

ABSTRACT

The Tehran housing market is the largest concentration of most forms of economic activity, with the largest and most important housing market in the country. The roots of economic and demographic centralization in Tehran go back to the time when it became the capital of Iran. This market is a complex market dominated by the private sector, and encounters many problems such as high housing prices and a shortcoming in the housing supply, which seem unsolvable to experts and residents. In spite of multiple agents and institutions involved in this sector and engaging at different level of authority – state, government, and local – there is no official information or research for identifying this wide variety of actors and the housing market's performance is ambiguous for both policy makers and private actors. Lack of understating in this scope causes inefficiency in the market and makes the housing plan and policies inapplicable and inappropriate for the social system. This research, therefore, was undertaken to develop a deep understanding of the structure and operation of the private housing supply in Tehran; in particular, it attempts to identify the constraints on housing provision. From the structure and agency philosophical perspective and using a qualitative approach based on 40 interviews as the primary data collection method, this research focused on the way that the housing development process takes place in Tehran and the relationship between the structuring dynamics of housing development process and the particular interests, beliefs, perceptions and strategies of each individual agent. It is concluded that, in general, the housing development process involves a complex and contextual embeddedness of institution and agency relationships. The housing development process in Tehran is shaped by the form of economic and institutional structure, which in turn affects the interests and the way agents behave in deploying rules and resources. The state control, lack of democracy, government policies, and unstable institutional environments caused turbulence in the housing sector.

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Abbreviations in this thesis

CBI	Central Bank of Islamic Republic of Iran
GDP	Gross domestic product
MHUD	Ministry of Housing and Urban Development
MRUD	Ministry of Roads & Urban Development
NLHO	National Land & Housing Organisation
ROD	Register of Official Documents
SORDP	State Organization for Registration of Deeds and Properties
CESO	City Electronics Service Office
UPHC	Urban Planning High Council

Glossary

Anbooh saz: Volume builder

Arse: Land

Ayan: What is made on earth; Building

Bazaar azad: Black market

Bar v Kaf: One of the most important parts of Tehran Detailed Plan which check the architectural design with the width of street, land area and supposed floors before issue architectural design approve.

Besaz-befroosh: builders and sellers

Daftar Asnad Rasmi : Register of Official Documents; Notary Public

Kargozar: *a person who reprehensive of a building company pursues the companies' case in public intuitions*

Kolangi: Single-storey old and traditional houses with courtyards or garden arrangements

Hesab Qarz-Al- Hasanah: Free interest account

Govahi Takmil Sakhteman: Building Completion Certificate

Mantageh: Region

Mohandes Saze: Structure engineer

Mohandesin Moshaver: Consultant Company

Moshaverin Amlak: ESTATE AGENT

Mozarebeh: A kind of Islamic transaction that money and resources provided by investors and they participate in risk and profit of the scheme; Equity

Qarz – Al – Hasanah: Free interest

Parvaneh sakht: Construction permissions

Rahn: Deposit; Mortgage

Sazman Sabt Asnad v Amlak: State Organization for Registration of Deeds and Properties

Setad Ejrayi Farman-e Hazrat Emam: Headquarters for Executing the Order of the Imam

Shahrdari Mantagheh: Regional Municipality

Shahrdari Tehran: Tehran Municipality

Shoraye Ali ShahrSazi v Memari: Supreme Council for Urban Planning and Architecture

Tarakom: Density

Tarhe Tafzili: Detailed Plan

Vam-e Qarz – Al – Hasanah: Free interest loan

Notes

Obligations and responsibilities of Iran Construction Engineering Organisation (ICEO)

- Supervision and control of the construction process, performed by the members of the ICEO and control of legal obligations of the ICEO
- Prosecution of offences by Security Council or Court
- Regulating legal relation between qualified engineers and employers (such as contracts or ethical issues)
- Giving construction affairs to the qualified engineers with Prestigious Engineering license -Banning the unqualified engineers to supervise the construction affairs and prosecuting of them

Obligations of the Municipalities or other Organisation for Giving Construction Permission

- Contravention Notice to the ICEO or Ministry of Roads & Urban Development, regarding supervision process, avoiding construction process and solving the problems.
- The Construction Permission is not given to those buildings do not follow the National Building Regulations.

It is north worthy to mention that in this thesis, the housebuilder considers as a general terms for all types of housebuilding companies and firms.

To give the equivalent of the Iranian currency notably *Rial* to US\$, before 1370, this currency was converted approximately based on the exchange rate of the same year by referring to the daily *Etelaat Newspaper*. After 1370, the exchange rate available at the official website of the Central bank of IRI was used; this may not correspond to black market of Iran (baazar azad). The value of Rial to US\$ dramatically dropped over last 4 years. This study used the average exchange rate over two field works: 25000 Rial is 1 US\$. In addition, while the Toman is an everyday term used by Iranians for transactions (10 *Rials* is 1 *Toman*), in this study Rial is used.

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1 Chapter 1 Introduction

1.1 Motivation

This thesis attempts to develop a deep understanding of the structure and operation of the private housing supply in Tehran. Tehran, as a city of 7.8 million people in a province of 13.4 million, is the largest concentration of most forms of economic activity, with the largest and most important housing market in the country. The roots of economic and demographic centralization in Tehran go back to the time when it became the capital of Iran. The continuous flow of immigrants into Tehran and the natural growth of its population have historically generated increasing demands for housing, correlated with rapidly rising land prices. The transformation of the “pattern of household structure, from extended families of the nineteenth century to the nuclear families of the twentieth”, has triggered another pressure on the housing market because of the creation of extra demand for more dwellings for the same number of people, a demand caused by improved standards and expectations. (Madanipour, 1999, p.57, Sheykhi, 2007)

The Tehran housing market is a complex market dominated by the private sector, and encounters many problems such as high housing prices and a shortcoming in the housing supply, which seem unsolvable to experts and residents. According to the report of the Tehran Housing Organizing Committee, Tehran will annually face with 175,000 residential units until 2026 (Tehran Housing Organizing Committee, 2008). The market system has failed to adjust to the supply and demand and despite major governmental efforts and the introduction of housing reforms, significant housing problems still exist.

In spite of multiple agents and institutions involved in this sector and engaging at different level of authority – state, government and local – there is no official information or research for identifying this wide variety of actors and the housing market’s performance is ambiguous for both policy makers and private actors. Lack of understating in this scope causes inefficiency in the market and makes the housing plan and policies inapplicable and inappropriate for the social system.

The necessity for scaling up housing production through all possible ways in developing countries is acknowledged by all policy makers and commentators in this field: they mention that the project-based approaches for housing supervision are inadequate in these countries, especially for low-income families (World Bank,

1993; Keivani & Werna, 2001). For low-income families, the share of housing costs in household consumption expenditure is almost 50 percent and the expected duration for having one's own home, while saving one third of one's income, is one century (Iran Central Bank, 2007). As Keivani and Werna (2001) discuss in their paper, the suggested policies such as "enabling strategies" are criticized, as these are unsuitable to the context of many of the developing countries. As they conclude, in developing countries such as Iran, the formal private markets should not be considered as the dominant mode of housing provision and it is necessary to find a more comprehensive and pluralistic approach to capacitate housing strategies. Any approach to housing provision requires consideration of the social, political and cultural factors which determine the activities of agents in each method.

In Iran, "the housing market always acts as a "buffer" for the economy. In the periods when other sectors suffer recession, this sector absorbs capital surplus and passive assets and protects the economy from depression" (Atefi et al, 2010, p.2).

Although it is predictable to appraise the level of complexity involved in scrutinizing the private housing supply process, there is little known about the wide variety of actors and the way housing development processes are implemented. There has been no precedent of empirical qualitative research to provide knowledge about actors, their role, strategy and their interrelationship in the market context.

In view of this observation, the main motivation for this study is enhancing understanding of the new development process in Tehran. It is also seeking the best way to find out how the market works and why, in spite of different government policies, Tehran is still facing a shortage of dwellings; also, affordable housing is one of the most pressing issues. This study articulates the housing development process and applies structure and agency approach for the first time. Moreover, in Iran, existing housing research and policy analysis is mostly based on quantitative methods for decision making (Najafy, 2006; Zarrini, 2007; Dorkosh, 2008; Chegeni, 2008). Therefore, this research is a novel qualitative study, considering that the focus is on agency–structure relationships and institutional interactions in the housing development process. It is an in-depth exploration of the housing development process based on 40 interviews, of which 20 were undertaken with actors playing a role in housing supply in order to identify active agents and institutions in this area and to get an idea of the general picture of housing supply

functionality. The other 20 were conducted with key agents involved in three particular housing development processes, chosen as case studies.

Setting the scenario for this research, in the next section, a brief introduction of the Iranian economic, political, and social context within which the housing market and housing development process takes place will be provided. This chapter will also contain the research aim and objectives, followed by the structure of the thesis.

1.2 The Field of Study

To enhance understanding of the structure and operation of private housing supply and find the constraints, it is necessary to study the relationship between the structuring dynamics of the housing development process and the particular interests, beliefs, perceptions and strategies of individual agents. There has been a wide range of studies concentrating on the land and property development process with the perspective of built environment transformation mostly determined by economic forces (Healey et al, 1990). However, the built environment is shaped by various professional actors in view of their specific way of viewing buildings and cities, and aims and actions. Institutional analysis can be considered a methodological approach to unfold these challenging ways of seeing and acting (Guy and Henneberry, 2000).

In addition, there is a specific consideration in the housing market which gives much more attention to the demand side rather than the supply side of the market, and in this respect, some authors acknowledge the existence of a 'black box' on the market process because most focus is instead on market outcomes (Adams et al., 2008). Property development is a non-homogenous process (Simmie, 1974; Massy and Catalano, 1978), and it is important to view it within a specific special and temporal context (Healey, 1990, 1991, 1992; Ball, 1988; Hooper, 1992). In confirming this idea, Bartlett and Bramley (1994) indicate there is excessive diversity of housing market institutions in the different countries and this characteristic makes it a localized market. Then for understanding the structure of the housing market in each country, it is necessary to study the social, economic, and cultural context in which the housing market operates.

Nevertheless, it is institutional interactions that have been mostly examined in developed markets, and a very few have been done in transition economies (Davis et al, 2000; Farashahi & Hafis, 2009). The 95 percent of empirical studies on

institutional theory, published from 1983 to 2002, have selected their case studies from Western countries (Farashahi et al, 2005). In countries with powerful states, firms have to conform to the compulsive power of the state and encounter these competing institutional faces that may cause a paradoxical situation where no institutional logic is powerful enough to shape behavior (Farashahi, 2009). In this sense, Iran is one of the most interesting settings for a study about the influence of institutional change. Developing countries such as Iran have been facing fast institutional change, so they provide the best terrain for a better understanding of institutional transformation in circumstances of instability (Farashahi & Hafis, 2009). Keivani and Werna (2001), from a different perspective, indicated another valuable point of focus on housing development in developing countries such as Iran. They mentioned the diversity of housing provision in these countries and a wide range of actors involved in the complex and complicated network of relationships between state and different agents.

Although the empirical results in this study are not aimed to be utilized to test the robustness of existing theory, this research provides additional in-depth insight into understanding complex social phenomena and helps illustrate how these theories and approaches operate practically in reality. The next section focuses on the aims and objectives of this research, followed by the structure of the thesis.

1.3 Aims and objectives

The aim of this research is to develop a deep understanding of the structure and operation of the private housing supply in Tehran; in particular, it will attempt to identify the constraints on housing provision. An inadequate knowledge of the process of housing development keeps preventing researchers and analysts from achieving a full understanding of how housing development operates. More importantly, this lack of understanding impedes policy makers from making appropriate decisions and reduces the chance of success of the devised plans. The relationship between planning and housing indicators highlights the requirement of policy makers to realize the process that supports the private market (Adair et al, 1990). Therefore, this thesis endeavors to concentrate this gap in existing knowledge. Furthermore, it will seek to examine the structural forces that have effects on key agents in the supply market and the way that agents pursue their aims

and strategies. It also tries to expose the interests, ideas, perceptions, and strategies of key agents, while simultaneously attempting to link agency and structure empirically. This is crucial; as Giddens (1984) stressed, structure and agency should not be treated separately in analysis in order to realize development activity (Healey, 1991). This thesis studies the housing provision in Tehran in a dynamic context; the comparison with the dynamics of housing development in other parts of the world highlights the peculiar context of Iranian builders' work. Most importantly, this study attempts to discover where the constraints and problems come from, why they are caused, and who is responsible for them.

The objectives of this research are:

1. To identify the actors, agents, and institutions involved in all stages of the housing development process in Tehran
2. To understand the interrelationship between actors, institutions, socio-economic, political, and cultural structures and through these interactions explore how land and property 'markets' are comprised, and the strategies, actions, expectations, and ideas of the house building companies are established
3. To discover constraints and limitations in different stages in the housing development process as well as in different levels of structure, agency, institutions, and interrelations between various agents.

The focus of this research is to uncover the housing development process in Tehran, concentrating on the social relations and decision network of agents and on socio-economic, cultural and political forces underlying the determinants of the housing development process. Furthermore, it intends to show how actors behave and react to this unique, complex, unstable, and complicated institutional environment.

1.4 Structure of Thesis

After this introduction, chapter 2 clarifies the context of this research, and presents the background of the characteristics and dynamics of housing market in Tehran. The key point explored is the way in which housing development activity

in Tehran has altered over time, between 1997 and 2007, and in what way such alterations have an effect on institutional relationships and agents' decisions to enter the housing market. According to the structure and agency approach, Healey's model (1991) and Ball's opinion (1998), the nature of economic, institutional, cultural and social contexts within which a property market operates should be considered. Consequently, this chapter addresses the structural aspects within the socio-economic and institutional context that affect the housing development process in Tehran. This chapter also provides the background of characteristics and dynamics of the land and housing market in Tehran. The key point in this chapter is to illustrate the significance of the impact of temporal and special factors on the cycle of housing development activity and the reason for the present form of investment in the housing sector. Therefore, the essential background within which the housing development processes take place can be elucidated. It appears that the nature and changes of the economy and political environment as well as the institutional framework have a great and undeniable impact on the nature of the housing development process in Tehran.

In order to effectively interpret and analyze field reconnaissance and interviews, it was necessary to find the most appropriate theoretical and conceptual framework with which to explain and appreciate findings. Therefore, in chapter 3, various models of the land development process from different theoretical perspectives are reviewed and evaluation is made of the weaknesses and strengths of each model. Considering the context of the study and the purpose of the research, the extent of the suitability and adaptability of the study for the housing development process is assessed. Hence, after justifying the most appropriate approach, which is structure and agency, the inherent difficulties in applying this approach will be elaborated on.

Chapter 4 describes the research design and the methods utilized as strategy to conduct the research. It justifies the design based on the theoretical approach and philosophical assumptions based on the social construction of institutions by structure–agency reciprocal relationships, which are effected by and affect actors' interests, ideas, perceptions, opinions and behaviors. This chapter also explains in detail the rationale and reasons for the qualitative approach adopted, and describe the step-by-step process of making a decision about required data and data collection. This chapter describes the two phases of fieldwork, including interviews

with actors involved in housing supply and selecting three case studies in Tehran and conducting interviews with key agents involved in those particular housing development projects. It not only justifies the case study approach, but justifies and explains the reasons for selecting three case studies and discusses in full detail each individual case study, emphasizing the description of the housing development projects in the context of the economic and physical nature of the housing developments.

Prior to the analysis chapters, chapter 5 presents the schematic model of the Tehran housing supply and the conceptual framework that will be used to analyze the case studies. The framework focuses on the contextual processes of the housing development process, the actors involved, and the dynamic of formal and informal actor relationships and the influence of external forces.

As argued before, for understanding the development process fully, the analysis of agency aspects is fundamental and necessary in terms of agents' roles, strategies, perceptions, preferences, ideas, interests, and expectations; likewise, the way they apply resources and employ regulations to achieve their aims. Therefore, this thesis proceeds with the event sequence of descriptive analysis of housing development. The findings are extracted from interviews presented in a format of four stages of the housing development process and it is explained how these stages take place in the three case studies selected for this study. Chapters 6, 7, 8 and 9 present the four stages of the housing development as follows: site selection and land acquisition; the preparation stage; the construction stage; and completion and marketing.

Chapter 10 concludes thought from the analysis, starting with briefly reviewing the procedures and presenting the empirical findings of implications on the way structure and agency drives the housing development process in Tehran. Then, it answers precisely the research questions and presents the entire involvement constraints and obstacles in the process from different aspects. The conclusion notices whether the findings from empirical research answer the questions and if the theoretical approach is appropriate. It continues by stating the original contribution of this study, providing the recommendations for the policy, practice and educational sectors.

2 Chapter 2The Tehran Housing market and The Economic Structure and Institutional Factors Affecting the Housing Market

2.1 Introduction

The largest market in Iran is the Tehran housing market, a highly volatile and extensive market that has been encountering a continuous growth in demand. As mentioned in the previous chapter, the Tehran housing market has faced different institutional changes that have led to changes in the process of the housing market in recent decades. Specifically in the last two decades, this market has been faced with excessive fluctuation of housing prices, such that three periods of booms and slumps have occurred, in the period 1997 to 2007. In order to explain the housing development process and to explain change over time, the dynamics underlying the institutional context within which a new housing development can be situated should be defined. A closed economy, political, and economic transition, central planning, government, and local authority intervention have given way to competitive forces. Understanding the institutional structure along with transformation in this and the way it affects the land and housing property activity is necessary to clarify and discuss housing provision in the Tehran context.

According to the structure and agency approach, Healey's model (1991) and Ball's opinion (1998), the nature of economic, institutional, cultural, and social contexts within which a property market operates should be considered. The unstable institutional environment and economic and political characteristics triggered a massive speculative and investment demand alongside an increased consumer demand. The attractiveness of the property market as an investment opportunity was strengthened by the institutional environment, which has surged in demand for housing properties in Tehran since 1991. This chapter addresses an outline of the background of the structural aspects within the socio-economic and institutional context affect the housing development process in Tehran. The significance of the impact of temporal and special factors on the cycle of housing development activity and the reason for the present form of investment in the housing sector is provided. This chapter contains three main sections. In the first section, it describes the spatial, cultural and environmental institutions in Tehran

which affect the interest and strategy of builders, investors and residents, indicators which play crucial roles in selecting site stage (see chapter 6). The second section illustrates the background of the economic pattern and discusses the evolution of development policy following the Islamic revolution of 1979, and examines to what extent each plan reached its aim. It is followed by an investigation of the effect of government monetary policies and capital market on the housing and property market as one the most important structural forces for actors involved in the housing market. In the analysis chapters, it will be revealed how much these policies shape the current pattern of the housing market and the way actors react to these structural forces.

The description of the housing property market provides a basis for understanding the temporal and spatial variation in the housing development process of Tehran. To achieve this aim, the last section illustrates the trend of demand and housing supply over the period 1997–2007 along with the description of the housing market cycle and the factors affecting these cycles. Due to the lack of data and information and its scattering among different organization, the raw primary data was collected from various state and government reports and records.

2.2 General background of Tehran

Tehran is the capital of Iran with a population of 8,429,807 and surpassing 12 million (Statistical Centre of Iran, 2010) in the wider metropolitan area in the form of 3,850,000 households. It is Iran's largest urban area and city, one of the largest cities in Western Asia, and the world's 19th largest city (Figure 2.1). By generating 25.45 percent of the Gross National Product of the country, Tehran has the highest share of the country's GDP (Iran Statistical Centre, 2007). The population pyramid (Figure 2.2) shows dramatically irregular growth because 20 million births occurred between 1974 and 1986, which are now giving rise to almost 20 million new families.

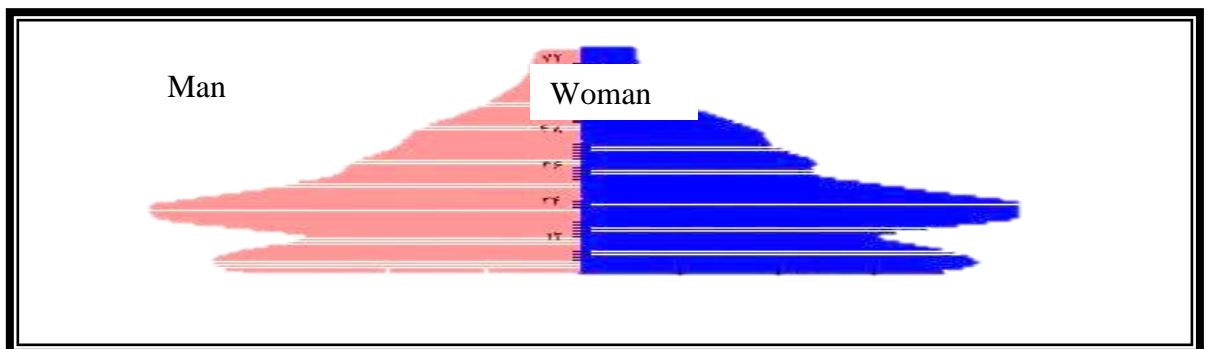
Figure 2.1 Iran and Tehran



Source: <http://iranmap.facts.com>

According to the population census of 2010, 10 to 15 million households will be added to the current households in the next decade. On the other hand, in the 2000s, Tehran faced the most immigrants in Iran and these 2,983,889 immigrants constitute one sixth of all immigration within the country (Statistical Centre of Iran, 2010).

Figure 2.2 Population Pyramid



Source: Statistical Centre of Iran, 2010

Administratively, the city is divided into 22 regions (figure 2.3), each with its own municipality, and 370 quarters or subareas, subdivisions also used by the census authorities. The 22 areas of the city are different in size and population. The largest, with 77.5 square kilometres, is the affluent area 1 at the foot of the northern mountains, which has one of the lowest population densities in Tehran. In addition, these districts differ in terms of financial status of the families, cultural level, quality of construction, land and housing value and average floor area, which increase as we move from the south to the north (Tehran municipality).

Figure 2.3 Tehran Map



Source: www.Tehran Map.ir

2.2.1 Cultural and social context

The city of Tehran is a modern city, mostly constructed over the last 60 years and the urban fabric alteration from the nineteenth century fundamentally transformed the picture of city from traditional, Middle Eastern city into a modern one. The changes in Tehran were not only physical growth but also in the form of several social impacts. Under the influence of the urbanization process and consequent changes in the social structure of the city, different social groups and classes segregated from each other in a new spatial and geographical arrangement based on a north–south divide (Madanipour, 1999).

The idea of Ehlers (1992), that proposed 'intra-urban shift' is one of the main forces for expansion of cities beside the rural migration, could be evidently seen in Tehran: "many of the new quarters were built and financed by urban notables as merchants from the bazaars and urban-based rural landlords. "They invested money in real estate, moved out of the old city quarters, and settled in the new quarters" (Ehlers, 1992, p 625).

The two waves of intra-urban migration simultaneously happened to Tehran, which, as soon as they became aware of them, shed light on the builders' interests when selecting the sites. First, the upper classes started an outward movement from the older part to the newly built area in the north. The clean, green environment and large, high-quality houses with gardens, in addition to the high social status of the neighbourhood, make the north of Tehran attractive. Second, intra-urban immigration belongs to low-class and some middle-income classes, for whom the growth in housing prices and rent, along with dramatically increasing inflation, has been decreasing the affordability of housing and caused their movement from central parts to suburbs and suburban new towns. The urban middle class emerged with their semi-bourgeois habits, ethnic specifications, and familial double standards. In addition, second-class traders, street shop owners, tradesmen and owners of small businesses, who were mostly provincial migrants, emerged as the new social groups of Tehran (Zavoush, 1991).

As mentioned above, Tehran has faced the highest number of immigrants in the country and rural migrants have settled in the old parts and the poor southern suburbs (Hafezi, 1980). "Rural migrants, who were holders of their particular cultural and local traditions and customs, transformed the urban texture and their culture became part of the urban dominant culture" (Alemzadeh Noori, 2010, 66). The ethnic and cultural diversity of people is an important factor in housing provision that can be taken into account as a structural factor, especially in the case of investors' and builders' strategies and preferences; this will be explained in more detail in chapter six.

It is necessary to clarify how this current particular pattern of housing supply effect on and is affected by zones' characteristics. Therefore, various indicators of the social and economic characteristics and their transformation over the period 1997–2007 are expressed. Providing these data illustrates the reasons for selecting three cases in three different regions in chapter four; also, they are helpful in the analysis chapters along with the result of interviews, to show how the interests and strategies of builders are influenced by this current pattern as well as their decisions' effects on it.

The data consists of population density, average floor area, quality of residential unit, and land price, available indicators that would uncover any geographical

distribution of social variations. The analysis relies on the available data from 1997 to 2007, which was more comprehensive in its scope and was published at the level of urban districts, to be supplemented by data from the 2010 census, which was more limited. The data from the 2010 census is not published at the detailed level of the 2007 census, which makes the comparison between them less than comprehensive.

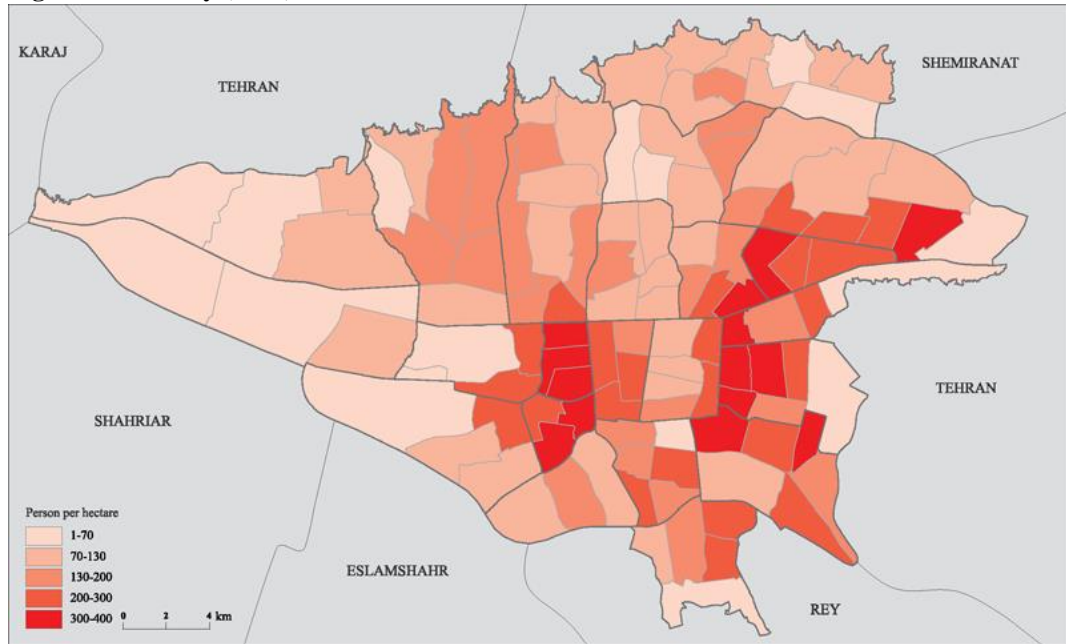
2.2.1.1 Density

According to the 2007 census, the density varied from 434 people per hectare in district 5 of region 15 (southeast of Tehran) to 1.3 people per hectare in district 3 of region 22 (Shahrdari-e Tehran, 2007).

A survey of the population density of different parts of Tehran indicates that in different periods there has been an extraordinary distinction between the northern and southern districts of the city. The highest densities were mostly located in a grouping of areas from the southwest corner of the city that stretched towards the east and northeast. Against this, the lowest density areas are to the north and northwest (figure 2.4) (Shahrdari-e Tehran, 2007).

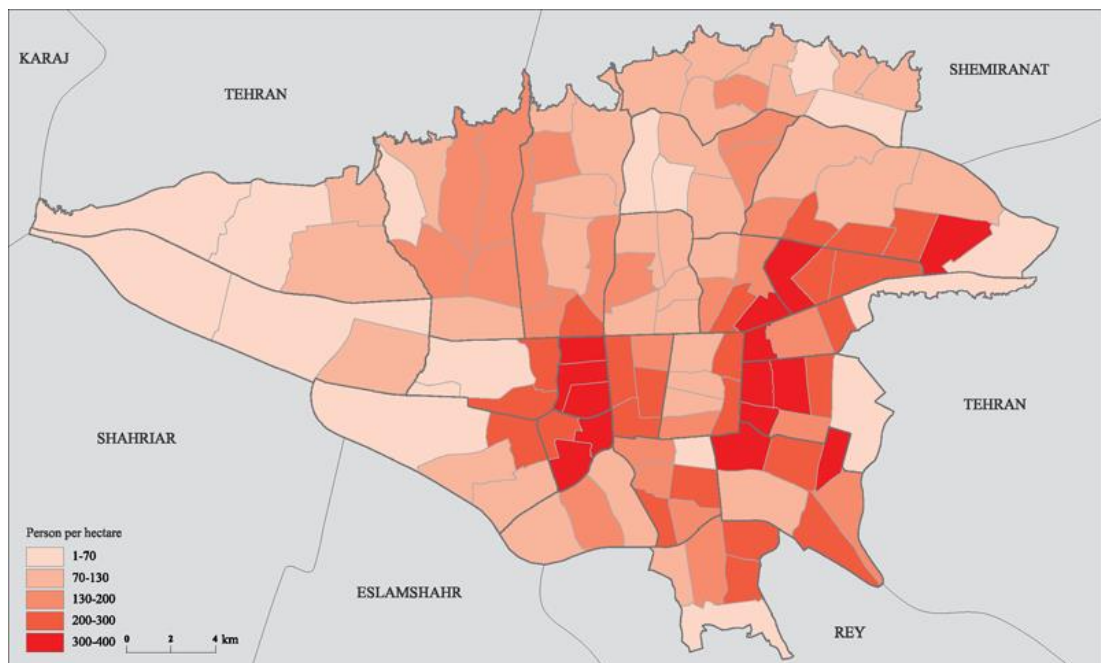
In the west and southwest of the city, where the municipality has lately begun to offer urban services, the population density is as little as one person per hectare. The average population density in these parts is 13, which means these areas could be expanded in future. While the dissimilarity between the northern and southern still remained in 2006, the difference has now decreased.

Figure 2.4 Density (1997)



Source: Thran Municipality

Figure 2.5 Density (2007)



Source: Thran Municipality

2.2.1.2 Literacy and Education

In 2007, the average level of literacy throughout the city was 90 per cent of the population of 6 years of age and more fluctuating between 80 to 99% in wide variety districts. Albeit the dissimilarity it is not remarkable, there is a well-defined distinction between north and south could be distinguished. However, districts 14

and 9 and region 1 from district 10 are between the areas in the south where the ratio is high and particular areas in the north (districts 41 and 42 from region 5 and district 22 from region 2) have a low ratio of educated people.

“The spatial distribution of the people with university education displayed that regions 1, 2, 3 and 6 have the highest ratio of people with higher education, while certain areas in the south have the lowest ratio” (Tehran Municipality).

2.2.1.3 Employment

The employment rate in the city in 2007 was 88 percent, the spatial distribution pattern of which illustrated that some districts situated in the south have the lowest employment rate and the northern and central areas have employment rates above average. Most regions except 1, 3, 9 and 14 have experienced lower employment rates in 2007 in comparison with 1997.

Regarding to employed women in a variety of districts of Tehran, spatial distribution outline displays that in both 1997 and 2007, the greatest number of employed women settled in the northern half of the city and that the distinction between the south and the north was definite.

The workplaces are mostly located in the southern half of the city, apart from some scattered quarters in the north. A major concentration of the workplaces is in the city centre, where the bazaar is located in district 12, and many businesses in surrounding regions such as regions 6, 11, 16 and 15 (Tehran Municipality).

2.2.1.4 Average Floor Area

Another indicator is the average floor area of residential units that is based on environmental, cultural, and social states. This indicator in Iran is sort of higher than other countries even developed countries, which is rooted to the cultural and social traditions and norms of the Iranian families with no connection to their financial status. In Tehran, this indicator has two main characteristics. “First, the current average floor area of residential units in Tehran is still more than 100 m², which is far greater than other countries. Second, the average floor areas in different zones of the city, demonstrates a significant divergence. In the south, residential units have the smallest floor area (between 50 and 70 m²) whereas in the north, especially regions 1 and 3, average floor areas vary between 130 and 175 m² and most units with a 300 m² area and above are located in these zones” (Atlas. Tehran). The units located in southern and western districts are newly constructed, having an average area of 100

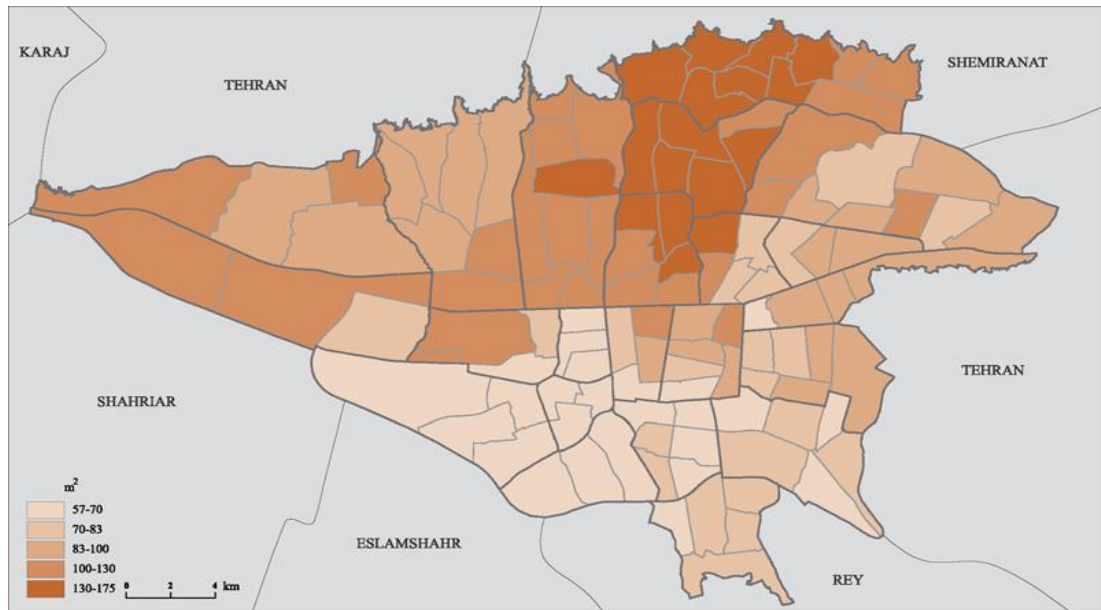
m². This contrast is mostly because of the difference in the financial status of the families, which increases from the south to the north. In northern districts, in addition to the economic factor, there is the environmental factor. The residential units in these districts are mainly houses, requiring greater floor area and a greater number of people residing in them (Shahrdari-e Tehran, 2007).

2.2.1.5 Floor Area Per Capita

This indicator manifests the economic, cultural, social, and environmental dimension of housing. It reflects the household financial strength, social and cultural status, and environmental conditions and it might be seen as higher than other countries due to the socio-cultural characteristic of Iranian families. Similar to other indicators, this reveals the difference between the various zones and illustrates an astounding variety. In the old central areas there is a moderate floor area per person, 30 m², but in the north and south of the city two very different patterns are seen. In the north, where the wealthy families live, this indicator is almost 130 m² in zones 1 and 3 and parts of 5 and 6 and in contrast, in the south it is less than 30 m² (figure 2.6) (Shahrdari-e Tehran, 2007).

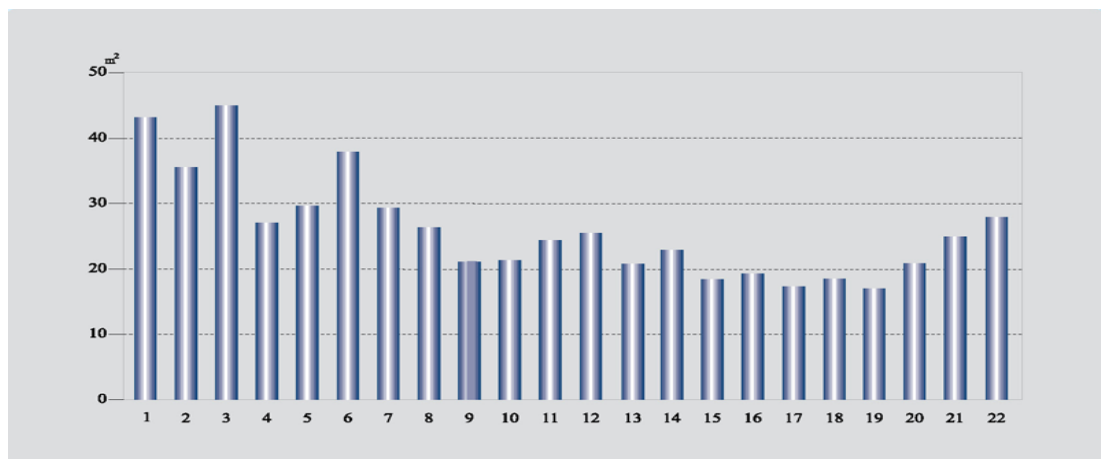
However, in new zones in the east and west of the city the average area per person varies between 20 and 30 m². Overall, the floor area per person increases from the south to the north: whereas in the south it ranges between 15 and 20 m², in the north it ranges from 40 to 50 m² (figure 2.7). During the last decade, the pattern of new residential units has been changed and the average floor area of newly built houses has decreased under the influences of household affordability dropping off and the reduction of household size. Based on the statistics, in 2007, the average floor area of newly built units was 130 m², which reduced to 125 m² in 2008 (Shahrdari-e Tehran, 2007).

Figure 2.6 Average floor space per household (2007)



Source: Tehran Municipality

Figure 2.7 roofed area per capita (2007)



Source: Tehran Municipality

2.2.1.6 Construction permissions

Generally, Tehran municipality reports indicate the considerable growth in construction permission in all zones; however, it seems that some zones have been more attractive for builders. The reasons for builders' preferences extracted from interviews will be explained later in chapter 7.

From 1997 to 2007, buildings were mainly constructed in marginal areas inside the city. Based on the available information, the most construction permissions have been issued for residential units in regions 5, 2, 4, 1, 7, and 15. From 1991 to 2004, the Tehran housing market faced its highest property value in regions 5, 2, 1,

3, 15, and 18 and from 2005 to 2007; this honour belonged to regions 2, 6, 7, 8, 12, 11, and 20. The highest construction approval in 2007 belongs to region 1, which has seen the most growth since 1997 (Shahrdari-e Tehran, 2007).

2.2.1.7 Land price

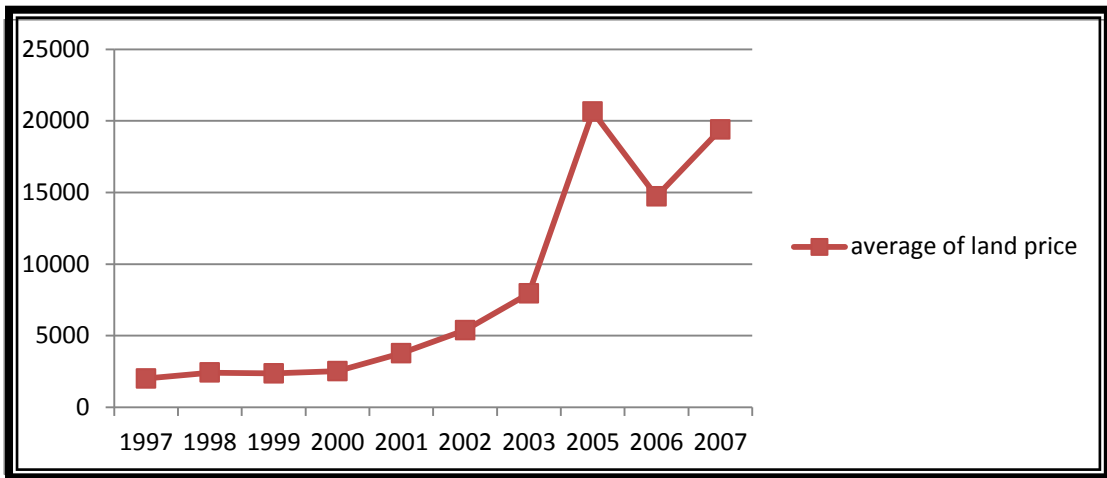
The changes in land price over the years shows a distinct relationship between the spatial patterns of social variation, the spatial patterns of new housing development, and the way urban fabric is valued. An average of the official prices of land in the city, as published in 2010 by the Tehran Municipality, is 19,689 Rial per square metre, which is remarkably less than the trading price in the real market. The highest price, 3, 9137,000 Rial (2,524 USD)¹ per square metre, is in region 1 (north of Tehran) which has had the highest price since 1997. The mid-range land price in this zone is two and a half times more than the city average. This area and the two neighbouring areas of zones 2 and 3 have a higher price than other zones and stretch from the northwest to the affluent suburbs of the north.

Figure 2.8 illustrates the trend of rising costs of land in Tehran between 1997 and 2007 and figure 2.9 shows that this growth rate varies in different zones² in the period from 2001 to 2007. The comparison between these two figures reveals that there has been constant growth in the trend of land price in all zones; however, the slope was not the same in all of them. Price increases in zones 1, 5 and 6 are remarkably more inclined (figure 2.9).

¹ The Exchange rate in 2007 in Iran was 1 US Dollar = 15,500 Iranian Rial and the calculation here was based on this rate. However, in May 2015 the rate changed to US Dollar = 3,300 Iranian Rial.

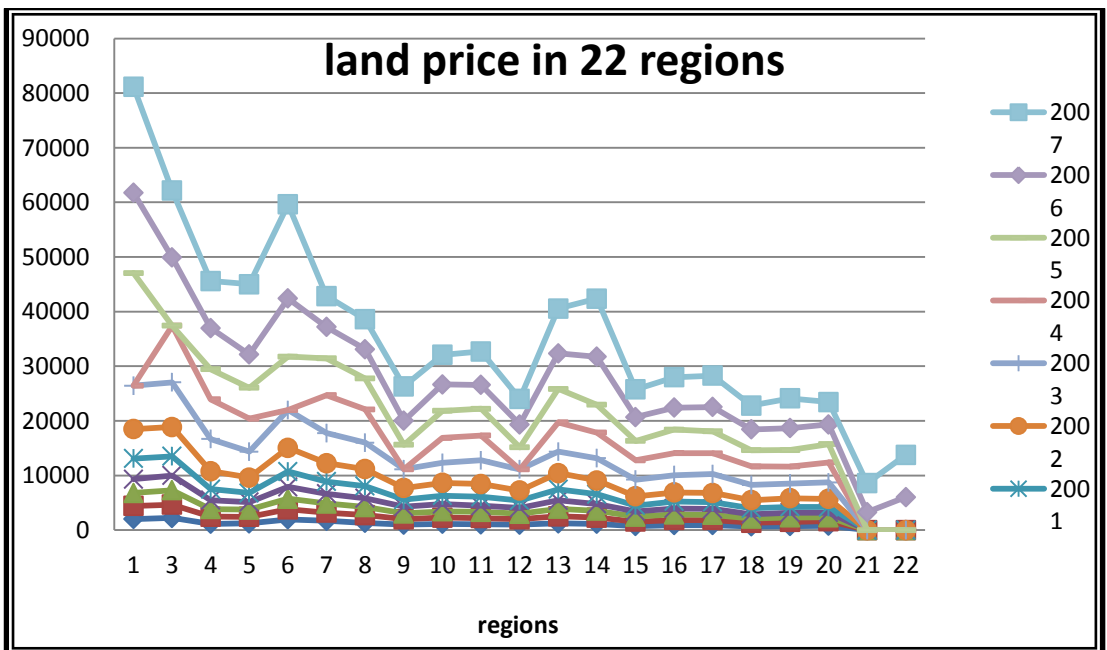
² The land price data for each zone was not available before 2001.

Figure 2.8 Average of land price in Tehran (1997-2007)



Source: Developed by Author, Housing and Planning Ministry (1997-2007)

Figure 2.9 Land price trend in Tehran 22 region during 2001-2007



Source: Developed by Author, Housing and Planning Ministry (2001-2007)

There is an inverse relationship between the number of residential buildings and the value of one square metre of land; therefore, a percentage increase in land value of one square metre caused a decrease of 26 percent in the number of residential buildings (Najafy, 2006). As Guy and Henneberry (2000) stated, the contrast between narrow, economic analysis and wider explanation embodying

social relations can also be illustrated by considering builder responses to price signals (Guy and Henneberry, 2000, p.2407). The builders' response to increasing the price in the north zones, specifically zone 1, is an attempt to establish new housing development projects. As shown in the previous section (2.2.5) the highest demand for construction permission related to zone 1. In house builder predictions, land price growth in this zone makes him able to sell the houses for a higher price later.

2.2.1.8 Summary of section

In conclusion, the mapping of the 2007 census data shows north–south and centre–periphery relationships. Higher land prices, lower densities, higher rates of literacy and employment, higher average floor area and floor per capita belong to the northern areas. As opposed to this, lower land prices, higher densities, and lower rates of literacy and employment are found in the south, where most of the workplaces are located. These characteristics of zones either are therefore not simply the result of a changing market structure or enlightened individual builder action. Rather, they are emerging as consequences of the constant reconstruction of the housing market by competing builders and dynamic amendment of development options in view of new structures of social action. It seems that the established socio-economic environment in the northern area might be at the beginning a result of a delivered choice (mostly influenced by government planning and land distribution policies) and can be considered as a structure for builder and builders.

However, as time goes by, builders' activities in these areas invent a new institution for wealthy households as well as other builders. This in return in a dialectic relationship has strengthened the current structure and has created a new pattern for development.

2.3 The Economic System and the Housing Market Cycle

Unlike other major financial markets of the world, Iran does not follow a free market system. Instead, it operates on a closed market economic system, which suffers from state domination (Khajehpour, 2000). The government has an undeniable impact on the economy through the huge revenues earned from the control of natural resources, including oil and gas. The Iranian economy is oil-based, meaning that oil revenue and foreign exchange play crucial role in Iran's economics and the

biggest source of income for the government is provided in dollars, which is obtained by selling oil. Therefore, dropping the value of the dollar or the value of the national currency (Rial) in relation to other foreign currencies leads to decreased income. In contrast with other developing countries, in which the urbanization process heavily relies on western capital, seeking opportunities to access surplus value (Walton, 1977; Slater, 1979; Armstrong and McGee, 1985), the instability in the economy and the political environment prevent Iran from making this terrain. The Iranian economy tightly depends on the level of activity of the housing market; moreover, the housing market is one of the best levers to balance between inflation and cash flow, which is applied by the government.

High inflation, and a high cost of living and housing, are counted as the three main problems which Tehranis suffer from. Under the process of the liberalization of the economy in the 1990s, many subsidies were removed by the government (Madanipour, 1990, a) and in December 2010, the Government of Iran undertook bold economic reforms to carry out subsidies to energy products and replace them with nationwide cash transfers as compensation for rising energy prices. This reform policy has had a huge impact on inflation and three months after the reforms inflation, by increasing 6 percent, reached 18 percent in February 2011. Inflation accelerated after imposing the new round of international sanctions; based on monthly reports from the Central Bank of Iran in January 2012, it reaching 23.5 percent (Hassanzadeh, 2012). As a result of these reforms on industries such as the housing industry, the production costs increased and there was also a sharp increase in liquidity.

The economic cycle shows that the economic growth is associated with the housing boom (Iftc, 2010). Three boom-and-bust cycle have happened over the last sixteen years in the housing market. The period of 1991 to 1996 was the house price boom and the growth rates were 61 and 67 percent for 2 consecutive years. Then from 1997 to 2003, the market continued on to growth rates such as 25, 42, 50, and 25 percent. Finally, the third cycle happened during the period between 2004 and 2007, in which the increase in rates were 11 and 28.5 percent.

The volume of cash flow is the function of economic boom and recession. In the economic structure of Iran, the government tries to create a market to absorb the huge amount of cash overflow. Over the last twenty years with three different parties in power this money has led to three different markets. From 1987 to 1995,

the state was governed by a constructive party, and the cash flow led to the car and phone handset markets. Between 1995 and 2003, when a reform party controlled the state, this extra capital flow led to the gold and exchange market. The Ahmadinejad government has been attempting to lead the cash flow into the housing market (Abdo Tabrizy, 2012). Since 2009, because of international sanctions, the cash flow has been blocked in Iran and due to the lack of capacity for investing in other sectors such as industry, banks are in danger of bankruptcy. Regarding the situation mentioned above, the housing market is dominated by private sectors and speculative actors more than ever before. Moreover, despite the other sectors, the government has no share in housing provision and the private sector has the biggest share in providing capital for housing construction and also for providing the total needed dwelling because no social housing is afforded by the state.

The following section will endeavor to unfold how, in the last three decades after the Islamic revolution, the mentioned pattern of the Iranian economic system and government policies have affected the activities that shaped the characteristics of the housing market.

2.4 Government Policies in the Housing Market: The Evolution of Iranian Development Policy

The Iranian economy is dominated by the state and analyzing its current structure is a difficult task because of the fact that the borders between private and public are very ambiguous. The existence of semi-state institutions in several formats generated this ambiguity. Various kinds of such organizations were constructed after the Islamic revolution (1979) to organize the confiscated assets of the Royal family and nationalized properties (Khajepour, 2000). In conflicting with the reason of their creation, these institutions, such as revolutionary foundations (bonyads and Setad Ejraee Farman Emam), seized land and property. In addition, over that past decade, most state-owned institutions involved in the establishment of quasi-public and semi-private firms (Khajepour, 2000) have been carrying out development activities for their own benefit. It is estimated that over 80% of the Iranian economy is controlled by the public sectors, and from the rest, the private sector and cooperative sector by 17% and 3% respectively. The state sector includes all large-scale industries, banking, major minerals, power generation,

insurance, network, radio and television, telephone services, shipping, roads and railroads – and all these are owned and administrated by state.

Although the housing sector is the only market which is almost exclusively controlled by the private sector, it has been affected by fiscal and monetary policies adopted by the government in recent years. Hence, the government programs on housing after the Islamic revolution that started from 1990 will be overviewed in this section.

2.4.1 The First Socio-Economic Cultural Development Plan (1990–1995)

After the war, reconstruction to repair damage resulting from the expansion of construction activities was predicted; therefore, the added value of the construction sector was 5.3 percent annually during this plan.

Economic adjustment and privatization policies, and the subsequent increase in the general price level, the gradual elimination of low-cost loans and the cessation of selling cheap materials, led to an upsurge in housing prices compared to the previous period. Neglecting the demand side orientation and replacing it with a pro-supply tendency caused an increase in urban land and other factors of housing production price.

Table 2.1 Achievement of the first socio-economic cultural development plan (1990-1995)

	Outline perspective	Production	Percentage of achievement
The amount of housing production (thousand units)	1580	732	46.3
<i>The average floor area</i> (million square meters)	154	107.5	70.3
<i>The average residential unit size</i> (square meters)	97	147	151.5

Source: Central Bank Report, 1997

At the beginning of the plan, the country was facing a shortage of 894 thousand housing units. According to the above table, the plan could not reach the aim and the provided units were 53.7 less than what the plan expected.

Among the reasons that led to the failure of the plan and the relative stagnation of the housing sector activities, can be cited the increased construction costs and

housing prices. The price index of construction materials had an average annual increase of 31.1 percent during the first plan.

House prices' growth, alongside expansionary policies which intensified inflation, borrowing from the central bank to finance the budget deficit, liquidity growth and development of non-rational expectations among producers and policy makers in the housing sector, all led to excessive speculation and increased demand for housing investment (Dalalpour, 2000, Karami, 2007).

As a result, 17 percent of liquidity of the private sector flowed to the housing sector and housing became a commodity capital.

There were several elements to prevent the plan from accomplishing its aim including the banking facilities ratio to prices of residential units (banking facilities was low), a high average floor area of units and lack of appropriate attention to the mass builders.

2.4.2 The Second Socio-Economic Cultural Development Plan (1995–2000)

This period was one of the most volatile periods of housing construction and its boom lasted until 1997. Foreign debt growth along with GDP growth leading to expected inflation meant that inflation reached 49.9 percent in 1997. Following 1997, owing to the risen price, the effective demand decreased and eventually the housing production fell.

The second development plan's policies relating to the housing sector were mainly based on three subjects: savings, miniaturization and massive production, in the form of free housing and social support. This plan finished by achieving 75 percent of its outline perspective but in this period housing became a capital commodity. The below table illustrates the achievement of the second socio-economic cultural development plan.

Table 2.2 Achievement of the second socio-economic cultural development plan (1995-2000)

	Outline perspective	Production	Percentage of achievement	The average growth rate Compared to the previous plan
The amount of housing production (thousand units)	1659	1311	79.0	8.3
The average floor area (million square meters)	165.5	170.8	103.2	5.7
The average residential unit size (square meters)	103	130	126.28	-2.5

Source: Central Bank Report, 1997

2.4.3 The Third Socio-Economic Cultural Development Plan (2000–2005)

During the period of the third plan, the intended achievements were to control the housing market, support volume builders, have the Housing and Planning Ministry create the housing and construction database, and encourage landowners to aggregate their lands through tax exemption and by granting extra density.

In this period, 2000 to 2003 were the good years for the housing market. However, then due to constraints imposed on Tehran construction under the suspension of extra density permission, a price bubble resulting from monetary policies ushered the market into recession. By achieving 96.3 percent of aims, the third plan was the most successful plan of all the plans before and after the revolution. In terms of floor area, although it was determined to decrease the average floor area from 110 m² to 100 m², it inversely reached 121 m², which was far from the target.

Table 2.3 Achievement of the third socio-economic cultural development plan (2000–2005)

	Outline perspective	Production	Percentage of achievement	The average growth rate Compared to the previous plan
The amount of housing production (thousand units)	2160	2022	93.6	13.1
<i>The average floor area</i> (million square meters)	226	243.7	107.8	11.3
<i>The average residential unit size</i> (square meters)	105	121	115.2	-1.4

Source: Central Bank Report, 2005

2.4.4 The Fourth Socio-Economic Cultural Development Plan (2005–2009)

The fourth development plan intended to improve the quantitative indicators of housing, reduce the average floor area of units, increase residential density and efficient use of land, utilize new technologies to optimize the use of production factors, downsize, reduce the power of the government and enhance the share of volume builder. The following table illustrates to what extent this plan met its aims.

Table4.2 Achievement of the fourth socio-economic cultural development plan (2005-2009)

	Outline perspective	Product.0ion	Percentage of achievement	The average growth rate Compared to the previous plan
The amount of housing production (thousand units)	3107	2049	65.9	0.2
<i>The average floor area</i> (million square meters)	204	249	122.0	0.4
<i>The average residential unit size</i> (square meters)	116	121	104.3	0

Source: Central Bank Report, 2009

2.4.5 Summary: Socio-Economic Cultural Development Plans (1990–2009)

This section outlines the perspective of Iranian socio-economic cultural development plans and the performances and achievements of each. Here are the results of these four plans:

- Reduced the average floor area of completed residential units from 155 m² to 120 m²
- Decreased household index from 1.18 to 1.09
- Construction and completion of the annual average of 288,000 housing units
- Improvement of residential units in terms of materials used

An increase of 25 percent in the average annual house prices and increased speculation in the housing and real estate sector due to high returns and low risk compared to other asset markets such as stocks, currency, and gold coin.

These plans were criticized in different aspects; the quantitative targets such as inflation and growth figures and the quantitative target about a growth of capital formation by the private sector. The common problem in all plans was the absence of a practical strategy with a clear method of implementation. In addition, some the qualitative targets of the plans could not be implemented without political reform (Khajehpour, 2000).

2.5 Effect of Government Monetary Policies and Capital Market on the Housing and Property Market

The housing sector has been facing a housing bubble for two decades. It has been caused by two factors: a lack of investment opportunities in the industry and agriculture sectors, and the role of housing as an important asset for households. Therefore, housing as an asset is accounted for under speculative demand, severely affecting fluctuation in this sector and its production and consumption pattern. Fluctuation in housing demand is influenced by speculative capital, seeking to achieve profit optimization flowing to the housing, gold, and currency markets. In Iran, since 1990, speculation in the housing market has intensified and volatility in the market has become a major problem.

The enormous financial resources, for various reasons, mainly due to the increase in money supply at the macro level, led speculatively to the housing sector. Since the speculative activities do not follow the law of diminishing, profit in the housing sector remains high until the excess supply unexpectedly changes, and expectations about the profitability of the sector change, and thus drive the financial resources out of the sector and consequently make the economy stagnated (Yazdani, 2005). Thus, the increased speculation in real estate causes the growth in prices, whereupon expectations will rise, and consequently this intensifies the growth in the price. This trend will continue constantly until the total economy goes into recession.

In developed countries such as the UK, the economic policy was directed to achieve monetary growth by controlling the level of spending and borrowing in the public sector and changing the rate of tax (Adair et al., 1993). However, in developing countries such as Iran, the budget deficit is attempted to be balanced mainly through the release of notes and borrowings from the central bank, which leads to increased liquidity and reduces the purchasing power of money

(Tayebniya, 2013). If inflationary expectations rise, people reduce the amount of liquidity in their asset portfolios and hold real assets as their prices increase in line with inflation.

It can be concluded that, based on studies, there is a positive relationship between liquidity and increased motives for housing speculation. Furthermore, the consumption demand for housing in the short term is the function of income, savings per capita, and the banking facilities and due to the impossibility of extreme change in income in the short term, the housing price changes in the short term are apparently arising from speculative demand. The table shows the liquidity indicators of housing and the amount of liquidity of the private sector and the ratio of liquidity in housing to the total liquidity in the community.

Table 2.5 Liquidity indicators of housing (1997-2007)

	1997-2007
Liquidity growth rate of the private sector (percent)	28.8
Absorbed liquidity growth in the housing sector (percent)	30.9
Liquidity ratio of housing to total liquidity of the private sector (percent)	27.4
Liquidity ratio of total liquidity in the market of second-hand housing (percent)	20
The total increased liquidity absorbed in housing sector	31

Source: Journal of Housing Economics, 34, 2007

With the estimation of liquidity in the housing market, its impact can be analyzed. The analysis of the amount of liquidity in the housing market and the share of consumer and investment demand demonstrated that 20 to 30 percent of total liquidity was allocated to the housing sector, which 35 to 40 percent of it belonged to investment demand, and 60 to 65 percent of it met the needs of households (Yazdani, 2011).

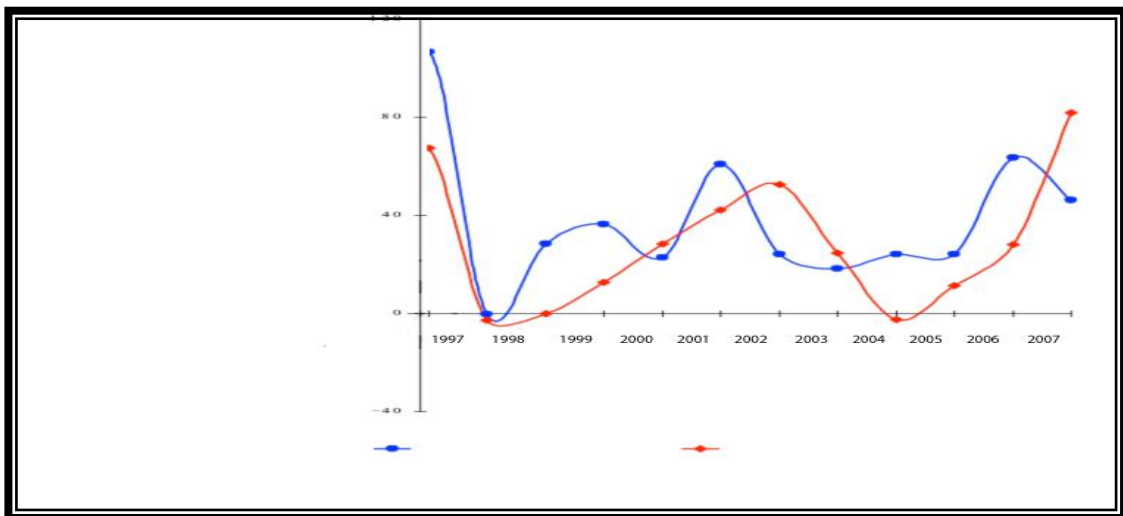
The below table shows the private liquidity growth rate and the price of one square meter of housing in Tehran. Two time series in the following diagram illustrate the consistent growth of housing prices with liquidity growth.

Table 2.6 Comparison of liquidity growth rate and housing price growth rate in Tehran (SQ²)

Year	Private liquidity Growth Rate	Growth rate of housing prices in Tehran
1997	-0.3	-2.7
1998	28.4	-0.1
1999	36.2	12.6
2000	22.6	28.3
2001	60.8	42.1
2002	24.0	52.4
2003	18.3	24.7
2004	24.0	-2.6
2005	24.1	11.2
2006	63.4	28.0
2007	46.0	81.6

Source: Journal of Housing Economics, 32-41, 2007-2009

Figure 2.10 Housing price increases consistently with liquidity growth of private sector



Pearson's correlation coefficient in table 2.7 shows that there is a significant linear correlation between these two variables.

Table 2.7 Pearson's correlation coefficient between liquidity growth rate and housing price growth rate in Tehran

Variables	Average	standard deviation	Pearson's correlation coefficient	Sig
liquidity Growth Rate of private sector	133.1	26.39	0.634	0.008
growth rate of housing price in Tehran	26.75	26.88		

Comparing the above table and figures shows that the growth in liquidity coincides with periods of rising house prices. Analyzing the alteration of liquidity in the housing sector, investment and consumer demand shows that consumer demand has displayed a gently increasing trend and the cycles of boom and bust in the housing sector related to investment demand.

2.5.1 Summary

During the period 1997–2007, more than twenty percent of the liquidity in the housing sector was spent in the trading of second housing while this ratio decreased to less than ten percent. According to this data, the housing sector has faced a flow of liquidity into the second-hand market, which is accounted for as an indicator of investment demand. For instance, in 2001, fifty-seven trillion Rial were invested in the housing market while the added liquidity to the private sector was 71 trillion Rial. This means over 80% of the added liquidity to the whole economy was spent in buying and selling residential units. In the bust period, less than 30 percent of private liquidity was absorbed in the housing sector.

Generally speaking, it seems that the housing market is always faced with a dilemma linked to the issues of its sector, such as increased liquidity and inflation. In addition, rising housing prices as shown in figure 2.10 can be considered a result of the flowing of private capital into the housing sector. The feature of these development policies fulfilled over the four periods of government intervention, significantly affected the economic pattern of the country. In addition to the economic activities related to the capital resources, there is a link between the economic pattern and the property investment pattern.

2.6 The Government's Plans and Policies in the Housing Sector

For the first time, the legal framework for the Urban Planning High Council and for the constitution of land-use planning under the feature of a comprehensive plan was devised by the 1966 Municipality Act. A set of other laws established new legal and institutional arrangements, giving permission to the municipality to work with the Housing Ministry for managing city growth. The most important event that happened in planning was the approval of the Tehran Comprehensive Plan in 1968. However, it was designed for 25 years and in the beginning of its implementation in 1979, it was hit by the advent of revolution (Madanipour, 2006, p.435).

The urban planning in Tehran was treated by three different approaches in the revolutionary and post-revolutionary periods that can be split into three phases: revolution (1979–1988), reconstruction (1989–1996), and reform (1997–2004).

The revolution that “toppled the monarchy in Iran, to be replaced by a state which uneasily combined the rule of the clergy with parliamentary republicanism”, triggered crashes between economic development and political underdevelopment and between tradition and modernization (Madanipour, 2006, p.435).

In addition to all institutional change, the war attracted many migrants to the capital city and its population reached 6 million by 1986. The comprehensive plan could not cope with these changes. Therefore, a firm of Iranian consultants (A-Tech) was ordered in 1985 to prepare a plan for the period of 1986–1996. The plan was finally prepared with much delay and approved by the Urban Planning High Council in 1993 but it did not please the municipality. Then the municipality itself invented a plan for Tehran, and identified the problems and shortages of resources, presented the land-use plan as an aim and introduced strategies to achieve its aim. It constituted six major characteristics which prepared the comprehensive, and detailed plans for land use and conservation was one of those (Madanipour, 2006, Shahr-dari Tehran, 1996).

The government passed the Comprehensive Housing Plan as an executive and strategic document in 2005 in order to enhance the life quality and reduce inequity in this sector. The comprehensive plan devises 55 plans in the form of 9 sections which contain provisions of secure housing, considerations of affordability of households in housing supply, quantitative and qualitative improvement of production of housing, environmental quality improvement, enhancements of

residential neighbourhood, preservation of national culture, modernization and reconstruction and regeneration, improvement of management of housing sector and coordination of housing programs. This plan focused on housing provision for low-income households, providing rural housing, developing housing finance, improving safety of existing houses, urban land market regulation, promoting the construction industry, regeneration and renovation, housing sector management and slums and illegal settlements.

Therefore, public banks were obliged by the government to allocate bank facilities for regeneration plans, and all credit allocated to regenerate old neighborhoods resulted in a 20 percent growth in housing units' construction. One of the controversial regulations over the years in the comprehensive plan related to density rules and the municipality's attitude to this issue. The density of housing dwellings is one apparent indicator for the elasticity of the housing supply in a metropolitan area. It is obvious that decreasing the availability of land makes its build more difficult. However, without planning considerations, the municipality enabled builders to build taller buildings only by paying fines to the municipality, in a policy popularly known as "selling density", without having to show their impacts on the surrounding environment.

Transforming the space into a commercial product and getting permission for additional density that varied in zones through negotiation brought chaos. The cost per square foot in multi-floor apartments is considerably higher than the cost per square foot to build single-family detached homes. It changed the face of the city, specifically in its northern parts, demolishing the medium building or courtyard house with considerable green space to give way to the high-rise building.

Builders are allowed to build 60% of land and a maximum of three floors (called 180 percent density): they prefer to pay thousands of dollars to buy one square meter of density in popular zones. Changing this permission has affected the Tehran housing cycle in a way that increasing this percentage more than 180 percent by permission of the Tehran mayor and eliminating this constraint to build higher buildings led to enhance the construction rate.

Due to the inefficiency of the comprehensive plan, the new Detailed Plan for the city's 22 districts unveiled in 2012 a format of zoning. The zones contain residential, service, commercial and green spaces with different densities and floor regulations for residential zones. The fixed density regulation with no room for negotiation was

claimed by policy makers in the new Development Plan. These land-use plans were provided by private sector consultants for a particular period and the role of the municipality is just to implement these plans, rather than preparing or revising them.

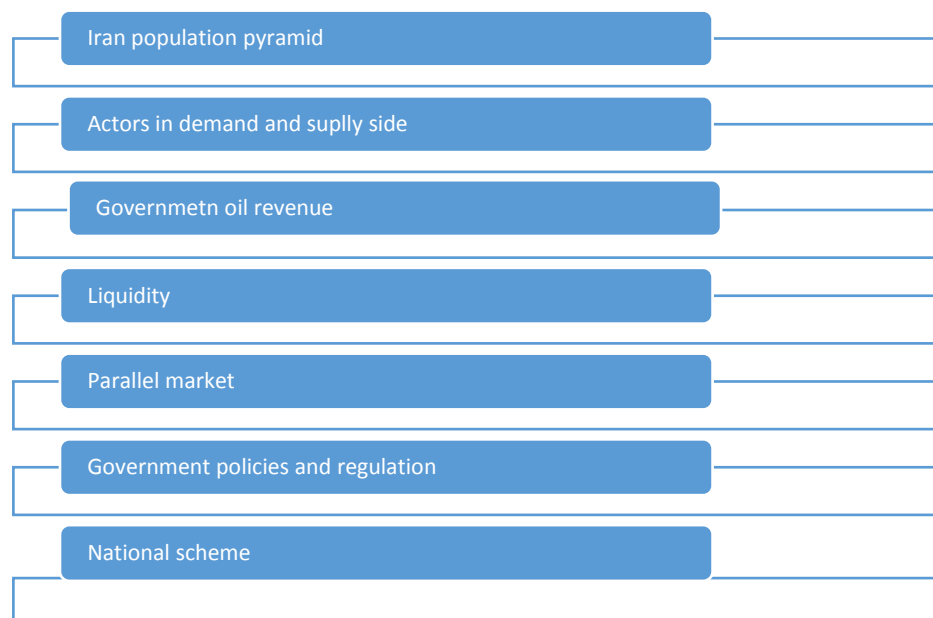
2.7 The Housing Market Cycle

The Tehran housing market boom-and-bust cycles are mainly affected by agencies who are investors and speculators that inject cash into market. By raising oil prices and with increased oil revenues, the state budget will increase, and more money flows into the economy than before. Consequently, the demand for housing rises.

2.7.1 The Factors Affecting the Housing Cycle

Figure 2.11 shows that several factors affect the housing cycle consisting of population, liquidity, government policies and government oil revenue – which were explained in previous sections – actors on the supply and demand side, parallel market, and national scheme that will be expressed later in detail.

Figure 2.11 The factors affecting the housing cycle



Bearing in mind the most significant feature of Tehran housing related to liquidity from oil revenue seeking the highest yield clarifies the significance of parallel markets. The volume of money in circulation is called liquidity included two components of the monetary base and money multiplier. Monetary multiplier during 2000 to 2009 in the average has been about 4.2 and the monetary base has been almost increased 6.4 times. Liquidity had the highest growth in 2005 and during this period is almost 8.5 times. In Iran, a large part of the money supply growth was due to the growth of the monetary base. Monetary base control requires interaction the government and the central bank, because in the current situation, the main part of the monetary base has been created by the interaction of government and the central bank. The liquidity based on monetary base and money multiplier illustrate in following table.

Table 2.7 Liquidity based on monetary base and money multiplier 2000-2010 (Milliard Rial)

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
monetary base	119615.9	128710.9	151200	22054.4	2799751	365499	539405.9	603940.2	60378.2	686398
monetary base growth		7.6	17.5	14.6	26.9	30.5	47.6	11.9	13.7	11/4
money multiplier	3.91	4.091	4.535	4.176	4.587	4.48	3.52	3.90	4.296	4.606
money multiplier growth		17.2	10.8	-0.8	10	-0.2	-21.4	10.7	10	7.2
Liquidity	417534	52659.4	685697/5	921019.4	1284199.4	1640293	1901366	2355889.1	2948874.2	352204.1
Liquidity growth		26	30.2	34.3	39.4	27.7	15.9	23.9	25.2	19.4

Source: Iran Central Bank, 2010

The parallel markets in Iran, as distinguished from other countries, are Iranian gold coin and the foreign currency market. It is universal that the capital is invested in a sector with low risk and high return and investors make decisions based on utility of various investment opportunities. However, in developing countries the people are encouraged to hold liquid assets such as gold coin and foreign currency because the lack of reliable mechanism for conflict resolution disheartens industrial investment (Chang, 1994). In Chang's opinion, people are reluctant to take risks with their resources in specific investments because of the state's failing to manage conflict in a suitable way and as a result the dynamism of the economy suffers. Investment in housing affects the portfolio composition and there is a correlation between asset prices and changes in income, whereas there is no correlation between income and return on stock certificates (Gholizadeh, 2007). The following table depicts the risks and returns of investing in different types of assets in Iran during the period from 1992 to 2006, indicating returns on asset classes other than housing dropped. It shows that the risk is reduced from 20.52 to 13.18 and return on housing increased from 19.94 to 27.37 percent.

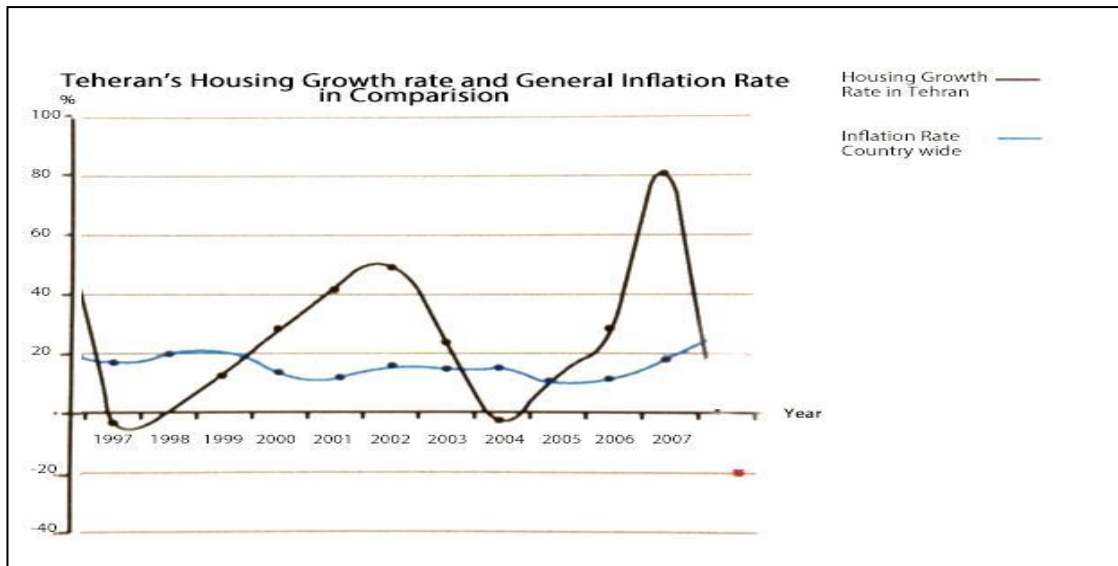
Table 2.8 Risks and returns of investing in different types of assets in Iran

Indicators	period	Gold Coin	Foreign Currency	Stock	Housing
The mean (return)	1992-1997	30.89	30.89	32.22	32.22
Standard deviation (risk)		35.23	35.23	30.60	30.60
Average (risk-return)		1.14	1.14	0.94	0.94
The mean (return)	2000-2006	19.04	2.03	32.22	27.37
Standard deviation (risk)		11.78	2.67	30.60	13.18
Average (risk-return)		0.61	1.31	0.94	0.48

Source: Gholizadeh, 2007

The characteristics of the housing portfolio are its high efficiency, offsetting inflation and generating real returns. The average inflation rate over 2000–2006 was 13.4 percent while the return on investment in housing was 27.4 percent.

Figure 2.12 Comparison of the growth rate of housing prices in Tehran and inflation



Source: Abdo Tabrizy, 2012

Government policies, which have an effect on the demand or supply side, include banking facilities, construction permissions, real estate tax, and tax on transfers. As shown in figure 2.13, the government policies, which differ from each housing minister, play an impressive role in forming these periods.

Figure 2.13 Boom-and-bust cycles in the three housing ministers' periods

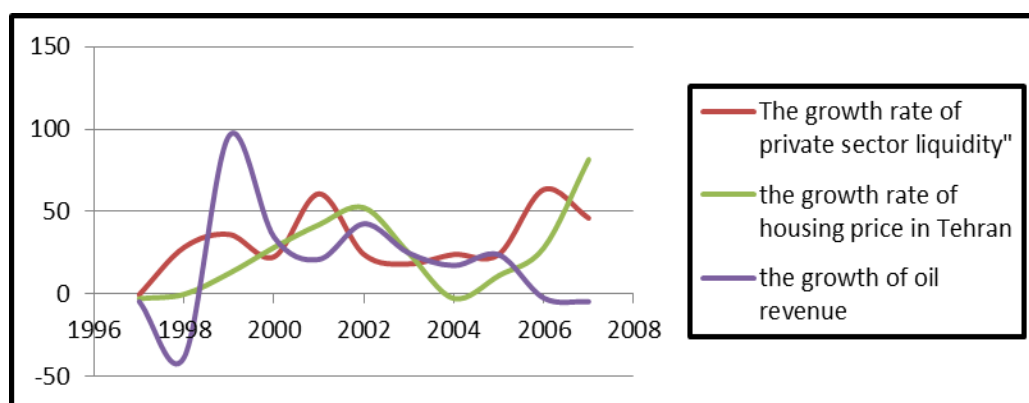


Source: Abdo Tabrizy, 2012

2.7.2 Boom and Bust Period in Tehran Housing Market

The housing sector has been heavily influenced by liquidity and monetary policies especially during last two decades. The increase in liquidity has been intensified particularly in periods of increasing oil prices and oil revenues (figure 2.14). Two periods of housing boom, 2000–2002 and 2006–2007, were exactly in tandem with the period of high oil prices and increased oil revenues (table 2.9). These housing cycles expose that the booms and crises in the housing market are closely connected to the growth of the economy. It also shows the role played by the government, which provides capital resources to generate economic activities.

Figure 2.14 Comparison of growth rate in oil revenue with private sector liquidity and housing price



Source: Developed by Author, Iran Central Bank (1997-2007)

However, the manufacturing sector (industry and agriculture) as well as services do not have the ability to raise funds. On one hand, in these sectors, the rate of return on capital is low, and on the other hand, the government dominates resources and large manufacturing firms. Therefore, the people who seek a way to keep the value of their assets from inflationary consequences are encouraged to become involved with speculative trading.

This trend leads to growth in investment and speculative demand; however, the supply is inelastic in the short term and this is reflected in the housing price. The important point here is that this increase in price is a criterion for deciding whether or not to enter the market for the coming period; and the demand will rise. This trend continues until the equilibrium of demand and supply is achieved and then the expectations decrease and the market goes into the bust period.

Table 2.9 Boom and bust period in Tehran housing market

Periods	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Boom	-	-	-	28.3	43.1	50.4	24.7	-	-	28	81.6
Bust	-3.7	-0.1	12.6	-	-	-	-	-2.6	11.2	-	-

Source: Housing Economic journal, 2009, p.45

Analyzing the trend of housing prices over these ten years shows that the housing market has experienced two full periods of boom and bust. The first boom in this period is from 2000 to 2003 and over last two years of it, the housing prices grew 61 and 67 percent. The second boom cycle occurred in 2006–2007, and the housing sector experienced a growth rate of 81 percent in 2007.

The following table illustrates the values of long-term growth of the housing sector indicators in Tehran in the period 1997 to 2007. Hence, the growth rate of house prices these years was more than general inflation: the rising cost of building materials and investment in housing have created the real benefit.

Table 2.10 Percentages of average growth rate of housing, land and other related factors in Tehran (1997-2007)

Housing price	24.1
Land price	26.3
General inflation	21.5
Price of building materials	21
Wages for construction workers	20.5

Source: leasing report, 2010, 116

In summary, the housing market cycles in Tehran are influenced by several factors, of which the most significant one is oil revenue and the amount of liquidity generated by this. Considering the parallel markets such as foreign currency and Iranian gold coin, those are serious alternatives for investing in the housing sector which highlight the importance of government monetary policies. According to the discussion so far, the Tehran housing market, after a period of one or two years of

boom, came across a period of four or five years of slump to return again to an upturn.

2.8 Demand for Housing in Tehran (1997–2007)

The demand of the housing market in Tehran went through dramatic growth during the last decade and got the first place in ranking of the provinces based on the market demand for housing (Iran Central Bank, 2009).

There are a number of factors that contributed to the pattern of housing demand in Tehran. Consumers and investing (speculative) demand are considered as two main factors affecting the housing market are discussed in detail in the following section.

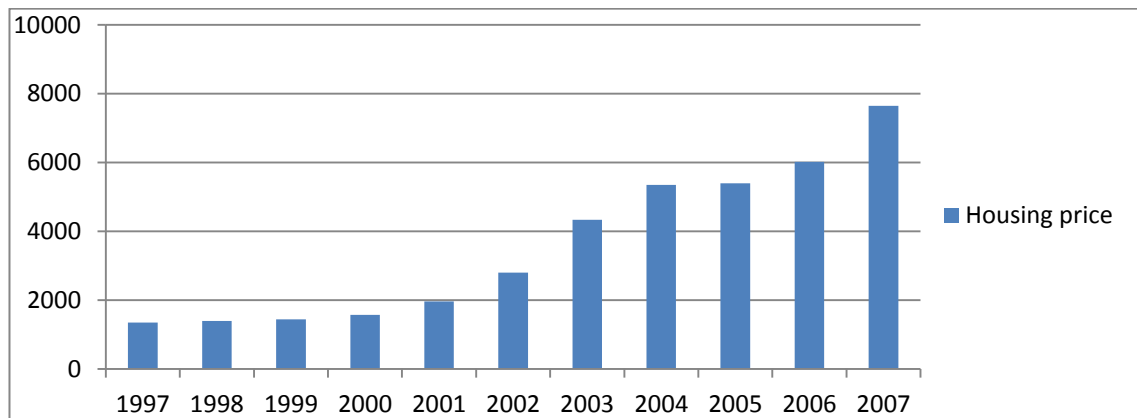
Investors and speculators who play an important role in the supply side, as well the investors with long-term goals, invest in this sector and mostly intend to rent the units; speculators who usually have a short-term goal and intend to sell a unit after a growth in the house price.

2.8.1 Consumer Demand

According to the report of the Tehran Housing Organizing Committee, Tehran will annually confront 175,000 residential units until 2026 which contains 55,000 demands for housing resulting from marriage, 10,000 units resulting from immigration and 60,000 units because of the demolition of old houses(Tehran Housing Organizing Committee, 2008).

According to the 2007 census (Statistical Center of Iran, 2009), the owner rate in urban areas is 62.2 percent. In spite of households' tendency to own the unit, this rate decreased 4.5 percent from 66.7 percent in 1997. This trend along with the comparison between the households' income and housing price growth shows that the applicants have lost their ability to afford to purchase and moved to the rental market. According to data related to housing tenure, the rental market had 11 percent growth during the period from 1997 to 2007, and vice versa, the owner market experienced an 11 percent decrease (Statistical Center of Iran, 2008).

Figure 2.15 Housing price in Tehran (1997-2007)



Source: Developed by Author, Journal of Housing Economics, 2007, 2008

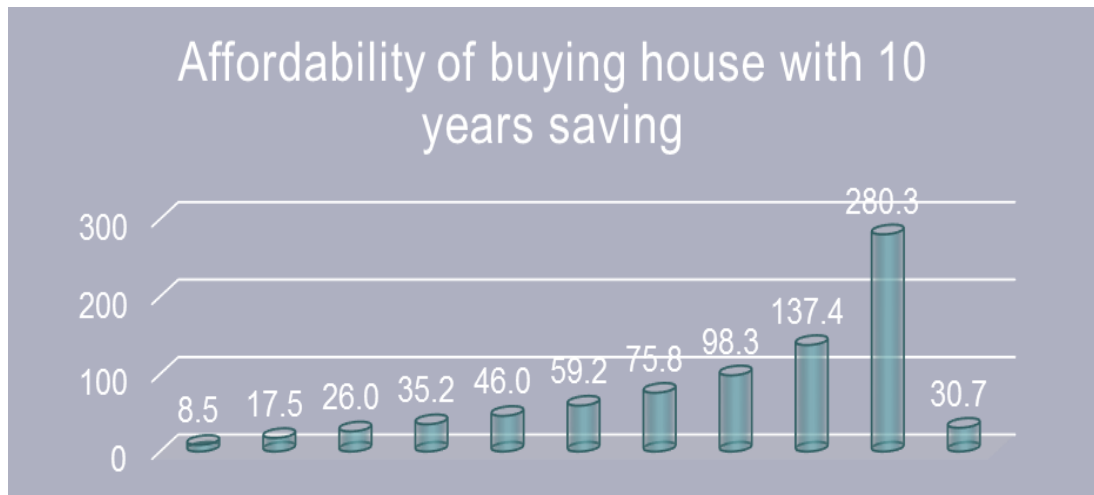
There has been considerable growth in housing prices over the last two decades. According to the housing price index (figure 2.15), between 1977 and 2007, prices increased eightfold (Statistical Centre of Iran). On one hand, rent growth motivates builders to build more units for renting, and on the other hand, tenants who spend a huge amount of their income on rent have the enthusiasm to be an owner-occupier. Najafy (2006) analyzes factors affecting supply of housing and showed that there is a direct relationship between the number of residential units and house price indicators, so that one percent increase in housing price leads to a 0.48 percent growth in the number of residential units. Hence, over the last decade the sign of growth in housing prices attracted the people to invest in this sector. However, the rise in price was result of the land speculators and real estate agents rather than the result of the market function (Gholipour, H, 2012).

In contrast to housing prices, the affordability of the index decreases over time and the purchase power of households has decreased. In Iran the main share of financial resources for buying a house is households' savings, whereas a very small part is provided by loans from banks or other sources. The main structural problem in the financial system in Iran is lack of appropriate mechanisms and functions such as long-term loans and proportionate support that may help households to finance the houses. Therefore, even if somebody has enough and a considerable current income, without significant savings or parental help, they will not be able to buy a unit (Atefi et al., 2010).

The below figure illustrates the size of the house that each income decile could buy with their own savings collected over ten years. The first decile which is the

lowest income group, could buy just 8.5 meters of one house after 10 years of saving, which means that for the first six income deciles, who constitute more than fifty percent of the population, buying a house with their own savings is impossible.

Figure 2.16 Affordability of decile for buying



2.8.2 Investment and Speculative Demand

This is particularly the case in developing countries where it is more likely that there are conditions conducive to increased investment demand in land such as the lack of alternative investment avenues and high inflation rate (Baken & Van der Linden, 1993). Similarly, Baharoglu (1996) in his research in Turkey indicated that one of the important factors influencing the level of investment in urban real estate was the lack of alternative investment avenues such as money markets.

The growth in housing stock has been higher than the growth rate of households in the past three decades, but the price has been increasing and this growth is reflected in speculative demand more than consumer demand. In the below table cash liquidity in the housing sector contains total liquidity in the construction of residential units consisting of started, in progress, completed and trading of second-hand housing units. Equity is the portion of households' demand for housing to meet the needs of their living expenses.

Table 2.11 Estimated consumer and investment demand for liquidity in housing sector

Year	Liquidity the housing sector	The share of Consumer Demand	The share of Investment Demand(percent)	Liquidity of the consumer demand	Liquidity of the Investment Demand	Total Liquidity of private sector	Liquidity ratio of housing to total liquidity (percent)	ratio of Liquidity of housing capital to total liquidity	Absorption Percentage of liquidity surplus to housing investment demand
1997	28271	76	24	27599	8715	16401	21.4	53.1	1.72
1998	36314	70	30	34628	14840	192682	25.7	7.7	3.47
1999	49468	61	39	36992	23649	249110	24.3	9.5	15.61
2000	60641	41	59	39975	57525	320957	30.4	17.9	47.15
2001	97500	39	61	47151	73749	417524	29.0	17.7	16.80
2002	120900	51	49	72930	70070	526596	27.2	13.3	-3.37
2003	143000	62	38	109938	67382	685867	25.9	9.8	-1.69
2004	177300	67	23	147400	72600	921019	23.8	0.8	0.06
2005	220000	59	41	212150	147426	1284199	28.0	11.5	20.60
2006	359575	54	46	283443	241451	1640293	32.0	14.7	26.40
2007	524893	76	24	27599	8715	16401	21.4	53.1	1.72

Source: Journal of Housing Economics, 34, 2007

The investment and speculative demand constitute an important part of housing demand. Return on investment in the housing sector in comparison with other investments causes the partial input or output of existing capital to/from housing market. Capital productivity in the housing sector is 2.3 while this indicator in the industrial and service sectors equals 0.96 and 0.5, respectively (Central Bank, 2009). On the other hand, if there is price stability in the other parallel markets for investing such as the stock market and foreign currency, the capital flows to the housing market.

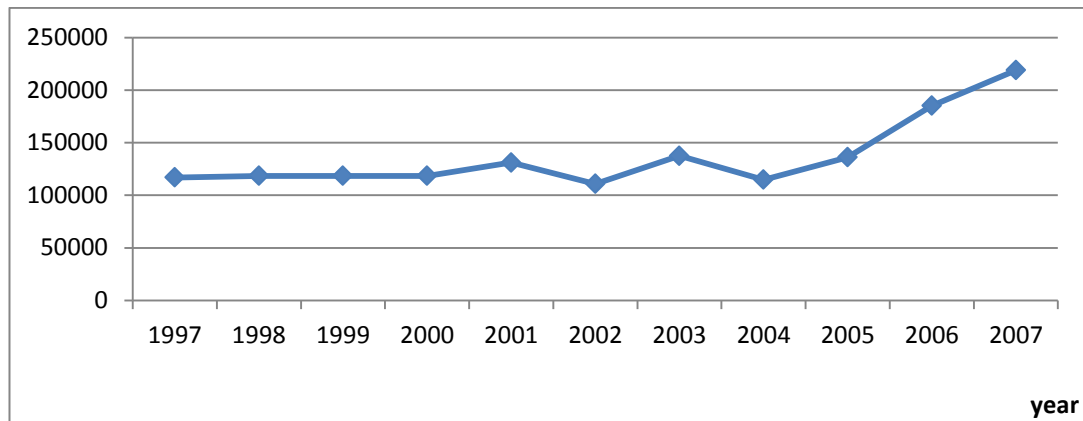
According to the studies, speculative demand share, which is measured by liquidity in this sector, was 42 percent of total housing demand in the last decade. The speculative demand for housing that rapidly enters or exits the housing market by altering the yields on investment in other sectors is the main cause of instability and volatility in housing (Mirzaee et al., 2010).

2.9 Housing Supply in Tehran (1997–2007)

Fluctuations in house prices are known as a key feature of the Iranian housing market which negatively affect suppliers. These fluctuations increase investment risk and expectation periods for sale, which are two virtual factors in the housing market. There are several factors which affect the investment in housing including construction permission regulations, the process of getting Completion Certificates, and bank facilities.

Figure 2.17 illustrates that requests for construction permission increased at a steadily increasing rate except in 2002 and 2004. It is worth noting that one of the remarkable features of the Tehran supply market is that it is highly influenced by investment demand and high-income households' demand.

Figure 2.17 Request for construction permits (1997-2007)



Source: author, Analysis of data extracted from annual report Tehran municipality

However, new housing supply could not match the massive demand. Between 1997 and 2007, 30,000 applications for construction permission were submitted annually and on average 100,000 units have been built each year. However, as mentioned in the previous section, the annual demand for housing is for more than 150,000 units (Fararo, Tehran Housing Organizing Committee, 2008).

The 28 percent growth in housing prices in 2005 and 81.6 percent growth in 2006 led to 35.2 and 74.5 percent growth in building permits in 2005 and 2006, respectively. Regarding the national expectation and in order to benefit more from boom situations, builders in addition accelerated their under-construction projects which caused the fulfilment of 22 million square meters of housing, and requests for construction permits for 37 million square meters housing.

Many housing applicants were forced to leave the market due to this increase in the supply along with price growth. With demand reduction and supply increase, the price expectations fell in the following period and a huge amount of liquidity was withdrawn from the market.

2.10 Conclusion

This chapter discussed the general background in relation to cultural, social, economic and institutional structures affecting housing supply in Tehran. The purpose of this chapter was to set the scene to examine the housing development process under inquiry within the context of institutional and market structure. In this chapter, it was summarized that the housing development process in Tehran was typified by the form of economic and institutional forces underlying the process. It is revealed that housing provision in Tehran is considerably influenced by whole economic state and structural forces such as liquidity and inflation as well as the mode of government intervention that regulates land and property activities through its varied policies and rules affecting the economic system. The comparison between the outline perspectives of government development plans with percentage of achievement indicated that failing to achieve the goals in housing scope was the common feature among different governments over the last two decades in Iran.

This chapter also focused on the performance of the housing property market in Tehran for the period between 1997 and 2007. It was indicated that Tehran has been facing an annual shortage of dwellings, and unaffordable high-price housing. It showed that in the last decade the housing development agents' strategies and behavior were influenced by the economic components of demand and supply of housing properties for investment and consumption intentions. In this chapter, it was also revealed that the housing property market in Tehran was speculative in nature and the economic and institutional environment prepared the terrain for speculative behaviors so that the speculative demand share was 42 percent of total demand in the last decade. The analysis showed that the booms and crises in the housing development process were in tandem with the economic cycles and growth in oil revenues, and also were subject to the way agents' ideas, interests and predictions of the future resulted from the way they behave in the market when employing the available resources as well as realizing the related rules and regulations linked to the housing development process.

The expansion of the housing development sector in Tehran is tightly linked to the economic and oil revenue growth and providing a profitable opportunity for investing. The chapter has demonstrated that one of the most important features of

the Tehran housing market is that it is not only 98 percent dominated by private sector, but also financed by private actors in all types of people with surplus capital, who could possibly shift to any other parallel markets with better profit at any time. Considering the parallel markets such as foreign currency and Iranian gold coin, those are serious alternatives for investing in the housing sector which highlight the importance of government monetary policies.

This chapter illustrates the unique characteristics of Tehran housing Market. The complexity which was revealed and the continuity of problems show that the research carried out in this scope so far has not been adequately done, and do not dig deep enough. Therefore, the next chapter will consider how best to study a housing market with these distinct characteristics.

3 Chapter 3 Review of the Models of the Property Development Process

3.1 Introduction

In recent years, there has been an expanding interest in understanding the land and property development process. Consequently, various conceptual models of the development process have been created. In order to provide a conceptual framework, the main need is addressing the background. Therefore, it is necessary to review the several existing development process models that are viewed from the different theoretical perspectives. These models particularly improve understanding of the way the development process operates.

The housing development process is complex and dependent on relations and interactions between key actors. The review of Tehran context revealed that the theoretical framework of this research should be able to provide an appropriate terrain to analyse the housing issues in this particular context with significant characteristics. Then, in reviewing different models researcher was seeking to the one which has the capacity of examining the relationships between actors and economic, social and cultural context, complexity, uncertainty and instability of context, actors' opinion beliefs and strategy. The selected model should be able to provide an instrument to examine the relationships between private actors and public institutions .in addition be able to discover the events take place in development process and money circulation.

This chapter includes two main parts; firstly, it will examine different models of the development process derived from different theoretical frameworks of neo-classical economics, urban-political economy, and institutional analysis in three periods 1980-1990, 1990-2000-2001 to 2011. The models range from a diagram that show equality of demand and supply, through to progression of events and series of relationships between the agencies involved in the development process, to structures within which property and land development take place. The features of these models are described and are assessed critically in terms of their applicability, theoretical foundation, and ability to express reality. The advantage of such a review is not only gathering them from different sources but it also presents a platform to argue about the core element and the connotations of the process. This

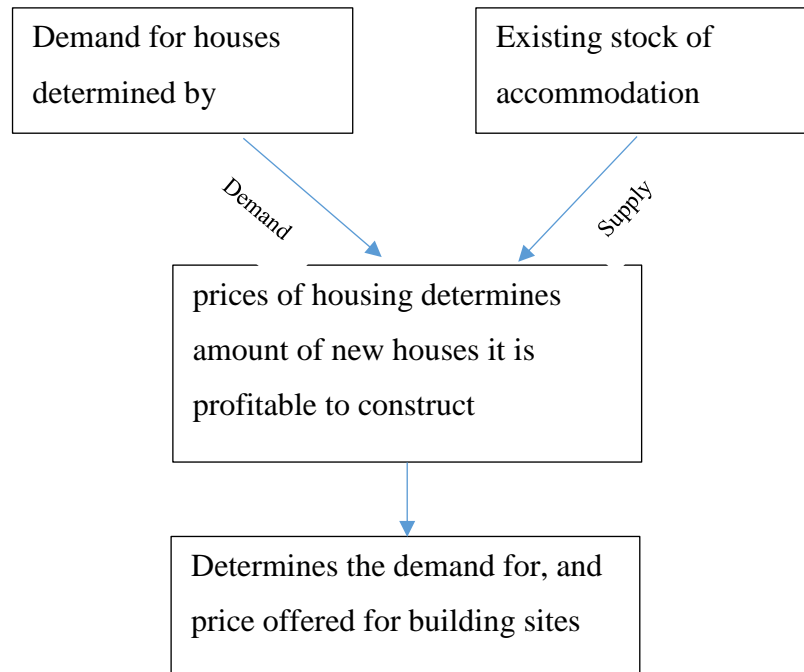
discussion creates an opportunity to find some principle for acceptance and rejection of a particular approach as a basis for the research. Furthermore, it leads to present the specific analytical framework, which is more appropriate for the particular case study. Secondly, it will explain the difficulties of employing structuration theory and present Giddens' suggestion for employing this theory.

3.2 The first period 1980-1990

3.2.1 Harvey's model of the development process

The below equilibrium model is developed from classical economic model of demand and supply by Harvey (1981). The graphical layout of demand and supply improved to box-diagram model of housing development process. In this model, the elementary relationship exists between demand and stocks, and it seems that demand links to price and income. This model was derived from Neo-classical theories which have dominated in the land and property market for many decades. These models underlie most of the real estate literature (Harvey, 1981; Fraster, 1984). In neo-classical economics perspective, "land and property prices are determined by the interaction of supply and demand in the market. If supply is constrained or demand stimulated by public policy, then, other things being equal, prices will rise. The price mechanism thus operates to return supply and demand to a state of equilibrium" (Adams et al., 2005p19). Many studies in land and property markets apply different models, which are based on neo-classical economics (Meen, 1996; Poterba, 1984; Topel and Rosen, 1988; Dipasquale and Wheaton, 1994; Mayer and Somerville, 2000; Barot, 2001; Wigren and Wilhelmsson, 2007; McQuinn and O'Reily, 2008). Their argument derives from the demand–supply relationship in production of the built environment. Furthermore, it is assumed that a perfectly performing free market only emerges without government intervention. In these models, development activity is considered unproblematic (Healey, 1991).

Figure 3.1 Harvey's model of the development process

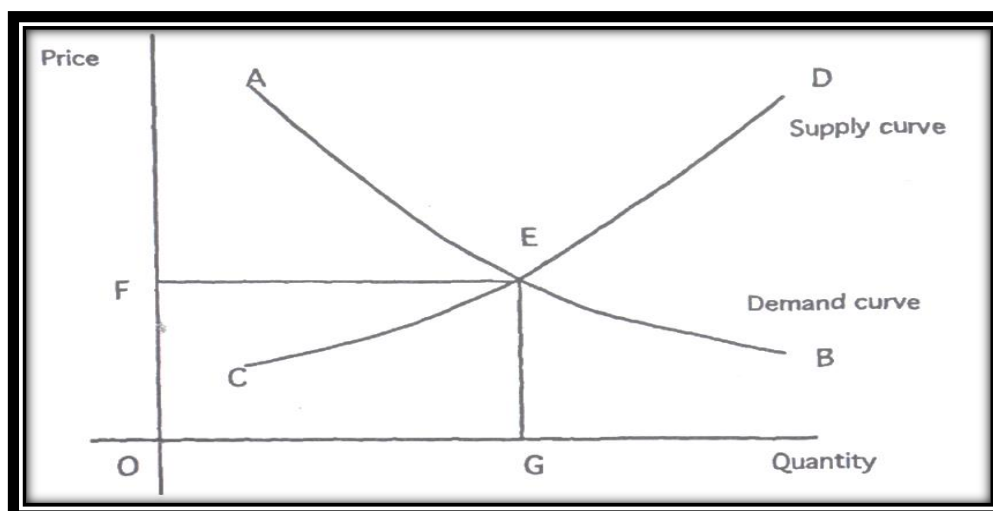


Source; Harvey, J, 1981

Above model was enhanced by Harvey from one of the most famous models under this group is the classical economic model of demand. Figure 3.2 exemplifies the simple model of demand and supply that was presented by Harvey (1992). It shows that the demand curve slopes downwards from left to right and decreases as price increases. On the other hand, the supply curve slopes upwards from left to right and it will increase when there is a growth in price. Point E is the intersection of demand and supply curves and the point of equilibrium. At prices to the left of E, producer or builder should decrease the quantity of production to achieve larger profit. On the other hand, to the right of point E, the opposite happens and producer should increase the volume of outputs.

3.2.2 The classical economic model of demand and supply

Figure 3.2 The classical economic model of demand and supply



Source: Adapted from Harvey J. (1992, 397)

The first assumption of the equilibrium models is that the development process is driven by the demand for new property. Demand is assumed to adjust to supply with numerous agencies involved in the development process, in the right place at the right time (Lichfield and Darin-Drabkin, 1980). The model is based on neo-classical economic principles and implied that the existing market is perfect and consequently, supply adjusts to demand immediately and any price differences are quickly eliminated. Therefore, for obtaining the maximum profits, there are no constraints for either consumer or producer. The next important assumption in neo-classical model is the concept of perfect competition mentioned above. This assumption means that an ideal competitive market exists within many buyers or tenants competing with each other in demanding the property, and the sellers and builders compete with each other in supply. Consequently, the behaviour of any one seller or any one buyer has no influence on the market price. However, the evidence in the studies of Ball (1983) and Leung (1987) show that large development companies dominate the local land and development market.

Adams et al (2005) explain that in a perfect market, changes in prices lead to a balance of demand and supply and to effective production. However, this condition needs many buyers and sellers with freedom to enter and exit, as well as "perfect information and homogeneous product". However, the condition of perfect

competition seems impossible in land and property (Adams et al., 2005, p.20). Ball (1998) mentions that for reaching equilibrium, buyers and sellers at the time of decision-making must use of the full information and it might not occur because of the possibility of land supply freezing due to planning regulations. "Whether and how fast equilibrium is achieved will therefore depend on the institutional characteristics of the market" (Ball, 1998, p. 63).

The criticizing of these two models would be categorized from different views as promised earlier; applicability, theoretical foundation, and ability to express reality. From the theoretical perspective, the assumptions are not applicable to the property market. This perfect market that is based on the interaction of demand and supply with perfect knowledge, homogeneity, freedom of entry and a large number of markets operating rarely exists. The property market is, in reality, imperfect, and consists of a number of sub-markets. On the other hand, different sites with their own characteristics in terms of age, accessibility, shape, size, owner, physical conditions, and institutional limitation make the property market heterogeneous (Fraser, 1985; Balchin, 1988).

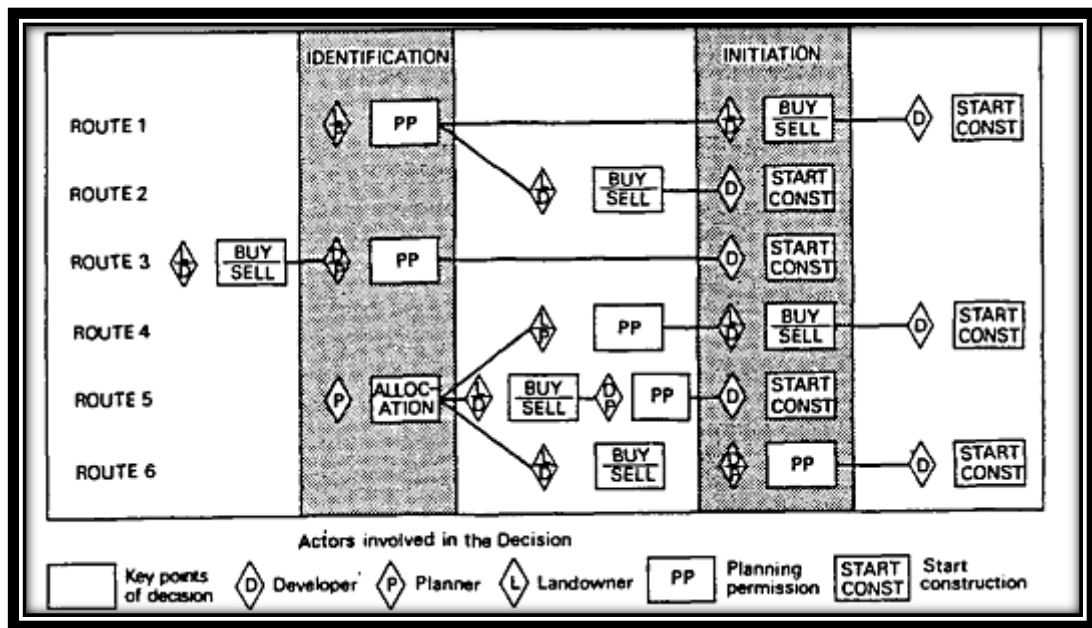
According to applicability, these models have many limitations to apply in a reality that is more complex. First, they are unable to separate two forms of user and investor demand. The importance of this division is these two forms of demand react to different signals. Second, until they concentrate on the economic elements of demand and supply, they therefore not are able to notice the non-economic interest of the actors involved in the development process. Third, they are unable to cope with the uncertainty in measuring further return according to the timescale of the development process and the restrictions of transaction in the land and property market (Howells and Rydin, 1990). Fourth, it is difficult to evaluate the land and buildings especially in a destabilized market produced through economic restructuring. Healey (1991) states considering the complex development process, which is involved in the range of events that happen across a period time; with diverse actors engaged in different stages, equilibrium models are not suitable. Jackson, Morrison and Royce (1994), also note equilibrium models are unable to analyze the different methods and strategies of individual agents except in terms of "rational expectations" models. It is also the case that the actual development process itself is highly complex. The relationships which are played out between landowners,

builders, sub-contractors, financiers and planners rarely run smoothly and the balance of power between these agents varies significantly during the different stages of the development process. Therefore, as Healey (1991) suggests, more attention needs to be given to the institutional dimensions such as strategies and interests of the supply side of the development process (p.231). In addition, development process is problematic in many ways because the property market is hindered by social and special constraints, which reflect access to scarce development resources and facilities. These limitations also affect the spreading of power in society as demonstrated by agents applying rules and procedures (Pahl, 1976)

3.2.3 A descriptive model of the land development process, Goodchild and Munton, 1985

Based on the same theoretical foundation, Goodchild and Munton (1985, see figure 3.3) later presented one of the event-sequence model. As Healey (1992) noted, event–sequence models in the neo-classical tradition underline the need to unpack the development process into its component events. Such models introduce the development process in the form of experienced facts based on the collection and organization of materials. Goodchild and Munton’s (1985) descriptive model of the land development process, attempted to explain an event–sequence model by focusing on three key roles (builder, planner, landowner) and two key events, the identification of land and the initiation of development upon it. This model highlights the different power relationships, which might dominate the process, and consists of six different routes that are considered for a developable site to pass the process.

Figure 3.3A descriptive model of the land development process, Goodchild and Munton, 1985



Source: Goodchild and Munton, 1985, p. 89.

In general, sequential models, especially by “cyclical flow type” offer a helpful initial “insight” into the development process. Eventually, however, their pattern, that contained many limitations, hinders them in obtaining variety of the development process (Gore and Nicholson, 1990, p.711). Furthermore, there is plenty of evidence that there is no standard sequence of events for a development project, which means that there is no certainty about the applicability of each model. Moreover, the specification of actors and their interest within the event–sequence model is restricted by the narrow concern of individual decisions required for the application of a single development project.

However, this simple linear and broad model, however, is too one-sided; it simply sketches the likely event that might be formed along the way of a project (Gore and Nicholson, 1990). Moreover, there is no exploring of the role of different actors and their relationships and the reason of these sequences’ actions in specific projects is not identified. Furthermore, the formation of events that are located in this model limit any other possible action and relationship that might take place throughout the various phases. The isolation of each subsequent event from the rest of the built environment and from external factors such as accessibility of finance, demographic change, and government regulation makes the model less inclusive.

Generally, linear models like event–sequence models are project-based; that does not seem to correspond to all kinds of projects and actually, there are no typical events and sequences for development projects (Gore and Nicholson, 1990; Healey, 1991).

Theoretically, the neo-classical model does not address the power relations nor the heterogeneous nature of the actors. Landowner intermediaries, flows, and different forms of finance, which change the form of the property market. These models fail to address relations between actors and broader structure (Healey and Barrett, 1990). Healey (1991) argues such models are merely appropriate for standard types of projects in stable conditions. Unfortunately, such conditions rarely exist. Neo-classical theory, by concentrating on the comparative analysis of equilibrium states, ignores the entrepreneurship, which can best be thought of as involving situations where markets are out of equilibrium (Baumol, 1968). Furthermore, these models are not appropriate for Iranian context firstly, as mentioned in previous chapter, the housing market dominated by private actor and governed by market that failed to adjust supply and demand. It seems these models are not be able to reveal complex relations between actors and the way that external factors affect their strategies.

It seems that the missing point in in the neo-classical models; power relations and money circulation is considered in Marxist models. As Healey (1991) notes, their perspective transfers from the neo-classical to a situation where markets are structured through the power relations of capital, labour, and landowner. The concentration of these models is on the challenges between landowners and capitalist producers over the catch the 'surplus value' produced in the manufacture of the built environment within a general model of a capitalist economy. This is an alternative discipline which claims that construction activity provides the core of the development process, which includes the assembly on site of several raw materials and constituents to produce a saleable commodity known as 'built property'. The core focus in Marxist ideas is the ways in which capital flows into and out of various sectors of the economy, (Gore and Nicholson, 1991).

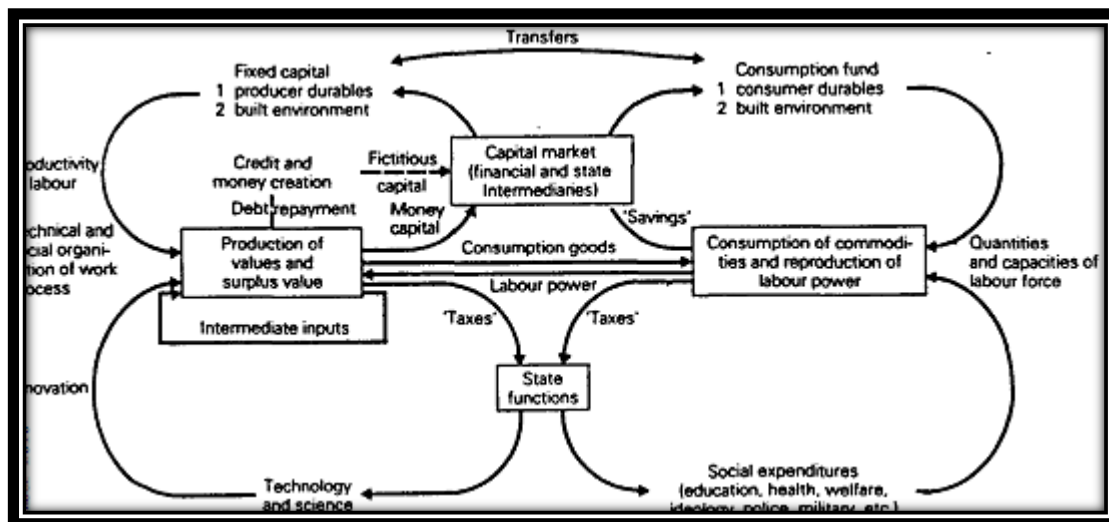
3.2.4 The built environment in the structure of relationships between primary and secondary, Harvey 1985

The most significant contribution to our understanding of the role of property production in the relationship of a capitalist economy belongs to Harvey (1978;

1981; 1982; 1985). “He develops Marx's analysis of circuits of capital to define three circuits: the primary or production circuit; the secondary circuit through which capital flows into fixed assets and the formation of consumption assets; and the third circuit of capital, which flows into science and technology and social expenditures” (Healey, 1991, p.221).

According to Harvey (1981), in the principal course, producing and consuming the commodities leads to expansion of capital. Nevertheless, ultimately, overproduction and/or declining gain degrees might occur, causing the limitation of the capacity for further investment of such grown capital in the principal course. Therefore, the surplus capital will be channelled into the secondary circuit through the financial and state intermediaries. Within this, two realm of investment may be detected. The first one is fixed capital, which includes the items employed as supplementary for the production process and help the physical framework to come into place, such as machinery and factories. The second sphere is the consumption fund, which covers the items that act as aids to consumption rather than as direct inputs. To finalize the figure of the circulation of capital, Harvey suggests another circuit of capital in his model which consists of investment in science, technology, and social expenditure, which is associated with the process of reproduction of labour power.

Figure 3.4: The built environment in the structure of relationships between primary and secondary, Harvey



Source: Harvey, 1985, p. 9

An inclusive attitude was taken by Harvey in his framework, locating development activity firmly among the context of all other economic activity and of all other domains of investing (compare with Ambrose). Consequently, it is emerging the linkage between social and economic circumstances and the built environment (Gore and Nicholson, 1990). However, Overconcentration on the capital flow resulted in neglecting the place of particular development process.

This model considers power in interactions and capital flows and offer linkage between events and the dynamics of the modes of production of different economics. However, this link in reality is hard to observe. The models of political economy can be used to apprehend the present day sociospatial patterns of multinucleated regional development (Gottdiener, 1994, p.97). Ball (1998) believed that Marxist analysis, as with other economic theories, ignores the institutions. In Healey's (1991) perspective, they do not pierce into the details of events of the development process and the network of the actors' relationships that might be involved in it. For applying in the empirical research, the problem with this models is the absence of the middle ground, and having no help to link the broad concerns of structure with the sectors operating in the development industry. In conclusion,

the most important point is these models cannot be used to comprehend the present “socio-spatial patterns of multinucleated regional development” (Gottdiener, 1994, p. 197).

3.2.5 Schematic view of the land market in the city and countryside (Bryant et al., 1982)

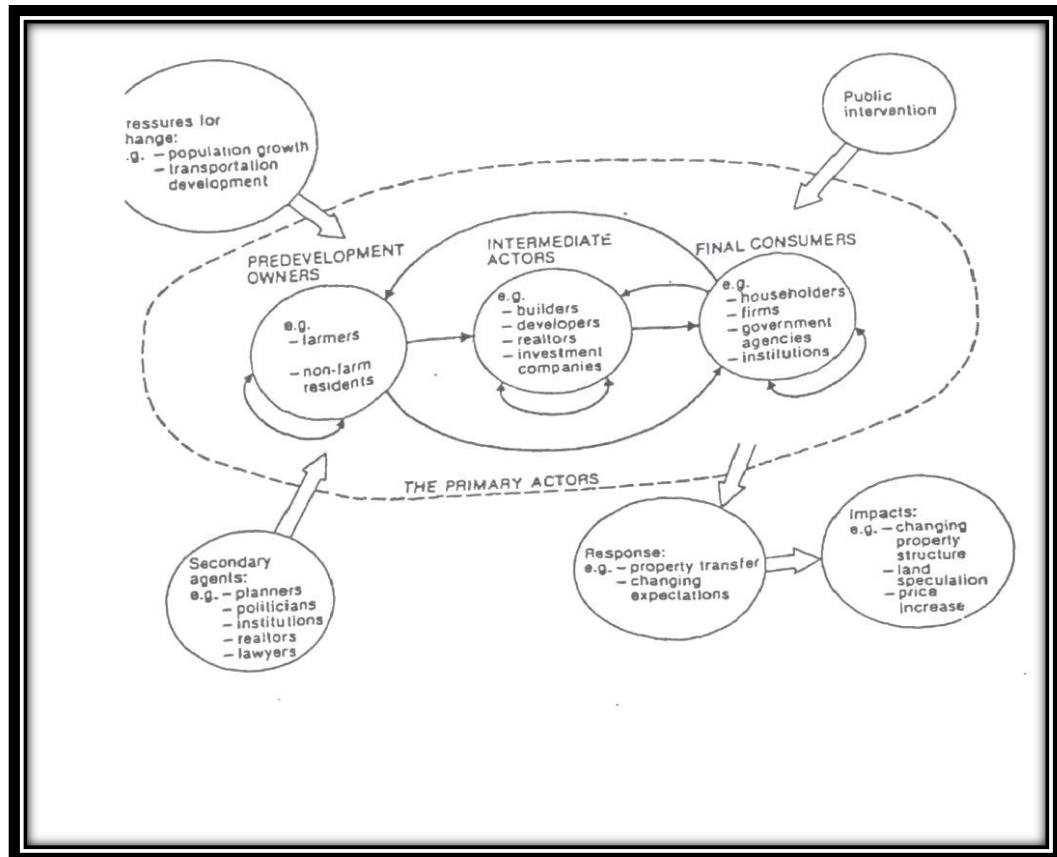
In contrary with previous model, Bryant et al. (1982) considered an agency in their schematic model under the institutional approach. “Accordingly, a wide consensus now exists in support of some form of institutional analysis” (Guy and Henneberry, 2000), to the extent that Ball, in his recent review of British property research, suggests that “the debate can no longer be one about a theory missing out institutions. Theories of how to look at institutions should rather be the focus” (Ball, 1998, p. 1515). The institutionalisms try to explain the differential abilities of different countries to engineer an effective and equitable restructuring process by their differences in economic and political institutions (Chang, 1994, p294). However, Ball mentions that due to the lack of application of institutional analysis in the property world, many assume it is not considered (Ball, 1998).

“Intuitionism” is an interdisciplinary concept used for a range of developments in sociology, economics, public policy, and urban and regional analysis (Giddens, 1984; DiMaggio, 1998; Hall & Taylor, 1996; Healey, 1997 & 2007). Despite differences in the use of in these areas, the term mentions embedding particular practices in a broader context of social relations that overarch the landscape of formal organizations, and the process by with individuals within social contexts create their own ways of thinking and acting (Healey, 1999). The institutionalist view does not believe in the institutional primacy of the market. It believes that the market is only one of the many economic institutions and not necessarily the primary one (e.g. Williamson, 1985; Simon, 1991). Moreover, it argues that there is no reason to be convinced that there are ‘scientifically’ given boundaries between different institutions –especially the kind of boundary pictured in the market-state dichotomy reinforced by welfare economics and neo-liberalism (Chang, 1994, p298).

The agents deployed in Bryant et al. (1982) enter into the land transformation process at the stage they are more likely to be involved. The primary agents are those with direct interest in land and consist of farmers, builders, builders, and occupiers.

On the other hand, secondary agents are those with indirect interest in the land development, usually related to public aspects, such as the planners and politicians, legal requirement, for instance, layers or financiers.

Figure 3.5: Schematic view of the land market in the city and countryside (Bryant et al., 1982)



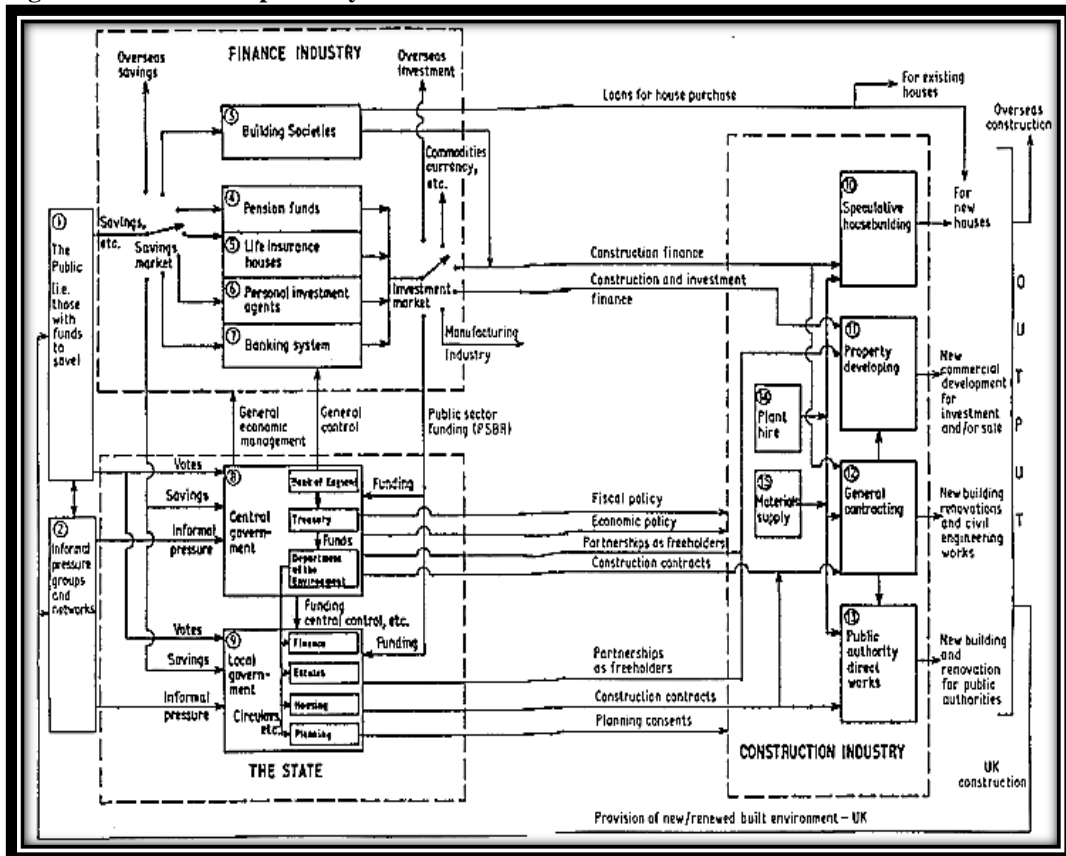
Source: Bryant et al (1982)

Although this model relates the decisions and events of the development process to the actors responsible, it fails to illustrate a relationship that exists between the various decision agents. Furthermore, the model of the land conversion process is considered a closed system; there is no attention to external factors which effective in different stages. There is no explanation of the exact nature of these relationships in relation to the huge amount of negotiation involved in performing them. These constraints are imposed by public authorities and legal restrictions as well as other agents' interests, strategies and actions in the development process. Later on in 1986 several models were devised by scholars based on intuitional approach.

3.2.6 The development system in the UK, Ambrose, 1986

The work of Ambrose (1986) provides a midway point between structure and agency, offering a model which demonstrates the development process in terms of the agencies and relationships between the state, the construction industry, and the finance sector. The model incorporates the shortcomings common to all such attempts to simplify a very complex reality. The elements are by no means as separate or neatly differentiated in real life as the diagram would imply. In addition the set of connections shown could be made much more complex since some kind of relationship, however tenuous, probably exists between most pairs of elements in the system (Ambrose, 1986, 67).

Figure 3.6: The development system in the UK Ambrose 1986



Source: Ambrose, 1986, 68-69

One interesting facet of the model is the fact that it may be used to chart the ways in which interaction between the various elements can lead not only to different types of development but also to different patterns of investment (Gore and Nicholson, 1990). They stated that this model has a number of strengths such as the relationship between varieties of actors and, at the same time, the limitation of their freedom. Furthermore it can be applied to all of the development

approaches: redevelopment, building conversion and utility alteration. However, not addressing land assembly or organization of construction, and ignoring the external factors, can be mentioned as its weakness.

The authors that are most associated with this model are Healey (1991; 1992), Ball (1983; 1985; 1986) and Krabben and Lambooy (1993). In Healey's perspective, the land development process is considered not only as a physical process of creating and transferring buildings to their consumers but is also a social process dominated by economic interests involved (Healey, 1991; 1992).

3.2.7 **The structure of owner-occupied housing provision, Ball, 1986**

Ball (1986) proposes the housing provision framework for housing analysis instead of consumption-oriented analysis, which was dominant, and mentions that although this approach is not incorrect, it causes us to miss an important side of housing analysis, that is, the relationship between social contexts connected to reconstruction of housing. He describes the structure of building provision:

"A structure of building provision refers to the contemporary network of relationships associated with the provision of particular types of building at specific points in time. Those relationships are embodied within the organisations associated with that type of building provision, and they may take a market or a non-market form. Provision encompasses the whole amount of development, construction, ownership, and use." (Ball, 1998, p.1513)

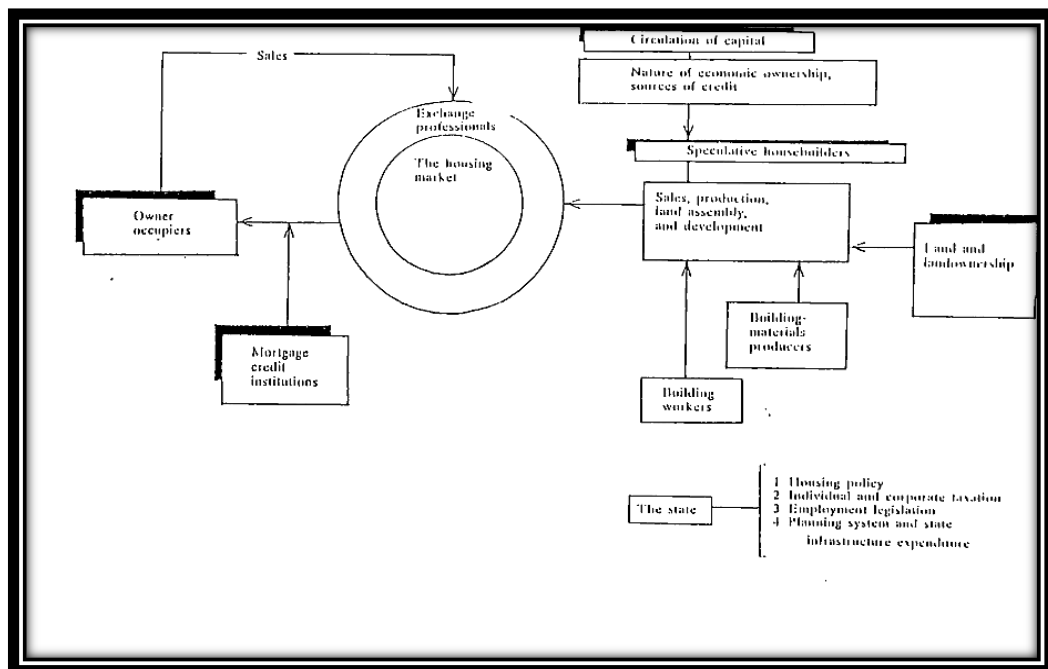
Two models devised by Ball (1986) are in relation to owner-occupied and council housing in contemporary Britain and refutes the dichotomy between structure and agency in his models because of the mutual relationship between them. In both these diagrams, Ball emphasizes two factors. First, he stresses the relationships that are the most important element; and second, the ways in which relationships between two types of agents work. One of the important characteristics of his models is that rather than focusing merely on the structuring dynamics of the modes of production as in structure models, the role of agents are considered (Ball, 1986).

Along with indicating that a real cluttered property development sphere works in a more complicated way than all models that are recommended, he suggests that:

"The perceived dichotomy between the economics of property markets and institutions is a false one and there is a continuum of issues rather than an

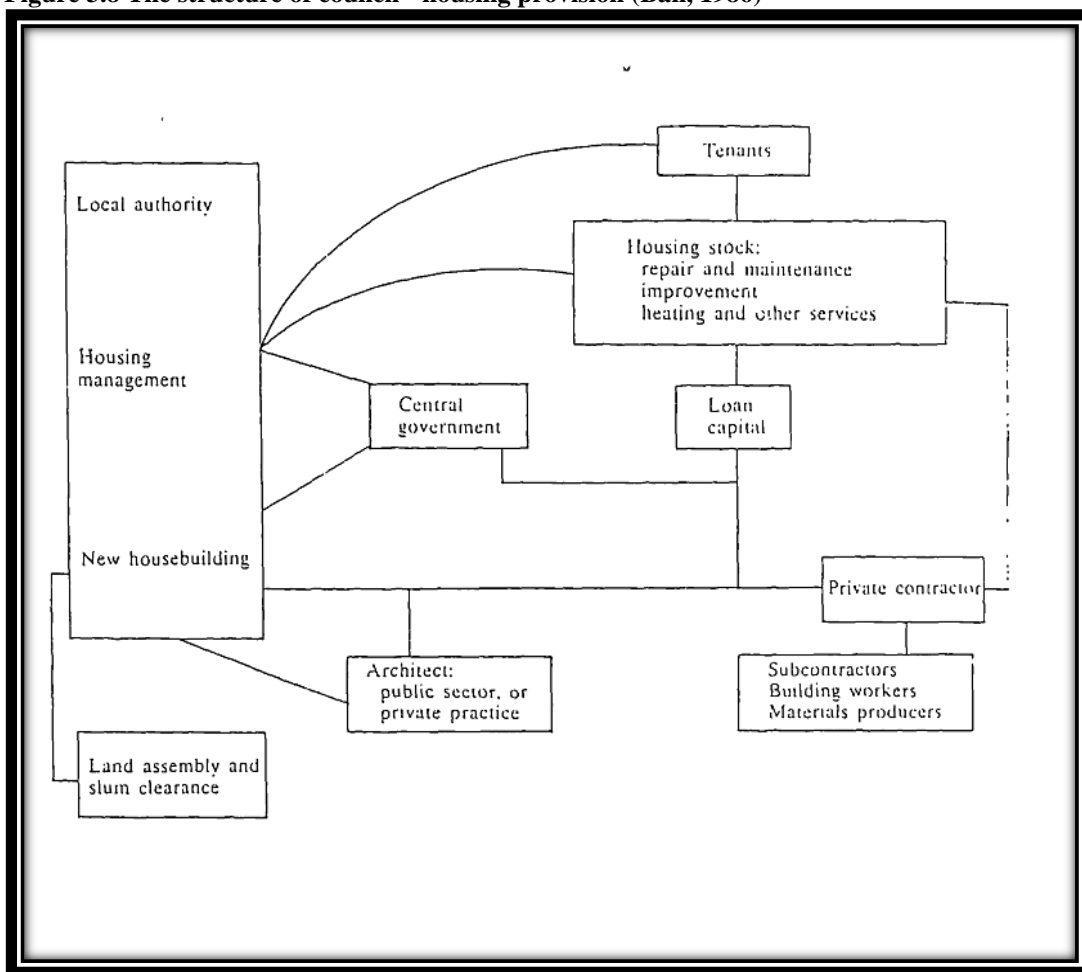
opposition. One most important feature of these models is that rather than focusing solely on the structuring dynamics of the modes of production as in structure models, here agents are seen as having a significant role. He states, each social science has its own theories to explain particular social processes. In a variety of formulations, the provision of goods and services is seen as relating to the satisfaction of needs, subject to the constraints of scarce resources and of contemporary political and institutional structures. Different policy housing needs are emerged by variety of social science principals and each social paradigm such as Pareto optimality or neoclassical economy has its own notions and ideals that compare policies to them.” (Ball, 1986)

Figure 3.6: The structure of owner occupied housing provision (Ball 1986)



Source: Ball, 1986

Figure 3.8 The structure of council - housing provision (Ball, 1986)



Source: Ball, 1986

In reviewing “Institutions in British Property Research”, Ball (1998) criticizes the other institutional approaches and eventually outlines the features of the structure of building provision (SoP) approach which was proposed by himself. He explains the distinctive specification of the SoP approach in eight sections:

1) There is no dichotomy between agency and structure because the “structure” of the provision is involved with the network of markets and organizations underlying the particular forms of building provision.

2) There is a two-way influence of organizations and markets.

3) Each type of building provision is connected to historically specific institutional and social relations, and therefore there is no universal explanation of the development process.

4) Changes in political landscape, market pressures, technologies and strategies of organization lead to continuous changes in SoPs without a prior weighting of importance of these potential influences.

5) SoPs provide a conceptual device for incorporating different institutions in analysis and not a complete theory itself; rather, they play a role as methodological theory and show the way that institutions should be examined

6) The institution is not always important and in some cases does not matter at all and it is a researcher's task to find out whether it is important or not.

7) The core of this approach is a contingent context and determines what an SoP has to deal with in the same empirically particular way. It defines which institutions should be included or excluded.

8) As the property market in the UK is limited to two forms, the SoP distinction would be important in the context of international comparison.

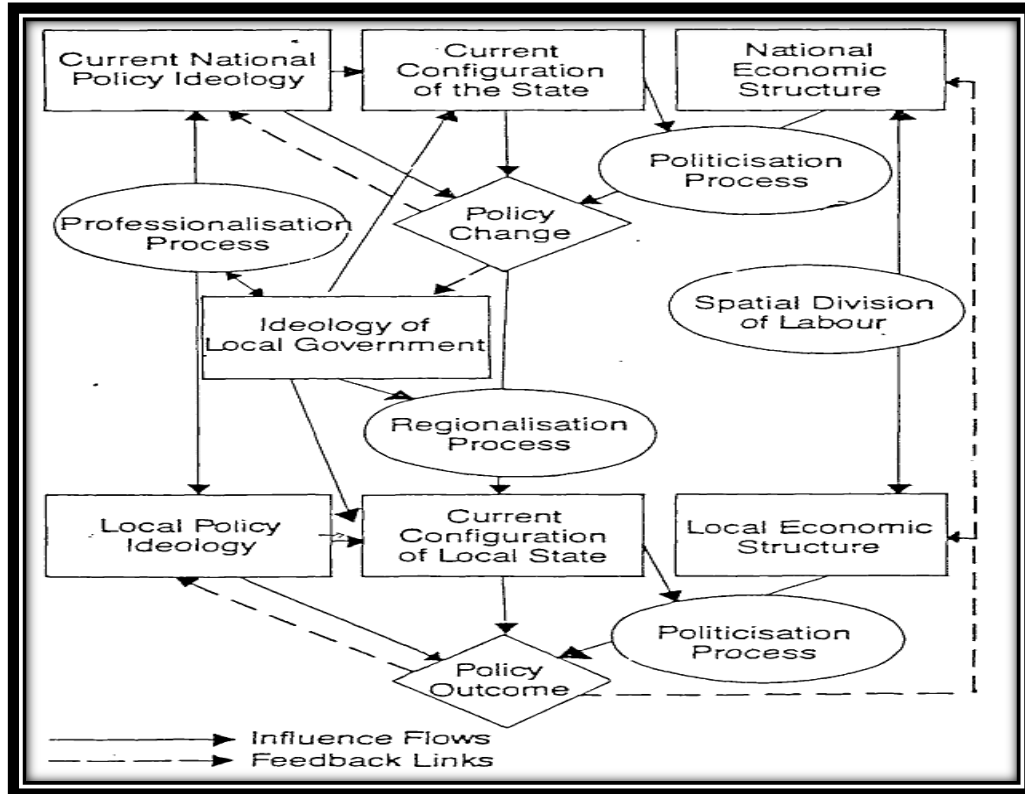
In spite of Ball's argument related to the linkage between structure and agency, Guy and Henneberry (2000) mention the point that he kept a clear separation between social and economic spheres (Guy and Henneberry, 2000). In addition, Ball (1998) stated that there is no prior weighting of the importance of the changes in strategies of organizations or political, technological and market changes and if there is any preference, it should be found through specific investigation, although he never mentioned in detail how it could be recognized. One of the important issues is, as Ball (1998) claimed, that (see above No7) before applying this approach, based on the question being asked and the researcher's judgment, the unimportant institutions and relationships should be ignored. However, in many cases such as this research, the study takes place in order to find the important institutions, their relationships, and the importance of institutions and their relationships defining through the case and research rather the researcher's judgment.

3.2.8 An Analytical Framework for the Policy Process (Rydin, 1986)

Rydin (1986) clarifies the development process within the mechanism of policies in relation to land development. She states that the planning system allocates land to a number of public and private agencies who play the role as an interest group. Hence, it is necessary to recognize the interest of these groups to understand the way these interests affect decision making in the development

process. She finds that the relationship between political, economic and ideological forces at the local level makes such an analysis complicated due to its effect on and influence by decision-making in the development process.

Figure 3.9 An analytic framework for the policy process (Rydin, 1986)

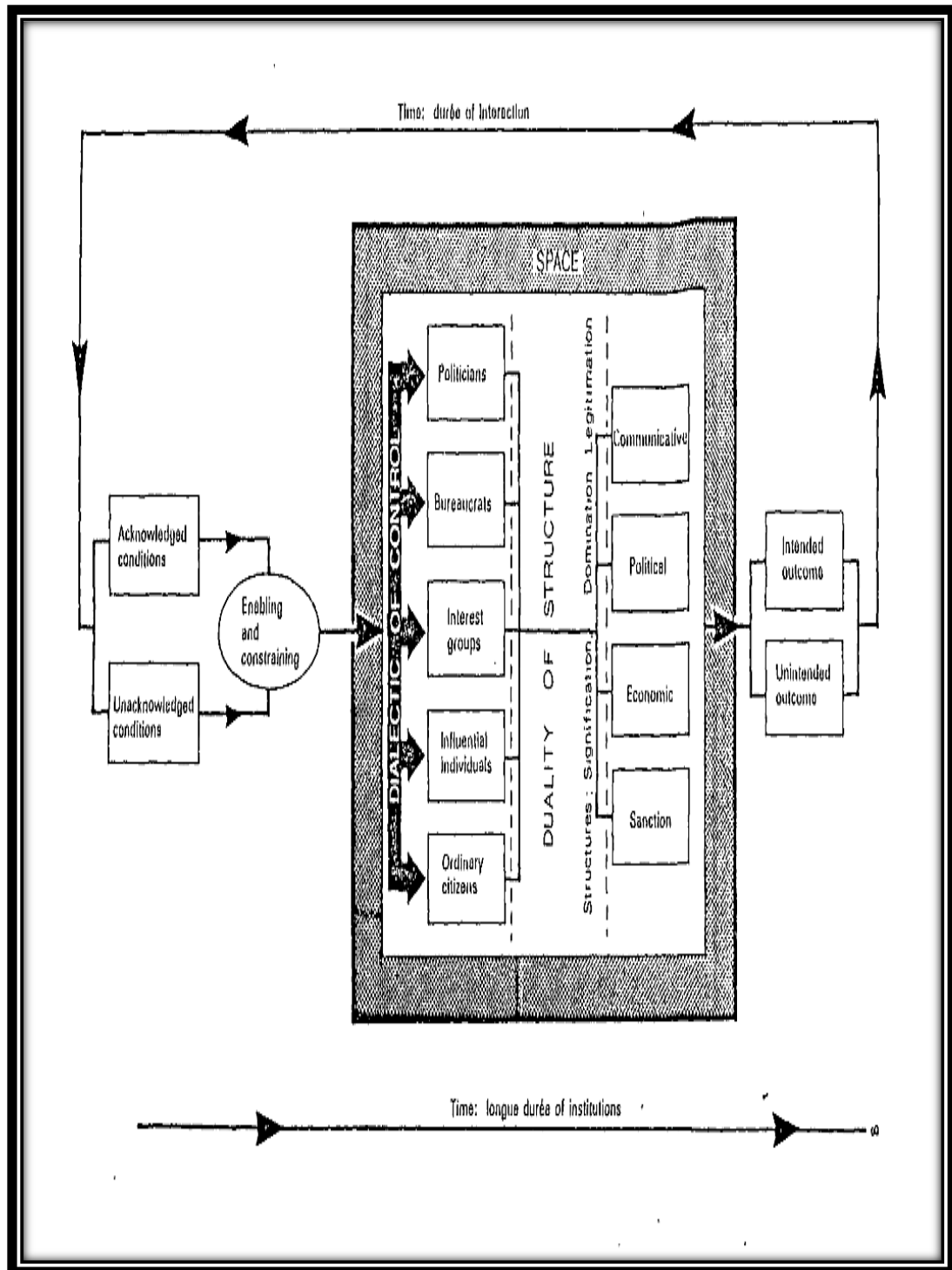


Source: Rydin, 1986, 130

3.2.9 Dear and Moos (1986) A Model of the Structuration of Urban Space

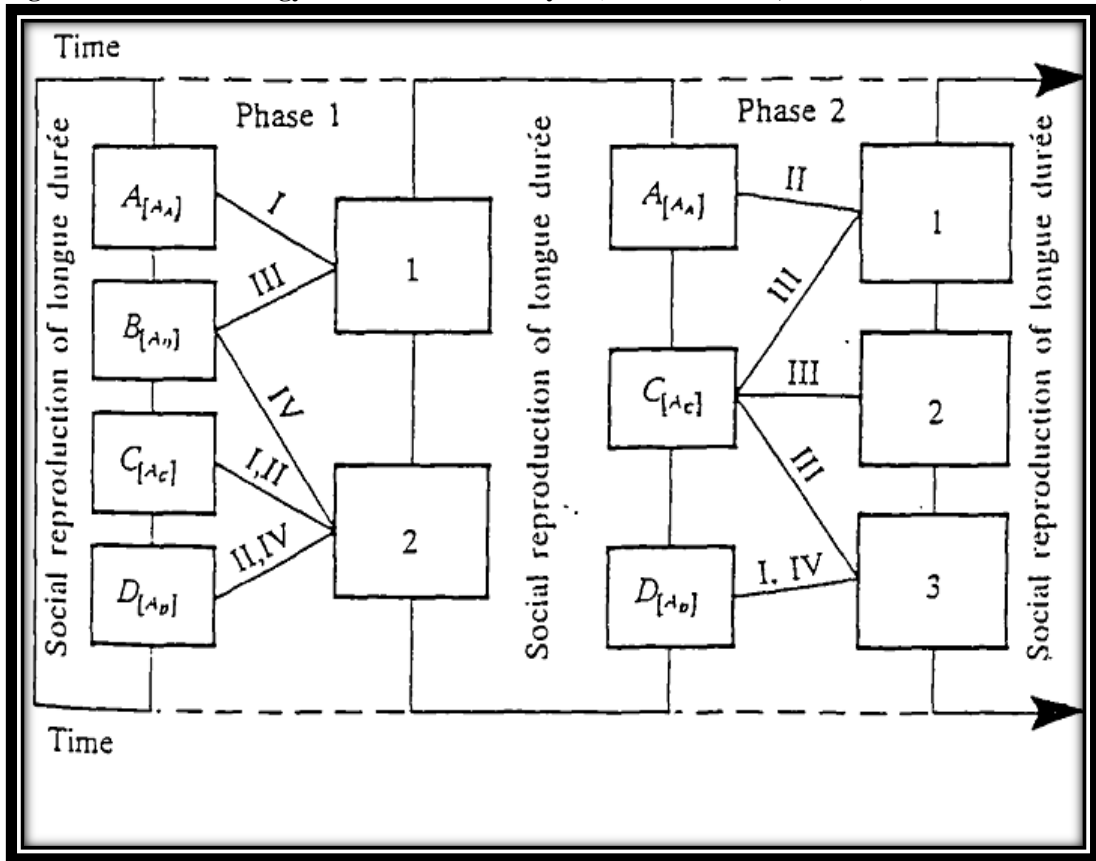
In 1986, Dear and Moos wrote two papers to discuss structuration theory in urban analysis and then apply this theory in their empirical work. The principal object of these papers was examining the usefulness of structuration theory as a framework for pragmatic application. They stated that the concept of structure and agency provides a very distinctive perspective in the study of social phenomena. They endeavoured to provide insight into the understanding of the urban built environment by performing an empirical application of Giddens' (1984) structuration theory. This was carried out through operationalizing the institutional model that developed as depicted in Figure 3.13. They employed two levels in their model consisting of institutional analysis and the strategic conduct analysis.

Figure 3.7 A Model of the Structuration of Urban Space (Dear and Moos, 1986a)



Source: Dear and Moos, 1986a, 245

Figure 3.11A methodology for institutional analysis (Dear and Moos, 1986b)



- A, B, C, D Institutions
- [AA], [AB] Bracketed agents in analysis
- I, II, III, IV Communicative, political, economic, and sanction mode
- 1, 2, 3 Outcomes from institutional action

Source: Dear and Moos, 1986b, 355

The principal aim of the institutional analysis is to understand how institutions influence interactions between varieties of other institutions. Four aspects of institutional analysis that reflect the structural features in all human interaction are: communication, political, economic, and sanctions (figure 13.3). Each category of agent employs these modalities of interaction in dialectical control of relationships with other groups or within a group (Moos and Dear, 1986a). In this research, their interpretation of institutions and the four modalities of interaction will be employed.

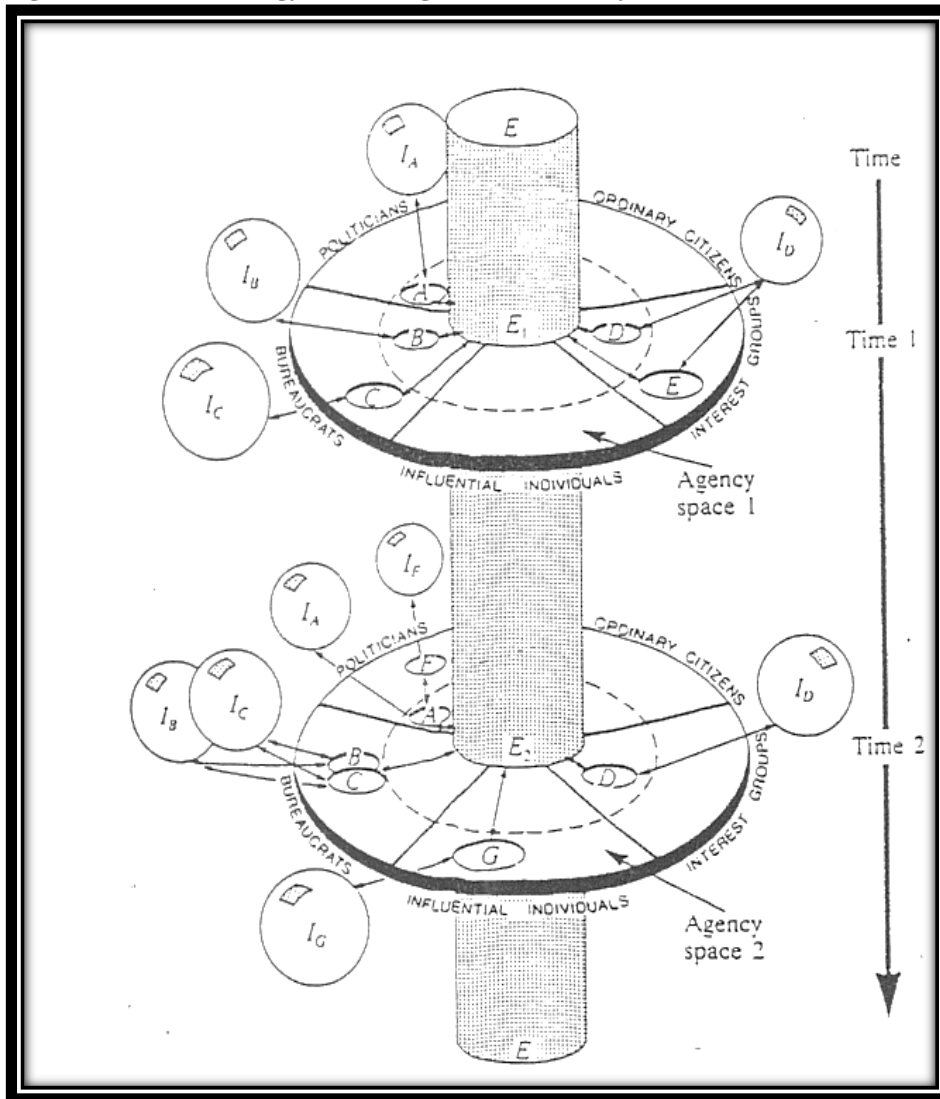
In the model suggested by Moos and Dear (1986a), structure is signified as the “medium and outcome” of social interaction, concentrating on the fact that it is a

duality of structure that ties up the social system to agency. By providing the rules, structures act as mediating devices that characterize the the social system. Meanwhile agents reproduce these structures and the social system. They noted that in analysis, the priority should not be given to agency or to the system; and also to bear in mind that attention should be paid to the interaction of agent and sysytem. They discussed how the structuration account is not simply blending two separate levels of individual and system analysis, it is rather intended to integrate the sense of duality of structure.

Moos and Dear (1986a) discussed that for movement from theory to practice, it is necessary to understand the relationship between different levels of explanations. Then, they explained the three levels that should be considered in applying structuration in analysis. The lowest level is events; the next level involves the relationship between institutions and agents in the process of producing the social reality; and the last level consists of the strucutral properties that have an effect on agencies and institutions in their interaction.

Dear and Moos (1986b) fulfilled the most significant emprical work offering certain implications on the realising of structuration theory and social phenomena. By formalizing the theory into an integrated framwork, the better and flawless identification of the interaction between strucutre, agency, system, time and space is provided. In addition, reformulation of structure as infrastructure prepared a terrain for redifining the “notion of determinism from structuration theory in both theory and practice”. This redefinition provides the precise “balancing of structure and agency in the development and implementation of the theoretical model and in the methodology for institutional analysis and analysis of strategic conduct. Finally, in regard to space in an institutional context, they elaborated on Giddens’ notion of the rationalized locale since it starts to articulate the way that social relations and spatial structures” are linked(Ismail,1994,p.91, Dear anD Moos, 1986b)

Figure 3.8 A Methodology for Strategic Conduct Analysis



Source: Dear and Moos, 1986b

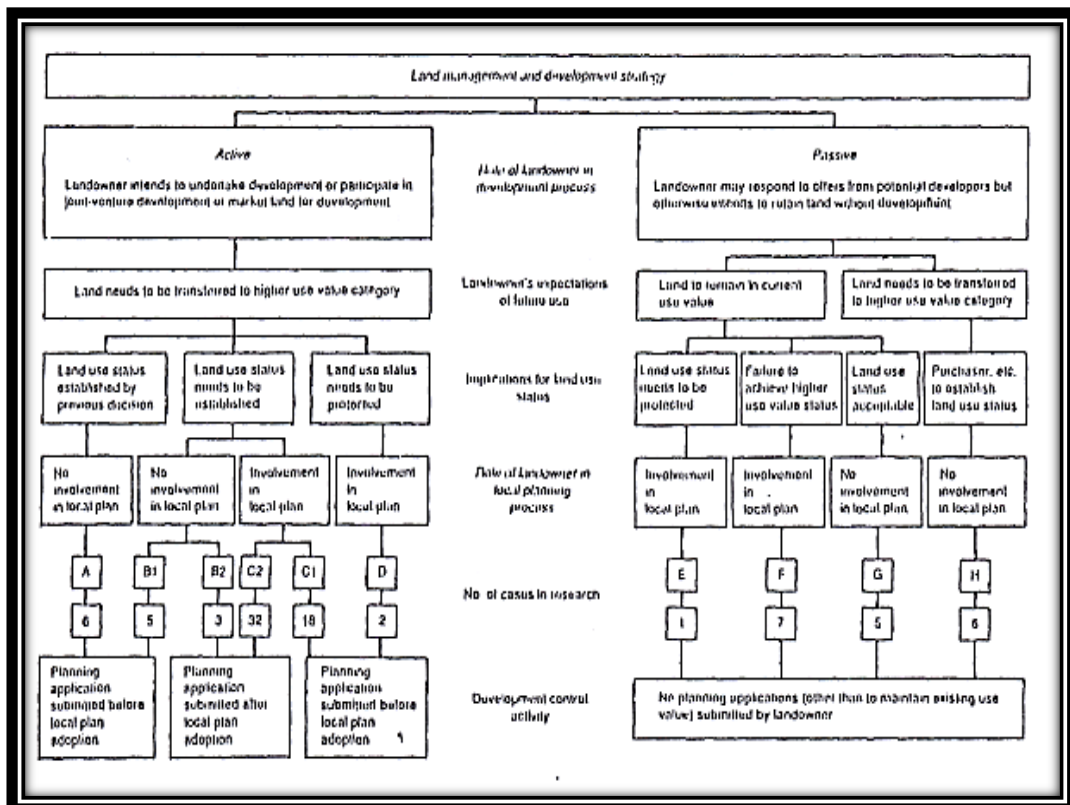
However, Gregson (1987) discussed how lack of specification is a major problem with this specific analysis. Although Dear and Moos claimed that this way of analysis enables researchers to move between the high abstract universal theoretical level and the particular events which take place at particular times and places. Nevertheless, the missing part is that they never mentioned the way of moving between two levels of analysis. Gregson (1987) also states that Dear and Moos were not successful in the implementation of the abstract level of structuration theory in their empirical work. The important point here is that Gregson believes that structuration concepts are not of the type that can be directly utilized in empirical research.

3.3 The second period 1990-2000

3.3.1 Landowner behaviour in the land development process (Adams and May, 1991)

Adams and May (1991) further attempt to explain the relationship between the behaviour of landowners and the planning stage of the land development process. They indicate the difference between the two types of landowners who can be involved in the land development process either actively or passively. They state that owners who are active in the development process but are not engaged in the local planning process are usually found in existing built areas and if necessary they are ready to appeal for or endorse land use change. Conversely, owners who are active in the local planning process hope to prevent undesired change and be able to keep the opportunity of having long-term development.

Figure 3.16: Landowner behaviour in the land development process (Adams and May, 1991)



Source: Adams and May, 1991

Their model was categorised as agency models under institutional approach models stress the importance of the analysis of the development process through the identification of actors and their relationships (Jackson, Morison and Royce, 1994).

Therefore, the individualist approach considers the individual actor in the property development process and their decisions are isolated from those of the other actors involved and from the economic, social and political structure. It is evident that agency models provide a more rounded picture of the development process than a purely event-based model. They attempt to cover the roles that different actors play. This type of model helps to contribute another perspective to building towards a fuller appreciation of the process. These models have been criticized as putting too much stress on the actors and the interaction in terms of explaining the outcome of the built environment. The effect of structural factors and their relationships with the institutional analysis of the development process are weakly developed. This weakness, particularly for Iranian context that structure has huge impact on individuals, makes this model inappropriate.

3.3.2 Healey's agency-structure model of the development process (1992)

Later, Healey (1992) devised a model by applying the concepts of structure and agency to explain the complexity of the development process. She stated that this proposed model set up the link between structure and agency empirically, relating the construction of roles, and the strategies and interests of agencies, to the material resources, institutional rules and organizing ideas in which agents acknowledge implicitly and explicitly they operate. The method of usage of material resources is determined by political rules and the rules of institutionalism. In a description of these rules, she adds that they could be legislated for in law or be existent as habit and tradition. As Healey (1992) indicates, this model, instead of stressing the situation of diversity of actors and interests, focuses instead on recognizing "levels of analysis". She defined the development process as an alteration of physical form, nexus of regulation, materials, capital, and worth of land and building and the attempt of actors with goals and interests to apply rules and resources to achieve values. This analysis of the development process is based on four levels:

1. A mapping exercise to describe the development process in operation, focusing on events in the production process of a development project, identifying the agencies involved and the outcomes produced.

2. Analysis of the agencies involved in the process, identifying roles in the production and consumption/use of the development, and the power relations which evolve between them

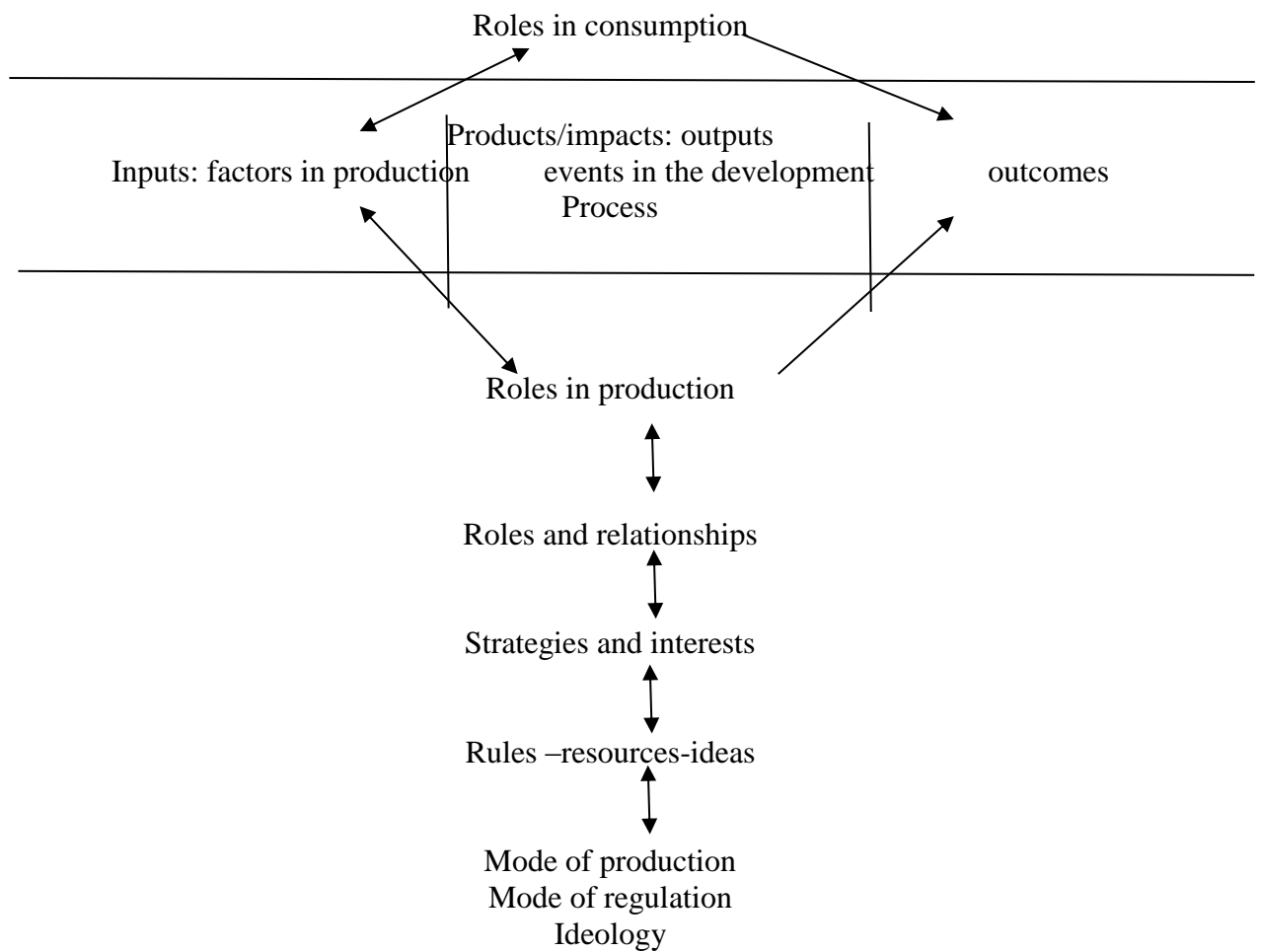
These two levels provide a fundamental empirical explanation. They should present the most significant events in which agency and relationship play crucial roles in the outcome of.

3. The evaluation of the "strategies" and "interests" of actors should make a chance to detect the controller of roles and connections. This evaluation relates to "resources, rules, and ideas that are vital in verifying development progress and products" (Healey, 1992, 35).

4. The understanding of the social environment within which the development process takes place. It is also important to realize its linkage to the form of production and regulation.

Figure 3.9 shows the general notions of the model which exemplify with the outcome of the case of alteration of the Hebburn riverside in Tyneside from 1979–89.

Figure 3.9 : An agency-structure model of the development process



Source: Healey, 1992, 37

Healey (1992) details this figure, describes that inputs contain land, labour, and capital, and gives further details about these factors. Land refers to different parcels of land in addition to the spectrum of property rights. In the Hebburn case, there were few landowners with large sites and the result would have been changed if it had faced many landowners. Labour refers to all those actions engaged in production including physical work such as clearing land as well as agents and actors such as consultants. Capital comprises state and private investment, which could be personal savings or taxation, and it also consists of machinery and raw materials. She claims that the model is comprehensive in form, relevant to all types of development projects, applicable under different economic and political regimes, and at the same time takes into account the temporal variation.

The first problem encountered in Healey's proposed programme is her assertion that 'an analytically development projects are accomplished'. Here the call seems to be for the construction of "grand theory" (Wright-Mills, 1970, pp. 42-3) which transcends context, whereas elsewhere in the paper, Healey is clearly concerned with constructing situated theory; however, this ambiguity remains a theme of the paper (Hooper 1992, p 45).

Hooper (1992) highlights a point that maybe the institutions are underestimated as mediating between structure and agency because of the abstract of the model. He continues, "such an approach would lose sight of the central idea of the duality of structure offered by contemporary theorists, leading to a partial and distorted form of institutional analysis" (Hooper 1992, p 47).

Healey (1992) also claims that the "structure model" approaches the details of the events of the development process and the network of the agency relationship are treated as a dependant variable. Contrastingly, Ball (1988) notes that in structural models the empirical construct cannot be theoretically assumed, and analysis must focus on the production of particular commodities in specific capitalist societies. On the other hand, agents' behaviour is variable and influenced by the resources, rules, and ideas that prevail in society. Essentially, Healey and Barrett are arguing that structure is not fixed, establishing and re-establishing itself, as the resources, rules and ideas which constitute the structure are deployed, acknowledged, challenged and modified through agency behaviour.

Furthermore, Healey (1992) argues that it is also important for the approach to be a universally applicable one, relevant to many different societies at different points of time. As Hooper (1992) has argued, universality is at odds with the historical groundedness of institutions. It is also more likely that the approach is most successful when used in locally based studies.

In addition, despite of the importance of power, it has no1 significant place in relations in Healey's work (Flyvbjerg, 2002). However, in this research as Giddens focus power plays core role in all interactions in ways of authorities and allocative resources.

In reviewing "Institutions in British Property Research", Ball (1988) criticized Healey's model from different aspects. The concentration of the model is on the agency-structure, but no precise definition is given about what constitutes a structure, agency, and institutions. In Ball's perspective, this confusion is because

of Healey's approach, that is, practical research questions rather than theoretical. The other major point that was brought up by him related to the absence of the way that it considers the dynamic in this model. Regarding the duality of structure and agency, he believes that in contrast with what Healey claims, it is very unlikely that actors could make any change in structure. To avoid the criticisms, this research reviewed the agency and structure definitions and interpretation in the literature and in spite of an absence of consensus on the specific definition, applied the most accurate and applicable one in empirical work. In addition, associated with institutions and the orality of interaction, it employs Dear and Moos' (1986) model (see Dallmayr, 1982; Giddens, 1984; Moos & Dear, 1986; Gregson, 1987; Sewell, 1992; Whittington, 1992; Adams, 1994; Jessop, 1996; Cassell, 1993; Cassell, Barley & Tolbert, 1997; Hay, 1998; Shilling, 1999; Dyck & Kearns, 2006).

3.4 The third period 2000-2011

3.4.1 Integrating the Economic and the Social (Guy and Henneberry, 2000)

In contrast with Ball's(1998) perspective of viewing the relationship between the economic and institutional process as a continuum, Guy and Henneberry suggested the perspective which perceives the "economic and social as two interrelated aspects of a wider process of urban change in which structure and action are recursively linked" (Guy&Henneberry, 2000, p2405). The reason stated by them is that kind of approaches that privilege either economic or behavioural explanation of urban development have notable problem. They suggest that the crucial influence on builders' decisions was the way in which they formulate their expectations of development values, cost, and hence of profitability (Guy & Henneberry, 2000, 2408). One of the significant factor of Guy and Henneberry's discussion; is the need for a 'cultural institutionalist 'approach which should be, "dynamic, deeply contextual and contingent both on the particular aims and objectives of development actors, and on a shifting market framework which may enable or constrain development strategies". Within that approach, "one level of agency can become, in another context, the next layer of structure and so on". It also "allows us to understand how property markets, are constructed by

competing . . . actors at local, national and global levels and over time” (Guy and Henneberry, 2000, p. 2413).

Pryke and Lee (1995) found significance of the social construction of profits within the “global” City of London and draw attention to the detection of the operational character of the “financial players” within a centre rather than considering them just as “individual economic agents” (Pryke and Lee, 1995, p.338). They intend to highlight the point that financial institutions carry specific ‘house views of market, of lending and investment opportunities’. In the process of making profit, there are many strong social and cultural factors taking place, which have an important bearing on the economics (Pryke and Lee, p.339).

The key to better understanding of the urban development process might be provided by the relationship between culture and capital. In Guy and Henneberry’s view, the investment strategies are made in specific cultural frames and unpacking these frames could be beneficial to show the way that “decision makers serve to structure socially property market process” (Guy&Henneberry, 2000, p. 2413). The most important concern of the researcher in this study is the same as what is precisely expressed by Guy and Henneberry: structures of provision are unique historically, positionally and spatially specific and, thus, non-deterministic. Nevertheless, if the entities are contingent upon context and at same time form part of the reproduction of that context, how do we define them without prejudicing the outcome of the research? There are then problems of causality. Which outcome should be attributed to the actions of entities and which to the context within which they operate? “Dualism masquerading as a duality” is a main conceptual problem (Holmwood and Stewart, 1991; referred by Jessop, 1996). According to Jessop, a linkage is being created by “counter posing structure (as rules and resources) to action (as concrete conduct) and then simply regarding them as recursively reproductive of each other” (Jessop, 1996, p.123).

3.4.2 The importance of Trust (O’Neill, 2002, Stein & Harper, 2003, Swain &Tait, 2007, Tait, 2011)

While Foucauldian and Giddens focus more on power as a core of each relationship, Stein and Harper (2003) brought the issue of importance of trust into consideration

and stressed that trust is fundamental as power for realising the human interactions and institutions and to modify them. They believed that the applying the vocabulary of power merely in describing everything is insufficient. It is necessary to have other vocabulary and concept autonomous from power such as truth, which are significant for planners and planning but has not been given adequate attention. In addition, generating trust is essential to build institutions and decision processes as well as reconstitute and amend them. Trust also is required at a micro level for conflict solution.

The perspective of Stein and Harper (2003) to power differ from Giddens (1984), they describe the negative side of power move to in the opposite track than does trust and if power considers as the prime vocabulary it would neglect and “obscures the requisite underlying trust” (Stein and Harper, 2003, p.136). Stein and Harper (2003)’ belief can be summarised that although power view and vocabulary is important and beneficial, in a liberal democratic society, trust perspective is more significant and useful to view human relationships and having efficient planning.

Trust is described as reciprocity at the level of the individual, about the competence and reliability of others, their fairness and consistency, and their openness, honesty, and capacity for care (Tait, 2011, Mishra 1996; Höppner, 2009). Not only government and policy makers require trust, each profession and all intuitions thus need, it is perquisite for mutual interactions (O'Neill, 2002). Tait (2011) discussed that there are two prevalent approaches to trust in literature, first, abstract and theoretical concentrating on ‘idealised relationship’, interested in universal and decontextualized truths’ of interaction between the individual and institutions. Contradictorily, a second approach emphasizing on ‘participatory methodologies’ associated with detailed contextualized empirical work and dynamic of individual relations in a specific setting. However, he believed that there are not the only methods to conceptualize trust and instead of understanding it simply the notion of personal relationship, examining it in three levels: ‘the individual, the institutional, and the ideological’ (Tait, 2011, p. 157-158).

At the ground level, the trust appears in the interaction between individual and institution because of logical and structural relationships and it derives from the expectation from institutions to present sets of values. This multilayer method of conceptualizing trust, which emerges from individual relations but thus, includes

structural and ideological level, provide the helpful concept for realizing public activities and similar works within which individual's work shaped by systems and institutions.

According to Swain and Tait (2007) there are four types of trust including 'rational calculative trust, interpersonal relationship, trust in institutions and abstract systems, trust in values in norms' and stated that the first and third types are thin whilst the rest were categorized as thick trust (Swain and Tait ,2007,p.233). In the later paper on 2011, Tait discussed these types of trust in detail. First type of trust is *rational-calculative trust*, related to the expected rational positive benefits that individuals predict advantage in their relations which someone expects his/her profit to act in other one's interest. The trust in this type is considered as a commodity to be transacted in trade by rational actors to follow their interests, which seems a thin form of interest. A second delineation of trust is *interpersonal trust* takes place in individual level and associated with social aspects on personal relationships. This form of trust is grounded on the 'first-hand experience' of knowing a person, shaped through the personal contact. A third is *trust in institutions and abstract systems*- cited by Giddens(1990) as well- which situated in a systematic and organizational surface and the trustworthiness is built owing to the linkage exist between the institution or individual to level of standard, admitted technical norms, consensus ethic and accepted social behaviour. The last type is *Trust in values and norms* that takes place at the ideological level concerns the intention of individual and institution to behave in an appropriate manner and expectation of observing sets of values and beliefs. Notwithstanding that the interpersonal trust and rational –calculative trust that depend on specific evidence based on a decision make about trust, this form of reliance rely on actors' status in broad social logical structures and it counts not on extracted information from specific case. This trust has huge impact on balancing personal and collective assertions by institution and individual, figure the institution's tendency to social justice. These four form of trust which it exercises in different levels, can be recognised in everyday activities of all built environment actors including planners, through building the personal interactions of trust with other actors such as politicians or helping to understand others ' values, norms and views. (Swain &Tait, 2007, Tait, 2011, p.160). Need to examine trust in different layers for understanding it and consider it as a phenomenon that appears from instituting's or

individual's status in a broad economic, political, social and cultural structure, is well explained by Tait (2011, p.161):

“May trust an individual because of a personal relationship, but there may also features of their institutional embeddedness, and their personal and professional ideological commitments, that determine friendly feeling toward them”.

However, in spite of the importance role of trust in society, it is diminishing and “crisis of trust” is seen as a common issue (O'Neill, 2002, p.1). Four reasons are identified for “crisis of trust” in a wider social context in which trust relationships are built; “*the rise of the risk society, pluralistic society, right based-society, advanced liberalism*” and the last two have more significant role to realize trust and specifications of planning.

Before presenting the above particular reasons, the prevalent reasons that make generating trust difficult in planning process and generally the process that public interest involve should be mentioned. First, it is not easy to build a trust among variety of groups with conflicting interests particularly if they have no values to share. Second reason causes to diminish trust is contrast of one group right to others interest that might be appears under form of contracts. Third, the context where participation takes place could prevent to develop the trust.

The *advanced liberalism* has brought a major change to planner and planning related to a relation among market, state, and trust in government institutions to provide public interest replaced by reliance in market mechanism. The crisis of trust in planning system is caused by growth in pluralism and lead to fail planners to make a response to wide variety of needs and interests in the heterogeneous society.

In conclusion, part of social and political context is shaped by trust, which is not merely create and destroyed within particular environments that form, and are formed by, lead researcher in their analysis to establish nexus of personal relations between planning actors to the broad institutional and ideological notions that figure our conception of planning. Bearing in mind that trust should be treated as dynamic and responsive to contextual transformation rather than static because of the mutating nature of personal relationships and institutional setting.

More than being comprehensive, this view adapted to this thesis because of concerning the issue of reciprocity at the individual and institution relationship,

which is one of the important principal of structuration theory also considering ideology, that one of the Healey's model element.

3.4.3 **(Re) development, Complexity and Networks (Doak and Karadimitriou, 2007)**

One of the most fundamental issues is explicitly emphasized by Giddens and expressed as an objective that social researchers should take into account: the complexity of skills depicted by individual agents situated in the stratification model in the context of specific individuals' day-to-day lives (Giddens, 1984, Gregson, 1987)

Doak and Karadimitriou (2007) stated that there is a need for another framework for property research. Institutionalism approach which are alternative to economic has its own insufficiency, importantly its evident lack of a solid body of theory at any level of inquiry makes it difficult to link up between distinct levels of inquiry and unfold causal relationships without resource to an already established theoretical body (Hooper,1992,Ball,2002, Doak and Karadimitriou,2007)

They claimed that the network-based approach promises to solve the 'structure–agency dichotomy allows for a dynamic interpretation of markets, can easily incorporate the role of 'culture' and can accommodate the transition between various spatial and temporal levels' (p.213). It is crucial to view the property markets as 'cultural entities, formed as much by tradition, taste, technological and social innovation as the same levels of demand.

The presented ideas seek to build holistic recognition of the interplay between actor negotiations of network processes and the structural properties. This is set within a broader paradigm of complexity in which networks interrelate with each other at the face the chaos. The proposed framework by them allows researchers to follow the networks as they are constructed and modified, explaining their rational discourses and activities onto actors, space, and time.

3.5 Weaknesses and strength of the reviewed models

Previously each model was reviewed critically in terms of their applicability, theoretical foundation, and ability to express reality and attempted to assess their suitability for Tehran context. In 1980's three models were presented based on three different theoretical foundations. In terms of theoretical approach Equilibrium models are based on neo-classical economics, which are driven by equality of demand and supply. This equilibrium is assumed to be unproblematic and happens at the right time, place, and price. Furthermore, neo-classical theory concentrates on explaining and predicting market outcomes through the analysis of supply and demand. However, in unpacking supply and demand as concepts and in seeking to unravel the processes by which they operate, neo-classical theory can be argued to be less helpful (Adams et al., 2005, 29). As Guy and Henneberry (2000) said, the econometric model should not be rejected; even though in delving deeper aggregate modelling becomes difficult and weak it offers a strong framework for detailed work.

According to applicability, are not applied in this research exactly because of the level of analysis which is needed in the Tehran housing market. Among the enormous researches in this topic, none of them strips down the other levels of work to study the active actors in their behaviour and their interaction with the wider environment. Another issue that makes the economic approach insufficient for analyzing the development process is considering negotiations unproblematic and predictable (Guy and Henneberry, 2000).

The second model, was an example of event-sequence models which these kind of models Event-sequence models portray the stages of the development process and attempt to simplify the complexity of reality by unpacking the process into constituent events. Agency models referred to behavioural models, focusing on actors in the development process, emphasizing their roles and the importance of their decisions. In reality, there is plenty of evidence that there is no standard sequence of events for a development project, which means that there is no certainty about the applicability of each model. Moreover, the specification of actors and their interest within the event-sequence model is restricted by the narrow concern of individual decisions required for the application of a single development project.

The built environment in the structure of relationships model devised by Harvey (1985) based on Marxist. That model focus on the forces which organize the relationships of the development process and which drive its dynamics and the whole economy. Regarding to the Marxist grounded model, although they are helpful for associated with the flow of capital, they are not appropriate for land and property development studies due to encounters with space and power. Marxism, in so far as Marx connected power directly to class interests, with the possible interference when class divisions disappear, relationships of power do too (Cassell,1993,p.121)

Later, there were several important models devised based on structure and agency approach including Ambrose (1986), Ball (1986) and Dear and Moos (1986). Regarding to the theory underlying these models, it provides a much richer insight into the variety and complexity of the development process than the other type of models. Healey and Barrett (1990), drawing on the social theory debates of Giddens (1984), advocate such an approach. Within this combined approach, the term 'structure' is used to describe the socio-economic, political, and cultural framework within which actors define and pursue their strategies, interests and actions (Adams, 1994). Structure, therefore, consists of the organization of economic and political activity and of the institutional values that frame actors' decision-making. Agency captures the entire manner with which actors in the development process develop and pursue their strategies. Adams (1994) suggests that the use of a combination of both structure and agency models provides a comprehensive approach to the understanding of the complex set of relationships which provide the framework for development to occur.

In terms of applying the model, although Ambrose (1986) offered a model in a midway point between structure and agency, it can be applied to this study because it ignores the external forces and more importantly social aspect of development process. Ball (1998) schemed a Structure of Building Provision model, stated that there is no prior weighting of the importance of the changes in strategies of organizations or political, technological and market changes and if there is any preference, it should be found through specific investigation, although he never mentioned in detail how it could be recognized. One of the important issues is, as Ball (1998) claimed, before applying this approach, based on the question being asked and the researcher's judgment, the unimportant institutions, and relationships

should be ignored. However, in many cases such as this research, the study takes place in order to find the important institutions, their relationships, and the importance of institutions and their relationships are defined through the case and research rather the researcher's judgment.

Last model was described in 1980's, offered by Dear and Moos (1986) called a Model of the Structuration of Urban Space and provide one the most significant empirical example of applying Giddens's structuration theory. However, it was failed to show the connection between abstract levels to empirical application.

Healey and Barrett (1990) argue that although different approaches such as institutional analysis, neo-classical economics theory, and Marxist economics are helpful, they fail to identify structure, agencies, and their interaction. These approaches offer a helpful trend for understanding the development process but they suffer from a lack of the fundamental dimension of recognizing the development process. Then they suggest the approach which merges structure and agency, concentrating on rules, resources, and ideology that are admitted by actors presenting a better way of understanding of the land and development process.

In 1992 Healey proposed model that set up the link between structure and agency empirically, relating the construction of roles, and the strategies and interests of agencies, to the material resources, institutional rules and organizing ideas in which agents acknowledge implicitly and explicitly they operate. However, this model was criticized in some aspects that explained in detail earlier such as absence of institution definition, neglecting power and trust, based more on empirical question than theoretical issues.

3.6 Theoretical approach in this research

Being complex itself, a unique characteristic of the context, based on what was explained in previous chapters and the schematic model, indicates the necessity of using the approach, which provides the instruments for analyzing this complexity.

This thesis adapts the structure and agency theoretical approach to understanding the working of housing development sector in Tehran and finding constraints on the process of housing supply. The structure and agency model is preferred over neo-classical and institutional models because of the emphasis on explaining the sector associated with structure agency and their relationship. The

adoption of a theoretical framework of structure and agency throughout the thesis enables a detailed study of the operational house building companies and institutions and other actors.

The structure and agency approach allows an analysis of what takes place in the development process, highlighting the continuous 'interaction' between structural parameters and the application of rules, resources, and ideas by actors who play roles in this area. The use of rules, resources and ideas sets a valuable framework for what 'drives' and generates development activity and demonstrates that house building companies' and financial institutions' behaviour is dynamic and capable of challenging and modifying whatever constitutes the structural framework in an attempt to counteract potential negative effects (Healey, 1992).

Furthermore, structure and agency allows a greater conception of the relationship between the development process and the housing supplier, by distinguishing the interests and actions of agents and institutions within the broader context of structural forces. Adams (1994) suggests that the use of the combination of both structure and agency models provides a comprehensive approach to the understanding of the complex set of relationships which provide the framework for developments to take place.

Although this approach is helpful for analyzing the dynamic of structure–actor relations and exploring the complexity of the housing sector, it has been rarely applied in empirical studies. So far, in the studies of the housing development process the focus has been more on housing price and the demand and supply trend.

3.6.1 Structuration Theory

The structure and agency approach is a product of philosophers who believe that both the social system and the individual actor are equally effective in the description of social phenomena. It is a relatively new attempt to resolve a great conflict in social theory, and promises to offer a comprehensive explanation of how structure and agency join together, in the production, reproduction and transformation of society. This approach is an endeavour to overcome severe problems in social theory, which emerged by transcending the two main approaches applied in social analysis, that is, the structuralism and humanism approaches. Therefore, the ontology of the structure and agency approach expresses that reality

exists in both the underlying structure of production and regulation as well as in agency relationship.

The most coherent formulation and reconceptualizing of structure in recent social theory have been made by Anthony Giddens (Giddens, 1976, 1979, 1981, 1984). He insists that the structure must be considered as 'dual' and it means that they are "both the medium and the outcome of the practice which constitute social systems" (Giddens, 19781, p. 27). Structure shapes the activity of people but simultaneously, people's practices also constitute and reproduce structure. In this view, society is not a product of human activity, nor does it exist independently; rather, it is suggested in his theory as an inherent spatiality to social life. He aimed to sensitize social analysis through concentrating on "the knowledgeability of the individual agent in the reproduction of social practice, the time-space contextuality of social life" (Dyck and Kearns, 2006, p.87).

The fundamental statement of structuration theory is that skilled, knowledgeable actors who live in society perform the production and reproduction of social life (Moos and Dear, 1986). The concepts provided by Giddens related to the ontological level, the nature of being in a particular time and space (Gregson, 1987). Giddens notes that knowledgeable human agents –people who know what they are doing and how to do it – perform structures and agents take action by putting into practice their essentially structured knowledge (Sewell Jr, 1992).

Therefore, "structure must not be conceptualized as simply placing constraints on human agency but as enabling" (Giddens, 1976, p. 161). He (1984) argues that structures are not social facts but the outcome of human actions. Hence, if powerful people, regardless of the number of them, act in innovative ways and work creatively, the capacity of the structure of their action would be able to transform the structure which gave them the capacity. This relationship powered the ability of being changeable to dual structure. Sewell (1992) explained that Giddens calls his theory the 'theory of structuration' specifying by this neologism that 'structure' must be concerned as a process, not as a steady condition.

Furthermore, Giddens (1979) mentions that in the structuralist perspective the social outcome is determined only by cultural and/or economic forces and it leads to ignoring the individual as an active and knowledgeable agent. On the other hand, in the humanism one, that is, agent-oriented philosophies, institutions are regarded as an environment of the settlement of actions. The issue is that neither of these

concepts reflects the power relations and conflicts in society and, most of the time, pay attention restrictedly to the nature of reasons or determinations in human activity. To overcome this problem, Giddens (1979, 53) recommended a solution:

"The notions of actions and structure presuppose one another. Therefore, the necessities reworking both of series of concepts linked to each of these terms, and of these terms themselves"

Healey and Barrett (1990), in their argument about structure and agency in the land and property development process, draw in particular on the work of Giddens (1984), in a sense that according to his definition, structure is established by the way the agents operate, deploying, acknowledging, challenging, and converting resources, rules and ideas, as they construct and pursue their own strategies. Such an approach attempts to expand understanding of the development industry as being dynamically involved in its own reestablishment, while at the same time being driven to reform by external pressure. Consequently, examination of how such external pressures are reflected in and influenced by the way individual agents decide on their strategies and determine their relationships during the specific projects, is mentioned by Healey and Barret (1990) as a critical issue to analyze the development process. They continue their arguing by presenting another crucial task for understanding the process of production and consumption of land and property. The crucial issue in this subject is that there are relationships between "the strategies, interests and actions of various agents who are involved in the development process – landowners, investors, builders consultants, public agencies, planning officers, politicians and community groups – and the organization both of economic and political activity and of values about land, property, buildings and environments witch frames or structures their decision making" (Healey and Barret, 1990, p90).

In their conclusion, they employ the solution of Giddens by proposing that any analysis of the development process needs to explore the relation between structure according to what arises during the development procedure in specific circumstances, and agency in terms of the manner of agents' developing and their policies for achieving their goals and their way of following the policies.

3.6.2 Applied Model in this thesis

The Healey's (1992) model along with Dear and Moos's (1986a) model are applied for this research. Combining these two provide helpful terrain for researcher to use their strength and avoid the weaknesses involve each of these model. In addition the view of Guy and Henneberry (2000) about integrating the economic and the social in analysis. In addition for solving the 'structure–agency dichotomy, network-based approach suggested by Doak and Karadimitriou (2007) is adopted as well. One the important concept absent in the theory and models was trust, which is required as much as power in actors' relationships. Therefore, trust has become one the significant vocabulary and notion in this research.

3.7 Difficulties in Applying the Structure and Agency Theory

The primary objective of social science and structuration theory is what Giddens makes clear: "structuration theory will not be of much value if it does not help to illuminate problems of empirical research" (1984,p. xxix). He highlighted that "social theory has the task of providing conceptions of the nature of human social activity which can be placed in the service of empirical work" (Giddens, 1984, p. xvii). In spite of these remarks about the importance of empirical work, there is still a crucial gap in his work related to the relationship between his own structuration theory and empirical research. This theory should examine the context of empirical issues and has to enrich our understanding of what happens and what has occurred in order to reach its main object and principles of social science (Gregson, 1987).

This theory was cited more in social theories books and papers, which are interested in theoretical and philosophical debate. The few empirical papers that cited this theory could be a good reason for why this claim is difficult to apply. Phipps reviews fifty-three potential empirical works in social science and geography which employed structuration theory between 1982 and 2000. Although Giddens gave some guidelines for empirical research, he stated that structuration theory is a sensitizing device but nothing more.

The first problematic issue about the papers and books that discuss structure, agency and institution, is the different interpretations and definitions (Gregson, 1987). For instance, in Giddens' definition, structures are presented as organized

rules and resources that agents exploit in their day-to-day activities, and institutions are “practices which are deeply sedimented in time-space: that is, which are enduring and inclusive laterally in the sense that they are widespread among the members of a community of society” (1979, p.80). On the other hand, in the interpretation of Dyck and Kearns, institutions are regarded as “chronically reproduced rules and resources” (2006, p.87).

One of the reasons for broadly general interpretations pertains to his work that opens a number of potential opposite readings and it has several conflicting points. Furthermore, there was lack of clarity for some words he used such as constitution (Gregson, 1987; Holmwood and Stewart referred in Jessop, 1996). The relationships between structuration theory and empirical research has been discovered merely by few commentators for several likely reasons. In addition to his lack of attention to this issue, there are fewer audiences of his theory interested in empirical work and dominated by those with theoretical interests (Gregson, 1987).

The second and more crucial issue relates to the nature of structuration theory that is presented by Giddens (1979, 1984) and the way that it can be applied in empirical work. Most critiques are consistent with Holmwood and Stewart’s main critique related to abstraction of this theory (Gregson, 1987; Jessop, 1996). The structuration theory deals with second order issues not first order problems and in Gregson’s opinion, transformising the structuration concepts to the particular empirical analysis is conducive to the eviction of structuration theory.

Gregson (1986) listed several critiques both association with the nature of theory and its link to empirical utilization. He also stated that although Moos and Dear (1985) identify structuration theory placed at a high level of abstraction in the most part, they did not succeed in pursuing the implications of this point for those endeavouring to integrate insights into empirical work. Guy and Henneberry (2000) believe that the key difficulty of this theory related to the “aspects of the dualism without at the same time dichotomising them” and defining the outcome of research in terms of featured causally by agent or context (Guy and Henneberry, 2000, p.2412)

3.7.1 Giddens' Guidelines for Empirical Research

Giddens offers three guidelines overall for empirical research. First, Giddens indicates that all social research encompasses “cultural, ethnographic, or anthropologic” attributes. The necessity of being involved in social research is attempting to know what actors know, and having to know to ‘go on’ with the daily activities of social life (1984, p.284). Therefore, a “mediation of one set of concepts” is required between those who do the research who are usually academics and those individuals in every day social life. The second guideline links with his argument about the complexity of actors’ behaviour in day-to-day life so the awareness of social research is needed. This especially should take into account institutional analysis because reproduction of institutions is bounded in the flow between intentional acts and unintentional outcomes (Gregson, 1987, p.76). The last Giddens recommendation is related to one of the vital themes of structuration theory and alerts the social researcher to be sensitive to the time-space constitution of social life.

These three core issues, elaborating on the implementation of the “double hermeneutic”, go beyond the weaknesses of voluntary theories of action and deterministic theories taking the action in order to develop a new theory alongside showing the way to place time and space in a centre of social analysis from the beginning.

However, these guidelines reflect many themes, which have recurred in Giddens work since 1979. He represented ten points of structuration theory focusing on:

- (1) The knowledgeability of human agents (practical and discursive consciousness)
- (2) The significance of the unintended consequences of action for the reproduction of social systems;
- (3) The study of day-to-day life in terms of the reproduction of institutionalized practices, and (4) routine activities
- (5) Situating social interaction within particular contexts which themselves are central to the process of social and system reproduction, and emphasizing within this the importance of
- (6) Socially sanctioned roles, and
- (7) Various types of constraints

(8) Isolating structural principles and considering the degree of 'closure' within societies

(9) The importance of the analysis of power struggles

(10) Trying to integrate sociological concepts within social life

(Giddens, 1984, p281–284; Gregson, 1987, p76).

Ethnography is one of the implied points proposed by Giddens to social researchers persuading them to have interpretation of the world as the target of their empirical research and he stresses to bear in mind that actors are knowledgeable and have complex skills. In his human agency model, the unacknowledged conditions and unintended outcomes that are conducive to reproduction of the social system have to be considered and analyzed along with discursive and practical consciousness.

The guidelines offered by Giddens (1984) expressing his emphasis on time and space and that empirical research should consider time and space as the centre of attention through locating the action spatially and temporally by analyzing the numerous temporal and spatial structures in societies. Giddens considers theory in terms of concepts, which make their strongest claims at the abstract level (Gregson, 1977, p.79) and he clearly presents his view and makes a distinction between theory and empirical work. He suggests:

“There is, of course, no obligation for anyone doing detailed empirical research, in a given localized setting, to take on board an array of abstract notions that would merely clutter up what could otherwise be described with economy and in ordinary language. The concepts of structuration theory, as with any competing theoretical perspective, should for many research purposes regarded as sensitizing devices, nothing more. That is to say, they may be useful for thinking about research problems and the interpretation of research results. However, to suppose that being theoretically informed ... means always operating with a welter of abstract concepts is as mischievous a doctrine as one, which suggests that we can get along very well without ever using such concepts at all’ (1984, pages 326-327).

Mentioning that structuration theory is posited in a higher level of abstraction, Gregson suggests some points to employ structuration theory in empirical work including taking theory as abstraction, which involves conceptualizing, or carving

up the world into several fluid rather than rigid layers. The interpretation of theory in the Constitution is one which has considerable affinities with a broadly realist view of the world. Given this, an obvious possibility for further discussion is to consider still further these affinities by exploring the degree to which it is possible to use the realist concept of hierarchies of abstraction to facilitate movement between the level-2 type concerns of much of structuration theory and the contingencies of specific empirical research projects (1987, p.80).

Regarding the level of abstraction, hitherto there have been moderately few endeavors to struggle with the difficulties in employing structuration theory within a hierarchy of abstraction comprising the details in an empirical study (Gregson, 1987). However, Moos and Dear (1986b) attempted to apply structuration theory in empirical analysis of the urban built environment and they presented a model for analyzing the structuration of urban space.

Moos and Dear (1985), in their study, examined particular events at specific times and places in different levels of abstraction. In their perspective, level 1 includes analyzing relationships between agents and institutions in the process of producing a particular event. Level 2, which presents a higher level of abstraction, consists of structural properties affecting the interaction between agency and institution. These two levels are linked together through Giddens' concept of duality of structure.

Lack of specification is a main problem as detected by Gregson (1987) in his analysis of Dear and Moos (1985): the way of linking between level 1 and level 2, or universal categories and specific events in a particular time and space, is not defined. They do not succeed in specifying the structural properties, nor the agents and institutions, and fail to make connections between the highest levels of abstraction and historically particular examples. Gregson criticizes them regarding their application of the structuration theory as presenting empirical work more than dealing with structuration theory. Bearing in mind structuration concepts are in the highest-level of abstraction which makes using them directly in empirical work difficult, more attention to specification is needed in their work (Gregson, 1987).

Overall, thereafter giving instances of Giddens' concepts, Gregson concludes that it would be reasonless to anticipate structuration theory to provide research questions or categories for empirical analysis and to employ structuration theory notions directly in empirical work. Worth noting is that the ontological issues are

the pivotal concern in structuration theory engages it with second-order conceptual aspects rather than first-order factual objects. Hence, structuration theory could be split up into two parts; on one hand, the categories that structuration deals with concerning ontological issues, and on the other, those parts associated with determination of specific empirical projects. Continually, Gregson suggests that to fill the gap between the abstraction concepts of structuration theory and empirical research it should be possible to employ rational abstraction. More than a few contradictions exist between structuration theory and realism; consequently, attempts to utilize rational abstraction in this context seems difficult. However, it seems that some of Gregson's criticism referred to the social theories in general for neglecting the possibility of naturalism and making them unable to be applied in empirical analysis, specifically, structuration theory leaves researchers with little help to use the insight of theory.

3.8 Conclusion

Reviewing different models since 1980 revealed that the structure and agency approach is the only one promise to reach such comprehensive coverage. As mentioned earlier, there is a much requirement for richer insight into the complexity and diversity of the development dilemma, which could provide by this approach than other models. In order to overcome the limitation inherent in other theoretical frameworks albeit of their benefit and help, the models based on structure and agency utilised as a foundation.

In this sense, Healey (1992), Dear and Moos (1986a, 1986b), Ball (1988) and, Guy and Henneberry (2000) have elaborated the essential theoretical foundation for such examinations. However, it would be impossible to assume them to undertake the huge amount of empirical work that would be vital to study the whole scope of development sub-sectors, not only in Britain but also elsewhere in the world. Enhancing the recognition of the wide variety of development processes in operation needs research arranges to explain the housing development processes within the conceptual framework of the structure and agency approach. This dissertation seeks to undertake such research. Its approach and methodology are explained in the following chapter.

4 Chapter 4 Research Methods and Design

4.1 Introduction

This chapter expresses the methodology adopted for this research, and the underlying theoretical assumptions leading the approach to enquiry, data collection, and analysis. The weaknesses of the model employed (Healey's (1992) model of the land development process), as well as criticisms of it, are presented besides the suggestions to improve it. This chapter also provides a step-by-step description of the process and methods applied for collecting data and information which include documents and interviews, and data analysis. In addition, it is explained where, when, how and why these interviews were conducted and the justification of the case studies. This is followed by a discussion of the way the validity of this research was approached, and the issues and limitations in concrete data collection were reviewed.

The reassessment of related models of the land development process performed in chapter three exposed the complexity of this process itself and the housing supply in Tehran engage with multiplicity of factors that makes it more complex. These kinds of projects involve a wide variety of sectors including the construction industry, the financial sector, and the entire range of social and economic activity associated with demand, supply and the requirement of land, building and location.

Faced with such complication and problems inherent in the housing development process, there needs to be some methodological awareness about the difficulties to be surmounted for an effective research contribution. Deeper understanding and an exploration of the development process has no chance of being achieved merely by reviewing a series and of diagrammatic models. Detailed surveys of the institutions and organizations, financial system, actors, and materials involved, and the operational frameworks in which these factors work together, are requisite (Gore and Nicholson, 1991).

The qualitative research method adopted is an effective and innovative approach to study with deeper insight the housing supply and constraints involved in the Iranian context where approaches to housing studies are mostly based on econometric models and other quantitative models (Dehesh, 1994; Najafy, 2006;

Zarrini, 2007; Dorkosh, 2008; Chegeni, 2008, Hadavandi ; 2011). In Iran, the qualitative approach is still primary and research suffers from a lack of methodologies, which has led to the gap between policies and studies, and the obstacles remain unsolved. Therefore, this research has a methodological contribution to give because for the first time it presents how the housing development process performs, and highlights the role of actor-relations and process-based qualitative methods. This research employs the interpretive method to analyze housing supply, how it operates, how the actors accomplish this process through their interrelations and what kind of constraints exist and in which part of it.

4.2 Philosophical Background

This research is interested in new development in Tehran and seeks the best way to find out how the market works and why in spite of different government policies Tehran still faces a shortage of dwellings and affordability, which is still one of the most pressing issues. The Tehran housing market is a complicated complex market that is dominated by the private sector and encounters many problems which seem unsolvable to experts and residents, such as high housing prices and a shortfall in the housing supply. There are different actors and institutions involved in new development such as suppliers, builders, financial institutions, and agents who sell land to builders and property to buyers.

In this research, the investigation into the utility of structure and agency approach adopted through an empirical analysis involved an examination of the structure and operation of the private housing supply in Tehran. The philosophical assumption employed in this research is that the housing development process is socially constructed by agent–institutions relations through the duality of structure, which contemplates institutions influenced by agency as well as the effect on agency (Moos and Dear, 1986). Considering a development process as any other social phenomena which should have a prior theoretical practice before empirical study, setting a model out is prerequisite (George, 1991). Then, “the empirical questions, the answers to which may feed back into the model” are suggested by this model, leading its modification or extension, and the field of study composition are defined (Ismail, 1994).

4.3 Building up Specific Research Questions

The aim of this research is to develop a deep understanding of the structure of the private housing supply in Tehran. However, as was also referred to, there has been no precedent empirical qualitative research to provide knowledge about actors, their role, and their interrelationship in the market context. Therefore, in order to answer the research questions established, the actors, their relationship, and the existence limitations require assessment.

The key research questions are:

1. How does the housing development process in Tehran work? How many actors and institutions are involved in Tehran's new housing development?
 - a) What are their role, interest, and ideas?
 - b) Which kinds of builders affect the housing stock more and have more market shares?
 - c) Among actors, who has the most influence on housing prices?
2. How do these actors and institutions relate to each other?
 - a) Which types of financial institutions are more vital for builders and investors regarding providing capital?
 - b) What is the interrelationship between agents, contractors, builders, landowners, and institutions and the public sector in development projects?
3. How do housing suppliers encounter structural forces in all aspects of social, economic, political, and environmental environments?
 - a) What barriers do suppliers confront in development projects?
 - b) What is the effect of the particular Iranian economic and political structure on the process of their decision-making?
 - c) How is the housing development process in Tehran driven by the way these structural factors and changes influence and in turn are affected by the interest and strategies of the agents involved?
4. How might policy-makers work to remove constraints to housing supply?

Although it is predictable to appraise the level of complexity involved in scrutinizing the private housing supply process, there is little known about the wide variety of actors and diversity of interviewing processes that link them together in

the housing development process. Subsequently, a quantitative and statistical approach is not appropriate for the objective analysis for this research, due to their aim of revealing the visible “facts” rather than “understanding the social construction of such facts” related to actors’ interpretations of beliefs and behaviour and their perceptions reflected in their relations (Loiola, 2013). Guy and Henneberry (2000) explained that the extensive and positivist research tradition cannot be applied to development research because of their inability to unravel the dynamic contextual relational between social action and economic structures (Guy and Henneberry, 2000).

In this research, an intensive approach is needed to discover underlying structural aspects that are fundamentally relevant to the housing development process. Therefore, agents in this approach are observed in contexts within which they practice and relate together, and the structure or logic behind the unexplainable pattern in the aggregate data becomes clear (Ismaeil, 1994).

Data gathered from interviews and three case studies in this research illustrate how this adopted approach facilitates understanding of reciprocal relationships between inherent factors of the broader process and the ideas, interests and strategies of agents. It reveals how the component elements of structure are affected by and influence the agents’ beliefs, aims and strategies. Associated with this aspect, these objectives are achievable under a qualitative case study approach.

Promising the objectives in terms of recommending them to policy makers, the intensive approach provided a possibility to deal directly with the agents and their way of transforming and the effective factors in this transformation. Although such phenomena, which is produced through a mixture of relations, seems improbable to generalize to other contexts, the causal or effectual factors generating these concrete events in the housing development process in Tehran have some similarity elsewhere.

4.4 Research Design

The two types of data used in this research are attributed to the methodology applied which is the structure and agency approach. The first category of data relate to the structural aspects affecting the housing development process in Tehran. The

second type is regarding the agency features of the detected housing development process.

The data associated with the structural aspects of the housing development process comprised economic information based on the economic pattern including real estate investment pattern, housing market cycle, government policies, and macroeconomic variables. These included data on the housing market of Tehran in terms of the demand and supply of housing space, rental, yield, parallel markets and capital investment flows into housing development. This group of data also contain the institutional background that is related to the housing development process, consisting of rules and regulations on land and housing development and housing plans. Such data are necessary to realise the structural context within which the social relations motivating a housing development process take place.

The primary resource of these data comprises municipality and Housing and Planning Ministry documents, the Statistical Centre of Iran and interviews with policy-makers and municipality officers. The secondary sources include public reports, articles, the websites of different institutions and newspapers.³ Hence, the quantitative information and data are analyzed in Excel and summarized in the form of graphs, charts and tables to facilitate discussion of the results of the analysis. The qualitative materials are carefully translated, analyzed descriptively and interpreted precisely.

For the second category of data relevant to the agency aspects, the data was gathered from the interviews and three case studies of three housing development processes in three zones of Tehran. To fulfil the objectives the fieldwork is designed in two phases. In the first phase, the researcher was seeking to get a broad general picture of the private housing supply in Tehran and obtain a general idea about private and public actors and their roles and interests. Taking interviews with one of the most important agents in each field led to identifying all effective actors and institutions in this market and the events embodied in the housing development process. Thus, the data, which was gathered from the interviews in this stage, was completed and strengthened by statistical information and documents. It helped to provide the eco-political and socio-cultural structure, which in turn revealed what is

³ Many new regulations and plans are launched by housing ministry and municipality in a form of interview or news.

happening behind the scenes. In section 5.5.2, the selected interviewees and the reason for their selection will explain in detail.

In spite of the importance of the above information, there is no place responsible for producing these kinds of statistical data and gathering the necessary information related to housing such as what exists in other countries. For instance, the website of house-builders in the United Kingdom provides the initial data about builders including annual turnover and units built; however, in Iran there is no information even about the number of housing companies. By referring to the institutions who are supposed to have these data, the researcher found how much this section suffered from the lack of basic and essential data about the actors and events. Due to this lack of data about the actors, their interaction and the way that the process takes place in this area, the Tehran housing market is a vague scope for both policy-makers and builders and this ambiguity led to the plans and policies offered by policy makers failing, and prevented builders from working efficiently.

Regarding the analysis based on structuration and the study of how and whether the institutions change, precise observational data on actors' interactions should be collected as well as the methods of collection detailed. In spite of organizations failing to compile data on their activities and decision processes, it is possible to obtain some extent of information more than what was expected concerning the typical dearth of information in organizations. It was suggested to the researcher that it is possible for them to "reconstruct relationships among organizations" eventually through depicting the diversity of archival resources (Barley and Tolbert, 1997, p.135).

Therefore, the first step of the empirical part of this research will be mapping the Tehran housing supply and offering an institutional map to finding out who is involved and what is his role. The results of this step shed light on the next phase, enabling the researcher to choose the appropriate case studies which makes them able to cover the most important and common methods of the housing development process. In addition, regarding the diversity of characters of different zones, which affect and are influenced by the housing process, selecting the case studies in different areas becomes more crucial and sensitive.

The second phase involved a detailed case history for each housing development process along with the conducting of interviews with key agents who were involved in the project in the private and public sectors; that is, builders,

contractors, estate agents, architects, financiers, assignees, utilities companies, local planning authorities, municipality officers, and project managers. The aim of the interviews was to detect each agent's role, interests, perceptions, views, and strategies and to clarify the way the actors interact with each other in the housing development process. Most significantly, the goal of the interviews was to reveal the way agents' decisions affect and are affected by the whole economy, the present and future housing development pattern and housing market status, and the regulations and policies that constrain as well as enable housing development activities.

All the data and information were collected in Tehran through fieldwork in two stages carried out between December 2011 and February 2013. The first stage was finished on April 2012, the data was analyzed, and the research questions were revised, a new set of questions designed and the properties of the case studies defined. Hence, the second phase was carried out between December 2012 and February 2013.

4.5 Case Study Approach

The approach adopted in this research was a qualitative case study that is one of the most useful methods when the phenomenon under study in a project is problematic and there is a complex interaction between a phenomenon and its context (Yin, 2003; Baxter & Jack, 2008). In addition, human agents are active and the context of their action is not steady so intensive research of case studies should be undertaken, with the purpose of realizing "causation patterns" (Guy and Henneberry, 2000, p.2411).

Illustrating the Tehran housing market and reviewing provision models and theories led to applying a mode that is concentrated on institutional and agents' behaviour along with presenting the social and economic environment. As stated by Mason (2002), when the institutional approach is taken and people's knowledge, views, experiences and interactions are meaningful properties of the social reality, the research questions will be designed to explore, and qualitative interviewing is selected.

To address the exploratory and descriptive questions for this research, a case study was the best approach; as Yin (2003) pointed out, five approaches encompassing experiment, survey, archival analysis, history, and case studies based on the research questions, should be taken. He states that for answering "how" and

“why” research questions, from these five approaches, case studies, histories, and experiments are more useful.

In addition, one of the factors in selecting this particular approach is a relationship between the various qualitative traditions exemplifying different theories and methods, and there are some historical approaches to methodology in each discipline. Utilizing the case study seems to be an appropriate approach to structure and agency analysis of the housing and land market. Healey (1992) presents her structure and agency model of development process based on a case study in Tyneside. Furthermore, Adams and Hastings (2001) in “Assessing Institutional Relationship in Development Partnership”, Adams et al. (2000) in “Ownership Constraints to Brownfield Redevelopment”, Han and Wang (2003) in the “Institutional of a Property Market in Inland China” use the case study method. In linking between theories and different types of case studies, Yin (2003) identifies six different types of case studies. These includes: case study research based on single or multiple case studies, and whether single or multiple, the case study can be exploratory, descriptive, or explanatory, and he notes that multiple case studies which are selected should replicate each other – either predicting similar results or contrasting results for predictable reasons.

This study undertaken was of multiple case studies based on the interactions between public and private actors in the housing development project considering all possible identifiable and relevant roles, events, and relations among all actors within the context. Multiple case studies provided an opportunity for the researcher to analyze “within each setting and across settings” and find similarities and differences between cases (Baxter & Jack, 2008, p.550). Similarly to Yin (2003), who gives the description of multiple case studies which can be employed in both “literal replication (predicting similar results) or theoretical replication (predicts contrasting results but for predictable reasons)” (p. 47).

Three case studies keeping the holistic and significant characteristic were selected to understand the variety of actors’ attitudes and resources, regulations and the factors that have an impact on dynamics of actor-relations towards completion of housing development projects. The justification and introduction of selected case studies will be expressed in the section 4.6.3 (second phase of fieldwork).

4.6 Approach to Data Collection

In view of the philosophical approach adopted for this research, since this research was mostly interested in people's roles, interpretations, perceptions, reasoning and understandings, as Mason mentions, these aspects demonstrate the primary data source for this study (J. Mason, 2002). As a result, the interviews were the principal source of evidence for the case study that were best described and interpreted through the "eyes of specific interviewees" (Yin, 2003, p. 92).

4.6.1 Documents

As a secondary source of data, documents were used as one method of collection of evidence in this research. This source of information was important in supporting and expanding evidence from the interviews. The documents were used to identify the explicit formal relations between the actors, housing policies and rules and the obliged process that each builder must pass for development projects. It is also important to consider that the analysis of documents, especially in the collection of indicative information of actors' perceptions, opinions and interests, was not treated as a direct representation and reflection of 'reality' or straightforward 'factual records' (J. Mason, 2002). Based on the theoretical assumption of this research, documents were interpreted in the social, cultural or political context in which they were created, rather than as sources of facts about particular events and individuals.

For figuring out the social, cultural or political context, three types of document were mainly utilized: public records, researcher-generated documents and popular culture documents (Merriam, 2009, pp.140-149).

Public records mainly refer to documents produced officially by public institutions. In this research, for example, various types of statistical data, e.g. census and housing surveys, various kinds of government reports, legal or policy data, and planning documents, e.g. land use plans were looked at. The census data was obtained from Iran Central Bank and the Statistic Centre of Iran and analyzed by the researcher. Archival data is needed to assess changes in institutions that govern the actions of collectives because when a collective plays a role, drawing flows of interactions and actions is more difficult than when individuals are active.

In view of the actors' formal links and procedures required by the municipality and the governmental organization of the housing development process, data was collected through the researcher's direct referring to the Tehran Municipality and th

Tehran Urban Planning and Research Centre. Such institutions formally establish the procedures that actors are supposed to follow from the beginning of the process. Although there was no online access for the majority of the information, some information about the required documents in the development process was collected through the websites of the relevant institutions. Researcher-generated documents mainly refer to the academic literature. Housing prices and shortage is one of the most vital issues in Iran, receiving a considerable amount of attention by academia. However, the quantitative approach is applied in all these studies, which the researcher reviewed in the Iran National Library; this numeric and quantitative data was used through the research.

Finally, popular culture documents refer to documents produced by the media. When the observations and interviews are transferred to qualitative methods, they are considered as documentary data (Mason, 1996). In this research, newspaper articles (including interviews in newspapers), the Journal of Housing Economics and other related journals were useful, particularly when some interviews of policy-makers and public officers, and 'facts' which occurred at a particular time, were required. Such interviews contain very important information and statistical data that are never published.

4.6.2 **Semi-structured Interview**

To identify the varieties of agencies, agency relations and activities and structural factors involved in the housing market, the interviews were undertaken with the identified group of key agents. The purpose was to achieve a general idea about the housing market's agents and structure and examine the roles, ideas, perceptions, strategies, and structural forces.

Interviews are one of the most commonly recognized forms of qualitative research methods and the qualitative interviewing is usually intended to refer to in-depth, semi-structured or loosely structured forms of interviewing (Mason, 1996). This is to meet the objective of explanatory power rather than to identify and describe common elements within the development. Specifically, the purpose of the first phase of interviews was to map the general pattern of the housing market and to:

1. Recognise agents' roles, objectives, interests and strategies

2. Collect information on the economic and organizational background of agents and diagnose links to the agents' interests and strategies

3. Examine how and why agents perceive the economic, social, and institutional forces in the formulation of development ideas, interests and strategies and how these in turn have an effect on the structural forces

4. Survey the social relations between the agents, that is, in what way they link and interact with each other

The interviews were carried out by the researcher herself for methodological and confidentiality reasons. This is crucial as the information and data gathered from the interviews linked to confidential perspectives such as the agents'/organizations' perceptions, interests, strategies, and reflects the decisions, views and opinions which for the agents' organizations should always remain private. Hence, in this research, each case study is identified only as case study one, two and three; and in the conversation of each interview, the interviewees are not directly recognized by their real names or addressed by their role such as builder or municipality expert.

Despite the fact that the interview is based on a set of semi-structured questions, the interviews were conducted with an informal and more interactive approach rather than in a formal way. This is to meet the objective of explanatory power rather than to identify and describe common elements within the development process (office development). It is widely acknowledged that a semi-structured interview allows the researcher to cover specific topics as an 'interview guide'; it also gives a great deal of leeway to the interviewer and thus it, particularly in this interview, allows the researcher to ask further questions "in response to what are seen as significant reply" (Bryman, 2004, p.543). Furthermore, it is beneficial to avoid the risk of having a boring conversation, while asking the standard questions under formal and controlled conditions minimized the risk of bias. Silverman (1988) stressed that the link between an interviewee's response to an action and the reality of the action are difficult to confirm.

a. Preparing for interviews

To achieve the objectives a schedule was prepared according to a theoretical framework for a set of semi-structured interviews, which was divided into four main sections. For each type of key agent the researcher set out an appropriate

interview, keeping the same theme Healey's (1992) model and Giddens's (1984) theory under the format of these sections.

Section 1 attempts to collect the information on the historical and economic background and institutional structure of the agent. The information gathered in this section is necessary in order to identify the actors involved in the development process not merely in terms of their size and the nature of their activity but also in the aspect of the economic structure within which they operate. The difference between the natures of markets within which the agents operate has a substantial impact on the way they pursue their interests, and the interactions they have with other actors in the housing development process. Having years of experience and the scope of activities could make a difference in shaping the strategy of agents. Therefore, in this section, structured questions of a close-ended type were asked to facilitate analysis, since the information needed was only factual rather than in opinion form.

Section 2 attempts to cover all levels mentioned by Healey (1992) and stresses agency aspects which aim to unfold the interviewees' roles, ideas, and strategies as well as the way they respond to structural change and whether these changes will lead to a modification in their strategies. In addition it seeks to find out the way agents deploy resources, specifically finance and land as the two most fundamental elements, and to recognise the rules and regulations in the development process which was employed by them during the development process. Then, the results will uncover the ways the rules and resources play a role as links in the relationship between the variety of agencies active in the housing development process and broader structuring forces. According to the importance of understanding, the social relations between the various actors perfectly describes the development process, and section 3 focuses on the interaction between agents also to find out if there is any network between actors such as a builders' network.

The last section, section 4, was designed in the interview schedule in order to achieve the third and fourth objectives of the research. This section attempts to discover precisely each agent's point of view and perspective about the most crucial constraints of housing supply in Tehran. In addition, each actor was asked his/her opinion of elimination of constraints in this sector and suggestions to policy-makers to solve the problems.

In terms of finding and contacting interviewees, as Creswell (2007) brings out the issue, one of the largest challenges to the researcher in interviewing is convincing people to participate in the research, getting them to respond, arranging a meeting and building trust. Although the researcher has a professional background and the academic status is crucial, in this case having contacts and strong recommendations played a determining role in getting access to interviewees.

In many cases, the interview can be conducted only if the interviewer is introduced by a person of higher social position of the interviewee to him/her. This issue will be discussed more in section 4.5.6. Gender issues were noted, since the researcher is a woman and most participants were men in high positions and of an older age, except for some of the professionals in private companies and technical actors in public institutions. At the level of policy-makers and construction companies, the atmosphere is quite male-dominated. On the other hand, the researcher's societal position as a student in the UK put her in different situation with different interviewees. In some cases, for instance in an interview with a private builder and other professionals in this position, was positively affected; conversely, some participants' perception about studying in developed countries such as the UK made them reluctant to talk.

Prior to starting each interview, each participant was given a consent form in accordance with the requirement of the University of Sheffield. As according to Creswell (2007), the contents and the purpose of the research were explained to participants, the significance of their participation was emphasized and they were assured about the confidentiality of the process. In addition, permission for recording the interview was asked for and in a situation where this was denied, written notes were made during the interview.

b. Interviews collected

The first phase was conducted between December 2011 and April 2012, when the researcher went to Tehran for doing the fieldwork. In general, people who could be accessed more easily were chosen to start the interview process and thereafter, through the snowballing technique, the other interviewees could be reached. It also helped to know much more about the issue and made the researcher more equipped with information in interviews with some people who were expected to be more

difficult to access and capable of misguiding the interviewer with skilfully employed tactics, which are more likely happen among elites (Morris, 2009).

Apart from having experience as a planner for several years, talking with municipality officers, housing experts and some builders displayed that there are different types of builders active in this market; however, there is no official report or data that shows their share and annual builds of each type. Then, the first essential step was finding who has the biggest share and could influence more the housing prices, housing stock and new developments.

The below table extracted from both informal and formal interviews and the percentage of each type of builder is approximate. The reason for selecting three types of builders from among the above presented table is their percentage share in housing supply along with their target market and produced affordable units. Then three types of building company are selected including the small company who build 16–30 units annually and has 35 percent of the market, the individual builder who annually builds 10–15 units with a 35 percent share, and a cooperative with a 14 percent share. It should be noted that a considerable amount of new units are built by self-builders and here they are categorized under the ordinary builder group because mostly they make a contract with one builder (Memar⁴).

⁴ Memar is considered an expert in constructing buildings by experience

Type of builder	Annual built	Mode of housing provision	land /site type	Source of finance	Structure of ownership	quality of dwelling	Target market	Mode of sale	Percentage share of Units produced
Ordinary) builder	1-15	Owner occupier-builder	Private Traditional courtyard house/ less than three storeys apartment	Personal saving/ family loan / individual capital	Sole Proprietor	standard	Upper lower class/ Medium class	Local state agency /friends and family	35
Individual builder	1-15	Speculative housing development	Private Traditional courtyard house/ less than three storeys apartment	Private investor/ individual capital	Partnership	Good	Medium class	Local state agency	
Small builder	16-35	Joint venture with land owner	Private large lot traditional courtyard house/	individual capital/ personal saving	Sole Proprietor limited co	Good/ very good	Medium class	Local state agency /friends and family	25
Small builder	16-35	Speculative housing development	Greenfield/ Private large lot traditional courtyard house/	individual capital/ private investor	limited co partnership	Luxury/ very good	High class	state agency/ advertising	
Medium builder	36- 50	Speculative semi Public private Joint venture	Semipublic /affiliated public company	Financial institution / private or public bank	Private share Holders/ semipublic partnership	Very good/ Luxury	High income	Marketing group/ presale	5
Medium builder	36- 50	Speculative housing development	Private	private investor/shareholders	Private shareholder/ limited co/ Partnership	very good	High income Upper medium	Marketing group	
						Good	Medium		

Large builder	50-100	affiliated public private Joint venture scheme	affiliated public company / semi-public company	Housing bank/ investment company	Private share Holders/ semi public partnership	Standard	medium	Marketing group	20
Large builder	50-100	Speculative housing development	NLHO/ affiliated public company	investment company/ shareholders	Private share Holders/ limited co	Good	medium	Advertising Presale	
Large builder	50-100	Cooperative housing	Public	Individual applicant/ housing bank	public share Holders/	Standard	Low income/ medium	Presale to applicant	
Volume builder	> 100	public private Joint venture scheme	Public/ affiliated public company	Bank/ shareholders Individual applicant	Public /private share holders	Low	Lowest income	Advertising Presale	5
Volume builder	> 100	Cooperative housing	Public NLHO	Individual applicant/bank	Public /private share holders	Standard/low	Low income	Advertising Presale	

Table 4.1 Types of Builders

Source: Own analysis of data extracted from interviews and documents

In this phase, 18 interviews were collected from different agents involved in the housing market, consisting of builders, private investors, consultants, estate agents, private bank managing directors, policy-makers, and Planning Authority and Housing experts. The interviews were held in the places that were preferred by the interviewees, i.e. where they felt relaxed. All interviews were conducted in the participants' offices and workplaces, which sometimes were not so quiet or comfortable for the interviewer.

As mentioned before there are many agents involve in Tehran market that belong to different types of institutions. The first phase of fieldwork attempted to conduct interviews with at least one actor from each group. The first interview was with one ordinary builder with lots of contacts aiming to introduce the researcher to other actors in different areas such as estate agents, landowners, and public officers in the municipality who worked with him for years. He was also selected because his target market was not limited to one group and he had been working for several years in providing affordable housing. From the volume builder group who build up to 100 units annually, D1 (Owner of Large property Company) and D2 (Manager of Large housebuilding Company) were selected because. Former is one of the five housing firms related to one revolutionary foundation with access to public land and contemporary they play important role in housing market because they access to large lots of public land. Later was selected because this large company is the only housebuilding company in Tehran that active in stock market with public shareholder and 100 annual built. From the group of medium housebuilders, B1 (Manger) was selected because his company deal with different housing projects due to their contact to the public institution and provide units for upper class households. B2 (Manger) was invited to participate because the firms target market is international and they are going to use new technology instead of traditional way of construction. It should be noted that the definition of volume builder is different to other developed countries such as in the UK which defines volume builder as one who annually builds more than 500 units (see Nicol and Hooper, 1999).

Due to the new wave of producing just for rich people, interviewing with these two firms as a good representative of this idea provided valuable information. According to the biggest share in annual built units and numbers of company, the small house

builders play an important role in Tehran housing market. Three firms are selected to their target market which was middle-income families and they active in east and south of Tehran as well. In terms of getting information about housing policies and plans, three interviews were taken with three key actors in Housing and Urban Development Ministry contains; the Director of Housing Economic Department, housing economic expert who was in charge of housing plans, Director of Tehran Housing plans. Another interview was conducted to the housing expert who was responsible as a project manager to preparer Tehran Housing and Development plan; he also was member of team who provided the Tehran Comprehensive Plan. For finding the bank system related to provide credit for housing development project, the interview was conducted to private bank managing director which allocate more credit for housing development projects among private banks.

The interviews were carried out in Persian (Farsi), because it was the native language of all interviewees. There was no challenge associated with language communication difficulties, since the researcher's native language is also Persian. Therefore, the fluency and dynamics of the interviews was not influenced by lack of language skills of the researcher in the interviewees' native languages. All interviews were transcribed and coded.

Table 4.2 portrays the initial picture of the general information and economic background of each interviewee involved in the housing supply development process. The "individual in structuration theory is sent to be an active, knowledgeable, reasoning person" that is, his/her action is bounded by the conditions of social system (Moos & Deer, 1986, p.234). The data and information utilized in the schematic model of Tehran housing supply in the next chapter were extracted from this phase of the interview schedule, which was held with one or two agents from each group as a sample. On the other hand, these results facilitate the comparative study and find in which way the agents' strategies and ideas change in the face of institutional factors and structural properties, how they respond and react and how they act in the social system and have impact on it. Furthermore, these results manifest to what extent the activities and events in the three selected case studies are typical or atypical in the housing development process.

Table 4.2The background of each agent

type of agent	type of firm	period working(age)	annual units built	Number of employee	area of activity	distinguished market in Tehran	Factor of preference	Structure of ownership
builder /volume builder(D1)	Local Property development comp	13	70	50	local	Yes/ zones 1,2,3,4,18	more profit /experience/ land access	Private share holders
builder /volume builder(D2)	Property development company	10	100	30	national	north of Tehran	more profit/ experience	public share holders
–Medium builder(B1)	Property development company	5	50	30	local		more profit/ land access	Private share holders
Medium builder(B2)	Property development and investment comp	5	50	20	International	Yes/ north of Tehran	reasonable growth more profit	Private share holders
Small builder (B3)	Building construction company	26	25	10	local	no	—	partnership
Small builder (B4)	Investment Building construction comp	30	20	10	local	no	more profit	Individual
ordinary builder (B5)	Building construction company	12	15	5	local	Yes/ zone 4	experience	partnership
consultant (C1)	Architects and urban design firm	8	—	16	local	no	—	Individual

estate agent (S1)	Property consultant firm	5	_____	6	local	Yes/zone 8	experience	Individual
private investor (I1)	Investing and development company	30	_____	8	local	Yes/ zone 1	more profit/ high valued residential area	partnership
private bank managing director	Private commercial bank	11	_____	9	national	_____	_____	public share holders
policy maker (1)	Housing institution	10	_____	_____	national	_____	_____	_____
policy maker (2)	Housing Ministry	4	_____	_____	national	_____	_____	_____
Planning Authority	Director of housing economic department	10	_____	_____	national	_____	_____	_____
Housing expert	Tehran Municipality	15	_____	_____	local	_____	_____	_____
housing economic expert	Housing Ministry	6	_____	_____	national	_____	_____	_____
Regional planning authority	Housing foundation	7	_____	_____	regional	_____	_____	_____

The results of this phase of interviews will be applied in the following three chapters of analysis according to each stage of housing development to display the comprehensive process. Usage of the extracted data from phase one of the interviews alongside the case studies provides the possibility of understanding the development process more comprehensively and more accurately.

4.6.3 Second Phase Case Studies; Introduction and Justification of Case Studies

The cases studies (three housing development projects) were selected in three different zones in Tehran. Tehran, as explained in chapter two, is the capital and the most important city in Iran and its housing market affects other markets in other cities and the whole economy as well. Simultaneously, it is highly influenced by the politico-economic situation. As per the reasons implied before, it is encountering a shortage of housing, significantly affordable units.

As expressed in chapter four, the social system in which the development process takes place should be considered in analyzing the development process. Based on the research questions and the conceptual framework, the most popular housing development process should examine the regular events that take place in this process to be able compare the effect of different roles, strategies and sources. Taking place in three different time periods, the staggered assessment of the case studies allowed the researcher to consider one of the important elements of Giddens' structuration theory: time. Case studies 1 and 2 are recently completed and the third one is in the middle of the construction process. Such divergence in the feature is important to illustrate the different variables involved and their influence on structural change.

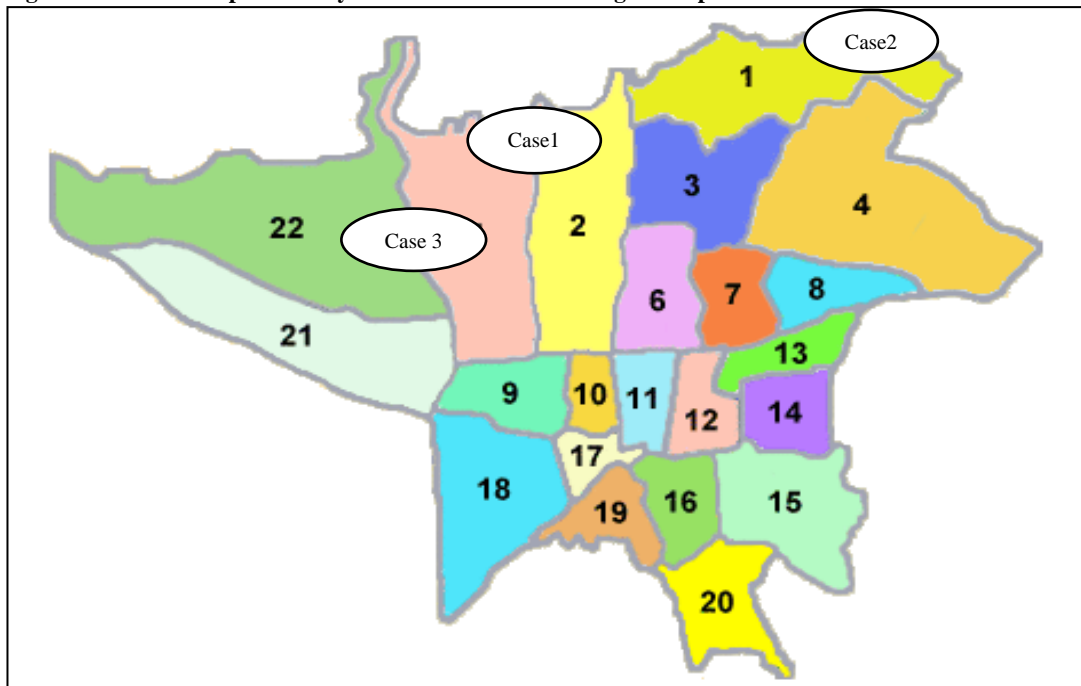
Project one was completed in 2012; some of the units were sold and some were still in the marketing stage. The second project was just completed recently (at the same time that the interviews were conducted), with some finishing left to be done. The third project is in the construction stage. Furthermore, the time is also significant regarding the provision of the circumstances to reflect the changes of structuring forces on behaviour and response of actors. One of the unique opportunities this research was facing was nuclear sanctions and radical changes in material price and economic recession at the time of fieldwork, and enabled the

researcher to examine the builders' and investors' perceptions that resulted from their strategies against this alteration.

Most importantly, these three projects were selected due to the key agents involved in order to find out the way key agents could determine modifications in the development process. Section 5.6.2 will explain the variety of builders and investors found after interviewing in the first phase, with different shares in the housing market. Hence, the three projects identify dissimilar types of builders and the distinctive contract methods with different types of contractors. To consider another necessary element of Healey's model and Giddens' structuration theory mentioned in chapter three, resources, the ways of accessing land and finance are not similar in these three cases.

Following, descriptions of the location of each project, the historical background, and general information on them will be expressed.

Figure 4.1 General map of the city of Tehran and the housing developments locations.



The table below illustrates the history of each builder and the case studies' properties. As the table shows, the first case was a project located in zone 5

constructed by a medium-sized company with 30 units built annually and a target of middle- and upper-class customers.

The target market is a significant factor in shaping the builder's strategy, since each type of target market has specific features and needs. Providing units for middle- and upper- income customers required land in high value areas, and high-quality construction with special design. The builders' decisions about target markets should be considered carefully to find a reason for the lack of affordable housing for most of Tehran's residents and achieve a solution. Nowadays, reducing the affordability of households because of the economic situation coincides with the builders' interest in the upper-class market.

Financing the project is another problematic and considerable factor related to ownership of the company, and was achieved in different ways in these three cases. In case study one, the company had to pay for land cost due to the contract with the landowner stating that the builder pay all construction cost and the landowner provide the land, and at the end the units were to be divided between company and landowner. However, in case two, which is located in the north of Tehran with a high land price, the builder supplied the construction cost and paid some part of the land cost because the land price was much more expensive than the construction cost in this area. The way of raising funds for this project was different according to the type of builder; for each project, the finance is provided through different investors. The best quality of construction belonged to case study two whose target market is high-income. According to the nature of the cooperative company in case study three, the way of accessing land and financing differ totally to the other two case studies. In this case, the land in the new district was available for the cooperative at a discount and the construction cost had been paid by members in instalments.

In addition to all the information mentioned above, selecting these three projects revealed that the process and sequence of events could not be the same in all development projects. The development process, as Ball (1998) mentioned, should be considered as a historical product and the events should be identified as Healey stressed as well in her model. Further analysis of the three case studies also revealed that there is a considerable discrepancy in the allowed density and density charge in the three zones. "Density" is a permit that municipalities issue based on laws passed

by Tehran City Council to increase the number of storeys of buildings being constructed. The current maximum height permitted free of charge is "two storey", but two-floor buildings have been abolished and the average height of a building in Tehran is 4-storey. Therefore, builders are forced to appeal for a "density licence" if they are interested in increasing the floors up to 9 storeys. The applicant builders must pay a fee to the municipality under the terms of "excess density" to get the construction permission associated with their floors and density request.

In October 2007, an act was passed by the Tehran City Council linked to density that defined the rate of density up to 120 percent as a "base density" with no charge. However, the charge should be paid for anything above this permission rate up to the "allowable density" – that is determined in the Tehran Detailed Plan for each zone – and the amount of it is progressive and proportional to the area. The base price for allowed extra density is USD 120 per square meter (1,200,000 Rial) and the maximum rate is USD 360 per square meter for the north of Tehran.

This legal charge becomes one of the vital sources of income for the municipality; in other words, the air space is sold by them in order to earn money. In addition to this defined charge based on the density regulations in the detailed plan, there is a possibility to some extent to increase the density by paying considerably more charges through negotiations. Therefore, this rate might reach more than USD 15000 per square meter in some neighbourhoods in the north for the extra density than permitted density in the Detailed Plan depending on the negotiation. In the next chapters, according to interviews, the room for negotiation and the methods of its conduct will be displayed in detail.

In case study 1, the allowable density was 300 percent in the location of the project and it means that, the charge was paid for a difference between base density and allowable density. In case study 2 the allowable density was 240 percent which is increased to 300 percent through negotiation; also, has the highest developing charge includes excess density, construction permission and insurance and the construction permission cost is diverse in different zones. Table 4.3 also shows that case study 2 involved the highest land price at 35,000,000 Rial, as compared to only 4,000,000 Rial in case study 3. The difference is due to the location and desirability of the area, which in case study 2 is zone 1 whereas in case study 3 it is in zone 22.

Table 4.3 Case Studies' Properties

Details of case studies	Iran pars building (case study1)	Mina building (case study2)	Zone 22 project (case study3)
Type of use	Residential + 1 unit commercial	Residential	Residential
Land area	737.50	500	10000
Building area	3218.72	3000	30000
No of level	5	5	22
No of units	20	10	200
Location	Ponak, zone 5	Niyavaran, zone 1	Zone 22
Land price	\$1,400,000	\$1,750,000	\$1,200,000 (It was 4,000,000 before reduction through negotiation)
Development charge	\$36,000	\$100,000	340,000 (It was \$2,400,000 before reduction through negotiation)
Infrastructural cost	\$10,0000	\$50,0000	-
Construction cost	\$3,006,163	\$1,000,000	-

Table 4.4 Companies' Backgrounds, Histories and Particularities

Description of the builder	Iran pars building (case study1)	Mina building (case study2)	Zone 22 project (case study3)
Type of builder	Medium company	Individual builder	Cooperative company
annual units built	30	25	55
Target market	Middle class/upper class	Low income /Middle class/ upper middle class	Low income
quality of dwelling			
type of firm	Property development & consultant company	House building firm	housing cooperative Affiliated to firefighting organization
period working(age)	15	26	14
area of activity	national	Local	Local
distinguished market in Tehran	No/ prefer north	No	No
Factor of preference	More profit/ guaranteed market	No specific	Land access/higher value added in land
Structure of ownership	Partnership	Sole Proprietor	Affiliated to firefighting organization (Municipality)
Source of finance	Individual capital	Individual applicant/ private investor/ personal saving	Member applicant/ loan

Table 4.5 Key agents of the three case studies

Interviewees	symptom	Group	Job Title
1	O1	Semi large/ Private /case 1	Owner and director of M company
2	PM1	case 1	Project Manager M company
3	A1	case 1	Architect M company
4	S1	case 1	Spoken person M company
5	C1	case 1	Main contractor
6	O2	Ordinary builder/ Private/case2	
7	S2	case 2	Spoken person H company
8	C2	case 2	superintendent
9	BD3	Cooperative/ affiliated /case3	Project Manager/ Board of Directors F Company
10	CB3	Cooperative/ affiliated /case3	Chairman of the Board F Company
11	C3	Case 3	Sub-contractor
12	C4	Contractor20+	Superintendent/ project management contracting
		common public institutions between three case studies	
13		Public/Zone municipality	Mayor of zone municipality
14	DP	Public/Zone municipality	Direct Manager of Department of Detailed Plan
15	BF	Public/Zone municipality	expert in Department of Detailed Plan
16	TE	Semi-public Electronic service offices	Technician
17	r	Public/ Registry organization	Senior officer
18	u	Public/ utilities service	Manager of service Department
19	O4	Large company/ private	Owner and director
20	OR	Organization for registration of deeds and properties	Senior officer
21	T	Tax Institution	Direct Manager of construction Department

The more specific questions were asked to key agents about the particular housing project selected as a case study, in addition to general questions, the same as in phase one. For instance, in addition to asking their typical way of accessing land, they were requested to explain land acquisition for this particular project in detail.

4.7 Establishing Validity of the Research

4.7.1 Triangulation

Following the notion of Denzin (1978) that no single method of data collection is uniformly superior due to inherent weaknesses and strengths, it is necessary to adopt a strategy, which permits a multi-method approach. Use of all relevant and appropriate methods of data collection allows a broad array of data to evolve, which can be corroborated through methodological triangulation (Denzin, 1978). Recommending use of more than one source of data in case studies, Yin presents the usage of several pieces evidence as the development of “converging line of inquiry” which allows for a triangulation of aspects of the similar data (Yin, 2003, p.98).

Therefore, in this research the data derived from the literature review and primary data sources is tested against the data obtained from the semi-structured interviews undertaken. In addition to use of different methods, this research employs a method of triangulation through collecting data from different views of the same phenomenon. Regarding the validity of qualitative analysis, multiple views and perceptions will be provided about the researched subject from various actors: the builders, the professionals, the investors, the company managers, the policy-makers, the public officers and the researcher herself. In this case, where each actor accused the other actors of causing a problem in the housing sector, asking the same questions to all of them and finding their views about the phenomena helps to reveal the truth and find the constraints.

4.7.2 Issues:

The most crucial and difficult parts related to the way that the interviewees were found and the interviews conducted. If the researcher had not had access to someone who introduced her to the interviewees, this fieldwork could not have been accomplished. In this research, building trust was so difficult and the respondents

feared whether their words would be used against them, especially if criticizing the government and revealing corruption and bribery. Although the researcher assured them that they would remain anonymous and their responses would be utilized merely for the research, some of them were still suspicious of the research and the researcher. Having a direct connection to most interviewees opened doors, but only halfway. Although the mutual contact was an influential person, his power influenced the interviewees to accept the researcher, making an appointment, and setting a meeting was still difficult and time consuming, which caused the prolongation of the fieldwork. In addition, in some interviews specifically with a high-position participant, after waiting a long time, the researcher was only given thirty minutes to conduct the interview.

One of the problems that occurred during the interviews in different ways was that interviewees talked beyond the research question and due to their positions and ages it was difficult for the researcher to lead the conversation to the line. In interviews with public authorities, often they tried to justify their work and plans and the private actors complained about government and high prices, or told an irrelevant story. Although in many cases it was possible to extract valuable information from the conversation, time was limited and all questions had to be asked. Since it was the first time that this technique has been applied to housing research, the interviewees were unfamiliar with this approach. It was difficult to explain to them the aim of the research and the reason for the technique employed.

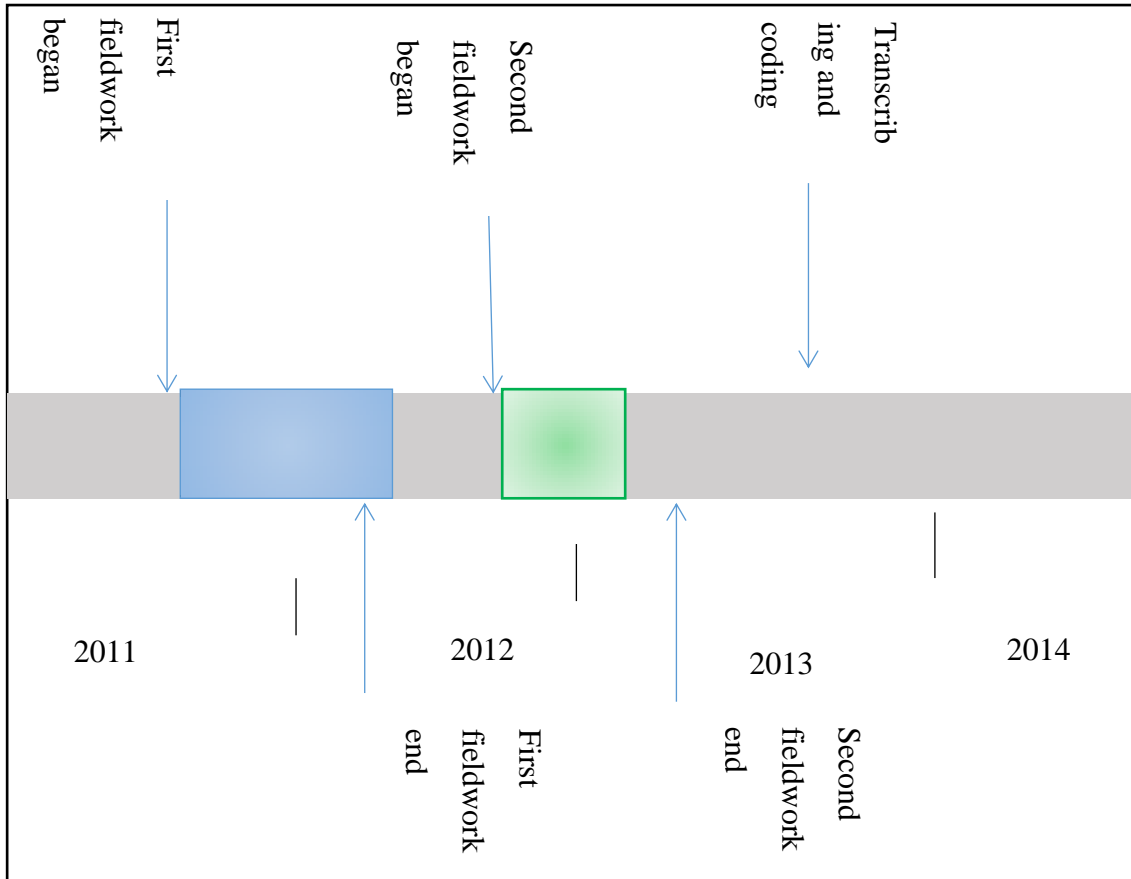
4.7.3 Ethical Considerations

To avoid any ambiguities in relation to the use of the data provided by interviewees, great attention was given to clarifying to respondents what they would be giving consent to by signing the form (J. Mason, 2002). Signature of consent form was obtained after the interview. In the analysis of the interviews, evidence was only used in the research after assessing no potential harm to interviewees. The issue of informed consent was taken seriously in this research, in order to assure the adoption of a rigorous moral practice, the confidentiality of respondents, and the safety of both the researcher and participants (J. Mason, 2002).

4.7.4 Timeframe of data collection

The next table displays the time frame for the chronological process of the fieldwork.

Figure 4.2 Timeframe of data collection



4.8 Data Analysis

The aims of the analysis are twofold. First, contrast the data using various research techniques. Claims for knowledge are evaluated and tested through methodological triangulation. For instance, emphasis is placed upon house-building company strategies derived from the survey data obtained from the interviews, and is tested against the literature review and government document sources. Second, examine patterns among respondents' replies (both descriptive and numerical) and explore relationships between variables through correlation and cross-tabulation.

Data analysis consists of examining, categorizing, tabulating, or otherwise recombining the evidence to address the initial propositions of a study (Yin, 1994). The researcher needs to rely on experience and the literature to present the evidence in various ways, using various interpretations. The case study that does not employ a series of statistical tests but attempts to make the study conducive to such analysis could inhibit the development of other aspects of the study (Tellis, 1997).

Asking the question 'how does structure and agency drive the development process?' is not simply an academic exercise that needs clarification. The answer has a considerable influence on the way in which analysis of the development process is approached. Since the critical issue is to explain the social relations (that is, in terms of the nature of roles and relationship; the strategies and interests of agents; and the resources, rules and ideas available to them which constitute this), these become the framework within which to observe and describe how actors reproduce, reinforce and transform the social relations themselves. Therefore, in this research the focus of analysis is split according to two driving forces, that is, the structural and agency elements. The aim is to distinguish the way each main aspect influences and affects the process of development activity while at the same time identifying the way the agency factor as well as the nature of the network of roles and relationships drive the development process.

4.8.1 Data Management: Sorting, Transcribing and Translating

All interviews were kept with clear time and the participant's initials of and reference to his or her organization, which were utilized to protect their anonymity. Transcripts were prepared for every session undertaken using the software *NVivo* for qualitative data analysis. The use of transcripts facilitated the review, coding, and interpretation of the data for an in-depth understanding of the way in which people articulated their ideas, to reveal explicit and implicit aspects, and not just the substance of their opinions (J. Mason, 2002). The transcription process involved simultaneous translation of the interview records from Persian to English, which was essential for the combination of the data analysis with the elements of the conceptual framework adopted for this research.

Analysis

After reviewing the literature and the empirical work, which are applied to structuration and institutional analysis, the researcher decided to combine the aspects for her analysis as suggested by Dear and Moos (1986), Barley and Tolbert (1997). Dear and Moos, in their work, were apt to understand how institutions affect interaction through finding the modality of interactions. However, Barley and Tolbert attempted to discover how actors' interactions modify and revise institutions by discovering scripts over time. Applying these two methods together enabled the researcher to cope with the complexity and dynamics of structuration theory; its abstract level which makes 'its empirical application a rare event' (Barley and Tolbert, 1997, p.151).

Grouping data is the first step of analysing scripts among the four steps suggested by Barley and Tolbert (1997). Giddens (1984) believes that all social life is episodic and to analyse social change, it is necessary to typify an episode as a number of events or acts including a specific sequence and having the distinguishable beginning and end. Depending on the research project, the categorization of data should be done. So in this research, initially, data was categorized based on types of events in the housing development process with distinct temporal and spatial boundaries encompassing land acquisition and the financing stage, preparation stage, and construction stage and finishing and marketing. . Likewise, the other definition was based on types of actors focusing on their activities and particular roles and their interactions with other actors. Following the categorisation the gathered data based on the housing development project, in each event, all actors and their relationships are uncovered, and the required steps are presented. The transcripts of interviews were transferred to NVIVO and coded based on two different ways. Firstly, they were coded based on the themes extracted from the Giddens' structuration theories and Healey's model. According to Giddens, unacknowledged condition of action, unintended circumstances, power, time, space, duality of structure, different modalities of interaction (signification, domination, and legitimation) were chosen as codes and they were looked for in the interviews.

Time and space were stressed by Giddens, therefore, time considered in two ways in analysing three case studies. Firstly, time was considered horizontal in a concept of social, economic, and political condition in a particular period. Secondly, time was vertically assumed as well because each project takes place in a prolonged spell and each of four stages occur in different duration. Taking place in three different periods, the staggered assessment of the case studies allowed the researcher to consider this important element of Giddens' structuration theory. Case studies 1 and 2 are recently completed and the third one is in the middle of the construction process. Such divergence in the feature is important to illustrate the different variables involved and their influence on structural change. These three case studies located in three different locations in Tehran.

In analysing the interviews, the effect of particular time that the project took place in it and the factors affecting the duration of the project, which could make it longer or shorter were noticed.

Power is one the most important theme in the structuration theory defined as the common exercise in daily activity of actors and all actions in a "sense of transformative capacity" engage power (Giddens, 1984, p.15). The power was founded inherent in each interaction during the development process as capacity to reach outcomes, which is produced in and 'through the reproduction of structures of domination (p.258). Power was recognised in allocative resources such as materials, technology and authoritative resources contain organisation of social time-space.

Healey (1992) explicitly stated each researcher should be looking at what in the research about the development process (see chapter 3). She was seeking to factors in production, the events in the development process and outcomes. The codes defined based on Healey's model, included: roles and relationships, actors' strategies and interests, rules, resources, ideas, ideology and mode of regulation. The second types of codes, related to those extracted from the interviews and raised repeatedly by different interviewees such as trust, reputation, network, relationships and contact, corruption. In addition, the third part that contains two other codes was defined by researcher according to the research questions and the research purpose encompasses constraints and the actors' suggestion for policy makers.

4.9 Brief Summary of the Chapter

This chapter explained in detail the research strategy and methods used in this qualitative research. It covered the following aspects: the philosophical background of this research, the case study approach to inquiry; data collection (55 in-depth interviews as primary method; documents as secondary); the data analysis process; and issues of validity and reliability. The research design and the data analysis aimed at answering the research questions set out in this section (4.3). The next chapter presents the schematic model of the Tehran housing supply and the conceptual framework that will be used to analyze the case studies. The framework focuses on the contextual processes of the housing development process, the actors involved, and the dynamic of formal and informal actor relationships and the influence of external forces.

Then the following four chapters will present the findings from the research process, which are divided into four sequential events in the housing development projects to show the results of the in-depth exploration of the dynamics of actor relations and structure–agency relationship in the development process.

5 Chapter 5 Towards a Conceptual Framework

5.1 Introduction

The review of related models of the land development process carried out in chapter three revealed the complexity of the processes of built environment production. Property development processes involve the construction industry, the building materials industry, the financial sector, and the whole spectrum of social and economic activity. Considering the complexities and difficulties inherent in the land development process, for an effective research a methodological awareness of the problems embedded is a precondition. It is concluded that among theoretical approaches in the property development process, the structure, agency approach provides the fullest possible context by taking into consideration institutional and other structures within which actors, agents operate, and development activities take place. It also considers the social agencies involved in the development process and attempts to overcome other approaches' limitations. Following the structure and agency model, the focus should be on an institutional perspective, in order to understand the land and property development process. The view of the property process assumed in this research is dynamic, contextual, and “contingent both on the particular aims and objectives of development actors, and on a shifting market framework which may enable or constrain development strategies” (Guy and Henneberry, 2000, p.2413).

Allied to Healey and Barrett (1999) the significant issue in understanding the process of producing the built environment is discovering how individual agents make their decisions and apply their strategies, to which different resources they may have access, the rules that they take into account which control and shape their behaviour, and the ideas and interest which lead to their various actions. On the other hand, focusing on events in the production process of a development project is the first level of the institutional model devised by Healey (1991). Therefore, understanding the whole process and identifying institutions as categories of a wide variety of social actors and their particular activities and specific characteristics is a fundamental step (this definition of institution was presented by Barley & Tolbert

1997). This chapter provides the schematic model of the Tehran housing supply and presents the conceptual framework.

5.2 The Role of Social Context

The research of context is inherent in the study of social reproduction bounding the interaction through time–space and involving actors’ relationships under various modes of communication, including different types of facial expression, linguistic and bodily gestures. Context is also involved in consciousness and utilizing of these “phenomena reflexively” to affect or guide the movement of interrelationship (Giddens, 1984). According to Giddens (1984), in the social system, context matters. It is also in the social system that institutions become identifiable, which are considered the system’s concrete features. For Giddens (1984), institutions are practices situated in time and space which reflect the use of abstract rules and resources in the system. This contextual perspective of a system is also adopted by González and Healey (2005), influenced by Giddens’ work. Giddens’ (1984) social system is composed of the context-specific activities of human agents, which are produced and reproduced in interactions. For this research, therefore, it is inside the contextual social system that actors carry out the housing development project.

Development decision-making takes place within institutional context structured by commercially dynamics needs and concern. Other authors have mentioned that the structure of resources and network of actors can influence the process, and stressed that coordination and guidance can be constructed case by case to influence housing development projects. The role of social context in the formulation of projects has been associated with case-by-case specificities of time and space (Scott & Thurston, 2004). In a similar way, Khan (2005) argues that understanding context is important to deal with the changing dynamics of a project’s nature, and actors’ roles and relationships during routine activities for project formulation (Khan, 2005): “The actions of development actors are both framed by contextual factors and serve to reshape contextual structures” should be examined (Guy and Henneberry, 2000, p.2408).

Jessop (1996) similarly pointed out structure's existence is dependent on the context of actors and he stresses that the structures are "irredeemably concrete temporalized and spatialized and they have no meaning outside the context of specific agents pursuing; specific strategies" (Jessop, 1996, 126). For Werlen, the social action can only be grasped if we view it as intentional and not merely responsive. Human action is therefore always an expression of socio-cultural subjective and material conditions. Although Giddens similarly stressed how the intention of actors defines human agency in terms of intention, he highlighted unconsciousness and motivation as significant features of human behaviour. Burns and Falm (1987) also support the view that existing structure embodies constraints and opportunities within which agents interact, negotiate and exercise power; simultaneously they act upon and restructure these systems (Burns and Falm, 1987)

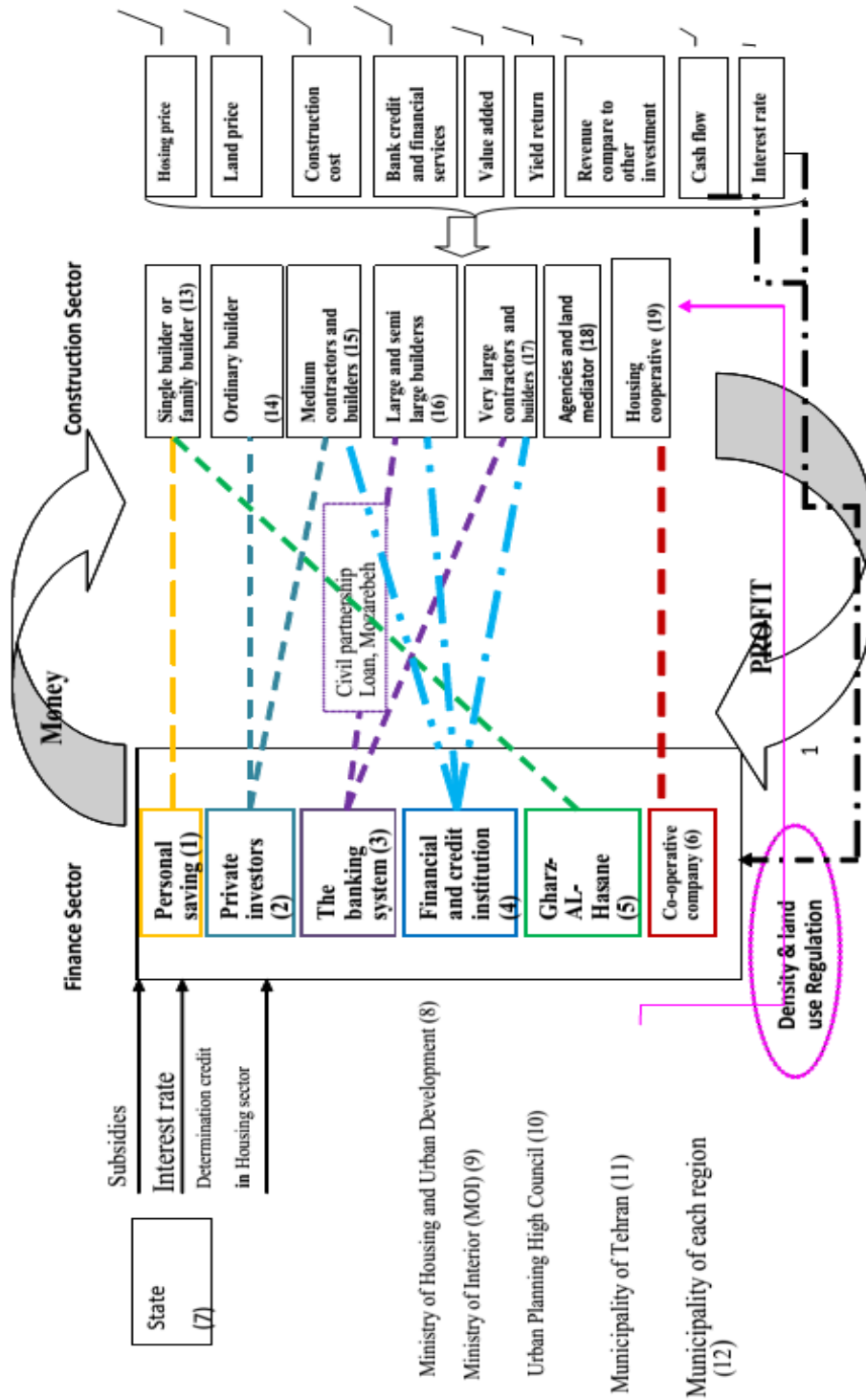
The research of Guy and Henneberry (2000) describes how social innovations motivate the cultural shift which is altering the context in which development choices are made and explained. These social innovation redefine both office needs and occupational and builder options. Conceptualization of the *contextuality* of social life is one of the elements, which makes Giddens's work valuable for geographers (Dyck and Kearns, 2006).

Healey (2005) argues that in spite of a range of approaches to conceiving "institution", the role of social context to figure out individual act and the point that social context contains norms, values, formal and informal organization, relationships between actors, and their interests, are shared issues.

5.3 Schematic Model of Tehran Housing Market

Figure 5.1 depicts an operational structure and agency model of the Tehran housing supply market. As Adams (1986) notes, it is crucial to understand what happens behind the scenes in development process. Therefore, the effort must be made to conceptualize the development process to examine the contribution of specific actors, the significance of particular events, and the complexity of relationships that make up housing development.

Figure 5.1 Schematic Model of Tehran Housing Market



In addition, as mentioned above, Healey (1992) claims that four necessary levels to empirical work are: theorization of the housing provision mode, characterizing development events, distinguishing agents and their relationships and demonstrating a link with broader structural parameters through the elaboration of rules, resources and ideas. Therefore, this schematic model illustrates the Tehran housing supply market as a system containing nineteen actors and institutions along with their linkages. According to the literature reviewed above, for escaping the criticism about ignoring external factors, as many external factors as possible are accounted for and twelve of them are considered. Regarding the relationship between the agencies themselves and agencies and structure, the various linkages will be explained. The linkage between the elements carry flows of money, regulations, political and social influence, economic effects and some other forms of interactions.

The model used is such that an element is placed in one of the three main fields: state, financial industry and construction industry. A fourth field contains external factors that have effects on the housing market. The first field is associated with structural influences of the planning system such as land-use, and economic rules such as subsidies on the housing supply process are mentioned. Planning is an activity carried out by the state at the different levels of authorities under the general supervision of central government. There are some points that should be explained first to clear the role of state in Iran and then argue about structural influences of the planning and economic regulation. The highly centralized planning and management system has been accompanied by the institutional fragmentation of responsibilities over urban development. The Ministry of Housing and Urban Development (MHUD) (8) and Urban Planning High Council (10) has direct responsibility for urban planning and public land. The Ministry of the Interior (MOI) (9) has direct authority over local authorities (city council and municipalities). They have the main role in introducing the construction regulation and the Municipality of Tehran (11) has a significant influence on the housing market by making land-use planning and establishing density criteria. The Tehran Municipality also plays⁷ a role as an executive body performing the planning and construction rules and regulations.

The importance of the planning system upon the actions of building companies and as a “contributory element of structure”, is via its provision of legal rules (Pope, 1992). In advocating “some ideas for research”, Healey and Barrett (1990) provide a research emphasis focusing on these rules, referred to as politico-juridical rules, which govern, limit and promote development opportunities. Adams (1994) offers a similar emphasis when stressing that planning neither overrules nor fully controls the process of transformation and development of the built environment, but searches instead for influencing it through the procedures of development regulation and control, development promotion and development plan preparation and negotiation. He suggests that the degree to which planning influences the residential development process depends upon the power entrusted to the institutions and agents of the planning system and especially upon the degree of relationships with landowners, builders, investors and other agents. In addition, certain interests/agents have privileged access to and influence within the planning system (Rydin, 1986).

In the Tehran housing market large and semi-large house-building companies (16) and very large builders (17) and housing co-operatives (19) are more restricted by land-use planning than ordinary builders (14) and medium builders (15). This difference relates to the scope and level of their activity. The definition of each type of builder and the sphere of their activity was explained in detail in the previous chapter. The ordinary builder (14) and medium builder (15) often renew the building and reconstruct the single-storey old and traditional houses (*Kolangi*) into high-rise apartments. However, the density criteria shape their activity and they are more influenced and restricted by this type of regulation. They are also able to affect density criteria as well by negotiation with the Municipality of each district (12). The percentage of success for builders in this negotiation depends on how powerful the builder is in that district, and on the flexibility of the municipality of that district. The other factor of success is associated with project value and profit, because the builder should pay money for each additional floor. If the sale price is significantly higher than construction costs and the project is being implemented in a high-price area the builder prefers to pay the fine and build a higher building.

The Municipality of Tehran (11) affects all types of house-builders, particularly the semi-large house-building companies (16) and very large builders (17), via land-use planning. These two categories of builder and housing company usually require large lots for implementation of their schemes. Volume building plans only can be placed in specific areas that are suitable for these plans. Due to Tehran being impacted in the north and centre, and also land-use of north west and south west Tehran being defined as non-residential areas in Tehran land-use planning by the Tehran Municipality, suitable areas for these companies' schemes are restricted.

Beyond the influence of rules, resources and ideas are also structural determinants, which affect both the organization of the house-building industry and the specifics of company operating strategies. In turn, the access to, and the use of, resources by house-building companies is largely due to the influence of the wider operations of the Iran economy. In association, the cyclical nature of the housing market is largely driven by the workings of the economy.

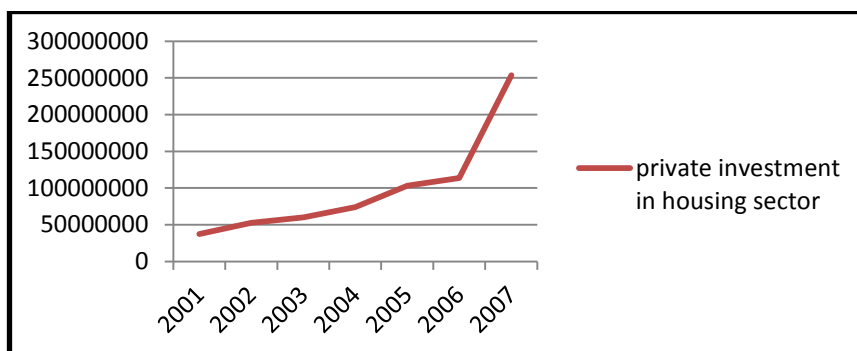
Iran's economy tightly depends on the level of activity of the housing market; moreover, the housing market is one the best levers to balance between inflation and cash flow, which is applied by the government. The economic cycle shows that economic growth is associated with the housing boom (Iftc, 2010). An oil-based economy and abundant liquidity are two strong motivations for speculative investment in the housing market; however, the interest rate has a significant effect on the decision-making of investors. That the interest rate is determined by the state (7) in Iran is considered as a determining factor by private investors (2). Other country experiences show that the deregulation of the financial market and breaking down the traditionally fixed interest rate was conducive to increasing the share of lending by banks and building societies, with the outcome of shifting to a more flexible mortgage market (Adair et al., 1993). In contrast, the interest rate is determined by Iran Central Bank under the direct supervision and control of the president. In addition to the universal common role of interest rates in shaping the expected profitability of house-building activities and determining the present value of properties (Mills & Hamilton, 1997; Kenny, 1999), it shapes the renting market in Tehran as well. The rent for units is formulated based on interest rate.

Private investors (2) estimate their yield to make a decision for entering the housing market. If their assessment illustrates higher profit in the housing market in comparison with other yields on alternative assets, they put money in this sector. Then only good return – more than rate of interest – on their investment will encourage investors and builders to invest in the house-building sector.

To avoid a shortcoming of Healey's (1991: 1992), the approach associated with it is failing of the generic institutional development model, which can be subsequently applied empirically. According to Ball (1983), each mode of provision is socially and historically conditional and demands detailed empirical investigation. The examination of the interests and actions of house-building companies and their relationships with financial institutions provide a definitive empirical focus for the research throughout this research.

The second field of this model shows the financial institutions. Private investors (2) are the most significant actors in the Tehran market and they dominate this market. Private investors (2) can be those who also play a role as a builder who consider this market as a good opportunity for investing . A short-term return, high profit and secure revenue make the housing market the best place for attracting liquidity. Their share has been increasing gradually; therefore, house prices are influenced by their decision-making. Private investors (2) provide credit for ordinary builders (14) – who have the main share in the Tehran housing-market – and medium contractors and builders (15). The below figure has been shown the dramatic increase in private investment in housing development projects since 2001.

Figure 5.2 Private investment in Housing development project



Source: Developed by Author, Statistical Centre of Iran, 2001-2007

The banking system (3) is another significant and determining institution in the housing market. Banks play a variety of roles. They are the main providers of capital for large and semi-large contractors (16). Banks participate in housing construction through various types of loan, Mozarebeh and Civil partnership. The government established a bank with the status of state economic enterprise after revolution in Iran in 1978 and named it the Housing Bank. The Housing Bank has been functioning as a commercial bank since then. Both commercial banks and the Housing Bank accumulate capital by accepting the deposits of millions of small savers at one rate of interest and then lending money at a higher rate. Determining the Interest rate by Iran Central Bank under government control limits private banks' power and freedom to setting on their facilities. However, the bank facilities are varied by each bank and their policies related to housing projects are different. Usually the interest rate of the loan for a housing project is much higher than the interest rate determined by Central Bank which in some cases makes the project unfeasible for builders.

Personal savings (1) associated with a single household might be considered in four ways. Among these four ways, two of them directly involve housing. First, despite the inevitable risk families face when depositing in the Housing Bank their deposits enable banks to increase the amount of credits in the housing sector. Second, this saving enables the banks to give loans to large builders (16) and very large house building companies (17) who are involved in property development. Third, this saving is employed by many families who are landowners (13) to reconstruct their house and they build high apartments instead of detached and semi-attached homes. They occupy one flat and if they end up with a male heir they give one flat to him and sell the other units. Under most of the conditions that the household cannot afford the construction cost, they participate in the development process with ordinary builders (14). They offer land and the ordinary builders (14) provide money to cover construction cost. After accomplishing the project a builder, according to his share, will own one or more units. Fourth, only some people put their money in Gharz-AL- Hasane fund in order to borrow the free interest loan to buy a dwelling with no sufficient credit.

The fourth institution that was introduced in this field is financial and credit institutions (4). There are eight financial and credit institutions in Iran that have several branches in different cities. In spite of these being non-government institutions, the Iran Central Bank supervises their activities. A one percent increase in financial facilities causes 0.53 percent growth in a number of residential buildings (Najafy, 2006). Their shares have grown mostly in the last decade and increased 40 percent over last three years. They usually lend money to medium contractors and builders (15), large and semi-large contractors (16), and housing cooperatives (19), and in some cases they participate in huge projects. The fifth financial institution is an interest-free loan (Gharz-AL-Hasane) (5) fund that is more effective on the demand side and less important on the supply side. They are not able to provide a considerable amount of money. The credit of each fund depends on the share of the members and the credits are just allocated to members or someone who is introduced by them. The last financial institution and house-builder is co-operative companies (6) (19). One type of partnership occurs between the public and co-operative mode of housing provision. In this mode, the public sector provides land free or at a below-market price and members of the co-operative finance and build their own housing units. This form of partnership was implemented relatively successfully in Iran after the 1979 revolution (Keivani & Werna, 2001, p.204). The difficulty of finding land in the inner city and the high price of land forced them to build housing in suburb. The entire government's department such as ministries, universities and most of the non-government organizations such as companies and hospitals have housing co-operatives. Their employees can be a member of these companies bringing their small personal savings as a membership, and then these companies assemble land from Housing and Planning Ministry. The ministry provides some facilities and services for housing co-operatives in order to access land to build high-volume dwellings. The cost of land has about a 70 percent share in the construction cost in Tehran then, which makes the role of housing co-operative more significant. After assembling the land, the housing co-operative starts the construction process and members pay the construction costs in several instalments. Paying instalments is one of the important sides of these co-operatives, as the employees usually do not have

enough individual savings to invest in the construction on their own. It is a good opportunity for them to have time to borrow money from their relatives or Gharz-AL-Hasane and pay in several instalments. In Tehran, many mass housing projects are built for different groups of government employees by different housing co-operative companies, for instance, teachers or military service employees. The land transferred to housing co-operative companies increased from 22 percent in 1991 to 26 percent in 2000.

All these institutions and agents are influenced by external factors that Gore and Nicholson (1990) and Healey (1991) mention as essential elements in studying the development process. Therefore, the fourth field of models is allocated to external factors, which affect house-builders' behaviour and interests in the Tehran housing market. Housing price (21) is determined in the housing market but, as explained in chapter three, prices did not often emerge from the interaction between supply and demand and their fluctuation is influenced by the economic situation or some actors' behaviour.

The second important element is land price (22). Land is fundamentally different from other factors. As indicated in the extensive literature on urban spatial theory, land prices depend on the stock of housing, not the flow or level of building activity. Those studies based on the investment literature tend to ignore the unique characteristics of land as a factor of production, while those based on urban spatial theory explicitly incorporate the land market into the theoretical structure (Dipasquale, 1999). Tehran's land price index based on prices in the base year (1992) has increased by 39 times. The rising price has not been the same in different areas. In northern regions, growth is higher than in the south. Prices in some areas of cities have increased hundredfold (Housing and Planning Ministry, 2008). Land price's share in housing price is approximately 60 percent; therefore, a small change in land price has a great effect on house price. The share of land price has decreased since 2008 and the implementation of the Mehr scheme. The below table shows that the Mehr scheme has more considerable effects in small cities. It is predictable because the required units and Mehr-provided units in small cities seem more appropriate than in Tehran.

Note that in the land market of Tehran the large landowners have not had a significant role over last 30 years. An urban land regulation that after the revolution in 1975 was developed gradually has caused a decrease in their role. Banks and financial institutions are not interested in land and profiteering, but they attend to participate in the building activities.

Another factor that is affected by the state (7) and plays crucial role in decision-making for all types of builders is construction costs (23). Kenny (1999) mentioned that the construction cost is consistent with 'normal profits' in the house-building sector. The estimated coefficients suggest that, over the long run, firms in the construction sector pass on any increase in their cost base to home purchasers in order to maintain profit margins. Previous empirical studies have found little evidence of a systematic relationship between construction costs and new housing supply, in contrast to results predicted by theoretical models (Rosenthal, 1999). However, Somerville (1999), based on a micro data set, found a significant negative relationship between construction costs and housing starts (Dipasquale, 1999). Zarrini and Mehregan (2007) estimate the influence of construction cost on housing provision in Tehran and state labour productivity in the construction sector is inversely related to construction cost. By increasing the labour productivity, the construction cost of one square meter will be decreased. The most cyclical fluctuations of housing price are derived from construction cost and the effect of this growth decreases in the long term. In Tehran, if construction rises by one percent, the housing price will be increased by 2.87 percent.

According to the influence of economic structure on agencies and institutions, the influence of cash flow (28) should be considered. Cash flow in the housing sector is divided into consumption demand and investment. 20 to 30 percent of society's cash flow is assigned to the housing sector. In the past three decades, approximately 34 percent of cash flow has been in housing market incentive to capital need and 66 percent is belonged to consumer need, and despite the lack of efficient capital market, the housing sector still attracts investors.

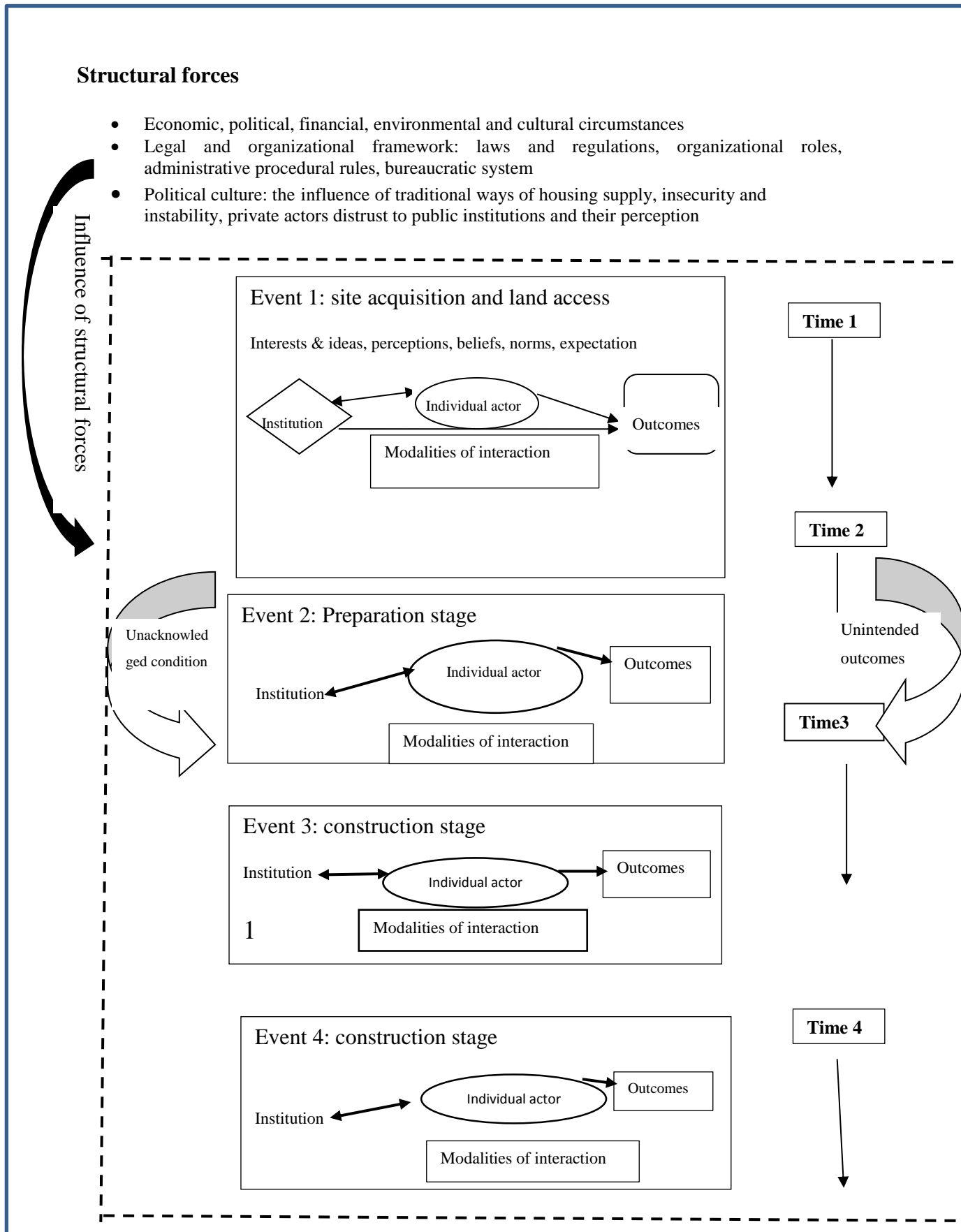
Growth in liquidity was a result of the government's inability to transfer foreign exchange earnings from the oil prices appropriately, and all economic sectors facing inflation, but the housing sector was affected more than other sectors.

Cash flow increased 36 percent, it reached 114 billion dollars in 2005, and still it has been increasing. Increases in money and cash flow always leads to increasing house prices. The elasticity of cash flow in Tehran is 1.86 and it is the highest rate among all cities in Iran (Aabedindoorkosh & Rahimian, 2009).

Moreover, to understand the agents' behaviour the value-added (24) aspect is mentioned as one motivating element for private investors (2) and ordinary builders (14). Hakfoort and Matysiak (1997) illustrated in value-added terms that the volume of output in the building and construction sector was very high in 2007 at €15.9 billion, which accounted for 9.6 per cent of the overall economy. According to the relationship between the construction sector and other sectors in macroeconomic terms, one percent growth in added value of the housing sector causes a 2.8 percent increase in GDP. Value added in the housing sector in 2005 was 1827 million dollars, and it was 4.4 percent growth more than 2004. In 2006, its increase equalled 3.7 percent. The most rises in the growth rate of value added in the housing sector was in 2007 with 40.9 percent. Based on the Iran Statistic Organization's report in 2007, the highest value-added in building sector belongs to Tehran, so it motivates development firms and builders to invest in this sector.

5.4 Diagram of the Conceptual Framework

TIME bounded particular eco-political socio-cultural environment



5.5 Analytical concepts

Structure

Structure is one of the most significant and “elusive” terms in the contemporary vocabulary of social science (Sewell Jr, 1992,p.1) and, fundamental to structuration theory, is understood as rules and resources, recursively implicated in the reproduction of social systems (Cassell, 1993). Reviewing the concept of structure and mentioning the differences in meaning of structure in functionalism, Giddens (1984) states that structure in his work appears as external to human action, as structures do not exist outside of specific spatial and temporal horizons of action pursued by specific actors acting alone or together and in the face of opposition from others. Likewise, actors always act in specific action contexts, which depend on the coupling between specific institutional materialities and the interaction of other social actors (Jessop, 1996, 126). Giddens (1984, p.25) summarize his discussion about structure and system;

Structure, as recursively organized sets of rules and resources, is out of time and space, save in its instantiations and co-ordination as memory traces, and is marked by an 'absence of the subject'. The social systems in which structure is recursively implicated, on the contrary, comprise the situated activities of human agents, reproduced across time and space.

According to Giddens’ definition “structure has no existence independent of the knowledge that agents have about what they do in their day-to-day activity” (p. 26). In this research, Giddens’ structure will be considered as external forces such as economic and institutional forces that exist within the social system and that influence the individual’s actions in particular ways specific to a context. In turn, individual action affect the social system through its influence on the institutional framework within such system.

Gregson’s (1987) criticism about Giddens’ treatment of the notion of structure is really fundamental and crucial particularly in empirical work. Giddens states that the structure does not exist outside of individual practices, which denies the existence of real structures. In this research, the structures supposed to exist outside

of social interaction as well. The core of the obstacle is that the foundation of structuration theory is dedicated to the creativity of human agency, though the restrictions for agency are assumed in theoretical realism to be similar to connections with structure and events along with considering the importance of agency (Gregson, 1987).

According to Guy & Henneberry (2000), property research is required to synthesize the approach that is able to integrate the economic, the social and cultural dimensions bound up in the process of property development. The structure in the conceptual framework consist of the “socio economic and cultural framework within which actors define and pursue their interests, strategies and actions” (Adams, 1994, p.65). Following Giddens’ belief that “structure exist recursively organized as regular rules and resources that individuals draw upon in their day to day activities’, the legal and regulatory frameworks in the housing development process are examined.

Another element in the conceptual framework is political culture, which consists of traditional methods of housing provision and performing the housing development project, considering the ideological aspects such as insecurity, distrust and perceptions. In this framework, resources encompass all factors and inputs of production of the housing development process such as land, both in terms of physical size and form of land rights; capital consisting of finance from family savings, personal wealth, finance and commercial capital; capital in the form of raw materials and machinery; labour both in the form of professionals, experts, and consultancy services as well as construction labour; and eventually resources in the form of information, knowledge, power, authority, informal relationship with public authority and experience.

Agency

The knowledgeability of actors and the complexity of their skills in designing the context of their daily behaviour are highly stressed by Giddens (1984) and are one of his elements of structuration theory. He believes that these skills do not receive enough attention in institutional theory, despite the fact that strong focus

should be given to a study of unintended consequences and unacknowledged conditions of action as a main part of social research. This neglect relates to the methodology process and detection of ontological issues in empirical work.

Agency is something which Giddens unpacks into three distinct, but interrelated, components: the stratification model, linking the reflexive monitoring of action, its rationalization, and motivation with the unacknowledged conditions and unintended consequences of action; a three-tier model of consciousness, comprising discursive consciousness, practical consciousness, and the unconscious; and the occurrence of action within the *duree* of everyday life, rather than, say, within the long *duree* of institutional or world time.

In this thesis, structure is examined in terms of what contributory factors have framed the operation of the Tehran housing market, and agency is examined in terms of the way in which the house-building companies and other key actors behave in pursuing their development interests and activities. The analytical framework developed consists of structure and agency approach and emphasizes the different actors and their interaction with each other, but also shows the importance of dominating the structure, and also illustrating that structure is shaped by actors as well as shaping actors' behaviour.

“In this model agency reflects the dialectic of control and the stratification of action. Giddens discusses that power is a central aspect of all human interaction and from this develops the notion of the dialectic of control” (Moos & Dear, 1986a, p.239).

Agency comprises the whole manner in which actors in the development process “define and pursue their strategies, interests, and actions” (Adams, 1994, p.65). All social action is bounded by the unacknowledged conditions and unintended consequences of action. Agency space in this strategic conduct is the arena where the interaction between agents takes place. In many cases, the agents connect to each other through the particular event or object that is the concentration of action. The number of agents who interact with each other achieve their objects varies between two agents join together and a group. Two factors affect the

interaction of agents. First, each agent is tied to a particular institution so should represent the views and interests of his or her institution as well as her or his own. The second perspective of agency space is the difference of placement of individuals within the domain of action. One agent may be more intimately involved with a particular event than others may. Each event focuses on the interaction between the agents involved to produce various outcomes.

Duality of Structure and Agency

The core attraction of Giddens' theory is the notion of duality of structure. In Guy and Henneberry's (2000) perspective, the key difficulty is defining the structure and agency aspect of dualism without simultaneously dichotomizing them. However, it is easier to be conscious about the dangers of dualism rather than to ignore it. While other theories endeavour to avoid the difficulty, Healy (1991) attempts to maintain dualisms of autonomous structures and agents in her institutional model (Pratt, 1994; referred by Guy and Henneberry, 2000) Transforming market structures or rational individual action could be inseparably resulted in environmental innovation (Guy, 1999).

Concerning the structure–agency duality, Holmwood and Stewart (1991) discuss that action theorists attempt to suck up agency and structure into each other that brings confusion about each category “includes or excludes justifies retaining the dualism rather than prompting efforts to transcend it. Thus, in some cases and on some occasions action theorists argue that some actions are structurally constrained and others unconstrained and that this justifies and demands the coexistence of different theoretical paradigms”. (which draws on abstract rules and resources) (Jessop, 1996, p.121).

“Dualism masquerading as a duality” is deemed as a main conceptual problem and is retained the form of counter-position abstract and a temporal. Counterpoising two categories' structures, rules, and resources to action as concrete behaviour is a false duality and its ritual position to act recursively does not make it temporal. Jessop's suggestion to overcome this issue is to consider “structure in ‘strategic-relational’ terms as involving ‘structurally inscribed strategic selectivity’ and action can likewise be analysed in terms of its performance by agents with strategically calculating structural orientation” (Jessop, 1996, p.124)

These terms respectively imply that structural constraints function selectively and they are conditional but always temporal and spatial; agents are reflexive and able to redesign their interests within boundaries and able to “engage in strategic calculation about their current situation”. Therefore, several theoretical consequences are extracted from redefining the structure–agency relationship and allow Jessop to distinguish “structural moments” and “conjunctural moments”. In the former, structure cannot be transformed by agents and actions are shaped, while in the latter, the context can be modified. Thus, in this new approach, structural constraints may alter conjunctural opportunities over time and space and specific contexts can perform as structural constraints for one agent at the same time as being conjunctural opportunities for other actors. It presumes the ability of agents to follow different kinds of strategy in order to modify the selective influence of structural constraints and opportunities. Considering actors as “reflexive, strategically calculating subjects-oriented to the structural-conjunctural complexities of action contexts”, the strategic-relational approach mentions that agents are active in context which “involve strategically selective constraints and opportunities”, and learn from the experience gained by acting in this context to display their interests, be capable of reshaping and do reshape social structures. Moreover, “actors might (re)formulate their strategies in the light of changing experience knowledge about the strategic contexts in which they perform” (Jessop, 1996, p.125). This strategic-relational approach is adopted in this research because the distinction made by Jessop is more helpful in analyses in a less democratic, centrally planned economic context such as Iran that is hardly modified by actors in many aspects and this distinction regarding changeable and inconvertible parts of context by actors is recognizable.

Power

Giddens (1984) discussed that power is a core aspect of all human interactions, and figures this develops the notion of the dialectic of control. The dialectic of control is the central force mediating the relationship between different individual agents.

According to Holmwood and Stewart (1991), the same dualistic manner as structure and action is employed in power analysis, hence power resources are

counted as structural forces, and the exercise of power is deemed as a distinctive type of transformative action (Jessop, 1996, 122).

If structures are considered as “relativized and relational complexes of social constraints/opportunities, then the analysis of power will involve the attribution to specific acts by specific agents of responsibility for the realization of a specific range of effects in specific temporal and spatial horizons” (Jessop, 1996, 2014).

The communal feature of the most of the existing strategies includes their Political nature. Political challenges are at the core of institutions and institutional development and transformation occurs through the power interactions. This kind of dynamic institutional ground may head business managers of developing countries to increase concentration on political intention rather than business to secure their interests (Oliver, 1991).

Institution

Thinking about the institutions and the methods of they change is not limited to one way; however, their transformation is related to two wider preoccupations in planning theory. The first links to the conceptualization of the relation between context and action and the second relates to social change.

Ball (1994) believes;

“The problem faced by investigations of (property) institutions, of course, is the general one of being able to specify causal connections and avoid the problems of inductivism (Pheby, 1988). Agents involved in property development are highly unlikely to be able to provide an adequate explanation for building cycles, nor, by implication, even know their own roles and importance within them” (Ball, 1994, p.680).

In this research, institutions are incorporated in the analysis not just as a background for actions, rather, in two meanings on two levels. At the structural level, the institution is considered as the phenomenal form within which agents communicate in society. On the other hand, at the agency level, it is utilized as the mode of interactions between agents engaged in the housing development process.

As mentioned in chapter three, although the approach employed is based on Healey's (1992) model, the absence of definition of institution resulted in applying the definition as provided by Dear and Moos (1986a). Therefore, 'institution' is applied in two ways in two different levels. Firstly, at agency level, institution is employed as modalities of interaction that reflect the structural properties inherent in all human relationships: signification, domination (allocative and collective) and legitimation. These institutional categories affect the housing provision through communicative, political, economic and sanction modes of interaction. Second, at the structural level, institution in the development process is applied as the phenomenal figures of the structural principals of the economic, cultural, and political system which form wide variety of agents who relate to each other via a specific event or purpose that shape the focus of action. Agents belonging to particular institutions work together to achieve more power through the dialectic of control (Dear and Moos, 1986a, 1986b).

In addition to adopting Dear and Moos's (1986a) definition and applying the modality of interactions, for being able to identify the institution in empirical work, it is necessary to consider institutions as being enacted through 'scripts'. This notion, suggested by Barley and Tolbert (1997), treat scripts as 'behavioral regularities' instead of mental models. Therefore, scripts are 'observable, recurrent activities and patterns of interaction characteristic of a particular settings'. In spite of Giddens' abstract notion, scripts can be empirically identified (Barley & Tolbert, 1997, p.98). This interpretation of institution implies that institutions are historical accumulations of past practices and understandings of the set conditions on actions. If the institution were considered prior to actions, it would be difficult to recognize how it can have an impact on behaviour and how one can investigate its implications for action or find the actions' subsequent influence on the institutions.

For clarification of the principal dimensions of the duality of structure in interaction, Giddens (1984) expressed the 'modalities' of structuration, connecting the structural features to knowledgeable capacities of agents. Actors applied the modalities of structuration in the production and reconstitution of systems of interaction, while at the same time they reproduce their structural characteristics.

Under the reflexively monitored social behaviour, he discerned three structural features of social systems inherent in all human communication: signification, domination (authoritative and allocative), and legitimation. The analysis of these structural features is portrayed by him in the following table.

Figure 5.3 Modality of interactions

<i>Structure(s)</i>	<i>Theoretical Domain</i>	<i>Institutional Order</i>
Signification	Theory of coding	Symbolic orders/modes of discourse
Domination	Theory of resource authorization Theory of resource allocation	Political institutions Economic institutions
Legitimation	Theory of normative regulation	Legal institutions

Giddens, 1984, p.31

First category focuses on the way that urban built environment influenced by intuitions through communicative actions. The built environment could be affected by communicative modality on interactions in two ways. First, it could be recognized as a single sustained code employed by different actors when they intent to involve in interaction. In the context, it is vital that different intuitions such as government, professional and academia reach to common language for communication. Second, the effectiveness of each negotiation depends on employing the right language for that particular communication.

The second class of institutional analysis, associated with political domination, which intend to find how different institutions involve in authoritative domination. This category may be found in all contexts because being able to legislate the rules makes government a powerful institution. The third category of institutional engages with economic domination concerns the way that built environment are affected by institutional control of economic resources. This influence on urban built environment implement through for methods; ‘taxation, finance, land speculation, and intra governmental transfer payment’. Government by using tax as a powerful instrument could be encourage or discourage wide variety of functions in urban

arena. Financial authorities play significant role in leading investment. Land speculation resulted in urban space through emerge artificially growth in land values. Last, concerns the situation that the particular urban project in local level financed by another level of government such as federal instead local.

The last category concerns on sanction as one type modality on interaction depicting the way institutional activities is legitimated. Three approaches identified that through them institutions may exercise to illustrate varied activities within legitimate social practices. First, intuitional action takes place outside legal limit and under this circumstance, sanction of intuition evaluated through the criminal justice instrument to find out whether the action recognise as a legal within legal bounds. Second, albeit doing the legal activity, may lead to confliction with other intuition or individual actor. In this case, sanction engage with the legal instrument to distinguish if the other party is right is infringed by action of the institution. Last, the sanction might be searched by intuitions through ideology. Each society contains defined norms that might be eroded by some disputant actions and depend on to somehow, these norms are prevail in society the power of sanction is determined (Giddens 1984, Dear and Moos, 1986, p.249). These modality of interactions are deployed in following analysis chapters to assist analysing the institution and agent interactions (see figures 6.1, 7.2, 8.1, 9.1)

Agent

Agent is another important term in the conceptual framework. Agents are the various actors, individuals, organizations and firms who play important roles, who are involved directly and indirectly, for particular interests and intentions, in the development process. In this research, 'agent ' comprises the key actors involved in the housing development process; the land owner, the builder, the housebuilder, the investor, the architect, the consultant, the estate agent, the governmental and local authority and subcontractors.

Behaviour, ideas, perceptions, expectations

According to Giddens' (1984) idea of practical and discursive consciousness, in this research, the process of production and reproduction of institutions is perceived as shared opinion, perceptions and expectations through actors' interactions. This study will analyze the way perceptions of private sectors form their behaviours and practices; it will also examine the impact of public institutions' perceptions about house-builders, planning and the built environment. Adams (1994) discussed the cultural ideas and values people keep about "what they should build, what they should like to occupy and what kind of environment they seek" (p.67). Although resources, rules, ideas and perceptions create a framework that derives development activity, agency practices and behaviours are varied and capable of changing and challenging the components of the structural framework anytime (Adams, 1994).

Interest, strategies, and skills

One of the components of Healey's (1992) model is the evaluation of the strategies and interests of actors, especially with respect to the most significant sets of relationships within the process, in order to recognize what governed the way different roles were played and interactions that developed. This examination may then be linked to the resources, rules, and ideas controlling the development process in the instance scrutinized. Therefore, in this research, the key agents were asked about their interests and strategies and how the structure affected the shaping of their strategies. 'Interest' is an agent's expected achievable goal for being engaged in the housing development process. It may be for receiving some form of gain or important benefits or advantages. 'Strategy' is the series of actions taken or the art of executing a particular stage of a development process in which the purpose is to achieve an intended outcome.

Time and Space

It is impossible to conceptualize structural constraints outside specific time horizons and spatial scales of action since any constraint could be rendered inoperable through competent actors' choices of longer-term and/or spatially more appropriate strategies. Giddens declares that for analyzing actors in the context of interactions, and the interrelating of those contexts themselves and presenting their

relationships to broader parts of the social system, the “situatedness” of interaction in time and space is essential (Giddens, 1984, 110).

In Gregson interpretation of structuration concepts, there is a set of concepts which concerns more to functional of human society and the way that it works in “particular periods or places” rather than the nature of being or existing in human society. In his perception, the substantial concern of Giddens regarding to all concerns of structuration theory is that the relation between structure and agency is universal and the concept of locales was not referred to particular structural properties (Gregson, 1997, p.82).

Giddens’ concept of locale is different from others’ in human geography; he states how “locals refer to use of space to provide the settings of interactions” where it can be a city or a room. In line with re-emphasizing the significance of time-space in social development, Cassell expressed the role of city as a “religious, ceremonial and commercial centre, being a distinctive feature of all societies characterised by extensive time-space distancing” (1993, p.189). However, Cassell underlined his own perspective of “how time-space distancing involved with the generation of power” brings the issue of division between “allocative resource” and “authoritative resource” in that power is generated through the reproduction of structures of domination (Cassell, 1993, p.185)

According to empirical research, Giddens lays stress on recognition of the time-space constitution of social life by researchers (Giddens, 1984, 286). Importantly, time plays a crucial role in this research rather than what is defined in the literature because the political, economic and social situation significantly and relatively faced quicker changes than other contexts over time. It must be borne in mind that the specific time within which the development project takes place contains different structural forces due to difference of legal, fiscal, and economic situations. In addition, time is a matter regarding the duration of the project implementation, which could determine project success and failure due to the cost of capital, which was invested in the development project, as well as pay-back time.

5.6 Introduction of Case studies

Before starting the analysis in next chapter, it would be beneficial to introduce case studies briefly.

5.6.1 Case Study 1: The Iranpars Building

This building is located in zone 5, which is in the northwest of Tehran and is known as a development zone because it situated in the margin and attracts people from the south and centre, and there are many underdeveloped lots. The Iranpars building is a 5-storey housing block with one commercial unit in the ground floor and one level of basement car park providing 24 spaces (figure 4.2). The total land area is 737.50 square meters including a 3,218.72 square meter built environment that contains 20 units in various sizes of 117, 115, 101, and 87 sq. m. It is a normal modern apartment block with standard building facilities for the middle-income class. This is a joint venture project that landowners participate with the company to reconstruct their property. The contract was made between the landowners and M Director in a way that the landowners put land as their share and the company holds the whole cost including construction tax and planning permission.

Figure 5.4 Case Study 1



5.6.2 Case Study 2: The Mina Building

The Mina building is located in Niyavaran which is one the best neighbourhoods in the north of Tehran in zone 1, and comprises 10 units on five floors with one level of basement car park (figure 4.3). It was constructed by an individual builder on a 500m² area of land containing 300m² of built space and has dual frontages. As stated earlier, zone 1 has a special characteristic that makes it desirable and unique, such as natural resources, historical and cultural heritage, different fabric and social and economic situation. From past decades until now the public officials of the state and international and diplomatic activities have been located here and the rich and upper-middle class are keen to live in this zone. In addition, it is the preferred area for builders to put their housing development projects into operation.

Figure 5.5 Case Study 2



5.6.3 Case Study 3: Zone 22 Project

This project is very different to the former two regarding its location, the nature of the company, the type of land, the number of units, and the fact that it has not been completed yet. This high-rise building is established on lot of a land, a vacant site that belonged to the Tehran Municipality, with a total area of 10,000m² located in zone 22. Unlike most housing projects in Tehran, including the other two case studies, that have to demolish existing buildings to build new ones, this project is being built on a lot of unoccupied land. This opportunity emerged owing to considering zone 22 as a part of Tehran. Zone 22 was the greatest and vastest urban development linked to Tehran with approximately 10,000 hectares; this region has been created for resolving the definition of western areas of Tehran and also for displacing the people who live in central Tehran's worn-out regions and to accommodate parts of Tehran city's population. The Master Plan of District 22 was delivered by Section 5 Commission in 08/06/2001, and Municipality of District 22 was officially activated.

This building comprises 200 residential units in a 22-storey building with 4 levels of basement car park. There is 30,000m² built area and 46,000 m² of non-beneficial densities and at the time of the study (data collection in December 2012), the building was still at the first phase of construction and was scheduled to be finished in 2014.

There are some noteworthy points of the three case studies illustrated in Table 5. According to a comparative study, the land price of case study 2 is the highest, at 35 million Rial per meter squared in comparison to 20 million Rial and 4 million Rial for case study 1 and case study 3, respectively. The difference is clarified in the difference in the location factor, which determines the desirability of the area and is corroborated by the description of the characteristics of each zone. The acquisition price of case study 2 is the highest, which is located in zone 1, and the lowest price belongs to case study 3 in zone 22.

In case study 2 the builder purchased land at a price below the zone market price because of the location of the site, which was in a cul-de-sac. In case study 3, the builder acquired the site at a significantly lower than prevalent value through the negotiation with the mayor of zone 22 that will be explained in detail in the next chapter.

Figure 5.6 Case Study 3



5.7 Conclusion

The schematic of Tehran housing supply in is complex with several aspects that influence the complexity of this process. One element is multiple of involved public organizations at all legislative, executive and monitoring levels besides their responsibilities overlap. One of the most fundamental issues is explicitly emphasized by Giddens and expressed as an objective that social researchers should take into account is the complexity of skills depicted by individual agents situated in stratification model in the context of specific individuals' day-to-day life (Giddens, 1984, Gregson, 1987).

The conceptual framework presented housing development process in its event sequences. These are the actual empirical incidents which result from the interaction of institutions and agents in order to produce a housing unit. Nevertheless, in this research, the event sequence does not apply as a primary tool to describe the development process. Rather, it is just employed to facilitate the debate relating to the procedure underlying each case study. For Dear and Moos (1986), the events could be analyzed in two ways, being a representative for a different level of abstraction. First, events might be examined by assessing the relationship between institutions and agents in the development process. This level entails identifying the actors involved in a particular event and the interaction between these agents and with institutions. This level is apt to examine the events by considering the way varied institutions are involved in structuring the development process. This analysis attempted to study the dialectical relations that characterize agency–institution interaction instead of a dualistic presentation of them.

Second, events may be analyzed at the higher level by considering the structural properties that have an effect on agency and institution in interaction. This level reflects the structural properties, which both constrain and enable the agents' strategies and action. In a similar way Healey (1992) also points out the focus is not on the particular institutions or agents, rather on those embedded features of the mode of regulation, and mode of production and ideology of society that affect decisions of agents which are reconstituted and replicated in everyday practice.

In the four analysis chapters (6–9), this objective is fulfilled through two levels, firstly by considering the relationship between institutions, and secondly by looking at the relationship between institutions and agencies along with the way agencies pursue their interests. Different stages of the housing development process are selected for carrying out the institutional analysis because each stage engages with various agents and different outcomes are produced. Dear and Moos (1986, a) identify the acts of agent or individual as institutional action.

Regarding the suggestion of Barley and Tolbert for structuration analysis, these four chapters endeavour to find the scripts over the years and find whether and how they replicate, revise and objectify. Furthermore, an attempt is made to find commonalities across scripts and to compare them over time.

As Healey (1992) indicated, integrating structure and agency is necessary and Giddens (1984) emphasized that in an explanation of the land development process, the balance should be maintained between structure and agency without any prior primacy to one another, as discussions of institutional elements influencing the housing development are often linked to the agency element. Therefore, the interaction between institutions and agents in the housing development process is discussed within the context of the stress on agents and institutions' relationships in each step of the event sequences.

Each analysis chapter (6–9) attempts to cover two parts in each stage throughout the explanation of institutional factors having an effect on the housing development process linked to the agency elements. At the suggestion of Healey and Barrett (1990), about explaining the land development process in the form of a causal relationship between the agents' interests, roles and strategies and the broader forces driving them, the agency responses to dynamics of the land development process in Tehran were extracted from interviews.

6 Chapter 6: Descriptive-Analysis of event 1

The First Stage of the Housing Development Process: Site Acquisition and Land Access

6.1 Introduction

According to the purpose of this research, analysis of recognized housing developments is elaborated within an institutional prospect that was suggested by Healey (1992) and Dear and Moos (1986). The analysis of the alteration process of the physical environment and the social relations of the three case studies is discussed ahead in the four stages of the development process. In each of the next four chapters, the analysis is assigned in two parts: the structure, and the agency level.

It should be borne in mind, as discussed in chapters one and three, how Giddens (1984) stressed that towards realizing development activities, structure and agency should not be regarded separately. Such a conceptual view considers that both structural forces and the individual actors are equally significant in the clarification of social phenomena such as land development process (Giddens, 1984; Healey, 1992; Dear and Moos, 1986a).

Site selection and acquisition of land is the first stage of the housing development process in which both private actors and public institutions play a role. This chapter is divided into three sections. The first section focuses on the structural part of institutional analysis. In Ball's (1988) perspective, the market and institutional context within which agents act has a considerable impact on the organization of development production. Hence, and though it focuses on institutions, it will be observed that discussion includes the agency factors as well. Details of institutions and agents involved in the land acquisition and transformation of land ownership, and the tools and instruments used by each institution, will be provided. The second section will identify private residential builders' criteria of the site selection and the financing method will be elaborated. The data in this section comes from both phases of the semi-structured interviews.

The third section of this chapter will uncover how this stage was accomplished in the three case studies based on the data from the interviews conducted. Through strategic conduct, the agents' interaction and response to the dynamics of the development process is shown.

6.2 **Institutions and their Instruments**

There are three key functions taking place at this stage. Both the government and the private institutions take part. An institutional analysis of this step must consider the provincial judicial system and regional municipality as the primary institutions responsible for the policy and legitimacy through political and sanction modalities of interaction. Institutional analysis also involved a consideration of the built environment encompassing builders, landowners, property professionals including estate agents and investors who were active via economic and communication modalities. The problems of communication among these different agents were noticed as well. The case studies illustrate the way the public institutions implement its authoritative control over the process of transfer of land and real estate ownership by presenting rules and regulations which increase the bureaucracy of land transactions.

Findings confirmed what was stated earlier in chapters two and three about the multiplicity of the housing development process and that many actors are active at each stage. The three case studies showed that from the agents involved in this stage of development, two public agents are under one institution, and four different private agents are under three institutions. As figure 7.1 illustrates, three aspects of the institutional mode of interaction have been recognized in the case studies in fulfilment of this stage: signification, domination and legitimation. There are also three types of institutions with different agents involved in this stage; built environment institutions includes the builders and landowners, estate agents of the land and property professionals, as well as the Organization for Registration of Deeds of the central state institution. In the case studies, the communicative mode of interaction is applied by private actors to enable them to act effectively in interactions that are affected by economic power. The ability and the methods of negotiation play the most important role in relationships between builders and

landowners, which is strongly characterized by their power. Although there is a common pattern in making contracts between builders and landowners, there are many places for flexibility, which considerably affects determination of the method of contract and purchasing. In addition, the communication mode of interaction for estate agents that belong to the land and property profession institution is vital. The reason is that they play a role as a mediator who is involved directly with landowners and builders and in some cases they are the only source for builders to access the land and for landowners to find a client for their resources.

To avoid and resolve any probable conflicts, specific regulations and rules were introduced by the authoritative control body as a sanction mode of interaction. The results of the interviews expressed that the process of transfer of land ownership suffered from the problem related to the communication modality of interaction between private actors and authoritative control body agents. It was appraised that that they were not successful in finding an understandable language to engage effectively in interacting with each other. The builders and landowners spoke in a similar tone concerning the authoritative action of the ORDP action, which affects the smoothness of transforming the ownership process while they have their own legal and juridical language.

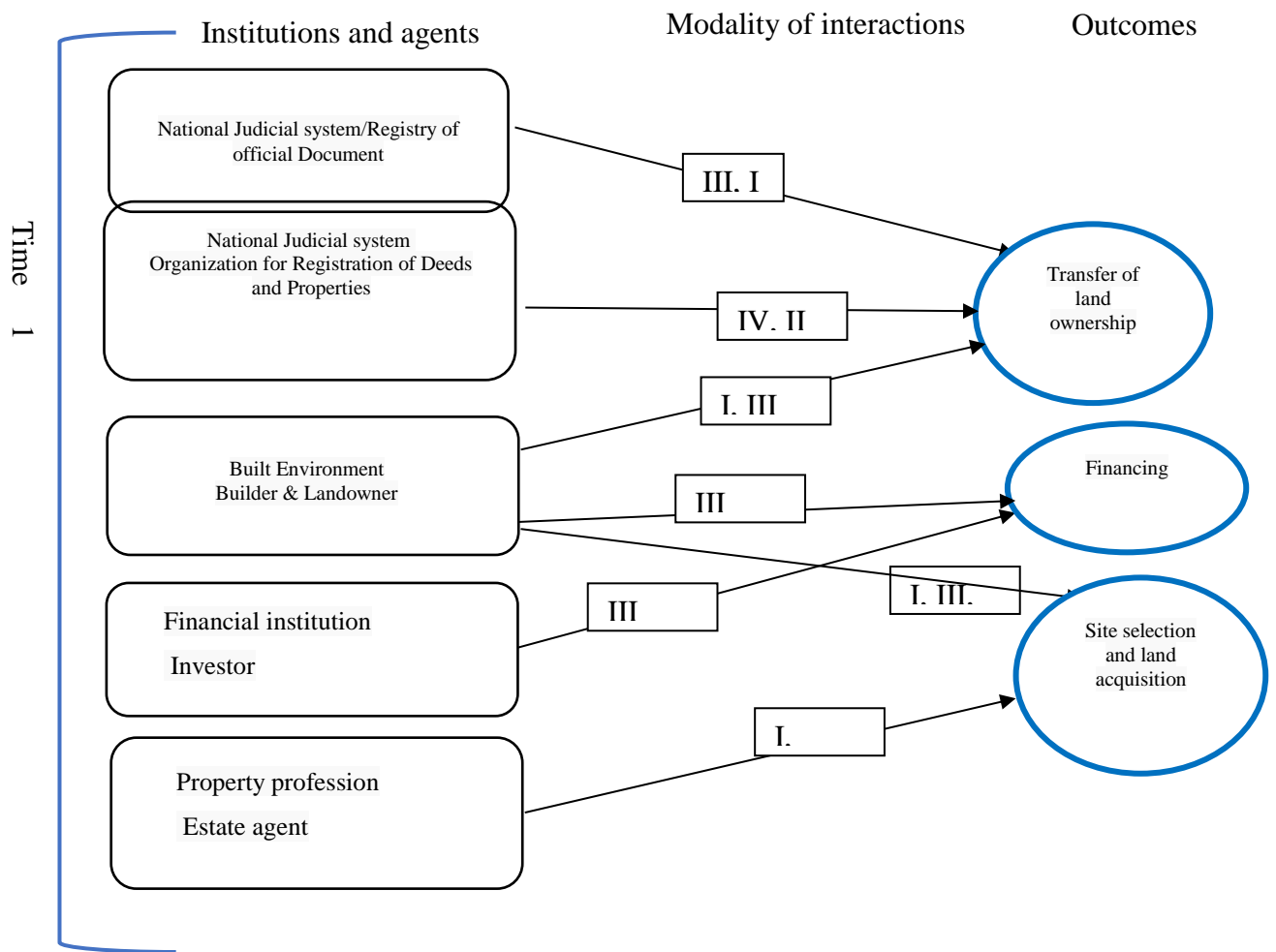
The legislation authorized in Iran has enabled the government to conduct unlimited and unfair interventions. It entailed laws to allow confiscation of land, introduction of construction permits, and devising of development plans. The Land Appropriation Act of 1960 gave the government the power of compulsory seizure; moreover, the Urban Development and Redevelopment Act of 1968 granted power to the municipality to confiscate land if it requires it for development or regeneration projects (Ghanbari & Madanipour, 1988; Clark, 1981). Furthermore, the absence of a land market prepared the terrain for land corruption and confiscation of land by the state in favour of its affiliated foundations (bonyads) and quasi-public organizations.

Financial institutions also play role in this stage in the way in which they allocate capital. This is crucial because it determines how investment takes place in Tehran and, as illustrated in chapter six, many factors affect financial institution policies. The Iran Central Bank is the highest agent of the financial institutions; it

monitors and controls the country's financial system, and the banks as the suppliers of the credit facilities to the builders. According to the unique characteristics of Iran, where the economy is centrally planned, the Central Bank determines the maximum amount of loan allowable and the percentage of facilities that the private banks are allowed to provide to builders as well. Therefore, as mentioned in chapter two, housing development projects are financed by private actors in the absence of public institutions such as banks. The investors evaluate the return of housing projects in comparison to other alternative investment opportunities in parallel markets. The three case studies showed that the policies and strategies employed by the financial institutions have an impact on the housing development process due to their influence on builders' decisions in terms of what, where and how to build. The analysis of the three case studies illustrated that a wide variety of factors influenced the type of financing instrument employed. This comprises the general state of the economy: aspects such as inflation and interest rate as well as the other criteria specified for each development project that will be explained in detail in the following sections.

Another important institution during this stage of site acquisition was the built environment with both main agents – the builder and the former landowner – interacting through the economic and communication modalities of interaction. Land was the primary economic resource in the negotiation and institutional actions were taken by these agents under the conditions of the property market. Since dramatic changes in price are influenced by structural economic forces, the builders preferred to participate with the landowner in a development project, and as this is the landowners' only way to regenerate their property and make more profit from their resources, the communication modality of interaction plays a more crucial and determining role. The communication interactions reflected upon the bargaining process, specifically in the negotiation of specifying the purchase price as well as the inclusions of conditions in the purchase agreement and construction partnership agreement.

Figure 6.1 The network of institutional relationship in the land acquisition



I – Communication mode of interaction

II – Political mode of interaction

III – Economic mode of interaction

IV – Sanction mode of interaction⁵(see chapter5)

The land and property profession was also another key institution engaging in the site acquisition process. The estate agents are under the institutions providing

⁵ Giddens (1984) expressed the ‘modalities’ of structuration, connecting the structural features to knowledgeable capacities of agents. Actors applied the modalities of structuration in the production and reconstitution of systems of interaction, while at the same time they reproduce their structural characteristics. Under the reflexively monitored social behaviour, he discerned three structural features of social systems inherent in all human communication: signification, domination (authoritative and allocative), and legitimation.

the professional services and the playing role as intermediary. Larkham (2007) in his research about the role of the estate agent in the West Midlands claimed that unlike in McNamara's (1984) study, estate agents have a restricted role in the development process. It seemed that in addition to the reasons stated by Larkham (2007) for this difference, the roles defined in these two studies for estate agencies led to contrary results. In the context of the three case studies in this research, estate agents play a role as a mediator in the development process and count as one of the most important way of accessing land for builders. Their role is totally different from these agents in Larkham's (2007) study, where they act as plan depositors and as architects. Since their role is to present the landowners in the negotiation process to accept the builders' bids and simultaneously convince builders to agree on landowners' suggested price and conditions, they interact by way of sanction and communication modalities of interaction. They profit from involvement in the purchase and sale of land and houses by receiving the fee from both buyer and seller. Another institutional characteristic of the Tehran housing market associated with this aspect is that the estate agents have been accused of causing the growth in land prices: at least, that is the policy-makers' and other actors' perceptions.

This stage starts by signing a contract for transferring ownership in one of the estate agents' offices. Then, the official transfer of land ownership from the former landowner to the new owner or builder should be registered in one of the Registry of Official Documents (ROD) (Public Notary) in Tehran. Finally, approval of the property deed by the State Organization for Registration of Deeds and Properties (SORD) is given.

According to Act 138 passed on 25/05/2009, all the real estate transactions must be recorded in the estate agency and tracking codes must be given to the buyer and seller. This tracking code is required by the Registry of Official Documents and by all infrastructure and service organizations (e.g. electricity, water, gas) for providing services. However, the three case studies indicate that in the implementation, this was not taken into consideration until 2012. This legislation has been enforced since 2012 and concerns political domination in the form of the authoritative control of the government on land and property ownership, and

especially on land speculation activities and spurious transactions. It is supposed to reduce land and dwelling speculation in the long run.

This institutional control causes a constraint for those transactions that take place between families, friends, acquaintances, and participants who usually sign a contract between themselves and then make it official in the ROD. This new regulation forced them to get the tracking code from estate agencies; therefore, they had to pay a fee to them even when they are not involved in the transaction. In addition, some lawyers believe that it causes many legal problems and imposes constraints in a situation of transferring ownership between families and friends.

This organization related to the Department of Justice was to set up official documents in accordance with laws and regulations. The institutional constraint is imposed by them to control the activities of property transfer and protect residents' legal rights. In the partnership model for housing development based on the agreement contract between property owner and builder that specifies the contribution of each, the landowner transfers the defined share to the builder and also gives him the legal right to pursue the administrative process. In case studies 1 and 2, half of property ownership was transferred to builders to facilitate the persuading of the ROD to grant a development project.

In order to implement this registration, the landowner has to obtain an inquiry from SORD about his property. Under the Real Estate and Deed Registration Code 1923, all properties are obliged to be registered with the SORD. The institutional action is taken by the SORD for two main purposes; first, in order to officially design and protect proprietorship and beneficiaries of owners' rights, and second, to validate documents formally. The registration and gaining of the confirmed deed from this organization is a fundamental first step for the housing development process that enables one to buy land and is one of the required documents to enrol the case in the municipality. The experts of the SORD check the property deed, then visit the site and compare the recorded information in the deed submitted by the owner, such as the status and dimension of the estate, and then carry out all the cadastral business. If any discrepancy is found, they will provide a corrective deed. This lengthy process is one of the critical steps, and it was complained about by many of the interviewees. In addition to the inquiry from SORD, there are two

more inquiries that are required; from the tax institution and the municipality in order to find whether this property owes any debtor any tax or toll. Furthermore, this process should be carried out for any transaction of the property regardless of the numbers of its transactions.

6.3 Land Acquisition and Site Selection Process

The land availability argument alternately affects the “structure and performance of the private housing market” (Adair, Berry, McGreal, 1990, P 64). Land is the most problematic material needed for housebuilding to source (Adams, et al.). The available land should be in accordance with the estimation of builders’ focus on the subject of development feasibility. In the site selection process, which is characterized by Baerwald (1981), the first stage is establishing the general picture and scale of the project; this is less related to location factors. The second stage of the site selection is removing or focusing on large areas within which the particular site will take place and in the last stage, builders evaluate potential development sites.

The current institutional status of the housing market derived from a cumulative history of action and interaction influenced by economic, social, and cultural factors. The site selection process in Tehran is often different from and sometimes the opposite of what the Baerwald (1982) defined for this process. Firstly, it is limited by institutional factors in terms of land resources and the built environment structure has been shaped over long duree. Due to the lack of large developable sites and brownfird (Baayer) in Tehran, new constructions, often along with redevelopment of existing sites, entails demolition of old courtyard houses that are less than four floors. The builders have to demolish existing dwellings to replace them with higher density developments. Therefore, in order to develop sites in the inner city, the major concern is marketability of the site more than whether the land is physically developable.

If the builders identify possible sites through real estate agencies, other intermediates, or landowners in their preferable area, they will determine the type, market-orientation, and the number of floors of the project based on the location and planning regulations. In evaluation of larger areas, builders are searching to

verify the “likelihood of finding a site where it will be feasible to build, finance and sell houses” (Baerwald, 1981). Regarding the type of company, its interests and target market, the order of the second and third stages could be changed and evaluation of a large area could take place after being informed about a specific site. For instance, the builder (B3) who does not specify any zone or area as his target market and confronts the possible sites through landowner would assess the specific site before large area evaluation.^{b3, b2}

In a response to the question of whether they have specified any target market or preference area, 98 percent of interviewees consider specific zones for their construction activities. Specific areas and particular neighborhoods are highlighted because they have a good reputation for profit-making or the builders whose past experience has been in one area prefer that same area for further activities. Networking with other actors has been established among builders over years; finding contacts and sufficient information can be used to delimit areas.^{b3}

The builders’ second stage evaluation of general areas is based particularly on the perception of the preferences and behavior of households (Baerwald, 1981, p347). Builders consider the area where they will be and whether certain households will be willing to purchase; and, importantly, households’ ability to afford to buy finished housing units. Owing to the economic crisis the households’ affordability has decreased and caused builders to eliminate considering areas which are known as a low- and middle-class areas in which their housing projects would not have as much return the projects in a rich area.

One 'medium-sized'builder whose company target for residential development is the north of Tehran (zone one) gave the explanation of how and why household affordability and structural factors reflect on site selection:

Because of the economic crisis and the government's inability to manage and control national income, wealth is not distributed in a fair and balanced way. Therefore, only the upper class, who are a minority, can afford to buy houses with a preference of these zones, which affects builders' interests and strategies.^{b2}

On the other hand, the social, economic and environmental characteristics of an area, institutional rules and ideology as emerged by collective reflected in an active

housing market, will lead a builder to search developable sites in that zone. The social rules and collective ideology will be explained in further detail. This point is mentioned by Cuff: “the design of our built environment emerges from collective action” (Cuff, 1991, p.13). Builders require a definition of the probable costs and returns on the project and it is necessary to analyze local market trends for estimating how well and how quickly units will sell and for what prices. Apart from the cost of land, building materials, labour, and service charges, marketing and overhead expenses, which differ among sites, there are other cost implications such as obtaining planning permission (Pacione, 1990).

Gaining planning approval and building permits that comply with conditions related to density are pointed out in all interviews as one of the determining factors in selecting a site. As interviewees noted, housing development would be profitable if the local authority gave a density allowance of more than four floors; otherwise, the project becomes infeasible. Having contact with the local authorities is also important because the time to obtain planning approval is very significant for builders; although how much time the builder must spend on getting it depends on the nature of the project and the character of the site^{b1', b3', b2', b}. The large developing companies such as D2 and the cooperative in case study three, in planning larger projects will find their dealings with public officials more complicated and will have to have discussions with the city council, zone municipality and other public bodies.^{d2}

The interviews showed the important features from the actors' points of view about site acquisition are their type, scales of construction, their method of financing project, having contact with public organizations and their relationships with governmental agencies. Volume builders with connections with government agencies such as National Land and Housing do not consider land as a main constraint because they have access to public land.

On the other hand, the ordinary builders who often need old courtyard houses (Kolangi) with a large area of land to reconstruct on, mentioned land access as a problematic issue. It seems that for 'medium-sized' builders who have no access to public land and for medium builders land access is considered a limitation. Not surprisingly, all types of builders achieve consensus about high land price as one of

the most important reasons for the high price of housing and creating a main constraint in housing supply.^{b1' b3' b2' b' d1' d2}

It is worth noting that what 'public land' refers to in this context has a different meaning from other contexts and these days public land constitutes a part of the developable land in the city. Public land in a current debate between the housing market's actors refers to the lands which are dominated by public organizations such as the military that differ from government. After the 1979 Revolution, the republican government confiscated many land and properties, and then by increasing the land price and turning property development into one the most profitable sectors, public institutions entered to this market. For ten years, these organizations have been establishing construction companies, participating in, or working with, existing housing development companies.

In the interviews, the builders and builders were asked about the ways they acquired the land. D1(builder) said that their housing development project mostly takes place in the large lots of land which are bigger than 5,000 hectares or large old courtyard houses bidded on by one of those public organizations mentioned above called Executive Orders of Leader Organization (EOLO) (Setad Ejraee Farman Emam).^{d1}

This organization is one of the public organizations belonging to the Islamic regimen that confiscated the lands belonging to the Pahlavi Regimen (before the revolution) and now with access to thousands hectares of land. Although the nature of activity of this organization is not related to housing and construction, accessing huge lots of land in different zones motivated them to establish five construction development companies and become active in housing development. The manager of M company (case study 1) considered these public organizations as the main speculators in Tehran and states:

There are many land speculators in Tehran. Some of them are looking for the abundant land without identified owners in order to seize it. The most important types of land speculators are public agencies and foundations.

o1

EOLO offered diverse sites to these five affiliated companies followed by investigating feasibility and choosing the most appropriate site for developing

based on its location, how much it is profitable and marketable and the size of the project that they intend and are capable of doing. The remaining lots that are not selected by these members are released to other companies through tender and obviously, the sites that are not as desirable as the selected ones. ^{d1' b1}

In addition to accessing the appropriate land, the methods of paying the land cost is another concession for them. They have to pay half price of the land at first and pay the rest in instalments across two years. Due to high land price, this term provides them with a specific opportunity to deal with big projects. It means with same capital as the other companies so they can select better and bigger sites.

Large builders (builders who take part in the stock market) introduced the government agency called National Land and Housing Organization (NLHO) as their main source for land. This organization owns most of the large lots in the inner city and the suburbs, which have the capacity to be utilized for massive construction; it is inevitable that actors will have to purchase land from this organization and deal with it during the site acquisition stage. An interviewee noted that their company accesses land easily and reaching appropriate sites with good location is not a big issue for his company. He explained that NLHO only offer the land to volume builders such as his company, which built one thousand units in its recent project.^{d2}

B1 stated that his company gets into both National Land and Housing Organization and Executive Orders of leader Organization (Setad Ejraee Farman Emam) therefore, regardless of the limitation of land in Tehran there is no hassle for them. Generally, he believes that land access cannot be considered as an important issue in comparison with severe problems such as finance and construction permits.^{b1}

The manager of a semi-large company (B2) said:

High land price is one of the crucial issues in Tehran and it is necessary for the government and municipality to cooperate over to resolve this problem. However, experiences in the housing market over previous years indicate that the government's policies merely made new problems. None of the government's plans have been implemented properly^{b2}

There are different methods to be aware of regarding available land for those builders who have no access to public land. In these ways trust, experience and acquaintance play crucial roles. As one of the ordinary builders (B3) explained:

It is necessary to deal with estate agencies or former landowners for buying old courtyard houses. In this case, the less than four floors buildings convert to high buildings with usually more than 20 units. Sites are usually found through communication with acquainted landowners or estate agents. Advertising in the newspaper is another way for builders like us but I rarely use it.^{b3}

Similarly, another ordinary builder declared that he usually buys old courtyard houses from some state agencies who are active in the same area and have known him over years and worked with him. ^{b5}

A commonality across scripts in all categories of private actors is identified which could be encoded as domination of the network in actors' behavior and strategies. This factor was mentioned by most interviewees in all stages but it is considered most importantly in land acquisition and selecting a project. It was expressed by one private actor:

We usually buy land through our networks and known state agencies. Sometimes we have a client that finds us by our website but we cannot rely on them. The duration of cooperation in the housing process is long and many issues such as financial or participation may happen so we need to know our participant. We accept an offer from someone who is recommended by our familiar contacts. ^{o1}

In section 6.4, the reasons of network-cantered strategies of actors will be discussed. It is discussed through the influence of one the most determining structural forces: the uncertain and unstable institutional environment.

6.3.1 Site Selection Criteria

Diversity of outcomes in the development process are due to combination of local specific and broad driving forces not solely from place to place but from one institutional site to another within a locality. The criteria expressed by interviewees implied the influence of structural forces and institutional environment.

The three stages of the builders' site selection process comprise distinct scales of analyses from larger scale to detailed examination, and the criteria they use at

each stage are appropriate to the scale of the analyses at that stage. There are 16 factors expressed by Pacione (1990) that derive from a literature review and pilot discussion with representatives of the housebuilding industry; land buyers were asked to rank the given criteria by preference. Scores in the top decile belonged to market factors, the likelihood of obtaining planning permission, and the availability of basic structure. Next important was concern over the social class over surrounding the area (p.22).

In this study, there are no criteria given to the respondents and they are asked to indicate the important factors by themselves. In contrast to Pacione’s table, the criteria that were mentioned by respondents were limited to four factors but the three top deciles are similar. The results are summarized in Table 1. The first place is attained by criteria relating to profit making and this was followed by having experience in that particular zone, land access, planning permission (density), acceptable growth, and neighborhood social class.

Table 6.1 Importance of site selection criteria

Criteria	Builder/builder rank
More profit	1
Experience	2
Land access	3
Planning permission (density)	4
Acceptable growth	5
Neighborhood social class	6

The majority of those interviewed stressed that their main concern was that the site was located in the area that made the project able to generate more profit in the short term. This manner indicated why past experience and personal knowledge of the activity space got a high score in builders’ importance criteria and the firms pursue the market trends. The considerable point extracted from the interviews is the good return tied to neighborhood social class and environment. In other words,

the higher gain can be yielded in a high quality and upper-class neighbourhood.^{b1', b3', b2', b', d1', d2', b4b5}

The interviews revealed that most builders prefer the north of Tehran due to the opportunity of making more profit. Conversely to what Baerwald stated, that builders are not profit-maximizers, the results of interviews showed that they do seek to maximize their profits. Therefore, the characteristics of the north of Tehran that were explained in chapter 6 guarantee the desire of builders to return. Firms try to survive in the market and are knowledgeable about market properties and the economic environment. The company manager defined zone one as his target market, explaining:

The best zone for making good profit is zone one; and it is the only zone that has not been affected in the recession and in the bust period. It has seen reasonable growth. ^{b1}

It is evident that the structural forces affect remarkably the firms' strategies. The director of the cooperative said – in response to whether his company considers a particular district for construction – which their activity is not limited to a specific zone but due to the same material costs in all zones, it is more profitable to carry out residential development projects in the areas in which value-added land is higher. Because of the higher land price in these districts, at first, the members have to pay more charges but at the end of the project, the value-added nature of these dwellings is not comparable with the projects in the zones with lower quality.^{BD3}

The revenue in this sector attracts many investors whose main activity is in other sectors such as industrial. One of the investors implied that he was attracted to this market because of its good return in long-term investment. He added that according to high inflation – roughly, 25percent – after accomplishment of a project, the investor's capital interest over the construction period is added to the housing value and it leads the growth in housing prices.¹²

Simultaneous with this characteristic being a positive for investors, it also means that none of the professional actors has a big share in the housing market and leads to chaos. In both phases of interviews, a consensus became apparent regarding the disadvantage of non-professional activities. These kinds of actors are just seeking profit without paying attention to the standards for unit construction

and enter the market in a bust and leave it if any better chance appears in neighboring markets.

6.4 Influence of Structural Properties on Behaviour of Actors

Economic environment

In addition to requirements for builders to undertake an economic study to ascertain the probably costs and returns on a project, they have to consider the economic and political situation as well. As Ball mentions, economic and financial factors play a vital role in determining organizational structures (2003). There are some influential and important economic factors affecting the housing supply, consisting of: government budget, inflation, interest rate, cash flow and foreign currency. The Iranian economy is based on oil revenue and any increase in oil price leads to a growth in the government budget and cash flow. Besides the housing market, there are the foreign exchange market and gold market for attracting cash flow and in a stable political situation the housing market is the safest place for investment with good capital return. The political situation affects the housing market and is associated with leading the cash flow to one of the other markets for investment. For example, the nuclear negotiations with Iran and P 5+1 caused the transfer of cash from the housing market to the foreign exchange market.

The other crucial factor relating to government intervention that is recognized as one of the housing supply's constraints is determining the interest rate. Unlike other countries, the interest rate is determined by the government instead of by market mechanisms. Therefore, banks cannot make a rational and cost-benefit-based decision about their capital and are unable to absorb deposits to invest in the housing market or any profitable investment area.

Flowing capital to land and housebuilding has prepared the terrain for speculative behavior so the most speculative behavior is seen in the land sector, and the consumers of it are other producers, not housing customers. As mentioned before, in Tehran land price constitutes 50 to 60 percent of the housing cost. On the other hand, in a country with a powerful state, one way for private actors on an

individual and organizational level to survive in this context is to comply with the coercive powers of government and state.

The housing expert who had a main role in devising Tehran's comprehensive plan explained the reasons causing this turbulence; from the two main constitutive factors for an investor in housing construction, that is, land and material, if the land price keeps steady, profit should emerge from construction techniques and mass production. Although in the short term, the fluctuation of land price is less than in construction, in the long term the percentage of its growth is more than growth in construction. For instance, during 2011 the land price increased 21 percent. This characteristic of land in Tehran causes the change in composition of builders' property baskets and they tend to speculate on land, thus it affects construction patterns and weakens mass construction.^{E1}

The structural factor is implied in his interview:

"The speculative behavior could be restrained but such this context allows these behaviors to occur. The housing market is not competitive, it is based on a leader and a follower, and the interest groups such as land speculators and investors influence policy-makers."^{E1}

Overall, the Iranian economy is in transition in an unstable and chaotic environment for actors and lead to firms' behavior becoming irrational (Farashahi, Hafsi, 2009).

Strategy of firms in unstable institutional environments

Regarding the characteristics of developing and emerging countries like Iran, many changes happen, and too fast. The firms' traditional ways along with beneficial frameworks for social and economic process lose their reliability. The frameworks replaced are often unfinished conflicting pieces unable to compose a persuasive framework of rules and norms of behavior (Farashahi & Hafsi, 2009).

The presenting land values are determined by housebuilders through predicting future house prices and construction costs but this relationship may be modified by

uncertainty (Leishman et al, 2000). As Peng truthfully described, in emerging economies, despite the claimed target of becoming "market economies", at the end they typically become a "predominantly relationship-based transaction structure". To overcome the uncertainty and survive in this unstable situation, firms employ "relationship-based" and "network-concentrated" strategies (Peng, 2003). Yet, the Adams et al. studies showed that network and trust play important roles in residential land markets in the UK as well. As they stated in their work, in residential land markets, networks generate the opportunity to buy land directly from suppliers or intermediaries, instead of relying on the anonymity of markets.

Social relationship embodied in this stage

The political institutions and power relationship induce builders to try to establish relationship with regulatory and executive authorities in order to create a network to ensure their profits. In addition to the role of social context explained in chapter five, Guy and Henneberry brought the issue of negotiation as a sign of the complexity of the development process and quoted from Cuff that the "object of negotiations, the building is created within the negotiations" (Cuff, 1991, p.96); that is, the social construction of the built environment (Guy and Henneberry, 2000, p.2410).

In case study three the board of directors could get a discount on the price of land through negotiation with the mayor of zone 22 where the project is located. They attempted to convince the mayor that because the Fire and Rescue Service is one of the affiliated members of the municipality, they have to be treated differently from other cooperation companies and the municipality should not make a profit from this land. They stated that it meant that one organization could earn profit on their employees. This negotiation continued for one year from 2008 to 2009 and they succeeded in reducing the price of land to half.

The spokesperson of M Firm uncovered a point about the public institutions that are involved in the housing development process:

"I always deal with these public institutions in all projects and I have found that having contacts and relationships in addition to spending extra money or giving bribes make the process easier and accelerates it."³¹

Based on the results of the interviews, relationship-based strategy strongly exists among private and public actors; also, private actors among themselves prefer to work with those who have known them for while, and are reluctant to trust new individuals or firms. One ordinary builder highlighted the point that the people prefer to work with familiar builders that they know they can trust; therefore, if a landowner wants to rebuild his property he tends to find a trustworthy builder. In addition to limitation of land, the network in this sector and speculating behavior make accessing land more difficult every year. The way of site acquisition has not been changed over the years because we always acquire the land from the state agencies that we have has a relationship with for years. However, nowadays our firms are known by more agencies and it leads to developing their network. ^{B3 02}

The other ordinary builder explained that to access land it is necessary to deal with estate agencies or former landowners to buy old courtyard houses. In this case the less than four floor building was converted to a high building with usually more than 20 units. He continued to say that the company could usually find the sites through communication with familiar landowners or familiar estate agencies. Advertisements in the newspaper are another way for builders, although he rarely uses it. He added that the people prefer to work with familiar

B5 expressed that his firm usually buys old courtyard housed from agencies that worked in his activity area, whom he has known over years; and he rebuild the sites to seven-floor buildings. He mentioned the high land price as one of the housing supply's constraint. In case study 1 (Iran pars) the manager told that land is usually purchased through our networks and known state agencies.

Sometimes we have a client that find us by our website but we cannot rely on them. The duration of cooperation in housing process is long and many issues such as financial or participation may be happened we need to know our participant. We accept someone who is recommended by our accountancy contacts. ⁰¹

6.5 Land Finance and Investment in Land and Housing

According to Healey (1991), builders are not from a sole genre but encircle a wide variety of organizations with diverse economies of scale and varying objectives among private and public factors. The structural factors such as economic and political issues, before even having a real influence on land and housing, affect actors' perceptions. For instance, six months before the start of western sanctions against Iran, the housing price increased owing to the assumption of decreasing the current currency value so it led the capital flow to the gold and foreign currency markets. On the other hand, as the housing expert E(1) – who had a main role in devising Tehran's comprehensive housing plan – stated the percentage of growth in land price more than increases the construction cost so the most speculating behavior occurs in the land sector. Therefore, the builders and investors gain their profit by speculating land instead of decreasing the construction costs through methods such as economies of scale and utilizing new technology.^{E1} This is mentioned by another housing economic expert:

There is significant speculative demand in Tehran especially in the north zones 1, 2 and 3 and it makes the Tehran housing market different to other Iran metropolitan cities.^{E2}

It is a trait of investment and uses of land and property that there is a vast diversity of various types of users, investors, and investment motivations. The general response from those interviewed was that the most significant character of the Tehran housing market is the high volume of non-qualified investments in this sector.^{11' b1}

Among the required elements of the development process comprising costs of land, service installation building materials, labour, marketability and overhead expenses, the costs of land has a significant share constituting 50 to 70 percent of housing cost. Prominent among the structural obstacles are increasing land cost, high financial costs; and high rent relative to income. In addition to what Haila (1991) called universal acknowledge about the price of land that it is a capitalized rent not derived from production cost, there are structural factors and institutional rules determine the land price in Tehran. A significant character of this market is

ascertaining that the land price never derives from the market function and the housing market witnesses the growth in price in a recession and absence of demand. Apart from high inflation, which directly affects land price, the actors' and collectives' suppositions of expected inflation play a crucial role in land price. To study investment in land and property, Haila (1991) claimed that the theories about investors' motivation did not help to reach any unanimous basis for finding empirical records to understand the special characteristic of land. She devised a new typology expressing four kinds of investment in land and property.

The definition and explanation of each type is different from the existing category in Tehran; the ideas and names of each category are adopted from her but researcher own description will be given. Figure 6.2 outlines these types. The typology, which was proposed in the paper, based on two aspects, consists of the aim of investment "(use or exchange) and the time of investment (presence or future)" (Haila,199, p348).

Both housing experts in the interviews emphasize that one of the considerable features of the Tehran housing economic structure is that investment demand has a significant share in comparison with consumer demand^{E1'E2}. The growth in land and housing price along with economic condition set the housing market up as a secure opportunity to invest for all type of residents.

Table 6.2 Four kinds of investment in land and property

Opportune land owner Provide land Use value	Nonprofessional / dealer/production sector investor
Public agents	Speculators / builders

The first agent is a landowner who occupies a property with no intention of speculation other than increasing the value in land and finding out the opportunity

to rebuild a property, make money, and sometimes provide units for children; he decides to participate in a housing development project with a builder. The actor is opportune in a sense that the possible profit owes to economic conditions and it is accidental.

Currently the participation between landowner and builder through making a contract is the most common way for financing the housing projects. Small and medium builders and most of semi-large builders who have no access to public land make a contract with the landowner to avoid paying the cost of land which is almost 60 percent of a project's cost. It means that the builder pays nothing for the land and provides construction and preparations costs and gives the landowner shares in the new built unit. As mentioned before in case studies 1 and 2 the builders make two different contracts with landowners and in a first stage of interviews most of the interviewees adopted this method to provide land.

The second agent was called by Haila (1991) dealers who switch investment from the productive sector to the real estate sector because of the over-accumulation in the productive sector. The different point in the Iranian context is that the capital flows to the real estate sector not because of a surplus in the other sector but the absence of security or good yield in other sectors. An ordinary builder (B3) stated the available financial resources for fulfilling housing projects are owner capital, private investors, and applicants' participation.

Many people give their capital to the firm in order to invest in the housing market and every month a certain amount of profit that is higher than the interest rate banks' is paid to them.^{b3}As mentioned in chapter 2, in Iran, productive activity is less profitable than real estate and other financial instruments do not work efficiently on this account, the property market absorbs the capital. The next section will explain how this stage carried out in the three case studies.

6.6 Site Selection and Land Acquisition in the Three Case Studies:

The major part of speculative residential development in Tehran is performed by small-scale builders who make a joint contract with landowners to develop their land into apartment blocks in return for a share of the apartment units (see Keivani

& Werne, 2001). This method of housing provision is employed in case studies one and two.

In the third housing development process, the builder's primary factor of production is land. Associated with land acquisition, the results of the interviews showed that there are two ways of purchasing: freehold purchasing, and contractual partnership with the landowner. The contracts have two crucial advantages to the builder over freehold purchases. First, these contracts reduce initial capital outlay, owing to the fact that it would not need to be made by them and they pay planning permission and construction cost gradually throughout the project. These contracts enable the builder to carry out the construction activity, otherwise they can hardly cope with the high land price in Tehran; in addition, it gives them the opportunity to take more projects in hand. Second, these contracts enable builders to reduce risks.

One institutional change occurred in the acquisition of land and the relationship between landowners and builders over the last decade through the change in script was made by them. Different types of partnership contracts have been devised depending on the ratio of land value to construction cost and an agreement between landowner and builder. In the zones with high land value, the share of landowners is higher than builders and if they want to have an equal share from the built units the builders have to pay the difference, and in some cases they have to rent a house for owners during the period of construction or provide an equivalent amount of money.

In case studies 1 and 2, it was verified that the former landowner, who is initially in control of this resource, was an original existing use owner. In case study 1, the property was owned by five participants, three of whom lived in an ancient three-storey apartment on 700 m² land; the other two were abroad. In case study 1, the firm was informed by one of their known contacts about the property abroad and its owners' decision about reconstructing.

There are some ways for private builders becoming aware of proper land to reconstruct on: newspaper advertisements, estate agencies, acquaintances, contacts, and websites though the latter is not very common. The estate agencies and contacts are more common between individual builders and medium companies.

In case study 2, the site was proposed to the individual builder by the known state agency who know him and are aware of which kinds of sites he is looking for. The former landowners discussed their site with this state agency and the agent introduced this builder to them and mentioned that this builder is a reliable and trustworthy. After two meetings about the model of partnership and the duration of project with the two landowners, the builder wrote the draft contracts and sent it to them. The draft contracts were read by them and their lawyer and were approved by them. In Iran, having a lawyer is not very common; it belongs to high-income and is particular to social class.

Although the price of land is very high in this neighborhood and the shares were supposed to be divided as 60 percent for the landowners and 40 percent for the builder, the allowable density was four floors and that caused them to gain less profit from the development process. Therefore, in the partnership agreement the shares of builder and landowners were set at 50 percent in addition to two conditions, including that the builder had to give each owner 1miliard Rial and rent a temporary home of a value of five hundred million Rial during the period of their housing development project.^{o2}

The reason for the builder's payment to landowners is the evaluation of the land value and construction costs which manifested that the land value was greater than the construction costs so the builder has to pay the difference for having an equal contribution.

Case study 3 is different in both aspects of land ownership and type of land. On the one hand, unlike the typical housing project in Tehran included in case studies 1 and 2 where they act on built land, there was a lot of land that was recently considered as urban land that had become a part of Tehran. On the other hand, it was one of the few areas land with public ownership, owned by the municipality, and the ownership transferred to a representative of the cooperative's board of directors.^{BD3}

This land is one of the lots of land that are supposed to be developed as a Tehran book fair; however, the plan was cancelled and the mayor of Tehran decided to allocate these lots to the municipal staff and their cooperatives. The price of land was forty million Rial (10,000 m² of land and 2,000 m² allowable built area)

and although it was expensive for their cooperative they applied for it. The other cooperatives complained about the expensive price and decided not to buy the land. The chair of the board informed me that:

We tried to convince other cooperatives to buy these lots of land, created a union, and taught them our experience about the way of developing their land. On behalf of that union, we started to negotiate with Tehran City Council and claimed that these lots of land were located in an area with no infrastructure and they were not worth this price. On the other hand, big lots such as this are cheaper than normal lots so by this discussion the land price was reduced to twenty milliard Rial. The second step of negotiation was held with the mayor of district 22's municipality and we told him that it was not fair that he wanted to get a profit from his employees who are on low income. The result of negotiations decreased the land price to 12 milliard Rial.^{BD3}

6.7 conclusions

The interviews show that in this stage many agents have a unique effect on the implementation of site selection and land acquisition, and are shaped by their relationship to the managers of housebuilding firms (builders). Builders play a key role in coordinating and integrating the actions of all other agents in order to take the project from beginning to completion stage. There are other important agents that are categorized into four groups: landowners, financiers, intermediaries such as estate agents and state level legislatures (which is Organization for Registration of Deeds and Properties).

In terms of site selection criteria, from the interviews in both phases it can be summarized that a particular attractiveness exists in the north of Tehran not only from builders' interest in speculative developments but from many types of firms. The results of the interviews show that the characteristic of specific zones had forced high-rise housing development projects to be located within these areas and prepared the terrain to fulfil most speculative behavior. This attractiveness resulted not merely because of locational advantage but also from social and cultural factors including the social and economic status of residents. Additionally, the economic recession led to the decrease in the affordability of households so the builders prefer to do the projects for clients with high income.

Analysis of the interviews shows that a wide variety of factors influence the kinds of financing instruments employed. The general state of the economy encompassing inflation, cash flow, oil revenue, and foreign currency has a huge effect on the institutional investors and builders. The case studies confirmed what was stated in previous chapters (1, 2, and 6) about domination of the private sector in the housing market and local financial institutions. The financial institutions such as banks had no involvement in these case studies and these three projects were financed by builders' own capital, households and private investors. However, the method of financing and shares of each of them differed in each case study according to the firms' strategy, type and size. In the case of investors and financiers, all of them had similar interests as well as ideas about the housing development projects. They believed that in such an unstable environment, long-term investment is not a rational choice. They were interested in making profit from the short-term investment and relied on good prospects for the housing property market even in an economic downturn. However, the three case studies show that the financing method of each project is determined by the nature and size of the firm, the firm's strategy and the type of project. As shown in section 7.6 the three types of financing were applied in each project. In addition, in response to the change of contexts, the actors made an institutional change and devised a kind of contract between landowners and builders to cope with the sudden increase in prices. These contracts are flexible in content regarding weight of land and construction value and cost. The next chapter discusses the second stage of the housing development process: the preparation stage.

7 Chapter 7 Descriptive-Analysis of Event 2

The Second Stage of Housing Development Process: The Preparation Stage

7.1 Introduction

This is one of the most vital stages in the housing development process. It consists of crucial events including the building approval and architecture plan approval. This section illustrates the steps that must be compulsorily gone through by all who intend to rebuild his property or take on a development project. It therefore unfolds the way the different development interests in the private and public sectors confront each other and how the planning authority performs its planning function. Considering the conceptual framework and analysis methods, this chapter presents two main levels of analyzing, including institutional interactions and agency level in five sections. The first section will provide details of institutions and agents involved in the preparation stage and the instruments of institutions. The process and requirement of planning permission and building permits as a vital step of the housing development process will be explained while identifying the constraints in this process. The third section discusses the structural forces in terms of those plans and regulations that have more effect on the development process and will examine the actors' practices and strategies. It is followed by a focus on the architectural design step and a comparison of three case studies in carrying out the preparation stage.

In this chapter, the other part of the structure, consisting of rules and regulations, will be considered. In terms of rules, Giddens (1984) defines rules not only as the identified everyday living rules of law and the bureaucratic law, but also as the utilized social rules. In the process of interaction between institutions, governmental and public institutions grant rules as instruments in the power relationships. On the other hand, the private sector employs these regulations to achieve their aims and if they face any contradiction between their interests and the regulations they will attempt to find a way to be as little affected as possible. It aims to reveal the ways in which the different key agents involved in this stage

behaved and acted by concentrating on their interests, ideas, and strategies through the resources employed and the regulations identified.

7.2 Institutions and Their Instruments

The institutions that are involved in this stage can be categorized into two levels related to the nature of their role and the dominant modalities of interaction which are deployed by them. The separation between these two groups is one of the controversial issues in the Iranian planning system and has always been expressed as a barrier in the housing sector by professionals.

The first group of institutions is responsible for formulating the policies; the other one, which includes the municipality, is supposed to implement and enforce those policies with limited jurisdiction. Therefore, the planning and management of the city is not very effective because the municipality has not yet been empowered with full control of planning “for its jurisdiction within a democratic and accountable framework” (Madanipour, 2006,p.473).

There are two important plans which were explained in chapter two, devised by the first group along with the municipality and city council. The chart below shows the hierarchy of urban management in Tehran. As chart 7.1 illustrates, three ministries and two organizations are dealing policy-making and planning. In this section, the executive institutions, which are entangled in the preparation stage, were discussed.

Figure 7.1 Hierarchy of Tehran Urban Management

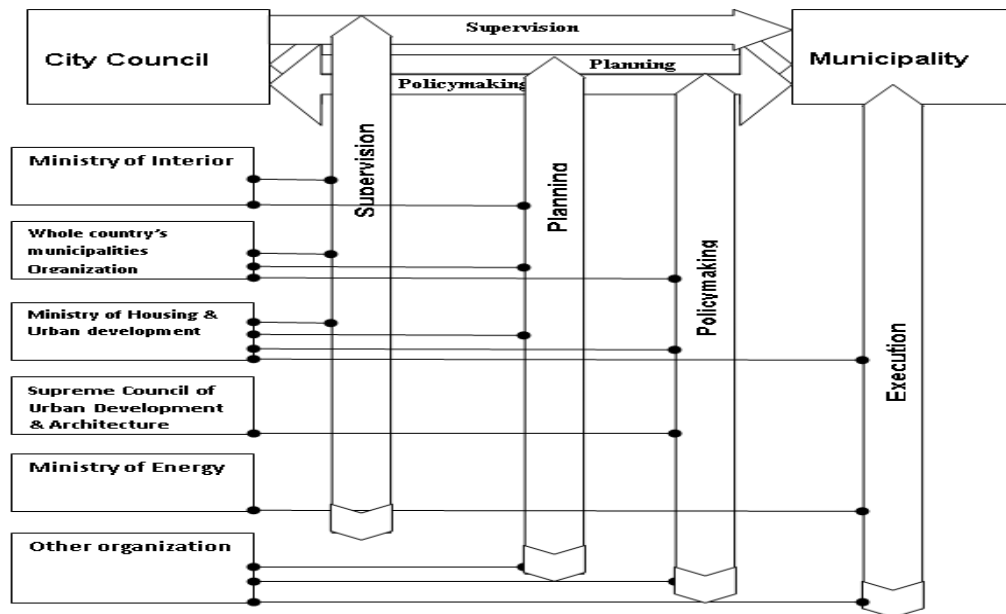


Figure 7.2 exemplifies executive institutions and agencies' modalities of interaction which exist within the network of institutional relationships at this stage. In spite of distinctions in the nature of resources, all agencies employ rules and regulations as instruments in their interaction. The diversity of public institutions in the process of getting building permits and planning approval make the stage of preparation the most complex stage. As mentioned in chapter six, at each stage of the housing development process, various institutions interact with each other in the different forms of modality to accomplish a particular envisioned outcome. Private actors resort to contact in relation to agents under public institutions and use the modality of communication in their interactions. Within the network of institutional relationships, the agencies under the governmental institutions govern the housing development activities by imposing constraints by introducing new or modifying previous rules and regulations. Public authorities also control the enforcement of regulations. They could also enable the development activities to expand by relaxation of rules, for example by lifting restrictions on specific aspects such as density regulation. Results from the empirical work showed their method of employing the rules and regulations is related to the broader cultural, economic, and

social structural forces which could recursively shape the pattern of institutional interaction within the housing development process. From the three case studies, it was revealed that there is an asymmetrical power relationship between the public agents and private actors that could be better understood within the political modality of interaction.

The figure below illustrates five agents under three categories of institutions playing a role in the preparation stage. At this stage the regional (District) Municipality becomes the focus of understanding of the way planning practices contributed to the alteration process of the three projects. The results of the interviews show that obtaining a building permit (approval) from the Municipality is not an easy task. The process of getting architectural plan approval and a building permit does not only require money, time and professional skills in producing an appropriate project design for submission. It also involves more necessary elements to facilitate this process including having a contact in municipality and the art of using these contacts as well as skills in negotiation. The three case studies demonstrate the significance of having contacts and skills in negotiation for a manager of a firm to meet their interests and fulfil their profit. Specifically, case studies one and three show that increasing the allowed density became possible through these factors.

Based on institutional analysis, the Tehran Municipality and each Regional Municipality play an important role by operating dominant power via the political modality of interaction. The city of Tehran is managed by a municipal structure comprising a central municipality and 22 district municipalities, each headed by a mayor. The significant and problematical issue here is the implementation of policies and rules and regulations exercised through the economic modality of interaction. In addition, the operating dominant power has an economic control effect. The institutional actions were founded on relevant rules and regulations, particularly the Tehran Detailed Plan 2006, as configuring regulations imposed on housing development projects. The most controversial act of this plan is Act 329 related to density which was reflected in the urban landscape as having cultural, social and environment effect. The pattern of zoning and allowed density in the Detailed Plan contributed to builders' decision-making about site location (see

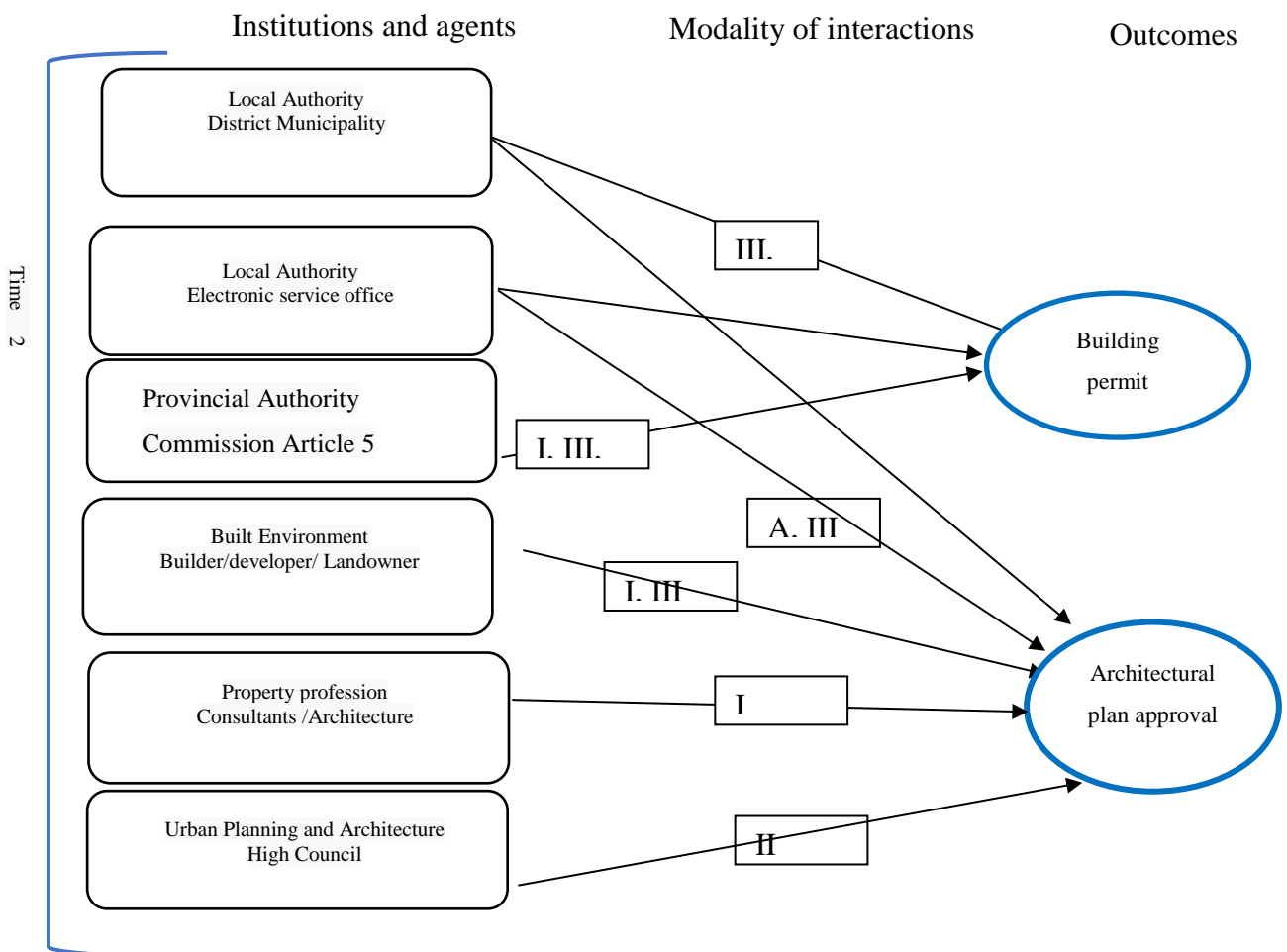
chapter 7). Analysis of the interviews revealed that due to direct links between this regulation and actors' benefit and profit, most bribery and corruption was carried out to increase the allowable density of each location.

There are two institutional actions which are taken by regional municipalities and affect the process of obtaining the architectural plan approval. According to the organic texture of Tehran, the roads are not suitable for this volume of construction and regeneration activities and are too narrow for these high-rise buildings. Therefore, the Municipality decided to improve and widen the existing public road network along with any proposal for new development of land. Each proposal was referred to a specific section in the regional municipality (Bar & Kaf) to examine the amount of correction and measure the amount of land that must be surrendered by landowners. As a result, the measurements of new households became smaller and in terms of high land price in Tehran, especially in the north area, this legislation has had a considerable effect on landowners' and builders' profit.

In addition, the builders have to provide one car parking space for each unit. If providing car parking indoors is not possible, per missing space 4,000 dollars (120 million Rial) must be paid by builders. In the case studies, because the type of development was high-rise housebuilding projects, the builders were dealing with the provision of a plentiful number of car parking spaces in their projects. On the other hand, the regional municipalities promised to provide the parking spaces within 150 meters of the building in case the builders failed to supply the spaces indoors despite the penalties. This aspect of the planning approval process reflects how the public authority had been appointed an important role to regulate development activities and at the same time to advocate social benefit. However, this institutional action was criticized by professionals, public opinion and media for different reasons and aspects (Afkar News, 2013). First, it caused the architectural design to be amended many times and reworking the architectural design lengthened the period taken to get approval. Second and more importantly – and this generated many discussions – was the money was gathered by the municipalities through the penalties but the car parking spaces they promised have never built.

The final area of institutional analysis involved legitimation of institutional action through the sanction modality. This institutional action takes place outside of legal bands. For example in case study 3, the firm manager made use of the affiliation of their members to the municipality to secure the members' rights and take advantage of working as a municipal employee in order to reduce taxes and tolls.

Figure 7.2 The network of institutional relationship in the preparation stage



I – Communication mode of interaction

II – Political mode of interaction

III – Economic mode of interaction

IV – Sanction mode of interaction

7.3 Planning Permission and Building Approval

The Architecture and Urban Planning Act 1976 states that land utilization and any change, development or land subdivision in an urban area must obtain permission from the municipalities. Comments on site selection from the Municipality are a prerequisite for a builder to apply for approval of the project design guidelines.

The biggest and most significant institutional change at the provincial level occurred in 2009. For several years, the municipality of Tehran had been known as the most problematic, with the biggest lack of efficiency and the most full of corruption and bribery.

A provincial municipality in Iran like Tehran Municipality is a non-governmental public institution, the mayor for which is elected by 31 members of the Islamic City Council of Tehran (shura). This is the elected council selected by Tehrani residents for four years and responsible for electing the mayor of Tehran and setting the municipal budget. As it shows, the residents are not directly involved in electing the mayor and the Islamic City Council of Tehran is responsible as a control body. In the face of increasing criticism of the performance and function of Tehran municipality, the Mayor of Tehran has launched the City Electronic Service Offices in order to reduce the referring of clients to this organization, as well as corruption, and avoid the need for human intervention. This semi-public institution with three to nine branches in each zone interacts with clients through the communication and economic modalities of interaction.

In contrast to the findings of Barley and Tolbert (1997), this computerized the system and reduced the domination of the personal ideas of municipal staff, no changes in the institution of power and professional dominance were seen. However, due to the new scripts arising, it can be concluded that the interaction order was changed (Barley and Tolbert, 1997). The hierarchical authority has not been seriously altered, the municipality redirected part of its executive responsibilities to CESO, but it was not just transferring the delegation of executive tasks; it became an economic modality of interaction. Likewise, this new policy has resulted in shifting the communication modality of interaction between the Tehran

municipality and private clients to the other levels and branches of the municipality. These offices are affiliated to the Tehran municipality but they are governed by the private sector, so a client has to pay the expenses of the services and this leads to an increase in housing development projects.

The clients' opinions about this change differed with respect to their expectations and perceptions about this transformation along with their ideologies, interests and roles. In addition, the results of the interviews show that there is no consensus on these offices' effectiveness and impacts regarding the time and cost of issuance of approvals.

The *kargozar* (representative) in case study 1, whose role is pursuing the proposals of projects on behalf of his company, who had the most relationships and had been referred to the municipality before, and now deals with CESO, believes that:

These offices make the process easier such that it remarkably reduces the unnecessary referring to different divisions of the municipality and one no longer needs to deal with several employees in each step of the process. Furthermore, the level of corruption has been decreased.^{s1}

On the other hand, a manager of a building company claimed that the duration of obtaining approval is the same as before and that bribery, specifically for big projects, remains.^{m3}

When the researcher raised this issue in the interview with the head of the detailed plan, he responded that this system is new, that there are still many loopholes in it, and it is too soon to judge their function^{DP}

The most important point is the delegation of authority in this section to the private sector. A client is given the right to choose between almost one hundred electronic service offices so if they are not satisfied by one of them they can choose another one. He added that the problem is that there is no control and monitoring system overarching these offices and it takes time to eliminate this foible.^{DP}

Inversely, the Chairman of the Board of F Company (case study three) believed that these offices are not very efficient because it is still necessary to pursue the project process personally in the regional municipalities.^{BD3}

Following this application and registration of a project, land and property inspectors from the electronic service office visit the site, write their reports, and send them to the Department of Detailed Plan in the regional municipality. The urban planning authority will check on the site location and boundaries. The application and the inspectors' reports are checked in this department and if there is any contravention between deed and site or application and detailed plan in terms of land-use or density the application will be referred to Technical Administration for review. In the next step, based on width, length, land-use planning, floors and allowed density, the architectural plan guideline and planning permit is issued.

The architectural plan in hand, the prospective property owner or builder now goes to the electronic service office, which is usually located in the relevant area for the project, to begin the often long and time-consuming process of plan approval. These offices will charge the applicants for pursuing the process on behalf of the municipality.

The items in the architectural plan would include floor plans, elevation, and sections of the proposed building and outbuildings containing structural details of any concrete or beam works. There are three possible scenarios regarding the architectural plan. It might be approved, requested to modify and re-submit it, or rejected by e-service offices. Various reasons could cause the plan to need to be modified. These include the submission of an incomplete plan; not considering all the necessary regulations in design; and contravention of planning regulations such as intention of the builder to erect residential structures in commercial or industrial zones. After the revision, it will be sent to the municipality.

In this step, if the architectural plan were approved, the tax and fees receipt would be issued. Otherwise, the municipality sends a message to the e-service office and lets them know about the barriers to the case proceeding. Applicants who have received the receipt and paid it have to go themselves to the income office in the municipality and settle their so it appears in the e-service office and makes them able to prepare the draft of the building permit. This step is the last step in these offices; next, the draft of building permit is sent to four different departments in the regional municipality to get signatures from the head of the detailed plan, the head

of the issuance of building permit, the deputy director of Planning and Architecture and finally the regional mayor.^{Bf⁷TE}

In the interview with the technical manager of one of the CESO, their way of communicating to regional municipalities was unfold. There is a dossier (Cartable)⁶ in these offices, which every day is brought up to date with the cases⁷ that are in progress and each of five liaison experts who pursues the cases in a particular division such as department of Detailed Plan (or Bar va Kaf) picks their related cases to pursue in that particular division. Their contact numbers are given to the applicant if she/he wants to track the case, or, under the circumstances of a problem arising or a tendency to appeal, they are be able to accompany a client to trace their cases in the regional municipality. ^{Bf⁷TE}

She described theses Electronic Service offices' interactions with clients and builders' attitudes towards them:

Electronic Service offices perform like a small municipality with less staff. It is a semi-private institution, facing a high number of applicants with high expectations, who it is hard to satisfy. Frequently their dissatisfaction is because of the regulations, specifically density rules, which do not meet their desires. Although often their desires are wrong, sometimes they are eligible to get extra density and in this case their request will be reviewed by the Council of Architecture. ^{TE}

The figure below (7.3) illustrates the steps of getting the building permit in detail as extracted from interviews and generally should be passed in all types of housing development projects. One distinctive characteristic of the institutional relationship discovered is that there are contradictions in the interpretations of development policies in the agencies under the public institutions and the regulations are not implemented accurately. For instance, according to the bylaw passed by the Urban Planning and Architecture High Council in session 34 on 1997, the regional municipalities should respond to an applicant within seven working days and issue a tax receipt within two days. If there is no need to change the architectural design, the municipal body has to give the construction permission

⁶Cartable is a folder or a space in organizations in which letters, documents, and forms are located to handle and investigate.

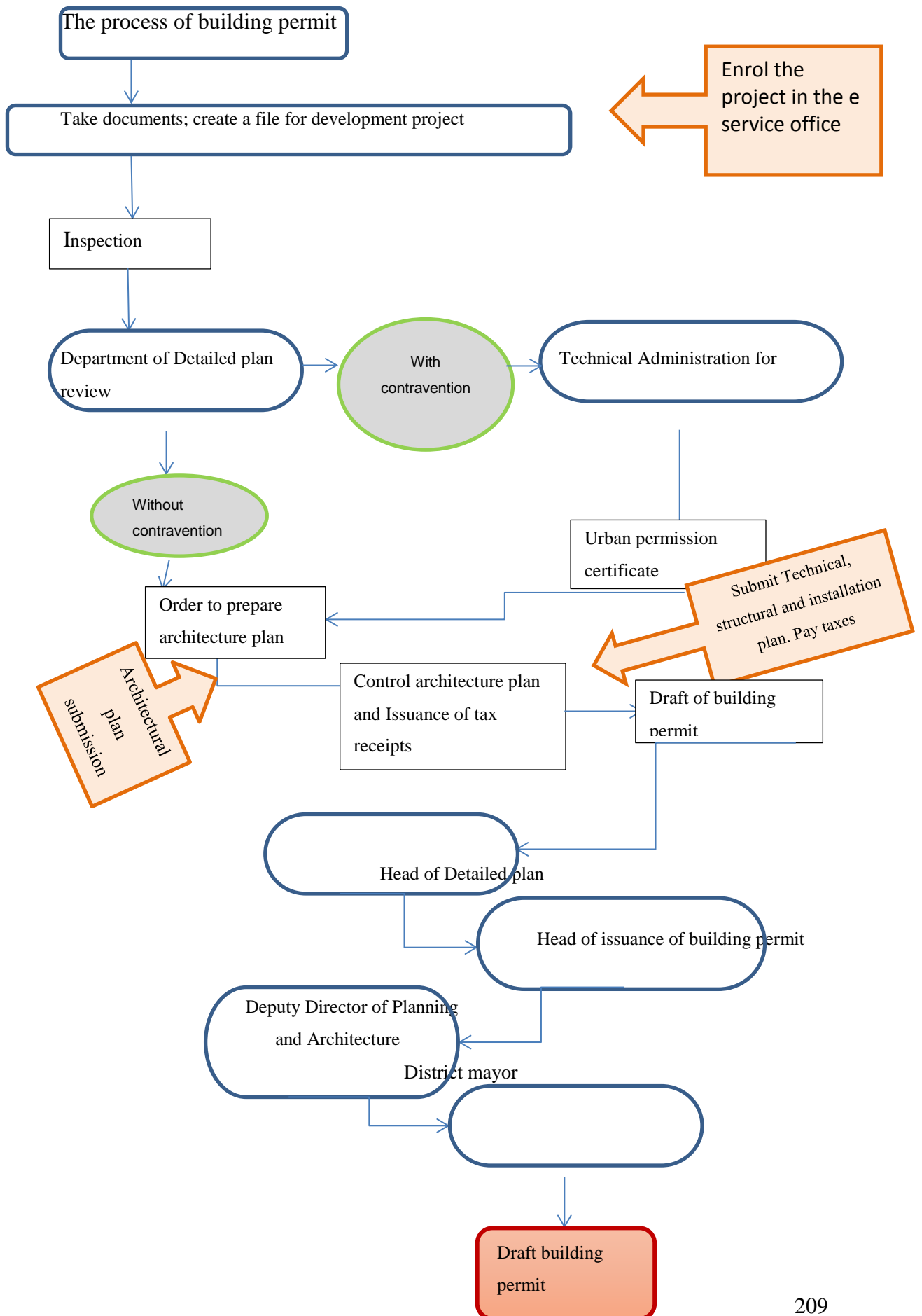
⁷ Case means each housing development plan which is submitted to CESO.

within one week. However, the interviews demonstrated that the minimum time is one month and it usually takes four to six months. In some cases depending on the project and location it could take up to one year because in high-demand areas and in the case of huge or complex projects more time is required. The builders believe that there are undue delays at almost all levels which characterize the process. However, Electronic Service experts believe that part of this delay is caused by the applicants themselves due to their lack of information, and that partly they are inevitable. Agbola (1987) found almost the same belief of builders in his research into housing development in Nigeria; nevertheless, the difference is they partly consider themselves as a cause of the delay and partly see the delay as inevitable. He stated that:

To many builders, it is just another government intention to make life difficult to would-be-builders

The technical manager in E-Service explained that the inevitable delay could be related to the various departments involved, the inherent sensibility of this issue which needs control from different aspects, and numerous applications that are received. She also complained about some of the builders who do not keep themselves updated as much as they are supposed to despite being educated and in this sector for a long time. The delay and hardship in this stage is reciprocal. The observation of the researcher confirms that some clients, especially landowners, have insufficient information about the new detailed plan, which was launched in 2012, and the required documents. On the other hand, new bylaws and regulations are not getting through to the public via the municipality. For example, no reflection of the new bylaw 2013 about selection engineer supervisor on the municipality website caused chaos. The applicants are supposed to be informed about the necessary items when applying for the building and the approximate period it will take to obtain the permission.

Figure 7.3 Process of Obtaining a Building Permit



In this regard, the case 1 project manager stated that the municipality does not properly inform about the new rules, they have no concern about informing the clients and this issue has been exacerbated by designers' poor following up on prospective changes in rules and regulations. If an Representative of a company (a spokesperson) gathers the information about the steps of process and regulations comprehensively and realizes the necessary documents in each stage, the process will speed up. ^{Pm1}

On the contrary, the managers of firms never mentioned their possible fault in terms of failure to adhere to rules when submitting a plan, or recognizing deficiency in documents. The perception of private agents of public authorities and the degree of trust in them to shape their strategies and behavior is low. Therefore, in a fair judgment, agencies under built environments institutions could attempt to modify the institutional environment. In the case of firm owners, they criticize the public agents in a similar way;

The managing director of a semi-large company (B1) said:

In Iran, one of the main obstacles is getting the building permit, especially in big projects (sometimes it can take up to three years to obtain this permission). We need to go through many bureaucratic steps in the municipality. This causes some investors either to refuse or to leave the projects. ^{B1}

Similarly, the owner of a semi-large company pointed out the other issue:

There is no single reference point that makes the policies. For example, there are so many referees involved in issuing the permissions. If we had detailed and unbreakable regulations where there is no way of bargaining and bypassing the rules, we would have a smooth process of obtaining permission. ^{B2}

In the last step, three copies of building approval are issued: one of these copies is kept by builder, the second one is submitted to the regional municipality, and the third one is given to the supervising engineer. The regional municipality should be aware of any housing development process and construction in its domain in order

to be in control of them. The supervising engineer needs one copy for monitoring the implementation of the plan and to oversee if there is any inconsistency.

In addition to the regulations, the regional municipality uses another institutional instrument as a way of sending inspectors to control the development process, especially to convince the public that the municipality is trying its best to check the housing projects and improve the built environment. Following the submission of the architecture design to the municipality, their expert visits the site regularly and the interval between each inspection varies from every day to once a week.

7.4 Detailed Plan and Planning Regulations

This section focuses on the rules and regulations as structural forces affecting more directly and significantly the way actors practice in this stage. “Social actors knowledgably and actively use, interpret and implement rules system and innovatively modify and transform them. In this way they generate institutional innovation and alteration and shape the deep structures of society.” (Burns and Flam, 1987, p. ix, Giddens, 1984)

In this research context, legally, all planning proposals should comply with the necessities as declared under the two development plans, the Comprehensive Master Development Plan and the Detailed Plan. From the interviews it was revealed at implementation level that the Tehran Detailed Plan is very much less referred to during the decision-making process of planning and building application. From 1964 to 2011, there was only the Comprehensive Development Plan or Farmanfarmayan⁸ plan determining only land-use of each parcel and afterwards, in 2012 the new Detailed Plan was unveiled in a format of zoning. The zones contain residential, service, commercial and green space with different density and floor regulations for residential zones. The density rules formulated are based on the minimum base land area and passway width starting from 120 percent. Passway width, lot size, parking facilities and green space can vary by zone. The floor area ratio is also specified for each zone between 0.4 and 0.6; that is one of

⁸ The first and the only Comprehensive Master plan of Tehran devised by Abdol-Aziz Mirza Farmanfarmaian with Gruen Associate on 1977.

two factors with allowable building density for computation of the maximum building size.

The minimum **building density** (Tarakom) – determined in the Detailed Plan – for all zones is 120 percent which means that 120 percent of the lot area can be built. In the case of builders' requests, providing the extra density is possible up to the maximum allowable building density through density provisions for that particular zone by paying the fee for each extra square meter.

The results from the interviews with the Head of Detailed plan in the municipality region 1 and the expert of B&K about the way that builders can be made aware of the allowable building density for each parcel was in conflict. The former claimed that the clients could find this information by entering each parcel code in the municipality website whilst the latter said the information about the zones is given on the website and each parcel 'data has to be given by an expert in this department'. DP⁹ Bf

One of the most controversial institutional actions by the Tehran municipality through the political and economic modality of interaction is related to the density regulation. Taking the fee for extra density has been one of the most controversial issues concerning municipal planning rules during the past two decades. Madanipour (2006) believes that this rule, which enables the municipality to receive money instead of simply allowing for extra density (so, selling density), show that it was not concerned about planning but that it was mainly used to endow financial autonomy to the municipality. He explains that:

Builders could build taller buildings by paying fines to the municipality, in a policy popularly known as "selling density" without having to show their impacts on the surrounding environment.

In addition to making room for bargaining and bribery, it leads to chaos in the urban forum and generates an opportunity for some people to earn money by making contact with municipal employees. In the interview with an investor, information was revealed about one firm that was not mentioned by other interviewees. This firm, by lobbying the municipality, helped builders to avoid applying for some regulations such as density, constructional and architectural rules; also, it enabled them to change the land use and get permission. This firm

makes a contract with development companies and receives the cost of the lobbying in exchange for each square meter.¹¹ However, it is claimed by the Head of Detailed Plan that using this new Detailed Plan eliminated the possibility of bargaining, omitting the Agreements Committee, which was responsible for discussing density with builders, and providing proper detailed rules for each parcel.^{DP}

This density policy was applied until a year ago to meet the municipality's needs in a government refusing to afford funding for urban projects such as subways and tunnels and highways. Moreover, the regional municipalities in zone eight face a lack of budget each year and the Tehran municipality has to support them. There is the capacity of earning money in region one to make revenue within the regulations. For instance, builders could build six floors with a floor area ratio of 30 percent instead of three floors with a floor area ratio of 60, so paying for this change is based on regulations and planning.^{DP}^{Bf} Furthermore, there is a division of the name Calculating and Tracking in order to investigate the appeals and applicants have to submit the justification plan to them in order to be sent to Commission Article 5, the highest authority in disputes.

The constant in all interviews was human intervention and different interpretations and implementations of plans and rules. Nonetheless, it is argued that this new Detailed Plan is based on the system of reducing human intervention and interpretation owing to twenty-two consultant companies who were working on specific plans for each of the twenty-two regions over five years. In addition this policy – the cost for exceeding density – enabled a shift in primary financial responsibility from builder to end consumer. These expenses will add to the cost of a built unit.

It is worth noting that one of the most significant and important characteristics of the planning authority and policy-making system in Iran, specifically in urban management, is the instability in rules and regulations that was mentioned in all interviews as one of the main constraints in this sector. It notably affects the strategy of actors and their relationships. This point was not merely mentioned by builders and investors but also by the former Housing Minister who had the highest role in the housing sector and policy-making:

The minimum time required for reaching the result of housing policies is five years, but the government usually change them before five years^{MH}

The interviews expressed the conflict between the interests of planning authorities and private actors. It seems that this conflict comes from the conflict between public interest and those private actors seeking the individual profit. The ordinary builder stated:

The rules become stricter every day, those related to earthquake safety regulations, energy efficiency, or architectural rules, made the construction more complicated but these are vital for urban life and cannot be ignored. The problem is with some temporary policies that make builders confused. For example from 2005 until 2008 the municipality set up a density rule preventing any construction of more than 2 floors in Tehran. Concerning all the expenses for permissions and registration, economically it was not reasonable for builders to build less than 7 floors. This resulted in the migration of many builders to the other cities.^{B5}

Instability in policies and rules has effects on investors and makes them more conservative when investing in the housing market, the investor explained:

The unstable political situation and unsustainable decisions that are made by politicians prevent the investors and builders to apply long-term strategies.^I

As explained in the previous chapter instability is one of the characteristic of developing countries that causes uncertainty for actors and leads to the emergence of different strategies.

7.5 Architectural Design

The regulations for architectural design are approximately the same for all kinds of apartments except high-rise buildings with more than seven floors and pyramidal buildings. In contrast, the planning rules and regulations can be dissimilar in different regions and these are announced in a communication issued by the regional municipality. For instance, the density rules were determined for each neighborhood, but before the new Detailed Plan had come into force, it was the same for all zones. Since the additional density allowed for a fifth floor being

available for purchase in most regions, this opportunity is also given for the sixth floor in some areas with a more expensive rate.

The manager of the Consultant Company (design and architect) explained that according to the regulations, the private builders and construction companies have to seek consultation services. They consult with consultants in the first phases of the project but about 50% of them leave the consultant and continue the project in their own way. In Iran, most of the observations and controls are related to the foundation and after the structure is done, there is no more serious control. The other issue is theoretically 5% of the construction cost belongs to the consultants but the investors are reluctant to pay such sum. This is why some of them will leave consultants after they get their advice on the basic structures.^{cc}

On the other hand, one investor believed that “the consultants are weak, are not up-to-date and they merely focus on making profit”¹¹. The interviews expressed various points about the regulation related to architectural design. The manager of Consultant Company believed although having these regulations is useful, they need to be up to date and flexible in some cases. Tehran’s traditional comprehensive planning just deals with the physical aspect of planning with no consideration of other social and cultural aspects. Therefore, its structure and view has become unpleasant with no spirit.^{cc}

Moreover, in local councils, there is no professional committee to accept the new and creative planning. In 1963, the policy-makers had imagined the future based on which they set inflexible modern regulations that are not comprehensive. Especially in local councils, more freedom to see new and up-to-date planning is needed. He criticized the consultants regarding this aspect:

The builders and consultants adopt the western models and theories in Iran without attending to whether are suitable for Iranian culture and its economic and social situation. Then, they fail to respond to the housing demand properly.^{cc}

7.6 Analyzing This Stage through Three Case Studies

This section focuses on the restriction imposed by regional municipalities and SUCA in the direction of practicing this unrestricted power, and how the agents in the three cases studies reacted to these constraints imposed. Analyzing the three case studies manifested how this stage is affected by different elements and whether it relates to the nature and size of the project. In addition, it unfolds the importance of actors' interests and roles in the evaluation of this stage.

In case study1, getting building permit took five months. The case study 1 architect said that an architectural design usually does not get approved by municipality the first time around. She confessed that in this case the architectural design was rejected because of her neglect to consider regulations about disabled people. She had found that in twenty units and more, 3 percent of units have to be of a design suitable for disabled people and in this project, only one unit had been allocated.^{a1} As a private actor in the role of architect, she considers all regulations as constraints. In a response to a question about how much she finds them useful for construction quality, she answered that the regulations cause more limitations than improvements in the quality of housing.^{a1}

In case study 2, the building permit was issued for four storeys and during the process, the permission for the fifth floor was obtained through negotiation. In this case the building approval cost, which includes the cost of buying extra density, was 1miliard Rial (\$40,000) and it was roughly ten percent of the total project cost². On the one hand, the builder failed to accomplish the requirement in accordance with the Building Bylaw 2009, so institutional action was employed against the builder in which the penalty was imposed ton him. On the other hand, the builders' interaction with the approval authority through communication and economic modalities of interactions in order to eliminate the conditions imposed by the planning authority helped him.

One of the strategies applied by the manger in case study three was, the manager had an informal conversation with the regional mayor, before making a formal application for the housing development plan. This stage was gone through significantly differently in case study 3. In this stage, the cooperative employed the communication modality of interaction very effectively along with the sanction

modality of interaction in order to legitimate such actions against the situation imposed on them. Consequently, this enabled them to interact with the regional municipality (22) that is particularly characterized by the political and authorities' power.^{BD3} The style of communicative language employed by the board of directors in the negotiation can be identified as akin to what Clark and Dear (1984) called 'hortatory language': that is, strongly urging listeners to give support (p, 90).

The cooperative had a special essence causing the power in the negotiation comprising its nature as a cooperative that enabled it to access some kind of public land belonging to the Fire and Rescue Service, which is one of the Municipality-affiliated organizations. It was exposed by the specific offers for cooperatives to access some plots of land owned by the municipality in region 22. Thereafter, as expressed in the previous chapter, the board of directors started to negotiate and bargain about the land price and they succeeded in reducing the price to less than half. The next stage of negotiation was about getting a discount on building permit and extra density that was a considerable amount.^{BD3} ^{cB3} Their power apparatus in their negotiations related to their affiliation to the municipality and they raised the point that members of this cooperative are municipal employees so the municipality could exempt them from its fees.

Their negotiations took one year, and led to the passing of the bylaw stipulating that municipal employees are exempt municipality charges such as density and building permit fees up to 200 million Rial. In addition, the allowed density for that zone was a hundred percent, meaning it would allow the construction of 10,000 square meters increase to 30,000 square meters after negotiation. The 2,400 million Rial density fee was supposed to be paid so that each share would be 500 million Rial ^{BD3} ^{cB3} .The table below compares the strategy of firms' managers (builders) in dealing with the Local Planning Authority.

Table 7.1 Strategy of firms' managers (builders) in dealing with the Local Planning Authority

Case study	To speed up process
1	<p>1. Try to be up-to-date with new bylaws and regulations to prepare an architectural design that complies with the regulations as much as possible</p> <p>2. Establish close informal relationship with municipal officers and staff</p>
2	<p>1. Apply PMC method during the land acquisition process and dealing with the ORD preparation of an architectural plan</p> <p>2. Start construction stage along with informal negotiation about extra floors</p>
3	<p>1. Try to prepare accurate architectural plan with less places that need modification</p> <p>2. Have informal discussion with regional Mayor</p> <p>3. Start construction stage after informal agreement with municipality before obtaining the building permit</p>

7.7 Conclusion

This chapter has investigated one of the vital and fundamental stages of the housing development process, which includes obtaining the building permit, through looking at three case studies. As demonstrated in the three case studies, the planning legislation clearly grants wide unrestricted powers to planning authorities in determining planning, architectural design and building permit applications. In the case studies, it was clear that the authorities employ the provisions under the planning legislation to fulfil the development policies. It showed how the public institutions interact with private agents through the economic and political modalities of interaction. In addition, some regulations and bylaws such as density have an economic control effect. The results of the interviews showed how the agents in three case studies reacted to the limitations imposed by them.

The Agency Perspective

At agency level the result shows the great tendency in actors to perform profit-making behavior and display a selfish attitude. It is also apparent in their strategy that there was a considerable tendency to break the law and find a way not to comprehensively apply rules and regulations. Apart from those regulations that they feel are useless from a professional perspective or feel that constrict their work in unnecessary ways, such as frontage regulations, they also tend to avoid employing those that improve the quality of the built environment but are in contrast with maximizing their profit. The interviews also revealed how relationship-based this stage is and when builders apply this strategy they encounter an unstable environment.

The Institutional Perspective

One of the most crucial and determining institutional changes that occurred during the fieldwork of this research was the implementation of the Tehran Detailed Plan. The second phase of interviews took place after this crucial change and it was expressed how the structural change had an effect on agents' strategies and perceptions. In addition, there was a chance for the researcher to observe another important institutional change, which was launching the Electronic Service Office, and transfer the part of executive responsibilities and administrative tasks to them. The aim was reducing the role of ideas and preference in implementation and

interpretation of policies and regulations. In addition, it aimed to reduce room for bribery and corruption, building a trust with private actors and convincing the public opinion about its efficient performance. There was a great hope to correct the mistrustful conception of people about the Tehran municipality's function which have been present for a long time.

Case studies two and three failed to accomplish the requirements in accordance with Article 100 Construction Law 1998, so institutional action was employed against the builder and they charged more. The builders interacted with the communication modality of interaction in a course of negotiation and bargaining. However, in terms of architectural plan, there was no place for negotiation and regional municipalities refused the architectural plans, which could not exactly meet all the related regulations in construction law and Municipal bylaws. For instance, in case 1 the architect had to change the architectural design to prepare one unit for disabled people. This shows that in relation to architectural design standards and specifications, there is no flexibility and strict situations were applied by the local planning authority to secure the prerequisites. However, in terms of the building and construction approval plan such as density and storey regulations, which create an opportunity for the Municipality to earn more income, the local authority shows more flexibility.

As evident in interviews, the planning authority has also made occasional decisions and fast changes in regulations by introducing new bylaws. This uncertainty was the product of the multiplicity of decision-making bodies and legislators and lack of coordination among them. The development agents, such as builders, consultants, and architects were aware of this, hence they are seeking short-term projects and in order to survive in this situation establishing informal links with the officers. For instance, in case study 2, the firm manager had an informal discussion with the director of the Detailed Plan of the region and in case study 3 the manager had an informal discussion with the regional mayor. The results highlighted that the institutional environment at this stage induced private agents to apply the relationship-based strategy to survive.

8 Chapter 8 Descriptive-Analysis of Event 3

Third Stage of the Housing Development Process: The Construction Stage

8.1 Introduction

The third stage of the housing development is the most challenging with respect to different individual agents and various public and private service organizations, various processes and different phases of work. It is a problematic stage entailing a wide variety of effecting factors, which make it unpredictable. It engages the physical activities of construction and involves agents such as builders, civil engineers, building material and equipment suppliers, sub-contractors, utilities services, the municipality and the Construction Engineering Organization as a control body. The housing development process has remarkable multiplier and linkage effects on the other sectors of economy such as manufacture of building material. In addition, this stage usually is a cause of delay in the whole project and prevents the project from catch up with the schedule.

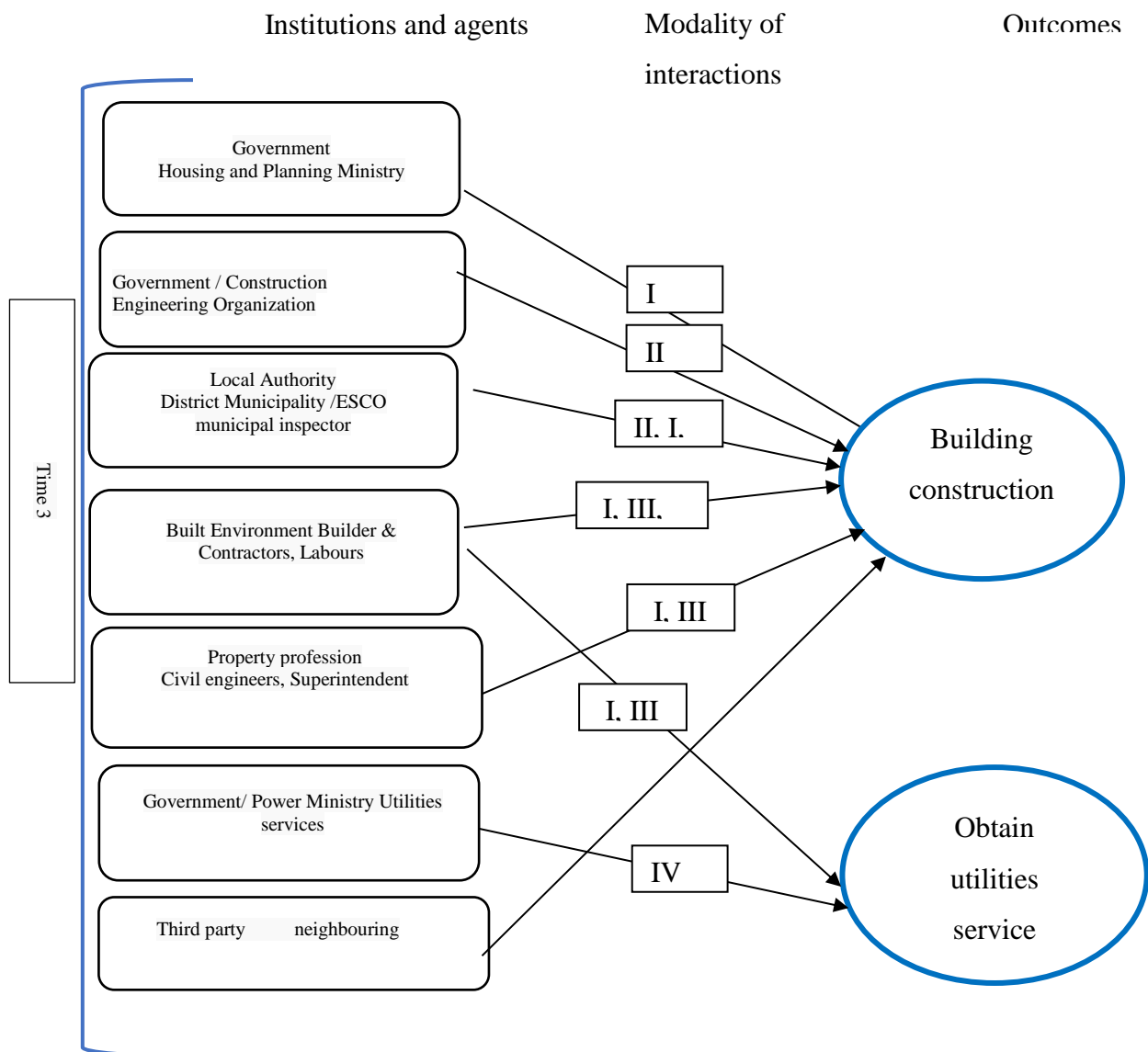
The performance of this stage varies with the type of firm and size of housing project. This chapter contains two main sections, firstly illustrating the institutions and agents active in this stage and their way of interacting, and providing an empirical outline of the agency response to the dynamics of the process and the method of making contracts with contractors. The second section relates to the second phase of construction, which is requesting utilities and interacting between private actors and the public sector.

8.2 Institutions and Their Instruments

In the construction stage, as case studies show, the institutional analysis concentrates on five prime categories of institution (figure 8.1) – the Government, the local authority (Tehran Municipalities and Regional municipalities), the Built Environment, the Property Profession and a third party. The agents in different institutions interact with other through various modalities to reach the intended outcome of housing construction. Agents under the Government institutions act as the regulator of the construction activity as well as controlling and supervising the

process of construction through the Construction Engineering Organization. The Local Authority also plays an important role in regulating and passing bylaw along with monitoring the construction process to be sure it complies with the rules, regulations and architectural approval of the project.

Figure 8.1The network of institutional relationship for the in construction stage



I – Communication mode of interaction

II – Political mode of interaction

III – Economic mode of interaction

IV – Sanction mode of interaction

The Built Environment institution comprises the most crucial agent who is the prime contractors' and sub-contractors' producer of the intended housing development. In addition, the institution of the Land and Property Profession consist of important agents providing the professional services such as superintendents⁹, project managers, and civil engineers.

The case studies confirmed that the level of success in implementing the construction activity depended greatly on the quality of the financial, organizational and managerial fulfilment through a collaborative teamwork procedure. The managerial factor could determine the success or failure of a project due to the difficulty of dealing with many sub-contractors. Specifically, in Iran most production carried out on sites lacks the prefabricated structure; similarly, it is often required to start production at a short notice on signing of the contract with a different sub-contractor. The three case studies show that constraints and restrictions in this scope put a high demand on the construction activity for efficient management.

The institutional analysis conducted displays that the main building contractors are the principal director in the construction activities. Hence, the case studies confirmed that carrying out the construction stage effectively and productively depends on the power of leadership and the proficiency of the prime contractor or superintendent who manages the project and coordinate the sub-contractors and engineers. Manifesting in three case studies, the inexperienced and ineffective superintendent – such as the one case study 1experienced – caused large financial losses and prolonged the project. Having an efficient project manager who is capable of handling unexpected events and problems was mentioned as an important factor that induced the construction project to be on schedule by the firm manager in the interview. Although an effective institutional change occurred in the first phase of the construction process in case study 3, adequate strategy applied by the project manager prevented the suspension of the project. In addition to being

⁹ The Superintendent (site supervisor) is responsible for all related activities, including project management and human resources management and accountability systems consulting, monitoring, and the implementation of the project.

experienced and having adequate knowledge, the prime contractor or superintendent is required to have effective organization skills to prepare the capability to accomplish the development projects given to them and to translate the architectural design and structural plans into reality (Wang, 1987).

Being a lengthy and complicated process, teamwork among the agents is fundamental. Generally, production function includes contractors, engineers, technicians, and several traders. All of them should consider each other person engaged in the team and that as everyone is a member of the team and part of the work, they can all affect the work of others and might even obstruct or smooth progress of the housing development project as a whole by their interaction (Ismael, 1994). However, it should be taken into consideration that in such a context as Iran, in addition to the contextual factors and institutional environment, these common elements such as team working have greater impact. As Keivani and Werna (2001) well explained, in developing countries like Iran, many dwellings utilize a traditional mode of production which is relatively labour-intensive, and semi-industrial methods of production. The multiplicity of actors who have to do their tasks at the same time on one site with a high probability of interfering in each other's tasks generates the possibility of conflicts and problems. In the three case studies it was noticed that the most common method applied by agents was the communicative modality of interaction which through it affects the construction process. The communicative approach was employed in this stage to support participating agents in resolving disputes so as to continue the activities as planned and on schedule, and in offering a deal and making contracts (see Dear and Moos, 1986a). Based on institutional analysis, in practical proof of what Dear and Moos (1986) stated, this style of language and communication approach have also presented the way in which economic, sanction and political power are implicated in the production process.

The builders interact with contractors through the sanction modes in varied types of contracts. Three types of contracts were recognized in the case studies indicating that the size and type of builders and the characteristics of a project have an effect on selecting the contractor type and method of contract. In all contracts, the prime contractor, sub-contractor, Mimar (see below) or superintendent agreed to

undertake the construction of the house building within a determined period according to the specified characteristics and at an agreed cost of construction; and on the other hand, the builder (firm manager) agreed to make payments for the work carried out for the agreed amount at an agreed point of time. One of the common patterns found in the three case studies under institutional analysis is the issue raised in this part in terms of breach of the building contract that occurred on both sides. Usually sub-contractors do not keep their promise to finish their work at an agreed time and in some cases, due to the lack of finance, builders are unable to pay the agreed amount of money after completion of the work. Therefore, trust plays a vital role in this respect and actors prefer to rely on their experience and the trust that was built by contractors in previous projects.

Another area of institutional analysis entails legitimation of institutional action through the sanction modality. In spite of being legal, institutional action might result in disputes between other intuitions or individuals. Sanctioning in this condition entails the legal instrument to define whether the institutional action infringed another party. Case study 2 witnessed the institutional recognition of the right of neighbours through the law of annoyance and disturbance of neighbors under section 12 of National Building Regulation. Under this regulation, any nuisance caused during the construction process is against the law and the owners or builders are responsible. The form of such intervention within the institutional framework was perceived in the case studies as the development process nevertheless implying noticeable public intervention to limit rights, to constrain bargaining process and to conduct negotiations with builders and landowners.

8.3 Contract Method and Contractors in Case Studies

Contractors are the most crucial agents in this stage. Contractors are individuals or firms who accomplish construction work for their employer who could be the investor or house building companies. Like builders, they have undertaken a broad range of forms (Madanipour, 1990) from the smallest scale, who are specialized individuals, such as plumbers, electricians, etc, to the highest scale, which are big construction companies that can work as a main contractor

^{p1, p2pm}. Madanipour (1990) defined an individual as “mimar” who “has traditionally been a builder in charge of the erection of the building as a contractor case to the owner. In that role, the “mimar” performed as combination of an architect, an engineer, and a master mason. Although it was a traditional way, it has been applied by some landowner specifically low-income in a low quality zones like south of Tehran” (Madanipour, 1990, 144).

In addition to various types of contractors of different levels and quality, many types of contracts can be made between them and their employee based on the nature and location of housing project. ^{p1, p2pm, p2, p3}. There are three general types of construction contracts: (general) management contracting, fixed contract, and multiple prime contracting. However, in a management contract the client enters into the relationship with a main contractor who is reimbursed selecting the sub-contractors, making contracts with them and paying their costs (prime costs). A fee entails sub-contractors’ costs, overheads, and profit. In most projects, except in contracting with major contractor companies – and they may reach five – more than one sub-contractor is employed on a particular project. ^{c1, c2, pm, c3}

In management and fixed contracting, a constructor is responsible for the entire project and pledges to the owner to perform the construction work in accordance with the contract documents. Otherwise, the landowner him/herself will have separate contracts with each sub- contractor. The prime contractor is responsible for coordinating and delivering the work covered by its particular scope of work. ^{c1, c2, pm, cm}

The contracts in the management-contracting route can be designed according to the employer’s expectation and the minimum of their demands are a technical supervision of the implementation of project, appointing sub-contractors and making their payments. Relating to providing material, the employer can buy it him/herself or fund a main contractor to buy the necessary materials. ^{c1, c2, pm, c3}

Unlike in the private sector, the general management contracting method is not applied in the public sector. Usually there are four factors playing a role in a construction project in the public sector. They are: the particular department or division in a public sector performing as an employer; contractor; a consultant; and a *kargozar* (representative) and trustee of the employer who chooses the contractor

and consultant. ^{c2c}Fixed contracting might be designed in two ways. In the first method, the contractor has to complete the project at a certain time with a certain charge for each meter that contains the materials and wage costs. However, in the second method the materials are provided by the employer. ^{c2}

The interviews show that in the case studies, there was no particular pattern and in each case the contract was made regarding the builders'/owners' strategies, the nature of the project and the agreement between project managers and contractors. In case study 1, a contracting manager is always responsible for selecting superintendents and sub-contractors for each project. However, the manager in case study 2 had previously hired a "mimar" instead of a contractor to whom he had provided materials himself in previous projects; but he changed his attitude in case study two. He explained his reason why:

In previous projects, I gave the responsibility to a Mimar as a contractor and controller. I bought the materials and gave them to the mimar but I found that the materials were not utilized efficiently and a large part of them was wasted. Therefore, I changed my strategy in this project (case study 2) and decided to make a contract with a contractor manager and I am more satisfied this way.^{c2}

The superintendent in case study one explained that if this company intended to work as contractor, it would be a main contractor, reliant upon the location of the project, and to the extent that an employer expects a professional work, the category of sub-contractors are defined by the company. This company constructs with professional teams such as a project manager, a superintendent and a project technician. ^{c1}

A company owner in case two outlined a noteworthy issue associated with the importance of managerial factors and the role of an experienced and efficient superintendent in the project's success.

The best result will be achieved by having a good superintendent who is responsible for choosing the best high-skilled sub-contractor in each section; but, there is an 'informal organization' behind the actors and the main structure. There is a possibility of collusion and or working down between sub-contractors. In (general) management contracting, the main

contractor is responsible for these issues but if I make a contract with multiple prime contractors, I then have to deal with them myself.²

8.4 The Legal Framework for Intervention: Institutional Control

Clause 7 of the Urban Planning act 1979 stated that an engineering supervisor is responsible for the enforcement of construction to be consistent with what is indicated in the construction permission and technical map. The structure of the Construction Engineering Organization (CEO) is too complicated to meet any intentional standard structure. Although the CEO was stabilized by the housing and urban planning ministry in 1995, it is an NGO, which is responsible for controlling the quality of construction based on Municipal rules and regulations. However, being affiliated to the Housing and Planning Ministry limits its activity and inhibits its function as an NGO. Through the political modality of interaction, the Ministry uses political instruments to have a hold over the CEO and determined the central board and its chairperson: it has made the supervision of the ministry by the CEO impossible. The issue which intensified this problem is the failure of member engineers in this organization to create coalitions. There are different factors involved in the construction control in Iran that complicate the system. On one hand, based on law, the municipality is responsible for the sustainability and quality of what is built in a city and its compliance with planning regulations. On the other hand, note 7 of Article 100 mentions an engineering supervisor who shall be selected by the owner as having professional liability for the proper implementation of a building. In addition, according to Article 27, the Construction Engineering Organization has to introduce an engineer who has a Prestigious Engineering License in one or more fields of engineering to control the quality of housing.

In Dear and Moos' opinion (1986) this outcome happened without a great deal of communication between the institutions and parties involved in the process and this lack of communication may be a consequence of the distinct interpretive communities that create the coalition which led to turbulence in the supervisory and monitoring system. The lack of coordination between government and municipality

to prepare a comprehensive and efficient controlling system for the construction stage was an unintended outcome.

The issue of controlling construction was covered by the media and therefore became an external force for public authority, and pressured them to react to this issue and explain to residents through the media. The destruction of some buildings which were next to the buildings under construction – due to a failure to observe safety rules – led to highlight this issue on national TV and in many articles in newspapers. Being raised in public led to many interviews in the media with both responsible and involved actors and public authorities about what happened and to try to ask their suggestions and solutions for this problem where public pressure was inured to changes in the construction control system (urban economic, 2012). Changing the rules of construction control and handing over the control responsibility from an engineering supervisor who is chosen by a builder, to an engineering supervisor who is selected by the Construction Engineering Organisation, could be one of the most unique and interesting practical examples of the duality of interaction between agencies and structure in space-time. In the conception of builders and contractors, municipal control policies accounted as an instrument considering the fabric without paying attention to the quality of a building. The main contractor criticized the attitude of the municipality in construction control:

The municipal inspect just seeks to find a problem to make money, not for improving the project. He only focuses on it matching the architectural plan and the consistency with the construction permit rather than the quality of building. ^{cl}

However, it is observed that many actors such as speculative builders and engineering supervisors neglect the quality of houses in favour of merely seeking their profit. The speculative builders prefer to finish the project with the lowest possible cost and some engineer supervisors would rather make money without any effort to control the construction process and sign the municipal control form without supervising the project.

8.5 Resources: Finance and Labour

Finance

The process of getting access to financial facilities for a housing development project was another crucial and problematic event. It is obvious that without adequate capital the project simply cannot go forward. This is a very common problem in Tehran that projects are abundant in this stage because of the lack of capital to proceed successfully. In case study 1, financial deficiency has proven to be the major factor causing the delay of the whole project and in case study 3, convincing households to increase the capital to continue the project was mentioned as the most important problem of a firm manager. Financing in this step impacts the way that the employer provides capital to cover the cost of contractors and materials. In the situation where a contractor is responsible for covering the costs of materials and sub-contractors, the contractor should raise finance for this stage.

A constant in all interviews was that financial problems are one of the most common problems among most of the projects and one of the important reasons for prolonging the process. As exhibited in case studies 1 and 2, the financing of construction was problematic because for case 1 it coincided with the economic recession period in which the cash flow decreased and the previous built units of the company were still unsold. The methods of securing finance by builders for construction expenses related to the type and financial strength of the builder. The semi-large and large companies usually have enough capital for their projects but the small companies or ordinary builders should have waited to sell their units in other projects or pre-sell some units from the one, which is currently under construction.

The company that delimits its activities to the housing sectors and has no source of capital other than the revenue of selling its units was impacted more than others by the recession. Furthermore, because the bank interest rate is not reasonable, the builders prefer not to keep their capital in the bank but invest in other sectors, so they face a 'lack of cash' when they need it during the construction stage, and it takes time to convert assets to cash. ^{pm 3 1}

The project manager in case 1 described that his firm is a project-oriented company and all income is dependent on its projects with no other income source.

For financing this project, units from another project were intended to be sold and the revenue to be spent here. Because of the recession, those units were not sold and this project faced a financial deficit. ^{pm3a} The company was dealing with three projects contains 50 units. The builder had to wait to sell those two projects units and spend the revenue in the Iran pars project.^d The architect of the project believed that the recession was not the only reason for the financial problem in this project and which caused the delay in completion: ^a

The company owner made too optimistic an accounted of the company's assets

The project manager added more reasons to the architect's views, which are observed in many projects as well. Sometimes a company does not have enough capital for a project but they start the project anyway. Then, when they encounter to lack of money during the construction, they suspend the project until they are able to provide the required capital. The same happened in this case study: the company did not have enough capital at the moment of starting this ongoing project, and therefore, the project was suspended for several months until the construction costs was provided.^{pm1}. She criticized the manager's perspective about financing the project:

There is a traditional view of housing development in many housebuilding companies, and in the attitude of the managers of these companies, that one must act in this market like a normal landowner who considers the project as a source of income. However, it should be clear that the amount of income that is generated must be spent on this project and the cash flow of each project needs to be analysed precisely. In a traditional view, a manager starts the project without adequate capital and has a hope of providing it during the construction. Nevertheless, should that employer/owner want to perform the role of financial manager, he would be completely unaware of the consequence of a delay in providing capital.

^{pm1}

The interviews revealed that in many firms the traditional method of managing is applied; that the management of costs is not seriously considered; and that the employer takes on the responsibility of financial manager himself. Besides the

direct influence of the recession, the actors' perception of the economic situation and their estimation of future trends affects their strategy and behaviour. It is implied in her interview:

The owner of the company was so optimistic. The risk analysis of the financial resources was not done properly to figure out the future investments. I did not agree with the feasibility study for this project because the company could spend this cost and energy in another location. The cost of contractors and superintendents are the same everywhere, and then it is better to invest in somewhere with more yield.

pm

The differences in financing this stage and the way to reduce costs in the three case studies were related to the type of firm, firm managers' strategies, interests and ideas. The below table compares the different strategies of providing capital for this stage which were employed in the three case studies.

Table 8.1 Comparing strategy in construction stage in three case studies

Case study	Financing	Reduce the cost of construction
Case study one	<p>Manager own capital</p> <p>The revenue was made by selling the built units in other projects</p>	<p>Employ experienced superintendent who is responsible for dealing with sub-contractors and employ the best sub-contractor in each step</p>
Case study Two	<p>Firm manager gave one unit in a project to the main contractor as a wage</p> <p>Private investor</p>	<p>Changed the strategy from employing a Mimar (traditional way) to a main contractor</p>
Case study Three	<p>Firm manager gave one unit in a project to the main contractor as a wage</p> <p>Raise finance from applicants</p>	<p>Employ experienced superintendent and contract with one man, a contractor who has been working with him several years; possible to pay the wage in instalments</p>

Labour

The labour market is influenced by two structural forces: government policies and the economic situation. Labour market domination by Afghan workers makes this market very sensitive to both labour laws and immigration regulations. The success of the urban economy reflects the position of the city in the special division of labour and the property market supports that position (D'Arcy and Keogh, 1999, p.921)

Almost all labourers in the construction sector are Afghan and Iranian workers who are not willing to do these kinds of works; likewise there are not contractors willing to hire them. The Afghans are preferred because:

Afghans are technically better, cheaper, and satisfied with no insurance, since most of them do not have work permits. Iran's labour laws are the world's worst labour laws; in any case, the law is pro-worker. The only issue we have with them is that occasionally they are arrested by the Labour Ministry to be deported to Afghanistan and the project stops to free them by paying a penalty or bribe.^a

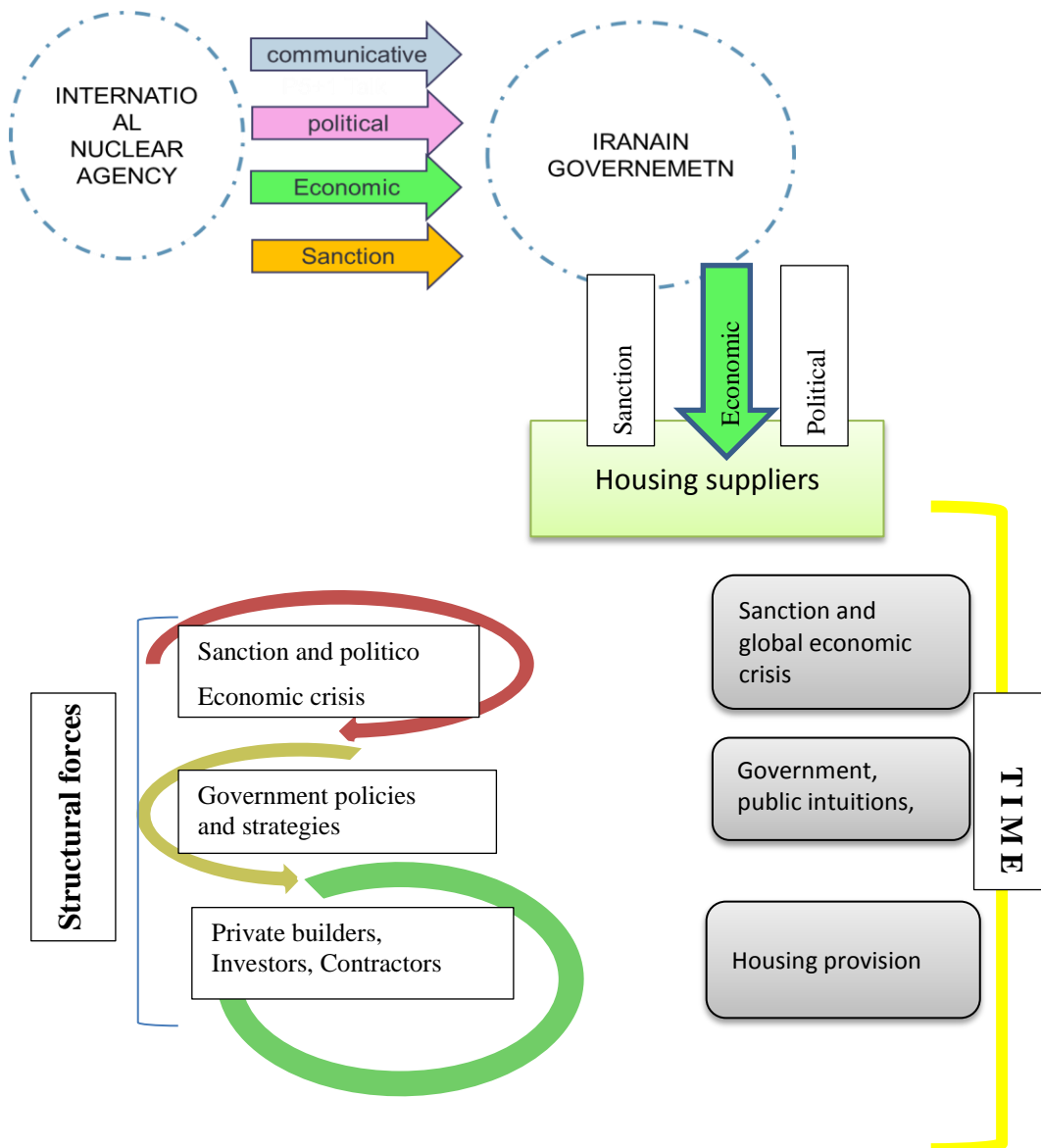
Then again, the labour cost is not very considerable in comparison with the material cost. However, the wages have been affected by sanctions recently through two aspects. Firstly, the wages have been increased because of inflation, and secondly, the Afghans workers change their wages to dollars to send it to Afghanistan and a devaluation of Iranian currency caused them to gain smaller wages in dollars than before. The next section will explain the effect of structural change on the labour market in more detail.

8.6 Structural Forces: Sanctions

Imposing sanctions against Iran has caused serious complications for the economy and its people, having an impact on the housing development process from different aspects as well. These sanctions have caused a change in the economic and political situations and have placed constraints upon actors at different levels. These kinds of structural changes that rarely happen during one project and in a short time, have created a unique and valuable opportunity to

scrutinize their influences on actors' strategies and resources. One feature that distinguishes this circumstance is that structural alteration has not taken place based on the interaction between the actors and structure in the system, even while it was imposed by external forces beyond the system.

Modes of Interaction



It is also generated another level of structure including western sanction and politico economic crisis for Iranian Government. Therefore, specifically since Jun 2012 the agencies have faced two levels of structure with a new type of constraint. In addition to the influence of sanctions on the actors that will be explained in

detail, the government policies in reaction to the western sanction became a new structural force for actors. Indeed, the Iranian government had to play the role as of agency encountering the western government and P5+1 Nuclear Talk Group. As mentioned in chapter five that one layer of agency can become a structure for the next layer (Guy and Henneberry, 2000. p.2413).

Regarding the recent and most crucial western sanctions, which coincided with the research fieldwork stage, the housing project in case study three was on a first phase of construction and hence it enabled the researcher to observe and explore the impact of sanctions on the housing development process, resources, and actors' strategies. The contractor was faced with a sudden increase in material price which was a consequence of the sanctions and the devaluation of the national currency.

8.7 Second Phase: Requesting Utilities from Urban Infrastructure Companies: Water-sewage, Power and Gas

Usually when construction work reaches second phase, after finishing the framework step and before starting the electrical wiring and pulp work, the requests for different services are submitted to different organizations. ^{s1} For requesting all these services, the property deeds and construction approval are needed. The power company is the most critical of the utility organizations because of its long processes and high charges. Most of the interviewees complain about the price they have to pay for getting the power service and keeping receiving it^{s1'02'd'2'3}. In some cases, it takes one year to get the power service. Another issue that most of the interviews indicated was about transferring the responsibility of electrical substation installation and executive functions to some private firms by Electric Company.

In 2009, the government decided to shift its responsibility of providing power to quasi- public firms. The remaining provincial responsibility was notably reduced since this task transfer was done. It was not just delegated to an executive authority, but it became an economic modality of interaction. This policy forced builders to pay the costs of a power substation apparently far more expensive than before. The financial responsibility for facilities to improve the quality of power distribution networks was shifted to the builders as well.

The customers are charged by these firms much more than the price previously charged by Electric Company and it burdens an extra cost to the construction expenses^{s1,c1,bd3}. In so doing, the actors believed that the electric company charged the house builders to repair the electric network^{s1,c1,bd3}. For instance, the 500-meter cable cost 3 m Rial and although it is expensive the builder "has accepted it as an immutable structural factor"^c. The contractor said that:

The electric network is weak and although it is the responsibility of the electric company to deliver electricity to the residents' homes, it still asks the owner to pay the cost of network repair. I have a finished project, which has no electricity after two years, and which residents inhabit^d

The interesting point revealed in interviews is that the opinion and perception of the agents who belonged to governmental institutions is in total contrast with that of private agents. In contradiction to what was above stated, the Deputy Director of Planning and Development, in the interview claimed that:

This company works very effectively and unlike the commentators' claims the process does not take so long. It needs time because we consider the electricity plan very carefully and Bureaucracy has to proceed. Furthermore, there are a few experts working in this sector with many applicants. The experts have to visit the sites and work on the design to determine how we can give our service to the applicants."

In a response to the criticism of the high cost, which is expressed by these private contractors, he justified it in a way below:

The infrastructure and grid needs to enhance in most areas. The private sector earns a high profit and this amount of money is nothing for them."

It is crucial to pay attention to the above view and concept of the Deputy Director about builders and builders gaining a huge amount of profit, and that these expenses are nothing for them, and that the public institutions are given the right by themselves to charge them. The policy makers in the municipality have exactly the same point of view about the builders, which derives some rules and regulations. The public authorities think that builders would be charged in such cases neglecting the point that these costs are passed to the buyer.

In a case one, the electric company, in a response to their request, specifies 2013 for providing them the service. The electric company stated that the extension of the process for this case was because this project located in zone 5 where high demand, weak infrastructure, and lack of electricity meters, are delaying factors. Therefore, the electric company introduced private affiliated firms instead to do their task. The PC noted that the cost of these private affiliated firms was ten times larger but they provided the service three years sooner. The company paid 12 m Rial for getting electricity.

The builder in the case two complained about the similar happening in applying for electricity and he raised the same issue:

The cost of electricity differs from each site, depending on the infrastructure of the location and the power of the grid. These private companies cost very much and this project was charged 350 million Rial. ^{o2}

Comparing the electricity cost and delivery time between the case studies corroborates that there is no particular rule associated with cost and delivery time which enables builders to schedule and estimate the project expenditures. The process of applying for the water service is not as problematic as power but it takes one to six months to get the subscription. In case one, it took six months to get the gas and water splitting. It could be done sooner but during the construction stage, the water that was utilized was illegal and this caused a problem and led to a fine. ^{s1}The water costs related to the numbers of units because the constructors are charged by water meter for each dwelling. ^{o2}

Due to the sensitive nature of the gas, applicants have to refer to the engineering sector of the Gas Company and submit their request. Then the engineering expert arranges a date to visit the site. After visiting the site, the safe scheme for gas piping is devised. For gas piping, applicants are free to choose between employing the gas company technicians and hiring a private technician; however, if they employ a private one it takes more time for GC experts investigate their work and confirm it. Therefore, applicants usually prefer to employ GC experts for safety and saving time. ^{s1}

In case one, the GC technicians were employed and the whole process took one month. It counts as a smooth procedure. In addition, a *kargozar*(representative) mentioned that he made contact with the expert and they collaborated on other projects as well. ^{s1}

8.8 Role of Network, Reputation and Trust

In unstable institutional environments reputation is a key for having a successful firm (Frashahi & Hafsi, 2009) and the best strategy to overcome the instability is network-centered strategies (Peng, 2003). In affirmation, the interviews made the significance of trust between actors in this stage crystal clear, to the extent that contractors were selected based on trust. The reputation of contractors plays a determining role in inviting them to work with builders.

One of the reasons that builders prefer to make a contract with known contractors was explained in this way:

The sub-contractor might make a claim during the project and demand more money than agreed in the terms of the contract. It is preferable to work with a sub-contractor who has been known for years and whom you've already had work experience with. ^φ

The below comments of the main contractor and project manager highlight the crucial role of trust:

The main contractor would rather not work with a new sub-contractor unless there was a compulsion ^d

The project manager in case three believed that the relationship between employer and contractor should be built on trust and friendship and if the employer conceived distinctive benefits for the contractor the project would not be successful.

^{bd3} However,

If a contractor takes a share of the profit, he will do his job better. We always try to build our relationship on trust and just work with the contractor who we worked with before. Several times, we tried to find the contractor through bid but it did not work. The contractors who had experience in cooperating with us in our previous projects usually give us a cheaper price and are familiar with our system. Furthermore, because

of trust and reliability, payment will be made after completing each step.

bd³

The relationships between contractors and housebuilders contain mutual benefits.

The owner of firm case study 1 mentioned the friendship and trust as factors of his success in his work:

The quality of my work is important but the most important feature is honesty and trustworthiness. I accept entire mistakes in the project and if problems arise with the building, the buyer could contact me and I would solve the problems^d

The representative of case 2 uncovered a point about the public institutions that were involved in the housing development process:

"I always deal with these public institutions in all projects and I have found that having contacts and spending extra money or giving bribes make the process easier and even accelerates it."^{s1}

8.9 Conclusion

This chapter shows that the construction stage in Tehran is carried out in a traditional model of production that is relatively labour-intensive and uses semi-industrial methods of production. The case studies showed that the level of success in implementation of the construction activity depended greatly on the quality of the financial, organizational, and managerial fulfilment through a collaborative teamwork procedure. The managerial factor could determine the success or failure of a project due to the difficulty of dealing with many sub-contractors. The actors interact with each other through communication and economic modalities of interaction in this stage. According to the importance of trust, networking and reputation among housebuilders as an employer and sub-contractors, the acquainted contractors are the preferred choice of builders.

Regarding resources, the level of finance, skills, and expertise play a crucial role in this stage. Shortage of funds is a common problem in this stage in many housing development projects, regardless of its causes; and it can result in the delay or suspension of the project. There are reasons at structural and agency level

for the financial problems; as shown, case studies one and three both faced a financial crisis. Whereas in case one the economic environment problem was intensified by the manager's strategy and behaviour; the strategy adopted by the firm manager in case study three and the method of his interaction with the prime contractor helped the housing project to continue.

This chapter revealed the one driving force of the competition between the public and private interests with respect to profit and property. The institutional change was observed in the Power Company, which provides the terrain to make a profit through shifting the executive responsibility to semi-public companies.

Two important structural changes occurred during the research that enabled the researcher to examine the effect of these changes. It showed how sanctions and devaluation of national currency affect the labour and materials markets in this stage, as well as the way in which private actors react to these changes and modify their strategies. The analysis of western sanctions against Iran explained how one layer of agents could become a structure for the next layer and the reaction of the government to the sanctions led to several unintended outcomes in the housing provision sphere. It also showed how economic status could affect the performance of housing development projects, such as in case study two, where the recession caused the housing project to stop for a year. The case studies revealed that the development actors have to have a flexible strategy to attempt to survive in the face of such rapid and drastic changes; and indeed, not all of them could survive.

- The following aspects were found as constraints in this stage:
- The absence of new technology for construction such as prefab structure, on-site construction activities and being labour-intensive
- The lack of power management and expertise of the project manager (site superintendent)
- Many houses are still built in the traditional way with a Mimar
- Neglecting the safety and quality of construction, especially in constructing for middle-class and low-income families
- The weakness of the control body, and disputes between the governmental and municipal institutions, led to turbulence in supervising the construction process

- The construction regulations mostly deal with architectural aspects rather than the necessary types of rules related to quality and standards of building
- Rapid change in rules and regulation and delay in informing actors

9 Chapter9 Descriptive-Analysis of event 4

Fourth Stage of Housing Development Process: The completion and Marketing Stage

9.1 Introduction

The last stage of the housing development process is completion and marketing. This stage involves three important steps: obtaining the deeds for the completed units, getting a Certificate of Completion of Construction and, lastly, marketing the end products. It involves different activities and different types of institutions. In addition to acquiring the deeds from the Organization for Registration of Deeds and Properties, and the issuing of the Completion Certificate by the regional municipality, many tenants need to be attracted to occupy the building as soon as it is ready to release.

This chapter consists of three main sections; the first section focuses on identifying the institutions and agents involved in all three steps of this stage concentrating on agents' interactions within an institutional context. It also attempts to illustrate the instruments of different institutions in three steps to understand this stage. The second section stresses the relationship between agencies in the process of getting the deeds. It unfolds the steps that should be carried out by private agents in order to obtain the Certificate of Completion of Construction from the local authority. It also reveals the legal framework for intervention by local authorities and their tools and instruments to control the housing development process. These two sections illustrate the necessary steps builders must pass through to obtain the right for release and sale of the newly completed dwelling. The last section discusses the marketing of built units and finds the different ways of marketing housing spaces that is carried by the house-building companies. The interviews reveal that ways of marketing vary among house-building companies related to the firms' size, type and level of work. At the time of the interviews, case study 3 was in the construction stage and the firm's manager stated that he would market the housing space through the firm's own leasing department.

In is worth noting that as mentioned in chapter five, the sequence of events does not necessarily follow the same order in all development projects. The

sequence can be changed according to the company's strategy. For example, in case study 3, the development project was demand-oriented due to the nature of the firm, which is a cooperative. Marketing took place as the first step and just ten percent of the dwellings were anticipated to be left for release after completion of the project. In case study 2, facing a lack of capital in the construction stage forced the builder to pre-sell some of the units to enable him to continue the construction. Before concluding the chapter, the summaries of the agencies' ideas, interests, and roles in the housing development process are presented.

9.2 Institutions Involved in this Completion Stage

The institutions involved can be categorized according to their role in three different steps of this stage: obtaining the Certificate of Completion of Construction, getting a deed for new units, and marketing (Figure 10.1). Institutional analysis shows that the local planning authority plays a role in the first step through the political mode of interaction. This reflects the exercise of the regional municipality authorities' control over the implementation of housing development projects. The urban planning authority participates in the inspection of the completed project to ensure that planning and design guidelines have been properly observed. The most important issue is that the completed unit must comply exactly with the approved architectural design and construction permit. Case studies 2 and 3 saw the institutional control over the construction process when finding a conflict with the initial submitted plan.

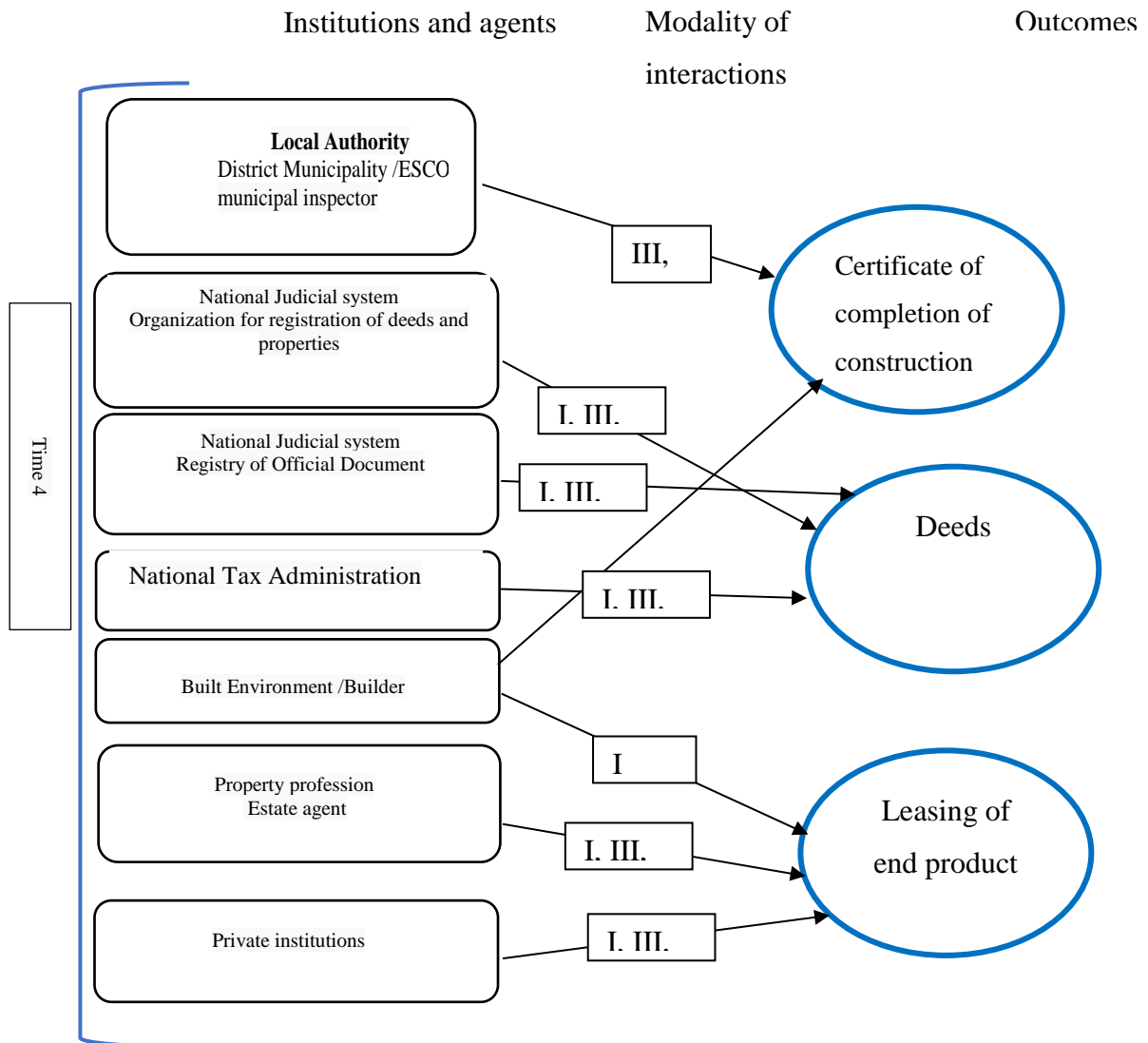
According to Article 100, the Superior Council of Planning and Architecture, the municipalities, and the Construction Engineering Organization are responsible for controlling the construction process. After completion of the process, if the inspector finds any conflict, the local authority, through the legal apparatus and depending on the type of infringement, could fine the builder or demolish the part which was built against the regulation.

Another important step in this stage is getting the segregation deeds for each new unit. A major condition that affected this process policy in the longue duree was the social history of land ownership in Iran. Land ownership is one the most important and controversial issues in Iran. There are many disputes over the

ownership of shares and inheritance, mostly because one property should be divided unequally between different people during participation or conveyance.

The two agents from the state authority involved in this step make it difficult and lengthy for applicants. Another institutional control is taken by the Organization for Registration of Deeds and Properties in order to support the right of the residents and observe construction in terms of legal matters and compliance with privacy legislation. The inspector observes the area of the property to assure compliance with the building designs and reports the accurate data to the ORDP to issue the deeds. Calculation of the common space in each housing project is one of the concerns.

Figure 9.1The network of institutional relationship in the completion and Marketing Stage



The institutional analysis of the marketing step involves three institutions. These are: private institutions that form the user of the completed housing development, the Built Environment, and Land and Property Professions. In all development projects, the issue is to sell the finished products at a hundred percent rate by the time the development is accomplished. There are different styles of marketing depending on the type, strategy, ideas and target markets of each firm. However, one similar pattern identified is that each category of builders has almost the same style of marketing the building units. Results of the first phase of interviews show that large house-building companies and semi-large builders usually have their own property marketing departments and the decisions about the release and marketing of units and the sale price are made in those sectors. It should be mentioned that in the Iranian context, estate agents play the most crucial role in marketing the completed house by interacting directly with the prospective client. Apart from the mentioned group, for other types of builders it is the main style of marketing their products. Although the semi-large builders have their own marketing units, they still release some of their products through estate agents. For ordinary builders, family and friend networks and advertisements in newspapers are considered a style of finding a customer for products as well. In this step the agents interact with each other through the communication mode of interaction, and especially for estate agents it is the most important mode of interaction. Since the marketing process involves a lot of negotiation in endeavouring to reach a satisfactory deal, the state agent applies a bargaining style. In addition, the house-building companies employ the economic mode of interaction as well and in relation to estate agents they have to consider the percentage of their share from each trade that was made by them.

One of the structural forces which has an important effect of this stage is the economic condition. The impact of the economic recession on the housing property market left many housing units vacant. Case study 2 encountered the economic recession and the process of purchasing all products took three years; the predictions of the manager of the firm went wrong and they faced financial problems. The economic recession hit more seriously those companies whose target

market is medium or low income due to noticeably decreased affordability of these classes.

In an institutional context, the interviews in both phases exhibit a change in the local housing development agenda whereby the development of housing has included not merely the provision of best sites and buildings with a high standard of quality and less tangible issues such as infrastructure, but also a concern with interior design, leisure parts and luxury facilities. This new wave has emerged in the past decade through one of the biggest structural and institutional changes in Iran that led to the creation of a new rich class in Iran. When president Ahmadinejad came to power, some actors through establishing contact with government institutions were able to access an enormous source of finance from oil revenue, and a group who took advantage of western sanctions by break the sanctions suddenly achieved a huge amount of capital. This new social level has created the kind of demand for luxury houses and it caused the changes in firms' strategies to respond to this new kind of demand. The interviews in the first phase with some firm managers indicated that this social and economic phenomena affected their interests and strategies, and therefore, they attempted to incorporate such features and facilities into their building design. Among the three case studies, according to their target market they were not seeking to build these kinds of first-class houses, though providing housing with an appropriate standard of quality is one of the most important things on all of their agendas. However, the firm manager in case study 2 talked about the tendency of his firm to change strategy to provide these kinds of first-class houses because its market is guaranteed.

9.3 Application for Certificate of Completion of Construction

Upon completion of the building, the Certificate of Completion of Construction should be requested from the E-service offices and the deeds, architectural plans and construction permission must be submitted. A municipal inspector investigates the completed building to ensure conformity with the approved plan. Figure 9.2 depicts the process of obtaining the Completion Certificate. If the builder built against planning regulations or with a difference from the approved architectural plans, depending on the type of contravention would encounter up to three

circumstances; paying the penalty, demolishing the part that is different from the approved plan, or possibly paying a bribe. Actors' strategies in the face of structural forces are determined related to the cost–benefit analysis so they evaluate what they gain through contravening the rule. Therefore, by doing the cost–benefit analysis they choose one of those above options.

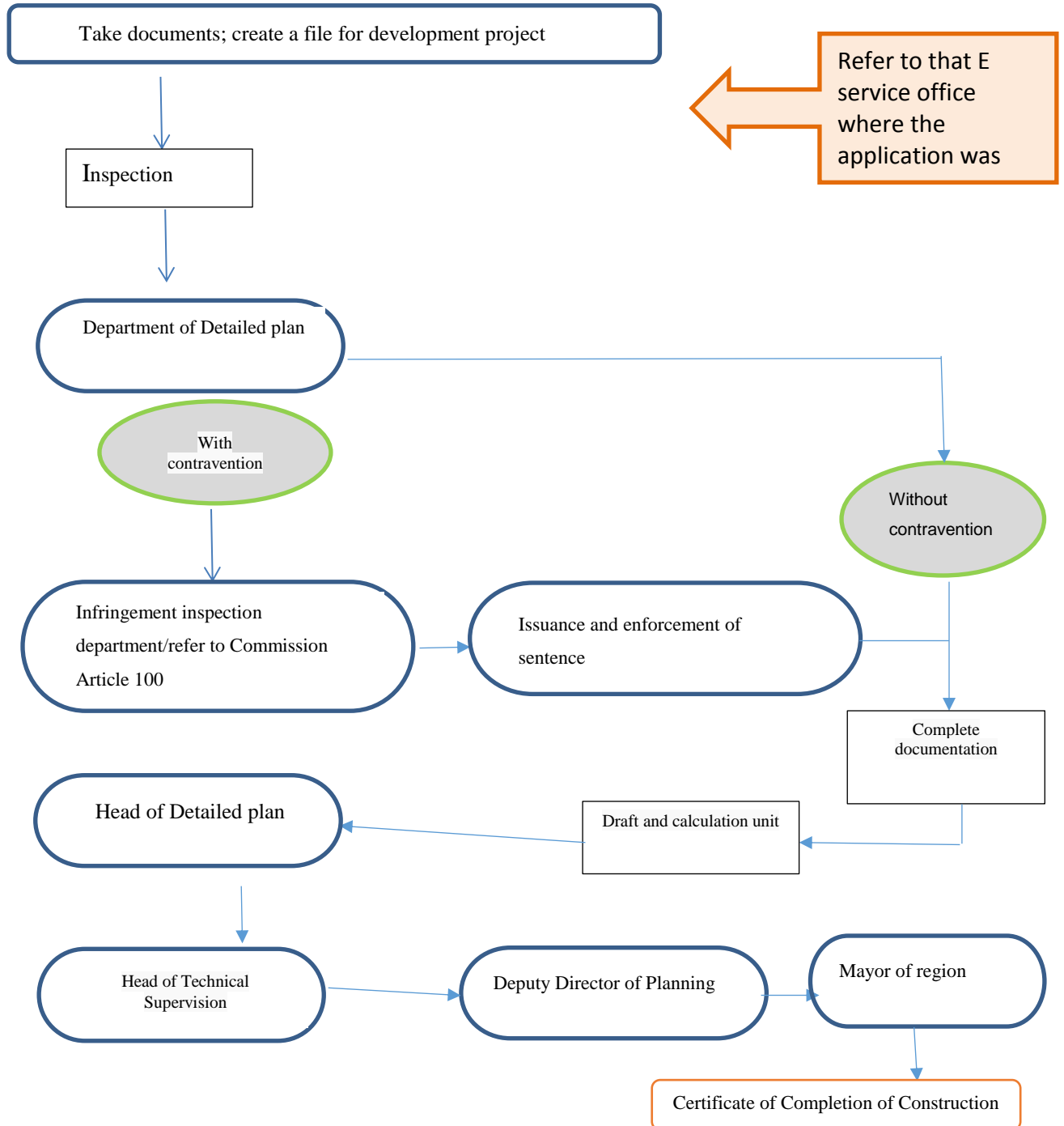
At this step, it may happen that a violation has been dealt with by paying bribes to inspectors, but the municipality does not issue a Building Completion certificate.^{s1}In case one, two violations happened: the commercial unit was built up to the first floor against the construction permission that was issued for the residential unit, and one of the storage areas in the underground floor was bigger than other storage areas. As mentioned above, after the cost–benefit analysis, the manager decided to pay the penalty for the commercial unit because the profit from renting or selling this unit was more than the amount of the penalty. However, for the six-meter difference with the approved plan of one of the storage areas, the penalty was 360 m Rial, which was too much to pay and it was not worth it. Therefore, the company owner preferred to amend it to be consistent with the approved plan and one wall was demolished to make the unit smaller.^{51'a1}

Launching E-services could be the example of institutional change that affected the agent. There was no solution considered for the projects that started before launching it and have no case there for getting Certificate of Completion. In case studies two and three, the companies faced almost the same issue in two different stages. In a case two, when this project started, these E-service offices were not in existence but by the end of project and the point of getting the Certificate of Completion of the project they had to go to one of those offices. The spokesperson said:

At the time of starting the project, these offices were not launched so we had no record there. At the end of the project, the district municipality refused to do any task associated with the Certificate of Completion of the project and without any record in e-service offices, we could not apply for that certificate. Finally, by paying 12 million Rial we could get it. Some employees in a municipality work together as a team and offer both the construction permit and the Certificate of Completion in exchange for money.” ae2

In case study three, the E-service offices were not established when the project started. The negotiation and agreement were done with the mayor of the municipality of region 22 but the electronic service inspector was not informed about them. Consequently, because of a dispute with the approved architectural plan, the case was sent to the Violations Sector instead of the Order Plan Sector.

Figure 9.2 Process of obtaining a Certificate of Completion of Construction



9.4 Registration Deed

A major condition that affected this process policy in the longue duree was the social history of land ownership after the Land Reform (White Revelation) in 1963 in Iran. Land ownership became one the most important and controversial parts of social relationships. There are many disputes over the ownership of shares and inheritance mostly because one property can be divided unequally between different people during participation or conveyance.

The second phase of completion, which takes a long time, is issuing the property deeds and segregation the apartment's deeds. Sometimes they are only ready after one year of the residents' settlement.

For issuing the property deeds, builders were asked to provide three enquiries by the registration office such as a certificate of paying tax, a registration inquiry or approval from the municipality.

Among these three enquires, the registration enquiry is obtained by the registry office itself and the other two should be done by the seller (in the case of housing development projects builders have to do it). The registration office gives tax pay off forms for submitting to the Ministry of Economic Affairs and Finance and the municipality.

In the municipality when that form is brought forward by the applicant, the receipt of renovation toll, fire toll, education ministry toll and property deeds are required. There are three kinds of tax related to property and construction: real estate tax, transaction tax, and construction tax.¹⁰ All these taxes have to be paid to the Ministry of Economic Affairs and Finance in one of its regional branches and the amount of tax is calculated based on the housing project's characteristics and lactation. In case study one, the total tax for each apartment was 50 m Rial, which was much higher than the normal tax, and the company was charged this amount of money for all ten apartments in another project.^{s1' rd}

The construction tax one of the structural forces of government that is accomplished through the political and economic modality of interaction. In this

¹⁰ The builder should pay this tax to government because they hire labour during construction process

type of duty, the employer must pay tax because of hiring labourers and employees in each project to government and this tax never expend for employees and labourers.

Case study 1 appealed against the Ministry of Economic Affairs and Finance and their appeal was rejected for the reason that although the project was stopped for two years, the duty for workers must still be paid. In case one, they are charged one milliard Rial, which was 10 times more than the usual tax for the same projects in this zone. ^{s1}

If the money required for paying all these tolls and taxes is available and all documents are ready, it can proceed within two or three days. However, in this case, what with the high tax and their appeal, it took two weeks. ^r

The step after getting a Building Completion Certificate is referring the case to the Organization for Registration of Deeds and Properties to ask the inspector to visit the new property. This is followed by the last step, which is transferring the newly built unit ownership to the customer, and the registry office issues the property deeds for the customer after receiving all the mentioned inquiries. ^r

In case one, the original property deeds were stolen and it got the firm into trouble: the units were delivered to those who had pre-ordered them in 2010 and had moved in but the deeds were only ready in 2012. Two of the landowners lived abroad and their availability for doing the administrative process was impossible.^{s1} Segregating the apartments' deeds depended on having the original property deeds. The complementation certification was required by SORD to issue the deeds of 20 new apartments and the municipality asked for original the property deeds to issue the completion approval; the copy of the deeds was not accepted. Therefore, the procedure was stopped at this point until the problem was solved 2 years later and having spent 120 m Rial.

One of the interesting characteristics of structure-agency interaction and behaviour of actors in Iran was observed in this stage. If the actors have the opportunity to make any change in structural pattern, they merely consider their own interests and pay no attention to improving their task environment. For instance, in the last step, builders have to register their deeds in an official registry office introduced by SORD. Recently, in order to reduce the dissatisfaction of applicants,

SORD announced that if an applicant faced any violation from these offices in terms of applying an excessive amount of money or making a delay in the process, they need just report it to SORD who would replace this office with another one. In case study two, the registry office applied extra money and it had a bad reputation due to the delay in the process and bribery. The representative of the firm brought this issue to the front and described that although the firm manager could report, he preferred to pay the bribe to speed up the process and after an hour of work done he had no enthusiasm to amend this situation. He said:

It is the same for all builders and managers. Actually for everyone. The people just think about themselves and their profit. They don't ever think about the long run. They just consider the present. They are a man of a day¹¹. Society is not important for them.

In addition, one institutional change occurred in this stage recently. The Construction and Engineering Organization took the responsibility in this stage to send one civil engineer as an inspector instead of SORD to examine the new development project. The function of the process of preparing deed would improve if these two institutions could work together efficiently. These two institutions interact via the modality of interaction and the lack of coordination among them makes a barrier to the process.

9.5 Marketing

According to interviews, the methods of marketing vary according to companies' type and their target market. Among the ten companies that are interviewed, three of them have special teams for marketing and estate agency is the popular way for marketing the newly built units. One of these companies which had a special marketing group was a semi-large property development company with local, regional, and international target markets. The managing director said:

Although the specific marketing group in the company is responsible for selling the products, it is helpful to network with estate agencies in the neighbourhood. They have power and experience shows that if they are

¹¹ It is a saying in Iran suggesting that people think about every day work.

not involved with the profits from the sale of units, they would prevent us selling the products by destroying the reputation of the project. ^{b2}

Analysis of three case studies showed that the events did not occur necessarily in the same sequence or in chronological order. Especially in order to finance the project or in the face of financial deficit, the marketing stage took place in a first stage or simultaneously with the construction cost. In case studies two and three, the first stage was marketing because the projects needed customers and their capital for starting. In case study one, the firm manager had to pre-sell some units because he encountered a lack of finance in the construction stage.

Over the years a lot of corruption occurred in presale and investing in big projects in some cases meant the household would give their entire savings to the builder and not only have no house after years but also lose all their capital. Such experiences have certified that the juridical system has never been able to catch the builders or builders who committed corruption. Therefore, people prefer to work with someone who they trust or who has a good reputation.

9.6 Summaries of the Agencies' Ideas, Interests, and Roles

The points from the interviews in addition to depicting the general picture reveal the different points of view about the constraints of private housing supply. These interviews also show how the distinction between the types of builders affects their access to land and finances and their views about the constraints in this area. For instance, D1, B1, and B2, who are the directing managers of the companies with connections to public organizations and public land, did not consider land access or high prices as a problem. ^{D1' B1' B2}

On the other hand, these results facilitate the comparative study and find in which ways the agents' strategies and ideas change in the face of institutional factors and structural properties, how they respond and react, how they act in the social system and have an impact on it. Furthermore, these results manifest to what extent the activities and events in the three selected case studies are typical or atypical in the housing development process.

The next crucial level in the institutional model of the development process is recognizing the various key agents' roles, interests, and ideas. Table 9.1 summarizes the findings gathered in the interview design. Table 9.1 clearly reveals that profit-making is the main objective of most of the key agents involved in the housing development process except the Planning Authority. This is because these agents are private organizations operating on a profit-making basis within the capitalist mode of production. However, as illustrated in this table, there are agents with similar interests, that is, profit-making, but who have different ideas about housing development.

The other interesting points are some private agents' interests such as providing housing for middle income families or presenting a new way of designing for saving energy. Actors even in the same category have contradictory ideas about housing development.

The interviews with investors revealed that they put the housing projects in their portfolios as a secure investment with a good return in the Iranian economic system. As an investor stated, the main character that attracts him to this market is good return in long-term investment. Thanks to high inflation – roughly, 25 percent – after accomplishment of a project, the investor's capital interest over the construction period is added to the housing value and it leads to the growth in housing price. He mentioned that his purpose is offering safe, high-quality housing and that his investments applied energy saving methods. This indicates that although his interest is making a profit he has an idea about the kind of housing and the way it is produced.¹¹

Though profit-making was stated as a common interest by all builders and builders, some of them stated some more interests and ideas. D1 and B1 expressed having a significant share in the housing market and offering high quality as their interests. B1 added that his company has decided to be active in investing and designing more than construction activities: to become specialized in getting permission and preparing architectural plans for large companies. His company has also been expanding the nature of their work to mixed land use projects and they are working on a mixed development project including offices and commercial

units. The company's interests also included establishing its name as a prestigious property development company.^{d1, b1}

Another idea that was put forward by one builder is utilizing new technology in order to build sustainable buildings and apply renewable energy in their constructions. To approach this aim, the company cooperates with one energy building company to achieve global standards in energy building^{d1}. The ideas of B2 have similarities with and differences to other builders. He has a similar idea about housing development as an area with remarkable yield and always faces constant demand. The differences are in his interests, which include his intention to broaden his activity to mixed-use property development and notably his aim to establish his firm's name as an authority in special design and quality while at the same time yielding good projects for investors.^{B2}

The desire towards such new ideas and innovation in construction and design aspects emerged from the rich people in the north of the Tehran market. Furthermore, having shares in the stock market and being able to present their shares to the public were expressed as interests of the company.

There is a noteworthy point that financiers and most builders brought up as an interest into the conversation: that the housing supply is one of the sectors can keep pace with increasing inflation. They mention that because this inflation leads to growth in land value it synchronizes with the economic crisis and prevents devaluation of their capital. ^{B2}

The architect who owned the consultancy firm had similar interests of a housing development association projects. They were exchange professionals operating for profit making. The firm's role was a designer and consultant to the builders in matters pertaining to planning and building the design of the development project as well as urban design for municipalities in different zones.^{cc} He stated:

In our architectural plan, the elements of urban design are considered. We study the social issues, urban relations, and local connections besides the interior details inside the units. We try to be recognized by builders and get them to consider Iranian culture in their design more than western style.^{cc}

In the case of experts, they had similar interests with various ideas. They tend to have an influence on policy-making for devising an appropriate housing plan from chaos and finding solutions for unit shortages and high prices. These housing economy experts examine the effect of the government fiscal and monetary policy on the housing market and endeavour to find a method to establish other capital markets, or sources of finance for housing suppliers while decreasing government domination in the central bank.^{hcl h2}

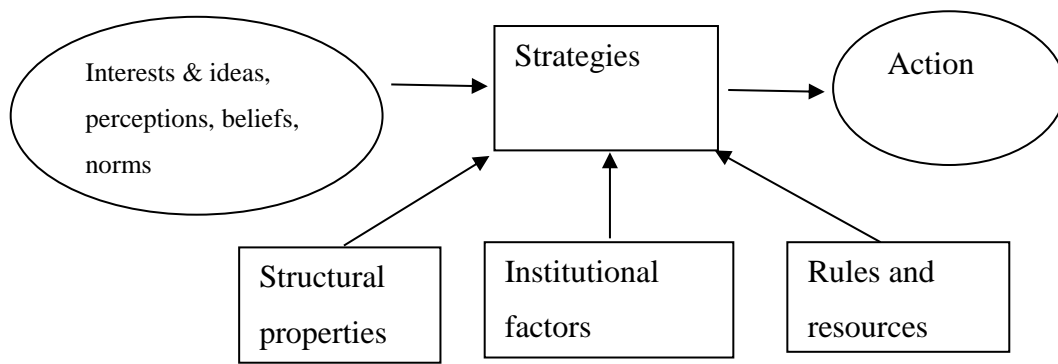
On the one hand, policy makers' ideas are in contrast with those of the housing experts. The policy-makers are looking for the policies for quick action and getting immediate results by interfering in the market. As a former Minister of the Housing and Planning Ministry stated:

The most important issue in the housing sector is the policies that the government has persuaded others to adopt. It interferes in the execution and administration of the scheme instead of leading, supporting and supervising the private sector in the implementation process. The government's time, energy and budget is wasted on the details of the development process; it causes neglect of the planning, and policy-making is taken into account as the main role of government.^{lm}

Table 9.1 Agents' roles, Interests and Ideas

role / agent	Interest	Idea
builder /volume builder (D1)	profit-making from long-term mixed-use property development – reach two million square meters by 2015 – build sustainable buildings	use renewable energy utilize new technology
builder /volume builder (D2)	profit-making from long-term investment	build high-quality buildings in high-demand areas
semi -large builder (B1)	having significant share in housing market in the next five years and becoming a brand dealing in mixed use complexes	build high-quality and luxury buildings in high-value areas
semi -large builder (B2)	being one of the top brands in the housing industry becoming well known as a good yield and high-quality firm / having shares in the stock market	build housing for just the upper class have a special design
medium builder (B3)	profit-making from investment	build cheap housing
medium builder (B4)	profit-making from long-term investment	build good-quality housing
individual builder (B5)	profit-making/ 20 annual units built	build for the middle class
consultant (C1)	profit-making/ being well known with builders	urban design based on Iranian culture and taste of requestors
estate agent (S1)	profit-making	offer a good service to customers
private investor (I1)	profit-making from long-term investment/offer unique housing	apply the best designers and engineers to offer unique housing in the Middle East
private bank managing director	being active in cooperative banking in the construction industry	offer credit for volume builders / big projects
policy maker (1)	housing plan evaluating and supervision	monitoring the implementation of the government housing development projects
policy maker (2)	making a plan for housing market, controlling the chaos	presenting an appropriate policy to resolve the problems
housing expert	playing a role in making policy	applying experts' leads to have a better housing plan
housing economic expert	use his knowledge in making policy	finding a solution for housing finance

The strategy of agents can be considered in different types. The first type is strategies where an outcome of their motives and intentions means their main interest is active in the housing market. The second is strategies, which are applied in the face of structural properties like the politico-economic situation and rules and resources in different stages of the development process. The third level is institutional strategies that are employed in interaction with other actors and institutions.



The owner of house-building companies stated the medium-term strategies for their company based on their interests, ideas, background and their resources such as finance, experience, expertise, contacts and information. These strategies are usually affected by structural properties and often changed in the face of economic and political situations. Furthermore, they applied different strategies in each stage of the housing development process, which are more flexible than the medium-term firm strategies.

As mentioned earlier the builder's idea was providing sustainable construction. He explained that for being up to date with new technology he tries to change the company strategy to be able to apply new technology in the construction. After cutting the energy subsidies, saving energy in housing becomes more important for buyers, so new technology should be applied in the building to save energy as much as possible.^{D1}

This indicates that this strategy was applied to respond to structural changes that the government made in an alteration to allocation of energy resources. This structural change affects the housing applicants and it can be a method to attract consumers in a competitive market. It seems that reducing the energy subsidies was not a sole reason to pick up this strategy; rather, it is a result of the idea of D2 about sustainable building and high levels of construction standards.^{D2}

The purpose of the investor was offering safe, high-quality housing and applying energy saving methods. Therefore, the strategies in a qualitative aspect were employing a European consultant to design the architectural plans and monitor during the construction process. All standards are deployed and the construction was done by the newest technology, which is imported from abroad.^U

Related to the abovementioned strategy, this company has relationships with different engineering firms to have the best construction quality. In addition, it works with one advertising and marketing firm that devised a specific questionnaire for who is interested in buying this company's products. This method was devised by him for the first time in the Tehran market. This questionnaire includes two sections; one is about the expectations and requirements of potential buyers, which is an effective way to monitor demand. The second part is associated with the applicant's information about income, education and social position, which gives the company the chance to choose buyers from all applicants and creates a very special environment for the consumers. ^U

B3 as an individual builder stated that his strategy is providing a diverse range of affordable housing in different zones, which changes over time because it is based on consumers' tastes. In addition to types of housing, the ways of managing his partnerships with landowners and his selling methods have changed according to their tastes and needs. ^{B3}

In addition, the architect said that:

“We have our fixed principles but concerning the situations we may apply some changes with minor strategies. While there is a continual change in the market, we have to be flexible. During the past two years, we have had low demand in the private sector and most of our customers were the councils and housing organizations for mass projects.”^{a3}

On the other hand, the assistant director of an estate agency stated that regarding strategy this firm deals with all types of property and does not limit itself to a specific type. Depending on the market, it can be a slight change, which may cause a reduction in some parts, but overall it never changes strategy to encounter changes in market.^{e s}

The builder brought out the structural change and noted that the recent recession and housing bust significantly affected the company: it led to having to fire fifty members of staff. In this situation of the housing market, most of the projects are not feasible and projects with less than 50 percent of profits are not implemented. Due to this situation, this company reduced the number of projects and by monitoring the demand limited the housing development projects to the high demanded areas.^{D2}

In contrast, the manager of the private bank demonstrated that the strategy of the bank was determined every five years and it hardly changed but the share of the allocatable credit for each sector like housing and construction was almost steady.^{kB}The interviews revealed that the determination of strategy consists of the agency aspect and structural aspect. The agents' strategies are based on their interests, ideas, and purposes and are influenced by the structure of the housing market, institutional factors, and action. Some strategies are applied to react or respond to other actors or situations. The point is that to what extent these strategies are flexible and how often they change. Furthermore, it is important to know which of these changes happen in reaction to the changes in the structural circumstances and how drastically they could affect the function of actors, the nature of them, their status, and view. For instance, the individual builder is able to change his strategy more easily and faster than a large company is and the companies dealing with private actors could be more flexible than others who engage with the public sector.

9.7 Conclusion

This chapter consists of the three steps in the last stage of a housing development project, and summarizes the interests and ideas of the interviewees.

Certificate of Completion of Construction

The major purpose of this step is assessment of the completed building by the local authority to check whether there was any conflict between the approved plan and built unit. If there is any conflict, the local authority, through the appropriate legal apparatus which depends on the type of infringement, could fine the builder or demolish the part which was built against the regulations. In case study 1, the company was forced to demolish the commercial unit that was built on the first floor against the construction permission that was issued for the residential unit, and to pay a penalty for one of the storage areas on the underground floor that was bigger than other storages. In addition, case study 1 faced an institutional change that affected the project: because the project started before this change in the rules.

Deed for completed units

Land ownership became one the most important and controversial parts of the social relationship. There are many disputes over the ownership of shares and inheritance mostly because one property can be divided unequally between different people during participation or conveyance. The property deeds and the deeds for the segregation of the apartment sometimes would sometimes only be ready after one year of residents' settlement. The recent institutional change that has given the responsibility to the Construction and Engineering Organization to examine new development projects could be beneficial if more coordination with the Organization for registration of deeds and properties were established.

Marketing

One of the important characteristics of the development process is that the sequence of events is not necessarily followed or its order is changed; also, it varies depending on the housing development project. In case study 1, a number of the housing units were marketed in the construction stage to compensate for the lack of funding. In case study 2, marketing was the last stage whereas in case study one marketing was

the first stage (the presale of units to applicants). In terms of the marketing approach, although a similar pattern was identified according to the traditional methods such as estate agents and newspapers, which are still dominant, the method of marketing actually depending on the type of builder. The results of the interviews show that from between ten housing development firms, one of the large property development companies and one of the medium housing development companies have their own in-house marketing teams. Out of the three case studies, case studies 1 and 2 released their products through estate agents and acquaintances.

In all the three case studies, a major condition that affected the institutional actions was the economy and the housing market conditions. The historical development of the housing market trend in particular reflected the exercise of the Government's and Municipalities' authoritative control over the type of housing development as well as legal issues concerning the leasing of the end product. One of the structural forces, which has an important effect on this stage, is the economic conditions. The impact of the economic recession on the housing property market left many housing units vacant. Case study 2 encountered the economic recession and the process of purchasing all products took three years; the manager of the firm's predictions went wrong and they face financial problems.

Agencies' ideas, interests and roles

The results of the interviews revealed that profit-making is the main objective of most of the key agents involved in the housing development process, except for some of the public authorities. The interesting characteristics of the pattern of interests and ideas showed that although these agents have similar objectives they have different ideas for achieving it. The interests of agents related to their institutions, roles, beliefs, perceptions and expectations affected by structural properties, rules and resources. Providing the affordable units for middle-income families merely was mentioned by two firm managers as their interest whereas the idea of providing luxury housing for rich people is almost as common as with house-builders. The Tehran housing market has been recently faced with a new wave of ideas, specifically from the young generation who want to provide high-quality units with special unique designs.

10 Chapter 10 Discussion and Conclusion

10.1 Introduction

The principal aim of this research was to understand structure and operation of private housing supply in Tehran. In particular, it attempted to identify the constraints on housing provision. Furthermore, it sought to examine the structural forces that have effects on builders and investors in the supply market. It attempts to uncover the strategies and interests of house builders as key agents while at the same time trying to link structure and agency empirically. Elaborating the characteristics of the unique Iranian context demonstrated that there is a need to find an adequate instrument and efficient approach for studying the housing development process. Therefore, this research considered other researchers' work about the process of land development, particularly Healey (1990, 1991, and 1992). As revealed in chapter 3, in spite of the usefulness of all conceptual frameworks, an adequate vehicle for understanding the development process has not yet been suggested. Thus, in this study, a structure and agency oriented methodology as suggested by Healey (1992) along with Dear and Moos (1986) structure and agency model was applied.

While the previous four chapters of analysis were used to explore the actors involved, their interaction, the structural forces and constraints in the formulation of stages of the housing development process, this chapter will present the summary of findings, which are sensitized by structure and agency theory, followed by a presentation of the way that the results meet the aim and objectives. The last sections consist of the policy and practice implications and contributions of this study.

10.2 Key Findings

In this section, the conclusion is argued related to the research questions provided in chapter five and attempts to evaluate whether findings collected from

the empirical analysis have satisfactorily answered the research questions. Generally speaking, it can be concluded that structure and agency sensitize device and place emphasis on the concept of institution, which is useful in understanding the housing development process. The empirical analysis evidenced the considerable and noteworthy usage of this device to examine this phenomena and concept of institution to interpret the process underlying the production of the housing unit. The analysis of case studies utilized in the research strategy revealed themes including:

- Decisions of actors are shaped by perceptions, beliefs, traditions, social and cultural norms, expectations and emotions (Jackson& Watkins,2011)
- Context matter
- Housing development process strongly influenced by cultural entities
- Strategies are network based and relationship based, the informal interaction and trust are matter
- The perception and prediction of actors matter, soft capacity elements matter (overcoming frustrations and insecurities, ideology, motivation)
- Flexibility in the strategy matters
- Coordination in public institutions and control over their function and procedures matter establishing a relationship with public and regulatory authorities is important

The widespread recognition of the importance of trust and reputation in actors' relationship as Adams et al. (2010) commented on is a practical sign that a housing market is operating imperfectly. The main findings of this research illustrate the necessity of the recognition of the process's complexity and the dynamic of contextual embeddeness of structure–agency interaction and actor relations for carrying out the housing development process. Structural control internally developed soft control and making a fundamental change in the pattern of controlling profit-seeking behavior and levels of corruption are also necessary. The employment of Healey's (1992) model to understand the provision of the built environment and assist urban theory in coming closer to recognizing the reality of institutional changes in urban area over time and discover the driving forces behind the scenes triggered these changes. Therefore, in the following section this is

scrutinized in the light of whether findings through this device on three housing development projects answer the research questions that were expressed in chapter five.

10.3 Research Question 1: How does the housing development process in Tehran work? How many actors and institutions are involved in Tehran new housing development?

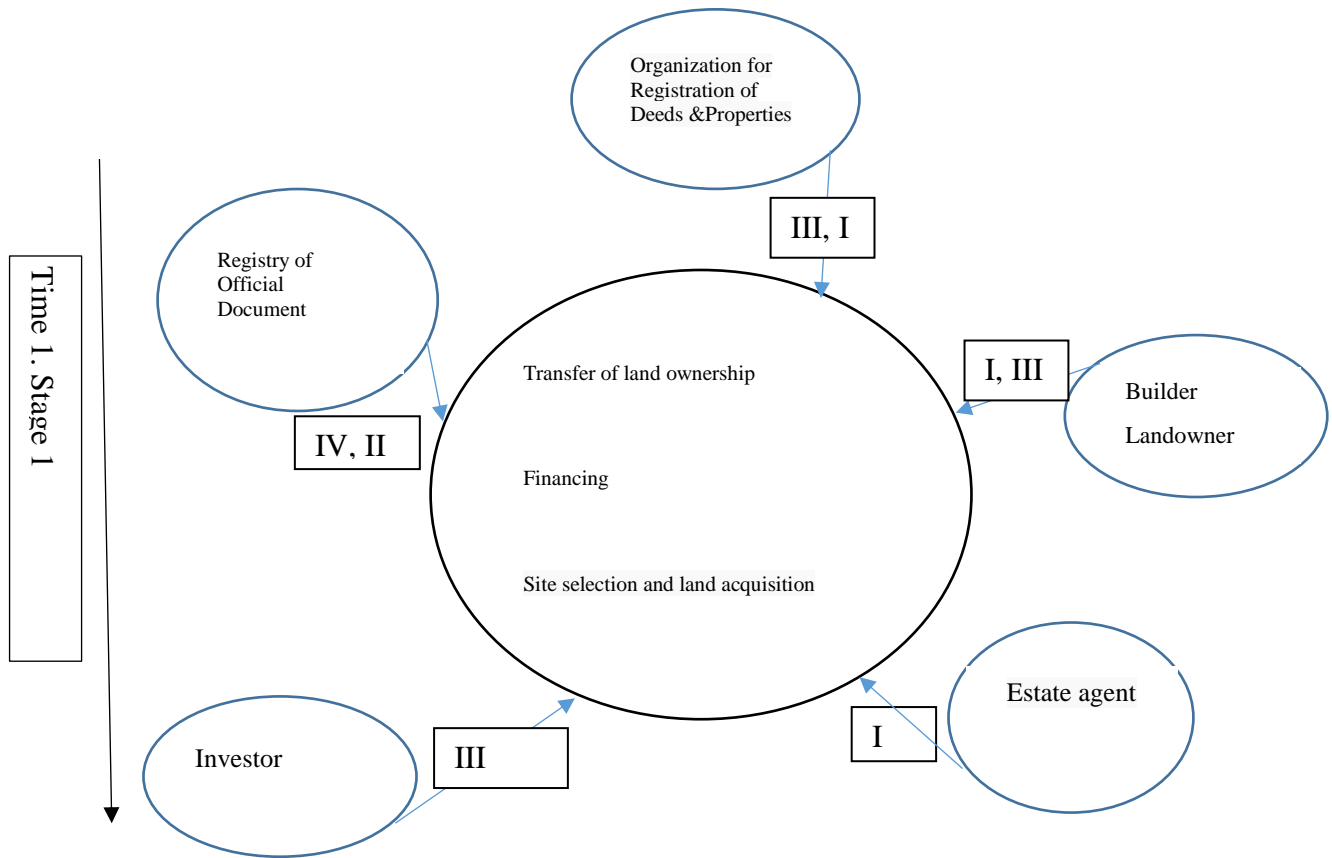
Housing development process in Tehran contains several steps in the form of four main stages; site acquisition and land access, preparation, construction and marketing. In terms of actors, this research showed that there are various actors involved in this sector that make this scope very complex and turbulent. There are various agents belonging to different types of institutions who interact with each other during the housing development process. The issue is that several planning authorities and executive bodies play a role at state and local level, but a lack of coordination prevents them from functioning efficiently. These pluralities of parallel decision-making bodies cause confusion for actors and make the housing development process complicated, lengthy, and rough.

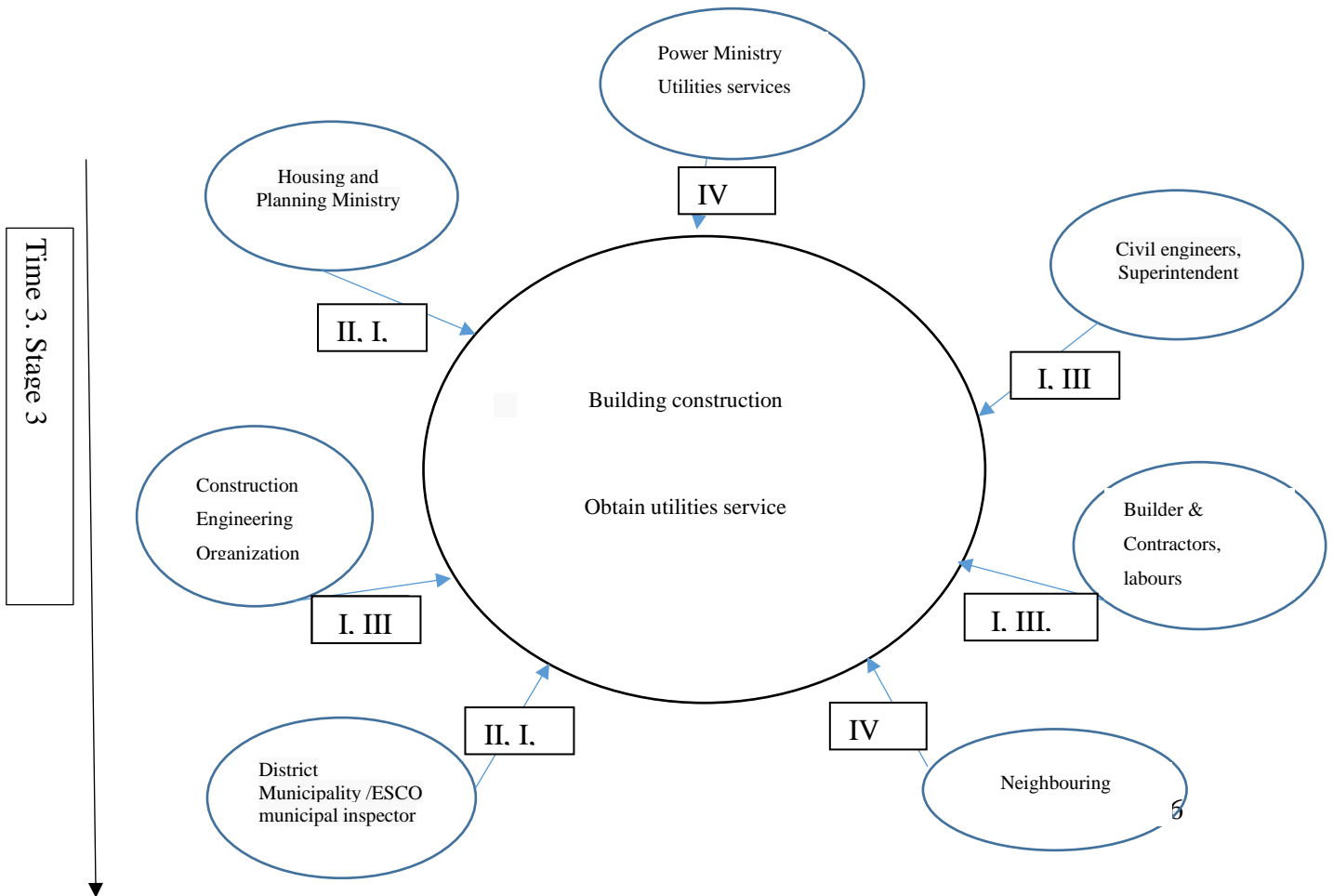
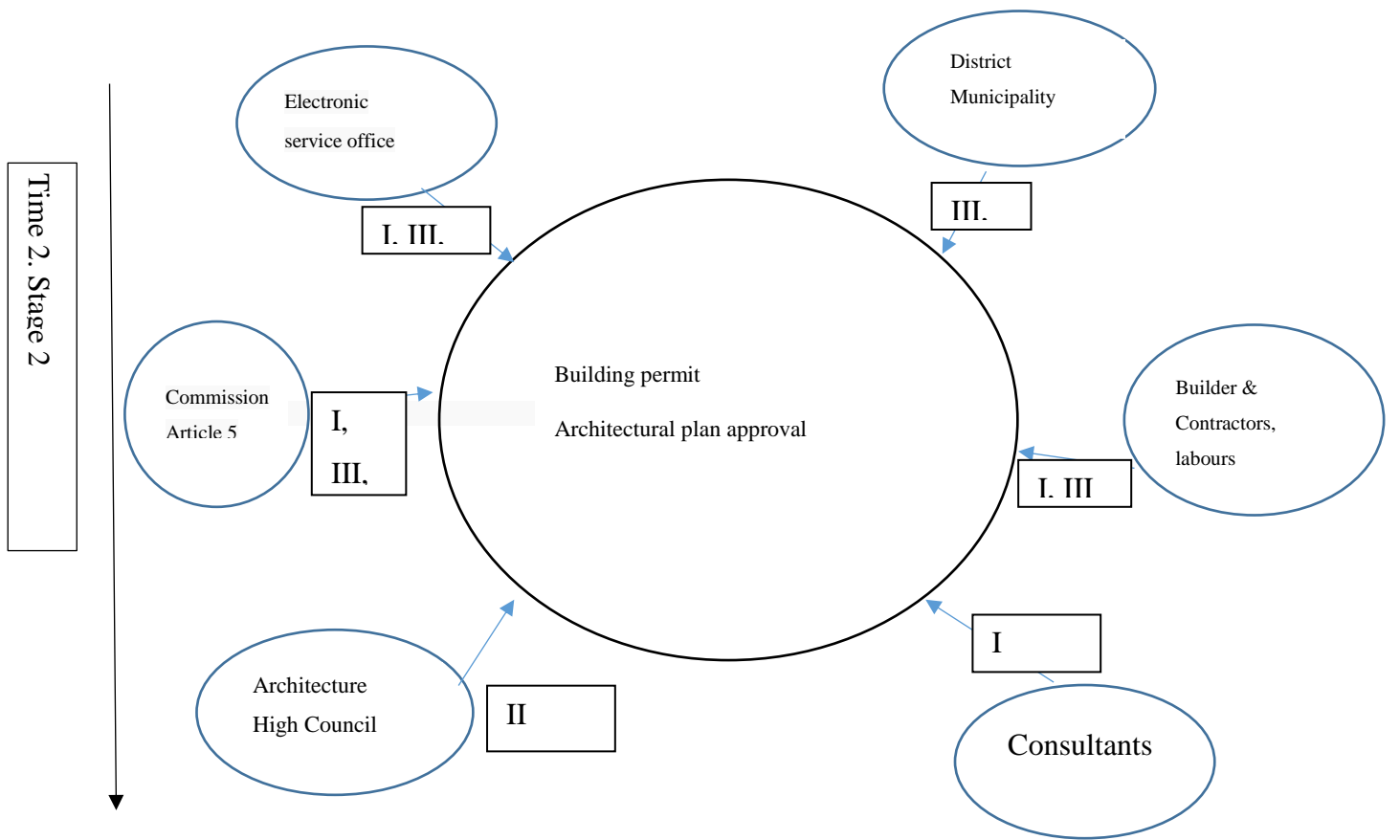
Agents in the built environment and property profession institutions have to deal with various agents in different institutions of different levels at each stage. The builders need to refer to different agents belonging to the juridical system at state level, affiliated organizations of the Housing Ministry at the governmental level, and semi-public and municipal organizations at the local level.

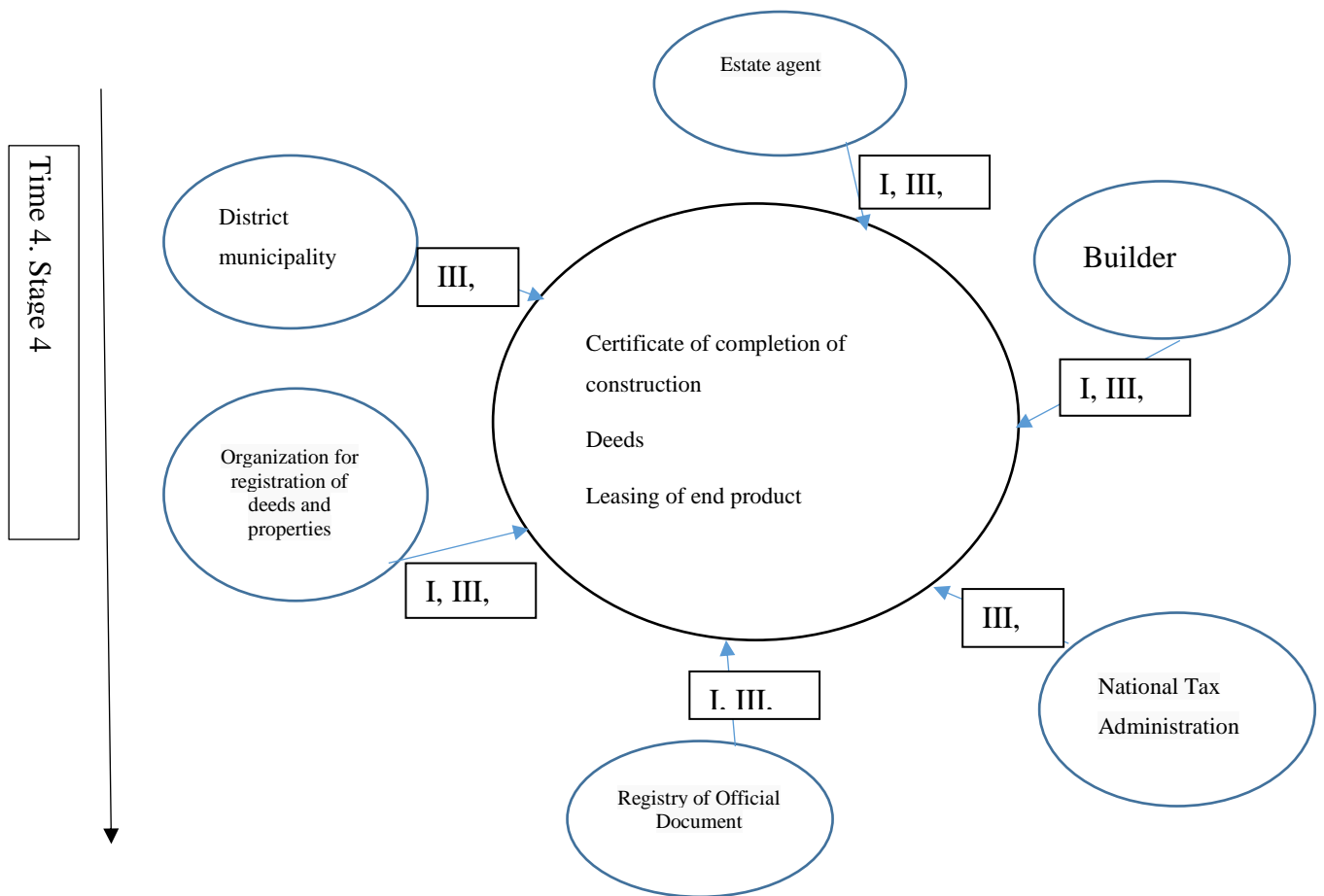
The below diagram summarise the housing development process in Tehran which should be taken regardless of the order of stages. In each step, actors relate each other through different modalities of interaction compassing communicative mode of interaction (I), political mode of interaction (II), economic mode of interaction(III) and sanction mode of interaction(IV) to reach outcome (see chapter 5 for these modalities explanation).

In first stage, three types of institutions with different agents play role, builders and landowners belong to build environment institutions, estate agents of the land and

property professionals, as well as the Organization for Registration of Deeds of the central state institution to reach three outcomes including Transfer of land ownership, financing and site selection.







In the case studies, the communicative mode of interaction is applied by private actors to enable them to act effectively in interactions that are affected by economic power and ability of negotiation play the most important role in relationships between builders and landowner. Authoritative control body applied sanction mode to solve conflict between interests and specify regulations. Financial institutions also play role in this stage in the way in which they allocate capital. The three case studies showed that the policies and strategies employed by the financial institutions have an impact on the housing development process due to their influence on builders' decisions in terms of what ,where and how to build. Another important institution during this stage of site acquisition was the built environment with both main agents – the builder and the former landowner – interacting through the economic and communication modalities of interaction.

In the preparation stage, five agents under three categories of institutions playing a role in the preparation stage. To obtain building permit and architectural plan approval have to refer to regional (district) municipality and the Tehran Municipality and each Regional Municipality play an important role by operating dominant power via the political modality of interaction. The final area of institutional analysis involved legitimation of institutional action through the sanction modality. This institutional action takes place outside of legal bands. This stage was mentioned as one the most problematic and difficult stage for builders.

The third stage is construction stage that the Government, the local authority (Tehran Municipalities and Regional municipalities), the Built Environment, the Property Profession, and a third party involve to interact with each other in order to obtain utility services and constructing the building. Agents under the Government institutions act as the regulator of the construction activity as well as controlling and supervising the process of construction through the Construction Engineering Organization. The Local Authority also plays an important role in regulating and passing bylaw along with monitoring the construction process to be sure it complies with the rules, regulations and architectural approval of the project. The case studies confirmed that the level of success in implementing the construction activity depended greatly on the quality of the financial, organizational, and managerial fulfilment through a collaborative teamwork procedure

The last stage concerns completion and marketing includes obtaining the Certificate of Completion of Construction, getting a deed for new units. Institutional analysis shows that the local planning authority plays a role in the first step through the political mode of interaction. This reflects the exercise of the regional municipality authorities' control over the implementation of housing development projects. The two agents from the state authority involved in this step make it difficult and lengthy for applicants. Another institutional control is taken by the Organization for Registration of Deeds and Properties in order to support the right of the residents and observe construction in terms of legal matters and compliance with privacy legislation. The inspector observes the area of the property to assure compliance with the building designs and reports the accurate data to the ORDP to issue the deeds.

10.4 Research Question 2: How do these actors and institutions relate to each other?

The findings displayed that in each event of the housing development process; more than one principal agent is required for decision making. At each stage of the housing development process, agents under different institutions relate to each other in the figure of a partnership constructing a network of institutional relationship to come off with a particular intended outcome. As mentioned in chapters six to nine, agents and intuitions interact with each other through different modalities of interaction: political, communication, economic and sanction-related. One of the important features of institutional relationships as displayed in figures 6.1, 7.1, 8.1 and 9.1 is that each stage of the development process might result in more than one product. It is also evident that each institution may employ a combination of modalities of interaction, not only at each stage, but also in the process of reaching one or more outcomes evolving in each stage of the development process.

One interesting characteristic worth noting of the pattern of institutional relationship revealed in three case studies is that public authorities introduce rules and regulations with the initial goal of controlling the development process and believe that they can thus improve the quality of urban environment and housing conditions. Although agents under the private sectors utilize these rules and regulations as instruments to elevate their ideas on housing development, and to reach their goals as well as pursue strategies that are usually restricted by institutional constraints, most of the time they are reluctant to apply them correctly and completely. As the interviews showed, the cause of infringement could be expressed in two principal reasons. From the professional perspectives such as architecture, some of the regulations, specifically those related to architectural design, are old fashioned, and impose unnecessary constraint on the process. Built environment agents try to lift restrictions through negotiation with the public authority because they find some kind of regulation in conflict with their interest and profit. For instance, as discussed in chapter seven, the density regulations limit the builders' profits and the most bargaining, bribery and negotiations can be witnessed at to this step.

10.4.1 Contextual embeddedness of political culture

The results of the interviews revealed the embedded perceptions that distrust and suspicion against governmental and public institutions negatively affect their interaction. The perception was shaped over three decades after the Islamic revolution (1979) that the public authorities have prevailed in all resources through political domination. Yet, the public institutional environment is full of corruption with the absence of a control body due to state domination. In the second and fourth stages (chapters 7 and 9), actors' embedded perceptions of political, cultural and judicial obstacles for employing regulations accurately establish the efficient interaction with the planning authority to assist them in their new policies and make a change in the institutional pattern of the official registration of deed. This phenomenon prepared a terrain to examine the initial part of Giddens's theory associated with reciprocity and duality of structure and agency in *longue durée*. In the preparation stage (chapter seven) it was shown that the firm managers were pessimistic about the institutional change supposed to have occurred within the Tehran Municipality to improve efficiency performance; as well as that, private development actors were seeking to find a way to infringe the regulations. On the other hand, there are embedded perceptions that consider builders and builders as profit makers who have to give some of their profits to the government institutions regardless of whether this payment is fair or not. This embedded perception led governmental and other public agents to create obstacles rather than being contributors to the private sector.

Moreover, public institutions suffered from the effective communication with professionals and builders (building firms' managers) in the process of decision-making. The comparison between case studies revealed that in the case where actors have knowledge about complementary interests and are self-motivated by their ideology, they mobilized their perceptions and the informal interactions between public and private actors that led to conciliation of interests and discovering a way to supply affordable housing and secure their profit as well.

10.4.2 Agents' strategies: relationship-based

The relationships in this scope could be categorized into two different levels, firstly between private actors such as builders, landowners and contractors, and secondly between them and the local state. The triggers for development actors to be involved in the relationship-based structure reflects Peng's (2003) belief of how transition usually leads to a primarily relationship-based transaction structure and which showed how the effects of failure in the market and instability in the institutional environment in emerging economics end up with this strategy. Adams et al (2012) study in UK also shows that such as relations play important role but under different reason from what Peng (2003) states. Through this partnership, housebuilders could reduce their risk, having better access to source of development land and avoid the risk of obtaining planning consent (Adams et al 2012).

These kinds of relationship are just found between the private actors and public authorities, or between landowners and builders rather than among people themselves to reach collective interest. There is no alliance between house-building firms on one hand or between the residents on the other hand.

The political institutions and power relationships induce builders to try to establish relationships with regulatory and executive authorities in order to create a network to ensure their profits. In a similar way, the interviews showed that informal relationships could be counted as one of the most important types of power in all stages of the development process. It is not just helpful to accomplish a particular project easily and smoothly; but also, in some cases, it determines the possibility of accomplishment of a project. It means that having contacts and relationships with public organizations empowers some actors to access land, obtain construction permission, and accomplish the kinds of projects that others cannot.

10.5 Research Question 3: How do housing suppliers deal with structural forces in all social, economic, political, and environmental terms?

Analysis of the case studies displayed that housing suppliers have to face a wide variety of structural forces in this sphere. In economic terms, the general state

of the economy, in particular inflation, current trends in the interest rate, foreign currency, oil revenue and cash flow, all have an impact on builder decisions and financing of the projects. The historical review of the three case studies and the results of the interviews with company managers indicate that the sources and types of finance have change to meet evolving economic conditions.

Being active in the closed economy of a centrally planned, state-owned, unstable institutional environment necessitates the agglomeration of particular Iranian, Islamic and western strategies to survive. In general, in the Iranian context, regulators' pressures are not difficult to understand and admission is inevitable; besides, there are more pressures imposed from both professional and community norms of behavior. The interviews revealed that most of the development actors behave passively rather than challenge the pressures which come from regulatory and planning authorities, and have less enthusiasm to make any alterations. Yet, they had strong feelings of powerlessness and illegitimacy when encountering the state-ownership and centrally planned aspects as well.

Regarding the most significant characteristic of developing and emerging countries like Iran, the actors involved in the housing development process have to encounter many changes, which occurred too fast (Farashahi & Hafsi, 2009). The history of Iran has seen a very high level of institutional transformation, instability and turbulence. Since Reza Khan and the Pahlavi Dynasty came to power in 1925, Iranian society has been facing Westernization. Reza Khan even intended to westernize the daily behavior of Iranians such as communicating and eating (Farashahi & Hafsi, 2009). The urban transformation from the nineteenth century has radically changed the image of the city from a traditional, Middle Eastern city into a modern one, a transformation which can be observed through patterns of land use, street patterns and building forms (Madanipour, 1999).

Uncertain and unstable institutional environments were mentioned by all participants as an important constraint. Interestingly, the three most important institutional changes at the two levels of national and international occurred during the research that helped the researcher to observe and analyze the interaction between structure–agency and institution–actor. The first one related to the major change over 50 years in planning systems and the built environment regulations

that was the implementation of the Tehran Detailed Plan. The second one was the Iranian subsidy reform plan; and the third, at the national level, was a new wave of western sanctions against Iran that affected the Tehran housing market from different angles.

Development actors react to structural changes in different ways. In the cases where the changes related to the regulations and rules, if the actors found them enabling, they would employ new regulations; otherwise, if they considered them constraining, they would attempt to infringe them through establishing relationships with the planning authority or amending their strategy to pursue their interests. In encountering broader economic and political change, they tried to adopt an innovative strategy to rescue their firms. As shown in chapter 8, following sanctions, the material price dramatically increased and the firm manager and prime contractor changed their strategy to continue the project. However, the house builders preferred not to start a new project (as in case study two) and private investors transferred their capital to the foreign currency market and suspended the financing of housing development projects.

The social rules emerged by collective perceptions about social class and of residential area are one of the best examples of the duality of structure and agency. Each zone and neighborhood becomes a representative social prestige and economic status of each resident, and part of his or her identity. The choosing of a specific neighborhood by the rich high-class citizens before the revolution, due to its attractiveness of being home to a Pahlavi royal residency in 1970 and a desirable environment, created social boundaries that are mentioned in Giddens's theory. These social boundaries became a structural instrument for the builders and motivated them to consider these areas as their activity zones. After almost 30 years, luxury houses are still designed by some builders in this area and they compete with each other to build as many luxury houses as they can. This activity has created a new demand for rich people and has made new institutional and social rules for residents.

10.5.1 **Context matters**

The case studies suggest that the housing development process can be influenced by the dynamics that appeared during the development process which

may enable or constrain the progress of the development process. The complexity and dynamics of the housing development process are influenced by contextual aspects (time and space) and internal aspects embedded in the development stages (actors, interests, perceptions, expectations, contact, and network). They are also affected by the external structural forces entailing financial, economic, political, regulatory, fiscal, and cultural forces, which are mentioned in chapter two and six. The interaction between all these is crucial for the creation of conditions for the completion of the housing development process. For instance, the issues of cash flow and liquidity brought about by oil revenue and instability are part of a bounded economic structure, which appears to determine the agency of investors.

Similarly, as Barley and Tolbert (1997) suggested, case studies showed that contextual change is often a prerequisite for actors to collectively think about the scripted pattern of behaviors and conceive of alternatives and the way to change the current one. They believe that in the absence of contextual alteration, actors probably replicate and continue scripted behavior, which makes the institutions very resistant. According to the analysis, from the four stages of the development process, in two stages exogenous factors lead to a change in the actors' strategies and modify the institutions. As shown in chapter seven, in the first stage of the development process, builders and landowners devised a new way of making contracts in the face of the economic downturn and rising land prices, which was flexible and related to the characteristics of the land and the project. In the preparation stage, chapter 7, it was evident that company managers of case studies two and three made changes in the patterned behavior to delay the construction by the local authority.

However, the behaviour of private actors in many situations supports what Barley and Tolbert (1997) describe under the understanding of institutions created by actors which leads to shared "typifications or generalized expectations and interpretations of behaviour" (1997, p.132). The perceptions of private actors which were shaped over the years through their interaction with public actors is a strong obstacle preventing them from making any change in the current institutional pattern. For instance, in the last stage of the housing development process, although

the builders had the opportunity to revise the institution, their mistrust of public authority prevents them from taking any action.

Furthermore, the context could even affect the interpretation of the meaning of rational choice, and without considering the context, explanation of actors' behavior is impossible. For instance, it is obvious that increasing the price leads to decreasing the demands; conversely in Tehran, land demand increases after price growth because, based on builders' experience, it would be even more expensive soon, and so their reaction intensified the price growth further. Although this situation seems irrational, the actors repeat it over time and believe that the price in Iran continuously increases and that it is better to buy immediately after the first signal of growth.

According to the fast and unexpected transformation in the economic, political and institutional environment that was mentioned above, firms employ "relationship-based" and "network-concentrated" strategies to overcome the uncertainty and survive in an unstable situation (Peng, 2003). The relationships between agents and institutions were explained in the previous section and the role of network-centred strategy in the following.

10.5.2 Agents' strategies: network, trust, reputation

The institutional analysis cast the conception of the residential land market and construction stage as more institutionally grounded on socially embedded networks of relations. To protect against instability along with securing self-interest, house builders attempt to tie themselves to the networks (see Adams et al., 2012; Granovetter, 1973; Hardin, 2006).

The institutional context of Tehran's housing market caused the variation of what Granovetter (1973) called the weak tie, and the way Adams et al. (2012) interpreted it related to house builder networks, as shown from the findings of this study. The main difference is, unlike the context such as that of the UK, a comparatively small industry; the Tehran housing provision industry consists of a

large number of small producers, so individuals in key positions have to spend time getting the experience to be able to build effective networks. The network in this context means the camaraderie shaped between some particular actors – for instance estate agent and house builder – to secure their profit. However, these networks never spread and expand over actors involved in this industry to make a strong guild or to reach coalition in order to increase their power to pursue the interests of their union.

One of the most distinctive features of the Tehran housing market, as distinct from other markets in developed countries, is the absence or inefficiency of unions for house builders or tenants. For the tenant party the absence of any strong tenant network has been making them defenceless against skyrocketing annual rental prices. Furthermore, if there was such a union, the price of land and housing was determined by the market rather than the development actor.

Moreover, although the institutional action taken in the construction stage engaged legal aspects based on the law of contract that legally binds the parties, if disputes between agents happen and any of two parties intend to breach, the legal form usually would not be helpful because of being time consuming and costly. Hence, the development actors rely on their networks which are bounded by trust and reputation.

As Davies (2001) pointed, overall planning faced to mistrust among people because it is comprehended to be complex, a technical and prevailed by power groups.

The results showed that trust and reputation not only play important roles between development actors but also more importantly are determinants between client (housing customers) and house builder, especially when the client intends to participate in the housing development project either by financing or providing land.

10.5.3 Agency, roles, interest, perceptions, beliefs

Despite the fact that speculative builder-builders play a major role in the transformation of the residential environment, most research on urban housing has been directed towards consumption issues (Pacione, 1990, p.219). Therefore, this

research focuses on the most important actor in the housing provision particularly housebuilder.

From the empirical analysis it can be inferred that there is convincing evidence that housing development in Tehran was ‘opportunity-led’: house builders’ decisions, especially individual builders or landowners who wanted to convert their property to apartments, were usually not reliant on market research. The housing development process was based strongly upon the house builders and investors’ short-term objectives and expectations about the amount of adequate return that could be made on the project; and in particular if the end-user or consumer could be guaranteed, then it motivates the house builder to commence the project. Case study one demonstrated this issue, in that the firm manager relied on his expectation of market rather than an accurate feasible study and market analysis. In a like manner, all agents in this scope based their decisions on profit-making elements and the planning authorities merely observed the continuous generation of a highly speculative housing market in Tehran, inducing an artificial high in land and housing not only in economic boom periods but also in the economic recession period, leading to stagflation and surplus of unaffordable properties. In addition, the municipality took advantage of this turbulence and made a profit from the growth in housing development projects.

The strategy of Iranian house-building firms is significantly correlated with company goals, age and experience, performance, managers’ ideology, and perception of the general and institutional environment. For instance, in case study one, the aim of the firm manager was concentrated on making more profit while maintaining the standard level of construction, i.e. “not very high quality but acceptable”⁰¹. He preferred to buy the land and carry out his own construction rather than enter into a joint venture project with the land owner. In an economic recession facing a lack of capital, his firm accepted regeneration project contracts to eliminate financial instability. In case study two, the firm manager, in addition to being a profit-seeker, had the ideology of providing affordable housing to the medium class as well and did not limit himself to specific areas, instead expanding his activity domain to the centre and the south of Tehran. In addition, flexible

strategies were adopted and the financial contracts and agreements with households were modified to satisfy them.

Case study three was completely varied in nature and interest: it concerns a cooperative firm with the aim of providing affordable housing for its members. One of the most interesting and valuable findings of the research is the discovery of this cooperative company as a successful example of the cooperative mode of housing provision. This mode of provision was expressed by Keivani and Werna (2001, b) as one of the appropriate modes for developing countries, particularly Iran where this mode was successful after the Islamic revolution 1979. However, the percentage of cooperative firms' share in the Tehran housing market was less than 10 percent and over the last decade it was engaged in corruption and many projects experienced setbacks (see Keivani & Werna, 2001, a, b). Case study three represented how the ideology and strategy of the manager of the cooperative could be determined to succeed at projects. His moral and religious ideology encouraged putting in all his efforts to provide housing for the members who were on low income. This ideology prevents corruption from occurring (which otherwise happens in many cases) and motivates him to cope with the constraints. The analysis of the strategies of a firm in encountering the structural forces and institutional changes elaborated in chapters 6 and 8 demonstrated that taking flexible, innovative and appropriate strategies help this firm survive and make it successful under circumstances that set many other firms back.

One interesting characteristics of the pattern of actors' strategies revealed by these case studies is that, although the agencies have similar objectives and interests, that is, to make profits, this is achieved under different methods and strategies. For example, one 'medium-sized' house builder stated that they are attempting to create the new wave of housing construction, building only high quality units for the high-income class^{B2}. In contrast, another one said that he has taken the strategy to build small units in the north of Tehran, which is the most desirable area usually defined by big, very extensive houses. He believed that most young couples desire to live in this area but can only afford a small unit. Therefore, they have started by building-high rise apartments including units less than 100 m² that cannot yet be found in these areas^{B3}.

In contrast with what Farashahi and Hafsi (2009) believed in their study of the strategy of firms in an unstable institutional environment, those actors in this situation cannot rely on their experience; this was mentioned by all firms' managers as an influential factor in decision making and in shaping their strategies. Although they claimed that in an unstable institutional environment, past experiences are not very helpful for firms' future activities, the results of the interviews in this study showed that the actors do in fact use their past experience of encountering rapid structural change and instability. There is also a paradoxical situation; it might be expected that in developing countries, actors stick to their past, stuck on their tradition, and are incapable of change.

The interesting characteristic of the collective is that they cling to their cultural and traditional ways of thinking and beliefs, even in the situations of insertional system change. For instance, it is true that the stock market did not work efficiently the first decade after revolution, and this instability encouraged people to invest somewhere with less risk, but the idea of considering the housing as an investment commodity has a cultural history. There is a saying in Iran that 'no one has loss from investment in land. Profit is always in land' and it is reflected in actors' behavior related to investing in the housing market, attested as the first choice for investing with 50 percent of speculative demand.

In this research it was revealed that opportunisms one of the most important character traits of Iranian people, and that by recognizing this collective character, the root of most of their behaviors and decision making could be realized and explained. Regardless of their role as agents belonging to public institutions or performers as private actors, they only consider their own profit and interest and totally ignore the public interest. They always try hard to gain money as much as possible through any legal or illegal means.

One of the most important features that were found is that the actors do not belong to society and have no public interest. The public authorities who are supposed to have public interest only consider their own interest and have no public concerns. The agents belonging to the public institutions behave selfishly and are profit-seeking, and it caused the biggest conflict between private and public interest. Such a character trait not only leads to a high level of corruption and

bribery, but it also seriously impedes any welfare programs being devised or, if these kind of plans are proposed, it impedes their fulfilment. There is no control system and even if the juridical system does uncover a corruption case, it would be covered up by political intervention or taking a bribe.

It was also observed that the structural factors such as economic and political issues, before even having a real influence on land and housing, affect actors' perceptions. For instance, six months before the start of western sanctions against Iran, the housing price increased owing to the assumption of a decrease in the currency value, so it led to the capital flowing to the gold and foreign currency markets.

10.6 Research question 4: How might policy makers work to remove constraints on the housing supply?

Policy framework

The hierarchy in the planning system and urban management prevents the correct and comprehensive implementation of policies and regulations. As Madanipour (2006) persuasively argued, despite the growth in size and complexity of the municipality, Tehran's governance has still been dominated by the central government. The launch of an elected city council and some extent of financial autonomy could not help the municipality to emerge from the government ministries. The first and most important issue related to the executive role of the municipality against the legislative role of the government in urban planning and management was that the municipality was merely supposed to implement the plans.

Based on the analysis, in the development process different agents belonging to these two institutions were involved and worked together for the same outcome through dividing the responsibilities or doing the same function, creating confusion in the roles and responsibilities. Therefore, the political debate between the two political wings of mayor and government was reflected in the built environment, development activists and development activity that hit, in the end affecting citizens.

In a time of conflict of interest between governmental organizations and public institutions, or overlapping responsibilities and executive authority, like what happened between one state-affiliated organization (Construction Engineering Organization, see chapter 8) and the Municipality of Tehran, the one that is located in the higher position in the political hierarchy won the debate through power domination.

The housing development projects encountered many problems because they were unable to control or avoid the negative influence of politics or other contextual factors; housing actors might have avoided difficulties for the future and are in fact better with the performance of this process. For policy makers and development actors, the findings from this study can shed light on factors that might be helpful to improve the performance of the housing development project and prevent future turbulence resulting from the lack of understanding and ambiguity of this sphere.

The system that different parallel planning authorities work together in needs to be modified. In each section, the state creates one institution beside the main one, such as the Superb Council of Planning and Architecture beside the Ministry of Housing and Planning, and the Commission 5 and Commission Act 100 beside Regional Municipalities, which really opens up the possibilities to infringe the rules. These institutions could make an exception to the rules and regulations on particular occasions, and as a result, it creates the possibility for some private or public agents to infringe the rules and regulations in order to pursue their own interests through the communication or economic modes of interactions. In a bargaining and negotiation process, if the agent belongs to a public institution, he could employ the political power to win; if it is private, he may consider paying a bribe as an instrument to achieve what he wants.

Lack of democracy state control

Unfortunately, after almost 40 years of urban experience and a paradigm shift, planning for people and not planning with people is still prevalent in Iran (Zebardast, 2005). The bureaucratic hierarchical top-down decision making dominates the management system of all state-owned organizations. In spite of the

Islamic Revolution that brought forward a new and widespread demand for democratic governance, the major disputes have been fought around national politics and the issues of urban management have been undermined. The Revolution's new Constitution asked for Islamic city councils to be set up, which took three decades after the demise of the *ancien regime* to implement; however, due to its function and political and social system, its implementation has not brought democracy (Madanipour, 1999). Hence, without democratic governance, the citizens are not able to actively take part in the management of the city. The Iranian housing provision sphere needs to consider the importance of a strategic planning approach as suggested by Alberchts (2004) which demands a decision-making method in which “the stakeholders become actively involved in solving policy problems on the basis of a joint definition of the actual situation and of the sharing of interests, aims and relevant knowledge” (p.745).

In addition, in a challenging environment of political accountability, lacking a link to democratic politics lays the groundwork for breaking agreements and merging policies agreed in these realms into formal plans without further investigation (Allmendinger & Huugton, 2102). Findings from this research could improve the lack of scrutiny and inadequacies in the housing development process such as “obfuscation of the political environment” and bring the influence of politics and “democratic accountability” under attention (Allmendinger & Huugton, 2102, p.98).

In the case of disputes in construction quality supervision (chapter 8), public opinion plays a role in both enabling and constraining factors on both sides of this quarrel. The public opinion reflected in the media put pressure on the government, which led to them delegating legitimacy for controlling the housing development process to the Construction Engineering Organization. It should be mentioned that such an occurrence was so rare in Iran because the state power domination has not allowed the public to be informed through the media. If such freedom of information were allowed, the power of public opinion could enhance the capability of modifying the institutional and structural system. If the media was given the legitimacy by the government to reflect the facts and if the public authorities were

transparent, the housing development process would function better and untether the public eye, and the level of corruption would decrease.

Strategic conduct analysis revealed that professionals and development actors were excluded from the policy-making process. The entire process reflected an attempt at providing housing, but the clients often were not consulted. There is no institution for controlling and supervising municipal activity and the lack of support of residential group means that no one can persuade or influence the consumers' interests.

Shifting the pressure and price growth to the consumer is one of the unintended outcomes of government and municipal policies. This finding was derived from how weak alliances between actors leads to preventing structure modification and maintains undesired institutions. If builders allied, they could affect the current pattern of the housing development process and social and institutional environments. Failed complaints of builders and landowners demonstrated the limitation of an individual agent's power in the face of institutional rule.

Legal framework for intervention

The findings of this research indicate that the mechanism of the market does not work well and the government's interventions have not been successful. To this date, the focus has been on a quantitative approach and the figures of housing shortage neglect the complexities and inherent factors of the process. On the other hand, it seems that there is no clear picture about the active agencies and institutions, their interrelations and the external affecting factors, not for the actors themselves, the academia, nor the policy makers. This lack of understanding appears in the government policies, municipality regulations, as far as organizational functions have been overlapped, and the policies that have achieved their aims. The interviews showed that government and local state intervention in the land and housing market endeavor to regulate and control the housing supply in Tehran. In the case studies, the Housing and Planning Ministry, Superb Council of Planning and Architecture, and Municipality of Tehran were all concerned with urban management through the planning and building control.

Tehran's governance has been dominated by the central government. Although the municipality has grown in size and complexity, it is still under the shadow of government ministries, even after the launch of an elected city council and a degree of financial autonomy. It is only charged with implementing the plans, rather than preparing them; and yet it is expected to have financial autonomy, resulting in controversial ways of implementing or changing planning regulations. It is only charged with managing its 22 districts, and yet the urban region covers 5 million inhabitants outside the city's boundaries. Without empowering the municipality to take full control of planning for its jurisdiction within a democratic and accountable framework, and to collaborate with other authorities in charge of the urban region, planning and management of the Tehran area remains less than effective.

Based on this study and the results extracted from other research, one of the most important and crucial problems in the urban planning and management which is the root of many constraints and which prevents the implementation of policies and regulations, is the method of financial autonomy of the Municipalities. As a non-government state institution, the Municipality of Tehran must be financially independent, but an efficient tax system has not been defined and it is under power of municipality. Consequently, the Municipality of Tehran provides the finance through the sale of density and making a change informally in construction and planning regulations such as converting the land use of urban land.

In addition to an unstable economy and political environment, instability in policies, rules and regulation were demonstrated by all participants in interviews as one of the most important obstacle in this sector. While the housing development process is a lengthy process and effects of policies always are reflected with delay, the governmental policies might change in less than five years. Fast changing policies prevents proper implementation of them as well as actors making long-term decisions.

From the policy-making point of view, the case studies demonstrated that supply-side housing policies such as increases in construction loans, promotion of industrial methods of construction and reducing land costs raise the construction capacity of society and recover the balance between supply and demand. In addition, it has been exemplified that with a lack of proper financial markets, a rise in the real

volume of money reinforces inflation and fluctuations in prices in the housing market, and increases the speculative demand for houses. This issue makes it clear that legislative authorities must consider macroeconomic policies as long-term solutions to resolve the problem.

10.7 General implications for practice

Before discussing the implications for practice, it is beneficial to assess constraints that were expressed by interviewees. One of the fundamental aims of this research is discovering constraints in housing provision and it is worth noting that the constraints, which were mentioned by interviewees, depended on their role, position and interests. In other words, a constraint and its level of importance vary from different actors' perspectives, which are driven by the normative assumptions along with relational, institutional, and cultural contexts. Interviewees were asked to describe five important problems in this scope based on their point of view. The below table illustrates the constraints based on participants' perspectives and what was stated during interviews along with their role's effect on their views.

Table 10.1 Constraints from participants' point of view

<ul style="list-style-type: none"> • role 	<ul style="list-style-type: none"> • Constraints
<ul style="list-style-type: none"> • managing director of medium-sized property development company (B2) 	<ul style="list-style-type: none"> • Ideas and the design of buildings • Consultants are not concerned about the quality of their work and just pay attention to making profit • Limitations that are caused by the planning regulations • The government's policies • High price of land
<ul style="list-style-type: none"> • investor / builder (I1) 	<ul style="list-style-type: none"> • The unstable political situation and unsustainable decisions that are made by politicians • Absence of government protection of suppliers • There is no housing loan for housing provider • No congruency between the construction cost and the loan amount • The planning regulation is not international and it has not been updated for decades • The consultants are weak, are not up to date, and they

	<p>merely focus on making profit</p> <ul style="list-style-type: none"> • Non-professional actors have a big share in housing market • The builders do not apply new technology • Lack of access to information • The actors are not familiar with the new products in the housing industry
<ul style="list-style-type: none"> • investor / builder (I1) 	<ul style="list-style-type: none"> • instability and insecurity • housebuilders seek extraordinary profit
<ul style="list-style-type: none"> • Assistant director of large Developing Company (D2) 	<ul style="list-style-type: none"> • Lack of finance • Government policies in both Housing sector and Financial sector • Bank credit and the paperwork process for applying for loans, and the loan amount has no congruency to the construction cost • Getting construction permission is difficult and takes a long time • High land price leads to increase in housing prices and makes the housing applicant unable to afford •
<ul style="list-style-type: none"> • Director of facilities in private bank 	<ul style="list-style-type: none"> • Iran Central bank rules
<ul style="list-style-type: none"> • Managing director of medium building firm (B3) 	<ul style="list-style-type: none"> • Unstable and insecure economic political environment • Large volume of cash flow that the government could not absorb in a productive and beneficial way • Rapid change in regulations
<ul style="list-style-type: none"> • Managing Director of large Developing Company (D1) 	<ul style="list-style-type: none"> • Government intervention • Instability in planning policies and construction regulations • Rules are flexible depending on relationships and negotiation

<ul style="list-style-type: none"> • Housing Economic Expert 	<ul style="list-style-type: none"> • The dominance of government fiscal policy on monetary policy • Financing just relies on the bank (lack of money market, stock market) • Determination of interest rate by government instead of supply demand mechanism • Banks have no independence in making decisions about their facilities and have to allocate their facilities to the government's projects • Lack of capital adequacy of banks • Government domination in central bank • Absence of capital market like Participation Bonds causes private investors to experience a lack of financial resources • Use of old technology in the production of buildings • Short life of housing that is needed to be rebuilt every thirty years
<ul style="list-style-type: none"> • Assistant director of estate agency 	<ul style="list-style-type: none"> • Government policies • Instability in economic situation
<ul style="list-style-type: none"> • Ordinary builder (B5) 	<ul style="list-style-type: none"> • Construction permissions, construction expenses • The land price • Restrictive regulations
<ul style="list-style-type: none"> • Assistant director of medium sized construction company 	<ul style="list-style-type: none"> • Lack of security for investment, financing • Construction permission • Rapid change in regulations • Possibility of corruption, bargaining and bypassing the rules
<ul style="list-style-type: none"> • Managing director of consultant firm 	<ul style="list-style-type: none"> • Non-expert actors • Adopting the western models and theories is not suitable for the Iranian context • lack of control on construction quality
<ul style="list-style-type: none"> • Representative case 1 	<ul style="list-style-type: none"> • Public organization function • Relationship-based strategy in municipality, bribery
<ul style="list-style-type: none"> • Owner and director of Medium company(case study1) 	<ul style="list-style-type: none"> • Lack of finance • Economic status
<ul style="list-style-type: none"> • Project Manager (case study1) company 	<ul style="list-style-type: none"> • There is no benefit–cost analysis • Construction not industrial and scientific; there is no

	enough understanding
<ul style="list-style-type: none"> Architect (case study1) company 	<ul style="list-style-type: none"> The regulations are restricted in an unnecessary way
<ul style="list-style-type: none"> Main contractor (case study2) 	<ul style="list-style-type: none"> The sub-contractors are not qualified The economic situation is unstable
<ul style="list-style-type: none"> 	<ul style="list-style-type: none">
<ul style="list-style-type: none"> Superintendent (case study 2) 	<ul style="list-style-type: none"> Subcontractors do not work efficiently
<ul style="list-style-type: none"> Sub-contractor 	<ul style="list-style-type: none"> Inflation
<ul style="list-style-type: none"> Superintendent / project management contracting 	<ul style="list-style-type: none"> Unskilled and Irresponsible subcontractor Employer financial deficit
<ul style="list-style-type: none"> Mayor of zone municipality 	<ul style="list-style-type: none"> housebuilders seek extraordinary profit housebuilders lack of information about regulations
<ul style="list-style-type: none"> Director of Detailed Plan in one of regional municipalities 	<ul style="list-style-type: none"> There is no industrial construction The economic situation The approach to the housing problems
<ul style="list-style-type: none"> Municipal expert (bar o kaf) 	<ul style="list-style-type: none"> The builders need to refer to the municipality
<ul style="list-style-type: none"> Technician in CESO 	<ul style="list-style-type: none"> The actors are not aware of regulations The municipality does not update technicians
<ul style="list-style-type: none"> Senior SORDP 	<ul style="list-style-type: none"> There are not enough employers The overlap with other institutions
<ul style="list-style-type: none"> Project Manager medium firm (case study 3) 	<ul style="list-style-type: none"> Members understanding and providing their share Regulations are constraining than enabling
<ul style="list-style-type: none"> Chairman of the Board and director medium firm (case study 3) 	<ul style="list-style-type: none"> Rapid changes in regulation

The municipality acts passively rather than being active in leading the potential and capacity existing in development actors. Locally embedded institutional practice and politics can affect the way new approaches and strategies are interpreted in the accomplishment of the housing development process (Coafee & Headlam, 2008). Nevertheless, the equilibrium between control and flexibility must be achieved, bearing in mind that it is not easy task in the Iranian context, because

there is a 'dark side' of pragmatic reactions that is rooted in historical and local governance traditions and power relations that can heavily impact outcomes (Coafee & Headlam, 2008, p.1588). The importance of experience in figuring out the unpredictable outcomes in a complex situation where democratic solutions are needed is acknowledged. However, to have successful strategies, what is required is a significant awareness of the ways in which power, the dynamics between actor-relations, politics and other structural forces can corrupt the process, as well as awareness of the tension within public sector management between statute/guidance and flexibility/experimentation (Coafee & Headlam, 2008, p.1588).

Therefore, this research suggests for the practice of the housing development process a reconsideration of the perspective of plans and rules at both the governmental and municipal level in order to devise a system of guidance concentrated on spatial, fiscal and social elements, in combination with creativity and flexibility. The suggested approach entails a general and fixed concept concerning housing demand and provision, quality of construction, the fabric of the city, cultural and environmental aspects (law, policies, standards), and being flexible with and at each particular stage of the housing development process or parts of projects would enable house-builders to be creative without any contradiction of the whole concept. The important point here is not to mistake flexible strategies in the housing development process with flexible accountability guidelines and policies. The border between the flexibility in some regulations such as architectural rules and fixed necessary construction regulations such as density should always be clear. The current problem is that in this area, the municipality is unnecessarily strict about some regulations, and being flexible instead is so effective and important in terms of environment and the fabric of the city. The first and the most significant practical step should set up the internal control body to prevent private circumventing laws by actors and eliminate the place for corruption and getting bribes in return for lifting the regulations in a particular project. Setting up an organizational systematic institution in order to replace a human-intensive system with a technology-intensive system will help to reduce the level of negotiations and infringements of regulations.

One of the most significant characteristics of housing supervision in Iran is the domination of the perception that considers housing development activity as a type of business with a good yield. The higher level of activity since 2001 was partly induced by density regulation which caused every household to be accounted by his/her house as a source of income and the wave of reconstructing houses as medium- and high-rise apartments was started. The selling density became an important source of income for Tehran municipality to assist it in financially being an autonomous power. Consequently it created a space for the activity of speculative non-professional actors as well as leading to an increase in speculative interest in the housing sector. The inelastic supply of housing properties triggered the price of housing to rise dramatically, and the growth in price led to circumstances where house-builders sensed and seized the opportunities for making profit through property development.

The case studies show that actors continue their activity and pursue their interests in spite of the complexity of the context and the unstable institutions. As Giddens (1984) stated, they “know tacitly about how to go on in the context of social life” even if they are not able to express it. Practical consciousness and unconscious types of understanding of what actors do were recognized in interviews. Participants acknowledge what they do and interestingly they were able to discursively articulate their strategies and behaviors and they were aware of the influence of economic, political and social environments on their scope of activities. It is worth noting that the point that was neglected by actors is their ability to affect the structure. The findings show that experience plays an important role in the successfulness of the firms in this sphere, particularly in the unstable institutional environment and under a context of transition where housing firm managers never know where and when changes may happen (Farashahi & Hafsi, 2009). The case studies emphasize that experience in leadership is dependent on socio-historical contexts because the appropriate decisions and solutions are also exclusive to the context in which constraints take place (Coaffee & Headlam, 2008). Therefore, political strategies are contextual and connected to the firm’s resources and experience and consequently age and size of the firms influence the choice and success of strategies (Siagh, 2001; Farashahi & Hafsi, 2009). As shown

in case studies two and three, managers had more than 15 years' experience and knowledge to rely on, and applied appropriate strategies to face institutional change, economic and political turbulence as well as dealing with other actors and customers. In other words, the power of their leadership helped their firms to survive the market and environment fluctuation. It could be clearer in comparison to case one that the strategy of the firm manager in facing economic recession and his optimistic view led to him having a severe financial challenge in construction costs.

In terms of the recourse, the housing provision in Tehran has faced problems in access to finance, land price and availability, data availability and transparency and new technology. According to this study the high land price, which constitutes fifty to sixty percent of housing costs, along with the state and government policies, are discovered as the main constraints mentioned by all interviewees. As mentioned in chapter six, an absence of land banking, domination of private ownership of urban land, confiscation of large lots by public institutions and the effect of estate agencies on determining land price have made the Tehran land market under control full, messy and complex. After more than one decade of governmental efforts and policies, and despite being in the center of experts and politicians' debates, it is still one of the most important issues in Tehran, and it seems to be an unsolvable one. The suggestion of this research is to motivate the citizens to establish a housing trust and a housing rental association to prevent growth in land price. In addition, public institutions lease the confiscated land in order to provide social housing. Regarding the capital deficiency for housing suppliers, one barrier is that the allocable credit for housing projects is determined by Iran Central Bank and it should be followed by both private and governmental banks. Then the banks cannot manage their own financial resources, a situation that is worsened by Iran Central Bank determining the interest rate as well. This problem could be eliminated by cooperation between house-builders and the government or municipality to provide units for middle-income households or increase the amount of loans for housing applicants to improve their affordability and at the same time supervise the housing development process preventing the irrational profit of house-builders. Now the profit of housing construction is almost fifty percent and

more related to the location of project. In addition, being a labor-intensive traditional industry rather than applying new technology for construction activities is resulting in high housing prices and project prolongation.

In terms of rules and regulation, rapid change and instability was mentioned as a first constraint in housing provision by almost 70 percent of interviewees. In addition, the case studies demonstrate reciprocal problems in relation to issue of accountability in terms of insufficient awareness and transparency on new regulations and bylaws. Not only the actors are not up-to-date in time about the new bylaws or changes in regulation by municipality, but also the City Electronic Service Office, which affiliated to municipality, suffered from accessing to information properly and timely. The lack of transparency and insufficient data and information had prevailed as an impediment to private actors (Khajepour, 2000). Furthermore, there is a strongly need to prepare a guideline for housing development process to articulate a sequential framework in order to clarify the required steps in each stage that following procedural requirements of can improve the sustainability of the development process (West, 2004). Currently actors usually follow the others and do what they do or apply “learning by doing” approach involved finding through the challenges emerged in their interaction and the complexity which existed in the housing development process. On the other hand, as researcher discovered and stated in chapter 7 the considerable unaccountability and neglecting to pursue the enquiries as well as updating in regulations. Interestingly, this issue not just related to households and unprofessional who decide to reconstruct their housebuilding, some professionals and housebuilder also refer are informed during the process or after their rejection of their proposals. This institutional constrain could be eliminated through political accountability of planning authority to inform CESO offices timely also private actors through their digital space and media. Hence, private actors required to be more familiar with the digital space (internet) and change their behavior due to changes in communication and technology.

10.8 Reflections on wider implications

According to apply structure and agency approach, this research attempted to take into consideration the interests and strategies of all agents equally important as economic and institutional structure affecting the housing development process. However, gathering the required data and information was difficult and access to some set of information was not possible. For example, the information about the housebuilder, the share of each type of house builder, their annual built and data connected the institutional investors in housing properties in Tehran.

10.8.1 Implications of applying Healey's model of land development process

The undertaking of this research through employing Healey's (1992) model of the land development process has produced some valuable findings. This section examines the problems relating to apply the land development process model.

Firstly, there was the conspicuous problem associated with structuration theory in the sense of its level of abstract also structure and agency; in terms of they are empirically hard to define (Giddens, 1984, Dear and Moos, 1996). It is difficult to consider agency and structure together as Giddens (1984) stated and at the same time avoid overlapping of discussion. Although in analysis chapters (7-10) due to the nature of analysis, the discussion carried out in two different levels in each chapter, the notable overlapping of discussion was inevitable. There is no way to avoid this problem because all time the linkage between agents' interest and strategies and the wider structural driving forces should be preserved.

The second problem is related to definition and utilization of the concept of 'institution' which is one of the important concepts of structure and agency approach. This concept itself is difficult to apply in empirical work and as Barely and Tolbert (1997) suggested it is empirically more applicable and identifiable if 'scripts' substitutes for Giddens notion. Regarding to absence of this concept in Healey's (1992), the definition of institution as suggested by Dear and Moos (1986a) was applied. As Hooper (1992, 47) noted, this is because Healey failed to theories the conceptual composition of 'institution' which 'leads to the generation of models of the development process which are excessively abstract, in the sense that they purport to be equally applicable to any social formation whether capitalist or not'. Furthermore, Ball (1998) argued that in Healey's (1992) model no precise definition is given of the constitution of a 'structure' an 'agency' as well as

'institution'. This ambiguity in definition intensified the difficulty of identifying these notions in real world. Reviewing the existence literature concern structuration theory and offering different interpretation of the Giddens' notions, it is more likely to cause confusion rather than clarify. In Ball's (1998) perspective the root of this problem related to the approach to the practical research questions rather than theoretical one and at the same time the focuses on importance of structure and agency on 'pragmatic ground' (Ball, 1998, p.1512). While the practical focus on agency are the key players within each institution and the strategies they apply towards the specific property development project. The fundamental concern with the Healey's (1992) model is about the way they be made to deal with each other for pre-defined outcomes. One of the significant issue is recognition whether the outcomes have been consequences of the structural forces or actors' strategies. In ball's point of view the outcomes are more likely have been resulted of the property cycles that of the strategies, likewise analysis in this research demonstrated that outcome are consequence of combination of structural and forces and institutional level beside actors' strategies and behavior.

Actually, this problem related to the structure-agency dichotomy, as Guy and Honeyberry (2000) stated, the key difficulty is defining the structure and agency aspect of dualism without simultaneous dichotomizing them. The Healey's (1992) model formulation does not conceptually offer structural environment (social, economic, political) explanations of agencies 'roles. The point is the agency behavior hardly affect structural change especially when the institutional concerns in a nationally comparative or policy context (Ball, 1998). This noted issue becomes more important in a context such as Iran, with the estate is dominated and the actors could not have much influence in structural forces.

It is noteworthy to put this point forward that a study of housing development should take its 'inherent complexity into account as well as it is structured by network relations' (Doak & Karadimitriou, 2007). It should be noted that Healey's (1992) model of the land development model suggested the valuable concept of reciprocal dialogue between the structure and agency which is necessary in housing development research. Overall, the result of this research recommends that in the analysis and examine any scope of the housing sector, the context, dynamics of

social system, integration of economic and culture in property dilemma should be considered. Regarding to these points the Guy and Henneberry (2000) presented frameworks that abled link up and integrate the economic and the social to provide the essential ‘zoom lens’ to focus(refocus) on the complexities connected with in these networks of production(Doak & Karadimitriou, 2007).

10.8.2 Implications at the Educational level

The main motivation of this researcher for continuing her research abroad was the problem related to the view of planning in the educational system, which is considered only associated with the physical and economic aspects. The absences of studies that have applied a qualitative approach in comparison with those which have employed econometric models prove this claim. In contrast, most of the planning departments in the UK belong to the social science faculties, whereas in Iran the planning departments are considered to fall under the engineering faculties with no elements of social science. There are no signs of social theories, nor the perspectives provided by them. Dominated by positivists, this has created irreparable problems leading to the generation of many research projects unable to identify constraints and find an applicable solution. All interviewees showed their interest in becoming aware of the results of the research and admitted that this kind of research is needed for both housing suppliers and policy makers.

The institutional analysis clarified that one of the problems is in the communication modality of interaction between different agents and institutions. As the case studies showed, at the institutional level, the local state and municipalities have not found the appropriate language to interact with development actors.

10.8.3 Implications for Research

Despite the importance of housing supply in Tehran, until now no scholarly work had been done with the way the housing development process carried out, nor has any major critical study been fulfilled regarding the examination of key actors involved in this scope. The current state of knowledge among academics is limited to quantitative research and econometric models focused on the housing prices, numbers of needed units and other similar issues. Placing emphasis on high prices

and a housing shortage distracts attention from the importance of the role of development actors and the root of the problems. The present study is the first inquiry that has articulated the housing development process in Tehran and Iran, and it also brings another way of approaching housing provision by shifting focus onto what has not been studied; that is, the duality of structure and agency, the dynamic context of the development process, the agent–institution relationships, the ideas, strategies, perceptions and values of people, and the way the resources and rules are employed by actors. Furthermore, due to having influential contacts and particular social status in Iran, the researcher was enabled to conduct interviews with many elite participants and governmental and public officers and gathered valuable data that would have been impossible for other researchers. Apart from this type of information, many data that was used in chapter two for illustrating the economic environment and the Tehran housing market was extracted and analyzed by the researcher and could be considered as a resource for other researches. In this sense, this study provides an original contribution to the knowledge of how the structure and operation of the private housing supply in Tehran performs, who is involved and what the constraints are. In addition, applying the structure and agency approach and Healey’s model for the first time shed new light on the urban planning and development process. On the other hand, examining this approach in one of the developing countries provided a unique and totally different context to western countries; this research contributes to a better understanding of such dynamic situations.

10.9 Further Research

- Explore the effect of each fiscal and monetary policies of governments on housing sector
- Finding a way for inventing an internal and external control body in order to reduce corruption and control the implementation of policies

- The necessity of community planning instead of central planning, and utilizing the capacity of society
- The influence of each group of actors such as estate agents, regional municipalities, public institutions, etc.
- The invention of a tax policy in the housing development process
- The issue of determining land and housing price by some actors
- The issue of the absence of social housing
- Finding the way to motivate actors to participate in the society and reach to democratic system in urban planning and development

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Appendix A Interview schedule (topics and questions)

History and General information

1. Could you please tell me about the size of your company including things like how many employees you have, how many units you build per year and how long have you been existence in housing market? Is there any distinguished market occupied by your firm? Are you trying local or regional market?
2. Do you specify any part of Tehran as your target for housing schemes? Why you choose these areas? What kinds of factors have influence on your preference? Yes we do our construction in region 1 and 3 .because the more profit we can get there but the experience in these parts and appropriate land are the important factors

Strategy

3. Could you please tell about purpose, priority, and strategy of your organization?
4. Would you say your company has a distinctive strategy and if so, who determine the strategy and how does that strategy change very much over the time?

Resources: finance, land

5. How your company secure finance? Shareholders and constructive partner
6. Do you think the finance is a main constraint on the development process? How you source finance? Is there any one source of lending?
7. What kind of land do you buy? From whom do you generally buy it?
8. Could you easily access to your desired land? Are the sources of land changed over years? How you counter to these changes?

Relationship

9. Do you work more with some landowner, estate agencies or an investor?
- 10.

11. Do you have any relationship to the other house building companies? If yes, in which stage of process do they involve in your project and how? Do you swap your project with other company?
12. To which ministry do you deal more during this process? Or do you deal more with municipality?
13. what kind of problem do you have with policy makers?
14. It is always said that builders ' linking to a property network reduce the agility of housing market. To what extend do you agree with this idea? Does your company link to any builders' network?

Selling

15. Do you target for any specific area to sell your product? To produce the housing, assessing the demand is crucial, how do you make this assessment? (What information sources? Do you contact to state agencies to ask some information)
16. How do you monitor the changes in demand? How do you response to these changes?

Constraint

17. As I mentioned before, this research is particular interested in constraint on new housing supply. Can you tell me what do you think about the main constraint?
18. What do you think about the effect of other factors such as planning regulation, economic and political situation? (and all other factor that the interviewee will not mention)
19. Is the behaviour of private investor rational? Does he make the restriction or it relates with possibility of bank lending procedure?

20. How important are these above limitations in your complementation the project? (If you want list them from most important to less important)
21. Overall, what would you like to change? How it should be changed?
22. In your view, how policy makers can remove constraint on housing supply?

Appendix B: List of interviewees per group and job title

Interviewee number	symptom	Group	Job Title
1	O1	Semi large/ Private /case 1	Owner and director of M company
2	PM1	case 1	Project Manager M company
3	A1	case 1	Architect M company
4	S1	case 1	Spoken person M company
5	C1	case 1	Main contractor
6	O2	Ordinary builder/ Private/case2	
7	S2	case 2	Spoken person H company
8	C2	case 2	superintendent
9	BD3	Cooperative/ affiliated /case3	Project Manager/ Board of Directors F Company
10	CB3	Cooperative/ affiliated /case3	Chairman of the Board F Company
11	C3	Case 3	Sub-contractor
12	C4	Contractor20+	Superintendent/ project management contracting
13	m	Public/Zone municipality	Mayor of zone municipality
14	DP	Public/Zone municipality	Detailed Plan(Tarhe tafzili)
15	BF	Public/Zone municipality	Detailed Plan expert bar o kaf
16	TE	Semi-public Electronic service offices	Technician
17	r	Public/ Registry organization	Senior
18	u	Public/ utilities service	Manager of
19	O4	Large company/ private	Owner and director
20	or	Organization for registration of deeds and properties	Officer
21	D1	Large company/ semi public	Owner and director
22	D2	Large company/	director

		private	
23	B1	Medium builder/ private	Owner and director
24	B2	Medium builder	Owner and director
25	B3	mall builder/ private	Owner and director
26	B4	mall builder/ private	Owner and director
27	B5	Ordinary builder/ private	Owner
28	cc	Architect/consult ant company	Owner and director
29	S1	Estate agent/private	Director assistant
30	I1	Private	Investor
31	BM	Bank/Private	Private bank Facility manager
32	P1	Governmental authority	Director of Housing Economic Department in MHUD
33	P2	Housing institution/STAT E	
34	pa	Planning authority	Planning
35	HE1	Public Authority	Housing expert in Tehran Municipality
36	He2	Governmental authority	Housing Economic expert in MHUD
37	hf	Housing foundation/public	Director
38	hm	Public	Former minister of MHUD

