044  | 4,779  | 5,410  |
| foundations <sup>2</sup> |                   |                  |                |                 |                  |                    |                 |           | ·      |        |        |        |        |
| Note: Totals may r       | not add due to re | ounding.         |                |                 |                  |                    |                 |           |        |        |        |        |        |
| a. This includes, fo     | or example, the   | construction com | pany under the | Housing Bank. ( | 2) This includes | , for example, the | e housing found | ation.    |        |        |        |        |        |
| Source: Planni           | ng Bureau of      | the MOH.         |                |                 |                  |                    |                 |           |        |        |        |        |        |

 Table A1-31.
 Actual vs. Approved Investment Budgets in the Housing Sector (RI billion)

# Annex 1.5. Input-Output for the Housing Sector, 1991–92

| Item  | Input (Backward) | Output (Forward) |
|---|------------------|------------------|
| Wheat                                       | 0.00001          | 0.00618          |
| Rice  | 0.000001         | 0.00031          |
| Sugar beet and sugar cane                   | 0.00001          | 0.00035          |
| Other industrial crops                      | 0.00002          | 0.00049          |
| Other agricultural products                 | 0.00001          | 0.00283          |
| Livestock                                   | 0.00001          | 0.00211          |
| Poultry                                     | 0.00001          | 0.0008           |
| Various aquatics                            | 0.00001          | 0.00015          |
| Honey, silkworm seeds,                      | 0.00001          | 0.00009          |
| Lumber and saw wood                         | 0.00             | 0.0115           |
| Crude oil and gas                           | 0.00011          | 0.00285          |
| Coal  | 0.00003          | 0.01221          |
| Iron ore                                    | 0.00008          | 0.00849          |
| Copper ore                                  | 0.00001          | 0.00159          |
| Building stones                             | 0.00005          | 0.01405          |
| Non-metallic mineral products               | 0.00018          | 0.00204          |
| Dairy products                              | 0.00003          | 0.00146          |
| Sugar                                       | 0.00004          | 0.00126          |
| Vegetable oil and fat                       | 0.00004          | 0.00079          |
| Poultry and livestock food                  | 0.00005          | 0.00008          |
| Tobacco products                            | 0.00003          | 0.00003          |
| Other food-stuff                            | 0.00005          | 0.00251          |
| Paper and paperboard                        | 0.00048          | 0.00452          |
| Print and publish                           | 0.00027          | 0.0011           |
| Articles of paper and paperboard            | 0.00034          | 0.00493          |
| Turnery                                     | 0.00008          | 0.03217          |
| Wood products                               | 0.00064          | 0.01807          |
| Cement                                      | 0.00008          | 0.01861          |
| Glass and glassware                         | 0.0001           | 0.00302          |
| Other non-metallic mineral products         | 0.00014          | 0.0849           |
| Textiles                                    | 0.00009          | 0.00517          |
| Rug and Carpet                              | 0.00005          | 0.00163          |
| Clothing                                    | 0.00031          | 0.00151          |
| Footwear and leather products               | 0.00013          | 0.00075          |
| Chemical fertilizers and pesticides         | 0.00036          | 0.00043          |
| Plastic products and synthetic fibers       | 0.00017          | 0.00687          |
| Medicine and pharmaceutical products        | 0.00021          | 0.00076          |
| Oil products                                | 0.00004          | 0.02733          |
| Rubber and plastic products                 | 0.00015          | 0.00979          |
| Other chemical substances                   | 0.000018         | 0.0185           |
| Steel and steelworks                        | 0.00009          | 0.19191          |
| Copper and articles thereof                 | 0.00005          | 0.00404          |
| Aluminum and articles thereof               | 0.00016          | 0.01297          |
| Metallic articles in buildings and industry | 0.00011          | 0.04992          |
| Industrial machinery                        | 0.00025          | 0.00538          |
| Agricultural machinery                      | 0.00009          | 0.00004          |
| Radio, TV & communication equipment         | 0.00009          | 0.0008           |
| Motor vehicles                              | 0.00003          | 0.00146          |
| Other industrial articles                   | 0.00013          | 0.06716          |

| Item   | Input (Backward)       | Output (Forward)   |
|--|------------------------|--------------------|
| Electricity  | 0.00003                | 0.01344            |
| Water  | 0.00004                | 0.0167             |
| Natural gas  | 0.00004                | 0.00278            |
| Buildings under construction                               | 0.00006                | 0.00002            |
| Residential buildings                                      | 1.00007                | 1.00007            |
| Other buildings  | 0.00006                | 0.00348            |
| Trade services   | 0.00004                | 0.04477            |
| Gas & oil products distribution                            | 0.00007                | 0.00528            |
| Restaurants & cafes  | 0.00004                | 0.00398            |
| Hotels & inns  | 0.00004                | 0.00078            |
| Road & water transportation                                | 0.00028                | 0.0793             |
| Air transportation   | 0.00005                | 0.0091             |
| Transportation side services                               | 0.00008                | 0.00284            |
| Communication services                                     | 0.00011                | 0.00224            |
| Financial institutions, banks & insurance companies        | 0.00006                | 0.02273            |
| Real estate  | 0.05529                | 0.00093            |
| Business activities  | 0.00007                | 0.00637            |
| Public services  | 0.00003                | 0.00054            |
| Defense & disciplinary forces services                     | 0.00006                | 0.00               |
| Higher education & researches                              | 0.00004                | 0.00042            |
| Technical & vocational training                            | 0.00004                | 0.00001            |
| Public education   | 0.00007                | 0.00029            |
| Hospital & health care services                            | 0.00007                | 0.00036            |
| Veterinary treatments                                      | 0.00003                | 0.00001            |
| Benevolence services                                       | 0.00008                | 0.00001            |
| Religious & other social services                          | 0.00005                | 0.00004            |
| Artistic & athletic services                               | 0.00006                | 0.00018            |
| Repair services  | 0.00007                | 0.00913            |
| Other services   | 0.00003                | 0.00318            |
| Total  | 1.86182                | 1.06283            |
| Source: Statistical Center of Iran, Plan and Budget Organi | zation, "The input-out | put table of Iran, |
| 1991," Tehran, 1376 (1997).                                |                        |                    |

### **Annex 1.6.** Inflationary Prospects

Inflation is declining at present. Nevertheless, high inflation (traditionally countercyclical) remains an important characteristic of the Iranian economy.<sup>220</sup> In recent years, the suppression of imports, the reduction/elimination of some subsidies, and the depreciation of the market exchange rate have all contributed to rising prices. High inflation has also eroded wages despite the existence of a statutory minimum wage.

With estimates of current unemployment at around 14 percent,<sup>221</sup> and with inflation at 11.5 percent at end-August 2001 (at around the lowest levels for nearly a decade), a large multiplier effect of government stimuli could be expected. If so, demand stimuli would result in short-term growth without fueling inflation. This is quite likely to be the case, considering the reported growing confidence in the government.<sup>222</sup> In Iran, however, the state conducts de facto management of supply (through ownership of the oil export industry) and demand (through its control of import licenses) of foreign exchange, influencing the value of the rial. To support nonoil exporters and to conserve its foreign exchange, the government is likely to want to maintain the current exchange rate. But as foreign exchange is not widely available in Iran and there are still purchase limits per person, there is always the risk of increased inflation (i.e., to the extent that demand stimulus leads to an increase in imports).<sup>223</sup>

In addition, inflation forecasts (17.5 percent for 2002–03)<sup>224</sup> are linked to the unification of the rial at a floating exchange rate; Bank Markazi (the central bank) committed to the unification of the rial by the start of the FY2002 (March 21). Until then there were two legal exchange rates: an official rate fixed at IRR 1,750/US\$, and the floating market rate set on the Tehran Stock Exchange (TSE) trading at around IRR 7,900/US\$. To offset the inflationary impact of the abolition of the official rate,<sup>225</sup> Bank Markazi aims to use the additional revenue the government will generate by calculating its oil-export revenue at the market rate in order to make higher subsidy payments. It is not clear (not to say

<sup>225</sup> Local estimates suggest that US\$5billion worth of goods are purchased at a fixed rate; thus Iran effectively will purchase circa 30 percent of all imported goods and 20 percent of their local currency cost at market exchange rates. It is said that some SOEs and bonyads have dollar-denominated debt with Bank Markazi, which they contracted and

<sup>&</sup>lt;sup>220</sup> This cyclicality affects housing supply. After a downturn in housing supply in 1989–90, there has been a relative boom until 1997–98, when reduced supply by both government and private sector took place (see documents of the Third FYDP in Housing Sector, *Report No. 1, Assessment of First and Second FYDP*. It claims that a boom started in 1991 with increased production by the public sector, continued in 1995–96 by the private sector.)

 <sup>&</sup>lt;sup>221</sup> The Management and Planning Organization (MPO) estimated unemployment as 14.3 percent for 2000–01 and 13.8 percent for 2001–02.
 <sup>222</sup> Therefore, estimations of multiplier effects of government spending will not overestimate the stimulus and on the

 <sup>&</sup>lt;sup>222</sup> Therefore, estimations of multiplier effects of government spending will not overestimate the stimulus and on the contrary, lead to acceptable results.
 <sup>223</sup> Accelerating liquidity growth (M2) confirms that there are strong domestic inflationary pressures driven mainly by

<sup>&</sup>lt;sup>223</sup> Accelerating liquidity growth (M2) confirms that there are strong domestic inflationary pressures driven mainly by bank lending to the public sector, in particular loss-making state-owned enterprises (SOEs). The Economist Intelligence Unit deems this to be partly offset by bond issues (both by the government itself and by quasi-state enterprises). These issues have become attractive to Iranians, as they offer an annual 17 percent over a four-year term. <sup>224</sup> Country Report Iran, The Economist Intelligence Unit, 2002.

is said that some SOEs and bonyads have dollar-denominated debt with Bank Markazi, which they contracted and currently service at the overvalued official rate and which they will be unable to fund if all transactions are conducted at the market rate. It is also quite likely that other firms (e.g., in the construction materials sectors) purchase goods and raw materials at heavily subsidized prices through the overvalued official rate, and would be forced to drastically increase prices when unification occurs.

somewhat contradictory) how this compares with the plans to replace subsidies with targeted welfare.

In general, use of the Tehran Stock Exchange (TSE) rate introduced in 1995 has risen dramatically. The rate is relatively stable as of mid-2001 at close to IRR 8,000/US\$ (mainly due to the rate management by Bank Markazi through the supply of oil-revenue foreign exchange to the market). Despite this, informal evidence suggests that the black market continues to pursue operations in hard currencies.

## **ANNEXES – CHAPTER 2**

| Year       | Area of Residential public           | Total area supplied  | Share of total |
|------------|--------------------------------------|----------------------|----------------|
|            | land supplied (1000 m <sup>2</sup> ) | $(1000 \text{ m}^2)$ | land (%)       |
| 1971-72    | 0                                    | NA                   | 0.00           |
| 1972-73    | 0                                    | NA                   | 0.00           |
| 1973-74    | 0                                    | NA                   | 0.00           |
| 1974-75    | 0                                    | NA                   | 0.00           |
| 1975-76    | 300                                  | 3,000,000            | 0.01           |
| 1976-77    | 900                                  | 4,500,000            | 0.02           |
| 1977-78    | 500                                  | 1,250,000            | 0.04           |
| 1978-79    | 1,000                                | 1,666,667            | 0.06           |
| 1979-80    | 20                                   | 40,000               | 0.05           |
| 1980-81    | 2,500                                | 416,667              | 0.60           |
| 1981-82    | 9,200                                | 34,074               | 27.00          |
| 1982-83    | 2,300                                | 28,750               | 8.00           |
| 1983-84    | 15,400                               | 29,057               | 53.00          |
| 1984-85    | 22,800                               | 45,600               | 50.00          |
| 1985-86    | 17,300                               | 38,444               | 45.00          |
| 1986-87    | 15,600                               | 32,500               | 48.00          |
| 1987-88    | 12,300                               | 24,600               | 50.00          |
| 1988-89    | 10,000                               | 20,000               | 50.00          |
| 1989-90    | 13,200                               | 20,625               | 64.00          |
| 1990-91    | 17,400                               | 20,471               | 85.00          |
| 1991-92    | 28,700                               | 34,167               | 84.00          |
| 1992-93    | 28,700                               | 34,167               | 84.00          |
| 1993-94    | 43,300                               | 81,698               | 53.00          |
| 1994-95    | 18,300                               | 35,882               | 51.00          |
| 1995-96    | 25,200                               | 27,391               | 92.00          |
| 1996-97    | 18,800                               | 31,333               | 60.00          |
| 1997-98    | 13,200                               | 28,696               | 46.00          |
| 1998-99    | 8,990                                | 42,810               | 21.00          |
| 1999-00    | 11,273                               |                      |                |
| 2000-01    | 14,122                               |                      |                |
| 2001-02    | 5,711                                |                      |                |
| Source: MI | HUD Database                         |                      |                |

Table A2-3. Allocation of Public Land for Residential Use

| Year       | Allocation $(1000 \text{ m}^2)$ | Revenue (Rls 1.000) | Revenue ( $Rls/m^2$ ) |  |  |  |  |
|------------|---------------------------------|---------------------|-----------------------|--|--|--|--|
| 1979/80    | 18                              | 2,587,015           | 143,723               |  |  |  |  |
| 1980/81    | 4,666                           | 2,587,015           | 554                   |  |  |  |  |
| 1981/82    | 10,930                          | 2,587,015           | 237                   |  |  |  |  |
| 1982/83    | 3,110                           | 2,587,015           | 832                   |  |  |  |  |
| 1983/84    | 20,898                          | 13,292,289          | 636                   |  |  |  |  |
| 1984/85    | 26,114                          | 14,718,087          | 564                   |  |  |  |  |
| 1985/86    | 20,941                          | 19,068,615          | 911                   |  |  |  |  |
| 1986/87    | 19,495                          | 14,617,440          | 750                   |  |  |  |  |
| 1987/88    | 18,027                          | 15,524,883          | 861                   |  |  |  |  |
| 1988/89    | 16,777                          | 15,900,425          | 948                   |  |  |  |  |
| 1989/90    | 15,702                          | 19,957,422          | 1,271                 |  |  |  |  |
| 1990/91    | 31,231                          | 32,862,338          | 1,052                 |  |  |  |  |
| 1991/92    | 55,799                          | 43,413,640          | 778                   |  |  |  |  |
| 1992/93    | 88,903                          | 61,264,870          | 689                   |  |  |  |  |
| 1993/94    | 78,456                          | 82,453,332          | 1,051                 |  |  |  |  |
| 1994/95    | 42,092                          | 61,459,319          | 1,460                 |  |  |  |  |
| 1995/96    | 49,261                          | 197,888,260         | 4,017                 |  |  |  |  |
| 1996/97    | 69,347                          | 223,814,084         | 3,227                 |  |  |  |  |
| 1997/98    | 28,346                          | 146,707,316         | 5,176                 |  |  |  |  |
| 1998/99    | 31,841                          | 262,446,301         | 8,242                 |  |  |  |  |
| 1999/00    | 44,665                          | 366,798,514         | 8,212                 |  |  |  |  |
| 2000/01    | 60,920                          | 408,670,598         | 6,708                 |  |  |  |  |
| Total      | 737,539                         | 2,009,205,593       | 2,724                 |  |  |  |  |
| Source: MH | Source: MHUD, NLHO Database     |                     |                       |  |  |  |  |

Table A2-4. Revenue from Total Public Land Allocation

| Year       | Land area             | Floor area            | Total cost    | Total cost of   | Cost per m <sup>2</sup> | Cost per floor | Cost per  | Share of   |
|------------|-----------------------|-----------------------|---------------|-----------------|-------------------------|----------------|-----------|------------|
|            | $(1,000 \text{ m}^2)$ | $(1,000 \text{ m}^2)$ | of land       | floor area (IRR | of land                 | area           | unit (IRR | land in    |
|            |                       |                       |               | million)        | (1,000 IRR)             | (1,000 IRR)    | million)  | total cost |
| 1971-72    | 11,482                | 9,871                 | 22,964        | 40,471          | 2                       | 4.1            | 0.8       | 36         |
| 1972-73    | 13,012                | 10,629                | 28,626        | 46,767          | 2.2                     | 4.4            | 0.9       | 37         |
| 1973-74    | 14,553                | 11,680                | 30,561        | 50,224          | 2.1                     | 4.3            | 0.96      | 38         |
| 1974-75    | 14,463                | 11,910                | 33,264        | 58,359          | 2.3                     | 4.9            | 1.14      | 36.3       |
| 1975-76    | 17,468                | 14,951                | 66,378        | 106,152         | 3.8                     | 7.1            | 1.79      | 38.4       |
| 1976-77    | 17,824                | 16,114                | 126,550       | 153,083         | 7.1                     | 9.5            | 2.7       | 45.2       |
| 1977-78    | 19,317                | 18,851                | 160,331       | 222,441         | 8.3                     | 11.8           | 3.2       | 41.8       |
| 1978-79    | 23,305                | 20,984                | 153,813       | 264,398         | 6.6                     | 12.6           | 2.7       | 36.7       |
| 1979-80    | 2,606                 | 24,686                | 99,028        | 328,323         | 3.8                     | 13.3           | 2.6       | 23         |
| 1980-81    | 23,876                | 25,782                | 126,872       | 342,109         | 3.8                     | 18             | 2.602     | 27         |
| 1981-82    | 26,370                | 19,515                | 124,714       | 302,438         | 4.7                     | 22             | 3.27      | 29.2       |
| 1982-83    | 22,994                | 16,654                | 161,780       | 320,194         | 7                       | 29             | 3.67      | 33.5       |
| 1983-84    | 21,065                | 14,760                | 271,210       | 396,995         | 12.8                    | 45             | 6.381     | 40.5       |
| 1984-85    | 29,192                | 20,991                | 451,827       | 596,012         | 15.4                    | 50             | 6.986     | 43         |
| 1985-86    | 36,012                | 25,769                | 576,192       | 1,314,219       | 16                      | 51             | 11.6      | 30.4       |
| 1986-87    | 33,762                | 23,763                | 513,182       | 1,235,676       | 15.2                    | 52             | 12        | 29.3       |
| 1987-88    | 31,797                | 22,250                | 458,345       | 715,257         | 14.4                    | 53             | 880       | 39         |
| 1988-89    | 26,284                | 19,814                | 479,035       | 752,886         | 18.2                    | 62             | 9.57      | 39         |
| 1989-90    | 22,132                | 17,810                | 542,936       | 799,144         | 24.5                    | 75             | 11.707    | 40.4       |
| 1990-91    | 17,098                | 14,640                | 653,371       | 869,923         | 38.2                    | 104            | 16.325    | 42.8       |
| 1991-92    | 23,375                | 22,309                | 2,163,382     | 1,802,989       | 92.5                    | 178            | 26.685    | 54.5       |
| 1992-93    | 27,482                | 26,333                | 3,129,613     | 2,685,971       | 113.8                   | 222            | 31.923    | 54         |
| 1993-94    | 27,732                | 26,539                | 3,140,974     | 3,916,959       | 113.2                   | 266            | 39.434    | 45         |
| 1994-95    | 28,772                | 27,578                | 3,031,800     | 3,702,973       | 128.7                   | 244            | 33.451    | 46         |
| 1995-96    | 27,583                | 29,379                | 524,440       | 5,076,587       | 188.6                   | 251            | 49.182    | 51         |
| 1996-97    | 32,146                | 29,929                | 7,585,921     | 7,929,806       | 236                     | 265            | 75.8      | 49         |
| 1997-98    | 76,752                | 193,641               | 9,080,830     | 8,814,622       | 118.3                   | 115            | 92.4      | 51         |
| 1998-99    | 37,036                | 30,425                | 9,037,891     | 12,618,320      | 244                     | 414            | 102.6     | 42         |
| 1999-00    |                       | 34,144                |               |                 |                         |                |           |            |
| 2000-01    |                       | 39,257                |               |                 |                         |                |           |            |
| Source: Ce | ntral Bank and        | d Statistical Co      | enter of Iran | 1               |                         |                |           |            |

Table A2-5. Characteristics of the cost of completed buildings in urban areas

| Period       | Year   | Total          | Non-residentia | ıl transfer | Total re       | esidential trans | sfer      | I              | Developers |         | Housin         | ng Cooperati | ves     | In             | dividuals |         |
|--------------|--------|----------------|----------------|-------------|----------------|------------------|-----------|----------------|------------|---------|----------------|--------------|---------|----------------|-----------|---------|
|              |        | m <sup>2</sup> | m <sup>2</sup> | plot        | m <sup>2</sup> | Unit             | plot      | m <sup>2</sup> | unit       | plot    | m <sup>2</sup> | unit         | plot    | m <sup>2</sup> | unit      | plot    |
| First decade | 79/0   | 18,400         | 0              | 0           | 18,400         | 61               | 61        | 0              | 0          | 0       | 0              | 0            | 0       | 18,400         | 61        | 61      |
| revolution   | 80/1   | 4,665,300      | 2,109,900      | 2,794       | 2,555,400      | 9,792            | 9,792     | 0              | 0          | 0       | 88,000         | 388          | 388     | 2,467,400      | 9,404     | 9,404   |
|              | 81/2   | 10,930,650     | 1,723,450      | 695         | 9,207,200      | 28,166           | 28,166    | 100,000        | 256        | 256     | 3,410,000      | 9,339        | 9,339   | 5,697,200      | 18,571    | 18,571  |
|              | 82/3   | 3,111,440      | 797,000        | 279         | 2,314,440      | 9,147            | 9,140     | 151,000        | 474        | 474     | 858,000        | 3,864        | 3,864   | 1,305,440      | 4,809     | 4,802   |
|              | 83/4   | 20,897,650     | 5,493,750      | 1,001       | 15,403,900     | 57,253           | 57,253    | 2,669,600      | 8,858      | 8,858   | 4,219,200      | 16,535       | 16,535  | 8,515,100      | 31,860    | 31,860  |
|              | 84/5   | 26,114,750     | 3,265,550      | 1,367       | 22,849,200     | 89,343           | 89,343    | 2,956,800      | 8,477      | 8,477   | 7,581,200      | 35,273       | 35,273  | 12,311,200     | 45,593    | 45,593  |
|              | 85/6   | 20,941,250     | 3,630,050      | 896         | 17,311,200     | 69,902           | 69,902    | 2,523,600      | 8,508      | 8,508   | 5,423,000      | 25,323       | 25,323  | 9,364,600      | 36,071    | 36,071  |
|              | 86/7   | 19,495,550     | 3,907,100      | 801         | 15,588,450     | 62,405           | 62,405    | 2,804,250      | 11,742     | 11,742  | 3,997,800      | 17,063       | 17,063  | 8,786,400      | 33,600    | 33,600  |
|              | 87/8   | 18,027,400     | 5,559,000      | 804         | 12,468,400     | 53,053           | 53,053    | 2,275,000      | 9,874      | 9,874   | 2,753,800      | 12,720       | 12,720  | 7,439,600      | 30,459    | 30,459  |
|              | 88/9   | 16,777,550     | 6,673,250      | 840         | 10,104,300     | 43,600           | 43,600    | 2,028,000      | 9,424      | 9,424   | 2,309,250      | 10,217       | 10,217  | 5,767,050      | 23,959    | 23,959  |
|              | Total  | 140,979,940    | 33,159,050     | 9,477       | 107,820,890    | 422,722          | 422,715   | 15,508,250     | 57,613     | 57,613  | 30,640,250     | 130,722      | 130,722 | 61,672,390     | 234,387   | 234,380 |
| First        | 89/0   | 15,702,464     | 4,134,197      | 694         | 11,568,267     | 52,847           | 52,833    | 2,634,025      | 12,718     | 12,718  | 2,595,433      | 13,136       | 13,122  | 6,338,809      | 26,993    | 26,993  |
| program      | 90/1   | 31,232,320     | 13,816,662     | 1,498       | 17,415,658     | 84,127           | 62,321    | 5,740,213      | 32,092     | 16,084  | 3,785,514      | 17,990       | 12,761  | 7,889,931      | 34,045    | 33,476  |
|              | 91/2   | 55,800,101     | 27,131,181     | 2,612       | 28,668,920     | 146,274          | 85,363    | 10,965,091     | 67,097     | 19,036  | 4,990,929      | 23,611       | 14,502  | 12,712,900     | 55,566    | 51,825  |
|              | 92/3   | 88,689,389     | 43,536,780     | 4,147       | 45,152,609     | 205,527          | 126,044   | 14,243,436     | 73,831     | 18,682  | 9,098,329      | 42,493       | 31,021  | 21,810,844     | 89,203    | 76,341  |
|              | 93/4   | 78,456,815     | 35,148,728     | 3,775       | 43,308,087     | 181,226          | 108,367   | 15,749,388     | 60,860     | 12,473  | 10,011,196     | 42,407       | 31,444  | 17,547,503     | 77,959    | 64,450  |
|              | Total  | 269,881,089    | 123,767,548    | 12,726      | 146,113,541    | 670,001          | 434,928   | 49,332,153     | 246,598    | 78,993  | 30,481,401     | 139,637      | 102,850 | 66,299,987     | 283,766   | 253,085 |
| Second       | 94/5   | 42,094,347     | 23,723,829     | 2,610       | 18,370,518     | 94,519           | 63,059    | 2,608,396      | 16,328     | 5,875   | 3,585,954      | 22,374       | 8,499   | 12,176,168     | 55,817    | 48,685  |
| program      | 95/6   | 49,261,812     | 23,991,904     | 6,113       | 25,269,908     | 120,701          | 70,543    | 10,141,265     | 48,497     | 13,031  | 3,829,055      | 21,432       | 12,050  | 11,299,588     | 50,772    | 45,462  |
|              | 96/7   | 69,346,606     | 50,520,491     | 3,933       | 18,826,115     | 85,244           | 61,896    | 6,134,758      | 33,297     | 15,998  | 2,551,827      | 11,331       | 8,334   | 10,139,530     | 40,616    | 37,564  |
|              | 97/8   | 27,169,434     | 13,947,588     | 2,130       | 13,221,846     | 64,788           | 42,774    | 1,813,412      | 14,289     | 5,495   | 2,499,430      | 13,753       | 6,270   | 8,909,004      | 36,746    | 31,009  |
|              | 98/9   | 29,036,875     | 20,048,493     | 1,903       | 8,988,382      | 41,022           | 29,967    | 557,235        | 4,967      | 1,868   | 1,284,694      | 6,342        | 3,446   | 7,146,453      | 29,713    | 24,653  |
|              | Total  | 215,316,901    | 130,640,132    | 16,208      | 84,676,769     | 406,274          | 268,239   | 21,255,066     | 117,378    | 42,267  | 13,750,960     | 75,232       | 38,599  | 49,670,743     | 213,664   | 187,373 |
| Third        | 99/0   | 43,426,818     | 32,153,322     | 1,963       | 11,273,496     | 44,863           | 29,388    | 1,485,338      | 11,001     | 3,836   | 2,942,695      | 6,973        | 1,537   | 6,845,463      | 26,889    | 24,015  |
|              | 00/1   | 35,823,044     | 21,701,254     | 1,973       | 14,121,790     | 39,676           | 25,863    | 1,844,609      | 8,683      | 2,616   | 1,981,450      | 8,849        | 5,806   | 10,295,731     | 22,144    | 17,441  |
|              | 01/2   | 51,165,769     | 45,454,408     | 1,968       | 5,711,361      |                  | 8,956     |                |            |         |                |              |         |                |           |         |
|              | Total  | 130,415,631    | 99,308,984     | 5,904       | 31,106,647     | 84,539           | 64,207    | 3,329,947      | 19,684     | 6,452   | 4,924,145      | 15,822       | 7,343   | 17,141,194     | 49,033    | 41,456  |
| Total        | I      | 756,593,561    | 386,875,714    | 44,315      | 369,717,847    | 1,583,536        | 1,190,089 | 89,425,416     | 441,273    | 185,325 | 79,796,756     | 361,413      | 279,514 | 194,784,314    | 780,850   | 716,294 |
| Source: MH   | UD, NL | HO Database    |                |             |                |                  |           |                |            |         |                |              |         |                |           |         |

| Period                  | Year  | Tota           | l      | Purchased      | Land   | Public La<br>(National l       | and)             | Mavat La            | ind    |
|-------------------------|-------|----------------|--------|----------------|--------|--------------------------------|------------------|---------------------|--------|
|                         |       | m <sup>2</sup> | Plots  | m <sup>2</sup> | Plots  | m <sup>2</sup>                 | Plots            | M <sup>2</sup>      | Plots  |
| First decade            | 79/0  | 2,904,000      | 714    | 0              | 0      | 15,000                         | 4                | 2,889,000           | 710    |
| of revolution           | 80/1  | 24,889,000     | 5,031  | 0              | 0      | 890,000                        | 424              | 23,999,000          | 4,607  |
|                         | 81/2  | 11,761,800     | 2,054  | 0              | 0      | 1,234,000                      | 155              | 10,527,800          | 1,899  |
|                         | 82/3  | 43,668,700     | 559    | 1,323,800      | 54     | 29,365,000                     | 132              | 12,979,900          | 373    |
|                         | 83/4  | 142,030,800    | 6,996  | 24,801,000     | 2,245  | 52,773,800                     | 1,340            | 64,456,000          | 2,411  |
|                         | 84/5  | 172,113,287    | 5,787  | 13,638,900     | 3,211  | 86,225,450                     | 748              | 72,248,937          | 2,828  |
|                         | 85/6  | 75,284,700     | 9,864  | 14,785,450     | 3,674  | 28,433,800                     | 2,525            | 32,065,450          | 3,665  |
|                         | 86/7  | 202,903,700    | 4,909  | 24,328,900     | 1,493  | 85,991,350                     | 556              | 92,583,450          | 2,860  |
|                         | 87/8  | 76,528,450     | 3,912  | 8,630,000      | 1,584  | 43,815,000                     | 285              | 24,083,450          | 2,043  |
|                         | 88/9  | 113,028,450    | 2,359  | 1,017,450      | 357    | 89,484,000                     | 228              | 22,527,000          | 1,774  |
|                         | Total | 865,112,887    | 42,185 | 88,525,500     | 12,618 | 418,227,400                    | 6,397            | 358,359,987         | 23,170 |
| First                   | 89/0  | 270,447,387    | 3,416  | 7,246,000      | 538    | 109,927,000                    | 276              | 153,274,387         | 2,602  |
| development             | 90/1  | 411,371,801    | 5,519  | 39,628,622     | 1,656  | 311,916,535                    | 624              | 59,826,644          | 3,239  |
| program                 | 91/2  | 1,411,624,326  | 13,645 | 74,871,729     | 7,643  | 1,093,453,275                  | 1,519            | 243,299,322         | 4,483  |
|                         | 92/3  | 925,834,874    | 9,879  | 222,105,812    | 4,972  | 457,661,496                    | 1,168            | 246,067,566         | 3,739  |
|                         | 93/4  | 844,932,879    | 4,403  | 21,559,184     | 825    | 346,386,066                    | 950              | 476,987,629         | 2,628  |
|                         | Total | 3,864,211,267  | 36,862 | 365,411,347    | 15,634 | 2,319,344,372                  | 4,537            | 1,179,455,548       | 16,691 |
| Second                  | 94/5  | 264,085,749    | 2,923  | 11,048,210     | 387    | 122,517,275                    | 804              | 130,520,264         | 1,732  |
| development             | 95/6  | 292,635,806    | 3,170  | 8,692,907      | 848    | 150,565,421                    | 817              | 133,377,478         | 1,505  |
| program                 | 96/7  | 585,160,167    | 4,800  | 9,646,675      | 2,494  | 428,401,793                    | 520              | 147,111,699         | 1,786  |
|                         | 97/8  | 231,952,182    | 2,218  | 3,400,435      | 651    | 170,049,196                    | 273              | 58,502,551          | 1,294  |
|                         | 98/9  | 184,628,435    | 1,467  | 3,755,408      | 412    | 126,113,402                    | 289              | 54,759,625          | 766    |
|                         | Total | 1,558,462,339  | 14,578 | 36,543,635     | 4,792  | 997,647,087                    | 2,703            | 524,271,617         | 7,083  |
| Third                   | 99/0  | 267,463,081    | 1,813  | 3,043,144      | 393    | 196,872,524                    | 756              | 67,547,413          | 664    |
| developme<br>nt program | Item  | m <sup>2</sup> | plot   | m <sup>2</sup> | plot   | Between city li<br>Periphery ( | mits and<br>(m2) | Within City<br>(m2) | Limits |
|                         | 00/1  | 261,346,360    |        | 1,142,469      |        | 185,634,4                      | 192              | 74,569,3            | 99     |
|                         | 01/2  | 312,792,493    |        |                |        | 274,832,0                      | )71              | 37,960,4            | 22     |

| Period      | Year    | Total          |        | Purchased Land |        | Public Land     |        | Mavat Land    |        |
|-------------|---------|----------------|--------|----------------|--------|-----------------|--------|---------------|--------|
|             |         |                |        |                |        | (National land) |        |               |        |
|             |         | m <sup>2</sup> | Plots  | m <sup>2</sup> | Plots  | m <sup>2</sup>  | Plots  | $M^2$         | Plots  |
|             | Total   | 841,601,934    | 1,813  | 4,185,613      | 393    | 657,339,087     | 756    | 180,077,234   | 664    |
| Total       |         | 7,129,388,427  | 95,438 | 494,666,095    | 33,437 | 4,392,557,946   | 14,393 | 2,242,164,386 | 47,608 |
| Source:MHUI | D, NLHC | Database       |        |                |        |                 |        |               |        |

| Period of time                              | Individual                                    | Cooperative | Builders | Total |  |  |  |  |  |
|---|---|-------------|----------|-------|--|--|--|--|--|
| 1979–1989                                   | 55  | 31          | 14       | 100   |  |  |  |  |  |
| First Development Plan (1988–94)            | 42  | 21          | 37       | 100   |  |  |  |  |  |
| Second Development Plan (1994–99)           | 59  | 16          | 25       | 100   |  |  |  |  |  |
| Third Development Plan (1999–2001)          | 67  | 19          | 14       | 100   |  |  |  |  |  |
| 1979–02                                     | 53  | 22          | 25       | 100   |  |  |  |  |  |
| Source: Estimated with data provided by NLH | Source: Estimated with data provided by NLHO. |             |          |       |  |  |  |  |  |

| Table A2-8  | Distribution | of urban  | land a | llocation | hy type   | of allocation | (in   | norcontagos) |
|-------------|--------------|-----------|--------|-----------|-----------|---------------|-------|--------------|
| Table A2-0. | Distribution | of urball | anu a  | nocation  | by type ( | of anocation  | (111) | percentages) |

Table A2-9. Share of Housing Cost and Transport Cost in Total Urban Household Expenditures (IRR Thousands)

|                       |                      | Average    | 1 Decile   | 2 Decile     | 3 Decile     | 4 Decile  | 5 Decile  | 6 Decile  | 7 Decile  | 8 Decile  | 9 Decile  | 10 Decile |
|-----------------------|----------------------|------------|------------|--------------|--------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| <b>1374</b><br>1995/6 | Total Expenditure    | 9,417.80   | 1,798.40   | 3,282.90     | 4,293.80     | 5,276.40  | 6,378.80  | 7,565.40  | 9,046.70  | 11,109.00 | 14,533.90 | 28,129.90 |
|                       | Housing Cost         | 2,703.80   | 759.50     | 1,227.40     | 1,537.30     | 1,859.20  | 2,125.10  | 2,438.60  | 2,868.50  | 3,388.00  | 4,071.40  | 6,105.20  |
|                       | Transport Cost       | 870.50     | 49.50      | 102.60       | 145.80       | 202.30    | 232.80    | 303.90    | 380.00    | 566.90    | 931.20    | 5,338.50  |
|                       | Share (%)            | 37.90      | 44.90      | 40.50        | 39.10        | 39.00     | 36.90     | 36.20     | 35.90     | 35.60     | 34.40     | 40.60     |
| 1379                  | Total Expenditure    | 25,305.10  | 4,941.80   | 8,721.20     | 11,473.50    | 14,082.70 | 16,654.80 | 19,569.40 | 23,344.20 | 28,557.10 | 37,497.80 | 74,579.20 |
| 2000/1                | Housing Cost         | 7,605.30   | 2,251.90   | 3,588.00     | 4,366.30     | 5,135.70  | 5,888.10  | 6,530.00  | 7,692.30  | 9,163.10  | 11,088.60 | 17,212.40 |
|                       | Transport Cost       | 2,639.00   | 141.90     | 260.30       | 388.60       | 560.90    | 666.50    | 918.50    | 1,100.50  | 1,593.80  | 2,430.40  | 15,754.80 |
|                       | Share (%)            | 40.50      | 48.40      | 44.10        | 41.40        | 40.50     | 39.40     | 38.10     | 37.70     | 37.70     | 36.00     | 44.20     |
| Source: 19            | 995/96 and 2000/01 U | rban House | hold Surve | y, Statistic | al Center of | Iran      |           |           |           |           |           |           |

|  |                   | Acquisition (m <sup>2</sup> ) |              |            | Allocation (m <sup>2</sup> ) |             |  |  |
|--|-------------------|-------------------------------|--------------|------------|------------------------------|-------------|--|--|
| Year   | Purchased         | Between Urban                 | Within Urban | Total      | Non-residential              | Residential |  |  |
|  |                   | Limit & Periphery             | Limit        |            |                              |             |  |  |
| 1995-96  | 490,252           | 3,423,830                     | 7,036,926    | 6,468,723  | 3,251,421                    | 3,217,302   |  |  |
| 1996-97  | 1,722,497         | 37,021,648                    | 8,412,108    | 22,936,725 | 18,754,345                   | 4,182,380   |  |  |
| 1997-98  | 735,152           | 11,149,756                    | 7,609,979    | 3,438,374  | 750,082                      | 2,688,292   |  |  |
| 1998-99  | 764,099           | 8,098,551                     | 9,118,243    | 4,411,678  | 2,198,308                    | 2,213,370   |  |  |
| 1999-00  | 1,240,155         | 709,374                       | 7,423,140    | 2,013,231  | 316,869                      | 1,696,362   |  |  |
| 2000-01  | 0                 | 7,375,167                     | 507,520      | 5,486,783  | 2,064,608                    | 3,422,175   |  |  |
| 2001-02  | 0                 | 15,222,718                    | 10,947,472   | 21,791,326 | 19,913,251                   | 1,878,075   |  |  |
| Total  | 4,952,155         | 83,001,044                    | 51,055,388   | 66,546,840 | 47,248,884                   | 19,297,956  |  |  |
| *Largest cities are Tehran, Tabriz, Ahwaz, Shiraz, Mashad, Esfahan |                   |                               |              |            |                              |             |  |  |
| Source: M  | <i>HUD</i> , NHLO | ) Database                    |              |            |                              |             |  |  |

 Table A2-10. NHLO Activities in Land in the 6 Largest Cities (1995-2002)\*

# **ANNEXES – CHAPTER 3**

# Annex 3.1. Description of Housing Programs in Iran

| Program  | Description  | Eligibility   | Government involvement  | Size <sup>c</sup>  |
|--|--|---|---|--|
| Savings<br>program<br>Regular<br>Housing<br>Savings Fund<br>Youth Housing<br>Saving scheme | Potential borrowers place deposit in the Bank<br>Maskan at 0 interest and for every period of<br>savings (5 to 6 months) the ratio of the loan<br>amount to the savings is increased by 1 up to<br>maximum of 7 times savings. Maximum loan<br>amount is IRR25–50 million (US\$3,125–6,250)<br>for 12–18 years at below market interest rates:<br>Loans are granted for construction or purchase<br>of newly constructed housing (first transfer of<br>ownership).<br>Additional benefits:<br>additional 2 percent subsidy on interest rate;<br>maximum loan period is 20 years. | Anybody<br>Anybody older than<br>18   | Housing Bank receives favorable<br>reserve requirements and<br>provision of additional liquidity<br>from the Central Bank on<br>favorable terms.<br>Interest rate subsidies:<br>interest rate caps at below market<br>rates (implicit)<br>additional interest rate subsidies<br>of 2 percent to youth housing | Total savings as of<br>end 2001 are<br>IRR9,486 billion<br>(US\$1.2 billion) <sup>a</sup> , in<br>1999 IRR623.5<br>billion (US\$78<br>million) were issued<br>in loans <sup>b</sup> .<br>Since 1996/97<br>government had<br>allocated in the order<br>of IRR260 billion<br>(US\$32.5 million)<br>per year for<br>additional deposits<br>for government |
| For Public<br>Servants and<br>Guardians<br>Operated by<br>Housing Bank<br>Since 1990       | Additional benefits:<br>up to 4 percent interest rate deduction on IRR15<br>million (US\$1,875) depending on the period of<br>savings;<br>loan to savings ratio is higher than for others<br>(7.5 or 10 vs. 7);<br>maximum loan period is 20 years;<br>purchase of any housing;<br>government matching deposits of 50 percent of<br>savings up to IRR2.5 million per period  | Employees of<br>ministries and public<br>institutions, budgets<br>of which are<br>included in the<br>government budget,<br>staff of armed and<br>law enforcement<br>forces who have<br>worked resident at | savings scheme and up to 4<br>percent for public servants and<br>military scheme (explicit).<br>Government provides additional<br>deposit for public servants and<br>military scheme (the exact<br>mechanism is not clear).   | military. <sup>b</sup>   |

| Program   | Description  | Eligibility  | Government involvement   | Size <sup>c</sup>  |
|---|--|--|--|--|
|   | (US\$312) The exact mechanism needs to be determined.  | least 2 years  |  |  |
| Ghadir<br>Project<br>Administered<br>by the<br>government<br>through Bank<br>Refah<br>Since 1999/00 | Low-income housing built for and sold to<br>targeted groups. <sup>d</sup> Part of the payment is made<br>up-front and part is made via installments (rent-<br>to-own).<br>Loans are provided by Bank Refah. Maximum<br>loan amount is IRR30 million (US\$3,750) for<br>15–20 years at 15 percent interest without<br>savings account.<br>Limited size housing built either via direct<br>government contracts, joint venture, or solely by<br>private sector under government supervision. | Targeted groups in<br>accordance with<br>priority of the score | Under direct government contract<br>or joint venture, the government<br>provides public land at "regional<br>price," which is estimated to be<br>about 10 percent of its actual<br>value.<br>Government provides additional<br>funds to be on-lent to the eligible<br>borrowers by Refah Bank at<br>subsidized rents. The government<br>portion of the loan is repaid in<br>15–20 years.<br>Government compensates Bank<br>Refah for administration of the<br>loans by 1 percent up-front fee.<br>Interest rate subsidies:<br>interest rate caps at below market<br>rates (implicit);<br>additional explicit interest rate<br>subsidies of 4 percent (up to 12<br>percent in total) for meeting the<br>following criteria - use of energy<br>efficiency measures, use of<br>innovative technologies, sale of<br>units under RTO scheme<br>Different targeted groups receive<br>additional subsidies in<br>accordance with their eligibility. | Government funds—<br>RI33 billion (US\$4<br>million) in 1999/00,<br>95 billion (US\$12<br>million) in 2000/01 <sup>b</sup> ,<br>120 billion (US\$15<br>million) in 2001/02,<br>and additional<br>IRR180 billion<br>(US\$22.5 million)<br>planned for 2002/03<br>Bank Refah funds—<br>RI12.6 billion<br>(US\$1.6 million) in<br>1999/00, 168 billion<br>(US\$21 million) in<br>2000/01 <sup>b</sup> , and 160<br>billion (US\$20<br>million) in 2001/02<br>As of the end of<br>2000/01 8,520 units<br>or 296,064 m <sup>2</sup> have<br>been built <sup>b</sup> . |
| Non-Ghadir<br>RTO program   | Housing built and sold via installments (Rent-to-<br>Own).   | n/a  | Government provides land at below market price and interest  | 13,157 housing units or 1.2 million $m^2$  |

| Program   | Description  | Eligibility  | Government involvement   | Size <sup>c</sup>   |
|---|--|--|--|---|
| Operated by<br>NHLO through<br>Housing Bank,<br>Since 1999/00                                     | Loans are granted by Housing Bank via savings<br>program at below market interest rates.<br>Maximum loan amount is IRR30–50 million<br>(US\$3,750–6,250).  |  | rate subsidies:<br>interest rate caps at below market<br>rates (implicit);<br>additional interest rate subsidies<br>of 6–8 percent (explicit).<br>Other subsidies to targeted<br>groups as they are eligible.      | have been built. <sup>b</sup>   |
| Program for<br>teachers   | Housing loans to teachers at subsidized interest rates.  | Teachers   | 10 percent interest rate subsidies,<br>i.e. final interest rate is 5–9<br>percent.   | In accordance with<br>NHLO there are<br>about 180,000<br>households receiving<br>such subsidies.  |
| Program for<br>deprived<br>Operated by the<br>government<br>through<br>Bonyad<br>Maskan (BM)      | BM provides technical assistance (prepares<br>technical drawings and supervises construction)<br>to the deprived and grants loans on behalf of the<br>government.<br>Loans are granted at subsidized interest rates and<br>the maximum loan amount is IRR20 million<br>(US\$2,500).  | Households with<br>inadequate-quality<br>shelter   | Government funds BM's TA and<br>administrative activities by 14.57<br>percent administration fee and<br>provides funding for loans with 8<br>percent interest rate subsidy; i.e.,<br>interest rate is 9–11 percent |   |
| Program for<br>rural housing<br>Operated by the<br>government<br>through<br>Bonyad<br>Maskan (BM) | Subsidized housing loans and technical<br>assistance (prepares technical drawings,<br>nominates the applicant to the bank and<br>supervises construction) for households in rural<br>areas.<br>Loans are granted at subsidized interest rates and<br>the maximum loan amount is IRR20 million<br>(US\$2,500). Lending bank is every year<br>nominated by the Central Bank. |  | Government funds BM's TA and<br>administrative activities by 14.57<br>percent administration fee and<br>provides funding for loans at<br>subsidized rates of 12–14 percent<br>b                                    | Construction /<br>reconstruction of<br>900,000 housing<br>units <sup>e</sup> (355 thousand<br>units during the<br>period of 1996–2000<br><sup>b</sup> ) |
| Post-disaster<br>program  | BM provides technical assistance (supervises construction) to those affected by any type of disaster and grants loans on behalf of the   | Households affected<br>by any type of<br>disaster. | Government funds BM's TA and<br>administrative activities by 14.57<br>percent administration fee and   | As of the end of<br>2000/01 in total<br>16,340 housing units  |

| Program   | Description  | Eligibility  | Government involvement  | Size <sup>c</sup>   |
|---|--|--|---|---|
| Operated by the<br>government<br>through<br>Bonyad<br>Maskan (BM)                           | <ul> <li>government. Often construction is carried out by people themselves.</li> <li>Loans are granted at subsidized interest rates and the maximum loan amount is IRR20 million (US\$2,500). Lending bank nominated every year by the Central Bank.</li> <li>BM also provides construction materials at lower cost than in the specific region affected by the disaster due to procurement in non-affected areas, where prices are lower, and in large amounts.</li> </ul> |  | provides funding for loans at<br>subsidized rates of 12–14 percent.   | have been<br>completed, 35,596<br>are under<br>construction, repairs<br>of 36,498 have been<br>completed and<br>21,078 are in<br>progress. <sup>f</sup> |
| Housing for<br>poor<br>Operated by the<br>Imam<br>Khomeini<br>Relief<br>Committee<br>(IKRC) | IKRC provides different services to<br>approximately 1 million households in targeted<br>social groups, including health services, cultural<br>activities, employment loans, provision of<br>housing.<br>IKRC builds limited-size housing (35–65 m <sup>2</sup><br>costing IRR20 million–US\$2,500), and provides<br>loans for self-construction and maintenance of<br>housing. These loans are at zero interest and not<br>repayable until household is able to do so.      | Students, large<br>families, disabled,<br>women headed and<br>low income<br>households | Government provides partial<br>funds at zero interest rate that are<br>repayable only when and if the<br>household is able to do so.  | In 2001/02<br>government<br>provided IRR170.5<br>billion (US\$ 21<br>million).  |
| New towns   |  |  | Government mainly provides<br>infrastructure. It also provides<br>land to co-operatives for housing<br>construction. Direct government<br>construction of housing takes<br>place at a rather small scale. | Government has<br>allocated 15,476 ha<br>of land for housing<br>construction <sup>b</sup>   |
| Public rental<br>housing  | Public rental housing provided at below market<br>rents. Usually this housing is rented for about 5<br>years before the tenant gains right to purchase<br>the unit.  | Public servants,<br>public workers,<br>teachers, military<br>personnel                 | Government provides public<br>rental housing.   | As of the end of<br>1999/00 193,934<br>housing units or 20.5<br>million m <sup>2</sup> were<br>provided as housing                                      |

| Program  | Description  | Eligibility   | Government involvement   | Size <sup>c</sup>   |
|--|--|---|--|---|
|  |  |   |  | against service by<br>the government <sup>b</sup>   |
| Funds<br>Youth<br>Teachers<br>Guardian<br>Workers<br>Administered<br>by the<br>participating<br>construction<br>companies<br>Since 2000/01 | Funds are established by Banks (Teachers—<br>Melli, Refah,Sepah), NHLO and construction<br>companies.<br>Government allocated 40,000 unfinished<br>housing units (10,000 per fund) to be finished<br>and allocated by the funds to the eligible<br>households via deferred payment scheme.<br>After finishing these units, funds would build<br>new housing, funded by government (RI15<br>million–US\$1,875 – per housing unit at<br>discounted interest rates), participating bank<br>(RI20 million–US\$2,500—per housing unit at<br>16 percent interest rate caps) and construction<br>company (the remaining part)   | Young households,<br>Teachers,<br>Guardians,<br>Workers<br>Additional<br>requirements:<br>—no prior land nor<br>housing ownership<br>—residents in the<br>area for 10 years | Government provides land at<br>subsidized price, 10,000<br>unfinished housing units and<br>IRR15 million (US\$1,875) per<br>housing unit at subsidized interest<br>rates for new construction.<br>Interest rate subsidies of 4<br>percent for meeting each of the<br>following criteria:<br>the three criteria under Ghadir<br>project and<br>construction in old<br>neighborhoods | So far only the<br>Youth and Workers'<br>Funds have started<br>their operations and<br>3323 out of 8828<br>constructed units<br>have been allocated<br>b. |
| New housing<br>fund<br>In preparation  | Ministry of Housing and the Central Bank are<br>currently working on development of a new<br>housing fund. The fund would support mass<br>production of limited size housing, rental<br>housing, and renovation of housing in rural areas<br>and for low-income households. It would also<br>support the four already existing funds—Youth,<br>Workers, Teachers, and Guardians. The fund<br>would be established by equal contributions<br>from the Central Bank and commercial and<br>specialized banks (RI1 billion–US\$125,000–<br>each), a contribution from Bonyad Maskan, and<br>a non-cash contribution from the Ministry of<br>Housing.<br>The exact mechanism of the fund's operations<br>has not been determined. | TBD   | TBD  |   |
| Program  | Description  | Eligibility | Government involvement   | Size <sup>c</sup>   |  |  |  |  |  |
|--|--|-------------|--|---|--|--|--|--|--|
| Program for<br>cooperatives  | Cooperatives can be established by employees<br>of one enterprise for the purposes of housing<br>construction. |             | Government allocates public land<br>for construction of housing.<br>Co-operatives are also eligible for<br>other subsidies such as those<br>provided for developers, if the<br>eligibility requirements are met. | Total allocated land<br>as of the end of<br>2000/01 is 1,852 ha<br>or 10 percent of total<br>land allocated by the<br>NHLO. |  |  |  |  |  |
| Program with<br>Bonyad       Bonyad Shahid builds housing on the land<br>allocated by NHLO and allocates it to martyrs<br>(the exact mechanism and terms of allocation<br>need to be determined).       Provide land at regional price,<br>which is expected to be 10<br>percent of its market value.       As of the end of<br>2000/01 in tota<br>ha of public land<br>allocated         Notes: <sup>a</sup> – Housing Bank supervision; <sup>b</sup> – World Bank estimates based on consultants reports. ; <sup>c</sup> – For detailed data see Annex 3.2 below; <sup>d</sup> – Special groups (martyrs, prisoners of war,<br>displad unterms)       Percent of its market value.       As of the end of<br>2000/01 in tota<br>ha of public land<br>allocated |  |             |  |   |  |  |  |  |  |
| 2000–01<br>Source: Compile   | 2000–01<br>Source: Compiled by the World Bank based on interviews with Government.                             |             |  |   |  |  |  |  |  |

# **Annex 3.2. Statistical Data on Government Housing Programs**

|  | 1995/96   | 1996/97   | 1997/98   | 1998/99   | 1999/00   | 2000/01   |  |  |
|--|-----------|-----------|-----------|-----------|-----------|-----------|--|--|
| Total amount of housing savings accounts (RI m)  | 1,435,600 | 2,379,400 | 4,032,900 | 5,450,400 | 6,511,000 | 8,495,300 |  |  |
| Of which:  | 404,700   | 603,300   | 704,900   | 698,400   | 665,300   |           |  |  |
| <ul> <li>government employees and military</li> </ul>  |           |           |           |           | 104,700   | 654,900   |  |  |
| - youth  |           |           |           |           |           | 246,600   |  |  |
| Government funds for additional deposit for  | 101,000   | 275,000   | 259,000   | 259,000   | 259,000   | 259,000   |  |  |
| government employees and military  |           |           |           |           |           |           |  |  |
| Source: World Bank estimates based on consultants reports using various sources from Central Bank, Ministry of Finance and Economy, and MHUD |           |           |           |           |           |           |  |  |
| Upgrading Programs   |           |           |           |           |           |           |  |  |

## Table A3-10. Savings Program

#### Table A3-11. Summary of RTO Schemes

|  | Ghadi               | r Project  | Non-Ghadir | RTO program |
|--|---------------------|------------|------------|-------------|
|  | 1999/00             | 2000/01    | 1999/00    | 2000/01     |
| Number of housing units planned                  | 17,000              | 38,000     | 8,016      | 11,000      |
| Number of housing units built                    | 2,184               | 6,336      | 4,017      | 9,140       |
| Total area of housing built (m <sup>2</sup> )    | 75,900              | 220,164    | 361,530    | 822,600     |
| Of which (of housing units):                     |                     |            |            |             |
| - government contracts                           |                     |            |            |             |
| - joint venture                                  |                     |            |            |             |
| - private  | 2,184               | 6,336      | 4,017      | 9,140       |
| Total costs (RI million)                         | 1,855               | 187,139    | 307,400    | 699,210     |
| Of which (RI m):                                 |                     |            |            |             |
| - government contracts                           |                     |            |            |             |
| - joint venture                                  |                     |            |            |             |
| - private  | 1,855               | 187,139    |            |             |
| Total area of land allocated (ha)                | 79,311              | 296,771    | 176,740    | 403,451     |
| Total loans granted (RI m)                       | 76,400              | 221,700    | 140,595    | 319,900     |
| Of which (RI m)                                  |                     |            |            |             |
| - government funds                               | 43,800              | 95,600     |            |             |
| - Bank Refah                                     | 32,600              | 126,000    |            |             |
| Notes: (a) This number appears to be incorrect   |                     |            |            |             |
| Source: World Bank estimates based on consultant | s reports using NHL | O database |            |             |

| Table | A3-12. | Program | for | Rural | Housing |
|-------|--------|---------|-----|-------|---------|
|-------|--------|---------|-----|-------|---------|

|   | 1995/96         | 1996/97        | 1997/98 | 1998/99 | 1999/00 | 2000/01 |
|---|-----------------|----------------|---------|---------|---------|---------|
| Number of housing units built / reconstructed             | 64,618          | 79,666         | 83,338  | 61,158  | 43,589  | 22,640  |
| Of which:   | 64,618          | 79,666         | 83,338  | 61,158  | 43,589  | 22,640  |
| - with government funds                                   |                 |                |         |         |         |         |
| - private funds   |                 |                |         |         |         |         |
| Total costs (RI m)  | 192,500         | 385,000        | 821,000 | 430,000 | 407,000 | Na      |
| Of which (RI m):  | 192,500         | 385,000        | 821,000 | 430,000 | 407,000 | Na      |
| - government funds  |                 |                |         |         |         |         |
| - private funds   |                 |                |         |         |         |         |
| Total amount of new loans granted (RI m)                  |                 |                |         | 52,120  | 21,300  |         |
| Source: World Bank estimates based on consultants reports | using informati | on from Bonyad | Mskan   |         |         |         |

## Table A3-13. Post-disaster Project

|   | 1995/96         | 1996/97        | 1997/98 | 1998/99 | 1999/00 | 2000/01 |
|---|-----------------|----------------|---------|---------|---------|---------|
| Number of housing units built / reconstructed             | 42,500          | 65,000         | 67,000  | 42,604  | 30,533  | 11,652  |
| Of which:   | 42,500          | 65,000         | 67,000  | 42,604  | 30,533  | 11,652  |
| - with government funds                                   |                 |                |         |         |         |         |
| - private funds   |                 |                |         |         |         |         |
| Total costs (RI m)  | 485,000         | 270,000        | 295,000 | 231,000 | 172,000 | Na      |
| Of which (RI m):  | 485,000         | 270,000        | 295,000 | 231,000 | 172,000 |         |
| - government funds  |                 |                |         |         |         |         |
| - private funds   |                 |                |         |         |         |         |
| Source: World Bank estimates based on consultants reports | using informati | on from Bonyad | Maskan  |         |         |         |

### Table A3-14. New towns project

|   | 1995/96       | 1996/97      | 1997/98 | 1998/99 | 1999/00 | 2000/01 | Total | Total since |
|---|---------------|--------------|---------|---------|---------|---------|-------|-------------|
|   |               |              |         |         |         |         |       | inception   |
| Land allocated for housing construction (ha)          | 249           | 269          | 145     | 165     | 132     | Na      | 960   | 15,476      |
| Source: World Bank estimates based on consultants rep | orts using NF | ILO Database |         |         |         |         |       |             |

### Table A3-15. Public rental housing

|   | 1995/96     | 1996/97    | 1997/98    | 1998/99    | 1999/00                  | 2000/01 |  |  |  |
|---|-------------|------------|------------|------------|--------------------------|---------|--|--|--|
| Number of housing units                       | 170,000     | 175,810    | 181,160    | 190,330    | 193,934                  | Na      |  |  |  |
| Total area of housing units (m <sup>2</sup> ) | 188,700,000 | 19,163,290 | 19,202,960 | 20,174,980 | 120,537,610 <sup>a</sup> | na      |  |  |  |
| Average rent (RI / $m^2$ )                    | 500         | 560        | 1,500      | 1,500      | Na                       | Na      |  |  |  |
| Cost of maintenance (RI m)                    | 1,650       | 1,960      | 19,000     | 14,525     | 13,495                   | 17,854  |  |  |  |
| Notes: (a) Seems inconsistent                 |             |            |            |            |                          |         |  |  |  |
| Source: Planning and Management Organization  |             |            |            |            |                          |         |  |  |  |

### Table A3-16. Housing Funds (Beginning 2002)

|   | Youth    | Workers | Teachers | Warriors |
|---|----------|---------|----------|----------|
| Total number of units of constructed housing            | 5,916    | 2,912   | 3,450    | 5,481    |
| Total area of units of constructed housing              | 354,960  | 174,720 | 207,000  | 328,860  |
| Total number of units of allocated housing              | 3,191    | 132     | 0        | 0        |
| Total area of units of allocated housing                | 191,460  |         |          |          |
| Total amount of issued loans (RI m)                     | 59,160   | 29,120  | 34,500   | 54,810   |
| Of which (RI m):  |          |         |          |          |
| - government funds                                      | 85,190   | 41,933  | 49,920   | 78,960   |
| - bank funds  | 59,160   | 29,120  | 34,500   | 54,810   |
| - Fund's own resources                                  | 139,618  | 68,723  | 81,980   | 129,430  |
| Source: The respective fund from MHUD and Ministry of E | ducation |         |          |          |

### Table A3-17. Co-operatives

|   | 1995/96 | 1996/97 | 1997/98 | 1998/99 | 1999/00 | 2000/01 | Total | Total since |  |
|---|---------|---------|---------|---------|---------|---------|-------|-------------|--|
|   |         |         |         |         |         |         |       | inception   |  |
| Allocated public land (ha)*             | 255     | 249     | 128     | 294     | 187     | na      | 1,133 | 7,860       |  |
| Other assistance (RI m)                 | 3,300   | 2,400   | 1,900   | 2,150   | na      | na      | 9,750 | Na          |  |
| Source: MHUD, NLHO Database. (*) Taksam |         |         |         |         |         |         |       |             |  |

## Table A3-18. Bonyad Shahid

|                                   | 1995/96 | 1996/97 | 1997/98 | 1998/99 | 1999/00 | 2000/01 | Total  | Total since |
|-----------------------------------|---------|---------|---------|---------|---------|---------|--------|-------------|
|                                   |         |         |         |         |         |         |        | inception   |
| Allocated public land (ha)*       | 145     | 21      | 15      | 14      | 10      | 8       | 213    | Na          |
| Other assistance (RI m)           | 1,700   | 19,705  | 26,500  | 23,000  | 7,000   | na      | 77,905 | Na          |
| Source: * - Taksam, Bonyad Shahid |         |         |         |         |         |         |        |             |

### Table A3-19. Government compensations for administration of different programs

|   | 1995/96 | 1996/97 | 1997/98 | 1998/99 | 1999/00 |
|---|---------|---------|---------|---------|---------|
| Bonyad Maskan   | 4,560   | 3,525   | 3,309   | 7,712   | 31,614  |
| Source: World Bank estimates based on consultants reports |         |         |         |         |         |

# Annex 3.3. Description of Housing Subsidies to Various Beneficiaries

## **Interest Rate Subsidies to Developers**

If the average size of housing units in the project built by the developer is within the limits (75  $\text{m}^2$  in the five largest cities and 100  $\text{m}^2$  elsewhere), it is eligible for interest-rate subsidies of 6 percent, if the number of housing units in the project is less than 10, and 8 percent, if the number of units is 10 or more. This subsidy is available for 18 months, after which interest rates increase to 24–25 percent.

Under the Ghadir Project and the four funds' programs (Youth, Workers, Teachers, and Guardian) developers are eligible for 4 percent subsidies to meet any of the following requirements up to a total subsidy of 12 percent that is passed on to the buyers of the units:

- (a) developer agrees to sell units under RTO scheme;
- (b) developer applies energy efficiency measures;
- (c) developer applies innovative technologies that reduce built area.

Under the four funds' program (Youth, Workers, Teachers, and Guardian) an additional 4-percent subsidy is available to those developers who carry out such construction in the old neighborhoods.

These interest rate subsidies are available or passed over to those buyers who buy units under the RTO scheme.

## Subsidies to Specific Social Groups

The following table provides a summary of the types of subsidies available to different social groups in Iran.

| Eligible recipients        | Types of assistance   |
|----------------------------|---|
| Group 1—martyrs,           | - Ghadir Project;   |
| prisoners of war, and      | - housing loans at 4 percent interest rate, 20 years maturity,  |
| disabled veterans (Special | maximum amount is IRR50 million (US\$ 6,250);   |
| Groups)                    | - 100 percent discount on land development costs that on average are assessed to be IRR5 million (US\$ 625) per housing unit; |
|                            | - Land sold at a price of 1980 that is assessed to be close to zero at current market value.                                  |
| Group 2—young families,    | - Ghadir Project;   |
| low-income households,     | - land sold at regional price that is assessed to be 10 percent of the  |
| women-headed households    | current market value.   |
| Group 3—public servants    | <ul> <li>loans for both—existing and new housing;</li> </ul>  |
|                            | - additional loans from public funding in the amount of 50 percent  |
|                            | of the person's savings so that the loan amount could be increased  |
|                            | to 1:2.5 rather than 1:2 (the exact mechanism is not clear);  |
|                            | - for every period the deposit is kept (1 period = 5 months) the  |
|                            | person gets additional interest rate subsidy of 1 percent up to 4 percent in total;   |

| Eligible recipients             | Types of assistance  |
|---------------------------------|--|
|                                 | - public rental housing at below market rents;                       |
|                                 | - income tax subsidies—whole housing loan installment is tax         |
|                                 | exempt   |
| Group 4—public workers          | - public housing at below market rents.                              |
|                                 | - Workers Fund   |
| Group 5—teachers                | - interest rate subsidies of 10 percent;                             |
| -                               | - public housing at below market rents.                              |
|                                 | - Teachers Fund  |
| Group 6—guardians               | - Guardian Fund  |
| Group 7—disaster victim         | - reconstruction loans at 8 percent interest rates;                  |
|                                 | - technical assistance (technical drawing for and supervision of the |
|                                 | reconstruction) from Housing Foundation (financed by the             |
|                                 | government) for reconstruction of housing;                           |
|                                 | - construction materials at below market prices (provided by HF).    |
| Group 8—rural housing           | - reconstruction loans at 8 percent interest rates;                  |
|                                 | - technical assistance (technical drawing for and supervision of the |
|                                 | reconstruction) from Housing Foundation (financed by the             |
|                                 | government) for reconstruction of housing.                           |
| Notes: (a) Low income for 2001– | 02 is set at IRR570,000 per month per household.                     |
| Source: World Bank estimates ba | sed on consultants reports.  |

# Annex 3.4. Scoring

| Parameter                            | Maximum           | Weight    | Note                                       |
|--------------------------------------|-------------------|-----------|--|
|                                      | score             | (percent) |  |
| Young family                         | 5                 | 16        | For every additional two years up to 10    |
|                                      |                   |           | years, 1 point is subtracte                |
| Woman-headed household               | 4                 | 13        |  |
| Families with 1–3 children           | 3                 | 10        | For every additional child 1 point is      |
|                                      |                   |           | subtracted                                 |
| Public servants and workers -        | 4                 | 13        | 0.5 point for each year of membership      |
| membership in co-operative           |                   |           |  |
| Holder of housing savings            | 3                 | 10        | 0.5 point for each period of savings (5    |
| account                              |                   |           | months)                                    |
| Resident in the area                 | 5                 | 16        | 1 point for every three years              |
| Special Groups                       | 2                 | 6         |  |
| Low-income household—in              | 5                 | 16        | 1 point subtracted for each additional IRR |
| 2001/02 IRR570,000 (US\$71)          |                   |           | 50,000 (US\$6,250)                         |
| per month                            |                   |           |  |
| TOTAL                                | 31                | 100       |  |
| Source: World Bank estimates based o | n consultants rep | orts.     |  |

# **Annex 3.5. Housing Foundation (Bonyad' Maskan)**

The Housing Foundation (HF) is a holding company with representative offices in different provinces. The foundation promotes:

- Rural development;
- Provision of financial aid for rural housing;
- Housing renovation under post-disaster program.

It provides technical assistance in the form of technical drawings, supervises construction/reconstruction, administers loans granted at 8 percent interest rates, provides construction materials produced by their subsidiary companies at below-market prices, and allocates housing. HF also allocates land. It is not clear, however, whether it is public land or that of the HF and what the allocation terms are.

These activities are mainly funded by the government, which pays a 14 percent annual fee to the HF.

HF has four subsidiary companies in construction (TOSE-E), machinery building, construction materials, and environmental production. Each of these companies has further subsidiaries.

TOSE-E has 11 subsidiaries, 10 of which are construction companies; one is a technical consulting company. All subsidiaries are separately incorporated companies. These companies work country wide (in 24 out of 28 provinces).TOSE-E builds 2,000 to 3,000 housing units a year. It has built 6,700 housing units for low-income and deprived households, 5,640 of which have been sold under RTO scheme.

HF builds housing for deprived households in rural areas, mostly those that have inadequate housing. Housing is provided at cost—50 percent downpayment and 50 percent in installments over 10 years. Currently 10,000 housing units are under construction. As of October 2001, HF had built 60,000 housing units and implemented about 5,000 rural master plans. About 900,000 housing units had been constructed or reconstructed in rural areas; 40,000 of these were for deprived households.

HF has allocated 290,000 land plots in rural areas and granted 300,000 loans as of October 2001.

HF does not have any data on income of beneficiaries; however, it estimated that they could reach as low as the fourth decile.

# Annex 3.6. Housing-Related Government Budget

|  | 1995/96 | 1996/97 | 1997/98 | 1998/99 | 1999/00 <sup>a</sup> | 2000/01 | 2001/02 |  |  |  |  |
|--|---------|---------|---------|---------|----------------------|---------|---------|--|--|--|--|
| Central government   | 287     | 484     | 469     | 346     | 570                  | 635     | 312     |  |  |  |  |
| Local governments  | 187     | 296     | 237     | 89      | 75                   |         |         |  |  |  |  |
| Total  | 474     | 780     | 706     | 435     | 688                  |         |         |  |  |  |  |
| a. budgeted  |         |         |         |         |                      |         |         |  |  |  |  |
| Note: Due to differences in sources and definitions, there are inconsistencies between Tables 3.20, 3.21, 3.22 and 3.23. |         |         |         |         |                      |         |         |  |  |  |  |
| Source: Statistical Year Book  |         |         |         |         |                      |         |         |  |  |  |  |

 Table A3-20. Total government expenditures on housing—capital and operating costs (RI b)

| Type of expenditure   | 1996/97 | 1997/98 | 1998/99 | 1999/00 | 2000/01 | 2001/02 |
|---|---------|---------|---------|---------|---------|---------|
| Home loan to the ex-prisoners of war  | -       | -       | -       | -       | -       | 7.5     |
| Home loan to imposed war refugees   |         |         | 3.5     | 2.8     | 3.4     | 5       |
| Housing for the Friday-prayer leaders (Imam Jomeh)  |         |         |         |         |         | 8       |
| Housing for the Members of Parliament   |         |         | 12      | 12      | 16.3    | 12.1    |
| Home loan for the Law Enforcement Forces personnel  | 1       |         | 25      | 45.5    | 91      | 160     |
| Housing construction for the LEF (housing units against service)  |         |         |         |         | 68      | 90      |
| Housing construction for the personnel of Ministry of Defense (housing units against service)                   | 4.6     | 9       | 16.5    | 12.5    | 18.4    | 20.2    |
| Home loan for Ministry of Defense personnel   |         |         |         |         |         | 406     |
| Repair of the Army housing units (housing units against service)  |         |         |         |         |         | 100     |
| Housing assistance to the Armed Forces personnel through the headquarters of the commanders of the armed forces |         | 8.5     | 9.9     | 9.5     | 11.4    | 13.2    |
| Against service (staff) Housing units of Ministry of Science, Technology and Research                           | 1.9     | 3.7     | 2.6     | 4.4     | 7.7     |         |
| Building construction for the Qom Theology School (Houzeh Elmieh Qom)   |         |         | 6       | 9       | 40      |         |
| Assistance to the Teachers Housing Savings Fund   |         |         |         | 65      | 82.6    | 140     |
| Against service (staff) Housing for the Organization of Physical Education                                      | 1.8     | 1       | 11.2    | 17.5    | 4.8     |         |
| Ministry of Housing, against service (staff) Housing construction   | 2.1     | 3.4     | 8.9     | 15.5    | 34.6    | 17      |
| Credit and technical assistance for housing (30804 and 3083040  | 112     | 136.4   | 145.8   | 272.5   | 351     | 428     |
| Housing Foundation- Rural housing   |         | 1.3     | 1.6     | 5.5     | 15.8    | 17      |
| Staff housing for Ministry of Industries  |         |         | 0.71    |         | 0.97    |         |
| Staff housing for Ministry of Roads and Transportation  | 0.8     | 1.7     | 1.6     | 1.9     |         |         |
| Building construction for the Iranian State Railway   | 2.1     | 1.5     | 1.35    | 2.8     |         |         |
| Assistance to the Housing Foundation  |         |         |         |         | 4.1     | 5       |
| Completion of the low-cost housing units  |         |         |         |         | 5       | 5       |
| Credit to the completion of the staff (against service) housing units   |         |         |         |         | 5       | 5       |
| Assistance to the housing facilities of the civil servants  | 50      | 2.3     | 8       | 15      | 19.4    | 19.4    |
| Housing construction for the students of Qom Theology School  |         |         |         |         | 2.3     | 2.3     |
| Ministry of Housing- housing for the low-income group   |         |         |         |         | 4       | 4       |

## Table A3-21. Government budget allocations for housing (RI b)

| Type of expenditure   | 1996/97 | 1997/98 | 1998/99 | 1999/00 | 2000/01 | 2001/02 |  |  |  |  |  |
|---|---------|---------|---------|---------|---------|---------|--|--|--|--|--|
| Rehabilitation of the damaged housing units in the imposed war in Khouzestan  |         |         |         |         | 68      | 30      |  |  |  |  |  |
| Province  |         |         |         |         |         |         |  |  |  |  |  |
| Minimum Total   | 176     | 169     | 255     | 491     | 854     | 1,495   |  |  |  |  |  |
| Note: Due to differences in sources and definitions, there are inconsistencies between Tables A3-20, A3-21, A3-22 and A3-23 |         |         |         |         |         |         |  |  |  |  |  |
| Source: Compiled by The World Bank based consultants reports using the Act of Budget, Tehran: MPO, various years.           |         |         |         |         |         |         |  |  |  |  |  |

|  | 1996/97         | 1997/98         | 1998/99 | 1999/00 |
|--|-----------------|-----------------|---------|---------|
| National budget  | 862             | 1,161           | 831     | 1,577   |
| Public buildings and establishments  | 404             | 623             | 391     | 621     |
| Construction plan of state buildings   | 199             | 279             | 271     | 466     |
| Construction plan of law enforcement forces buildings  | 64              | 115             | 120     | 154     |
| Construction plan of other public buildings  | 142             | 229             | 0       | 2       |
|  |                 |                 |         |         |
| Housing provision  | 158             | 195             | 204     | 371     |
| Construction plan of workers' residential complexes  | 2               | 3               | 1       | 3       |
| Construction plan of civil servants staff (against service) housing                                  | 21              | 25              | 30      | 50      |
| Construction plan of housing in damaged regions  | 0               | 0               | 0       | 0       |
| Plan of credit assistance for housing  | 135             | 164             | 168     | 307     |
| Plan of rural housing  | 0               | 1               | 2       | 6       |
| Plan of land and housing affairs' coordination   | 0               | 2               | 3       | 5       |
| Research and investigation plan  | 0               | 0               | 0       | 0       |
|  |                 |                 |         |         |
| Urban development  | 291             | 337             | 228     | 575     |
| Plan of urban development planning   | 3               | 6               | 5       | 29      |
| Plan of establishment and development of drinking water installations                                | 2               | 1               | 2       | 0       |
| in urban areas   |                 |                 |         |         |
| Plan of establishment and development of sewage system installations                                 | 183             | 171             | 141     | 330     |
| Plan of establishment of urban areas security system installations                                   | 4               | 5               | 4       | 7       |
| Plan of transportation improvements  | 85              | 151             | 76      | 204     |
| Plan of establishment of other urban installations and facilities                                    | 12              | 1               | 0.5     | 4       |
| Improvement plan of urban affairs and municipalities management                                      | 3               | 2               | 0       | 1       |
| Research and investigations plan   | 0               | 0               | 0       | 0       |
| Urban and rural housing and development research   | 8               | 6               | 8       | 11      |
| Provincial ( <i>ostan</i> ) hudget allocations*  | 784             | 941             | 617     | 757     |
| Sub-total  | 1.646           | 2.102           | 1.448   | 2.334   |
|  | 1,010           | _,10_           | 1,110   | -,001   |
| Provincial   |                 |                 |         |         |
| Allocation for housing investment  | 296             | 237             | 89      | 78      |
| Allocation for current expenditures  | 8               | 9               | 10      | 11      |
| Sub-total  | 304             | 246             | 99      | 89      |
|  |                 |                 |         | 0,      |
| ΤΟΤΑΙ  | 1 950           | 2 348           | 1 547   | 2 423   |
| a. Includes provincial credits of the sections of construction and public installations of urban     | housing and dev | velopment       | 1,577   | 4,745   |
| <i>Note</i> : Due to differences in sources and definitions, there are inconsistencies between Table | s A3-20, A3-21, | A3-22 and A3-23 | 3       |         |
| Source: Economic report and balance sheet of 1378 (1999–2000), Central Bank or                       | f Iran.         |                 |         |         |

 Table A3-22. Public works, public buildings, & public housing expenditures in the government budget (RI b)

|   | 1996/97            |                | 1997/98        |               | 1998/99        |              | 1999/00    |        |
|---|--------------------|----------------|----------------|---------------|----------------|--------------|------------|--------|
|   | Budget             | Actual         | Budget         | Actual        | Budget         | Actual       | Budget     | Actual |
| Workers' residential complexes                                  | 3                  | 3              | 4              | 3             | 3              | 2            | 4          | 3      |
| Civil servants' staff<br>quarters                               | 25                 | 20             | 42             | 32            | 67             | 38           | 41         | 50     |
| Plan of credit assistance                                       | 184                | 146            | 375            | 164           | 412            | 164          | 410        | 307    |
| Plan of rural housing   | —                  |                | 12             | 2             | 13             | 2            | 13         | 6      |
| Plan of the coordination<br>between land and<br>housing affairs |                    |                | 10             | 2             | 7              | 3            | 7          | 5      |
| Sub-total   | 212                | 169            | 463            | 203           | 502            | 209          | 475        | 371    |
|   |                    |                |                |               |                |              |            |        |
| Provincial (related to ostan) credits                           | 39                 | 270            | 99             | 212           | 88             | 89           | 78         | 75     |
| TOTAL   | 251                | 439            | 542            | 414           | 588            | 298          | 552        | 446    |
| Note: Due to differences in source                              | ces and definition | ons, there are | inconsistencie | es between Ta | ables A3-20, A | .3-21, A3-22 | and A3-23. |        |
| Source: Management and  | Planning Or        | ganization     | , economic     | report of 1   | 375-78         |              |            |        |

# Table A3-23. Allocated Budgeted versus actual capital expenditure in public housing in monetary<br/>terms (RI b)

### Table A3-24. Budgeted versus actual capital expenditure in public housing in physical terms

| Plan  | Floor a        | rea produce      | ed m <sup>2</sup> (estin | nation) <sup>a</sup> | Number of housing units (estimation) |                  |              |               |  |
|---|----------------|------------------|--------------------------|----------------------|--------------------------------------|------------------|--------------|---------------|--|
|   | 1996/97        | 1997/98          | 1998/99                  | 1999/00              | 1996/97 <sup>b</sup>                 | 1997/98          | 1998/99      | 1999/00       |  |
| Workers residential complexes                                   | 5,400          | 5,000            | 3,000                    | 3,600                | 45                                   | 50               | 30           | 36            |  |
| Civil servants' staff<br>quarters                               | 40,760         | 52,750           | 63,834                   | 47,845               | 340                                  | 527              | 638          | 479           |  |
| Plan of credit assistance                                       | —              |                  | 185,000                  | 383,925              | —                                    | _                | 1850         | 3839          |  |
| Plan of rural housing   |                | 2,500            | 3,667                    | 6,912                |                                      | 25               | 37           | 69            |  |
| Plan of the coordination<br>between land and<br>housing affairs | —              | —                | —                        | —                    | —                                    | —                | —            | _             |  |
| Provincial (related to <i>ostan</i> ) credits                   | 540,000        | 353,334          | 148,238                  | 94,182               | 4500                                 | 3533             | 1482         | 942           |  |
| Total   | 586,160        | 413,584          | 403,739                  | 536,494              | 4885                                 | 4135             | 4037         | 5365          |  |
| Notes: (a) The average floor area 125 m <sup>2</sup> in 1375.   | of a housing u | init is taken as | 100 m² (duri             | ng 1376-78).         | (b) The average                      | ge floor area of | a housing un | t is taken as |  |
| Source: Management and  | Plan Organi    | zation, eco      | nomic repo               | ort of 1375-         | -78                                  |                  |              |               |  |

|   | 1996/97      | 1997/98       | 1998/99        | 1999/00         | 2000/01       | 2001/02 |
|---|--------------|---------------|----------------|-----------------|---------------|---------|
| National  |              |               |                |                 |               |         |
| Rent or allocation of   | 1.8          | 1.9           | _              | _               | _             | 10      |
| properties  |              |               |                |                 |               |         |
| Revenue earned from governmental housing units  |              |               | 2.5            | 3.8             | 5             | 5       |
| Revenue earned from land development  | 1.5          | 1.9           | 8.1            | 6.6             | 6             | 7       |
| Sale of low-cost housing<br>units   |              | 3.8           | 5.9            | 5.3             | 5             | 5       |
| Revenue earned from urban land allocation   | 2.3          | 1.2           | 3.1            | 3.9             | 10            | 10      |
| Revenue of previous<br>investments for social<br>housing                              | _            | _             | _              | _               | 100           | 40      |
| Total   | 5.6          | 8.8           | 19.6           | 19.6            | 126.0         | 77.0    |
|   |              |               |                |                 |               |         |
| Provincial  |              |               |                |                 |               |         |
| Public housing sale   | 1.8          | 0.1           | 0.1            | 0.3             | 1.7           | 1.7     |
| Rental and sale of public lands   | 7.4          | 1.0           | 5.7            | 0.4             | 0.3           | 0.3     |
| Sale of low-cost housing  | _            | _             | _              | _               | 3.2           | 3.2     |
| Revenue earned from land development  | 1.5          | 1.4           | 2.1            | 1.1             | 4.6           | 4.6     |
| Revenue earned from sale of<br>housing units excluding<br>housing consumption pattern | _            | _             | -              | _               | 2.6           | 2.6     |
| Total   | 10.7         | 2.5           | 7.9            | 1.8             | 12.4          | 12.4    |
|   |              |               |                |                 |               |         |
| TOTAL   | 16.3         | 11.3          | 27.5           | 21.4            | 138.4         | 89.4    |
| <i>Source:</i> Compiled by the Worl MPO, various years                                | d Bank based | l on consulta | nts reports us | sing The Act of | of Budget, Te | ehran:  |

Table A3-25. Revenues related to housing sector in the government budget (RI b)

# **Annex 3.7. Procedures for allocation of public land**

At present the National Organization of Land and Housing allocates land in the following ways:

## Allocation of land via bid

Allocation of lands through bidding is used, for the most part, for urban lots threaded into the texture of the cities. Allocation is conducted through public advertisement in the highcirculation newspapers. The base price of the bid is also at the day's prices. According to this method, the total price is proffered in cash at the time of allocation. The buyer is not bound to construct a residential unit, but he/she can apply any kind of land use in accordance with the urban regulations. Also the buyers of these lands can sell them to a third person.

## Allocation of land in large parcels to the housing mass producers (developers)

Allocations of large land parcels are priced according to agreement. The mentioned price cannot be less than the cost price of the land, which is the sum of the raw price of land and the cost of land improvement. In this method, parcels of the improved lands are allocated to the professional housing builders in order to perform the mass-production housing projects. These land allocations are performed through publishing advertisements in the newspapers. In this method, the buyer is bound to implement the mass production project in accordance with the timing programs.

## Allocation of land in contribution form

Allocating and awarding lands is performed as a contribution to the housing construction. According to this method, the land is a government contribution and the construction capital is considered the contribution of the partner (professional builder). So no funds are received for the price of lands. At the end of task, based on the agreement, a percentage of the ground floor of the built unit is possessed by the government, which sells its own share from the residential units at the day's price and via bidding.

## Allocation of land to construct rental housing by the private sector

Annually, at least 10 percent of the lands available for allocation in selected cities should be allocated for the construction of rental housing by the private sector.

In accordance with the law designed to encourage the construction and supply of rental residential units, these units must be utilized by the builder as rental accommodations .The builder may sell the units after five years. The base price of this type of land should be based on expert advice. But to support such builders, the government gives a 15 to 65 percent discount. The discount method is in reverse relation—that is to say, the lower price is subject to a greater percentage discount, and the higher price is liable to a smaller percentage discount. For example, when the price of each square meter of land is IRR100,000, it will be subject to a 65 percent discount; land valued at more than IRR400,000 a square meter is subject to 15 percent discount.

The method of receiving the price of lands in this type of allocation is by installment, in that 30 percent of the land price is received when the contract is signed; the rest is receivable in three-year installments (up to completion of construction).

## **Regulations on allocation of land to individual applicants:**

The lands can be allocated to the individual applicants who have not been considered eligible under allocations identified in the previous items. By observing the legal priorities accorded educational staff (Ministry of Education personnel) for access to housing and the groups that are supported by the government in accordance with certain regulations, lands can be allocated to individual applicants via advertisement or on the basis of privilege; successful applicants are chosen from this pool of qualified people.

All the parcels, which are transferred to the individual applicants, are provided at cost.

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# Annex 3.8. Allocation of Public Land

| Table A3-26. | Allocated pr | ublic land by | y type and y | vear (Amount in | IRR 1.000: U   | =unit: M=area  | in 1.000 $m^2$ ) |
|--------------|--------------|---------------|--------------|-----------------|----------------|----------------|------------------|
|              | mocuteu pe   | aone iana og  | , cype and y | cui (minoune m  | 11111 1,000, 0 | -unity mi-area | m 1,000 m /      |

|               |              |             |              |             | Resi         | dential       |            |              |                 |               | Non-residential Total allocation |             | ocation        | Revenue (RI)        |               |                    |
|---------------|--------------|-------------|--------------|-------------|--------------|---------------|------------|--------------|-----------------|---------------|----------------------------------|-------------|----------------|---------------------|---------------|--------------------|
| Year          | Mass p       | roducers    | Cooper       | atives      | Indiv        | vidual        | Rei        | nt           | Tot             | al            |                                  |             |                |                     |               |                    |
|               | U            | М           | U            | М           | U            | М             | U          | М            | U               | М             | U                                | М           | U              | М                   | Total         | per m <sup>2</sup> |
| 1979–80       | -            | -           | -            | -           | 61           | 18            | -          | -            | 61              | 18            | -                                |             | 61             | 18                  | 2,587,015     | 143,723            |
| 1980-81       | -            | -           | 288          | 88          | 9,404        | 2,467         | -          | -            | 9,692           | 2,555         | 2,794                            | 2,111       | 12,486         | 4,666               | 2,587,015     | 554                |
| 1981-82       | 256          | 100         | 9,339        | 3,410       | 18,571       | 5,697         | -          | -            | 28,166          | 9,207         | 695                              | 1,723       | 28,861         | 10,930              | 2,587,015     | 237                |
| 1982-83       | 474          | 151         | 3,864        | 858         | 4,809        | 1,304         | -          | -            | 9,147           | 2,313         | 279                              | 797         | 9,426          | 3,110               | 2,587,015     | 832                |
| 1983–84       | 8,858        | 2,669       | 16,535       | 4,219       | 31,860       | 8,515         | -          | -            | 57,253          | 15,404        | 1,001                            | 5,494       | 58,254         | 20,898              | 13,292,289    | 636                |
| 1984-85       | 8,477        | 2,956       | 35,273       | 7,581       | 45,593       | 12,312        | -          | -            | 89,343          | 22,849        | 1,367                            | 3,265       | 90,710         | 26,114              | 14,718,087    | 564                |
| 1985–86       | 8,508        | 2,523       | 25,323       | 5,423       | 36,071       | 9,365         | -          | -            | 69,902          | 17,311        | 896                              | 3,630       | 70,798         | 20,941              | 19,068,615    | 911                |
| 1986–87       | 11,742       | 2,804       | 17,063       | 3,997       | 33,600       | 8,787         | -          | -            | 62,405          | 15,588        | 801                              | 3,907       | 63,306         | 19,495              | 14,617,440    | 750                |
| 1987–88       | 9,874        | 2,275       | 13,730       | 3,754       | 30,459       | 7,439         | -          | -            | 53,053          | 12,468        | 804                              | 5,559       | 53,857         | 18,027              | 15,524,883    | 861                |
| 1988–89       | 9,424        | 2,028       | 10,217       | 2,309       | 23,959       | 5,767         | -          | -            | 43,600          | 10,104        | 840                              | 6,673       | 44,440         | 16,777              | 15,900,425    | 948                |
| 1989–90       | 12,718       | 2,634       | 13,136       | 2,595       | 26,993       | 6,339         | -          | -            | 52,847          | 11,568        | 694                              | 4,134       | 53,541         | 15,702              | 19,957,422    | 1,271              |
| 1990–91       | 33,092       | 5,740       | 17,990       | 3,785       | 24,045       | 7,890         | -          | -            | 84,127          | 17,415        | 1,498                            | 13,816      | 85,625         | 31,231              | 32,862,338    | 1,052              |
| 1991–92       | 67,097       | 10,965      | 23,596       | 4,988       | 55,581       | 12,715        | -          | -            | 146,274         | 28,668        | 2,612                            | 27,131      | 148,886        | 55,799              | 43,413,640    | 778                |
| 1992–93       | 74,008       | 14,264      | 41,765       | 8,939       | 89,754       | 21,949        | -          | -            | 205,527         | 45,152        | 4,147                            | 43,751      | 209,674        | 88,903              | 61,264,870    | 689                |
| 1993–94       | 60,928       | 15,759      | 42,041       | 9,827       | 78,257       | 17,722        | -          | -            | 181,226         | 43,308        | 3,775                            | 35,148      | 185,001        | 78,456              | 82,453,332    | 1,051              |
| 1994–95       | 16,533       | 2,648       | 21,755       | 3,451       | 56,231       | 12,271        | -          | -            | 94,519          | 18,370        | 2,604                            | 23,722      | 23,722         | 42,092              | 61,459,319    | 1,460              |
| 1995–96       | 48,497       | 10,141      | 21,432       | 3,829       | 50,772       | 11,299        | -          | -            | 120,701         | 25,269        | 6,113                            | 23,992      | 126,814        | 49,261              | 197,888,260   | 4,017              |
| 1996–97       | 33,297       | 6,135       | 11,331       | 2,552       | 40,616       | 10,140        | -          | -            | 85,244          | 18,827        | 3,933                            | 50,520      | 89,177         | 69,347              | 223,814,084   | 3,227              |
| 1997–98       | 14,289       | 1,813       | 13,752       | 2,499       | 36,746       | 8,909         | 18,273     | 1,177        | 83,060          | 14,398        | 3,130                            | 13,948      | 85,190         | 38,346 <sup>a</sup> | 146,707,316   | 5,176 <sup>b</sup> |
| 1998–99       | 4,967        | 557         | 6,342        | 1,285       | 29,713       | 7,146         | 61,370     | 2,805        | 102,392         | 11,793        | 1,903                            | 20,048      | 104,295        | 31,841              | 262,446,301   | 8,242              |
| 1999–<br>2000 | 1,136        | 1,554       | 6,973        | 2,943       | 27,098       | 6,906         | 22,227     | 1,111        | 57,434          | 12,514        | 2,009                            | 32,151      | 59,443         | 44,665              | 366,798,514   | 8,212              |
| 2000-01       | 8,541        | 14,444      | 8,524        | 1,873       | 19,866       | 12,467        | 1,130      | 57           | 38,061          | 28,841        | 1,973                            | 32,079      | 40,034         | 60,920              | 408,670,598   | 6,708              |
| Total         | 431,716      | 102,160     | 359,259      | 79,205      | 780,059      | 197,425       | 103,000    | 5,150        | 1,674,034       | 383,941       | 42,868                           | 353,599     | 1,716,902      | 737,540             | 2,009,205,593 | 2,724              |
| Notes: (a)Th  | ere seems to | be a comput | ation mistak | e by 10,00  | 0. The actua | ıl sum should | be 28,346. | (b) his is c | calculated base | ed on correct | ted total all                    | ocated volu | me of 28,346 i | $m^2$ .             |               |                    |
| Source: Wo    | orld Bank e  | stimates ba | sed on con   | sultants re | eports using | g MHUD, N     | ILHO Dat   | abase        |                 |               |                                  |             |                |                     |               |                    |

|                            |                   |        | 1378                 |          | 1379              |        |                      |           |  |
|----------------------------|-------------------|--------|----------------------|----------|-------------------|--------|----------------------|-----------|--|
|                            | Area              | a      | Price                |          | Area              |        | Price                |           |  |
|                            | Allocated         | Weight | Price in the capital | Weighted | Allocated         | Weight | Price in the capital | Weighted  |  |
| Province (ostan)           | (m <sup>2</sup> ) | (%)    | of the province      | price    | (m <sup>2</sup> ) | (%}    | of the province      | price     |  |
| East Azarbayejan           | 175,000           | 2      | 574,000              | 8,808    | 791,000           | 3      | 662,000              | 18,190    |  |
| West Azarbayejan           | 246,000           | 2      | 373,000              | 8,045    | 310,000           | 1      | 419,000              | 4,512     |  |
| Ardebil                    | 131,000           | 1      | 286,000              | 3,285    | 147,000           | 1      | 298,000              | 1,522     |  |
| Esfahan                    | 774,000           | 7      | 847,000              | 57,482   | 1,570,000         | 5      | 1,028,000            | 56,066    |  |
| Ilam                       | 136,000           | 1      | 233,000              | 2,778    | 133,000           | 0      | 298,000              | 1,377     |  |
| Bushehr                    | 509,000           | 4      | 233,000              | 10,399   | 276,000           | 1      | 298,000              | 2,857     |  |
| Tehran                     | 1,109,000         | 10     | 1,450,000            | 140,995  | 13,659,000        | 47     | 1,890,000            | 896,777   |  |
| Chaharmahal and Bakhtiyari | 43,000            | 0      | 233,000              | 878      | 38,000            | 0      | 298,000              | 393       |  |
| Khorasan                   | 339,000           | 3      | 671,000              | 19,945   | 164,000           | 1      | 776,000              | 4,421     |  |
| Khuzestan                  | 1,213,000         | 11     | 465,000              | 49,456   | 3,012,000         | 10     | 595,000              | 62,255    |  |
| Zanjan                     | 102,000           | 1      | 345,000              | 3,085    | 38,000            | 0      | 517,000              | 682       |  |
| Semnan                     | 254,000           | 2      | 233,000              | 5,189    | 50,000            | 0      | 298,000              | 518       |  |
| Sistan & Baluchestan       | 294,000           | 3      | 296,000              | 7,630    | 173,000           | 1      | 457,000              | 2,746     |  |
| Fars                       | 425,000           | 4      | 644,000              | 23,998   | 96,000            | 0      | 821,000              | 2,738     |  |
| Qazvin                     | 93,000            | 1      | 604,000              | 4,925    | 2,376,000         | 8      | 752,000              | 62,068    |  |
| Qom                        | 618,000           | 5      | 495,000              | 26,822   | 10,000            | 0      | 554,000              | 192       |  |
| Kordestan                  | 205,000           | 2      | 233,000              | 4,188    | 232,000           | 1      | 298,000              | 2,402     |  |
| Kerman                     | 676,000           | 6      | 233,000              | 13,810   | 419,000           | 1      | 351,000              | 5,109     |  |
| Kermanshah                 | 691,000           | 6      | 365,000              | 22,114   | 265,000           | 1      | 415,000              | 3,820     |  |
| Kohgiluyeh & Boyerahmad    | 19,000            | 0      | 233,000              | 388      | 26,000            | 0      | 298,000              | 269       |  |
| Golestan                   | 64,000            | 1      | 474,000              | 2,660    | 150,000           | 1      | 575,000              | 2,996     |  |
| Gilan                      | 147,000           | 1      | 423,000              | 5,452    | 2,163,000         | 8      | 512,000              | 38,471    |  |
| Lorestan                   | 209,000           | 2      | 233,000              | 4,270    | 36,000            | 0      | 298,000              | 373       |  |
| Mazandaran                 | 155,000           | 1      | 233,000              | 3,167    | 257,000           | 1      | 298,000              | 2,660     |  |
| Markazi                    | 174,000           | 2      | 502,000              | 7,659    | 119,000           | 0      | 646,000              | 2,670     |  |
| Hormozgan                  | 2,097,000         | 18     | 233,000              | 42,841   | 659,000           | 2      | 298,000              | 6,822     |  |
| Hamadan                    | 155,000           | 1      | 391,000              | 5,314    | 80,000            | 0      | 461,000              | 1,281     |  |
| Yazd                       | 352,000           | 3      | 310,000              | 9,568    | 1,538,000         | 5      | 379,000              | 20,249    |  |
| TOTAL                      | 11,405,000        | 100%   |                      | 495,153  | 28,787,000        | 100%   |                      | 1,204,437 |  |

|  |           |        | 1378                 |          | 1379      |        |                      |          |  |
|--|-----------|--------|----------------------|----------|-----------|--------|----------------------|----------|--|
|  | Are       | a      | Price                |          | Area      |        | Price                |          |  |
|  | Allocated | Weight | Price in the capital | Weighted | Allocated | Weight | Price in the capital | Weighted |  |
| Province (ostan)   | $(m^2)$   | (%)    | of the province      | price    | $(m^2)$   | (% }   | of the province      | price    |  |
| Source: Iran Statistical Yearbook, Tehran: Iran Statistical Center, various years and World Bank calculations. This Table is reproduced from Table |           |        |                      |          |           |        |                      |          |  |
| A3-26.   |           |        |                      |          |           |        |                      |          |  |

# Annex 3.9. Market rent

| City          | 19          | 996/97         | 19         | 997/98          | 19       | 998/99         | 19          | 999/00           | 20          | 00/01    | 20     | 01/02    | 20     | 02/03    |
|---------------|-------------|----------------|------------|-----------------|----------|----------------|-------------|------------------|-------------|----------|--------|----------|--------|----------|
| City          | Rent        | Deposit*       | Rent       | Deposit*        | Rent     | Deposit*       | Rent        | Deposit*         | Rent        | Deposit* | Rent   | Deposit* | Rent   | Deposit* |
| Arak          | 1,393       | 15,279         | 1,737      | 19,008          | 2,101    | 24,072         | 2,617       | 32,631           | 3,354       | 38,685   | 3.989  | 43,870   | 5,495  | 63,035   |
| Ardabil       | 1,976       | 15,845         | 2,334      | 13,892          | 2,343    | 12,646         | 2,592       | 12,910           | 3,390       | 24,540   | 4,567  | 34,107   | 5,445  | 49,111   |
| Oromieh       | 1,830       | 12,166         | 2,112      | 12,255          | 2,476    | 15,585         | 2,705       | 17,395           | 3,774       | 23,702   | 5,027  | 32,731   | 5,929  | 52,239   |
| Esfahan       | 1,803       | 38,925         | 2,051      | 46,732          | 2,372    | 53,816         | 3,001       | 65,926           | 3,678       | 81,804   | 5,050  | 84,040   | 7,002  | 107,495  |
| Ahwaz         | 1,946       | 28,056         | 2,348      | 36,817          | 2,778    | 44,750         | 3,272       | 60,225           | 3,959       | 72,855   | 5,333  | 84,440   | 6,814  | 122,761  |
| Tabriz        | 2,109       | 22,304         | 2,589      | 26,262          | 3,109    | 30,481         | 3,798       | 38,857           | 4,340       | 49,075   | 5,312  | 54,607   | 6,784  | 72,838   |
| Tehran        | 3,387       | 108,109        | 4,345      | 116,910         | 5,060    | 130,894        | 5,805       | 160,998          | 7,595       | 195,078  | 10,471 | 242,519  | 13,640 | 323,837  |
| Dezfoul       | 1,717       | 14,030         | 1,954      | 16,663          | 2,169    | 22,154         | 2,814       | 25,110           | 3,293       | 31,514   | 4,795  | 49,129   | 5,417  | 71,126   |
| Rasht         | 2,115       | 47,489         | 2,745      | 61,516          | 3,564    | 65,198         | 4,493       | 79,512           | 4,526       | 102,376  | 5,598  | 102,823  | 6,951  | 147,583  |
| Zahedan       | 1,736       | 14,076         | 2,240      | 17,220          | 2,932    | 18,914         | 3,325       | 24,449           | 3,964       | 37,374   | 4,889  | 41,606   | 6,103  | 61,863   |
| Zanjan        | 1,903       | 20,978         | 1,968      | 25,806          | 2,587    | 28,876         | 2,989       | 37,394           | 3,580       | 42,668   | 4,604  | 54,157   | 6,033  | 70,073   |
| Shiraz        | 1,225       | 40,986         | 2,513      | 54,553          | 2,857    | 68,417         | 3,425       | 86,059           | 4,113       | 93,483   | 5,632  | 112,461  | 7,446  | 129,889  |
| Qazvin        | 2,358       | 33,781         | 3,051      | 41,561          | 3,611    | 49,295         | 4,235       | 66,912           | 4,860       | 79,292   | 6,273  | 87,743   | 8,200  | 105,916  |
| Qom           | 1,543       | 26,976         | 1,956      | 34,921          | 2,469    | 40,350         | 2,750       | 48,629           | 3,313       | 60,701   | 4,497  | 56,970   | 5,527  | 80,151   |
| Karaj         | 1,981       | 59,218         | 2,495      | 65,481          | 2,861    | 75,589         | 3,349       | 97,351           | 3,968       | 125,561  | 5,600  | 147,165  | 7,546  | 187,899  |
| Kerman        | 1,732       | 10,449         | 2,167      | 14,313          | 2,654    | 28,247         | 3,170       | 27,779           | 3,678       | 41,180   | 5,056  | 53,460   | 6,684  | 62,504   |
| Kermansha     | 1,776       | 24,439         | 1,996      | 27,466          | 2,317    | 31,752         | 2,866       | 39,742           | 3,420       | 50,920   | 4,328  | 58,426   | 6,182  | 83,778   |
| Gorgan        | 1,983       | 26,622         | 2,280      | 29,990          | 2,682    | 37,172         | 3,522       | 47,114           | 4,042       | 54,520   | 5,178  | 62,887   | 6,537  | 91,295   |
| Mashad        | 1,952       | 22,941         | 2,365      | 30,539          | 2,773    | 35,362         | 3,363       | 47,675           | 3,963       | 57,915   | 5,129  | 61,449   | 6,425  | 85,286   |
| Hamedan       | 1,306       | 23,853         | 1,556      | 28,318          | 1,874    | 33,781         | 2,472       | 40,791           | 2,974       | 45,885   | 3,760  | 52,994   | 5,592  | 81,522   |
| Yazd          | 1,571       | 10,982         | 1,772      | 12,565          | 2,053    | 19,517         | 2,504       | 23,314           | 3,137       | 32,286   | 4,345  | 37,158   | 5,524  | 65,825   |
| * Assumed to  | be annual o | leposit.       | ·          |                 | ·        |                |             |                  |             | -        | -      | -        | -      |          |
| Source: World | Bank estir  | nates based on | consultant | s reports using | Househol | d Surveys, Teh | ran" Iran S | Statistical Cent | er, various | s years  |        |          |        |          |

Table A3-28. Average monthly rental and deposits agreed in contracts concluded between landlord and lease-holder in real estate agencies per one square meter of floor area for a housing unit by selected cities

# Annex 3.10. Utility statistics

|   | 1996/97   | 1997/98   | 1998/99   | 1999/00   | 2000/01   |  |  |  |  |
|---|-----------|-----------|-----------|-----------|-----------|--|--|--|--|
| Urban households  |           |           |           |           |           |  |  |  |  |
| Annual expenditure (RI)   | 330,732   | 423,951   | 539,842   | 779,834   | 851,704   |  |  |  |  |
| Number of households  | 7,948,925 | 8,266,882 | 8,597,557 | 8,941,460 | 9,299,118 |  |  |  |  |
| Subtotal (RI b)   | 2,629     | 3,505     | 4,641     | 6,973     | 7,920     |  |  |  |  |
| Rural households  |           |           |           |           |           |  |  |  |  |
| Annual expenditure (RI)   | 289,973   | 365,625   | 463,339   | 701,656   | 864,988   |  |  |  |  |
| Number of households  | 4,410,370 | 4,454,474 | 4,499,018 | 4,544,009 | 4,589,449 |  |  |  |  |
| Subtotal (RI b)   | 1,279     | 1,629     | 2,085     | 3,188     | 3,970     |  |  |  |  |
| Total (RI b)  | 3,908     | 5,133     | 6,726     | 10,161    | 11,890    |  |  |  |  |
| <i>Votes:</i> (a) <i>Statistical Year Book.</i> (b) For years 1997/98–2000/01, figures calculated assuming 4 percent annual growth. (c) <i>Statistical Year Book.</i> (d) For years 1997/98–2000/01—calculated assuming 1 percent annual growth. Growth rates from World Bank database. |           |           |           |           |           |  |  |  |  |

## Table A3-29. Utility Expenditures

*Source:* Statistical Year Book and authors' calculations.

### Table A3-30. Annual Utility Expenditure by Income Distribution (RI in 2000/01)

|                                 |   | Decile of income distribution |         |         |         |         |         |           |           |           |  |
|---------------------------------|---|-------------------------------|---------|---------|---------|---------|---------|-----------|-----------|-----------|--|
|                                 | 1   | 2                             | 3       | 4       | 5       | 6       | 7       | 8         | 9         | 10        |  |
| Average<br>URBAN<br>expenditure | 288,495   | 476,170                       | 577,125 | 657,995 | 781,845 | 835,092 | 976,752 | 1,068,272 | 1,143,140 | 1,471,887 |  |
| Average<br>RURAL<br>expenditure | 250,238   | 448,232                       | 556,487 | 658,019 | 738,664 | 852,292 | 943,291 | 1,079,025 | 1,311,950 | 1,774,868 |  |
| Source: World                   | ource: World Bank estimates based on consultants reports. |                               |         |         |         |         |         |           |           |           |  |

*Source:* world Bank estimates based on consultants reports.

# Annex 3.11. Flow of Subsidies

Figures include only those subsidies identified and reviewed in this paper.



Figure A3-1. General Housing Subsidies in Iran's Housing Market

--- implicit subsidies

\_\_\_\_\_ explicit cash subsidies



Figure A3-2. Subsidies for Assisted Housing

---- implicit subsidies

\_\_\_\_\_ explicit cash subsidies

NOTES: Subsidies that are available to everybody in the market are in grey, while subsidies specific to assisted housing are in black



Figure A3-3. Subsidies for Social Housing

---- implicit subsidies

\_\_\_\_\_ explicit cash subsidies

NOTES: Subsidies that are available in to everybody in the market are in grey, while subsidies specific to social housing are in black

# **ANNEXES – CHAPTER 5**

|               | Total      | Steel frame | Concrete | Steel & Concrete | Steel & Brick or | Brick &   |
|---------------|------------|-------------|----------|------------------|------------------|-----------|
|               |            |             | frame    | frame            | Stone            | Timber    |
| 1365/1986     |            |             |          |                  |                  |           |
| Whole Country | 8,217,375  |             |          | 273190           | 3,534,158        | 1,292,208 |
| Percentage    | 100.00     |             |          | 3.32             | 43.01            | 15.73     |
| Urban         | 4,669,722  | ,           |          | 242,513          | 2,977,666        | 614,757   |
| Percentage    | 100.00     |             |          | 5.19             | 63.77            | 13.16     |
| Rural         | 3,547,653  |             |          | 30,677           | 556,492          | 677,451   |
| Percentage    | 100.00     |             |          | 0.86             | 15.69            | 19.10     |
| 1375/1996     |            |             |          |                  |                  |           |
| Whole Country | 1,0770,112 | 1,125,383   | 429,338  | 1,554,721        | 4,836,029        | 1,528,139 |
| Percentage    | 100.00     | 10.45       | 3.99     | 14.44            | 44.90            | 14.19     |
| Urban         | 6,913,730  | 1,075,417   | 37,4106  | 1,449,523        | 3,848,392        | 604,181   |
| Percentage    | 100.00     | 15.55       | 5.41     | 20.97            | 55.66            | 8.74      |
| Rural         | 3,856,382  | 49,966      | 55,232   | 105,198          | 987,637          | 923,958   |
| Percentage    | 100.00     | 1.30        | 1.43     | 2.73             | 25.61            | 23.96     |

 Table A5-1. Dwellings by Type of Structure in Urban and Rural Areas, 1365 and 1375

|                       | Concrete block  | Brick & Stone      | Timber    | Adobe & Timber | Adobe   | Miscellaneous | N/A     |  |
|-----------------------|-----------------|--------------------|-----------|----------------|---------|---------------|---------|--|
| 1365/1986             |                 |                    |           |                |         |               |         |  |
| Whole Country         | 429,923         | 151,381            | 59,522    | 1,541,298      | 828,599 | 53,946        | 53,150  |  |
| Percentage            | 5.23            | 1.84               | 0.72      | 18.76          | 10.08   | 0.66          | 0.65    |  |
| Urban                 | 207,419         | 7,4014             | 15,008    | 254,135        | 239,537 | 11,536        | 33,137  |  |
| Percentage            | 4.44            | 1.58               | 0.32      | 5.44           | 5.13    | 0.25          | 0.71    |  |
| Rural                 | 222,504         | 77,367             | 44,514    | 1,287,163      | 589,062 | 42,410        | 20,013  |  |
| Percentage            | 6.27            | 2.18               | 1.25      | 36.28          | 16.60   | 1.20          | 0.56    |  |
| 1375/1996             | 1375/1996       |                    |           |                |         |               |         |  |
| Whole Country         | 667,505         | 246,748            | 39,322    | 1,079,368      | 561,779 | 80,324        | 176,177 |  |
| Percentage            | 6.20            | 2.29               | 0.37      | 10.02          | 5.22    | 0.75          | 1.64    |  |
| Urban                 | 306,383         | 134,714            | 13,313    | 200,178        | 205,748 | 26,130        | 125,168 |  |
| Percentage            | 4.43            | 1.95               | 0.19      | 2.90           | 2.98    | 0.38          | 1.81    |  |
| Rural                 | 361,122         | 112,034            | 26,009    | 879,190        | 356,031 | 54,194        | 51,009  |  |
| Percentage            | 9.36            | 2.91               | 0.67      | 22.80          | 9.23    | 1.41          | 1.32    |  |
| Source: Statistical Y | earbook 1380, T | Cehran: Statistica | al Center | of Iran, 2002. |         |               |         |  |

| Year                         | Steel &<br>brick | Percentage      | Annual Change<br>(percent) | Steel &<br>concrete frame | Percentage    | Annual Change<br>(percent) | Total    |
|------------------------------|------------------|-----------------|----------------------------|---------------------------|---------------|----------------------------|----------|
| 1375/1996                    | 103,751          | 76.95           |                            | 22,648                    | 16.80         |                            | 134,837  |
| 1376/1997                    | 98,170           | 74.59           | -3.07                      | 25,053                    | 19.03         | 13.32                      | 131,619  |
| 1377/1998                    | 98,670           | 73.48           | -1.48                      | 27,484                    | 20.47         | 7.53                       | 134,282  |
| 1378/1999                    | 96,556           | 71.39           | -2.85                      | 29,451                    | 21.77         | 6.39                       | 135,253  |
| 1379/2000                    | 85,491           | 67.62           | -5.28                      | 32,623                    | 25.80         | 18.50                      | 126,435  |
| <i>Source</i> : Cal<br>2002. | culations ma     | de on the basis | of data from Stati         | stical Yearbook           | 1380, Tehran: | Statistical Center         | of Iran, |

Table A5-2. The Share of Major Structural Types in Building Permits Issued in Urban Areas

Table A5-3. Building Permits Issued in Urban Areas by Number of Stories

| Year           |                | 1 story     | 2 stories    | 3 stories    | 4 stories   | 5 stories<br>and more | Including the city of Tehran | Excluding the city of Tehran |
|----------------|----------------|-------------|--------------|--------------|-------------|-----------------------|------------------------------|------------------------------|
| 1377/1998      | Number         | 66,718      | 46,717       | 16,743       | 3,092       | 1,012                 | N/A                          | 134,282                      |
|                | Percentage     | 50          | 35           | 12           | 2           | 1                     | N/A                          | 100                          |
| 1378/1999      | Number         | 66,983      | 47,113       | 19,126       | 10,359      | 3,791                 | 147,372                      | 135,253                      |
|                | Percentage     | 45          | 32           | 13           | 7           | 3                     | 100                          | 92                           |
| 1379/2000      | Number         | 61,886      | 43,059       | 17,794       | 15,911      | 7,203                 | 145,853                      | 126,435                      |
|                | Percentage     | 42          | 30           | 12           | 11          | 5                     | 100                          | 87                           |
| 1380/2001      | Number         | 59,158      | 42,356       | 20,576       | 21,215      | 10,949                | 154,254                      |                              |
|                | Percentage     | 38          | 27           | 13           | 14          | 7                     | 100                          |                              |
| 1381/2002      | Number         | 60,039      | 46,930       | 25,174       | 11,723      | 7,177                 | 151,043                      |                              |
|                | Percentage     | 40          | 31           | 17           | 8           | 5                     | 100                          |                              |
| Source: Statis | stical Yearboo | ok 1380, Te | hran: Statis | tical Center | of Iran, 20 | 02.                   |                              |                              |

| Table A5-4. Urban Buil | ding Permits Issued, | Selected Provinces, | 1999 and 2000 |
|------------------------|----------------------|---------------------|---------------|
|------------------------|----------------------|---------------------|---------------|

|                 | Tehran  | Esfahan | Khorassan | Fars   | Khoozestan | Total for 5<br>Provinces | Whole<br>Country |  |  |  |
|-----------------|---|---------|-----------|--------|------------|--------------------------|------------------|--|--|--|
| Number          | 27,190  | 17,765  | 11,312    | 10,444 | 7,782      | 74,493                   | 145,853          |  |  |  |
| Percentage      | 19  | 12      | 8         | 7      | 5          | 51                       | 100              |  |  |  |
| Number          | 19,383  | 19,935  | 1,0679    | 11,703 | 8,199      | 7,4493                   | 147,372          |  |  |  |
| Percentage      | 13  | 14      | 7         | 8      | 6          | 48                       | 100              |  |  |  |
| Source: Statist | ource: Statistical Yearbook 1380, Tehran: Statistical Center of Iran, 2002. |         |           |        |            |                          |                  |  |  |  |

| Year   | 1374       | 1375      | 1376      | 1377       | 1378       | 1379        | 1380   | 1381   |
|--|------------|-----------|-----------|------------|------------|-------------|--------|--------|
|  | (1995)     | (1996)    | (1997)    | (1998)     | (1999)     | (2000)      | (2001) | (2002) |
| Amount of Cement   | 15,460     | 16,442    | 16,995    | 20,049     | 22,219     | 24,000      | 26,650 | 28,300 |
| Produced (1,000 tons)  |            |           |           |            |            |             |        |        |
| Annual Increase (percent)  |            | 6.35      | 3.36      | 17.97      | 10.82      | 8.02        | 11.04  | 6.19   |
| Source: Statistical Yearbook 1380, Tehran: Statistical Center of Iran, 2002, for data up to 1999. The data |            |           |           |            |            |             |        |        |
| for 2001 are from Ministry   | of Industr | ies and M | ining. Da | ta for 200 | 0 and 2002 | 2 is estima | ited.  |        |

Table A5-5. Domestic Production of Cement 1374–1381 (199–2002)

Table A5-6. Domestic Production of Ceramics and Tiles, 1374–1383 (1995–2004)

| Year  | 1374   | 1375   | 1376   | 1377   | 1378   | 1379   | 1380   | 1381   | 1382   | 1383   |
|---|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|   | (1995) | (1996) | (1997) | (1998) | (1999) | (2000) | (2001) | (2002) | (2003) | (2004) |
| Amount of Ceramics and<br>Tiles Production  | 44,451 | 47,090 | 46,616 | 53,309 | 64,105 | 64,772 | 69,325 | 73,878 | 78,430 | 82,983 |
| (1,000 sq. m.)  |        |        |        |        |        |        |        |        |        |        |
| Annual Increase (percent)   |        | 6      | -1     | 14     | 20     | 1      | 7      | 7      | 6      | 6      |
| <i>Source: Statistical Yearbook 1380</i> , Tehran: Statistical Center of Iran, 2002, for data up to 1999. The figures for 2000 to 2004 are projected figures. |        |        |        |        |        |        |        |        |        |        |

 Table A5-7. Production of Construction Equipment, 1374–1378 (1995–1999)

| Year                             | 1374 (1995)    | 1375 (1996)    | 1376 (1997)     | 1377 (1998) | 1378 (1999) |
|----------------------------------|----------------|----------------|-----------------|-------------|-------------|
| Heavy Machinery                  | 394            | 425            | 882             | 616         | 532         |
| Annual Increase (percent)        |                | 7.87           | 107.53          | -30.16      | -13.64      |
| Trucks                           | 2379           | 3316           | 3827            | 5491        | 3938        |
| Annual Increase (percent)        |                | 39.39          | 15.41           | 43.48       | -28.28      |
| Source: Statistical Yearbook 138 | 30, Tehran: St | tatistical Cen | ter of Iran, 20 | 002.        |             |

| Table A5-8. | Qualified | Professionals | in Tehran | and Seven | Provinces | (2001) |
|-------------|-----------|---------------|-----------|-----------|-----------|--------|
|-------------|-----------|---------------|-----------|-----------|-----------|--------|

|                | East           | Esfahan   | Khorassan    | Khoozestan    | Fars     | Kermanshah | Mazandaran | Total for | Tehran | Total for | Country |
|----------------|----------------|-----------|--------------|---------------|----------|------------|------------|-----------|--------|-----------|---------|
|                | Azerbaijan     |           |              |               |          |            |            | 7         |        | 8         | Total   |
|                |                |           |              |               |          |            |            | Provinces |        | Provinces |         |
| Architecture   | 112            | 233       | 351          | 58            | 107      | 33         | 93         | 987       | 4782   | 5769      | 6256    |
| Percentage     | 2              | 4         | 6            | 1             | 2        | 1          | 1          | 16        | 76     | 92        | 100     |
| Construction   | 2241           | 2809      | 3257         | 1728          | 1800     | 341        | 1729       | 13905     | 22284  | 36189     | 43620   |
| Engineers      |                |           |              |               |          |            |            |           |        |           |         |
| Percentage     | 5              | 6         | 7            | 4             | 4        | 1          | 4          | 32        | 51     | 83        | 100%    |
| Building       | 5848           | 17765     | 11312        | 7782          | 10444    | 3479       | 3947       | 60577     | 27190  | 87767     | 147372  |
| Permits        |                |           |              |               |          |            |            |           |        |           |         |
| Percentage     | 4              | 12        | 8            | 5             | 7        | 2          | 3          | 41        | 18     | 60        | 100     |
| Permits/       | 2.6            | 6.3       | 3.5          | 4.5           | 5.8      | 10.2       | 2.3        | 4.4       | 1.2    | 2.4       | 3.4     |
| Engineers      |                |           |              |               |          |            |            |           |        |           |         |
| Source: Unpubl | ished data fro | om Engine | ering Discip | linary Organi | ization, | 2001.      |            |           |        |           |         |

|                    | 1379              | 0 (2000)  |            | 1380              | (2001)    |        | 1381               | (2002)    |          | New Plan    |
|--------------------|-------------------|-----------|------------|-------------------|-----------|--------|--------------------|-----------|----------|-------------|
|                    | Implemented       | Plan      | %          | Implemented       | Plan      | %      | Implemented        | Plan      | %        | 1381 (2002) |
| TOTAL              | 434,900           | 498,500   | 87.2       | 489,800           | 684,800   | 71.5   | 558,200            | 808,800   | 69.0     | 938,100     |
| Employment         |                   |           |            |                   |           |        |                    |           |          |             |
| Agriculture        | 14,000            | 17,500    | 78.9       | 13,400            | 25,000    | 53.4   | 15,900             | 29,600    | 53.8     | 37,150      |
| Mining &           | 252,000           | 252,300   | 99.9       | 292,600           | 351,900   | 83.1   | 308,500            | 416,000   | 74.2     | 445,800     |
| Industry Sector    |                   |           |            |                   |           |        |                    |           |          |             |
| Mining &           | 158,100           | 134,200   | 117.8      | 157,200           | 182,700   | 86.0   | 154,800            | 216,000   | 71.7     | 216,800     |
| Industry r         |                   |           |            |                   |           |        |                    |           |          |             |
| Costruction        | 93,900            | 118,100   | 79.5       | 135,400           | 169,200   | 80.0   | 153,700            | 200,000   | 76.9     | 229,000     |
| Services           | 158,400           | 216,600   | 73.1       | 172,000           | 291,300   | 59.0   | 220,300            | 343,600   | 64.1     | 432,350     |
| Transportation,    | 59,400            | 73,300    | 81.1       | 70,400            | 85,200    | 82.6   | 79,000             | 100,100   | 78.4     | 114,450     |
| Communications,    |                   |           |            |                   |           |        |                    |           |          |             |
| etc.               |                   |           |            |                   |           |        |                    |           |          |             |
| Commerce,          | 56,000            | 76,500    | 73.2       | 58,900            | 113,000   | 52.1   | 78,200             | 133,500   | 58.6     | 170,800     |
| Restaurants,       |                   |           |            |                   |           |        |                    |           |          |             |
| Hotels, Financial  |                   |           |            |                   |           |        |                    |           |          |             |
| Institutions, etc. |                   |           |            |                   |           |        |                    |           |          |             |
| Public, Social,    | 43,000            | 66,800    | 64.4       | 42,700            | 93,100    | 45.8   | 63,100             | 110,000   | 57.4     | 147,100     |
| Private services   |                   |           |            |                   |           |        |                    |           |          |             |
| Misc.              | 10,500            | 12,100    | 87.2       | 11,800            | 16,600    | 71.5   | 13,500             | 19,600    | 69.0     | 22,800      |
| Source: The Revise | ed Plan for Emplo | yment Opp | ortunities | s (as approved by | the Board | of Min | isters), Tehran, G | overnment | of Iran, | , 2002.     |

Table A5-9. Distribution of Employment Opportunities by Sector

| Table A5-10. Estimates | of Labor for Building | t 1 so m Built Area | , by Type of Structure |
|------------------------|-----------------------|---------------------|------------------------|
| 10010 110 101 1001     | or masor for banang   | , - »q              |                        |

| Type of Construction |                    | Non-skilled<br>Labor<br>(Man days) | Semi-skilled<br>Labor<br>(Man days) | Skilled Labor<br>(Man days) | Total Labor<br>(Man days) |
|----------------------|--------------------|------------------------------------|-------------------------------------|-----------------------------|---------------------------|
| Concrete             | Joist & Block      | 1.22                               | 1.09                                | 1.67                        | 3.98                      |
| Block Walls          | Roof               |                                    |                                     |                             |                           |
|                      | Steel Roof         | 2.39                               | 0.81                                | 1.47                        | 3.67                      |
| Brick Walls          | Timber Roof        | 2.39                               | 0.81                                | 1.47                        | 4.67                      |
|                      | Brick Vault        | 2.39                               | 0.81                                | 1.47                        | 4.67                      |
|                      | Steel Roof         | 2.39                               | 0.81                                | 1.47                        | 4.67                      |
| Steel Frame          | Joist & Block      | 1.22                               | 1.09                                | 1.67                        | 3.98                      |
|                      | Roof               |                                    |                                     |                             |                           |
|                      | Steel Roof         | 1.22                               | 1.09                                | 1.67                        | 3.98                      |
| Reinforce            | d concrete         | 1.22                               | 1.09                                | 1.67                        | 3.98                      |
| Source: Gholam       | ali Farjadi and Ha | ssan Safari, <i>Proje</i>          | ct on Employmen                     | t in the Housing S          | <i>ector</i> , Institute  |
| for Research in l    | Planning and Deve  | elopment, Tehran:                  | Management and                      | l Planning Organiz          | zation, 1997.             |

| Year      | Steel            | <b>Brick Masonry</b>  | Adobe        | Cement           | Brick Masonry &         | Total      |
|-----------|------------------|-----------------------|--------------|------------------|-------------------------|------------|
|           | Structure        | & Steel Roof          |              | Block            | Timber Roof             | Employment |
| 1980      | 5,815            | 548,024               | 2,049        | -                | 21,093                  | 629,337    |
| 1981      | 4,710            | 641,450               | 1,764        | -                | 323,000                 | 714,574    |
| 1982      | 6,368            | 524,908               | 700          | -                | 25,996                  | 582,282    |
| 1983      | 13,908           | 657,666               | 389          | -                | 22,623                  | 721,308    |
| 1984      | 10,856           | 750,960               | 181          | -                | 17,979                  | 819,930    |
| 1985      | 23,261           | 754,802               | 2,517        | -                | 23,609                  | 847,309    |
| 1986      | 32,614           | 686,334               | 0            | -                | 27,787                  | 770,007    |
| 1987      | 29,496           | 642,773               | 259          | -                | 26,982                  | 741,825    |
| 1988      | 29,032           | 612,444               | 130          | -                | 20,548                  | 679,070    |
| 1989      | 85,473           | 776,492               | 138          | -                | 14,996                  | 3,896,443  |
| 1990      | 23,930           | 634,912               | -            | 23,192           | 13,984                  | 693,879    |
| 1991      | 122,340          | 611,588               | -            | 15,831           | 16,604                  | 772,590    |
| 1992      | 165,943          | 403,851               | -            | 14,832           | 10,066                  | 598,973    |
| 1993      | 169,062          | 403,695               | -            | 17,425           | 10,975                  | 607,721    |
| 1994      | 211,116          | 448,891               | -            | 13,685           | 9,028                   | 690,270    |
| 1995      | 111,263          | 673,933               | -            | 17,701           | 9,599                   | 828,296    |
| Source: 0 | Gholamali Farjao | li and Hassan Safari, | Project on E | Employment in th | ne Housing Sector, Inst | titute for |
| Research  | in Planning and  | Development, Tehr     | an: Managen  | nent and Plannin | g Organization, 1997.   |            |

Table A5-11. Estimate of Employment in Housing Sector

|                | East   | Esfahan | Khorassan | Khoozestan | Fars | Tehran | Total for 6 | Country |  |
|----------------|--|---------|-----------|------------|------|--------|-------------|---------|--|
|                | Azerbaijan   |         |           |            |      |        | Provinces   | Total   |  |
| Consultants    | 8  | 28      | 30        | 9          | 18   | 558    | 651         | 693     |  |
| Percentage     | 1  | 4       | 4         | 1          | 3    | 81     | 94          | 100     |  |
| Source: Data e | Source: Data extracted from the list provided by the Deputy for Technical Affairs, Management and Planning |         |           |            |      |        |             |         |  |

Organization, Tehran: September 2001.

| Table A5-13. Graded | Contractors by | Management and | l Planning Organi | zation, 2000 |
|---------------------|----------------|----------------|-------------------|--------------|
|---------------------|----------------|----------------|-------------------|--------------|

| Grade   | ade Buildings-            |                        | Build                    | ings-                    | Buildin                          | gs-Total              | Road B                           | uilding                 | High-Te                   | ech Steel                 | High-Tech                      |                       |
|---|---------------------------|------------------------|--------------------------|--------------------------|----------------------------------|-----------------------|----------------------------------|-------------------------|---------------------------|---------------------------|--------------------------------|-----------------------|
|   | Nati                      | onal                   | Provi                    | Provincial               |                                  |                       |                                  | Concrete                |                           |                           |                                |                       |
|   | Number                    | Percent                | Number                   | Percent                  | Number                           | Percent               | Number                           | Percent                 | Number                    | Percent                   | Number                         | Percent               |
| 1   | 1                         | 0                      | 4,569                    | 60%                      | 4,570                            | 54                    | 2                                | 1                       | 31                        | 67                        | 72                             | 61                    |
| 2   | 17                        | 2                      | 2,140                    | 28%                      | 2,157                            | 26                    | 14                               | 4                       | 10                        | 22                        | 18                             | 15                    |
| 3   | 7                         | 1                      | 603                      | 8%                       | 610                              | 7                     | 11                               | 3                       | 3                         | 7                         | 15                             | 13                    |
| 4   | 243                       | 28                     | 244                      | 3%                       | 487                              | 6                     | 96                               | 26                      | 2                         | 4                         | 7                              | 6                     |
| 5   | 223                       | 25                     |                          |                          | 223                              | 3                     | 60                               | 16                      |                           |                           | 7                              | 6                     |
| 6   | 232                       | 26                     |                          |                          | 232                              | 3                     | 81                               | 22                      |                           |                           |                                |                       |
| 7   | 53                        | 6                      |                          |                          | 53                               | 1                     | 37                               | 10                      |                           |                           |                                |                       |
| 8   | 106                       | 12                     |                          |                          | 106                              | 1                     | 66                               | 18                      |                           |                           |                                |                       |
| Total   | 882                       | 100%                   | 7,556                    | 100%                     | 8,438                            | 100%                  | 367                              | 100%                    | 46                        | 100%                      | 119                            | 100%                  |
| <i>Note:</i> Maximum possible grading differs for each category of contractors. However a certain company might be graded in a number of categories. Usually for under Grade 4, contractors' grading is done at the provincial level; the results are thus quoted separately. |                           |                        |                          |                          |                                  |                       |                                  |                         |                           |                           |                                |                       |
| Source:<br>for invit  | Data extra<br>ation to Bi | cted from<br>dding and | The List of<br>Contracti | of Building<br>ng, Tehra | g <i>and Insta</i><br>an: Deputy | allations<br>for Tech | <i>Contractor</i><br>inical Affa | rs: Nation<br>irs, Mana | al (not Pro<br>gement and | ovincial) C<br>d Planning | <i>Contractors</i><br>Organiza | <i>Eligible</i> tion, |

for invitation to Bidding and Contracting, Tehran: Deputy for Technical Affairs, Management and Planning Organizati 2001. Unpublished data, Deputy for Technical Affairs, Management and Planning Organization, 2002, for provincial contractors.

|            | East         | Esfahan     | Khorassan     | Khoozestan     | Fars    | Kermanshah      | Mazandaran     | Total for 7   | Tehran      | Total for 8  | Country |
|------------|--------------|-------------|---------------|----------------|---------|-----------------|----------------|---------------|-------------|--------------|---------|
|            | Azerbaijan   |             |               |                |         |                 |                | Provinces     |             | Provinces    | Total   |
| Grade 1    | 227          | 85          | 357           | 892            | 227     | 379             | 179            | 2346          | 350         | 2696         | 4570    |
| Grade 2    | 227          | 93          | 206           | 151            | 160     | 86              | 113            | 1036          | 342         | 1378         | 2157    |
| Grade 3    | 44           | 32          | . 53          | 25             | 43      | 10              | 38             | 245           | 150         | 395          | 610     |
| Grade 4    | 20           | 22          | . 27          | 1              | 9       | 5               | 17             | 101           | 82          | 183          | 487     |
| Total      | 518          | 232         | 643           | 1,069          | 439     | 480             | 347            | 3,728         | 924         | 4,652        | 7,824   |
| Percentage | 7            | 3           | . 8           | 14             | 6       | 6               | 4              | 48            | 12          | 59           | 100%    |
| Source: Ex | tracted from | the data pr | ovided by the | e Deputy for T | echnica | l Affairs, Mana | gement and Pla | nning Organiz | ation, Tehr | an: Septembe | r 2001. |

Table A5-14. Distribution of Provincial Contractors in Selected Provinces of Iran

| Group          | Province(s) or Region   | Maximum Appropriate                       | Total Executive      |
|----------------|---|---|----------------------|
| _              |   | Commission (RI m)                         | capacity (RI m)      |
| 1              | Tehran  | 60  | 100                  |
| 2              | East Azerbaijan, Esfahan, Gilan, Mazandaran,                      | 70  | 120                  |
|                | Markazi   |   |                      |
| 3              | Khorasan, Hamadan, Zanjan, Semnan                                 | 80  | 140                  |
| 4              | Southeast Fars, Chahrmahal Bakhtiari,                             | 90  | 160                  |
|                | Kerman, Lorestan, Yazd, West Azerbaijan                           |   |                      |
| 5              | Ilam, Booshehr, South Khorasan, Sistan                            | 100                                       | 180                  |
|                | Baloochestan, Kurdistan, Kohgilooyeh                              |   |                      |
|                | Booyer Ahmad, Hormozgan, Khozestan,                               |   |                      |
|                | Bakhtaran   |   |                      |
| 6              | Abu Musa, Jask, Khark, Dayyer, Qeshm,                             | 120                                       | 200                  |
|                | Kolahi, Kish, Larak, Lavan, Moqam, Hormoz,                        |   |                      |
|                | Hengam, other islands, Booshehr,                                  |   |                      |
|                | Hormozgan.  |   |                      |
| Note: The figu | res will be adjusted each April according to general adjustmen    | t indices. The figures are for Buildings, | Roads, and Water and |
| Sewerage cate  | gories; for Urban Infrastructure, Installations, and Power the li | mits are multiplied by a factor of 0.5.   |                      |
| Source: Reg    | ulations for Qualification of Building and Installe               | ations Contractors and Contrac            | ting, Deputy for     |
| Technical A    | ffairs, Tehran: Management and Planning Organiz                   | zation, 2001.                             |                      |

Table A5-15. Executive Capacity of Individual Contractors

| Grade | Minimum      | Maximum      | Maximum     | Minimum Requirements for Machinery, |                                  |       |           |  |  |
|-------|--------------|--------------|-------------|-------------------------------------|----------------------------------|-------|-----------|--|--|
|       | Appropriate  | Appropriate  | number of   |                                     | Equipment and Tools <sup>a</sup> |       |           |  |  |
|       | Project Cost | Project Cost | permissible | Heavy                               | Semi -                           | Light | Equipment |  |  |
|       |              | (Capacity)   | projects    |                                     | heavy                            |       | & Tools   |  |  |
| 1     | 50           | 200          | 2           |                                     |                                  |       |           |  |  |
| 2     | 100          | 300          | 2           |                                     |                                  | 1     | 3         |  |  |
| 3     | 150          | 400          | 2           |                                     | 1                                | 1     | 4         |  |  |
| 4     | 400          | 800          | 2           |                                     | 1                                | 3     | 5         |  |  |
| 5     | 600          | 1,500        | 2           | 1                                   | 2                                | 4     | 6         |  |  |
| 6     | 1,000        | 2,500        | 3           | 2                                   | 3                                | 5     | 7         |  |  |
| 7     | 1,500        | 3,500        | 3           | 3                                   | 4                                | 6     | 8         |  |  |
| 8     | 2,500        | 6,000        | 3           | 4                                   | 5                                | 7     | 10        |  |  |

 Table A5-16. Contractors Grading Points and Minimum Requirements for Buildings Category

| Grade |           | Minimum    | Points              |         | Minimum Qualifications of Partners and         |  |  |
|-------|-----------|------------|---------------------|---------|--|--|--|
|       | Executive | Working    | Finance             | Total   | Executive Board                                |  |  |
|       | Manager   | Experience | &                   |         |  |  |  |
|       | & Board   |            | Credit <sup>b</sup> |         |  |  |  |
| 1     | 250       |            | 30                  | 300     | One person equivalent to university diploma    |  |  |
| 2     | 350       |            | 70                  | 500     | One person equivalent to university diploma    |  |  |
| 2     | 550       |            | 70                  | 500     | in civil anginaaring and 10 years experience   |  |  |
| 2     | 600       | 200        | 100                 | 1 200   | One nemen equivalent to P. Se, in sixil        |  |  |
| 3     | 000       | 200        | 100                 | 1,200   | engineering and 7 years of experience: or      |  |  |
|       |           |            |                     |         | One person equivalent to B Sc. in civil        |  |  |
|       |           |            |                     |         | engineering and 7 years experience, and One    |  |  |
|       |           |            |                     |         | person equivalent to university diploma in     |  |  |
|       |           |            |                     |         | civil engineering and 5 years experience       |  |  |
| 4     | 1.000     | 700        | 200                 | 2.200   | Two persons, each equivalent to B.Sc. in civil |  |  |
| -     | -,        |            |                     | _,_ • • | engineering and 7 years experience             |  |  |
| 5     | 1,200     | 1,000      | 400                 | 3,200   | Two persons, each equivalent to B.Sc. in civil |  |  |
|       |           |            |                     |         | engineering and 10 years experience            |  |  |
| 6     | 1,500     | 1,400      | 700                 | 4,200   | Two persons, each equivalent to B.Sc. in civil |  |  |
|       |           |            |                     |         | engineering and 10 and 15 years experience,    |  |  |
|       |           |            |                     |         | respectively                                   |  |  |
| 7     | 2,000     | 1800       | 1,000               | 5,400   | Three persons, each equivalent to B.Sc. in     |  |  |
|       |           |            |                     |         | civil engineering and one with 15 and two      |  |  |
|       |           |            |                     |         | with 10 years experience                       |  |  |
| 8     | 2,200     | 2,000      | 1,400               | 6,500   | Three persons, each equivalent to B.Sc. in     |  |  |
|       |           |            |                     |         | civil engineering and 15 years experience      |  |  |

*Notes:* (a) Samples include: (i) heavy machinery: bulldozers, loaders, graders, mechanical shovels, trucks over 10 ton capacity, dump trucks, truck mixers, draglines, tower cranes, trench cutter, side booms, etc; (ii) semi-heavy machinery: finishers, concrete pump, rollers, trucks 5-10 ton capacity, bunkers, backhoe, etc; (iii) light machinery: vehicles, tractors, dumpers, auto mixers, lift trucks, rail winder, etc; (iv) equipment and tools. (b) Points for Finance and Credit are calculated according to the following method (Article 23). The procedures for calculating points awarded for Finance is as follows: (i) The sum for the following amounts should be calculated as positive: Liquidity; deposits and mortgages at banks, or with clients or persons; bank accounts; other receivables; Receivables for approved quantity surveys or bills of materials; due payments for mobilizations; securities; other liquidity assets; goods in store or on road; letters of credit opened by banks and permanent assets (excluding depreciation value of assets). (ii) The sum for the following amounts should be calculated as negative: Debts to banks clients or persons; debts because of mobilization payment, debts because of insurance, tax, etc.; other liabilities; Five points are awarded for cach positive IRR million. The procedures for calculating points awarded for Credit is the sum of the following: Loan credits against mortgage; securities with clients: (i) One point is awarded for each IRR million; (ii) The points awarded for Finance and Credit of A and B.

Source: Regulations for Qualification of Building and Installations Contractors and Contracting, Tehran: Deputy for Technical Affairs, Management and Planning Organization, 2001.

|                                  | Number of<br>Projects  | Total<br>Costs     | Total      | Materials | Labor     | Misc.   |
|----------------------------------|------------------------|--------------------|------------|-----------|-----------|---------|
| Country                          | 2 157 102              | 14 190 550         | 10 600 125 | 6 075 270 | 2 000 024 | 724 722 |
| Country                          | 5,157,195              | 14,169,559         | 10,099,123 | 0,975,579 | 2,999,024 | 124,122 |
| New Buildings                    | 209,655                | 9,167,251          | 5,711,677  | 3,806,685 | 1,492,190 | 412,802 |
| Total Urban Projects             | 205,3236               | 11,824,185         | 8,472,373  | 5,550,048 | 2,336,579 | 585,746 |
| Urban New Buildings              | 136,875                | 8,115,204          | 4,784,205  | 3,210,158 | 1,217,023 | 357,024 |
| Extensions & Renovations         | 401,535                | 2,608,453          | 2,582,932  | 1,681,143 | 764,173   | 137,616 |
| Total Rural Projects             | 1,103,957              | 2,365,374          | 2,226,752  | 1,425,331 | 662,445   | 138,976 |
| Rural New Buildings              | 72,780                 | 1,052,050          | 927,473    | 596,527   | 275,167   | 55,779  |
| Source: Statistical Yearbook 138 | 30, Tehran: Statistica | al Center of Iran, | 2002.      |           |           |         |

Table A5-18. Private Sector Investment in Urban Housing in 1375 (1996) IRR m

|                              | 1374/1995       | 1375/1996         | 1376/1997      | 1377/1998 | 1378/1999 | Average |
|------------------------------|-----------------|-------------------|----------------|-----------|-----------|---------|
| Total Investment             | 7555            | 12832             | 17779          | 17950     | 23180     |         |
| Investment in Tehran         | 2890            | 5834              | 6683           | 4843      | 6020      |         |
| Other urban areas            | 4665            | 6998              | 11096          | 13107     | 17160     |         |
| Investment in Tehran (%)     | 38%             | 45%               | 38%            | 27%       | 26%       | 35%     |
| Other urban areas (%)        | 62%             | 55%               | 62%            | 73%       | 74%       | 65%     |
| Annual increase for total in | vestment        | 70%               | 39%            | 1%        | 29%       | 35%     |
| Annual increase for Tehran   | 1               | 102%              | 15%            | -28%      | 24%       | 28%     |
| Annual increase for other u  | 50%             | 59%               | 18%            | 31%       | 39%       |         |
| Source: Statistical Yearbook | 1380, Tehran: S | tatistical Center | of Iran, 2002. |           |           |         |

| Year          |                 | Public            | Cooperative           | Private           | Total   |  |  |  |  |
|---------------|-----------------|-------------------|-----------------------|-------------------|---------|--|--|--|--|
| Numb          | per of units    |                   |                       |                   |         |  |  |  |  |
| 1370          | 1991            | 6,315             | 14,225                | 149,472           | 170,012 |  |  |  |  |
| 1375          | 1996            | 4,289             | 19,493                | 163,354           | 187,136 |  |  |  |  |
| 1376          | 1997            | 5,956             | 25,310                | 156,143           | 187,409 |  |  |  |  |
| 1377          | 1998            | 5,072             | 24,493                | 168,886           | 198,451 |  |  |  |  |
| 1378          | 1999            | 7,314             | 19,951                | 183,792           | 211,057 |  |  |  |  |
| 1379          | 2000            | 10,775            | 15,889                | 194,979           | 221,643 |  |  |  |  |
| 1380          | 2001            | 8,885             | 19,586                | 225,548           | 254,019 |  |  |  |  |
| 1381          | 2002            | 8,452             | 24,488                | 314,925           | 437,865 |  |  |  |  |
| Pe            | Percentage      |                   |                       |                   |         |  |  |  |  |
| 1370          | 1991            | 4                 | 8                     | 88                | 100     |  |  |  |  |
| 1375          | 1996            | 2                 | 10                    | 87                | 100     |  |  |  |  |
| 1376          | 1997            | 3                 | 14                    | 83                | 100     |  |  |  |  |
| 1377          | 1998            | 3                 | 12                    | 85                | 100     |  |  |  |  |
| 1378          | 1999            | 3                 | 9                     | 87                | 100     |  |  |  |  |
| 1379          | 2000            | 5                 | 7                     | 88                | 100     |  |  |  |  |
| 1380          | 2001            | 3                 | 8                     | 89                | 100     |  |  |  |  |
| 1381          | 2002            | 2                 | 6                     | 72                | 100     |  |  |  |  |
| Notes: (a) Da | ata excludes th | e city of Tehran. |                       |                   |         |  |  |  |  |
| Source: St    | atistical Ye    | arbook 1380, Teh  | ran: Statistical Cent | ter of Iran, 2002 | 2.      |  |  |  |  |

Table A5-19. Dwellings Built by Sector According to Issued Permits

 Table A5-20. Active Cooperatives in Some Provinces of Iran (number and percent)

| East<br>Azerbaijan  | Esfahan      | Khorassan          | Khoozestan          | Fars     | Tehran | Total for 6<br>Provinces | Country<br>Total |
|---------------------|--------------|--------------------|---------------------|----------|--------|--------------------------|------------------|
| 327                 | 291          | 467                | 366                 | 341      | 1810   | 3602                     | 5481             |
| 6%                  | 5%           | 9%                 | 7%                  | 6%       | 33%    | 66%                      | 100%             |
| Source: Statistical | Yearbook 138 | 80. Tehran: Statis | tical Center of Ira | n. 2002. |        |                          |                  |

| Table 15 21  | NIT TIA | Dontol Housing | • Duciosta h- | Trung of Contract | (mumber of m  | motoota and n  | (tereserve) |
|--------------|---------|----------------|---------------|-------------------|---------------|----------------|-------------|
| Table A5-21. |         | кенцаі понянія | FLOTECTS DV   | I VDE OF COMPACE  | unninner or n | projects and u | ercenti     |
|              |         |                |               |                   | (             |                |             |

|  | Contracts | Joint venture | Private | Total  |  |  |  |  |
|--|-----------|---------------|---------|--------|--|--|--|--|
| Projects   | 339       | 254           | 75      | 668    |  |  |  |  |
|  | 51%       | 38%           | 11%     | 100%   |  |  |  |  |
| Dwellings  | 53163     | 41137         | 14518   | 108818 |  |  |  |  |
|  | 49%       | 38%           | 13%     | 100%   |  |  |  |  |
| Source: Database of the National Land and Housing Organization, 2000 |           |               |         |        |  |  |  |  |
|  |         | Demolished Buildings | Gardens & Farmlands | Bayer land | Total   |  |
|--|---------|----------------------|---------------------|------------|---------|--|
| Number   |         |                      |                     |            |         |  |
| 1370   | Area    | 7,024                | 4,077               | 31,597     | 42,698  |  |
| (1991)   | Permits | 2,8119               | 5,557               | 83,308     | 116,984 |  |
| 1379   | Area    | 3,020                | 1,332               | 36,548     | 40,900  |  |
| (2000)   | Permits | 10,781               | 2,759               | 11,2895    | 126,435 |  |
| 1380   | Area    | 4,025                | 1,669               | 39,215     | 44,908  |  |
| (2001)   | Permits | 11,617               | 2,394               | 114,175    | 128,186 |  |
| 1381   | Area    | 4,595                | 1,824               | 41,723     | 48,141  |  |
| (2002)   | Permits | 16,253               | 2,531               | 132,259    | 151,043 |  |
| Percentage   |         |                      |                     |            |         |  |
| 1370   | Area    | 16                   | 10                  | 74         | 100     |  |
| (1991)   | Permits | 24                   | 5                   | 71         | 100     |  |
| 1379   | Area    | 7                    | 3                   | 89         | 100     |  |
| (2000)   | Permits | 9                    | 2                   | 89         | 100     |  |
| 1380   | Area    | 9                    | 4                   | 87         | 100     |  |
| (2001)   | Permits | 9                    | 2                   | 89         | 100     |  |
| 1381   | Area    | 10                   | 4                   | 87         | 100     |  |
| (2002)   | Permits | 11                   | 2                   | 88         | 100     |  |
| Notes: (a) Data excludes the city of Tehran.                                 |         |                      |                     |            |         |  |
| Source: Statistical Yearbook 1380, Tehran: Statistical Center of Iran, 2002. |         |                      |                     |            |         |  |

| Table  | A5-22. | Issued  | Building | Permits     | bv  | Type    | of I | anď |
|--------|--------|---------|----------|-------------|-----|---------|------|-----|
| I GOIC |        | 10 Ducu | Danang   | I CI IIIICO | ~ , | - 1 - 2 |      |     |

| Table A5-23. | Dwellings | Built through | NLHO I | Land Allocation | on |
|--------------|-----------|---------------|--------|-----------------|----|
|--------------|-----------|---------------|--------|-----------------|----|

| Years  |           | Individual | Cooperative | Developers | Total   |  |
|--|-----------|------------|-------------|------------|---------|--|
| Number   |           |            |             |            |         |  |
| 1358-1367  | 1979-1988 | 234,387    | 130,722     | 57,613     | 422,722 |  |
| 1368-1372  | 1989-1993 | 283,766    | 139,637     | 246,598    | 670,001 |  |
| 1373-1379  | 1994-2000 | 256,095    | 84,305      | 122,491    | 462,891 |  |
| Percentage   |           |            |             |            |         |  |
| 1358-1367  | 1979-1988 | 55%        | 31%         | 14%        | 100%    |  |
| 1368-1372  | 1989-1993 | 42%        | 21%         | 37%        | 100%    |  |
| 1373-1379  | 1994-2000 | 55%        | 18%         | 26%        | 100%    |  |
| Source: Database of the National Land and Housing Organization, 2000 |           |            |             |            |         |  |

| Cities  | Conditions          | Land Allocation        | <b>Payment Conditions</b> |  |  |
|---|---------------------|------------------------|---------------------------|--|--|
| All Cities  | Comply with Housing | Experts' price with no | 50% Cash; 50% in three    |  |  |
|   | Consumption Pattern | bidding procedures     | year installments         |  |  |
| Selected Cities   | Comply with Housing | 60% discount on land   | 50% Cash; 50% in three    |  |  |
|   | Consumption Pattern | price                  | year installments         |  |  |
| <i>Note:</i> Installments in the three years are without interest rates and for each month of additional physical progress an additional discount of 10% to 30% might be applied. Provincial Engineering Disciplinary Organization determines the experts' price. |                     |                        |                           |  |  |
| Source: Unpublished data form the National Land and Housing Organization, 2002  |                     |                        |                           |  |  |

 Table A5-24. Facilities provided for Public Servants Cooperatives

| Cities   | Conditions                   | Land Allocation        | Payment Conditions          |  |  |
|--|------------------------------|------------------------|-----------------------------|--|--|
| All Cities   | No Conditions                | Bidding procedures     | Cash                        |  |  |
|  | Comply with Housing          | Experts' price with no | Cash                        |  |  |
|  | Consumption Pattern          | bidding procedures     |                             |  |  |
|  | Average Built Area 50 sq. m. | 25 percent discount on | 50 percent cash; 50 percent |  |  |
|  |                              | experts' land price    | in three year installments  |  |  |
| Selected Cities  | Comply with Housing          | 25 percent discount on | 50 percent cash; 50 percent |  |  |
|  | Consumption Pattern          | experts' land price    | in three year installments  |  |  |
|  | Average Built Area 50 sq. m. | 50 percent discount on | 50 percent cash; 50 percent |  |  |
|  |                              | experts' land price    | in three year installments  |  |  |
|  | Al-Ghadir project (rental    | 80 percent discount on | 50 percent cash; 50 percent |  |  |
|  | units)                       | experts' land price    | in three year installments  |  |  |
| Note: Installments in the three years are without interest rates and for each month of additional physical progress an additional discount |                              |                        |                             |  |  |
| of 10 to 30 percent might be applied. Provincial Engineering Disciplinary Organization determines the experts' price.                      |                              |                        |                             |  |  |
| Source: Unpublished data form the National Land and Housing Organization, 2002   |                              |                        |                             |  |  |

## REFERENCES

- 1. Abedin Dorkoosh, Sa'eed, 'Housing Affordability and the Necessity of Mass-Produced Housing', *Anboohsazn Maskan (Housing Developers Quarterly)*, vol.1, no.1, Fall, 2000, pp.12-18.
- 2. Gholizadeh, Ali Akbar, 'Demands for Housing Assets', *Barnameh va Boodjeh (Plan and Budget)*, no. 42, 2000.
- 3. Chegini, Ali, 'Household affordability of housing: a case study in Tehran, Isfahan, Kermanshah, and Arak', *Faslnameh Eqtesad Maskan (Housing Economics Quarterly)*, no. 31, Fall and Winter, 2001, pp.17–27.
- 4. Deputy for Technical Affairs, *Regulations for Qualification and Contracting Regulations for Qualification of Building and Installations Contractors and Contracting*, Management and Planning Organization, Tehran, 2001.
- Veyseh, Behrooz Sohrab; Ghasemzadeh, Masoud; and Khodabandeh Kouranloo, Nahid; 'Estimation of the Need for Construction Materials during the Third Economic, Social and Cultural Development Plan', *Faslnameh Eqtesad Maskan* (*Housing Economics Quarterly*), no. 28, Summer, 1999, pp.12–29.
- 6. Yazdani Broojeni, Fardin, 'The Efficiency of Housing Markets in Urban Areas', *Faslnameh Eqtesad Maskan (Housing Economics Quarterly)*, no. 32, Spring & Summer, 2001, pp. 11-20.
- 7. Secretariat for Housing Committee, *Assessment of First and Second Five Year Development Plans- Report Number One*, unpublished working document, Bureau of Planning and Economics, National Land and Housing Organization, Tehran, November 2000.
- 8. The Municipality of Isfahan, *Housing Transactions in the City of Isfahan*, The Municipality of Isfahan, Isfahan, undated.
- 9. Kharat Zebardast, Esfandiar, 'Spontaneous Settlements: Perceptions and Realities', in *Proceedings of the Eight Seminar on Housing Development Policies in Iran*, National Land and Housing Organization, Tehran, October 2001.
- 10. Farjadi, Gholamali, 'Employment Generation Potential of the Housing Sector', in *Proceedings of the Eight Seminar on Housing Development Policies in Iran*, National Land and Housing Organization, Tehran, October 2001.
- 11. Farjadi, Gholamali; and Safari, Hassan, *Project on Employment in the Housing Sector*, Institute for Research in Planning and Development, Management and Planning Organization, Tehran, 1997.
- 12. Vafadar, Hamid Reza, 'Estimation of Explicit/Implicit Subsidies for Wheat and Flour', *Barnameh va Boodjeh (Plan and Budget)*, no. 18, 1997, pp. 21-39.
- 13. Pajooyan, Jamshid, 'Cash Subsidizing Methods on Gasoline', *Mahnameh Siasi-Eqtesai-e-Ettela'at (Polical and Economic Monthly)*, no.169, 2001, pp. 248-258.
- 14. Khalili Araghi, Mansour, 'The Impact of Supply-Side Financing Policies on the Housing Sector', in *Proceedings of the Eight Seminar on Housing Development Policies in Iran*, National Land and Housing Organization, Tehran, October 2001.

- 15. Khalili Araghi, Mansour, 'Investment Economic Analysis in the Housing Sector', *Faslnameh Eqtesad Maskan (Housing Economics Quarterly)*, no. 19 & 20, Spring, 1998, pp. 2-17.
- 16. Nili, Mas'oud, 'Economic Development Prospects in Iran', *Barnameh va Boodjeh* (*Plan and Budget*), nos. 34 & 35, 1998-99.
- 17. Rafi'ee, Minoo, 'Housing Mass-Production in Tehran: For Whom Do They Build?', *Anboohsazn Maskan (Housing Developers Quarterly)*, vol.1, no.5, Fall, 2001, pp. 8-12
- 18. Rafi'ee, Minoo; and Athari, Kamal, *Informal Settlements in Iran: A Survey of Causes and Solutions*, unpublished monograph, Urban Planning and Architecture Research Center, Tehran, 1995.
- 19. Rafi'ee, Minoo, 'Housing, Employment and Sustainable Development', in *Proceedings of the Eight Seminar on Housing Development Policies in Iran*, National Land and Housing Organization, Tehran, October 2001.
- 20. Fardanesh, Farzin, 'Satisfactorily Small: Post-Occupancy Satisfaction Analysis for Designing he Small Dwelling', in *Proceedings of the Eight Seminar on Housing Development Policies in Iran*, National Land and Housing Organization, Tehran, October 2001.
- 21. Naghsh Jahan Pars Consulting Engineers, *Project for Regularizing Downtown*, unpublished monograph, Tehran, 1998.
- Naghsh Jahan Pars Consulting Engineers, Master Plan for Sepahan Shahr, unpublished monograph, Tehran, 1995. Sharmand Consulting Engineers, Feasibility Study for Housing Development in Pakdasht, Tehran, 1997.
- Nikooseresht, Nasser, 'Main Issues in the Housing Market: Policies, Strategies and Implementation', *Faslnameh Eqtesad Maskan (Housing Economics Quarterly)*, no. 32, Spring & Summer, 2001, pp. 3-10.
- Sourshejani Samani, Pejman, 'Determining key Iranian Economic Sectors Using Input/Output Tables', *Barnameh va Boodjeh (Plan and Budget)*, no. 36, 1999, pp.12-24.
- 25. Rahimi Broujerdi, Fatemeh. 'Effective Capitals on capital Flight', Central bank of Islamic republic of Iran, 1999-2000.
- 26. Department for Construction Statistics, *Housing Construction Activities in Urban Areas:1991-2000*, Central bank of Islamic republic of Iran, 2001.
- 27. Sabouhi, Yaddolla, 'Optimum Use of Energy Resources', Barnameh va Boodjeh (Plan and Budget): Special Issue on Third Economic Plan, 1997, pp.52-76.
- 28. Statistical Center of Iran, *Income and Expenditures of Urban Households in Iran:* 19992-2000, Statistical Center of Iran, Tehran, 2001.
- 29. Deputy for Technical Affairs, *List of Building and Installations Contractors: National (not Provincial) Contractors Eligible for invitation to Bidding and Contracting,* Management and Planning Organization, Tehran: 2001.